

Towards Semiocy?

Exploring a New Rationale for Teaching
Modes and Media of Hans Christian
Andersen Fairytales in Four Commercial
Upper-Secondary “Danish” Classes

A Design-Based Educational Intervention

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For others interested in accessing the appendices, this is to some extent possible in so far no sensitive data is revealed. Please contact the present author through the homepage www.nikolaj-frydensbjerg-elf.dk.

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Preface

Since 2003 the present author has been a PhD stipend at the *Institute of Philosophy, Education and the Study of Religions* (formerly Danish Institute for Upper-secondary Education) at the University of Southern Denmark in Odense. Research visits have been made to the *Institute of Education*, University of London, and *School of Education*, University of Wisconsin-Madison. Moreover, fieldwork has been conducted at four commercial upper-secondary schools in Denmark. I wish to THANK all with whom I have had the joy and pleasure of working and reflecting with – supervisors, researchers, PhD student colleagues, teachers and students. A special thank to Thomas Derek Robinson, who has served as language consultant. The work is dedicated to my three children, Johannes, Hjalte and Juliane. Like me they enjoy H.C. Andersen, both as bedtime stories and Disney animations.

Nikolaj Elf, Jelling, Denmark, 2008.

Bibliographical note:

This study is connected to the fairytales of Hans Christian Andersen (1805-1875), who was born in Denmark and is known world wide for stories such as: “The Little Mermaid” (1837), “The Ugly Duckling” (1843), “The Emperor’s New Clothes” (1837). When referring to English titles of Andersen’s fairytales, this is done as a service to non-Danes, so as to present a fluent product. The name and year marked in parenthesis refers bibliographically to the first time that the *Danish* version of the fairytale is published, unless other information is given. In the References section you will find the reference to Danish titles as such: Andersen, H.C. (1837): *Kejserens nye Klæder* [The Emperor’s New Clothes]. In: *Eventyr, fortalte for Børn. Første Samling. Tredie Hefte*. Kbh.: C.A. Reitzels Forlag. The homepage www.andersen.sdu.dk, edited by Andersen researchers at the University of Southern Denmark, is recommended when searching for authorised Danish and English versions of the fairytales. One could also consult Andersen 1963-1990 and Andersen 2003.

Abbreviations often used:

Hhx	Higher Commercial Examination [højere handelseksamen]
A	Appendix
DBR	Design-Based Research
MTE/StLE	Mother Tongue Education/Standard Language Education

Part I: Prologue

Purpose and perspective

The purpose of Part I: Prologue is to introduce the study and present the methodological framework. Chapter 1 introduces the field of research, the research question, hypothesis, empirical cases and main concepts of the study. Chapter 2 presents the methodology developed as to its application in this study.

Chapter 1. Introducing the study

1.1. A study of “Danish”

The focus in this study is upon “Danish” as a school subject in the commercial upper-secondary system in Denmark (often abbreviated: ‘hxx’, or Højere Handelseksamen [literally: Higher Commercial Examination]). In regard to defining or classifying the object of study, this focus is related to broader debates within a field of research, which has serious problems of terminology and self-identity. Some term it the research field of *mother tongue education* (MTE), while others would term it: *standard language education* (StLE), as Herrlitz and van de Ven (2007: 16f) have made exceedingly clear.

While there are both historical and ideological reasons for choosing the former or the latter term, it is clear that the choice made for this dissertation is dependent on how we look at and understand what Sawyer and van de Ven (2006) have termed the *rationale* of this school subject.¹ In order to cope with the terminological and ideological controversy in a practical, yet open-ended manner it has been chosen to follow both notations: MTE/StLE; mother tongue education/standard language education. It is difficult to accept either of the two terms out of hand, and yet the problem consists in identifying a better alternative. In a sense, this study seeks to explore exactly such a better alternative. It explores a new rationale that may help us identify a new didactical² model, which better covers involved potential meanings, and which may be employed in future circumstances.

The terminological and ideological controversy also influences the writing of the name of the school subject “Danish” – written in quotation marks. In doing this here and in the following, it refers to a noun denoting a school subject – not the adjective referring to characteristics of Denmark, Danes, or Danish language. One of the challenges in theorising and working with the past, present and future of MTE/StLE as an object of study is precisely that we should remember the significant differences between “Danish” and Danish – or “English” and English, “German” and German, and so forth. As Herrlitz and van de Ven have put it, in referring to a research situation almost three decades ago:

¹ By ‘rationale’ I mean – inspired by Sawyer & van de Ven 2006 – the paradigm, the legitimacy, the topics, the teaching-learning processes, the knowledge regime and the agents of a school subject. In chapter 4 I shall explain in detail what these categories refer to.

² Difficulties apply to the concept of *didaktik* in Danish, as explained in Haue 2007. Haue suggests that the most general understanding in Danish of *didaktik* – or didactics in English – “comprises selection of materials, methods, student prerequisites as well as teaching purposes.” (Haue 2007: 9). Cf. also Westbury 2000, Hudson & Schneuwly 2007.

Mother tongue education appeared to be strongly bound to ‘language area’ and to national culture. The development of general, and therefore, international theories and concepts, which is commonplace in other scientific areas, had scarcely started in the field of mother tongue education. (Herrlitz & van de Ven 2007: 18).

1.2. The semiocy rationale

What could be the new rationale of MTE/StLE? It is suggested that it could be a concept termed: ‘semiocy’. The semiocy neologism – used in the title of the dissertation – is not my own invention, rather it was presented for the first time in a report regarding ‘*The Future of Danish*’ (my translation of the Danish title, cf. UVM 2003c). This report was written by a workgroup, including researchers such as linguists, literary researchers, education researchers and the present author (at that time still a graduate student, working as a co-working and writing ‘secretary’ of the group). While the semiocy concept was only described briefly, and vaguely, it was equally pointed out that the rationale of teaching ”Danish” changes in a knowledge society. The argument develops as follows:

In knowledge society demands are increased constantly because the primary production in such a society involves, precisely, competencies in being able to interpret and use symbols, most commonly verbal signs, but also graphs, diagrams, instructional videos, programmes, statistics etc. Instead of offering literacy to the population, one now has to teach the population what one may term *extended or semiotic literacy*. In other words, we have moved from Lutheracy to alphabetic literacy, and now we have to move on to semiotic literacy (*semiocy*).³

This quote does not define nor explains semiocy in any elaborated manner. However, one may suggest that it presents a true and interesting hypothesis in the sense that it tries to come to terms with real changes in society, and how we should deal with these changes in education, or – more narrowly – in MTE/StLE. The difficult question is how to ‘move on’ to semiocy in practice. Can research contribute to such a process of change?

From the point of view of empirical research into educational practice and reform (cf. Randi & Corno 1997 for an overview), it is a standard finding that practice represents a complex order, which is highly difficult to change. Since implementing new ideas is an extremely difficult and complex project perhaps we should rather speak of processes of *adaptation*, as Randi and Corno (1997; cf. also Oates 2003) recommend. Social semiotic theorists (Hodge & Kress 1988, van Leeuwen 2005) who reflect on processes of change in parallel ways would argue that any kind of social system is governed by what Hodge and Kress (1988) term: *regimes of logonomic structures* and *ideological complexes*. The terminology, which is explained in detail in the following chapter,

³ My translation. The original quote in Danish – cited from UVM 2003c – is found in Appendix 3. In the following ‘Appendix’ is abbreviated with a capital A and references to an appendix are made in this way: A3.

in itself signals the rather rigid nature of social systems, including education. On the other hand, Hodge and Kress would argue that logonomic structures and ideological complexes *can* change through intervention.

With regards to this study, the point is for the study – through an intervention focused on the concept semiocy – to change the social system of the school subject “Danish” and, more broadly, MTE/StLE focusing on the upper-secondary school system. Such an intervention contests didactic concepts of MTE/StLE, such as literacy and literary *Bildung*, which currently dominate and seem to have proved their worth (UVM 2003c, IMEN 2005, Herrlitz et al. 2007, Sawyer & van de Ven 2006; cf. chapter 4, section 3 below, page 134ff., abbreviated like this: 4.3, p. 135ff. in the following). It is more comfortable to continue using familiar notions rather than proposing new alternatives, the point being that these older concepts no longer seem adequate due to cultural and social developments. They lack authenticity now and in the future.

1.3. Research question

While the theoretical and conceptual issues for the whole of MTE/StLE cannot be solved at once in the present study, one may take on a specific issue such as Hans Christian Andersen fairytales and media pedagogy. The so-called Hans Christian Andersen 2005 Foundation (cf. www.hca2005.com) offered this opportunity. In order to celebrate Andersen’s 200 year anniversary, the Hans Christian Andersen 2005 Foundation was established in 2004. The foundation supported projects to promote Andersen nationally as well as internationally. One of the goals was to support new research and development in education, where one research angle the foundation wished to support, was an exploration of media pedagogical approaches in formal teaching at the upper-secondary level. This dissertation is the direct result of that intention. The dissertation addresses the research *Interesse* – to echo Jürgen Habermas (1973) – loosely conceived by the foundation.

A research project is first and foremost guided by its specific research question. The research question asked here, in its most simple shape, is:

How may we didactically rethink and integrate H.C. Andersen fairytales, media pedagogy and “Danish” MTE/StLE at commercial upper-secondary level?

This question launches the fundamental concepts and relations to be explored within a concrete framework. A longer version that specifies the theoretical, methodological, and applicative features of the study would sound as follows:

If we take the institutionally driven commitment, defined by the H.C. Andersen 2005 Foundation, of designing learning resources to be used in teaching H.C. Andersen

fairytale in commercial upper-secondary “Danish” classes, while integrating media pedagogy and MTE/StLE as a heuristic starting point, what kind of MTE/StLE-related, didactic “Danish”-rationale could then be theoretically developed?

The practical and applicative issue of the question arises of adapting a design-based intervention process where the designer-researcher collaborates with teachers and students using and continuously reflecting on the resources and the didactic rationale. Such a methodological approach signals an ambition to contribute qualitatively to the inter-disciplinary field of mother tongue/standard language-related classroom research and, more broadly, didactic research (which would, in Anglo-Saxon countries, be termed curriculum research), media pedagogical research, communication research, even cultural studies.

Historically, the theoretical basis for such questions goes back at least to the beginning of the 20th century. In European and American contexts prominent media theorists, semioticians, *cultural studies* researchers, and education researchers have tried to deal with the question of teaching a mother tongue, as we shall see in detail later. What brings these theorists together is, in a sense, the argument that in modern culture the mother is no longer the only, or most dominant, socialising element for children being brought up, nor is the mother tongue the only, or perhaps even the primary, communicative mode for children and young people. I may be playing with words that no longer has the same meaning, but the point is that we should rethink the conceptualisation of the so-called mother tongue subject and mother tongue education, and the way this school subject relates to other school subjects – asking basic didactic/curricular questions such as: Why teach this subject (the question of legitimacy), what should be taught (the question of content), and how should it be taught (the question of method)?

1.4. The hypothesis

As suggested above, the exploration of these broad questions – theoretically as well as empirically – is guided by a hypothesis. The hypothesis is that teaching H.C. Andersen from a media pedagogical perspective may be interpreted through a didactic rationale that would guide media pedagogy within MTE/StLE. I propose that we call this rationale semiocy. In order to make this rationale operative, it is suggested that semiocy is related to a rethinking of media pedagogy, which could be termed: ‘multimodal media pedagogy’. Figure 4.4.1.1 – presented in chapter 4, section 4 – is a model of such a pedagogy.

It is suggested that the model captures essential relations of multimodal media pedagogy and semiocy. Chapters 3 and 4 will lead to it, as it is used for analysing the empirical part of the

intervention (Part III). The model answers two fundamental questions that pertain to the intervention:

- 1) What are the purposes and implications of seeking an alternative vocabulary for teaching media pedagogy that go beyond media literacy?
- 2) What are the operative dimensions of empirically oriented didactic research?

It is suggested that the model implies semiocy as the broadest competence goal of MTE/StLE.⁴ It follows from this that the domain within MTE/StLE often referred to as *media education* or *media pedagogy* (e.g. Buckingham 2003) would have to play a vital part in the process of moving students towards semiocy. However, media education is rethought and rephrased as ‘multimodal media pedagogy’. The goal of multimodal media pedagogy is termed ‘multimodal media competence’, which would become a sub-goal of semiocy within MTE/StLE. If this line of deductive reasoning is coherent and stringent, a rethinking of media pedagogy within MTE/StLE would imply a rethinking of MTE/StLE in its totality. In extension, we must perform a rethinking of the most commonly associated goal of media pedagogy, namely ‘media literacy’.

The purpose of chapter 3 is precisely to question the concept of media literacy, and the purpose of chapter 4 is to explore and define the new basic categories and relations suggested in the model. At this introductory point, it is sufficient to propose that this model of multimodal media pedagogy/semiocy *could* be used as a tool for understanding and designing multimodal media pedagogy in “Danish”. It also follows from the model that Hans Christian Andersen fairytales, in various constellations of modes and media, *could* be used as a semiotic resource that could lead to multimodal media competence.

The open-ended using of the modal verb ‘could’ – and the question mark in the title of this dissertation: *Towards semiocy?* – suggests that we may find a fundamental discrepancy between theory and practice. In theory we may be able to develop a coherent didactical model, in practice we may not be able to adapt it. The latter, indeed, depends highly on the interpretation of the model by the primary agents in the field of education, namely teachers and students.

⁴ The words: ‘competence’ and ‘competency’ and the plural forms: ‘competencies’ and ‘competences’ are used in different, to some extent confusing ways in different English-speaking contexts, and there are disputes on what the spelling of these words means. Here and in the following I understand competence within the theoretical framework of a holistic model of competence inspired by one of the most acknowledged research projects on competence and education in recent years (Rychen & Salganik 2003, cf. 4.2ff). A holistic model of competence, as suggested by Rychen and Salganik, would use the spelling forms competence and competencies. The complex question of what competence means and how it can be applied is analysed in detail in chapter 4. Briefly put, competence is ability beyond *skills* (and competencies are abilities beyond skills). Competency – with a y – is associated with the ability to solve a specific demand using a specific skill.

1.5. The four cases

In the present study, ‘agents of the field’ refers to four teachers and their students at four different upper-secondary schools in the hhx-system. They are the key informants of the study. My main empirical focus is on these four cases, and the empirical question related to the ‘quasi-experimental, multiple-case study’ (cf. chapter 5, p. 159) is: How do they adapt and interpret the designed learning curricula of four experiments informed by the model of multimodal media pedagogy/semiocy in practice? How do they understand the *integration* of a new media pedagogical approach with traditional “Danish” and the teaching of H.C. Andersen?

Listening to and trying to understand their perceptions as they unfold in the longitudinal process of the intervention we will find that their answer to the model is much more ambiguous and, to some extent, quite critical. Making a *trustworthy* (Bryman 2004, cf. chapter 5, p. 159) account of this process is the main purpose of Part III. Briefly summing up empirical findings, it is suggested that the intervention does not simply become a “success” and data does not one-sidedly confirm the hypothesis or the model of multimodal media pedagogy. Rather, teacher and student perceptions lead in many different, interesting and, to some extent, critical directions that suggest debates about the potentials and constraints of teaching “Danish” and changing the subject.

When first approaching the four participating teachers (called Karen, Jane, Susanne and Peter) in 2004, it was suggested by the present author that an experimental media pedagogical approach to Andersen should be attempted in order to rethink the rationale of the school subject. Through initial interviews it was found that all teachers shared a personal and professional interest in the project (this is reflected in a sample of data labelled ‘Teacher Profiles’, cf. A25-A28). All four teachers were particularly interested in developing their understanding of media pedagogy or perhaps one should rather say *ICT pedagogy*. Over and against this, H.C. Andersen did not seem to be of any particular interest. There was for instance no explicit interest in broadening the conception of what Andersen refers to in terms of textual resources. The main motivation for the four “Danish” teachers to be interested in media pedagogy was their confrontation with the acute problem of how to comply with new official politico-normative demands of integrating ICT within “Danish”. The four teachers all had limited experiences in using media and technology in the classroom – Karen being an exception.

When first being approached, the teachers were all engaged with in-job training programs, funded by the Danish Ministry of Education, incorporating ICT. This was an official attempt at reforming the school subject. Initial interviews with the teachers confirmed the results of existing international research (Haenens 2000; Hennesy et al. 2005; Süß 2001), namely that the effects of these intervention programs were limited and ambiguous, particularly when applied to mother

tongue education: Educational programs seeking to integrate many topics and pedagogies, such as ICT, generally lead to *disintegration*, or rather no integration. This also holds true for intentions to integrate media pedagogy and MTE/StLE (Buckingham 1990a, Buckingham 1990b, Buckingham & Domaille 2003).

At an initial pre-experimental meeting with the participating teachers (cf. chapter 6, p. 191ff.), Karen stated that: “the point of the programme [called Gymnasie-IT/ICT in Commercial upper-secondary Education] was integration.”⁵ The second participant, Jane, replies: “We have done opposite because we are busy – so we have done what we already knew, and then added the other thing on top”. The third participant, Susanne, contests this, claiming that the programme had offered a new “horizon” on the subject. Later in the conversation, the fourth participant Peter, addressed the idea of integration by saying:

Peter: I am also appointed (using an ironic tone) ict pedagogical driver

The others: (laughing, someone saying) ooh we have that too

Peter: (laughs a bit) it sounds (...) it doesn't cover much more than all the other stuff, which could sound like that, it concerns primarily (...) how one may use ict both in terms of pedagogy, but also in terms of discipline (A4, my translation)

As we may see, while the participants relate to ICT in an ironic manner, they also have a positive attitude. For these, ICT and media is more or less the same thing.

The official demand for teachers to integrate ICT into their teaching was related to preparing a reform of the whole system of upper-secondary education in 2005 (UVM 2000a, UVM 2003b), one year after conducting the intervention. This reform has been characterized as the most important reform of upper-secondary education in a hundred years; and all teachers received information on this in 2003-2004. At the rhetorical level the reform implied disintegration and, simultaneously, re-integration of a number of new and old ‘whys, whats and hows’.

⁵ For this and the following quotes in Danish, cf. A4. For a full transcription of the meeting cf. A29. The transcription norm being used follows a slightly revised version of the norm suggested by Jacobsen & Skyum-Nielsen 1996. The six rules are: 1) words are transcribed in the chronological way they are said on tape, including transcribing words like “øh”, which would be translated into “eh” in English, 2) I use conventional orthography; abbreviations and self-interruptions, though, can be transcribed using a hyphen, such as when ikke is pronounced [ik-], 3) comma means short pause, dash means longer pause; no capital letters are used (names, like H.C. Andersen and “I” in English excluded), 4) editorial remarks about the speech and its situation can be made within parenthesis, 5) stress on a syllable can be transcribed, using an accent, like this, académic [fågligt], 6) sequences and words that are impossible to understand from digital audio/audio tape, are marked, in English, like this, “(nu)”, meaning ‘not understandable’, and like this, “(uf)”, in Danish meaning ‘uforståeligt’. It should be noted that speech could be very difficult to translate from one language to another (cf. e.g. Kress 2003 for reflections on this).

As a part of the reform, the “Danish” curriculum was to be rewritten – more specifically the hhx-curriculum, which is in focus in this dissertation, was also to be modified. An unpublished draft suggested that the new “Danish” curriculum for hhx would foreground the importance of developing the so-called cultural competencies for the pupil (speaking, listening, writing, and reading) in relation to four main subject-areas: literature, language, media, and communication. The media dimension of school subjects should be understood in terms of both teaching with and about media. The use of ICT is anticipated, as the statements made by the teachers clearly suggest. Media pedagogy, in terms of media education or teaching about media, would be designated a high priority in this circumstance. Quantitatively it would have to increase, and the same goes for using ICT across the curriculum.

This macro scenario, which would directly affect teaching at the meso-level of the classroom, was probably the reason for the intervention programme being interpreted by the participant teachers as “good timing”. This was made clear in statements by Peter and, later, by Karen, at the pre-experimental meeting referred to above. The project suggested a possible concrete answer to the pressing questions: *How should we live up to the reform in terms of integrated media pedagogy, and how to integrate theory with practice?* Indeed, just about every “Danish” teacher was asking these questions with varying degrees of enthusiasm. Furthermore, it is likely that MTE/StLE teachers around the world were and are being pressed by similar reforms and issues.

1.6. Media pedagogy and H.C. Andersen

As suggested in the research question, there are three basic concepts, which must be taken into consideration so as to attain their integration: the concepts of ‘media pedagogy’, the concept of ‘Hans Christian Andersen’, and the concept of “Danish”, where all three are related to specific research fields. I have already touched upon “Danish” and the problems of characterizing this subject as mother tongue education. In the following, I will sketch the frameworks for media pedagogy and Andersen. In chapters 3 and 4 all three fields of research will be elaborated more thoroughly.

The research field of *media pedagogy* is dominated by the concept of media literacy. However, it will be argued that the development of a new principle for media pedagogy within MTE/StLE requires the dismantling of this concept, which currently dominates. In fact, teachers and researchers worldwide who use the concept of media literacy openly admit that it is problematic and unsatisfactory. As David Buckingham and Kate Domaille (2003) have pointed out in a UNESCO survey of media education (through a questionnaire sent to a representative section of internationally recognized experts), the term media literacy is often used *strategically* in national

curricula and among pioneering teachers. This is because “... it offers a basis for including media alongside print in the established mother-tongue language curriculum” (Buckingham & Domaille 2003: 45). The problem in regard to this strategic use is the resultant development of conceptual inconsistencies, and even confusion. Media literacy has led to other umbrella notions such as: ‘critical media literacy’, or ‘multiliteracies’. ‘Critical media literacy’ simply doubles the somewhat contradictory conceptual problem of mixing the two notions of ‘media’ and ‘literacy’. To be critical is certainly an aspect of multimodal media competence, just as it is an aspect of competencies related to *other* school subjects and subject areas, perhaps even all human semantics! ‘Multi-literacies’, a concept proposed by the so-called New London Group (2000) and adopted, to some extent, by Buckingham in his recent study on *Media Education* (2003), carries the same problem of confounding concepts (cf. chapter 3, p. 41ff., and chapter 4, p. 159ff.).

In the pursuit of an alternative to ‘media literacy’, it is suggested that we draw on theorists such as Günther Kress (e.g. 2003), David Buckingham (e.g. 2003), Joshua Meyrowitz (1998), James Paul Gee (e.g. 2003), Kirsten Drotner (e.g. 2002), Jan Thavenius (1995), and Svein Østerud (2004) among others. These find that there is more, or at least something else, to media than it just being a language. Also, they are in the search of a new vocabulary for describing media and the reason for teaching it.

Instead of speaking of media-as-language, Kress and van Leeuwen (2001) suggest differentiating and distinguishing between *modes* and *media*, a theoretical discrimination, which plays a vital role in this study. In their understanding, mode would mean semiotic resources, and medium would mean the material substance for production, distribution, and reception of modes (cf. 4.1.1, p. 146). This distinction implies a new, challenging exploration in and outside schools of the dynamic and culturally shaped *interdependency*, but also at the same time *interdependency* between communicative modes and media, used by people in communicative contexts. Kress argues that these dependencies meet in *textual constellations* (2004), which imply potential construction of meaning and knowledge production within various contexts and subcontexts, such as the school and the subcontext of MTE/StLE, and we may add, the domain within this context of teaching Hans Christian Andersen or other canonical writers. The word ‘potential’ is used here because much hinges on actualising *meaning-making* for agents in a context – primarily the teacher and student(s) working together in classrooms at schools.⁶

The distinction between mode and medium is relatively new and disputed. It is not, in general, incorporated into available theory on media and media pedagogy, nor has it been applied to the

⁶ The word meaning-making – and the way it is spelled here and in the following – refers to the theory of multimodality, cf. Kress & van Leeuwen 2001 and 4.1ff.

literary works of Andersen or teaching Andersen before. Instead, theory reflects much confusion as in the recently published *Dansk Mediehistorie* ([Danish Media History] Jensen 2003). This work does not operate with a distinction between media and modes. Speech is rather understood as a medium, while speech, in the theory of multimodality, is a mode! This illustrates that theories of media and multimodality are contested and need to be critically re-examined.

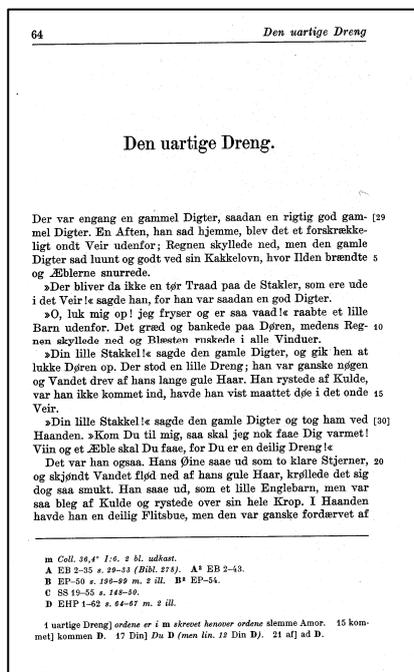


Figure 1.6.1. Scanned picture from the authoritative Andersen 1963-1990 edition of his fairytales.

Within the school subject “Danish”, among “Danish” teachers and among Danish literary academics Andersen’s fairytales are viewed dominantly from what Kress and van Leeuwen (2001) term a *monomodal* point of view. This means that they are seen as texts written in the mode of language, and given in the medium of the book (or rather paper). One example of this is illustrated in figure 1.6.1. The figure reminds – at least Danes – that for decades we have been taught Andersen’s writings. In other words, the traditional didactical choice of teaching his fairytales is to focus on them as literature. This has fostered and simultaneously been backed up by a specific institutionalised pedagogy within the school subject: literary pedagogy. This pedagogy has dominated – as social semioticians (Hodge & Kress 1988) would term it – the *regimes of genres, production, reception and knowledge production* of the school subject for decades.⁷

It is possible, however, to call attention to non-monomodal versions of Andersen’s fairytales by including other media than books and paper – hence suggesting a multimodal media pedagogical approach to his work. Figures 1.6.2 -1.6.5 demonstrate this point as they show different textual constellations of modes and media of Andersen’s fairytales. The figures remind us, from a contemporary point of view, that we may read, see and hear Andersen’s fairytales – sometimes simultaneously. Inspired by post-structuralism (Barthes 1989), one is able to discuss whether these fairytales are even *his* any longer. In a sense, they have *lost the authority of the author*; instead, the reader – and the teacher and learners – has the authority.

⁷ For a history of the literary pedagogy in “Danish”, cf. e.g. Mortensen 1979 and Kaspersen 2005.

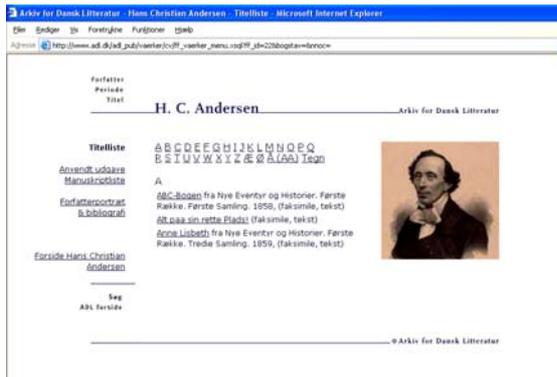


Figure 1.6.2 Cropped screenshot from the homepage *Arkiv for Dansk Litteratur* (www.adl.dk) used in experiment 1 (cf. chapter 7, p. 214ff.).

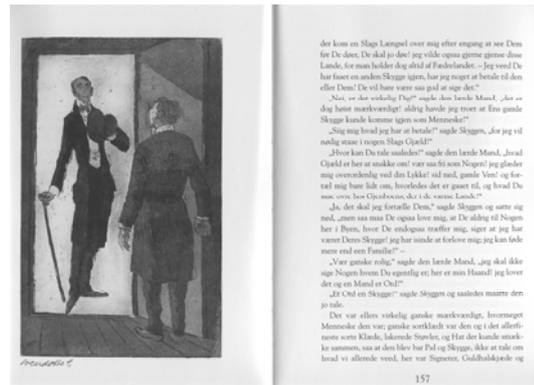


Figure 1.6.4. Scanned picture from the fairytale “Skyggen” (The Shadow) in Andersen 1995. Made available in experiment 3 (cf. chapter 10, p. 309ff.).

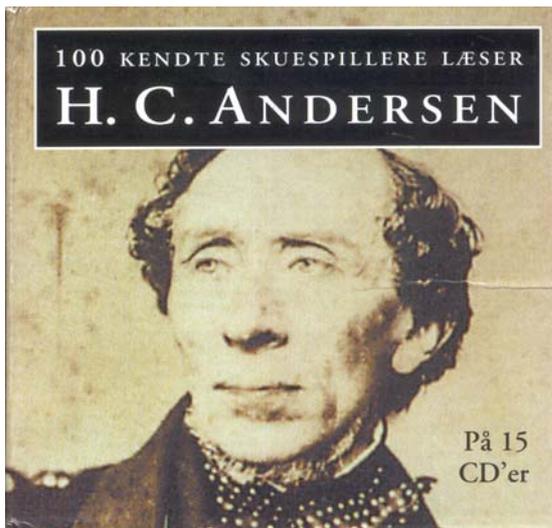


Figure 1.6.3 Scanned cover picture of a collected work of 14 compact discs entitled *100 known actors reading H.C. Andersen* [My translation]. Readings from this and other collections are made available in experiment 2 (cf. chapter 8, p. 259ff.).



Figure 1.6.5. Picture from pre-released material by the animation production company Egmont Imagination, A-film & Magna Films working on an adaptation of “The Ugly Duckling”. Made available in experiment 4 (cf. chapter 11, p. 347ff.).

In other words, it seems more accurate to claim that Andersen's original fairytale *discourses* (Kress & van Leeuwen 2001, Gee 1996), some of which were themselves inspired by earlier discourses, have been *transmediated* (a concept developed in chapter 3) into new textual constellations and communicative contexts, where his authoritative authorship is shared with others or has more or less been forgotten. From the point of view of life outside school, access to these "other" fairytales is relatively non-problematic. They are consumed – to use a market metaphor – in a rich variety of modes and media. In this regard we may mention: The Internet medium in different (digitised and searchable) language modes; in audio books, as modes of speech, which are distributed by popular technologies such as audio cassettes, compact discs, or the Internet; small children may experience them as "double modes" of language and stable pictures in the media of so-called picture books, illustrated works in bedtime stories; and we experience them as explicitly multimodal audio-visual genres in animated fairytales, in theatre plays, operas, in the television, motion pictures, and stage adaptations.

In this way, Andersen's fairytales have existed and been massively distributed in an abundance of multimodal media constellations for a long time and in many geographical regions. Andersen is a global phenomenon, translated and transmediated into almost any language and any national context. Critically, one could claim, however, that this has not affected the domain of teaching Andersen in "Danish" in Denmark – and that this represents a cultural contradiction: In the domain of everyday life outside the school system, we think of and produce knowledge about and through his fairytales – and so many other communicated phenomena (e.g. Tønnesen 2003) – in a multimodal and mediated manner. This is the case everywhere except in the domain of school, or to be more specific, the Danish upper-secondary education institution. Here, the fairytales have continued to be taught predominantly as a monomodal medium related to a 19th century literary and nationally-oriented rationale of mother tongue education (cf. 4.3.2, p. 137). The participating teachers, as we shall see, quite openly acknowledge this contradiction. They watch Andersen fairytales as animations and read illustrated works of Andersen fairytales with their children.⁸ But they find it problematic teaching such resources in their own practice on hhx level. The intervention of this study suggests – critically-constructively – that it may be possible and perhaps more authentic to operate with a multimodal approach to Andersen in "Danish", which would integrate literary pedagogy with other pedagogies, including media pedagogy.

⁸ Cf. e.g. the structured research interviews from the post-experimental phase in A48, which are analysed in chapter 12.

Indirectly, it is suggested that it may be adequate to apply multimodal media pedagogy to teaching other authors of the so-called Western Canon (Bloom 1994), such as Shakespeare, Cervantes, and Dante canonized in other countries. Some researchers and teachers in England have already experimented with this (Grahame 1991; Durran & Morrison 2004), and this study continues their line of research. Integrating multimodal media pedagogy with the framework of canonical writers and the traditional rationale of MTE/StLE, one might change the ways students and teachers produce knowledge within this subject, which again may change or at least challenge the very rationale of the school subject on a universal macro level. Doing this may help reflect upon a general development in semiotic practice in contemporary global culture that affects our way of producing meaning, including producing meaning on our so-called cultural heritage (Jensen 2005).

1.7. Design-Based Research (DBR)

The questions regarding “Danish” as emerging from a local school culture, which were raised by the participating teachers in the pre-experimental phase of the intervention, and which are put to fore in the present introduction to the dissertation, point towards the methodology guiding this study.

This study bases its methodology upon the concept of Design-Based Research (e.g. Barab & Squire 2004). In chapter 2, there will be made a presentation of the epistemological assumptions of Design-Based Research (or DBR), and in the beginning of Part III, chapter 5, we shall elaborate on its research design from the point of view of social science (Bryman 2004) clarifying how data are collected and selected. In this introduction, the basic structure of DBR with respect to this study will be outlined.

The methodology of DBR reflects a dilemma: On the one hand, its theory- and policy-driven aim is to test the impetus of particular innovative curricula related to a school subject, on the other hand, its attempt to meet and match concrete pedagogical needs for teacher and student interests and other agent’s interests in a local school culture.

Applied to this study, the idea of integrating the theory of semiocy and multimodal media pedagogy with “Danish” using H.C. Andersen as a resource is the theory- and policy-driven impetus. Who are the agents of this impetus? Quite obviously, one agent is the H.C. Andersen 2005 Foundation, which we may characterize as a group of cultural opinion makers in public life, encouraging new research with the agenda of changing school practice. A second group of agents are the research fields of mother tongue education and media pedagogy. These suggest new theories and hypotheses, which could co-construct the design of this intervention project. A third agent is the

Danish Ministry of Education (abbreviated UVM [Undervisningsministeriet]), which through political power pushes for a reform, requiring new practice. All of the above are external agents of the field ‘driving’ the impetus of the study.

As suggested above, however, we also find *internal* agents in DBR studies, which are paid a particular interest. In fact, what is crucial in any type of intervention research is that the researcher allows his or her project to be influenced in its design by agents in the field (Zeichner 2001). They should be able to influence the knowledge produced. Herrington et al. (2007), whom apply a DBR methodology, argue that the requirements and interests of the participants in the field should be explored, articulated and inscribed into the research question already in the early phases of any DBR project.

This is precisely why initial interviews and an initial meeting with participant teachers were arranged (cf. Part III, p. 156ff.). Such data informed the specific intervention, including the experiments in vital ways. In addition, we shall see why later types of dialogue were organised with the participating teachers; data was required on *their* concerns and cognition. The didactic theoretician Sigmund Ongstad (2004) has termed such a subject-related process of reflection: ‘didactization’. Establishing processes of didactization is a main concern of DBR studies in general, but also of this study in particular. In terms of data collection, there will be several qualitative accounts of didactization among the participating teachers and students using a variety of research methods that fit the intervention situation.

One way of illustrating the process of didactization in this study is to point out the basic fact that the four “Danish” teachers included in this study, had taught “Danish” for several years at four different commercial upper-secondary schools or “gymnasiums” in Denmark during 2004. Their profiles reflect their familiarity with the practices and events of “Danish”.⁹ However, due to the intervention, these teachers were suddenly forced to engage learning resources and adapt an unfamiliar curriculum design. This meant changing their understanding and execution of practices, but also engaging in new types of events. At the concrete level, the teachers had to adapt learning resources related to Andersen’s fairytales, which the present author – as an intervening research-designer – had conceived and made available to them. This may sound simple and unproblematic. In reality, it implied didactization at a quite fundamental level for the teachers. It required rethinking the rationale of the subject.

⁹ I draw on literacy researcher David Barton (1994) when the concepts ‘event’ and ‘practice’ are used. Barton argues that literacy development is embedded in events and practices. Events are concrete and time-and-space-specific, whereas practices are ideological.

In an evaluative interview in a film made by students in a so-called journalism group (one of the methods developed for producing data on didactization) in the last out of four experiments, one of the participating teachers (Karen) has some interesting comments in this regard. More specifically she states that before the intervention started: “I thought I knew a lot about H.C. Andersen (shaking her head) but there was certainly much I did not know”.¹⁰ In the same interview, Karen suggests that she refers to “both academic matters and methods”. To use Sawyer and van de Ven’s (2006) terminology, the excerpt demonstrates that paradigms, traditions, topics, teaching-learning processes, and knowledge regimes related to “Danish” were contested in Karen’s understanding due to her participation in the intervention. Her colleagues at the other three schools and, not the least, students, constantly invoke similar comments. They begin to experience and reflect on a new conception of the subject in terms of its practice.

As will be documented, both students and teachers remark on this process as being both inspiring and challenging, while retaining its ambivalence and ambiguity. Such findings have also been found in other DBR research. As Sten R. Ludvigsen reports on another DBR study, design-based intervention processes are about rethinking epistemological participation structures and rewriting the social scripts for students:

When we view design experiments as interventions in educational practice, these are often done through some kind of collaboration between teachers and researchers who try to change the way the students work. These shifts often presuppose a change in participation structures, and how agency and division of labour are distributed between the teacher and the students. One aspect of this change is an epistemological change among the students and the teacher. By epistemological change I mean how the teachers and students think about the knowledge construction processes. Their perception of this will have an impact on what kind of participation structures develop in the educational setting (...). The design experiment as a specific type of intervention is therefore often strongly connected to different ways of working, or, to put it differently, to social scripts for students’ actions (...). These scripts will often be new to the students. As a consequence they must be explicitly learned and developed in institutional practices over longer periods of time.¹¹

This is a very precise description of the processual methodology of design-based intervention research – and it is also a precise description of the methodology of the present study. DBR studies

¹⁰ Karen’s words, in Danish, are: “jeg troede jeg vidste en hel masse om H.C. Andersen (ryster hovedet), men der var sandelig meget jeg ik- vidste”. And in the next quote: ”det er både fagligt stof, og det er arbejdsmetode.” Cf. A1 and A44: Karens case, Journalistgruppe.

¹¹ Ludvigsen’s article is in press at the publisher Pergamon, Elsevier. He has kindly given me permission to use this quote.

raise fundamental questions of epistemological change – or didactization, as Ongstad would term it – not only on an abstract theoretical level, but in fact in concrete classrooms. Teachers and students alike may be able to raise such questions, which should be collected and analysed by the designer-researcher doing participant observations and using other qualitative methods.

In the present study, one way of illustrating this, is to bring forth a specific student group in this study, which was to evaluate experiment 2 in the intervention that explored how mediated orality could be taught and learnt in a competence-oriented way using Andersen’s fairytales as a resource (analysed in detail in chapter 8). One exchange developed as follows:

Mette	...but I think it has been fun, because it has been different
Anne	yes it has been fun because it has been different, but I am not sure about it in terms of content
Signe	no
Mette	no really I don’t know how much can be used afterwards
Anne	no ¹²

The point being that something new and different within a school subject was tried out, which in turn contested normal procedures. More precisely, the ideological conception of practice within a school subject was put to the test. The experiment had been ‘fun and different’, but these two parameters are not necessarily valid in relation to learning ‘content’ in terms of formal education. At least this was the student-informants’ argument. Thus, they express doubt, perhaps even scepticism, regarding the objective of the experiment.

This argument is, in a sense, illustrating the main dynamics of the dissertation. Listening carefully to the agent-considerations regarding the experiment, a pertinent question, which comes to the fore, is whether integration of H.C. Andersen, media pedagogy, and “Danish” is meaningful and produces viable ‘content’ for education. It is understood, in terms of research-design, that the student-argument carries a certain force. One must even recognise certain drawbacks – at least from a student point of view.

From an analytical-theoretical point of view, however, the experiment referred to and the intervention study as a whole also produces positive and applicable insights, as already argued. The

¹² Excerpt from A2, my translation. Original: [Mette: men jeg synes da det har været sjovt, fordi det har været anderledes / Anne: ja det har været sjovt fordi det har været anderledes, men hvor indholdsrigt det har været, det ved jeg så ikke/ Signe: nej / Mette: nej altså jeg ved ikke hvor meget man kan bruge det til her bagefter / Anne: nej]. Cf. also A34 and A36.

evidence therefore points towards *possible* changes in the events and practices of “Danish”. This indicates both: a) the *constraints* that may hinder change in the long run, but also, b) an *alternative understanding* of how the rationale for a school subject ought to be interpreted retrospectively and prospectively. More narrowly, it also produces knowledge about how to teach one of the canonical topics found in the “Danish” curriculum, namely H.C. Andersen. Perhaps, foreign readers will experience that the study offers knowledge of and ideas on how to teach other literary classics like Shakespeare, Dante, and Cervantes in “English”, “Italian”, and “Spanish”. The perspective, hence, goes beyond a local scope.

1.8. Lessons from earlier research

As suggested above, there is nothing new in conducting research on how media pedagogy might gravitate towards MTE/StLE and vice versa. However, I believe this research tradition should reflect upon the reasons for its lack of impact on developing events and practices at schools. Insights might arise if one goes back five decades to prominent media guru Marshall McLuhan. In 1959 he pointed out the “task we must now tackle – the training of the young in mastery of the new global media” in front of a gathering of “English” teachers in Chicago.¹³ McLuhan was prophetic. His innovation consisted in several of his speculative points regarding media education. He pointed out, for instance, a youth’s media ‘mastery’, thus hinting at media competence as the important goal of media education. Also, he warned against viewing new media as a threat to the old. All this still seems surprisingly modern and close to concerns, which interest scholars today, including the present author. More than this, these reflections come forth to our present age as down to earth. One reason for this may be because he remains focused upon the learner’s situation, making the ironic comment that: “Of course Johnny must read. He must follow the lines of print (...). But in the meantime we shall have lost his attention” (Op. cit.: 3). In this way, McLuhan points at the essential need for *social authenticity* and *personal relevance* in the process of learning if we wish to retain student attention, also in regard to MTE/StLE. This will benefit both themselves and society. In my analyses of the collected data, I shall return to these two aspects repeatedly.

While McLuhan was ahead of his times, and still speaks to us today, this does not mean that we should lose our critical perspectives of the ideas he puts forth. McLuhan may be ‘down to earth’, but not universally so. The problem with his discourse is the (techno)-deterministic ease with which he addresses the process of changing a school subject in reality. I would argue that McLuhan

¹³ I cite from McLuhan 2003: 9.

presents a top down logic that goes roughly as follows: New technology and media changes culture, and culture changes education – it's simply something to be tackled, almost mechanistically. In this sense, Johnny from McLuhan's comment above is more like a paper-person than a real person.

Media scholars after McLuhan have repeated his boosting optimism each time a new and promising media or technology was developed. If we move on to a later era of so-called new global media – the 1990ies with its advent of the Internet and digital generations (but still electronic communication) – the dominating discourse among businessmen, policy makers and, to some extent, educational researchers was an echo of McLuhan's discourse, proclaiming, once again, that media culture will inevitably and rapidly change education, including mother tongue education.¹⁴ Alternatively, post-critical education researchers (e.g. found in an anthology edited by Buckingham; cf. Buckingham 1998b) have had a hard time believing this vision any more. Indeed, a growing amount of empirically grounded research is backing this scepticism up, both in an international and a national context.

To illustrate my point, a recent Danish dissertation (Henningsen 2005), which is written with a national perspective, has explored the relationship between media and learning in primary school “Danish” (levels 8-9; ages 13-14). The study concludes, on the basis of combined quantitative and qualitative analyses, that the variety of so-called ‘media texts’ (not including books – a problematic distinction which will resurface later, cf. 3.1ff., p. 41ff.) that teachers actually use for teaching and examining students at final exams, are very much restricted and dominated by literature. Nonetheless, the study also demonstrates, through an ethnographical classroom study, that there is great potential among students, teachers and schools to develop media learning within MTE/StLE. Also, it is found that the *affective* interests of students in media should be accentuated. Evidence for similar conclusions on upper-secondary media education has been presented in various smaller Danish quantitative and qualitative studies over the last 15 years.¹⁵

In a global perspective, the UNESCO survey made by Buckingham and Domaille concludes that media education: “appears most frequently as a ‘pervading’ element of the curriculum for mother-tongue language or social studies,” and that “it is loosely defined and assessed as such.” (Buckingham & Domaille 2003: 43) Having reservations in regard to the validity of such findings (given the bias that the informants are, typically, the pioneers of media education in their respective

¹⁴ Cf. Bigum & Kenway 1998 for a summarizing overview.

¹⁵ Cf. e.g. Poulsen 1999; Poulsen 2001; Lehrmann 1996; Agger 2001; Drotner 2001b; Andresen & Holm Sørensen 1994.

countries), it must be pointed out that many countries have developed published sources, official documents, policy papers and conceptual frameworks for media education. The problem being that these resources and recommendations for classroom practice do not necessarily correspond with what is happening ‘on the ground’. As a matter of fact, Buckingham and Domaille point out that we know very little about what happens in classrooms. Classroom research is needed offering empirical data. As they formulate it, rather dramatically: “One of our key findings is that there is an extraordinary dearth of systematic, reliable research in this field” (Op. cit.: 42).

Trying to compensate for this dearth of research Buckingham and others gathered in a school of thought associated with the University of London and has offered interesting new research of what happens or could happen in MTE/StLE classrooms, if one intervenes with a media pedagogical agenda.¹⁶ Some of their findings will be described in detail in chapter 3. One should expect for this research to have quite some impact on teaching “English” in England. However, Buckingham, in one of his most recent books, *Media education* (2003), airs some frustration in regard to common education commentators, but also certain media professionals, for dismissing “...media education on the basis of prejudice and ignorance...” criticizing the “utopian fantasies of educational change”, which are claimed to exist among academics (Buckingham 2003: ix). These points summarise Buckingham’s earlier research, which has inspired media education and MTE/StLE researchers all over the world – including this study. However, these points are also unpleasant reminders of how difficult it is to produce research that may relate to and impact upon reality. The main problem of ‘boosting conceptions’ of integrating media education and MTE/StLE seems to be that both are unrealistic and rest on naïve conceptions of social ontology. In this case the social system of education and its subsystem: MTE/StLE. We cannot conclude that any social or cultural development, such as a technological media development, easily diffuses into the social practice of teachers and students in education. The relationship is far more complex in modern society. Rather, it develops as an experiment with unexpected results. Methodological self-scrutiny is required; and I will attempt to unfold this in the following chapter.

¹⁶ Cf. e.g. Buckingham 1990a; 1990b; 1990c; 1998; 2000; and Buckingham & Sefton-Green 1995.

Chapter 2. Design-Based intervention methodology

In this chapter the methodology will be presented and developed as to its application in this study. Chapter 5 will concern the details and principles of data collection, but also data selection from the perspective of social research.

As was mentioned in the introduction, this is in terms of methodology a design-based intervention study. In order to explain what this means, a presentation of Immanuel Kant's reflections on educational experimentation will be necessary. Following this, it will be demonstrated how Kant's approach is related to contemporary action research conducted in Britain by, for example, David Buckingham. This approach attempts to explore the integration of media and mother tongue education in a manner, which has inspired the research design of this study. The approach is not adopted uncritically however. Limitations of the methodology are identified and operationalised. Pursuing a refined alternative, attention must be turned to the methodology of DBR, as developed in an American context. Finally, some basic epistemological and ontological ideas will be presented, to which this kind of research is indebted. In turn, this points at Giddens' approach to sociology, social semiotic analysis and so-called abductive science, which may be an answer to knowledge production in the so-called age of uncertainty.

2.1. Kant on experimenting

In *Über Pädagogik*, from 1802, Kant defines some principles of education, and then reflects on the necessity of experimenting with these. Although Kant's book is, in many ways, outdated, the following is rather interesting:

Man bildet sich zwar insgemein ein, daß Experimente bei der Erziehung nicht nöthig wären und daß man schon aus der Vernunft urtheilen könne, ob etwas gut oder nicht gut sein werde. Man irret hierin aber sehr, und die Erfahrung lehrt, daß sich oft bei unsern Versuchen ganz entgegengesetzte Wirkungen zeigen von denen, die man erwartete. Man sieht also, daß, da es auf Experimente ankommt, kein Menschenalter einen völligen Erziehungsplan darstellen kann. (Kant 1878: 69)

As read from a contemporary point of view, Kant's point must be as follows: Educational principles or we may say hypotheses, should enlighten the making of new practices and experiences. Kant, thinking as a modern man of the Enlightenment, is quite optimistic, and deterministic about this relation. He believes that the happy marriage between sense (Vernunft) and experience, as mediated through policy-making, will improve society. However, Kant also expresses an interesting doubt,

questioning how sensible sense is, so to speak, in terms of foreseeing what will actually happen in practice. In Kant's own words, he suggests that the sense of theoretical principles should always be tested in reality through experiments. Kant expects that this will lead to experiences that often will reflect 'entirely unexpected effects'. This remark sounds almost like a post-modern doubt in Kant's writings (Lyotard 1979; see also Zembylas 2001). Acknowledging this process should help researchers and educational politicians revise theory and policy-making continuously.

Many contemporary education researchers would disagree with Kant in regard to the ease with which theory and science may produce change in social reality (among others, Hargreaves 1994; Randi & Corno 1997; Borgnakke 1996; Borgnakke 2000). Kant, however, remains constructive, and ethically concerned. He suggests that confronting theory with experience and experiences with theory, in a mutual reaction, is a necessary ongoing process in history. Indirectly, Kant offers a lesson on methodology, which I find imperative for this study: *We should be sceptical about deterministic relations between theory and empirical reality – or we might say, more philosophically, between idealism and materialism*. But still, we should insist on exploring this relation. As shall be explained in detail later (cf. 2.6, p. 36f.), Kant's basic logic of experimental procedure in educational research has a processual, abductive structure. It proceeds from theory via experience to revision, and so forth. There are several parallels between this logic and contemporary research regarding the integration of media and mother tongue education/pedagogy, which are of relevance for this study.

2.2. From Kant to contemporary media and mother tongue education research

Broadly put, research taking media education/pedagogy as a point of departure for changing the knowledge production of MTE has developed from speculative, theoretical top-down approaches, which did not deal with the messy business of classroom practice, to *theoretically informed*, yet *empirically grounded* research. This latter approach acknowledges the importance of local school culture and the construction of meaning for teachers and students. It attempts to identify an inter-relationship between top-down theorizing and bottom-up rethinking of theories and practices.

David Buckingham and Julian Sefton-Green's article "Cultural Studies Meets Action Research in the Media Classroom" (1996), explains the methodology of their book *Cultural studies goes to Classrooms* (1995) – it functions as a good example. Their point of departure is a critique of the traditional, one-sided, speculative "handing down"-principle of media education research, known from the 1980s and previous decades: Academics hand down theory from speculative ivory towers to teachers who, again, hand it down to students. In this process, both students and teachers are

assumed to have empty heads.¹⁷ As Buckingham and Sefton-Green point out; nobody tested whether this principle actually functioned. Among researchers and politicians in the 1980s, there was “very little sense of what actually happened when those suggestions were put into practice”, as Buckingham and Sefton-Green put it (1996: 224).

In order to shed some light on this matter, they and other British researchers, conducted several ethnographically oriented studies in the early 1990s, *watching media learning* as one of the titles goes (Buckingham 1990c). This research eventually made it clear, as summarized in the 1996-article that: “...grandiose expectations were seen to be rarely fulfilled” (Op. cit.: 225). The knowledge production of a school subject such as “English” looked like something from the 1970s, with a strong influence from critical theory, which students did not really understand. Furthermore media, which were familiar to learners from their private lives, were absent or taught in ways that seemed problematic. Buckingham and Sefton-Green’s methodological response to this was a new research agenda, which was to promote realistic change. This agenda combines ethnographic research with what they term “action research”, testing out new, and more learner-oriented conceptual frameworks for media pedagogy in realistic classroom settings. In other words, echoing Kant, sense is confronted with experience. The methods for studying this are: “observation, individual and small-group interviews and surveys, and most significantly, we have considered students’ own productions in a range of media, including their written reflections on their work”, Buckingham and Sefton-Green explain (Op. cit.: 228). Combining this kind of action research and ethnography, one is led to data from what these researchers term situated discursive practice. They read data “not as transparent evidence of what students really think or feel, but as a form of social action that needs to be related to the social contexts in which it is produced.” (Op. cit.: 228).

Buckingham and Sefton-Green contrast their findings from this provoked practice, so to speak, with the macro discourse of traditional media and mother tongue education (as they understand it). Doing so, they are able to highlight several interesting constraints of dominant discourses and point at alternative future potentials. I will present some of these findings in chapter 3, hence making possible what is now considered main insights in media literacy research.

In many ways Buckingham’s and Sefton-Green’s research is inspiring and worth applying in other contexts. The suggested methods and approaches for analysis are similar methods used in the present study. Buckingham and Sefton-Green are clearly inspired by *Cultural studies* and action

¹⁷ Indeed, one may say that the so-called *hypodermic needle theory* going back to Harold D. Lasswell (1938) – a theory rejected long time ago within Media studies (cf. e.g. Drotner et al. 1996: 83) – was the operating principle for media education.

research, having the courage, but also talent to explore and develop new methodologies dissolving unfruitful disciplinary distinctions between ethnographic research, action research, social semiotic research, and discourse analysis (hence confirming and demonstrating what some theorists are suggesting in principle, see e.g. Chouliaraki & Fairclough 1999; and, in a Danish context, Høiris 1988). From this current perspective they are also indebted to the idea of experimenting with a political agenda – as proposed by Kant – openly admitting their own subjective and power/knowledge related interests in future teaching. Being entirely objective in this kind of research is not possible, which Sefton-Green and Buckingham acknowledge, hence confirming Habermas' general observation decades ago (1973). Yet, I believe their conception of methodology could be developed further, or rather, needs to be refined or restated, in order to explain the research methods conducted in the present study.

What is lacking, among other things, in Buckingham and Sefton-Green's research, is a clearer description of the resources by which they were actually intervening: What were they teaching? What did the learning material look like? Sefton-Green and Buckingham quickly shift to (interesting) macro reflections and generalizations. Ironically, classrooms seem quite absent in their declared classroom based studies. This makes it difficult to understand how they construct new knowledge from the meso-level of observable classrooms to the macro-level of theory, and even how this may be reproducible. Thus, while transparency is lacking in the given approaches, the methodology of DBR has something to offer in this regard.

2.3. DBR as applied to this study

The term: 'design-based research', indicates that it is research applying a design. More specifically, it is designed learning resource materials that researchers insert into a field. In the research report it is seen as an important aspect to explain this design and the processes, which it enables. The history of DBR is relatively short. More specifically, it is a new methodological concept that has been developed in the US over the last two decades, and it is related to various facets and disciplines within the learning sciences (Barab & Squire 2004; Squire et al. 2003; The Design-Based Research Collective 2003; Sandoval & Bell 2004). Among practitioners there does appear to be an conception of DBR as an entirely new methodological invention. It openly acknowledges influences from action research; intervention research; evaluation studies and classroom based qualitative research. In the longer run this development is seen as going back to the pragmatism of Dewey and C.S. Peirce.

The methodology of DBR reflects a dilemma, which was mentioned in the introduction: On the one hand, it is theory and policy-driven. On the other hand, it intends to meet and match concrete teachers' pedagogical needs, student interests and competencies, and local school culture. The reason why DBR confronts this two-folded dilemma is that educational research has found, in a number of empirical studies over the last decades that educational reform does not lead to any significant change *unless* teachers – being primary gatekeepers of the school subjects – engage in this reform process, and are allowed to do so in innovative and creative ways (cf. e.g. Hargreaves 1994, Randi & Corno 1997). Education research and policy-making with the agenda of change needs to be well founded, “acknowledging the primacy of classroom culture”, as one of the studies is entitled (Squire et al. 2003).

What DBR researchers typically *do* is intervene into a given circumstance by introducing a designed learning curriculum. This could be a web page covering issues on science learning. Such researchers often see themselves as designers and researchers or *designer-researchers* at the same time, as does the present author.

In regard to the present study this meant that the specific situation was approached with the intent of change, through a specifically designed learning curriculum. More specifically this was implemented in four subsequent experiments during the course of a year. For each of the four experiments a mixed compilation of *resources* and *tools* (which I will term *Available Designs*, cf. below) were compiled and presented to teachers in a first and second/final version. With the designed learning resources there followed relatively detailed explanations of the teaching-learning practices that the teachers and the students were to apply. The teaching processes were termed ‘*Designing*’, from which followed the production of new material, which was termed ‘*Redesigned*’. The explanations for the Available Designs in each experiment implied a range of epistemological, pedagogical, curricular, technological, and social commitments that must be interpreted, or *adapted*, as Randi & Corno (2003) would phrase it, by the teachers and students.

The design of materials that a DBR researcher or research team posits into a specific setting is, as is proper, to some extent controlled beforehand and during the intervention by the researcher(s). In this process, however, the involved agents in the field also have an important say, which is to be taken seriously by the supervising researcher – as argued and briefly illustrated in the introduction. The present study planned for systematic processual activities or perhaps they could be called genres (Ongstad 1997), for reflection with both teachers and students. This will be referred to in detail in the analytical-empirical section (Part III).

Category	Psychological Experimentation	Design-Based Research
Location of research	Conducted in laboratory settings	Occurs in the buzzing, blooming confusion of real-life settings where most learning actually occurs
Complexity of variables	Frequently involves a single or a couple of dependent variables	Involves multiple dependent variables, including climate variables (e.g., collaboration among learners, available resources), outcome variables (e.g., learning of content, transfer), and system variables (e.g., dissemination, sustainability)
Focus of research	Focuses on identifying a few variables and holding them constant	Focuses on characterizing the situation in all its complexity, much of which is not now a priori
Unfolding of procedures	Uses fixed procedures	Involves flexible design revision in which there is a tentative initial set that are revised depending on their success in practice
Amount of social interaction	Isolates learners to control interaction	Frequently involves complex social interactions with participants sharing ideas, distracting each other, and so on
Characterizing the findings	Focusing on testing hypothesis	Involves at looking at multiple aspects of the design and developing a profile that characterizes the design in practice
Role of participants	Treats participants as subjects	Involves different participants in the design so as to bring their differing expertise into producing and analyzing the design

Table 2.3.1. Comparing psychological experimentation and Design-Based Research Methods. Cited from Barab & Squire 2004: 4.

As pointed out, DBR is about performing experiments in real settings. Sasha Barab and Kurt Squire (2004) argue that the classroom, thus, becomes a *semi-naturalistic* setting and that this changes certain parameters of the research in fundamental epistemological and ontological ways. In table

2.3.1, Barab and Squire synthesize the “infrastructure” of DBR, comparing it with psychological experimentation.

This study does not subscribe to all distinctions made in the table above. For instance, DBR does not seem to intervene with a hypothesis, as suggested by Barab & Squire; but perhaps our disagreement rests on how we define a hypothesis. Inspired by abductive epistemology (cf. 2.5, p. 34f.), I will argue that *a hypothesis is a potential local explanation, or theory, of a phenomenon that takes place in a specified context*. The hypothesis proposed in this study involves, if not ‘multiple’, then at least several aspects; this becomes evident in Part III as the hypothesis is adapted to local classroom culture in the process of design.

It is, indeed, challenging to characterize the: “complexity, fragility, messiness, and eventual solidity of the design, and doing so in a way that will be valuable to others.” (Barab & Squire 2004: 4). Still, it is possible to do so by demonstrating invariance and variance in the findings as they emerge from different settings and agents exposed to identical material. The contextual backdrop is very important to DBR. Nevertheless, DBR is first and foremost theory-driven, as stressed by Barab and Squire. Each study should attempt to move beyond local contexts towards what some ethnographers – inspired by Clifford Geertz (1973) – term *petite generalisation*. In Barab and Squire’s view this is crucial for the validity and specificity of design-based intervention research:

...the validation of a particular design framework is not simply intended to show the value of a particular curriculum. Instead, design-based research strives to generate and advance a particular set of theoretical constructs that transcends the environmental particulars of the contexts in which they were generated, selected, or refined. This focus on advancing theory grounded in naturalistic contexts sets design-based research apart from laboratory experiments or evaluation research. (Op. cit.: 5)

A local classroom setting is the *minimum ontology* of DBR, as Barab and Squire term it. Designer-researchers should try to relate this ontology to a macro-ontology. Summing up, the goal of DBR is two-fold:

- To explore how a design impacts actual curriculum change in local contexts
- To understand how this exploration may be used to confirm, reflect upon or potentially revise the theory and model that were involved in making the design.

These will also be the goals of this study. This pursuit will be made operative in the following way: Firstly, in Part II, there will be developed a consistent theory and model for an integrated approach to media pedagogy and MTE/StLE focused on teaching Andersen fairytales in concrete “Danish” classrooms. Secondly, in Part III, this model will be tested in specific experiments exploring how these impact curriculum change in local contexts (four classes), while at the same time reflecting whether this may be used to confirm, refute or revise the theory and model. The principles informing systematic data production and data selection for analysis are described in chapter 5, which explains in detail the research methods and techniques employed. DBR is traditionally rather vague about which fundamental questions that ought to guide any kind of social research.

A fundamental epistemological assumption embedded in this methodology is to acknowledge the *agentive* nature of meaning makers in the local field of classrooms. What does this imply, more precisely? In regard to this study, teachers and students will always, and expectedly in very different ways, remake the learning resources offered to them in a dynamic and heterogeneous processes. This remaking is not an *implementation*, but should rather be thought of, as already suggested, as an *adaptation* that reflects, among other things, the identities of the teacher and the students - ‘Identity’ being one of the concepts that will be looked into later on (cf. 3.2ff., p. 58ff.), so as to present a theoretical clarification (drawing on Gee 2001).

It will be stressed that not only teachers remake the *Available Designs*, since students do this also. In some DBR approaches it is found that the interpretative role of students is somewhat ignored. In the conception of teaching utilised in this study, however, teachers and students work together in a community, mutually constructing the ‘content’. Nordic researchers in subject-related didactics (e.g. Ongstad 2004; Krogh 2003) have reflected on this point, arguing that teachers and students act, but also collaborate from their various perspectives upon a *third* dimension, the subject-matter mediated in concrete texts. Transferring this point to DBR, it could be said that one may differentiate two groups of human agents, who produce and construct meaning in the classroom. These make adaptations of a third entity of meaning construction, the designed curriculum. This didactical *triad* should be reflected in designer-research in terms of developing the curriculum, but also in terms of methodology; i.e. in the process of theorizing, collecting empirical data and presenting analysis.

If this translates the vocabulary of DBR into the introductory and simple distinction of *events and practices*, the analytical ambition for this particular study is to analyse how the adaptation process of injecting a curriculum design affects exactly such events and practices. The smallest

analytical unit of DBR is a semiotic event related to the designed curriculum and the unfolding in practices and events of this curriculum. In the context of this study and its research question, we could narrow this down, arguing that the smallest analytical unit is an event, which reflects teaching of multimodal media competence within “Danish”. If one were to advocate the concept of media literacy, it could be called a *media literacy event*. Alternatively, it could be called it a *semioy event*, while others, such as the so-called New London Group, designate it a: *design event*. In the New London Group’s vision for ‘designing social futures’, as the subtitle goes in *Multiliteracies* (2000), the following general model for didactic design and analysis is framed:

Designs of Meaning	
<i>Available Designs</i>	Resources for Meaning; Available Designs of Meaning
<i>Designing</i>	The work performed on or with Available Designs in the semiotic process
<i>The Redesigned</i>	The resources that are produced and transformed through Designing

Table 2.3.2. Designs of meaning. Cited from New London Group 2000: 23.

This matrix, and its vocabulary, will be adapted as a tool for analysing the experiments conducted through intervention. The scale of analysis for a particular experiment should not – and cannot – describe all the resources for constructing meaning, all the work performed on this, nor present analyses of all the resources produced by the teachers and students. Rather, it is an auxiliary hypothesis that it should offer a holistic sense of the semiotic, transformative chain within these three stages of selecting data for events and practices as they relate to their local impact and the confirmation or revision of more general theories and models. In chapter 5 there will be found a detailed presentation of how data is collected, an evaluation of how one may select among data, and an operationalisation of how such processes of analysis may be validated.

2.4. DBR, sociology and social semiotics

When studying social reality, a minimal conception of social ontology is required, because it is not possible to choose a reliable epistemology prior to defining the nature of object of study. It is only through such epistemological certitude that we may research the engineering of changes within this

ontology, and later reconstruct these as valid empirical-analytical findings. It is proposed that DBR reflects a conception of social reality, which parallels Anthony Giddens' concept of *structuration* as proposed in: *The Constitution of Society* (1984)¹⁸. It also parallels social semiotics (Hodge & Kress 1988), including its understanding of macro-, meso- and micro-discursive levels of semiotic chains. Thinking these features together in a framework should not be too difficult, as they both explicitly approach one another in terms of disciplinary fields: the sociology of Giddens incorporates semiotic, even psycho-semiotic ideas; and semiotics incorporates different theories of non-functionalistic sociology, dependent on the social reality one wants to analyse, as Theo van Leeuwen has stressed in his introduction to social semiotics (2005: 73ff.).

Giddens' structuration theory is in fact quite simple, which is probably one of the reasons for its efficiency and wide acknowledgement (Føllesdal et al. 1999). It may be formulated as follows: What people do in local events, studied as *micro sociology*, is not merely a function of rules and norms on the systemic level, as often believed in classical sociology. Local events and settings have their own genuine agent-controlled dynamics, as often demonstrated by ethnographers. On the other hand the micro sociology of local events is not merely controlled simply by agents decoupled from the larger structures. Giddens transgresses the classical *dualism* between the acting individual – in this study the teacher and students in class – and society. Instead he proposes an analysis of these two entities as a relational and processual *duality*, a *social practice*, as he puts it, in which the system is simultaneously enabled and constrained. In this sense, the system is understood as the written and unwritten rules, norms and official protocols of mother tongue education developed over time. Other sociologists have introduced 'practice' as an analytical term, Bourdieu (1984) being the most prominent, advanced, and often referred to, by (media) literacy and situated cognition researchers (Buckingham 2003; Barton 1994; Kirshner & Whitson 1994; and in a Danish context, Tufte 1995). However, for this study Giddens is sufficiently advanced and operational. He points out that the system is at once the means and the result of the enacted events of individuals, such as teachers and students in classes. This is the social system, which is intervened and surveyed in order to understand the process of its design. As it happens, Giddens understands social practice as positive and constructive because it leaves open the possibility for social change through intervention without being naïve in regard to quick emancipating results. Thus it follows neither the micro or macro sociology of the school subject.

¹⁸ Referring to this work, I draw on Danish sociologist Lars Bo Kaspersen (1996). Cf. also Giddens 2001.

The theory of *Social semiotics*, as Hodge and Kress (1988) explain it in a book of the same name (published by Polity, which was established by Giddens), has a similar implication idea, adding novel analytical components and clarification though. ‘Social semiotics’, as they define the term is, in a way, saying the same thing twice: semiotics, as defined by its founding fathers – Voloshinov, among others – refers to *signs used functionally*. Signs and the dynamics of the social are intrinsically related, indeed Hodge and Kress even highlight “the primacy of the social” (Op. cit.: vii). The reason why they make this emphasis is perhaps that semiotics is often misunderstood, due to the influence of Saussure and later uses of his approach, so that the sign is understood as an autonomous and stable structure – leading to rigid structuralism. In Hodge and Kress’ understanding, the sign and the social are always on their way, so to speak, in a semiotic exchange. With Berge and Ledin (2001) speaking of contemporary genre theory, very much indebted to social semiotics, we may characterize the understanding of social semiotics developed by Hodge and Kress as advancing, as a *pragmatic turn* within semiotics.

This is reflected in Hodge and Kress’ understanding of structure. Instead of following Giddens in positing two levels (the micro and the macro), they suggest – like many other semioticians and ethnographers – a differentiation between micro-, meso-, and macro-structural levels. These systems are more or less observable and flexible, methodologically and analytically speaking:

Structures exist on different *levels*, which can be labelled in relation to the point of semiotic entry as *macro-structures* (structures so large in space or time as to be difficult to perceive directly, *meso-structures* (structures of a scale that makes them accessible to direct inspection) and *micro-structures* (structures too small to be easily perceived). These terms are relative to specific problems and specific semiotic positions. This relativity and specificity is not a disadvantage from the point of view of semiotic analysis. On the contrary, to recognize it is itself an important contribution to effective analysis. ... Semiotic movement between levels can be termed either *stretching* (movement upwards) or *diving* (movement downwards). (Hodge & Kress 1988: 263)

The relativity of semiotic structures is important to stress in order to avoid misunderstanding: It relates to the primacy of the socially embedded agents who produce meaning, such as teachers and students negotiating this process in a meso-level setting. In reference to the design of this study, it could be stated that *Available Designs* intervene between teachers and students in four experiments through processes of stretching and diving.

Philosophically speaking, social semiotics is a materialistically grounded theory. A text is a “concrete material object produced in discourse” (Op. cit.: 6) projecting “a version of reality” (Op. cit.: 263) conducted by real, active men. This idea has, among others, been further developed in the

theory of multimodality, particularly by Kress and van Leeuwen (Kress & van Leeuwen 2001; Kress et al. 2001). Here they clarify, in new and precise ways, in which manner ‘semiotics’ includes a rich variety of material modes and media, not only the mode of writing.

Hodge and Kress (1988) also distinguish between *ideological complexes* and *logonomic systems*. In spite of this rather esoteric language, these notions are important for this study:

Following Kress and Hodge, “ideological complexes” (Op. cit.: 3) are defined as a functionally related set of contradictory versions of the world. To exemplify the relevance of such definitions we may present the following example: In the four classroom cases being studied, it is easy to collect data that reflect different conceptions – or rationales, as I also term it – of “Danish” as a school subject system among students. It is also possible to point out ideological prerequisites for their interpretation and the uses of *Available Designs* in the four experiments. Likewise, as will be demonstrated, we find quite different versions of “Danish” among the four teachers included in the study. Not only are there found ideological differences among the teachers – these also differ from the position taken in this study. Indeed, none of these represent objective positions. Contradictory versions of “Danish” are also found in comparing the present hypothesis about “Danish”, and other versions of “Danish”, such as that found on an official macro discursive level in curriculum protocols. Ideological complexes are, in other words, a very strong and important tool in understanding processes of didactic construction of meaning in this study.

Equally, the concept “logonomic systems” (Op. cit.: 4) operationalises the analysis of vital elements for teaching – topics, teaching-learning processes, knowledge production. A logonomic system hereby refers to a set of cognitive *regimes* that determine the *production, reception, genre, and knowledge production regimes* practiced by teachers and students in a class. Again, this analytical tool is quite useful for explaining the dynamic processes of intervention and, more specifically, its experiments. For example, in analysing experiment 1 and trying to make teachers and students work receptively and productively with the genre of critical reviews in different sub-genres related to Andersen fairytales, it was found that both teachers and students demonstrate substantial discursive resistance (cf. chapter 7, p. 214ff.). What many students produce in the final product, is in fact the dominating genre, or rather non-genre, of “Danish” – the essay [stil]. The dominant logonomic system of “Danish”, often referred to – by students who are tired of experimental approaches – in positive terms as “traditional Danish”, is indeed influential. In retrospect, it is the most extensive cognitive process that occurs in class. The advanced multimodal media experiences, which students and teachers may have had outside school, often seem non-

existent within the social regime of formal “Danish”. However, it is comforting to find counterexamples, among students and teachers. More specifically, one finds instances of receptive and productive approaches to non-traditional genres, which points at potentials for new typologies of knowledge production within the school subject (more on this later).

Summing up the relationship between DBR, sociology, and social semiotics, we may say that critical reactivation and reconfiguration of patterns for constraints and potentials in a given social system is a common focus. Understanding processes of change, and their implementation in research, seems to be one of Hodge and Kress’ most urgent interests. Not surprisingly, they describe processes of promoting semiotic change in a way that suggests strong parallels with the three-fold analytical structure proposed by the New London Group (Kress being a member of this group), which again resembles the thinking of DBR:

Change involves both relatively continuous and relatively discontinuous aspects. Where the discontinuous aspects are emphasized, the process is constructed (and construed) as a *transformation*, that is a discontinuous progression from one structure to another. Where continuity is emphasized, the process is constructed as a *slide*. But every slide can be analysed in structural terms as a transformation, by isolating initial, intermediary and final states, and every transformation can be analysed as composed of slides and patterns of continuous rapid changes. (Hodge & Kress 1988: 265, my marking)

The attempt of ‘isolating’ these triadic states of transformation is precisely what will be taken up in the intervention analysis of experiments in Part III. Here we will analytically distinguish the Available Designs (initial state) which leads to Designing (intermediary state), which again brings us to the Redesigned (final state). Likewise, on the broad level of explaining the unfolding intervention over a time-span of a year or so, there will be an analytical distinction, as already suggested, between the pre-experimental phase of the intervention, and later, an intermediate phase (cf. chapter 9, p. 302ff.), and eventually a post-experimental phase (chapter 12, p. 399ff.). This will involve trying to reconstruct the dynamic evolution of the design-based intervention.

The methodological reflections, so far, lead to the suggestion that one may define design-based intervention research, within curriculum studies/subject-related didactic studies, as communication about the process of trying to change the *ideological complexes* and *logonomic system* of a particular school subject.

2.5. Abductive epistemology

The most abstract, epistemological level of design-based intervention research consists of *abductive* reasoning – which is different from inductive and deductive reasoning. In this sense the study

continues a recent tendency in text-oriented Nordic mother tongue education research (Berge 1996) of drawing upon abductive research epistemology. Compared to the epistemology of DBR, this is not revolutionary. Barab and Squire (2004) demonstrate abduction as a line of reasoning that goes back to the triadic philosophy of Peirce (later inspiring Dewey), which insists upon experimental *inquiry*. Indeed, this was due to an explicit inspiration from Kant. Barab and Squire do not offer much explanation as to this genealogy, or the epistemological concept, however.¹⁹ In extension, one may question whether it is only related to American philosophers.

As Danish researcher of the philosophy of science, Søren Harnow Klausen, retells the genealogy and idea of abduction (Klausen 2006; Klausen 2007), it has also been elaborated consistently and influentially by other 19th century philosophers such as Hermann von Helmholtz (1821-1894) and William Whemwell (1794-1866). Abduction is, Klausen argues, a commonsense way of thinking by ordinary people. In terms of research, abduction has become increasingly popular in modern science since the decline of positivism and the advent of realism. Abductive science seeks to offer explanations, including causal explanations, not only systematic descriptions. The basic investigative logic of abduction is that one should look for *the best explanation* of a given phenomenon. Abduction does not reiterate the logic of naïve mimesis; its essential formula is to relate a certain phenomenon (particular *evidence*) to a hypothesis that – imagining that it was true – would represent a good explanation of the phenomenon. Abductive science has stronger parallels to inductive science than deductive science, whereas inductive science, in its narrow sense, will only allow conclusions (hypotheses) on the basis of empirical observation. Abductive science allows for the construction of hypotheses and investigation, on the grounds of non-observable phenomena found, in social semiotic terms, on micro and macro discursive levels. Hence, we may say that possible phenomena can be inferred, although not directly observed, leading to a suggestion of a possible explanation.

Klausen offers an example, which is relevant for this study and its hypothesis. He suggests that one may not be able, at all levels, to observe the statement that “all children are competent”, but that we may, within abductive science, still accept this hypothesis as a good explanation of observed data. Klausen argues that abductive reasoning has parallels with the idea of the hermeneutic circle, in which one tries to find explanatory relations between details and a totality, both being dependent on and interacting with each other, while being different at the same time. On the other hand he

¹⁹ *The Commens Dictionary of Peirce's Terms* – edited by researchers from University of Helsinki and elsewhere – offers vital quotes on abduction by Peirce. Cf. Bergman & Paavola 2003- and www.helsinki.fi/science/commens/terms/abduction.html.

warns not to make circular and regressive arguments. Instead it is suggested, referring specifically to education research, that we should economize explanations, by condensing them into a few conceptual notions that seem to be relevant to the contextualised reality being researched – say a social system such as a school subject from a particular theoretical angle. We cannot, within abductive science speak of a “last” founding platform of explanation. Instead, good explanations/hypotheses rely on:

- Simplicity
- Matching background knowledge (e.g. state of the art theory)
- Scale (how many actual and potential observations match theory?)
- Ability to predict
- Depth of explanation

– or, as Klausen puts it (2007), our *ability to make judgments* in balancing different kinds of explanations.

2.6. Research in the age of uncertainty

In this way we are back at Kant’s beliefs and doubts in (post-)modern research, which have parallels to what is nowadays termed *knowledge production in the age of uncertainty* (Gibbons et al. 1994; Nowotny et al. 2001). Sociologists who advocate this concept have begun to speak, not of reliable knowledge, but socially robust knowledge, reflecting a so-called *Mode 2-society* (Gibbons et al. 1994). They would still argue that there is an “epistemological core of inviolable principles, rules, methods, and practices which (...) constitute the essence of science” (Nowotny et al. 2001: 201), but science becomes increasingly dependent upon society and context. Correspondingly, we should take up a heightened emphasis upon the social and ethical implications of doing science. Research may support social change in a positive manner, helping teachers teach better, hence reflecting new demands from society. In order for research to do so, however, re-thinking and experimenting with dominating methodologies is required. In other words, it is not only theory that should be subjected to experimental evaluation, it is methodology itself. Hence, a scrutinizing meta-methodological, reflexive discourse is necessitated for informing our pursuit of seemingly positive findings.

In Klausen’s view, abduction is a more realistic method than the commonly referred to methods of induction and hypothetical-deduction. Certainly, this is an ongoing dispute. Some philosophers

argue that the only possible scientific method is hypothetical-deductive method (Føllesdal et al. 1999). Other methodologists, such as Alan Bryman (whose work is included in chapter 5 when the research methods and validation techniques of this study are explained from the perspective of general social research, cf. Bryman 2004), only distinguish between inductive and deductive studies. Historically, it has been argued that abduction, in terms of method, is analogical to Kant's basic idea of experimentation, which also seems to cross disciplinary boundaries. In contemporary research it seems analogical to Karl Popper's theories of falsificationism and verisimilitude.²⁰ This simple idea could be presented as follows: Theory 1 must be confronted by experimentation, leading to experiences that inform, revise, or amplify Theory 1, and so forth. Kant operates with the time scale of a *Menschenalter* (cf. 2.1, p. 22f.), around 30 years. In this study, the scale is speeded up, repeating the theory-experiment-experience-revision process four times in a row within four experiments, which took place within the time-span of the intervention of one year.

Both Peirce and Dewey, having written dissertations about Kant, shared his idea of experimental inquiry, though interpreting it differently. Peirce applied it to a general, yet rather heterogenous abductive theory of meaning-making that, nonetheless, informs semiotics and curriculum theory more and more. This includes Dewey's pragmatic theory of knowing (1997 [1916]), and it also includes competence-oriented (media) education research related to it. In the upcoming chapters my theoretical investigations will attempt to incorporate both Peirce and Dewey into theory development and teaching models for multimodal media competence, as used for a didactic design in specific contexts.

As suggested, the point of doing research in the Age of Uncertainty is also related to an acknowledgment of the public – in a broad sense – having a say in terms of what researchers should study. Not only researchers define the politics of knowledge production, as Gibbons et al. stresses (1994). Some resent this interference as they argue, following Habermas, that the freedom of doing research, and particularly research into social sciences and the humanities, is related to the autonomy of science. However, science is and has always been related to political demands, defined by the state or other agents. As Nowotny et al. (2001) eloquently remind us, the main point is to understand that rethinking science is not science rethought. The epistemological core should stay intact, while we, as researchers, at the same time attempt to understand and respond to context specific challenges. These points make good sense in the case of this study, as it was embedded in,

²⁰ Popper developed the theory of falsifiability throughout his life; cf. e.g. Popper 1999. Popper acknowledges that there are analogies between this theory and Peirce's theory of abduction, also characterised as a theory of fallibilism.

and even driven forward by, the context of the H.C. Andersen 2005 Foundation and the reform of upper-secondary education.

2.7. Research(ing) practice: progression in the dissertation

The subtitle of the dissertation could have been formulated in terms of an experiment, hinting at Kant. However, the contemporary use of the word differs from Kant's. Certainly, Kant's application of the word insists that educational theories should be tested in real settings. In this sense the present study *is* an experiment. Thus, there is no problem in using the term in relation to the empirical-analytical analyses of the four specific 'experiments' analysed, in detail, in Part III. The reason experiment is not used in the subtitle of the dissertation is that in contemporary science, as often highlighted in handbooks of scientific methodology related to the social sciences and the humanities (cf. e.g. Drotner et al. 2003; Barab & Squire 2004), experimentation predominantly refers to highly controlled, artificial testing of theory in laboratory settings – a method particularly employed in psychology, including learning and media psychology. In this sense, my study is *not* an experiment. From a contemporary point of view, we should call it a design-based intervention; or simply an intervention.

How, then, will the dissertation proceed in pursuit of an answer to its research question? After this prologue, the dissertation is structured into two main parts. In Part II there will be Theory; and Part III will be Analysis. Part II asks two basic questions: What does "the old term", media literacy, refer to (chapter 3), and what is the alternative, multimodal media competence about (chapter 4)? This concludes with establishing a definition of multimodal media competence and semiocy, and an explanation of the model of how to teach it – and how to analyse such teaching.

Part III will conduct a thorough intervention analysis, further unfolding the methodology and analytical strategy (chapter 5) and then framing the context in terms of an institutional setting, embedded curriculum framework, classes, teachers, students involved (chapter 6). From that point on empirical analyses will be made of the design processes for the four experiments. Analyses will show how specific subject-related curriculum material, which addresses H.C. Andersen from four different angles – utilising some of the constellations of modes and media depicted in the introduction – was made available to four teachers at different schools. This, in turn, lead to new designing processes and redesigned products, giving evidence of the way the teacher(s) and student(s) meet and interpret the competence challenge of the experiment in a local, contextualised perspective.

This ongoing, procedural analysis of the intervention will not simply retell the cumulative, or continuous, dive, in a social semiotic sense, from one experiment to another. This is so because the intervention was an ongoing and contextualised process, taking place in four intervals over a year. Such a set-up has, not surprisingly, led to modifications (often radical) in conceptual apparatus, engagements and perspectives among the agents of the field. There have also been developments from simple to complex comprehension of modes and media as it may be taught in MTE/StLE; from positive attitudes to negative among students and teachers; from mastery to sudden low performance. In this sense, findings are heterogeneous and context-sensitive. However, systematic patterns of impact and their relation to theory production are also identified, such that they link one experiment to the other and one teacher to the other, and so on.

Finally, in Part IV: Epilogue there will be a conclusion, which summarises the findings and questions of the limitations and implications of the study.

Part II: Theory

Purpose and perspective

The purpose of Part II: Theory is to unfold the concept of media literacy and, simultaneously, question it, hereby developing an alternative, namely the concepts of *multimodal media competence* and *semiocy* as the concepts for teaching and learning media within “Danish”, but also MTE/StLE subjects in other countries.

The concrete strategy for theory development is to ask two specific questions in two consecutive chapters: In chapter 3, the archaeological question: “What is media literacy?” is asked. In chapter 4, the critical-constructive question: “What is multimodal media competence in MTE/StLE?”, breaks down into sub-questions offering robust answers and definitions. Thus we also come to approach questions such as: “What is a mode, multimodality, and a medium?”, “What is competence?” and “What is MTE/StLE?”

This brings us to the concluding section of Part II, which seeks to identify an object of reference for ‘multimodal media competence’, and ‘semiocy’ henceforth. Answers to the above questions imply the proposal of a didactical model for teaching semiocy in MTE/StLE. It will be argued that semiocy is a multidisciplinary concept that tries to synthesize theories from media education, media pedagogy, multimodality, semiotics, situated cognition, and pragmatism.

Chapter 3. What is media literacy?

If we take a broad view at existing theories of media education and media pedagogy, we see that they often employ the term: ‘media literacy’. In extension didactic models (or: ‘curriculum models’) related to this notion are suggested in enlightened, differentiated and yet – to some extent – conflicted ways. This will be demonstrated through an archaeology of knowledge,²¹ by presenting a systematic conception of media literacy positions, situated and institutionalised in three contexts: Firstly, by focusing on a branch of Anglo-Saxon theory *The British School of Media Education*, as centred on David Buckingham, will be presented; Secondly, theories of *Media Literacy in the US*, focusing on Joshua Meyrowitz and James Paul Gee, will be highlighted; Thirdly, the context for the present research, namely *Nordic Media Pedagogy* and its approach, as represented by for example Jan Thavenius, Kirsten Drotner, and Ola Erstad will be covered. Theorists from these three contexts are not representative of all approaches to media education and media pedagogy.²² They do, however, represent influential and, indeed, inspiring positions, which have served as foundational frameworks for the design-based intervention of this study.²³ However, at the same time, these positions suggest – sometimes explicitly – problems and limitations in the terms: ‘media’, ‘media education’, ‘media pedagogy’ and ‘media literacy’. More precisely, diagnosing the origin of these problems opens up alternative theorizing, new concepts and models.

3.1. The British School of Media Education

David Buckingham has for the last two decades, been a prominent figure regarding research on media education, media literacy, and media pedagogy. Arguably, he is the main driving force in the British School of Media Education, but one must also mention Julian Sefton-Green, Jenny

²¹ The archeological method derives from Michel Foucault (Foucault 1969). In *Stanford Encyclopedia of Philosophy* (available on the Internet) Gary Gutting explains Foucault’s archeological method in the following way: “In 1969, he published *The Archaeology of Knowledge*, a methodological treatise that explicitly formulates what he took to be the implicit historical approach (“archaeology”) he deployed in *The History of Madness*, *The Birth of the Clinic*, and *The Order of Things*. The premise of the archaeological method is that systems of thought and knowledge (...) are governed by rules, beyond those of grammar and logic, that operate beneath the consciousness of individual subjects and define a system of conceptual possibilities that determines the boundaries of thought in a given domain and period.” (Gutting 2003: no paging)

²² New research on media literacy continues to be published; e.g. Feilitzen & Carlsson 2006.

²³ In the account of theories, in this part, I will offer some illustrations of their relevance for and relation to aspects my intervention study and its experiments. Hence, the analysis of the intervention is begun from a predominantly *synchronic* perspective in this theoretical part. In the analytical part (Part III), the analytical approach will be predominantly *diachronic*: practice will be analysed, not as an illustration of theoretical points, but as a time-and-space embedded process.

Grahame, Cary Bazalgette, Sonia Livingstone, among others. I use the term ‘school’, and not ‘position’, because it has developed as one of the most homogeneous and dominating theories of media literacy, both nationally, through studies in an English context, but also internationally through surveys of, and dialogue with international theory-making, qualitative and quantitative studies, and policy making. From this platform the approach has played a substantially stronger and more convincing role in defining media literacy than American research on the topic. It goes without saying that Nordic studies on the research theme have had less impact than both of the abovementioned.

In the following, it will be argued that there are both *productive features* and *counterproductive aspects* of the British School’s conception of media literacy. Put briefly, the productive feature is its emphasis on social distribution of media and media education, e.g. its acknowledgment and explorations of children’s media competencies in and out of school contexts. A counterproductive aspect is the conceptualisation of ‘medium’ and in extension the very notion of ‘media literacy’, which I (and Buckingham, too, if we make a close reading of his writings) find to be a glaring contradiction in terms, since some of the formulations of this position suggest using the notion of ‘multimodal media’ competence instead.

As indicated in the previous chapter, the British School has made research on media education and media pedagogy in at least three learning contexts: 1) as a specific subject matter in the school curriculum, 2) as a possible integrative element in “English”/MTE, and, in recent years, 3) in out-of-school settings. Theoretically, it is inspired by the British tradition for Cultural studies and New Literacy Studies (Raymond Williams (1976), Stuart Hall (1980), Brian Street (1984), among others; in dialogue with American cultural studies, e.g. Jenkins 1992). It has combined this theoretical framework with a predominantly qualitative methodological approach that integrates ethnographic field studies with action research acknowledging the political nature of doing research without being politically naïve (Buckingham & Sefton Green 1996a, 1996b).

If we focus on Buckingham’s interest in “English”, a number of popular articles have reflected on both the major historical *differences* between mother tongue education and media studies, and on the hypothetical *getting together* of media education and mother tongue education as early as 1990 (1990a: 12; 1990b; cf. also Bazalgette 2004). He claimed then, and still does, that although media education has been a part of the “English”-curriculum ever since the 1930s, it remains a disintegrated “bolt-on component”, always at risk of being colonised by traditional MTE practices, such as focus upon student writing, reading, listening and oral competencies (1990a: 9; 2003: ix). In

this way, he makes the same point as McLuhan (2003) half a century ago (cf. chapter 1), the difference being that Buckingham is aware of the historical *lack* of media culture impact, and offers some explanations of this. To use a common phrase from the methodology of ethnographic and action oriented studies, Buckingham and his frequent co-writer Julian Sefton-Green explore the relationship between the ‘constraints and possibilities’ of media education in different contexts advocating what we might call a *realistic* position. This is opposed to the former *speculative* positions within media education research, which becomes quite evident by studying some of the now classical titles, such as *Watching Media Learning* (Buckingham 1990c), *Cultural Studies Goes to School: Reading and Teaching Popular Culture* (Buckingham & Sefton-Green 1995), *Making Media: Practical Production in Media Education* (Buckingham et al. 1995).

3.1.1. Mapping discourses of media education

As part of a UNESCO survey, Buckingham and Kate Domaille asked media education experts all over the world about the current potential and constraints upon media education. They concluded that media education “appears most frequently as a ‘pervading’ element of the curriculum for mother-tongue language or social studies” (Buckingham & Domaille 2003: 43), and that media education in these institutionalised school contexts is “loosely defined and assessed as such.” (Ibid.) Buckingham and Domaille underline that this finding is probably not entirely valid given that the informants are engaged pioneers of media education, and thus biased in their judgements. Informants generally point out that media education is an integrated part of the educational system in terms of a conceptual framework for national curricula as reflected in the production of teaching materials, syllabus documents, and the like; but Buckingham and Domaille ask rhetorically, whether there is a discrepancy between this discursive macro-reality and the meso-reality of classroom teaching. The problem is that the research community does not know the answer to this, due to an: ”absence of basic research, particularly into questions about students’ learning and about the effectiveness of media education programmes” (Op. cit.: 44).

When The British School speaks of effectiveness, it does not refer to a mechanistic understanding of education commonly advocated for, particularly within the field of educational technology.²⁴ Rather, effectiveness is related to contextualised potentials and constraints for knowledge production. Buckingham has identified at least three dominating discourses in his

²⁴ For a critical discussion on the ontology of educational technology, cf. McDonald et al. 2005. Cf. also Nordkvelle 2001.

classroom-oriented research that constrain, and construct, the teaching of media – these may be summarised by the keywords *Discrimination*, *Inoculation* and *Elitism*, explained in table 3.1.1.1.

<p>Discrimination – of popular culture on behalf of the preservation of high culture, especially the literary heritage. This discrimination is particularly strong within the domain of mother tongue education.</p> <p>Inoculation – in the sense of defensively protecting children and young people against the apparently manipulative character of mass media, hence understanding children/young people as passive objects, not meaning-making agents.</p> <p>Elitism – in the sense that a certain theoretical academic perspective, particularly that of semiotics and critical theory of the 1970s, should be the (only) adequate conceptual approach in the teaching and learning of media.</p>
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Table 3.1.1.1. Three constraining discourses of media education.

Not entirely contrary, but alternatively, and respectively, he would argue, referring to his own interventions and analyses which media education could potentially comprise: *Inclusion*, *Empowerment*, and *Multidisciplinarity*. These are vernacular discourses – see table 3.1.1.2 – that could represent a future rationale, so to speak, of media education:

<p>Inclusion – acknowledging the value of any kind of culturally mediated form, high and low.</p> <p>Empowerment – preparation for engaging a media-saturated civil society with a rich variety of mediated forms, many of which are aesthetical.</p> <p>Multidisciplinarity – a broader understanding of required theoretical insight into media, especially socially oriented theories of meaning-making.</p>
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Table 3.1.1.2. Three vernacular discourses of media education.

Due to Buckingham's so-called socio-cultural position, he would argue that constraints are neither definitive nor fully hegemonic. They may be contested and interventions may be made into them, by researchers and other agents, on the very same levels that they operate: in classrooms, policy documents, and the research community.

In a broader educational perspective, Buckingham is on a quest for what he calls post-critical understanding of teaching-culture in a semiotic society (Buckingham 1998b; 2003; cf. also Green 2004). He does not claim that such a theory has yet been fully developed, only that we can no longer draw on the radical, self-proclaimed ‘progressive’ and emancipating Marxist theory of the 70’s. Neither does he claim that may we draw on so-called constructivist theories of the 90’s in the equally emancipating spirit of Derek Tapscott (1998) and others preaching the advent of the digital generations. Indeed, this approach seemed to simplify earlier theoretical conceptions of social constructivism and overstate the competencies of the unspoiled and untaught child - a vulgarisation, so to speak, of Rousseau. These models of pedagogy also apply to media education and are typically identified by buzzwords, such as ‘student-centred’ and ‘project orientated teaching models’, but are simply not convincing if we wish to grasp the complexity of teaching and learning. In the search for a more authentic and robust alternative we need to think in new ways, with an insistence on remaining theoretically informed, yet empirically grounded in our research. This ought to be the epistemological basis for the production of new knowledge and new practices.

3.1.2. *A model of media pedagogy*

What then, is Buckingham’s best offer in terms of a theory for ‘media literacy’, apart from the general points already made? His basic idea is that media education is primarily set for teaching *about* media, and only secondarily for teaching *with* or through media. Surely, this point is not new, but rather a standard formulation, known for decades. Indeed, it has, among others, been distributed by UNESCO, institutionalised in university organisations, but also printed in editorials, academic titles etc.²⁵ Buckingham repeats this institutionalised sociology of knowledge when he explains that: “media education should not be confused with educational technology or educational media” (Buckingham 2003: 5). This assertion does not, however, define ‘media education’, nor does it clarify the relationship to other fields of research, and Buckingham is aware of this. As he argues in another article, “it is possible that the advent of ICTs will reconfigure the relationship between theory and practice in media education, and that it may result in a broader definition of the subject field.”(Buckingham & Domaille 2003: 49)²⁶ The subject field might include, precisely, media education, educational technology, and media pedagogy.

²⁵ In a Danish context cf. Tufte 1998 for an overview.

²⁶ Constructivist approaches are being developed within that branch of media pedagogy research which concentrates on the teaching-with-media and/or ICT aspect; cf. e.g. Danielsen 1997; Dillenbourg 1999; Dirckinck-Holmfeld & Fibiger 2002; Wasson & Ludvigsen 2003.

From a Nordic perspective, as we shall learn in detail later (cf. 3.3ff., p. 83ff.), ‘media pedagogy’ is an umbrella notion for all three sub-fields. Buckingham seems to be ambiguous in his conception: *Media education*, he argues, prioritises the teaching of media as a *concept*, which would make it a knowledge domain in the terminology of the present dissertation. However, *research in educational media* focuses on media as a communicational means for teaching and learning. Buckingham clearly wishes to separate these two fields of research and practice. His argument becomes ambiguous, however, if we compare it to an insight provided by the American media learning scholar Michael Resnick stated in a Danish journal: “*What we teach is related to how we teach*” (2000: net version, no paging). Resnick, who is rooted in American educational science, echoes one of the fundamental assumptions of John Dewey’s²⁷ pragmatism, namely that there is a “unity of subject matter and method” (1997 [1916]: 164). It follows from Resnick and Dewey that teaching *about* media – teaching concepts – inevitably and intrinsically is subjected to the teaching and learning *with or through* media (educational media). This does not necessarily apply the other way around, which is an important point emphasised by Buckingham (2003): teaching *with* media does not, necessarily, foreground media concepts and conceptual learning. If one does not acknowledge this, it will quickly lead to a superficial understanding of media.

In some research contexts the distinction between *what* and *how* is incorporated in institutionalised academic discourse. In a Nordic tradition, we have a relatively long tradition for researching and teaching concepts *about* media, as we shall see later in detail. In the last decade or so, moreover, we have seen a growing interest in educational technology, particularly ICT (cf. e.g. Dirckinck-Holmfeldt & Fibiger 2002; Hakkarainen et al. 2002; Bundsgaard 2005, Ludvigsen forthcoming). We have also seen examples of theoretical and empirical research bridging the gap between technology and media arguing that a growing acknowledgement of the relationship between the two research fields is necessary (e.g. Drotner 2001a).

Although Buckingham prefers to speak of media education, he, too, employs the ‘media pedagogy’ term. In his understanding it refers to the integrated research and practice of the teaching about and with media, however, with a *priority* of the former on behalf of the latter. Consequently, media pedagogy in Buckingham’s understanding is to teach a conceptual framework about media through practices where teachers and students use, as he phrases it (in a striking terminology that I

²⁷ Dewey’s production is immense and diverse, and research about him likewise. The main source I will relate to is *Democracy and Education* (1997) [1916], particularly the chapters on “The Nature of Subject Matter” and “Theories of Knowledge”, in which he clarifies his approach to pragmatism. I use Glassman 2001, among other resources, as a critical introduction to Dewey.

shall comment on later) *language modes* in a collaborative and dynamic meaning-making and knowledge building process:

'media learning' could be regarded as a three-stage process: it involves students making their existing knowledge explicit; it enables them to render that knowledge systematic[ally; NFE], and to generalize from it, and it also encourages them to question the basis of that knowledge, and thereby to extend and move beyond it. At each stage, this is seen as a collaborative process: through the encounter with their peers and with the academic knowledge of the teacher, students progressively move towards greater control over their own thought processes. The act of moving between one language mode and another for example 'translating' or restating the insights gained through practical media production in the form of talk or writing – would seem to be a particularly important stage in this process. (Buckingham 2003: 143)

This proposition is a good example of the up-coming tendency in educational theory, including theory on media pedagogy, to connect a cognitive position with a socio-cultural position constructing a third position which could be termed socio-cognitive. Situated cognition, in James Paul Gee's formulation (in Kirshner and Whitson's seminal anthology on *Situated Cognition: Social, Semiotic, and Psychological Perspectives*) "...argues that human learning is not just a matter of what goes on inside people's heads but is fully embedded in (situated within) a material, social, and cultural world..." (Gee 2003: 8). In Buckingham's version of situated cognition related to the domain of media education, knowledge building is seen as a continuous distributed activity; one dimension being the cognitively controlled process ('thought processes'), and another related dimension the situated meaning-making actively performed by students in collaboration with peers and the teacher. Buckingham claims that this model (or rather, as he cautiously puts it, this proposal "towards" a model, Op. cit.: 12f) is indebted to Vygotsky (1978). Later I will argue that it is as much indebted to a researcher that visited Vygotsky in Moscow in the beginning of the 20th century: John Dewey (cf. Glassman 2001). But certainly, the echo of Vygotsky is evident in this quote in the sense that Buckingham is not advocating direct teaching of scientific concepts. On the contrary, teachers should teach, and students learn, indirectly, and this indirect teaching-learning process about media concepts implies shifts between language modes. Such an organisation will lead students 'progressively' from what we might term, again with Vygotsky, a spontaneous construction of concepts to an academic one.

Another interesting feature of Buckingham's proposition is that it speaks of *stages*. It suggests, in my Aristotelian interpretation, that there should be some sort of *dispositio* and *narratio* to the design of a concrete curriculum programme. Reflective teachers should stage a sensible relationship

between beginning, middle and end of a designed learning module, and between working in productive/creative and reflective/receptive ways. As Aristotle put it in chapter 7 in his *Poetics*: “An extended whole is that which has a beginning, middle and end”.²⁸ Buckingham claims that this concept of staging is adopted from the pedagogical theory of multi-literacies (New London Group 2000 [1996], abbr. NLG 2000 in the following). Using the NLG terminology, he suggests four factors (not three, as indicated in the quote above) that should guide this dynamic staging process: Situated Practice, Overt Instruction, Critical Framing, and Transformative Practice. This is a general pedagogical model, regardless of school subject and level – meaning that it could be applied to the domain of media education/media pedagogy in “English”, “Danish” and so forth.

<p>Situated practice – an immersion in meaningful practices, recruiting learners’ previous as well as their extra-school discourses, constituting an arena in which all learners are secure in taking risks and trusting the guidance of others – peers and teachers.</p> <p>Overt instruction – teacher-guided, systematic, analytic focusing of students’ attention, with the goal here of conscious awareness and control over the conceptual relationships in the domain being practiced.</p> <p>Critical framing – teacher-guided practices that support the students to stand back from what they are studying and view it critically in relation to its context, so that they can constructively critique it, creatively extend and apply it.</p> <p>Transformative practice – akin to situated practice, but now students transfer and re-create meaning, demonstrating that they can revise and apply what they have learned to new cases.</p>

Table 3.1.2.1. The pedagogy of the New London Group. Michaels & Sohmer 2002: 172.

Buckingham, being a realist, warns that the NLG model is highly speculative and should be tested and revised. Indeed, in a recent study regarding the multi-literacies project conducted by members of NLG, Michaels and Sohmer (2002) intended to adopt this pedagogical model into actual teaching. This led to scrutinising reflections on what these four concepts meant in practice – they found that they were “undertheorized” and contained “missing links” (Op. cit.: 174). I have added Michael’s and Sohmer’s revised, critical elaboration to the concepts as an explanation in table 3.1.2.1. Contrary to Buckingham’s interpretation of the NLG model, Michaels and Sohmers stress

²⁸ I cite from Aristoteles 1993, page 23, my translation from Danish.

that the four categories are “a complex, intermingling set of “features” (not a linear hierarchy or set of stages)” (Op. cit.: 172). This discussion and its implications for a model of media pedagogy will surface once more in the elaboration of Dewey and the synthesizing proposal for a new model of multimodal media pedagogy later on.

3.1.3. *Defining a medium, or defining a problem?*

A theory of ‘media pedagogy’ obviously requires a definition of ‘medium’. Nonetheless, this is where Buckingham’s approach – and the British School in general – has certain limitations. When it defines a medium, a specific understanding of media is launched, which marginalises others. We saw an indication of this in Buckingham’s use of the word ‘language modes’ in his proposal of a model for ‘media pedagogy’. In *Media education* (2003) we do not find any elaborated theory of modes, only a few sceptical comments on the theory of multimodality. Buckingham’s focus is rather on media, leading to related terms, such as the disciplinary study of ‘media education’. Several problems of ontology – that is problems of determining what the world contains and more specifically how the textual world of H.C. Andersen relates to this – arise when making terminological choices. Considering the dominance of The British School in Media Literacy studies, some illustrations might be purposeful:

In *Media Education* (2003), Buckingham states, with no hesitation, that a medium is defined as: “...’an intervening means, instrument or agency’: it is a substance or a channel through which effects or information can be carried or transmitted” (Op. cit.: 3). Compared to other conceptions and definitions of media in educational theory and sociology – such as with Dewey and Luhmann (2002) – we find that this is a *narrow* media definition. Dewey speaks of medium as an “environment” defining it in a broad, abstract and apparently anthropological manner, where it refers to “a system of behaviour” (1997: 11). Buckingham rejects such a definition and advocates a more material definition, of which is more pertinent to the present study. But still, Buckingham’s definition is problematic or, rather, unsystematic, one of the problems being that it uses several synonyms (‘means’, ‘instrument’, ‘agency’, ‘substance’, ‘channel’) to define the phenomenon. In the 2003 publication, Buckingham therefore solves the problem of defining a medium by not addressing it further in terms of explicit definition. Rather, he *exemplifies* what a medium is, using video, radio, photography as instances. In addition, he draws a distinction between *medium* and *media texts* explained as “the programmes, films, images, web sites (and so on) that are carried by these different forms of communication” (Op. cit.: 3, my emphasis).

This last quote points to the constraints in the media conception employed by The British School: It seems that Buckingham draws indirectly on what is referred to by Joshua Meyrowitz (1998; cf. 3.2.2, p. 59) as the media-as-conduits conception of a medium. This conception, which is quite popular, also among teachers and students, presupposes that a medium is a more or less insignificant and non-signifying entity through which *content* is transported (this content then has a certain “immediacy”, to use a concept from Grusin & Bolter 2000: 71).²⁹ It is not argued that The British School always advocates this conception of a medium, only that it does not seem to take into account the full range of media conceptions available. Meyrowitz (1998) has, as we shall see, convincingly supplemented media-as-conduits with two other media conceptions and their related media literacy – or ‘media competence’, as I prefer to name it. Furthermore, the theory of multimodality supplements the conceptions employed by The British School’s and Meyrowitz by introducing the concept of mode.

Another, related problem is that Buckingham seems to blur the distinction between medium and technology. A radio, in my understanding, is a *technology* and not a medium. There is a difference between media and technology; although particularly Americans tend to forget this with their well-known embracement of *technology, technology, technology* (cf. e.g. Philips 1999). The *medium*, in the current understanding, of e.g. an animation we watch on television is *the screen*. On this medium a *text* is displayed with the help of the VCR and the television, which is the technology. Etymologically, “the text is a cloth; *textus*, from which text derives, means “woven””, as Barthes once remarked (1989: 715). With the terminology of multimodality we might say that the text is the full range of modes woven together in a multimodal expression, which is again woven together with the medium simultaneously representing and communicating meaning for and to communicators in context, thus establishing a *genre*. I shall return to define these categories in a systematic manner later. The category of ‘media text’, as deployed by Buckingham, is a notion that draws our attention towards the media element of texts and communication. In this sense it *could* be useful for media education theorists and teachers. However, in a Nordic context (and perhaps also in other contexts), ‘media text’ has become dichotomised as the less valorised *opposition* to literature. Hence, teachers, curricula texts, even research (cf. e.g. Henningsen 2005), speaks of *literature* vs. *media texts*. This becomes counterproductive if one wishes, among other things, to move towards a broad and non-

²⁹ In my intervention I asked, at my first meeting with students in the classes, what they believed a medium was. Their answers are presented in chapter 6 as part of introducing the context and its agents’ pre-understanding of a medium.

elitist understanding of media with the purpose of integrating and developing media education within MTE, including literary pedagogy, from a semiotic view.³⁰

Returning to Buckingham's conception of a medium, and particularly how this conception co-constructs his and our conceptualisation of media literacy, it may be useful to clarify its distinctive understanding of medium. Buckingham's position may be termed *socio-materialistic*. His crucial point is that a medium is the *interventional* element of communication. Medium, in Buckingham's etymological account, means "in-between". The social context is vital to Buckingham's approach to media literacy; the social context, so to speak, defines the medium, along with the material substance. What Buckingham wishes to emphasize in media education in particular – that has been missing both in its practice and in the research of practice – is a strong focus on the *social embedding* of media. Buckingham criticises Vygotsky on this point arguing, in the line of Bakhtin (1986) and Wertsch (1991), that Vygotsky overlooks the *power* related nature of producing meaning or utterances in a context. We can offer an example related to this study to illustrate Buckingham's point: When a text, for example Disney's animation of *The Little Mermaid*, is produced, social power relations, including economical relations, are actualised among producers. When discussion of this text takes place in the classroom setting, social power relations among teacher and the students, and internally among the students, takes place as well. Meaning-making and knowledge production is related to power relations.

When Buckingham makes these observations he more or less explicitly advocates what is here termed a socio-materialistic understanding of media. In later analyses this will be coupled to the theory of social semiotics and its emphasis on ideological complexes and logonomic structures. Indeed, Buckingham's approach implies a dialectical or holistic understanding of the relationship between the media and the social context. The dialectical relationship functions as follows: The media affects the participators while, at the same time, the participators affect the media. Sonia Livingstone (1999) suggests the term *social appropriation* to understand this relationship: We appropriate the meaning and function of media in social life. Analogically Saskia Sasken (2002), Livingstone's colleague at London School of Economics, suggests the notion *cultures of use* in relation to ICT. Livingstone & Liewrouw use the term "social shaping" of media (Livingstone & Liewrouw 2002).

³⁰ I suspect Buckingham to be more or less aware of the potential flaws in his definition of a medium. Perhaps, he ignores them because they are found not to serve any purpose for a discussion of media education that has the purpose of making sense to people outside the academic ivory tower; a point he has made repeatedly (cf. e.g. Buckingham and Sefton-Green 1996).

One of the main points of a socio-materialistic understanding of media is that it rejects any kind of techno-determinism.³¹ The rejection of techno-determinism obviously complicates the analysis of the social function of the media for researchers, teachers as well as learners of media.

Buckingham, in one of his earlier works (2000, the chapter “Understanding media”) summarises the dynamic relationship as follows: “the ‘power’ of the media is not merely a *possession* – or a function or consequence – of either technologies, institutions, texts or audiences, on the contrary, it is inherent in the *relationships* between them.” (Buckingham 2000: 80)

3.1.4. Four core concepts of media education

As we now know, concepts and conceptual learning plays a crucial role in the The British School’s approach to media pedagogy. This raises the questions: Which concepts; what conceptual knowledge, what kind of ‘overt instruction’ is to assist the teacher in didactic planning, undertaking, and evaluation of a concrete, designed curriculum? In the last quote, by Buckingham, a conceptual framework is, in fact, sketched for media studies. Indirectly, this also involves media education and perhaps even multimodal media pedagogy: *technology, institutions, texts and audiences*. In later publications Buckingham offers an alternative four-folded categorisation, which is based on empirical research. The UNESCO survey (Domaille and Buckingham 2003) asked, among other things, what core concepts should form the curriculum of media education / media literacy. Answers could be condensed into the four main concepts found in table 3.1.4.1.

<p>Language: Media aesthetics – media as constructions – realism – narrative – conventions and genres (these issues are often addressed through student production)</p>
<p>Representation: Media messages and values – ‘media and society’ – stereotyping – selection and point of view</p>
<p>Production: Media industries/organisations/institutions – economics – professional practice</p>
<p>Audience: Personal response and involvement in media – consciousness of own media use – the role of media in identity</p>

Table 3.1.4.1. Core concepts of media literacy. Buckingham & Domaille 2003.

³¹ As Livingstone has put it, stone face towards preachers of a new digital generation: “...the time scale of technological development differs from that of social change...” (1999: 61).

Buckingham adopts and elaborates these concepts in *Media Education* (2003), applying them to an analysis of *actual* teaching practices and curricula, but also *potential* national curricula. He argues that a framework, which takes concepts as its starting point instead of *practices* (as is often seen in MTE frameworks, e.g. in “English” in the UK), is a much more flexible strategy. It allows for contextualisation at different levels, including the integration of specific school subject approaches to media education and the incorporation of local school culture, i.e. prior media competencies for the teacher and students.

Buckingham’s suggested conceptual framework, inspired by the UNESCO survey, has both advantages and disadvantages: Advantages, in the pragmatic sense, because it reflects important aspects of a media society that are grounded in a practice, which has developed over time, and which highlights elements of teaching media that both pioneering media education teachers, but also MTE teachers might understand.

On the other hand, it is found that the conceptual framework has disadvantages, because it seems somewhat arbitrary and inadequate. Are *all* relevant aspects of the medium/media, in today’s semiotic society, reflected in sensible ways in these categories? Perhaps we should readdress this question in an open-ended and empirical manner, in order to acknowledge the difficulty of offering a conceptual framework: What are the adequate conceptual categories for describing a media-saturated society? Several media and/or ICT education researchers and philosophers address this problem (e.g. Castells 1996, Luke 2003). Generally, we might ask if a descriptive historical account is suitable for a prescriptive framework. Indeed, there is no inherent reason for this. Instead, due to the complexity of media development, there may be a situation, where we must *explore* this question. This reflective exploration is an important part of this intervention study which pairs itself with the concrete case of Hans Christian Andersen: What challenges do texts and media related to his fairytales offer for a curriculum framework of media pedagogy within MTE/StLE? In chapter 4 and Part III, this problem will be dealt with specifically. For now, however, let me illustrate the inherent problems of the chosen framework by commenting on the elaboration of one of the concepts: Language.

In *Media Education* the concept of language refers not only to the study of spoken semiotic resources for meaning-making, but all kinds, including still and moving images. But why refer to it as a concept of language, then? Why not *modality*? Contemporary media studies and multimodality studies (Kress and van Leeuwen 2001, Meyrowitz 1998, elaborated on later in Part II) would not apply the Language concept in this sense, or at least they would seriously question it. Language

becomes increasingly inexact a characterization of how meaning is represented, communicated, and perceived (in ways, it could even be argued, that cannot be described as sign-based (cf. e.g. Messaris 1994, who talks about visual literacy from a cognitive standpoint)). If we insist on using *Language* as a core concept in media education, there is an obvious risk of ignoring these central representational and communicative aspects and differences related to ‘media’; or rather constellations of modes and media. In other words, the language concept may paradoxically reinforce an emphasis on a historically dominating modality in MTE, verbal language, and writing in particular.

In order to avoid such paradoxes, it is necessary to rethink and perhaps further abstract the conceptual framework of ‘media education/pedagogy in MTE’, at least if its many agents are to understand its rationale in a uniform way.

3.1.5. *Media literacy or media competence?*

While the media definition and the conceptual framework suggested by Buckingham have disadvantages this is also the case for its defined goal and very rationale. A close reading of Buckingham’s works and co-authorships over the years, reveals the surprising story of The British School moving back and forth between describing the goal of media education as *media literacy*, *media literacies*, *multiliteracies*, and *media competence*. The strategy seems to be to expand the concept of literacy, from referring to practices of one semiotic kind, such as reading and writing, to semiotic meaning-making of many kinds, hence adopting conceptualisations from other theory constructions of media education.

Considering the institutional, global discourse on media literacy, associated with UNESCO led World Summits, one might acknowledge the pragmatic reasons for insisting on the literacy/literacies notion. Nonetheless, I advocate – as does Kress (2003) and other literacy researchers – a *narrow* use of the literacy concept, and a rejection of broad compounds such as print-literacy, cine-literacy, computer-literacy, media-literacy etc. Alternatively, as will be demonstrated later, it is preferable, in many contexts, to employ the concept of *competence* instead of literacy. Roughly put, it is possible to understand the goal of media pedagogy as the development of student competence (not literacy) to deal with the complexity of modes and media in social life, which is to advocate a social theory of media education. This is not a fundamental rejection of Buckingham’s approach, but rather a rephrasing, and a rethinking, of the media literacy approach.

Let me illustrate the problem of mixing the notions of literacy and media by offering a number of quotes from Buckingham. In *Teaching Popular Culture* (1995), which deals specifically with the challenge of arguing for the teaching of media in MTE, the problem is illustrated well:

Literacy in the late 20th century therefore cannot be seen as something that is confined to one particular medium or form of expression. It is not simply a matter of learning to read and write print texts, but rather something that applies across a range of media. The competencies and understandings that children are developing in their encounters with media texts, largely *outside* school, are both valid and important in themselves, and also form part of a continuum that includes, and may be transferred across to, their encounters with books and with print. (Buckingham & Sefton-Green 1995: 5)

Although many sensible insights are offered here, we see that *literacy* functions as the broader term that defines the rest of the domain that the authors wish to address. Literacy does not refer to reading/writing only, but also to the competencies and understandings (in plural) of a range of media. This use of the literacy term is further developed and defined in some parts of *Media Education*, most unambiguously here:

The term 'media literacy' refers to the knowledge, skills and competencies that are required in order to use and interpret media. (Buckingham 2003: 36)

As we see here, *media literacy* – singular – is now the broader term. Later in the same work, however, Buckingham amplifies the concept and speaks of mapping “media literacies” (Op. cit.: 39f). The category ‘understandings’ is substituted, or perhaps interpreted, as knowledge and skills, subjected, as was competencies, to media literacy. Also, we should note a small change in agency and way of legitimising the teaching of media: Whereas the former quote (*Teaching Popular Culture*, page 5) emphasises children’s and students’ own ‘valid’ encounters with media outside school, in *Media Education* Buckingham speaks of competencies that are ‘required’ – by exterior demands in society, we might add. This change in discourse is not, from the perspective of this dissertation, a radical shift in pedagogical paradigms considering his elaborated model of media pedagogy – rather it represents a small shift in accentuation from the cognitive to the social. As it happens, this demonstrates precisely the dual cognitive and distributed nature of teaching media. This duality becomes particularly clear only a few pages later in *Media Education* (note the shift in terminology):

We would need to recognize that the competencies that are involved in making sense of the media are socially distributed, and that different social groups have different orientations towards the media, and will use them in diverse ways. (Op. cit.: 39)

And later:

...making sense of the media is not simply a matter of what goes on inside children's heads: it is an interpersonal phenomenon, in which social interests and identities are unavoidably at stake. (Op. cit.: 48)

What is found to be positive and productive about these last quotes, are two things: Firstly, in terms of terminology, it is stated that making sense of media does not involve *literacies*, but *competencies*. In the current understanding, making sense is related to semiosis and social semiotics, that is, agents actively handling semiotic resources, including media, in social life. In other words, Buckingham here acknowledges what he argues for sometimes, but not always, namely that situations, and society as a whole, are semiotically rich and challenging, and that people need to draw on semiotic resources and domains, in formal and informal ways, in order to handle life challenging situations. This involves, but is not restricted to, handling media. Secondly, Buckingham now emphasises the existence of people's agency, and that this agency has fundamental implications for their understanding and handling of challenging situations which include media. To engage in semiotic situations is therefore fundamentally driven by a person's continuous active and dynamic agency in collaboration with others.

This last point is parallel not only with social semiotics, but also ideas formulated much earlier in the history of educational theory. One may mention pragmatics such as that developed by John Dewey (1997 [1916]) and his subsequent educational philosophy, and most recently in preliminary studies of so-called Plurilinguistic Language across the curriculum policy frameworks developed in the context of Council of Europe (e.g. Vollmer 2006). What Buckingham suggests, if we were to paraphrase it in Dewey's terminology, is that *doing* reinterprets and reshapes knowledge about media. There is no such thing as a stable entity called the object of knowledge about or for media. To know about media, as seen from a student's point of view, is to use personally and collaboratively developed knowledge on media. Media *per se*, inside children's heads or in academic books in libraries, does not exist, at least not in the kind of education, which Buckingham imagines. This becomes quite evident in a concrete case study performed and analysed by Buckingham:

... judgements about representation or realism are frequently very complex. Children use a range of different types of knowledge in making such judgements, which include their developing knowledge about the processes of media production, their knowledge of the 'language' of media, and their knowledge of the real world. (Buckingham 2003: 47, my emphasis)

This review of category use, as related to media literacy for Buckingham and The British School, leads me to the preliminary conclusion that it is possible, on the basis of existing theory, to move towards a theory of media pedagogy, which is socio-cognitively oriented and envisions media competence as its main goal. As stated earlier, this dissertation is not opposed to Buckingham's social theory of media pedagogy. What is being opposed is the sometimes-disturbing terminology, which sets up a social theory of *literacies* as the goal of media education. Rather, the goal of developing a theory of media pedagogy, and a theory of media education within MTE/StLE, is to define a socially oriented theory of competencies that deal with the challenging existence of semiotic society, while focusing on the relationship between modes and media in texts.

The reason why Buckingham insists on 'literacy' as an operative term – in spite of its evident inconsistencies – must be considered pragmatic: It is the most frequently employed notion around the world. It may seem impossible to reorient or challenge this institutionalised discourse. Moreover, he wishes explicitly and implicitly to indicate an inspiration from a certain branch of literacy studies, the so-called: *New Literacy Studies*. This emphasises the social embedding of meaning-making (cf. e.g. Street 1984, Kress 2003, Barton & Hamilton 1998). David Barton's *Literacy: Steps to an Ecology of Written Language* summarises the approach of this branch, arguing (1994: p. 34f) that literacy should be thought of as an everyday practice made up of literacy events, which are embedded in three dimensions: 1) our *social life* (both locally: the spatiotemporal locations we speak and read in, and more broadly, e.g. the ways in which social institutions support literacy), 2) our *mental life* (that is, our psychological life), and 3) our *cultural history* (both individually and collectively). When these ideas were first presented, in the beginning of the 1980's, they were highly controversial and – within mainstream discussion of literacy, including PISA investigations of children's literacy outcome – they still are. For a media education researcher such as Buckingham, who comes from cultural studies, however, they serve as a convincing and inspiring parallel theoretical framework. What Buckingham seems to overlook, however, is that Barton and new literacy studies researchers in general relate literacy solely to reading and writing.

3.2. Media literacy in the US

The media literacy movement in the US seems to be much more heterogeneous than in the British context. Some of its dominant figures are predominantly cognitively oriented, while others focus on the media component as such. However, only a few researchers, some of which gathered around University of Wisconsin, try to integrate both perspectives. In extension of this, one could conclude that there is no coherent American ‘school’ of Media Literacy. Instead, it is proposed that there are common features in American theory construction regarding media literacy, which can lead us to a further development of an alternative concept of multimodal media competence. The theory, which is of special interest here, is that of Joshua Meyrowitz. It clarifies three media conceptions. Another approach, which is of interest, is James Paul Gee’s explorations of child and adolescent meaning-making in working with different texts, in different domains. One example of this could be video games played at home. Before we begin, it will be necessary to reflect theoretically on an often-cited American book, which has had a great impact (also in a Nordic context): James Potter’s *Media Literacy* (2001).

3.2.1. Potter’s media literacy perspective

Potter’s approach to media literacy is relatively easy read, practical, and yet it is problematic to apply to media education (research). A representative example of his way of thinking goes as follows:

Media literacy is a perspective that we actively use when exposing ourselves to the media in order to interpret the meaning of the messages we encounter. We build our perspective from knowledge structures. To build our knowledge structures, we need tools and raw material. The tools are our skills. The raw material is information from the media and from the real world. Active use means that we are aware of the messages and are consciously interacting with them. (Potter 2001: 4)

In spite of such utilitarian rhetoric, which has had some impact on recent Danish research on media learning in “Danish” (cf. Henningsen 2005), Potter must be perceived as part of a popular tradition in the US (another example being Semali 2000, and to some extent Kellner 2002). In Buckingham’s terms this approach views media in a *protective* way, implicitly ignoring vital, and complex, elements of teaching. In the Potter tradition, the concept of media is to a large extent identified with institutions or so-called media conglomerates (e.g. TimeWarner; The Walt Disney Company) and their potentially manipulative effect on the American citizenry. Making sense of media is conceptualised – rather instrumentally – as the skill or ability to deal with ‘information’.

Epistemologically, Potter may be considered to represent a techno-deterministic position, drawing on what I referred to earlier as the hypodermic needle theory. This (false) idea goes as follows: Media is something we are ‘exposed to’. Media has the potential to inject messages into the minds of children, youth and the citizenry in general, unless, in Potter’s understanding, they have (learned) ‘media literacy’ to resist it. This media/user conception is a now generally rejected leftover of early behaviouristic theory among media researchers (cf. e.g. Drotner et al. 2003, Buckingham 1998). Nevertheless, Potter insists on developing this *perspective*, having great faith in cognitive preparation and protection.

It is noteworthy that Potter and Buckingham share notions, such as knowledge building and activity. But unlike with Buckingham and the new literacy movement, these terms are cognitively laden for Potter. Potter thinks of literacy predominantly in skill-oriented terms – not in contextualised and cultural terms. Potter focuses on media *per se*, assuming, as Kathleen Tyner writes: “the media component (...) to be more problematic than the educational component.” (Cit.en. Erstad 2004: 217)³² It follows from this that an ecological approach (in Barton’s sense) to and analysis of meaning-making practices has disappeared. Principally, we must argue that both ‘components’ – media and education – require adequate conceptualisation and definition if we wish to speak of media education or even an expanded domain of education.

3.2.2. Meyrowitz’s three media competencies

Meyrowitz (1998) would object to a one-sided concept of information for media. Rather, he identifies this media conceptualisation as one among *three*, which we should include in the establishment of a consistent and updated competence oriented framework for media education. He terms the three media conceptions and their associated competencies: Media Content Literacy, Media Grammar Literacy, and Medium Literacy. His main argument, echoing Dewey, is that “different ways of thinking about media lead to different conceptions of the competencies, or literacies, that may be desirable in the educated and aware citizen.” (Meyrowitz 1998: 96) As we see, Meyrowitz employs literacy and competence synonymously. In fact, he prefers to speak of media competencies rather than literacies, acknowledging, as we shall see, inherent paradoxes in the use of the literacy term. In the following, we shall perform the terminological experiment of systematically substituting his vocabulary of ‘literacies’ with ‘competencies’. In doing this a full

³² Erstad discusses Potter from a socio-cultural point of view, inspired by Buckingham, cf. 3.3.2.2.

discussion of what these media competencies refer to is made possible, developing illustrations of how they might be relevant for the analysis of the intervention study.³³

3.2.2.1. Media content competence

Meyrowitz explains media content literacy – or competence – in the following way: “The most common conception of media is that they are conduits that hold and send messages” (1998: 97). Meyrowitz illustrates *elements* of the media-as-conduits-conception in a pedagogical table from which is cited in table 3.2.2.1.1.

<p>“Media Content Elements</p> <p>The media-as-conduits metaphor focuses attention on those elements that move relatively easily from medium to medium and between live interaction and media, such as:</p> <p>Ideas</p> <ul style="list-style-type: none">• Themes• Topics• Characters or roles• Narratives• (...)• Genres (thematically or topically defined)• (...) <p>Typical questions about media-content elements explore:</p> <ul style="list-style-type: none">• Structure/pattern of above content elements• (...)• Influence of media industry structure on content• Variations in individual and group perceptions of content• (...)

Table 3.2.2.1.1. Media content elements. Meyrowitz 1998: 97.

Correspondingly, Meyrowitz develops a *tool* useful for analysis of media content (table 3.2.2.1.2). In itself, the tool seems simple, perhaps even banal, but its heuristic value becomes clear when

³³ We may wonder whether Meyrowitz was forced to use the literacy term because of the dictated theme of the journal in which his article was printed. The theme was media literacy – with contributions by Buckingham (1998a) and Messaris (1998), among others.

compared to equivalent tools developed by Meyrowitz (cf. below) and when applied to the present study.

<p>“The importance of media content is most visible when other elements of mediated communications are ignored and when one content element, A, is contrasted with another real or hypothetical content element, B:</p>		
A	vs.	B
Content Element A	vs.	Content Element B”
Meyrowitz example:		
Violent	vs.	Peaceful content
Example from intervention study:		
Sad	vs.	Happy main character in the animation “The Ugly Duckling”

Table 3.2.2.1.2. Tool for the analysis of media content. Quote from Meyrowitz 1998: 98.

We can illustrate the relevance of this tool for the analysis of the teaching and learning processes going on in the intervention study about H.C. Andersen. In experiment 4, students from all four classes worked with the “The Ugly Duckling” in different texts and with differing modal constellations and media: Firstly, they encountered the Danish verbal version of “The Ugly Duckling” found on a homepage on the Internet (www.adl.dk; Andersen 1843); later, they encountered one of The Walt Disney Company’s animated, and non-verbal, versions of “The Ugly Duckling” (1938). In both texts, the main character of “The Ugly Duckling”, the duckling, experiences both *sadness and joy*. The content of this character’s emotions is more or less the same regardless of the media. If this specific content is not present as a vital part of a story of a duckling, then it has probably nothing to do with “The Ugly Duckling” that Andersen originally wrote. It is Andersen related content that can be, and is, *transmediated*.³⁴ This is one way of using Meyrowitz’s

³⁴ By using this term ‘transmediated’, and related terms like the noun ‘transmediation’, I refer, in some extent, to Grusin and Bolter’s notion and understanding of *remediation*, defined as “techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real” (2000: 98). One of the problems of this definition, however, is the use of prefix, re-. Re- means ‘going back’; applied to the process of mediation, this suggests that the process of mediations must be understood diachronically and retroactively. But we should also understand the process of mediation synchronically, and proactively (as I did, inspired by Meyrowitz, in the analysis of content in different versions of “The Ugly Duckling”; in such an analysis, time, and history, is put into parenthesis). Thus, I prefer the term transmediation, defined as the transportation, and refashioning, of content, form, and function variables, in-between media seen from a synchronic and diachronic point of view. Cf. also Kress 2003: 36, who discusses the ‘trans-‘ prefix in

notion of ‘media content literacy’ or preferably ‘media content competence’, no matter whether we are students, teachers or researchers. It is a didactical tool to reflect on *what* could, and does go on in media education in MTE/StLE – and *how*, and *why*.

3.2.2.2. Media form competence

However, such a conception of media is only one out of three possible, Meyrowitz argues. Within Media Studies there are at least two other ways of understanding media. A second approach is named “media grammar literacy” by Meyrowitz (Op. cit.: 99). The question arises, however, if the ‘grammar’ concept or other language-oriented concepts that Meyrowitz applies are stringent enough in order to construe this second media conception. The grammar concept is a relict from structuralism, which held that *parole* was based, ontologically, on a grammar structure coded in(to) a *langue*.

Buckingham/UNESCO also echoes this belief, when they suggest the notion ‘Language’ in identifying a core concept for media education as related to “media aesthetics” (cf. 3.1.4, p. 52). Alternatively, it may therefore be suggested that we foreground Meyrowitz’ more formalistically oriented formulations and use the term *media form competence*. This could be defined as understanding, recognising, knowing and being able to manipulate “a wider range of production variables” within each medium that “shape perception and response to mediated communications” (Meyrowitz 1998: 99). In this quote Meyrowitz’ vocabulary draws on the well-explored relationship from formalistic theory between form, content and perception, which prioritises form. As V. Sklovskij put it in 1914, in a working definition of art: “‘artistic’ perception is perception in which form is sensed (perhaps not only form, but form as an essential part)”.³⁵ Meyrowitz explains in plain American English that such literacy “demands some understanding of the specific workings of individual media” (Op. cit.: 100). A list of some ‘workings’, or production variables, as he also terms them, is cited in table 3.2.2.2.1.

relation to the notion *transduction*; and cf. Kampmann Walther 2005, who defines and uses the term transmediation in a parallel way.

³⁵ This is my English translation of a Danish translation by Jane Kabel of Sklovskij’s text “Voskresenie slova” [1914] [The Resurrection of the Word] found in W.D. Stempel (red): *Texte der russischen Formalisten*, München 1972, bd. II. Wilhelm Fink Verlag. The Danish translation is as follows: “*kunstnerisk* er en perception hvor formen opleves (måske ikke kun formen, men i hvert fald formen).” (Sklovskij 2001: 4).

“Print Media	Still photography	Radio/Audio	TV / Film
<ul style="list-style-type: none"> • Size/shape of page • Color(s) of paper • Thickness of paper • (...) • Size(s) of type • (...) • Mosaic of text and graphics 	<ul style="list-style-type: none"> • (...) • Angle (low/high/level) • Front/back/profile • (...) • Depth of focus • Lens (wide→telephoto) • (...) • Color balance • Type of paper • (...) 	<ul style="list-style-type: none"> • Mike pickup pattern(s) • Electronic volume • (...) • Fade up/fade out • (...) • Segue/ Silence • Echo • (...) 	<ul style="list-style-type: none"> • (most photo variables) • (all audio variables) • Visual fade in/out • Cuts • (...) • Length of shots • (...) • Still or shaking camera • (...)

Table 3.2.2.2.1. Form variables for various media. Meyrowitz 1998: 100.

As with *media content competence*, Meyrowitz also offers an analytical tool in the shape of a diagram, which helps us identify and analyse production variables. I have rephrased and applied this tool for this study in table 3.2.2.2.2.

This tool can be used for reflecting on didactical designs in numerous ways, including the design of this study. For example, if we focus on the picture book resources, made available for teachers and students in experiment 3, we could point at different ways of illustrating the Andersen fairytale called “The shadow” (Andersen 1847) – more precisely the main protagonist called The shadow. In table 3.2.2.2.1, Meyrowitz has not specified production variables for illustrations, but for still photography. However, many of the variables in still photography are similar to those of illustrations – like *colour*. What differs between the two illustrated versions of “The shadow” (as used in classroom experiments in this study) is precisely colour. One version is a black and white sketch from 1849 (Andersen 1849), whereas the other illustration is from 1999. In fact it is a visual interpretation and uses colour. The latter was produced by Danish artist Martin Bigum. Both illustrations are available on the Internet and were made easily accessible on the intranet of the classes, as a resource for the students to work with.

“The impact of media production variables is most visible when a content element, A, is held constant and one production variable is contrasted with another.

	Vs.	
Form variable □	vs.	Form variable △”
Meyrowitz example: MURDER Shown from perspective of victim	vs.	Perspective of murderer
Example from intervention study: CHARACTER The Shadow illustrated in black and white graphics	vs.	The Shadow illustrated in colours

Table 3.2.2.2.2. Tool for analysis of media form. Quote from Meyrowitz 1998: 102.

From a media pedagogical point of view, we might ask: Why should we teach students this (way)? One good, general answer would be: In order to allow students to develop their media form competence. There are, as indicated, numerous form elements potentially related to this competence, however, this simple design analysis illustrates how Meyrowitz’s conception of media as form can be used. Indeed, this may be taken from the teacher’s point of view, as a way of reflecting on how to plan, carry through and assess teaching, which alters (or affords, to use the terminology of multimodality (Kress & van Leeuwen 2001)), individual perceptions and collaborative competence oriented towards knowledge production on media experiences.

3.2.2.3. Media function competence

Meyrowitz takes us a step further, pointing out a complex *relation* between content, form, and function, based on his studies of people watching television (Meyrowitz 1985). He terms this relation ‘medium literacy’, which we could term ‘medium competence’, or, as it is used here ‘*Media Function Competence*’. Regardless of the name, this competence refers to the *social teleology* of media, that is, how media might aim at function, use or adaptation to social contexts due to its materiality and the persons forming part of this context. ‘*Media Function Competence*’ foregrounds the point that we, as people, citizens and students should learn and be able to understand the particular characteristics of each medium, which shape our communication:

“...regardless of the choice of content elements and regardless of the particular manipulation of production variables...” (Op. cit.104).

Meyrowitz offers several explanations and examples of what is here termed ‘*Media Function Competence*’, and its reference (cf. table 3.2.2.3.1). One of his elaborate examples – with which any teenager can identify – entails understanding why ending an intimate relationship might work differently depending on the medium: Ending a relationship in at telephone conversation rather than a ‘Dear John letter’ might become counterproductive (not ending it, after all). This is because the telephone, due to its vocal, bi-directional, and simultaneous communicational form, tends to maintain an informal, intimate, and fluid relationship. Whereas the use of a ‘Dear John letter’ might be productive because it allows one to have authority in the sense that a letter does not convey emotional vocalisations, also it allows calm and reflected writing (and revision), among other things.

“Medium analysis focuses attention on those relatively fixed features of a given medium (or of a general type of media) that make it a unique communication setting and distinguish it from other media and from face-to-face interaction, such as:

- Type of sensory information conveyed; unisensory or multisensory (*visual, oral, olfactory, etc.*)
- (...)
- Unidirectional vs. bi-directional vs. multidirectional (*e.g., radio vs. telephone vs. on-line computer conference*)
- (...)
- Relative ease/difficulty of learning to encode and decode; stages of mastery (*e.g., learning to read vs. learning to listen to the radio*)
- (...)
- Degree and type of human manipulation (*e.g., painting a picture vs. snapping a photograph*)
- (...)

Table 3.2.2.3.1. Sample of medium variables. Meyrowitz 1998: 104.

If we were to relate analytically to the concept of ‘Media Function Competence’ in regard to the present intervention study, we find several theoretical and empirical analogies.

Theoretically, Meyrowitz’s discourse on sensory information or earlier, production variables, can easily be compared to and improved upon by multimodal theory (more on this later).

Empirically, in experiment 1 for example, students learnt about the genre of criticism from the mid-19th century, e.g. in the mediated shape of reviews for Andersen fairytales, semi-public letters

from professional associates, and personal letters from his friends. Students were encouraged to work productively, writing pieces of criticism in one of these three genres and in a spatiotemporal situation of their own choosing. This called for a situated medium competence, including understanding, manipulation, reflection and choosing between different ‘logics’ of one medium and another, used in the pertinent context. They were offered conceptual knowledge *about* a newspaper and a letter (as medium), and at the same time they were *performing* the medium, productively.

The same goes with the task of the so-called “Journalist group”, a student-based agentic feature installed in all four experiments (cf. chapters 7-8 and 10-11). The task of the Journalist group was to act as journalists by focusing on the experiment going on in the classroom, with the declared goal of communicating this in a medium related to that foregrounded in the experiment. So, since experiment 1 was about writing critical reviews of Andersen’s fairytales, one journalistic group chose to write an article collaborating with a local newspaper, whereas another group, in another class and school, chose to design a homepage and write several brief reports about the experiment. This homepage was made fully accessible for students and the teacher in class (through a password), and semi-open to the public.

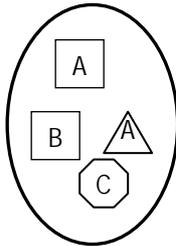
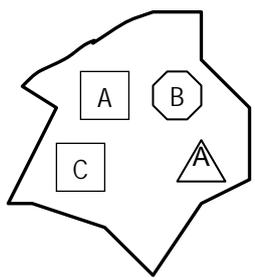
In these cases we cannot, in evaluative terms, speak of productive or counterproductive choices made by students, as done by Meyrowitz in his synthesizing tool for analysis of medium competence (table 3.2.2.3.2). Rather, these choices brought with them different theoretical and actual juxtapositions of content, form, and function sensitive to the situation. Indeed, this included student interests and already developed media competencies. In terms of function, the potential of permitting student collaboration and productive co-opting in the process of producing and distributing meaning is quite different.

In regard to the collaborative local newspaper, which published the article written by the student-journalists, it became quite clear that the editor has almost full authority in terms of choosing what was to be printed. The peers in class only had a say in the sense that they could be interviewed and were permitted to express opinions, which might be published.

In the class producing a homepage, all students were permitted to upload different types of meaning-making – such as written opinions, and pictures – unsupervised. Both student-journalists and peers in this class were potentially able to communicate with a larger audience, transgressing the classical point-to-point micro-level approach found in classrooms (student-teacher), but also beyond the meso-level of the classroom community with the macro-level of a wider public. On the other hand, it is likely that less people will receive the student-journalist story if a homepage is used

instead of a local newspaper. In other words, reflections and choices are required, and they imply advanced considerations about the combination of content, form and function, including ethical considerations on behalf of the teacher and students.

“Media settings are most visible when content elements are held constant and one looks beyond the range of formal choices within each medium to the differences between using one medium vs. another medium (or vs. no medium at all).

Medium environment	vs.	Medium environment”
Meyrowitz example: Telephone call	vs.	Written letter
Political debate on radio	vs.	Political debate on TV
Examples from intervention study: Writing a review of Andersen fairytales in newspaper to Andersen	vs.	Writing a fictitious personal letter
Journalistic text produced by students to local paper	vs.	Journalistic text written by students to homepage

Table 3.2.2.3.2. Tool for medium function analysis. Quote from Meyrowitz 1998: 105.

More generally, Meyrowitz argues that ‘Media Function Competence’ is a vital part of living actively and critically as citizens in society at different discursive levels, including acting as teachers and students in the educational system. Meyrowitz often employs the hypothetical word *might*: Telephones “might” have changed dating rituals in general; changes in dominating media “might” alter “social conceptions of what it means to be educated and competent” (Op. cit.: 105), and so on. He does not argue for determinism in the relationship between a medium and its social life, rather he argues that this relation should be foregrounded as a main theme in forming student media competence in school and, not the least, as a main theme among teachers and school leaders themselves. In relation to this, Meyrowitz’s critique of the literacy concept is developed:

Historically, technology has reconfigured the social system of schooling in many ways. Gutenberg’s often mentioned printing press made possible a shift in society, from oral to written

forms of communications, which again supported new educational media and, hence, new educational practices and pedagogies. We might exemplify this in a MTE/StLE context with the development of advanced literary pedagogy in the 19th and 20th centuries. These practices and pedagogies have been contested and reshaped for decades, by the addition of various forms of electronic technologies and media leading to the necessary development of new related competencies and pedagogical concepts. *The problem is, however, that the discourse of educational practice and research continues to insist on the terminology of literacy and text.* This becomes an obscuring conceptual constraint for players in the field, such as teachers, politicians, students and developers if they wish to discern the differences between media and competencies needed when dealing with and teaching in a complex, media-saturated society. Thus, Meyrowitz argues that the school system is in a paradoxical perpetual *authority crisis* due to media development. Schools tend to redouble their efforts to teach traditional literacy skills, while at the same time attempting to help students to process, and reflect upon, the new, semiotic resources they meet through nonverbal media. The emergence of nonverbal media threatens the basic structure of the school system. Such a system is based:

...on the assumptions that most of what a child knows can be correlated closely with his or her age and reading ability, and that the teacher always knows more than the young students (Meyrowitz 1985, Papert 1993). The vast range of experiences that children now have through nonprint media make age and reading ability much weaker predictors of children's knowledge and more often give even young children experience with topics and issues unfamiliar to their teachers. (Op. cit.: 107)

What Meyrowitz diagnoses here (in readdressing McLuhan's point regarding Johnny, cf. 1.8, p. 19), is a fundamental discrepancy between child (media) experiences and schooling. This discrepancy leads to what we might call a *Verfremdung* or *de-familiarisation* effect (Sklovskij 1991) in the educational system: Teaching with and/or about media, leads to teacher de-familiarisation. As we shall see in the analysis of experiment 1 and subsequent experiments, this diagnosis is reflected empirically in Danish school practices. However, the experiment also demonstrates, in a positive perspective, how de-familiarisation can be (re)designed towards new familiarisation.

Meyrowitz's critique of the literacy-concept helps us summarise his framework for competence: Firstly, his point is to promote the future use of the notion of media competence instead of literacy. This is because he acknowledges serious constraints within the discourse of literacy. The question is how many media competencies we should specify? Meyrowitz suggests three media conceptions, which have been rephrased as: 'Media content competence', 'Media form competence', and 'Media

function competence'. I believe it is no coincidence that Meyrowitz is able to identify *three* media competencies. A generalised social semiotic approach to communication would argue that these three media conceptions, seen together, rephrase the three basic elements of any semiotic resource: content, form, and function (van Leeuwen 2005). Hence, Meyrowitz's media conceptualisation seems consistent with the theory of social semiotics: it is applied indirectly and productively on one element of the communication process – the medium.

If we attempt a comparison of Meyrowitz's media conceptions with the four-fold conceptual framework suggested by Buckingham (cf. Buckingham 2003, Buckingham & Domaille 2003), which are language, production, representation, audience, it is evident that some analogies appear: Firstly, 'Audience' is a vital conceptual feature of 'media function competence'; secondly, 'Language' is part of 'media form competence', and so on. An advantage regarding Buckingham's proposed categories is their use in everyday discourse. This makes them relatively easy for teachers to understand and apply. Yet it seems that Buckingham's categorical framework is too narrow. Are these four categories able to represent media pedagogy adequately? I believe that Meyrowitz's proposal is more generalised, systematic and comprehensive, expanding the scope of media and its related competencies. The drawback being, that this approach is more difficult to understand, access and thereby apply for the everyday teacher and in teacher training.

It follows from this last critical remark that Meyrowitz's approach to 'media education' and 'media pedagogy' has its limitations too. As indicated, its conceptualisation of the media-and-modes constellation seems a bit blurry (speaking of production variables and sensory information). From a classroom-oriented pedagogical view, we may also question its implicit approach to the cognitive and socio-cultural dyad. Briefly put, I will argue that Meyrowitz's conception of media pedagogy is more cognitively than socio-culturally oriented, more result- than process-oriented, more scientifically than spontaneously oriented (using Vygotsky discourse), and more conceptually oriented than practice oriented. In the end, in his understanding, 'media literacy' is still very much about developing student 'skills' and 'knowledge'. If knowledge seems to be a stable entity that can be stored in the mind, then 'Media literacy' is something that can be transmitted and acquired. In this sense, Meyrowitz's position is not far from Potter's perspective on media literacy. Although Meyrowitz demonstrates a concern for contextual parameters such as students and schooling in a broad macro perspective, he does not offer any processual classroom strategies, at the meso-level, for planning, designing, undertaking and assessing media competencies. In this sense, Meyrowitz's approach is yet another theoretical approach to media education which does not acknowledge, nor

explore methodologically and empirically, the dynamics of local school culture and the teaching of specific school subjects.

From the perspective of traditional mother tongue education practices, we may question whether Meyrowitz in fact speaks of ‘*literary pedagogy*,’ and not ‘*media pedagogy*’. This objection derives, in part, from empirical observations, such as comments made by teachers questioning whether this or that experiment was truly an experiment with ‘*media pedagogy*’ and not ‘*literary education*’!³⁶ Indeed, there is no doubt that teachers and students in “Danish”, and MTE/StLE classrooms in other countries, work with media content quite often. Sometimes they use ‘*media form*’, and occasionally ‘*media function*’ *when they work with literature*. Meyrowitz’s point is that these practices can be generalised. If this is the case, we may be able to bridge historically disintegrated pedagogies in MTE/StLE. What Meyrowitz suggests is that basic signifying practices related to one specific media are also manifested in other media. The competencies for understanding these media, in abstraction, are comparable to understanding other media. One may suggest that this observation eventually leads to the main hypothesis: that semiocy – not simply media literacy – should be placed in the core of the rationale of “Danish”/MTE/StLE.

There is nothing ‘*natural*’ about the way Meyrowitz constructs his framework for foregrounding media competencies. The distinction between ‘*literary pedagogy*’ and ‘*media pedagogy*’ is a thin line produced by institutionalised knowledge and power relations, not the least in academic domains at the university level. This avoids, so to speak, media pedagogy becoming integrated or assimilated with literary pedagogy. Indeed, this also applies to other institutionalised pedagogies and vice versa. The post-structuralist word-and-image researcher W.J.T. Mitchell (1995) even claims that we should speak of this problem as *institutionalised battles between the verbal and visual disciplines* at universities, leading to the marginalisation of vernacular *semiotic domains* (a concept I shall explain in detail in next section), particularly those that cross disciplinary boundaries.

3.2.3. *Gee on semiotic domains, knowing and identity*

There exists a network of researchers, which gathers around The University of Wisconsin *School of Education* (UW-M), which includes James Paul Gee, Kurt Squire, David Shaffer, among others. These collaborate with scholars from other American research communities, such as Jay Lemke, Sasha Barab, Michael Warschauer, and Henry Jenkins. It has been possible for them to combine

³⁶ This point is expressed quite clearly in teacher evaluations of experiment 3; cf. A45. Peter answers the question: “Do you think that the suggested curriculum – in your case – opened new perspectives in teaching H.C. Andersen within the subject of Danish” in the following way: “No, not especially. I already include pictures as illustrations as an ‘opening’ towards certain epochs and thematic connections, but also for their own sake”.

both a ‘cognitive component’ and a ‘social component’ when addressing media literacy. These researchers do not only address media literacy/media education. Indeed, no particular interest is paid to the media concept used in education or curriculum studies. Rather, the general research interest is directed at exploring encounters with new semiotic domains (see more below), such as video games, and what they might teach us about learning and knowledge production in various contexts, such as formal schooling. Researchers draw upon a multidisciplinary theoretical framework, which includes discourse studies, genre theory, learning theory and even European sociology. The positive feature of this approach is that it is more open towards *potential* meaning-making and knowledge production, regardless of the medium. Less attention is paid to traditional genres, such as literature. A negative feature, as seen from the perspective of traditional Nordic media education research and didactic research, is that some of the complexities and challenges of teaching media within formal schooling are set aside on behalf of a discussion of informal learning outside school.

The work of James Paul Gee is paradigmatic for the UW-M semiotic research into learning, which is to be presented and evaluated. This will involve a rather detailed account of his work as it has inspired this study in several ways, as we shall see.

Gee was a contributor to the now classical anthology: *Situated Cognition* (Kirshner & Whitson 1997), a leading theoretician within international discourse studies (Gee 1996) and a member of The New London Group (2000). Gee has also written *What video games have to teach us about learning and literacy* (2003), in which he addresses the possibility of teaching video games and other semiotic resources in school subjects and reflects upon the reasons why this is such a constrained enterprise. Moreover, Gee is part of an international MTE research forum affiliated with AILA. There is no doubt that he, indirectly, pushes the limits of discourse on media literacy, media education, and MTE/StLE in ways that inspires further research one might add.

His work is indeed worth considering in relation to this study as it explores the potentials of allowing new constellations of modes and media enter the domain of school. His general argument is that many contemporary texts contest what he terms bad theories of learning and knowledge production, which dominate schools and school subjects. In extension, his approach implies and requires a re-thinking of these. Echoing Dewey, Gee argues that good video games facilitate the essentials of future education, namely: “...producer-like learning and knowledge, but in a reflective and critical way...” (Gee 2003: 16). Obviously, this is a speculative hypothesis, and we should be sceptical about Gee’s non-empirical approach. Indeed, we should remind ourselves of the criticism

given by The British School on media research from the 70's. Although Gee claims that he deals with: "learners in a material and social world" (Op. cit.: 7) he does not, in terms of methodology, intervene and observe how video games are used and interpreted by actual teachers and students. Having said this, similarities between Gee's interests and the present dissertation may be found, both at superficial and complex levels.

Resuming the four experiments in the intervention study, we might consider whether verbal criticism in different media (experiment 1), oral readings (experiment 2), picture books (experiment 3), animations (experiment 4), and various journalistic genres (Experiments 1-4) have the same potentials as video games to facilitate producer-like learning and knowledge in a reflective and critical way. This dissertation claims that this is the case. Perhaps they are not as hyped and popular as video games are nowadays, however, they once represented a 'new media' that was to change culture outside and inside school. So, let us look further into the theory that Gee constructs. Gee offers at least two fruitful theoretical distinctions, whose relevance for this study will be illustrated briefly. It is the distinction between semiotic and intellectual domains on the one hand, and between knowing and knowledge on the other. Moreover, he proposes a new way of conceptualising identity, which is found useful for heuristic empirical analyses.

3.2.3.1. *Semiotic vs. intellectual domains*

Gee's concept of *semiotic domain* is comparable to a general theory of social semiotics. It is a broad term for what Theo van Leeuwen calls *semiotic resources* (van Leeuwen 2005: 3ff.). By a *semiotic domain* Gee means:

...any set of practices that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artefacts, etc.) to communicate distinctive types of meanings. (Gee 2003: 18)

Semiotic domains may be found at different discursive levels. One example of a semiotic domain could be newspapers, and another a school subject such as "Mathematics". A third, media education within MTE/StLE as it is found around the world. Clearly, Gee speaks from a semiotic perspective, from which there is only a marginal interest in media or literature. What Gee observes instead is that semiotic domains are dichotomised and posited in a hierarchical structure: In society as a whole, a rich variety of semiotic domains are cultivated and pursued with great vigour by young people and children. Ethnographic studies of media culture (e.g. Jenkins 1992) prove this to be the case all around the world. If we look at school practice, however, intellectual domains reveal

themselves instead. Intellectual domains are those institutionalised semiotic domains which, because of some social norm, are found to be worth learning, and which students therefore should know about. Gee characterises the difference between semiotic domains and intellectual domains as *the problem of content*:

The problem of content is, I believe, based on common attitudes towards school, schooling, learning, and knowledge. These attitudes are compelling, in part because they are so deeply rooted in the history of Western thought, but nonetheless, I think they are wrong. The idea is this: Important knowledge (now usually gained in school) is content in the sense of information rooted in, or, at least, rooted to, intellectual domains of academic disciplines like physics, history, art, or literature. Work that does not involve such learning is “meaningless.” Activities that are entertaining but that themselves do not involve such learning are just “meaningless play.” Of course, video games fall into this category. (Op. cit.: 20f)

In this quote, Gee bridges the Anglo-Saxon curriculum approach with continental didactics, in the sense that he highlights – and at the same time scrutinises – one of the three basic, rarely questioned elements of the so-called classical *didactical triangle*. This triad has reflected all teaching-learning situations since Plato’s dialogue on *Menon* (to give a specific example from ‘the history of Western thought’), namely the teacher-*content*-student components. In Gee’s conception, content could be substituted with intellectual domains. And Gee’s point – which is parallel with findings in Danish research³⁷ – is that certain intellectual domains, rooted in academic life at universities, gain the power to define what is knowledge. Because of this it marginalises valuable meaning-making practices found in other semiotic domains, as represented in figure 3.2.3.1.1.

If we were to apply this distinction between semiotic and intellectual domains on the Andersen resources that were made available for teachers and students in this intervention study, we can render probable that they all belong to the margin of the intellectual domain called Danish Studies, Andersen studies, and the teaching of Andersen in “Danish”. One may substantiate this: a search in one of the most elaborated bibliographies of Andersen (cf. Dansklærerforeningen 2006), as was done when systematically preparing the experiments, it was found that there is an abundance of knowledge/content regarding Andersen, which is rooted to/in the academic study of literature. It took the shape of research articles, books and learning material. There is also plenty of academic

³⁷ In an ethnographic study of adolescents taking part of the informal teaching institution called Ungdomsskolen, Danish media pedagogy researcher Kirsten Drotner found empirical evidence of what Gee speaks of theoretically: In her study, Peter, like other young guys, related learning to school boredom. Thus, funny, unpredictable, and youth-controlled media experiments made with a video camera in the Ungdomsskolen setting could not be regarded as learning or competence development by the students (Drotner 1994: 150).

material on the philology of Andersen’s work, as long as it stays within the medium of monographs and the mode of writing. However, there is hardly any material about the trans-mediated Andersen mode/media constellations used in this intervention. Such Andersen resources exist and are relatively easily available for teachers (economical copyright constraints do play a role – more on this later). Indeed, while they have been quite popular and widely distributed for decades, they have not been part of the intellectual domain of academic studies in “Danish”, nor do they play any important role in the teaching practices of “Danish”.

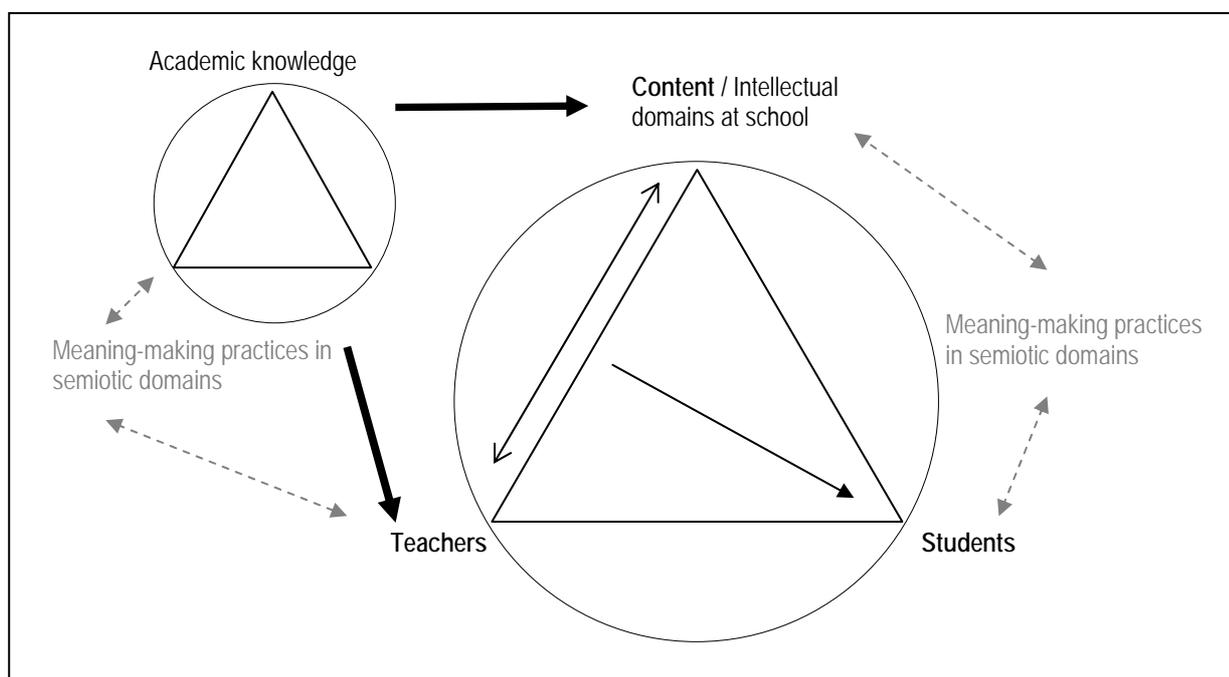


Fig. 3.2.3.1.1. The didactic triangle of traditional schoolwork related to academic knowledge production and marginalized meaning-making practices in semiotic domains. An interpretation of Gee 2003.

Methodologically speaking, this analysis raises questions about interpreting the findings of the intervention: We should expect that students and teachers, being introduced to an explicitly experimental media pedagogical programme about Andersen, would initially meet the programme with a degree of scepticism. This is because they are asked to engage something implicitly evaluated as meaningless inside school. On the other hand, we should expect that teachers and students participate in and experience a wide variety of semiotic domains outside school with similar semiotic resources. Also, we should expect them to relate to the intervention with their

personal experiences – at least to some extent. This is why the arrows in figure 3.2.3.1.1 point in both directions, from social practices in semiotic domains to teachers and students. In Part III, there are detailed accounts of whether teachers and students found that the experiments lead to meaningful, subject-related knowledge production or simply meaningless play. The student comment regarding experiment 2 cited in the introduction (chapter 1), suggested the latter.

3.2.3.2. *Knowing vs. knowledge*

The difference between semiotic and intellectual domains is related to another distinction that Gee, and indeed every (American) educational pragmatist, is interested in, namely that of distinguishing between *knowing* and *knowledge*. In the history of educational philosophy, Dewey (1997) has convincingly discussed and constructed the distinction: knowing/knowledge. While Dewey's general point developed as a diagnosis of the 19th and 20th century Western educational system it remains strikingly relevant as we find ourselves in late-modern 21st century society. The point being that a modern society is, first and foremost, *a knowledge society*. Moreover, the problem arises that more knowledge is accumulated than one person could ever grasp, or indeed teach. This puts pressure on the educational system and its agents: it must reconsider the relationship between society and education.

What Dewey finds to be a problem and a point of objection regarding the teaching practices of his time was a dominance of what we might term, following Gee, the teaching of academic domains. More specifically, the teaching of stable knowledge that students are expected to acquire more or less passively. Dewey finds this approach to the curriculum inauthentic, undemocratic and marginalizing for the most important feature of democracy, namely its ability to develop *inquiry*. Alternatively, he argues the case for an approach to the curriculum and curriculum experimentation that rethinks the relationship between subject-matter and method. His proposal (developed further in the next chapter) is grounded in a philosophical investigation of knowledge production, which is indebted to Peirce's pragmatism. Going far beyond the simplistic motto of 'learning as doing', with which Dewey is often – reductively – identified, he sums up his method of knowledge in educational contexts in one of the final chapters of *Democracy and education* entitled "Theories of knowledge":

The theory of the method of knowing which is advanced in these pages may be termed pragmatic. Its essential feature is to maintain the continuity of knowing with an activity which purposely modifies the environment. It holds that knowledge in its strict sense as something possessed consists of our intellectual resources—of all the habits that render our action intelligent. Only that which has been organized into our disposition so as to

enable us to adapt the environment to our needs and to adapt our aims and desires to the situation in which we live is really knowledge. Knowledge is not just something which we are now conscious of, but consists of the dispositions we consciously use in understanding what now happens. Knowledge as an act is bringing some of our dispositions to consciousness with a view to straightening out a perplexity, by conceiving the connection between ourselves and the world in which we live. (Dewey 1997: 344)

To rephrase Dewey's eloquent formulation in a didactical perspective (again, referring to the didactic triangle), "doing content", seen from the point of view of the student, is thought of as a continuous, purposeful knowing-activity in a complex, modifiable environment. From the perspective of the teacher, who has the responsibility of designing the didactic and curricular approach, the challenge is to organise or, to use a metaphor Dewey employs, "furnish" the environment with a complexity that meets student aims and desires, enabling them to develop already existing dispositions in adaptable ways.

At this point one may propose that Dewey's conception of *knowing* is close to the definition of 'subject-related competence' applied in the intervention (cf. 4.2., p. 119ff.). Furthermore, it relates very well to the New London Group (2000) approach and approaches of other educational researchers arguing that teaching a curriculum – including a semiotic domain in an intervention – is never to 'transmit' or 'implement'. These rather see it as a dynamic, agent controlled (teacher and students) adaptation process, in which resources, curricula, and new knowledge are reworked and reinterpreted due to a local context and the professional interests of its agents.

Surprisingly, Gee does not make a reference to Dewey in his *Video Games*-book (2003), though he reflects on learning-as-knowing. However, he does make an explicit reference to Dewey in another collaborative writing. This simply reads: "But *to know* is a verb before it is a noun, *knowledge*" (Shaffer et al. 2004). Why is this difference so important to point out? Because it emphasizes the *active* nature of developing knowledge, no matter what level this occurs at. As a conclusion to Gee's conceptualisation of knowing/knowledge in relation to his idea of semiotic domains, it could be said that meaning-making in semiotic domains is always a potential for the production of knowledge. This is a radical and, indeed, a social constructivist point inspired by the works of philosophers on the knowledge society, such as Carl Bereiter (2002): If we understand schooling as a semiotic domain *en miniature*, the work engaged in by teachers and students, when using semiotic resources, draws on own experiences, always producing new meaning and new situated interpretations, which – if they reach the level of mastery – could push the limits of knowledge in an academic sense. Gee argues his conviction of this point in regard to new semiotic

domains being addressed in school practice. A good example of this could be the case of teaching video games: to some extent students become ‘experts’, whereas teachers are ‘illiterate’.

What shape would an alternative to Dewey’s theory take on this point? If one insists on considering schooling and teaching an ‘intellectual domain’, it follows that this type of meaning-making becomes inauthentic and rather a mere knowledge *reproduction*. From a semiotic point of view, such teaching would not be possible, even in principal. In reality, this is how teaching is often thought however. Still, Gee insists on ‘producer-like learning and knowledge in a reflective and critical way’ (as cited in 3.2.3), not the least for future DBR and development programs. Future curriculum designs that incorporate video games and various other domains should focus on teaching students how to “know knowledge”. On the one hand, this implies that students should be confronted, manipulated he even uses the word ‘frustrated’ by a semiotic domain. On the other hand, it becomes clear that this domain should allow them to critically reflect, so as to raise awareness and eventually the ability to manipulate it, and in extension of this, potentially transforming its practice. In brief, this constitutes the formula of the New London Group model of pedagogy (cf. table 3.1.2.1), of which Gee was one of contributors. In terms of pedagogical content and method, we see several obvious parallels between Buckingham’s Vygotsky-inspired media learning model and Gee’s Dewey-inspired semiotic knowing model. In chapter 4 a synthesis will be attempted between the two models.

It has been argued that Gee and other researchers at UW-M represent a position that combines elements from cognitive and social approaches. What, precisely, makes Gee’s proposal regarding the organisation of teaching-learning video games, and other possible semiotic domains, a situated cognitive approach? If we were to use the terminology of the *Video Games-book* (Gee 2003, pages 30ff.), it can be summarised with the two concepts: *internal design grammar* and *external design grammar*. ‘Internal design grammar’ refers to a specific semiotic resource (for instance the game “Tetris”, or the The Walt Disney cartoon “The Ugly Duckling”). This design combines modalities in specific communicative ways, which may be analysed as such. In Meyrowitz’s terms, we have a resource, which combines content, form and functional variables. To know this, to be able to analyse this in the Deweyan sense, is a cognitive activity.

However, this activity of analysing the ‘internal design grammar’ of a specific textual entity, Gee argues, can never be separated from what he terms the ‘external design grammar’. Although this seems to refer to a linguistic object, it is predominantly a sociologically oriented concept – a linguistic way of describing a sociological phenomenon related to a semiotic phenomenon. It refers

to the ‘grammar’ of how communities of people, or agents, construct meaning with and through a specific semiotic domain. This always occurs in a specific context and culture, situated in a specific spatiotemporal framework.

Inspired by German sociologist Ulrich Beck, among others, Gee explains ‘external design grammar’ through the concept of *affinity groups*. Affinity groups are “...a group of people associated with a given semiotic domain...” (Op. cit.: 27). All individuals participate in a number of affinity groups. Members of affinity groups “...can recognize certain ways of thinking, acting, interacting, valuing, and believing as more or less typical of people who are “into” the semiotic domain...” (Ibid.). There are many affinity groups, say, of video games, cultivating what we might call a video games culture in general; but there are also more specific affinity groups related to specific types of video games, such as the Internet based *World of Warcraft*; there are affinity groups – sometimes referred to as fandom or cult – of television programmes, movies, books or music; and there are affinity groups of amateur football players, dancers and so on. Returning focus to an educational context, we may term these affinity groups as informal, meaning that a group of people engage in some semiotic domain in a non-professional, non-institutionalised, non-educational way. Correspondingly, we may suggest the existence of educational, formal, institutionalised affinity groups, and, hence, external grammars related to these groups. Gee points, self-ironically, to the strict external grammar of the affinity group of linguistics, especially that of Chomskyian linguists, a group he once belonged to himself. These still have a very specific way of speaking the internal grammar of linguistics, which is opposed to that of socio-linguists, where Gee currently locates himself. To some extent both affinity groups acknowledge that they deal with a common object; on the other hand, they produce meaning about and construct this object in different ways.

Analogically, if we were to draw a parallel to this intervention study, a formal affinity group called “Danish” teachers could be suggested and presupposed. However, on a more specified level, we may speak of an affinity group of “Danish” teachers in upper-secondary education, as distinguished from that of primary education and more specifically yet, we may speak of “Danish” teachers in hhx, the commercial upper-secondary school being studied here. Equally, it is presupposed that we may distinguish different student affinity groups related to “Danish”, which, again have various subdivisions. We should expect that all these affinity groups share a common object, which is the domain of “Danish”, but on the other hand we should also expect that there are important differences in the way they produce knowledge about this object. In extension we may

expect differences in the external design grammar of “Danish” as a social system. From a methodological point of view this calls for reflection. Experimental, subject-related, didactic research should collect data that represents speakers from both parties – students and teachers – but also related affinity groups. Thus, one could expect diverging and converging interpretations of the meaning-making and knowledge producing processes.

3.2.3.3. *Identity as the answer to the context problem*

Gee argues that there is a tendency, in educational research, not to be specific about what is meant by often-used concepts such as ‘social’, ‘context’, and ‘culture’. In fact, rather than being concepts they are reduced to being mere notions. With regard to Gee argues that we should search for “...a more dynamic approach than the sometimes overly general and static trio of “race, class, and gender”...” (Gee 2001: 99). As we have seen, there may be two ways of facing this challenge: one is by introducing the distinctions between semiotic and intellectual domains, and internal and external design grammars; another is by speaking – as do researchers in The British School – of social appropriation (cf. 3.1.3, p. 49f.). Gee’s own, interesting, answer to “the context problem” is that we use the category of *identity* as a core analytic lens. In relation to the primary theoretical framework of this study, social semiotics and Giddens’ sociology (cf. 2.4, p. 30ff.), this makes good sense. Giddens’ emphasis of the late-modern self’s need to be reflexive, not the least in his recent work (e.g. Beck et al. 1994), is also in correspondence. Identity-making and individual agency is probably the prime analytical category, not only of educational research, but of (late-) modernity in general. As Danish didactic researcher Ellen Krogh (2003) has suggested, it is a core element, perhaps even *the* core rationale of “Danish” as a subject in upper-secondary education.

Identity in Gee’s conception should not be thought of as romantic concept of self-expression. Drawing on a large body of, predominantly late 20th century philosophy, sociology, and discourse theory, Gee suggests instead that there are four perspectives on identity (cf. table 3.2.3.3.1). As Gee points out, these four perspectives retell the history of identity conceptions as they have come to the fore throughout Western history. From a contemporary and systematic point of view, however, the identity conceptions are not perfectly delineated, but must be seen as co-existing and collapsing. Gee explains that *nature*-identity (N-identities) refers to how we conceive ourselves in regard to our “natures”, our biology; *institution*-identity (I-identities), refers to what we are primarily because of the positions we occupy in society (a thought developed, among others, by Foucault 1973); *discourse*-identity (D-identities), refers to what we are primarily because of our individual accomplishments as they are interactionally recognised by others (a thought developed in discourse

studies, e.g. Gee’s own work, 1996); and affinity-identity (A-identities), which according to Gee, is gaining prominence in late-modern society. This latter identity refers to what we are because of the experiences we have had within certain sorts of social “affinity groups” (a thought developed by Beck, Giddens & Lash 1994, among others).

Process		Power	Source of power
1. Nature-identity: a state	developed from	forces	in nature
2. Institution-identity: a position	authorized by	authorities	within institutions
3. Discourse-identity: an individual trait	recognised in	the discourse/dialogue	of/with “rational” individuals
4. Affinity-identity: experiences	shared in	the practice	of “affinity groups”

Table 3.2.3.3.1. Four perspectives of identity. Gee 2001.

This framework summarises several of the points developed from Gee’s work. It is remarkable how clearly it emphasises the production of identity, meaning and subject-related knowing, as being interlaced in cognitive, social, and indeed complex ways. While this may never be fully described in a concrete empirical analysis, these categories inform our pre-conceptions and revise our prejudices prior to empirical analysis. For this reason identity-categories become a fundamental tool in understanding and analysing the primary agents – teachers and students – of the studied context. They force us to ask: who they are, how may this be related to what they do and how they interact in specific design events, and why. Identity is necessary in order to understand the design process of the intervention in its totality and explain some of the reasons for why it is adapted productively and/or constrained counterproductively.

As suggested in the introduction, *a profile* of the participating teacher-informants in this study will be developed using the concepts given above (cf. chapter 6, p. 191ff.). In other occasions, identity concepts will be used to characterise differences among students, such as gender and affinity groups within the classes.

We may exemplify the usefulness of these concepts, focusing on the affinity group of girls and their identity making in the course of the intervention. In experiment 1, case 4 (the teacher is Peter), I recall a female student (based on empirical data: A35, Bånd 3, and A31, Feltnoter fra Peters case), who sits in a computer room where she and her peers are to search for Andersen fairytales on the Internet. In a short conversation with me, she states that “...she is prEtty bad at computers” [rImelig dårlig til computere] (A35, Tape 3: page 14). This is representative of several girls in the class at that time, my conversation with other students show. In case 1 from another school (the teacher is Karen), we find a female student in the homeroom with her laptop in front of her (this is a laptop class). Although I have not written down the exact wording in the field notes, I recall questioning her as to whether computers create the same negative emotions found in the other class. She states that computers are really not the issue, just things that are there, almost as an invisible means. In a later interview with two boys – Danny and Mike – from the same class, they confirm that students in class seem relatively accustomed to computer use (cf. A35, Tape 6, page 12). Hence, this reflects the general attitude for the girls in that particular class. Here, media pedagogy is not about the use of educational technology, teaching about media, but about producing knowledge. Indeed this is considered to be a productive use of the Available Designs. This is contrary to the other case, where media pedagogy appears to become a counterproductive matter of teaching *with* media, and not really reaching the point of knowledge production, due to technological and infrastructural constraints, among other things. In other words, the context co-construes and is construed by the person’s formation of identity, which again affects knowledge production.

Do the two student statements follow essentially from the gender of their speakers (N-identity)? While stereotypes regarding the relationship between gender and media use would claim so, this hardly seems to be the case here. The simple comparison of observations and their contexts makes it obvious that nature is not the predominant issue. However, Gee’s other identity categories may suggest a different and more viable explanation. In a theoretical sense we expect the statements from case 4 to be meaningful and dependent upon the dynamic complexity of several co-existing and contextualised identities. Empirical analysis backs this up: Firstly, the girl I spoke to is a student (I-identity) of a school, which emphasises the importance of ICT (cf. A52). However, the physical and infra-structural equipment (the computer technology) does *not* work much of the time, which creates frustration. This constructs what we might call an ambiguous D-identity for the student. Secondly, her male “Danish” teacher, Peter, is not particularly interested in computers, and does not valorise work with computers and computer-mediated texts positively (cf. A38 and A29).

In this sense he co-constructs the D-identity for the female student. A third factor may be the girl's exclusion from dominant male groups in the student body, perhaps stemming from norms within and outside this particular class. These groups of boys were observed to show, share, and enjoy, computers inside and outside school, having established an affinity group of ICT nerds. The girls in the class were not and could not be part of this.

In contrast, the girl from case 1 was part of an institution, which prioritises computer work and where the computer technology actually works, which created a positive D-identity. The girl's teacher, Karen, literally and explicitly celebrated computers, claiming that she hopes for them to replace all other educational technology in the future (cf. A25 and A31, Feltnoter fra Karens case). This underscores the creation of a clear D-identity related to computers and computer-mediated texts. Moreover, both male and female students collaborated quite well together, so that proficiency among the boys was able to reach, teach and help peers. This alternative mix of identities co-constructed the positive evaluative statement made by the girl from this case.

Buckingham argues that the theory and design of media education should consider a range of types of knowledge (cf. 3.1.5, p. 54), including the personal history of students. Biography, in other words, plays a vital part in the process of producing knowledge about media. Nordic media pedagogical research, particularly on informal settings, has focused on gender roles as a vital parameter for meaning-making and knowledge production (cf. e.g. Jerslev 1989; Drotner 1989; Knudsen 2005). This research could broaden, or refashion, its theoretical, methodological and analytical scope. With Gee's identity framework, we are able to rethink the relationship between identity and knowledge production, perhaps with a greater emphasis upon sociology and less on gender, than is often seen. This kind of research would also have to move beyond its focus on students, children and young people and include teachers and adults. Analysing the relationship between identity and knowledge production in classrooms does not end with students, because the design of media education is very much controlled by teacher identities. In extension, student knowledge and identity production is partly determined by teacher identities. Returning to our discussion of the cognitive/social relation of teaching media, we should also underline that these interrelated identities, which meet in a classroom community, are distributed according to the context of local school institutions and wider contexts. In terms of nature, institution, discourse, and affinity-groups, identity development must be considered and reflected upon in order to understand variation and distribution among schools in educational content in one and the same subject matter. A strong conceptualisation of student and teacher identity is conspicuously absent in Buckingham's

publications. Indeed, this is also the case for other theoretical writings, where characterisations of collaborative work in classroom communities are equally lacking. Gee supplements Buckingham on this vital aspect by presenting analytical categories of society and, more importantly, its agents.

3.3. Nordic media pedagogy

After having presented the British School of Media Education and Media Literacy in the US, it is natural to address Nordic media pedagogy, and particularly its Danish branch. This section, which concludes the presentation of theory about media literacy, constitutes the most immediate research context for this dissertation. While Nordic research is a ‘position’, it cannot be characterised as a school of thought on the area, because it constitutes a theoretical framework, which is adapted from international research, not the least Anglo-Saxon approaches. This being said Nordic Media Pedagogy does contain features, which sets it apart: its core concept and goal, media *Bildung*, is not shared by mainstream Anglo-Saxon theory at all.³⁸ What Nordic researchers on media pedagogy have in common with international research(ers), is an interest in the relationship between media and cognition in teaching practises. There have been fundamental changes in conceptualising these relations over last 30 years. Indeed, these changes have reflected international tendencies (cf. Nordicom 1995, among others). Buckingham’s approach, including his inspiration from Vygotsky, has played a dominating role in the last decade, not the least for the researchers Kirsten Drotner, Jan Thavenius, and Ola Erstad, whose research will be presented and applied here.

In the eighties, Pierre Bourdieu’s (1984) focus on the importance of cultural capital played a vital role, particularly for Danish researcher Birgitte Tufte (1996). Prior to this the Marxist and/or semiotic media pedagogy of Roland Barthes, Oskar Negt and Hans Magnus Enzensberger played a dominating role.³⁹ Nowadays, the problem of clarifying the very notion media and rethinking media in relation to the theory of multimodality and competence is a vibrant issue in Nordic, and Danish research.⁴⁰

³⁸ *Bildung* is a hyper complex concept. Given the fact that it has been developed and used, for centuries, in German and Nordic countries, but *not* in Anglo-Saxon countries, it is notoriously difficult to translate into English. Some would translate *Bildung* into personal identity building, or existential competence, but the term is, as we shall see, interpreted in other, or extended, ways too. At this point I choose not to translate the concept into English. Instead, I maintain the German word, as spelled in German, ‘*Bildung*’. Cf. also Haue 2007.

³⁹ For an archaeology of early media pedagogy in a Danish context, cf. e.g., Bondebjerg 1976, and Mortensen 1972, referring to Negt/Kluge; Thygesen 1974 referring to Enzensberger; Olivarius et al. 1976 referring to Barthes and Umberto Eco.

⁴⁰ Cf. e.g. Brügger 2002, Bundsgaard 2005.

Another point, which has been continuously shared with international tendencies, is the marginalized position for media pedagogy in school practice, as suggested by the UNESCO survey (Buckingham & Domaille 2003). There is, however, no systematic Nordic study of media pedagogy that backs up Buckingham and Domaille's findings. At the best one may find, within a Danish context, some research, surveys and expert opinions, which render their findings plausible for this region.⁴¹ Briefly put, the Danish story of media pedagogy is one of experiencing several "new media waves", in terms of development and qualitative research projects. These are often initiated by (action) researchers trying to integrate new kinds of technology, media, and genres in school practice – predominantly within "Danish" as a subject, and predominantly within primary and secondary education (up to age 15, or so). Other instances have been approached within informal learning settings. During the last thirty years or so, we have seen an abundance of teaching material and studies regarding "mass media", including comics and advertisements (in the seventies), television and video production (the eighties), movies and moviemaking (the nineties), and hybrid, computer mediated texts (this decade). One might think that these projects have led to a broader understanding and definition of media and perhaps even profoundly changed the teaching of and with media within school subjects (including "Danish"). The general impression is, however, that these attempts to integrate new constellations of media and modes *beyond* books and photocopies have, in general, had no impact. In Gee's terms, alternative semiotic domains have not become a part of the academic domain of "Danish", especially not in upper-secondary education. Media therefore remains a "bolt-on component", to use Buckingham's expression (Buckingham 1990a: 9). This continues to be the case in "Danish" curricula and practices, as it does in England and other countries. As a Danish Media Studies researcher, once a researcher of "Danish", somewhat ironically, and eloquently, put it recently: Media in "Danish" "...is on a tolerated residence, and this is intolerable in the long run" (Agger 2001: No paging, my translation)".

As indicated, the main *difference* between Nordic and international tendencies, is the use of the term media *Bildung*, which draws on a German-Nordic educational tradition related to *didaktik*. In contemporary research this is indeed a difference in vocabulary, but not necessarily in thought. As we shall see among influential media pedagogy researchers such as Danish Kirsten Drotner (e.g. 1994, 1999; 2001a, 2001b, Drotner et al. 1996), Swedish Jan Thavenius (1996), and Norwegians Svein Østerud (2004) and Ola Erstad (2004), it is an ongoing discussion whether competence, as a

⁴¹ Qvortrup 1986; Qvortrup 1996; Lehrmann 1996; Drotner 1999, Agger 2001; Poulsen 2001a; Poulsen 2003a; Poulsen 2003b; Elf 2003; Henningsen 2005.

concept, can be compared with, or even replace *Bildung*. What are the differences and similarities? One strategic way of responding, which Drotner and Thavenius share, is to identify competence with *instrumentalism*, thus arguing *against* media competence and insisting instead on *Bildung* as the prioritised concept. Another strategy, shared by Erstad and Østerud, is to argue *against cognitivism*, thus becoming advocates of media competence/literacy as this concept promotes a socio-cultural understanding of learning – an argument, which draws heavily on new literacy studies.

Regardless of these differences, it will be claimed that contemporary Nordic researchers agree that ‘media competence’ and ‘media *Bildung*’ should not be dichotomised, but rather seen as a necessary *relation* in late-modern educational thought. Nordic educational research is slowly shifting from a German didactical *Bildung*-tradition going back to the 19th century, towards an Anglo-Saxon curriculum tradition rooted in pragmatism.⁴² This fundamental difference is reflected and reworked in contemporary Nordic research on media pedagogy. What must be attempted is to develop a new understanding of Nordic media pedagogy in a way that bridges the Nordic and Anglo-Saxon traditions.

3.3.1. *Media Bildung*

How is ‘media *Bildung*’ conceptualised in contemporary Nordic research? As indicated, Thavenius and Drotner, have gone the furthest in re-defining media pedagogy in the light of *Bildung*, approximating the idea of media competence.

3.3.1.1. *Drotner: Media Bildung as exercises of media complexity*

In preparation for the reform of the upper-secondary system in Denmark, Drotner (2001b) wrote a significant article about media in a future school context. Here, she defines ‘media *Bildung*’ as follows: “Media *Bildung* is the continuous development of ability to handle media complexity through personal exercises of reflexivity.”⁴³ Drotner terms this approach a ‘media pedagogy of otherness’, making an explicit reference to the late writings of T.W. Adorno (1972). She argues that exercises of media reflexivity are in fact done on an every day basis by everyone in and out of

⁴² Cf. Westbury 2000 for an overview of differences and similarities between the curriculum and didactics tradition. Cf. Haue 2007 for an article on the Danish tradition of *Dannelse*.

⁴³ This is a literal translation of her formulation. Instead of using the word ability, we could use the word ‘competence’, if this refers to a non-one-sided functionalistic conception. Drotner precisely opposes a ‘functionalistic’ conception of media competency because she relates this notion to the testing of specific, measurable competences.

school life, e.g. when watching the news on TV or using the phone. Generally, this goes by unnoticed, unless some catastrophic mediated event, like 9/11, occurs.

Drotner's educational point is that media experiences must be included systematically and reflexively in formal schooling. This must be done to prepare citizens for reflexive work with media in their daily, private and professional lives. There are currently found two dominating and dichotomising discourses of media among school theoreticians and policy-makers. One argues, deterministically, that the encounter with new media is equivalent to new knowledge – this is media pedagogy as part of the knowledge society discourse. Another media discourse argues, in equally simplifying terms that the use of media is simply about having fun – media serves as a means of amusement. In Neil Postman's influential version of media-as-amusement (1985), this is interpreted nostalgically as the end of the Enlightenment. In the interpretation of Danish media researcher Stig Hjarvad (2003) this presents a reason for criticising the knowledge society discourse as naïve: New media are primarily used for social means. Drotner herself searches for a third way, which would construct media pedagogy as something, which combines the media-as-knowledge discourse and the-media-as-amusement discourse. Such media pedagogy could potentially lead to media learning.

In terms of didactics, Drotner's analysis leads us to the point that future schooling-media should be seen as both a conceptual *goal* and as a reflected *means* for teacher and student meaning-making across the curriculum. Furthermore, this should be established for democratic purposes: It must be ensured that everybody is trained to minimum standards in such reflexive exercises. Offering suggestions to didactical design, she suggests that teaching processes should be organised as a sort of *Verfremdung-process* that moves back and forth between the known and the unknown, making familiar media strange and strange media familiar. As she puts it: "...the otherness of the media still requires comparison with the known and their often intense experiential potential requires a desire to throw oneself into these processes. This is why media is an important current source of *Bildung*." (Drotner 2002: no paging, my translation). In this, we hear echoes from Adorno, but also from Russian formalism (cf. Sklovskij 1991), the point being that curricula at the macro-level and teachers at the meso-level should acknowledge the responsibility of confronting students with the converging historical and cultural complexity of the media world. This highlights phenomena such as media convergence and media globalisation; also it would acknowledge student experiences while at the same time confront them with conceptual limitations regarding media and its use.

As a contribution to a universal theory of media pedagogy, we might say that Drotner's *complexity criterion* solves a general problem within media pedagogy and media education. Gee

(2003) reveals this problem when he speaks of ‘good video games’ without clarifying what ‘good’ means. Also, Buckingham (2003) is puzzled by it when he reflects upon current theory of media learning and its inability to understand progression. The problem could be termed *the commonsense media didactical problem of selection*: What media should teachers select (or allow to be selected by students) when, and why? This problem is perhaps particularly difficult to address for media pedagogy researchers and teachers, because media pedagogy has a tradition for an ever-inclusive approach to meaning-making in any kind of media. Indeed, Drotner also objects strongly towards the traditional criteria of selection, which she claims – with specific reference to the upper-secondary school system in Denmark – draws on an elitist and to some extent nation-building, conception of the relationship between media, *Bildung*, and education. An elitist conception would argue that *Bildung* is equivalent with specific media content and values. This would predominantly be high culture in its institutionalised aesthetic form, often referred to as *art*, and particular works of art depending on the institutionalised teaching context, such as literature, or even a literary national canon, within MTE. It would then be claimed that this should be taught-as-transmission in school. Her general response to such elitism is to argue for a much broader, ‘anthropological’ conception of culture, including ‘low’ and ‘popular’ culture, acknowledging any kind of mediated meaning-making processes as essentially valuable. Indeed, this follows in the line of Buckingham, Stuart Hall, and Raymond Williams (cf. 3.1 ff., p. 41 ff.).

Facing the reality of classrooms, Drotner also acknowledges the fundamental and limited nature of formal teaching, constrained as it always is in time, space, resources, and idealistic goals. Simply put, the classroom context requires, even in the most ‘democratic’ formulations – such as the ones we saw with Dewey and the New London Group – the selection of something at the expense of something else. The question is: what legitimises one selection over another? The answer to this problem, in Drotner’s conception, is to refer to the complexity criterion. According to Drotner (and some of her colleagues and Danish apprentices, e.g. Kampmann Walther 2005, Iversen et al. 2003), quality in media pedagogy comes with the *furnishing* of media complexity within subject-related school environments. One could argue in extension of such an approach that the teaching of media complexity is not only related to the object of study, but also to the experiences and reflexive abilities or competencies of the students in a specific context – (media) experiences develop in time *and* space. These two categories should become a core principle of orientation not only of media pedagogy, including media pedagogy within MTE/StLE, but of all aspects of MTE/StLE (Drotner 2001b).

It is worth noting that Drotner's ideas had some impact on the final report regarding the future of "Danish" as a subject (UVM 2003c), funded by the Danish Ministry of Education. This mentions, precisely, of two *Bildung* perspectives in the mother tongue subject: firstly, the development of *historical consciousness* [historisk bevidsthed; UVM 2003c: 83, my translation] and, secondly *geographical-spatial* (also phrased 'anthropological') consciousness [geografisk-rumlige bevidsthed; Ibid., my translation]. Given the fact that the present author was co-author of the report and that Drotner is one of the supervisors of this investigation, it should not come as a surprise that her media pedagogy has had some impact on this study and its experiments. In this sense the reflections on Drotner's media pedagogy presented here become indirect, self-critical reflections on the theoretical presuppositions of this study.

In terms of the overarching goal of the study (to reflect on Andersen from a media pedagogical standpoint) Drotner's media pedagogy was an obvious place to start. The complexity criterion was easy to adapt to a design based intervention study. It is an optic, which allows the designer-researcher and the teachers to remember and acknowledge the complex media development of Andersen's fairytales in time and space (history and culture). This furnishes and confronts teachers and students alike with a rich diversity of Andersen related semiotic resources. Indeed, these span from 19th century computer-transmediated reviews of Andersen fairytales in a Danish context to Disney animations and knowledge about these produced in another time and geographical context (the US), in ways that would allow both receptive and productive meaning-making.

Drotner's thinking also encouraged consideration of whether teachers and students had already developed competencies specifically in relation to Andersen as a media phenomenon, and in general, to media, but on various levels. Considering Andersen's canonical status, both within and outside of school in Denmark, it was expected that students would know of Andersen in some manner as a writer, with a very exposed personal biography, and a fairytale writer. Beyond that nothing was considered certain. Must it be expected, for example, that students in commercial upper-secondary school had experienced Andersen fairytales beyond books? Must it be expected for them to be very experienced – but not necessarily reflected – users of the Internet, audiotapes, picture books, and animations? As will be explained in Part III, these questions were addressed to the students in the initial phase of the intervention. Student answers – disparate as they were – influenced the designed intervention.

Seen from the perspective of 'traditional' MTE/StLE, and traditional approaches to teaching Andersen, Drotner's media pedagogy is rather controversial. Especially its emphasis on what we

might term the anthropological aspects of meaning-making will raise dispute. The controversy comes from its contest of the traditional primary functions of MTE/StLE, namely nation-building. This focuses on national content, represented by, supposedly, ‘Danish’ language and literature. In the case of teaching Andersen within ”Danish”, the nationalising function is doubled. The discourse of H.C. Andersen represents a fascinating incarnation of personal identity formation and national identity building, which every Dane knows of, or at least relates to positively or negatively. This is most conspicuous in the case of “The Ugly Duckling”, which has produced several metaphors about Denmark and being Danish. In this sense, a dominant discourse related to Andersen marginalizes a media pedagogical approach moving towards geographical-anthropological *Bildung*.

Another way of understanding Drotner’s conception of media *Bildung*, is to ask how it places itself on the cognitive-social continuum, which we have used to characterise the media pedagogies of Buckingham and others. When Drotner makes references to the development of student reflexivity, we move into the cognitive realm of educational theory. This does not lead to a one-sided cognitivism, but rather, a predominantly cognitive, individual conception with inherent social elements. Meaning-making is partly a social praxis, in Drotner’s conception. In fact, she generally refers to children/adolescents and their meaning-making/knowledge production in *plural*. The balanced cognitive and social view of meaning-/identity-/knowledge making processes is demonstrated most significantly in the title of the 1991 study: *At skabe sig – selv*.⁴⁴ In this (widely recognised) ethnographic study of peer groups working in an informal learning setting with video production, she demonstrates that collaborative and negotiative aspects were vital for simultaneous, construction of storytelling and identity making among young people. She also acknowledges that A-identities are emerge and becoming increasingly important for young people. Later, in a quantitative study of media use (Drotner 2001a), which applied a larger international research framework (Livingstone & Bovill 2001) to a Danish context, Drotner made a similar point. She stressed the importance of acknowledging and didactically drawing on the meaning, identity and knowledge making activities that children and adolescents engage in, in groups and informal learning settings. This study therefore also approached settings, such as watching soap operas or playing video games in the weekend. She finds that the differentiated social praxis of media use creates differentiated patterns – in Gee’s conception: *identities* – of people and their processes of developing, sustaining and changing meaning, identity and knowledge (Drotner 2001a: 31). That

⁴⁴ A title notoriously difficult to translate, as it contains a word play: as ‘skabe sig’ means ‘act crazy’, ‘be hysterical’, even ‘acting out’, in Drotner’s Freudian interpretation, but also, literally, ‘create yourself’; the title, thus, meaning both ‘to create – your self’ and ‘to act out – creating your self’.

there *are* differences, is demonstrated statistically by Drotner, e.g. in regard to *gender use* of computers outside school. This is markedly different to inside school. It is vital, Drotner argues, that teachers show sensitivity towards this in their didactic design.

So far, we have accepted that Drotner has constructed a conception of media *Bildung* opposed to *Bildung* as found in literary pedagogy. However, it could be an interesting exercise to look for similarities. There has been a long and problematic tradition of legitimising the teaching of language and literature, especially in “Danish” as a research and school subject, through the existential “formation” of the self (Andersen 1912; cf. 4.3.2, p. 137). In the 19th and 20th century, perhaps even until the early 1970s, this tradition of *Bildung* dominated “Danish”. It posited the simultaneous teaching of language and literature for nation and identity building purposes. In this sense it constructed a partly romantic, partly modern repressive *didaktik* of “Danish”. The student was expected to express him or herself, as long as this self-expression was recognised as acceptable within existential and national norms and values.

In more recent research conceptions regarding literary pedagogy within “Danish” (Mortensen 1979, Hetmar 1996, Mortensen 1999, Esmann 2000, Krogh 2003, Kaspersen 2005), the nation building aspect of MTE/StLE has been marginalized or in some sense reworked. However, in none of these studies is literature related to a global media culture in any substantial way, and the existential focus on identity formation remains intact. In Klaus P. Mortensen’s approach (1999), well-known international theories within the humanities, such as new criticism, reception criticism, and cognitive semantics are integrated along with Gadamer’s (1960) version of hermeneutics. Didactically, individual development of the cognitive, reflexive processes is foregrounded and associated with *Bildung*. *Bildung* is therefore seen as an open-ended continuous process of personal development, visualised as a hermeneutic *spiral* [sic], an implicit premise being that the encounter with and analysis of Danish literature generates distance, otherness, self-transgression in meaning-making, and eventually, formation of the self. This premise becomes a strong argument for an historical approach to reading literature, since temporally and historically displaced literature is the most effective way of establishing these learning processes of otherness, the argument continues.

In 2005, a “Danish” literature canon in primary and upper-secondary school was implemented in the national curriculum for “Danish” by the Danish right-wing government (UVM 2004). H.C. Andersen, probably the most referred to author among politicians during the preceding public debate, and the most read author in the commercial upper-secondary education (hhx) discussed here (see the survey in UVM 2005), is – not surprisingly – included. This is why it is a fair claim that

Andersen is first and foremost constructed as a literary writer in the Danish educational system, and why it is controversial to suggest any other approach to reading his works.

What is strikingly similar between the canonical literary pedagogy approach and Drotner's media pedagogy is the common interest in identity politics through 'pedagogy of otherness'. On the other hand, a major distinction is the valorisation of which media are thought to be able to catalyse experiences of otherness and which social contexts these media should be drawn from. Whereas literary pedagogy predominantly focuses on literature in a long historical, yet narrow geographical context (although translated literature may to some extent be taught), media pedagogy foregrounds a broad geographical (global and local), yet historically narrow context, typically focusing on contemporary and popular media. In other words, media and literary pedagogy can learn from each other within MTE/StLE. Media pedagogy could learn historical *Bildung* from literary pedagogy, whereas literary pedagogy could learn anthropological *Bildung* from media pedagogy.

It should be added that not only Drotner, but also several Danish media (education) researchers (e.g. Lehrmann 1996, Agger 2001), argue in this manner. They reason that the history of culture and identity formation is also a history of media. There is great potential for student interest in, and indeed integration between, traditional literary education and media education at the heart of working with the combined historical and spatial *Bildung* perspective.

Both perspectives make very good sense when compared with H.C. Andersen. Another way of putting could be to say that the story of Andersen fairytales, which have circulated in culture for more than one and a half century, offers material evidence that we should consider, and integrate, both perspectives within "Danish". Many of his fairytales have been transmediated into new constellations of modes and media, embedded in a wide variety of geographical and historical contexts that have had great impact on their design. According to Professor Johan de Mylius (expressed in a conversation) a picture book version of "The Emperor's New Clothes" has been published in China, which has illustrations of the Emperor wearing boxer shorts!⁴⁵ For experiment 3 (cf. chapter 10, p. 309ff.) the illustrations for "The Shadow" in Andersen's first collected and illustrated, work of fairytales (1849) are used. These were produced and published in Germany, and became a huge success starting a whole tradition of Andersen picture books around the world. For experiment 4 (chapter 11), the first animation of an Andersen fairytale produced and distributed by

⁴⁵ It has not been possible to locate the publication. However, other interesting – and funny – transmediations from different geographical regions are found on the Internet: www.amazon.com/Emperors-New-Clothes-Tale-China/dp/0689830688; www.hca.heindorffhus.dk/hca-grenada1987-emperor-large.jpeg; barrypittard.files.wordpress.com/2007/07/emperors-new-clothes.jpg

The Walt Disney Company in the United States in the early 20th century was made available. There is no doubt that Drotner's concept of media *Bildung* is relevant and applicable, also in relation to teaching H.C. Andersen.

3.3.1.2. Thavenius: Media Bildung as tomorrow's functionalism

In Jan Thavenius' approach to media pedagogy (1995), we find a similar way of arguing for media as the contemporary means for *Bildung* – focusing on both historical and cultural practices of people in non-educational and educational contexts. Compared to Drotner, however, Thavenius argues more explicitly for a relationship between *Bildung* and what he in positive terms refers to as media functionality, media literacy, or media competence.

Like many other theorists of media pedagogy, Thavenius' primary concern is not the media component itself. Rather, he searches for the component that can lead to *Bildung*. This could be media, or rather, as Thavenius develops the concept in the chapter "Den reducerande mediepädagogiken": an aesthetical practice (cf. also Thavenius 1983). Inspired by Oskar Negt, Thavenius stresses that *Bildung* is not simply an inherent personal, essential category for identity formation – it is a historically and socially constructed category. In the epoch of modern bourgeois culture, *Bildung* has been constructed as an essential category. In Thavenius' optic, however, it should be characterised as the undisputable regime of bourgeois taste and class hierarchy, related to specific norms and content, which had the power to render literature, or other higher arts, as the only means for personal, or rather spiritual, development. In post-bourgeois society, this stable and object-related conception of *Bildung* has vanished. Instead, *Bildung* must be re-conceived as a notion for the deliberate confrontation with mediated, aesthetic otherness as a means for identity formation. As Thavenius puts it, in an almost Peirce-like abductive gesture, we should ask ourselves, not what media pedagogy *is*, but what it could *become*. This future-oriented approach necessarily requires new theory development and empirical studies, which offers space for teachers and students alike to present insights regarding a rethinking of practice and the legitimacy of this practice.

As this short presentation suggests, Thavenius' thinking is rooted in the experience- and project oriented critical, Marxist pedagogy of the 70s, which, in turn, is rooted in Dewey's approach, among others. Some would argue that Thavenius is stuck in the 70s; one could also argue that he revitalises pedagogical thinking in post-Marxist ways like Buckingham (who he often cites), acknowledging and attempting to deal with the contradictions of formal teaching, instead of simply ignoring or dissolving them. Methodologically speaking, Thavenius acknowledges the realities of

classroom practice and empirical studies of the same, although his own methodology in his book from 1995 is entirely speculative. Thavenius points out that the few empirical studies of media pedagogy that we know of clearly show that new theory is not equivalent with new practice. As he puts it: “In theory it is easy to delineate clear boundaries and sharp distinctions. However, teaching cannot in and of itself proceed beyond its own limits. It must accept conflict, contradiction and compromise.” (Op. cit.: 217, my translation and emphasis). The contradictions of teaching media that Thavenius outlines are summarised in table 3.3.1.2.1. Thavenius claims that theoreticians, teachers and policy-makers normally deal with such contradictions by suggesting an either-or strategy. Thavenius, like Østerud, searches for a third way, sensitive to the local context. This is termed a *pragmatic way*.

Either	Or
Pleasure	Learning
Media analysis	Media production
Media content	Training skills
Media as means for learning	Media as goal in itself
Individual	Social
<i>Bildung</i> [dannelse]	Education [uddannelse]

Table 3.3.1.2.1. Typical either-or oppositions when teaching media.

Thavenius’ inspiration from Buckingham implies a somewhat confusing use of terminology. He equates ‘media literacy’ and ‘media competence’ (Op. cit.: 175) without clarification. Likewise, ‘medium’ is not clearly defined. Rather, media are often associated with aesthetic artefacts, which is reductive. These inconsistencies imply that theoretical interpretation is required if we are to understand and use two models of media pedagogy, as he suggests. The models seem to grasp, in valid ways, two significantly different approaches for designing, analysing and theorising media pedagogy. The first model could be understood as: ‘the division of labour model’ [‘arbetsdelingsmodellen’]. It represents the either-or strategy of teaching media pedagogy, offering relatively little space for student-oriented inquiry.

The second model, the ‘functionalisation model’ [‘funktionaliseringsmodellen’, see figure 3.3.1.2.1], however, takes student-initiated inquiry as its point of departure. Thavenius characterises the model as integrative rather than fragmenting, non-instrumental rather than goal rational, collaborative rather than individual. Beyond that, it could be characterised as a radicalisation of the Buckingham/New London Group “four stages model” of teaching (cf. 3.2, p. 58f.). It is a model that foregrounds student agency, and students’ competence (‘functionality’) to draw on perspectives, which will help them deal with personally driven inquiry. The teacher’s responsibility, or rather the responsibility of the learning environment, is but to facilitate the student potential to do so in conscious ways.

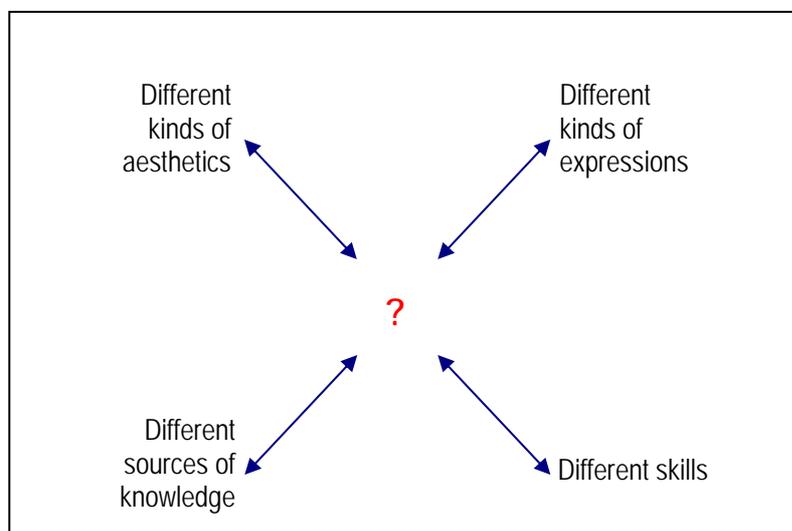


Figure 3.3.1.2.1. The functionalisation model. Translated by me from Thavenius 1995: 225.

We might ask, whether the functionalisation model is a naïve 70s style critical model, or rather a post-critical model of (media) pedagogy? Thavenius argues – employing self-criticism and pragmatic perspective – that the teacher in many school contexts will not be able to practice this kind of pedagogy, due to curriculum demands, assessment procedures, technological constraints, time, conceptions of pedagogy etc. This is indeed true but Thavenius does not seem to place enough emphasis on the *students’* lack of preparation, whether cognitively and/or socially, to face the challenging call for agency and product-driven activity. This is one of the findings of the present empirical analyses. In this sense, there is a Romantic perception of the child in Thavenius’ thinking. Although Thavenius – like Dewey, social semioticians and other reform educational thinkers –

might be correct, ethically speaking, regarding the insistence upon agency, we could argue that the social and cultural practice inside and outside school simply does not permit it. My empirical analysis will demonstrate this in Part III.

Thavenius' response to this objection, based on piloting Swedish research (Holmberg 1988), is actually to argue for research intervention. In this sense, the present study is an answer to Thavenius. As I shall demonstrate in Part III, the design of the intervention, in general, and the design of the experiments, more specifically, attempts to integrate Thavenius' two-folded modelling of media pedagogy, analysing how they turn out in practice. The special work method termed the "journalism group", which in each experiment allows a few students in a class to become a part of a process which is predominantly open-ended, student-based and inquiry-led, is a concrete attempt at adapting the functionality model into teaching. In other aspects, the experiments are designed in a way that is closer to the division of labour model, encouraging student agency and knowledge production, but in a relatively teacher controlled set-up. We shall see how teachers and students respond to this.

3.3.2. Multimodal media competence in the socio-cultural field

With Norwegian researchers Svein Østerud and Ola Erstad we have witnessed, within Nordic research of media pedagogy, the most systematic shift so far, from Nordic media pedagogy and its focus upon *Bildung* and didactics, towards a curriculum and competence oriented approach with a socio-cultural shape. To some extent, they bring us back into an Anglo-Saxon theoretical framework reminiscent of especially The British School all the while they revise it, because they relate to the theory of multimodality, (new) literacy thinkers, and the advent of digital educational technology rather than Buckingham's emphasis on media education. Consequently, they end up insisting on an integrative approach to media pedagogy so as to open up for the possibility of talking about multimodal media competence. Østerud's work will be the focus of the next section, which will include brief comments on Erstad.

3.3.2.1. Østerud: Bildung, literacy, and competence

Approaching the notion of literacy in the information age, Østerud (2004) presents a historical account of Norwegian, Nordic, European and even Anglo-Saxon school history, demonstrating how certain combinations of educational philosophy and politics in historically defined settings have created a dichotomous and counterproductive way of thinking about future literacy. More broadly, this includes teaching with and about communicative modes and media. Briefly put, he concludes

that one should acknowledge the necessity of teaching multimodal literacy, conceiving literacy from an extended, socio-cultural point of view. Although one may sympathise with the overall intent, this defined goal is somewhat contradictory, and not necessarily in correspondence with the literacy theoreticians Østerud claims to build on, wherefore it becomes necessary to discuss and rephrase the argument he proposes.

To some extent, Østerud rephrases Dewey's famed, pragmatist criticism of "oppositions" in educational philosophy (Dewey 1997, especially the chapter "Theories of Knowledge"), and the 19th century conception of *Bildung*, which we have already commented on from a Danish literary and media pedagogy perspective (cf. above). What is novel in Østerud's account, however, is his comparison of the three concepts: *Bildung*, competence, and literacy. It highlights the problems of *Bildung* and searches for an alternative. This becomes clear in the following formulation:

The problem with the concept of *Bildung* – whether referring to neo-humanism's formal or the Encyclopaediaism's material *Bildung* – is that it is deeply anchored in the topics of tradition [traditionsstoff], in antique language and culture and the natural sciences [naturvitenskapene] respectively. The concept of competence would be better suited for characterising the type of student we wish to form in contemporary school, because it involves the person as a whole, while unbound by traditions. When I likewise give up this notion, it is because it is occasionally associated, narrowly, with professional teaching [yrkesopplæring], preferably in a way that opposes it to a general concept of proficiency [alment kundskabsbegreb]. In order to avoid this polarisation, I wish to introduce the concept of *literacy* (...). (Østerud 2004: 173, my translation)

For a reader in the Anglo-Saxon tradition of curriculum research – not being familiar with the *Bildung* tradition – this quote might seem obscure. Indeed it is abstract and difficult to understand, wherefore it is necessary to develop Østerud's point a bit further for better understanding.

Firstly, he rejects the *Bildung* approach, as it refers to either Neo-humanism or Encyclopaediaism. These are, of course, two influential philosophical-institutional traditions: On the one hand, Neo-humanism is associated with a classical conception of formal *Bildung*, as developed in a European context in the early 19th century by Humboldt and adapted in Nordic countries. This Neo-humanistic position lead(s), in terms of didactics, to an academic and scholastic tradition for teaching that sees knowledge as static, previously given and *objective*. It assumes that knowledge can be transmitted, theoretically and abstractly, without prior experience of the phenomena to which the theory refers. Institutionally, this idea was integrated as the core didactical idea of the so-called *Erudite School* [Latinskolen], an elite school, which prepared for university and taking up office. Later, in the upper-secondary school system, this view was institutionalised within a so-called

‘almen’ (in German, *allgemeine*, and in English, general) line in the ‘gymnasium’.⁴⁶ However, Neohumanism was not the only concept of *Bildung* from the 19th century. An upcoming Encyclopedian or ‘realist’ *Bildung* was also developed in the 19th century. Historically, it was rooted in the medieval guild and the advent of industrialisation, modernisation, and rationalism. It emphasized knowledge production related to practical and professional interests, but also the functional demands of society. Didactically, this position emphasized knowledge production as a *subjective* and experience based activity. The realist view was institutionalised, among other places, through the invention of a new type of ‘market oriented’ – the term we would use today – gymnasium that wished to educate people for the demands of contemporary society.⁴⁷

Secondly, Østerud – like Dewey and perhaps Thavenius – wishes to dissolve these simplistic, mutually exclusive positions inherent to the *Bildung* tradition and schooling system. He points out that oppositions are still operative in contemporary schooling and educational debates, not only in upper-secondary levels and lines, but also, and perhaps more disturbingly, in the Nordic ‘Unitarian’ primary school system, which its counterproductive paradoxes and confusions among educational researchers, teachers and policy-makers. For example, in public debates we find a widespread discourse demanding more ‘hard’ knowledge; but at the same time we find a discourse arguing a Dewey-inspired project of process and practice oriented work, which seems to reflect the demands of the market. The oppositions cannot be solved institutionally, Østerud argues: they can only be highlighted and understood as a counterproductive contradiction, and thus necessary to rethink.

If we do so, and this leads us to the *third* part of the quote, we are on our way to a more fundamental re-conceptualisation of the principles of education and teaching in a Nordic context. This includes making it clear how we understand the *student’s* knowledge formation, which involves the often forgotten and marginalized *who*-question of curriculum and didactical studies, that rather emphasizes *why, what, how* questions. Students should, in Østerud’s view, be the point of departure for educational thinking. Referring to a socio-cultural understanding of knowledge production, Østerud argues for a non-instrumental view on the student, which acknowledges *performative* resources (Op. cit.: 172) – that is, student *agency*, which is intertwined with symbolic and communicative resources in society. This view on agency is rooted in both Østerud’s diagnosis

⁴⁶ In Denmark we have a four-folded upper-secondary ‘gymnasium’ system, which reflects historical traditions. One line named stx (earlier called *det almene gymnasium*) is academically oriented, whereas two of the other lines – hhx and htx – are oriented, explicitly, towards ‘the market’ (one of them being the line I have intervened in, hhx (cf. chapter 6 for a more detailed analysis of this specific educational context), and the other htx, oriented at science). The fourth is hf, which is closer to stx.

⁴⁷ For an account of the Danish historical development of this type of education, cf. Mortensen 1979.

of a post-modern information society, which in many ways allows increasing student-controlled agency, and in what Østerud terms the socio-cultural tradition for knowledge production (in the line of Vygotsky, Dewey, and others; cf. Glassman 2001). As a small corrective, I believe that Østerud would be more accurate if he described his position as ‘socio-cognitive’ and not ‘socio-cultural’. The very metaphor of a student as a ‘performative resource’ suggests a combined cognitive and socially distributed activity (Lemke 1994).

Thirdly and finally, in referring to the quote, if we acknowledge the concept of student-as-a-performative-resource, we are brought to the core question of how to conceptualise teaching. Should one emphasise competence or literacy? A close reading of Østerud, demonstrates that he acknowledges the concept of competence, but prefers literacy for reasons of historical setting. In this sense the problem with competence is simply the way it is interpreted and constructed. Due to the tradition of *Bildung* this interpretation is done in a functional-instrumental manner. This becomes the argument for choosing literacy as the valorised term. From the perspective of consistent theory making, perhaps he should have retained competence to avoid obvious problems, similar to those of Buckingham: embracing the literacy term. The important question is, whether Østerud attributes a holistic conception to competence? He does: Competence refers to the person as a whole. He defines competence as “the proficiency [kunnskap] which is part of [innforlivet i] the individual human being and constitutes its readiness for action in daily life” (Op. cit.: 169, my translation). This holistic conception might come as a surprise to Nordic teachers and theoreticians familiar with the *Bildung* tradition, since these are opposed to the ‘competence’. However, as shall be clarified in the section “What is competence?” (cf. chapter 4, p. 103ff.), this personal-functional approach to competence is characteristic of a discretely developed 20th century view on, and use of, the competence term as rooted in Dewey.

Østerud’s conception of literacy therefore draws on, but also reinterprets the so-called ‘new literacy movement’, developed by Street (1984), Barton 1994), and later Kress (2003), among others. Like Buckingham, Østerud ignores that these theoreticians relate literacy to *verbal* writing and reading practices. “To be literate”, Østerud explains (my translation), “is to be a competent participant in a learning situation where the written language or other symbolic mediation forms are involved” (Op. cit.: 179). In my understanding, what Østerud speaks of is not literacy, however, but what has been termed multimodal media competence, semiotic competence, or *semioacy*. A working definition of these categories could, indeed, be helped along correcting Østerud’s literacy definition as follows:

Multimodal media competence is to be a competent participant in a learning situation where the written word on paper and/or other constellations of modes and media are involved.

In this way, as claimed initially, Østerud brings us some steps towards an understanding of the principle of media pedagogy, or rather multimodal media pedagogy, and how it should be designed in practical teaching. As stated initially, Østerud's overall intent of criticizing and liberating, so to speak, the literacy notion from the *Bildung* tradition and its problematic value-laden oppositions is sympathetic. As a core concept *Bildung* seems to hinder an authentic, socio-cognitive approach to teaching contemporary communicative modes and media in society. However, 'literacy', too, seems to be an exceedingly narrow concept, at least if and when we have more than writing in mind. Moreover, it is found that Østerud is unclear about whether we should address modes and media as an educational means, as something we teach and learn with, or whether these modes and media should also be addressed conceptually, as something we teach and learn about, as Drotner and Buckingham would emphasize. It is clear that any current school subject would have to use a rich variety of semiotic means. The question is whether MTE/StLE has a special task in addressing multimodal media as an object by students and teachers?

3.3.2.2. Erstad: Media competence

The critical conclusion, arrived at with Østerud, seems to be a point of departure for his Norwegian colleague, Ola Erstad. In an article from 2004, which summarizes his view on media pedagogy (following up his dissertation, Erstad 1997), *Bildung* does not play a dominant role; this is rather ascribed to the concept of "media competence in the socio-cultural field", as the title of the article goes. The fact that Erstad solely uses the concept of competence in this manner, rather than speaking of literacy, is refreshing, and a didactical move forward. However, Erstad may be operating with a conception of competence that is too skill-oriented. Having said this, there are pragmatic reasons for Erstad's discourse. In a new Norwegian curriculum for primary and secondary school (the first 12 years in school), student development of *digital competence* is installed as a cross-curricular goal. No other country in the world has done this. It follows that teachers would need help in terms of didactic and pedagogical reflection in order to be able to understand and adapt to this demand. Erstad's article and book (Erstad 2005) offers this. Let us present his position:

In Erstad's view 'media pedagogy' is a historically dynamic field of research and practice. One main contemporary challenge for media pedagogy is to develop insights about 'student media competence' and particularly digital media competence. Media competence is defined as an:

“...agent’s competence in the gap between applied skills, insight into differentiated aspects of media and optimal functioning in the information society...” (2004: 216, my translation in this and the following quotes). The double focus on *skills* and *insight* advocates an understanding that bridges media education and educational technology. The theoretical backing is found with Buckingham (2003), Kress (2003), and activity theory (Engeström 2000). In Erstad’s view, Kress is concerned with the way new technologies open up: “...new possibilities for learning and development of proficiencies...” (Op. cit.: 226), whereas Buckingham has wisely warned that “...media and technology, are widely seen only as tools for learning and not as cultural artefacts...” (Op. cit.: 232f). In this way, Erstad advocates the teaching of media in both conceptual and practical ways, being more direct than Østerud about how it can be done in a formal school context.

Erstad dances on a knife-edge, however, which may be dangerous: What makes me worry is that he argues, perhaps due to the suggested political agenda, for the teaching of media competence across the curriculum, in a way that suggests that a practical use of media contributes, almost in itself, to the development of media competence. Erstad runs the risk of throwing the baby out with the bathwater. Buckingham’s insistence on conceptual learning, which is grounded in research showing that the cross-curriculum approach quite often leads to superficial teaching of media (Buckingham & Domaille 2003). Hence, the curriculum strategy that Erstad and many other media literacy/digital competence researchers and developers recommend, may lead, ironically, to a marginalisation of media as a complex concept. Historically, this is the case for media pedagogy within MTE/StLE, at least in a British teaching of “English” (Buckingham 1990a, 1990b). There, the intent to integrate media led to the reinforcement of traditional teaching of “cultural techniques” (writing, reading, talking and listening) in instrumental and reductive ways.

And this is not my only critique of Erstad’s position, as it is expressed in the article. At one point Erstad states that “...competence is an expression of collective and not individual processes...”, implicitly suggesting that the teaching (and learning) of a collaborative classroom practice should be emphasized. Indeed, this is a *socio*-culturally oriented agenda: Social demands and dynamics are – seemingly – the main or rather only agency of media pedagogy in Erstad’s conception. In this sense he is explicitly opposed to Potter’s cognitivism. A socio-cognitive position in-between these two extremes, does not seem to be an option. Although it must be acknowledged that competence development can be thought in collective ways, and that we need to develop our understanding of group competence, it can also be thought in individual ways. Backing for this is found in Rychen & Salganik’s *DeSeCo* study (2003; cf. 4.2.4, p. 123ff.).

Erstad's definition of media is unclear, in that it repeats the same problems of definition that are seen among other media theoreticians. Erstad generally uses the concept of media as synonymous with technology and digital information, due to his interest in the information society and digital competence. However, as argued, media is related to, but not the same as technology, also information is probably a too narrow concept. In a sense, Erstad contributes to the new media wave tendency within media pedagogy, in that he struggles with historical amnesia in an over-emphasis of media (and technology) popular at the time of the research. The problem with this approach is that it marginalizes the full complexity of contemporary communication and media use. After all, as shown repeatedly by quantitative surveys (e.g. Drotner 2001a; Livingstone & Bovill 2001), technologies such as television, telephones, writing and their associated and experienced constellations of media and modes are still used frequently on a daily basis.

3.4. Summary: The potentials of and problems with media literacy

To sum up chapter 3, Erstad's position brings us a step closer a more refined or alternative understanding of the aim of media pedagogy and media education. Indeed, it helps us answer the archaeological question: "What is media literacy?" which has been the purpose of this chapter. We may structure the results according to our claim from the beginning of this chapter in which three different media pedagogical traditions were suggested: A 'British School of Media Education', 'Media Literacy in the US' and 'Nordic Media Pedagogy'. Buckingham of course represents the British School and defines, at one point, the term 'media literacy' as a reference to *knowledge, skills and competencies that are required in order to use and interpret media*. In the US tradition Gee has a different definition that sees media literacy or rather semiotic competence as *any set of practices that recruits one or more modalities to communicate distinctive types of meanings*. Finally, the Nordic tradition, as represented by Østerud, suggests that *multimodal media competence is to be a competent participant in a learning situation where the written word and/or other constellations of modes and media are involved*.

While these definitions seem to differ a lot we may also identify a hidden unity, which grounds the archaeology as a whole. As a synthesising principle we find in all definitions references beyond media. In this sense, media is part of a broader semiotic framework, which includes other resources, wherefore we may deduce a common definition, which encompasses the ones above. It is implied that the aim of teaching media therefore reaches beyond media qua media. Instead it focuses upon the ability to manage semiotic frameworks with regard to the triad content, form and function.

In terms of operationalising this conclusion with regard to this dissertation we may say that the semiotic definition of media literacy creates a foundation for the model to be specified in the next chapter. It presents a framework that makes it possible to identify Andersen elements in a concrete Design-Based intervention and it hints at the possibility of a general synthesis for this field of research in the final conclusion.

Chapter 4. What is multimodal media competence in MTE/StLE?

Through the archaeology of media literacy in chapter 3, we have extracted vital, yet seemingly fragmented insight into the teaching of media pedagogy and media education seen from the point of view of multimodal media pedagogy. This should encourage us to pursue an alternative, synthesizing theoretical principle of media pedagogy in a MTE/StLE context. In return, this requires the development of a distinctive and precise vocabulary for such principle. It has been suggested that we call this principle ‘multimodal media competence in MTE/StLE’, which leads to the broader competence concept termed: ‘semiocy’ that represents the rationale of MTE/StLE.

In this chapter, these concepts will be developed, offering definitions of the core notions in play: ‘modes’, ‘multimodality’, ‘medium’, ‘competence’, ‘MTE/StLE’, and ‘semiocy’. The goal is to develop a MTE/StLE related didactic *model*, which emphasises the teaching of modes and media. If the goal is to develop a MTE/StLE related didactic model, we must ask: “why a model, rather than an overall theory?” As the Stanford Encyclopedia of Philosophy suggests, a model: “...can represent a theory in the sense that it interprets the laws and axioms of that theory” (Frigg & Hartmann 2006: no paging). In this sense there seems to be a hierarchy of terms, as regards levels of abstraction: data, hypotheses, models and theories. One of the pay-offs in establishing a model, is that it can be used, in operative ways for didactical planning, for intervention analyses, scientific reflexion and self-criticism, all of which are indispensable scientific virtues. Bear in mind that the concepts being presented in linear discourse are interwoven and mutually interacting in practical terms.

4.1. What are modes, multimodality and a medium?

Uses of the concepts ‘mode’ and ‘modality’ are rooted in Günther Kress and Theo van Leeuwen’s Theory of Multimodality (Kress et al. 2001; Kress & van Leeuwen 2001; Kress 2003). This theory has the potential of rethinking the central concept of language replacing vague expressions such as an expanded notion of language or language across the curriculum (cf. e.g. Vollmer 2006).

Multimodal studies still question their own framework in fundamental ways inviting critics to question and further elaborate. This has been done in several research contexts orientated more or less towards education (e.g., Burn & Parker 2003; Jewitt 2003; Lemke 2005). However, only few critics have applied the theory of multimodality to the didactics/curricula of MTE/StLE in systematic way (Kress et al. 2005 being an exception). This is where the present study will

contribute with new insights, pointing out, among other things, the self-defeating nature of multimodal studies reproducing a rather traditional discourse when it comes to reflecting on the type of competence related to multimodality. Kress' influential work from 2003 entitled *Literacy in the new media age* is an instance of this. As one out of several, Kress constantly speak of literacy, however referring to more than simple verbal meaning-making. Why not speak of 'semioacy in the new media age' instead? 'Literacy' hardly seems sufficient.

In return, it should be pointed out that the "affinity group" of multimodal researchers has developed a complex theoretical framework, which includes concepts such as: 'discourse', 'design', 'production', 'distribution', 'mode', 'medium', 'experimental meaning potential', 'provenance', 'transduction', 'affordance', 'genre', and 'knowledge production' (Kress & van Leeuwen 2001). While this terminological complexity has many applications, it has not been integrated into operative competence thinking in formal schooling. One reason may be that the terminological complexity has become a hindrance if we wish to establish a new heuristic didactic principle for MTE/StLE. It is simply difficult to make operative such an abundance of terms in the didactic reflection on media education and media pedagogy within MTE/StLE. As a response to this situation, one may reduce conceptual complexity by simply focusing on the concepts of 'modes' and 'medium' – also prioritized by Kress and van Leeuwen (2001) – and relate them to the teaching of Andersen in "Danish".⁴⁸

The theory of multimodality represents a double interest in this study of MTE/StLE. One interest is shared in most of the writings on multimodality, namely modes and media as a *means* for cross-curricular communication in school subjects. This optic has received much attention within multimodal studies (e.g. Kress et al. 2001, Jewitt 2003), and is used here also as it is applied in describing the modes and media used for constructing 'Available Designs'. However, using different modes and media for teaching is the case of any school subject, like science or history. What makes multimodal media pedagogy within MTE/StLE special or rather a specific educational context is that it draws on modes and media not only as a communicative means, but also, and predominantly, as a conceptual, objectified entity – as stressed by Buckingham (e.g. 2003), Drotner (e.g. 2001b) and the group writing a report on the future of "Danish" (UVM 2003c). In other words, resources of modes and media represent both the available means and the productive goal of

⁴⁸ Philosophical backing for reducing the abundance of terms could be found in phenomenology utilising Husserl's distinction between adequate and apodictic, as explained by Richard Owsley: "Phenomenological reduction to Husserl eliminates or holds in abeyance judgments whose locus in conscious experience are not readily apparent." (Owsley 2000: no paging; the quote is from the Internet journal *Current Studies in Phenomenology and Hermeneutics* available on www.unt.edu).

domain specific knowledge production and competence development within MTE/StLE. Other school subjects in the curriculum, such as “social science” and “media education”, teach with and about media/modes as well, but not to the same degree and relation to the specific rationale of MTE/StLE.

4.1.1. *Defining modes and multimodality*

The operative definition of ‘mode’ comes from a recent article by Kress:

I use the term “mode” for the culturally and socially produced resources for representation and “medium” as the term for the culturally produced means for distribution of these representations-as-meanings, that is, as messages. These technologies—those of representation, the modes and those of dissemination, the media— are always both independent of and interdependent of each other. (Kress 2004: 6f)

There are several layers in this statement, which must be explained. We learn that modes are technologically and materially produced semiotic *resources* which allows, as explained elsewhere, “the simultaneous realisation of discourses and types of (inter)action” (Kress & van Leeuwen 2001: 21). Media then, are the material *means* used in the production of semiotic products and events. As Kress puts it in the 2004-article, modes and media together, could be characterised as *textual constellations* or *communicative ensembles*.

However, defining modes and thereby also media is not enough for a theory of multimodality. Multimodal theory making is particularly concerned with meaning-making in the context of school(ing). Multimodality refers to the interrelated meaning-making of two or more semiotic resources or modes represented in the same medium. As Kress & van Leeuwen write: “...the meanings made with language whether as speech or as writing, are interwoven with the meanings made with other modes in the communicative context, and this interaction itself produces meaning” (2001: 11). From this it is possible to suggest that multimodality is defined as follows:

Multimodality is the interwoven, interacting meaning-making made with two or more modes in a communicative context.

The concepts of ‘mode’ and ‘multimodality’ establish a distinction between potential and actualised meaning. From an epistemological point of view, Kress draws on Marx, when he speaks of modes as *resources* to be *realised*. Ernst Bloch (1975), who is also a materialist, would probably have termed this the dichotomy of *latenz* and *tendenz*. Following the same line of thinking, Jeppe Bundsgaard, who researches the integration of ICT pedagogy and “Danish”, argues that the

mode/medium distinction proposed by Kress and van Leeuwen helps us understand the object of study for media pedagogy, media education, MTE/StLE and/or ICT pedagogy. He also understands mode, and multimodality, in a double perspective. Mode refers both to mediated material *features*, or “marks” (Bundsgaard 2005: 81), and a perceptive *activity*, or a way of consuming such marks. This seems reasonable, and one could add that activity is embedded in – and to a large extent understood as a function of – the context within which this activity is performed. An example could be a “Danish” lesson with a teacher and students in a specific setting. Epistemologically, we should stress that the existence of modes *as such* – an ideal notion – is not equivalent to the perception of modes *for us* – as Dewey would phrase it. Indeed, such a point is inspired by Peirce, who was in turn inspired by Kant. Kress & van Leeuwen are Kantians or perhaps simply modern (cf. Diggins 1994: 8), in the sense that they highlight the importance of distinguishing between the feature and the activity. Furthermore, they wish for researchers and teachers to focus upon the potential and vital activity performed by the student. They suggest, for example that we move from questions such as: “‘what *is* a mode’ to questions like ‘how do people use the variety of semiotic resources to make signs in concrete social contexts’” (Kress & van Leeuwen 2001: Preface; cf. also van Leeuwen 2005). Their point is that representation is not equivalent to communication. Note also, that a general sign theory and a theory of pedagogy are implicit in the theory of multimodality. We shall return to these matters later.

4.1.2. *Why multimodality?*

How may these highly abstract concepts be used in educational research and practice? The point of departure of multimodal research is a *diagnosis* of contemporary society with a special interest in education. In being sensitive towards new semiotic and technological developments in society and culture, Kress and van Leeuwen point out that words, images, and multiple other modes are found in culturally produced communicative contexts. Indeed, this happens ever more. We can, for instance, observe this phenomenon in newspapers (Kress 2003), popular magazines (van Leeuwen 2005), television (Goodwyn 1999), and the Internet (Burn & Parker 2003).

As demonstrated in a Danish study regarding art books and the expanded concept of what constitutes a work of art (Elf 2006b), we can also observe multimodality in experimental, large-scale book formats: Traditionally, the size of art books represents verbal modes found in the genres of poetry or prose, which have no or few illustrations. For some decades, however, they have also been used for inter-artistic experiments combining words and images. In this case the medium of the book perhaps even replaces the medium of the interactive screen (cf. e.g. www.afsnitp.dk).

These works of art draw on an aesthetic tradition, which goes back to the emblematic tradition of the Renaissance, the Romantic Period (e.g. Bacon, or *Gesamtkunstwerk*), and the historical avant-garde, which expanded the notion of works of art by using montage (cf. e.g. Bürger 1974, Steiner 1982). In a sense, the theory of multimodality is a generalisation of modern aesthetic principles, which tells us that we should probably be sceptical about the sometimes simple-sounding functional discourse of multimodal theory.

In general terms Kress (2003) claims that the traditional ‘reciprocal’ and naturalized relation between specific constellations of modes and media, e.g. writing in books, is increasingly de-naturalized. New constellations of modes and media in contemporary life emerge. There are many examples of this, such as websites, which is an obvious case (Kress 2003: 137). As highlighted in multimodal research, which focuses upon the teaching-with-modes aspect, the tendency for multiple modes is easy to observe in predominantly non-aesthetic, in-school, communicative and textual contexts. Here one may mention learning material, particularly within specific school subjects. If we are to offer other examples related to the intervention study presented here – taking Andersen fairytales as a point of departure – written, oral, visual and audio-visual modes are found in a rich variation of textual constellations, such as paper, screen and/or physical space. The theory of multimodality covers the broadest range of communicative contexts formed in constellations of modes and media found in society. It dissolves or at least contests convention on what a text or a work of art is and could be used for – not the least in regard to schooling. Thus, multimodality may help expand our understanding of practice within a specific social system. This regards especially the use of texts in media education and MTE/StLE.

The theory of multimodality emphasizes that – in terms of *social and cultural power* ascribed to modes and media – some textual constellations are valorised more than others. In extension they represent or gain greater cultural acknowledgment. This is also the case within formal schooling. Written language is, first and foremost, the culturally dominant mode. It has been produced and distributed in vast quantities for centuries in a number of dominating formats, e.g. the book, papers, or Internet home pages. In a historical perspective, Kress & van Leeuwen put it as follows: “The most highly valued genres of writing (literary novels, academic treatises, official documents and reports, etc.) came entirely without illustration, and had graphically uniform, dense pages of print.” (2001: 1). This dominance of the written word has led to what Kress and van Leeuwen term a monomodal construction of reality, also within academic research. For example, *genre theory* is associated with speech and writing – the modes of language. Linguistics and nostalgic media

(education) theorists, such as Neil Postman (1985), have constructed the world in monomodal ways, for better or worse. Linguistic theories of genre, rooted in the Australian Genre School, have been able to contest the cultural regime of genres – especially those taught in school. However, they have not been able to move beyond the monomodal conception of semiotic reality, thus creating blind spots.

In the case of Andersen the monomodal point is easy to illustrate. An image of a fairytale from an authoritative edition of collected fairytales (cf. 1.6, p. 12) offers precisely such an example of ‘graphically uniform text’. This has been the mode for academic Andersen-studies for decades, even centuries, and is familiar to any student in school working with Andersen. Here we see the culturally preferred, positively valorised monomodal expression of Andersen fairy tales. The mode of writing is so familiar, particularly within mother tongue education that we seem to forget other modes may be involved in communicating the very same text. Also, other texts may communicate using modes and media other than writing and paper. In a theoretical-historical perspective it is not until the emergence of theories of structuralism, post-structuralism and semiotics including, recently, the theory of multimodality that we have begun to explore and contest the conception that writing is (always) the dominating and most important mode of representation and communication.

Several theorists have contested monomodal linguistic dominance within research and educational practice (e.g. Lemke 2005, Mitchell 1995, Gee 2003). These insights will be drawn on, but also evaluated in detail, in regard to the four experiments (cf. Part III, p. 156ff.). At this point, it seems pertinent to present a few critical remarks on Kress’ most recent approach to multimodality. The following radical hypothesis is suggested on the back cover of his *Literacy in the new media age* (2003): “In this ‘new media age’ the screen has replaced the book as the dominant medium. At the same time image is displacing writing and moving into the centre of communication.” If it were true this world famous and often cited hypothesis would indeed imply a radical shift of paradigms. As several critics have remarked, however, it has certain weaknesses (cf. e.g. Prior 2005). In fact, the claim of “displacement” repeats a well-know fallacy within media studies called the replacement thesis (cf. e.g. Drotner et al. 1996): New media, or modes for that matter, do not replace old ones – they supplement and reconfigure the system of representation for communication. Paradoxically, in this quote, Kress constructs the visual or the image, as the new monomodal regime, which is most likely not the case in the real world. Rather, this is only the case *within certain domains*. There has, therefore, only occurred a shift from the logic of writing, towards the logic of the image in a very limited sense. Remembering the fundamental insights of

multimodality, we should stress that semiotic reality is not divided into *either* writing *or* image by replacing one monomodal culture with another. Instead, and using Kress' own vocabulary, communication happens in increasingly *multimodal* ways.

Historically, we should also remember that in terms of culturally popular texts produced for the masses, monomodality has been the case for decades, also in relation to Andersen. A large quantity of multimodal texts relate directly to Andersen's work. These include dramas, movies, television series, illustrated fairytales, mediated oral readings of his fairytales, animations (produced since the 1930s), texts and reviews on the Internet in different digital formats, made available for teachers and students in the four experiments of the intervention. Most recently and worth a special mention is a digital adventure video game (cf. www.hca.eu).

To sum up on the relationship between multimodality and monomodality: in terms of representation there is no such thing as monomodality. What there is, in terms of communication, is a foregrounded mode – the *dominant mode*, as formalists would have it. This enables our perception and semiotic actualisation of the text in context. In a specific communicative context, semiotic resources may occur that have a latent function. The problem is that we do not see or hear them consciously because we have learned not to acknowledge and valorise these multiple co-producing semiotic resources. This has been done, for example, through institutionalised disciplines such as academic research channelled to educational settings. This determines the use to which they are put by teachers, students and researchers, whether this regards ignoring, acknowledging or producing (new) knowledge about them. Sometimes this happens quite literally, as will be demonstrated in the analysis of experiment 3, regarding the teaching of illustrated H.C. Andersen fairytales.

4.1.3. Applying multimodality to Andersen and teaching

Kress and van Leeuwen's rather simple distinction between modes and media, on the one hand, and representation and communication, on the other, is an important starting point for this intervention study. The study does *not* claim to make an intervention with seemingly monomodal Andersen material. Instead, using a set of varying semiotic resources, it explores how different constellations of modes and media related to fairytale discourses produced by Andersen, may lead to contextualised communication in a classroom setting. By doing this we explore meaning-making systems and knowledge production as related to developing multimodal media competencies for students. The intervention presupposes that a dominating monomodal perception is present as it is actually practiced in "Danish". Also, a monomodal perspective is applied to the teaching and learning of Andersen in general – specifically among teachers and students participating in the

intervention. Drawing on the vocabulary of social semiotics, it could be said that monomodality is at the *ideological* centre of MTE/StLE, in that it historically focuses upon language and its associated written genres. Preferably and predominantly this means literature, the culturally and socially most valorised type of writing. It follows that monomodal thinking is at the centre of the dominant pedagogy developed for this school subject, literary pedagogy. In extension, it is also at the centre of a pedagogical approach to Andersen, in the current state of affairs. The consequence being that MTE/StLE marginalises didactic knowledge producing uses of alternatively mediated multimodal representations of H.C. Andersen. Equally, it is assumed similar mediated representations of literary classics are marginalized in other countries (cf. e.g. Durran & Morrison 2001 focusing on Shakespeare in “English”).

Kress and van Leeuwen (2001) suggest, indirectly, that the use of multimodal resources actualises monomodal constructions of Andersen’s texts. The present analyses rather demonstrate that drastic interventional steps have to be taken in order even to make teachers and students consider the meaning-making *existence and potential* of modes other than writing. These results therefore suggest that multimodality and the complex ‘interdependency and independency’ relations of (multi)modality and media (Kress: 2004: 6f) remain “hidden” or at least out of immediate view. On the other hand, the intervention analysis also demonstrates that teachers and students sometimes do reflect on multimodality and its uses, acknowledging its importance in meaning-making and knowledge production. This could contest and change – to use social semiotic terms – the logonomic structure and ideological complex of MTE/StLE. Student and teacher competencies outside school may, in fact, be linked to the development of competencies inside school. Although this sounds banal, empirical research shows that it is not.



Figure 4.1.3.1. Photo from case 4, experiment 3.

One may anticipate the explication of such a claim by offering a brief illustration, which applies the theory of multimodality. In experiment 3 (cf. chapter 10, p. 309ff.), several excerpts of illustrated works of art and other visual interpretations of Andersen’s fairytales were made available for students on the school intranet. Here they could be downloaded and presented on student computers or projected onto a screen in class (as in case 4, cf. fig. 4.1.3.1) hence pursuing

several intermediary goals of the teaching module.

In terms of medium, computer-mediated excerpts from picture books and other media were projected onto a screen. The designed curriculum instructed the teacher to, among other things, present these excerpts to students and highlight their way of producing a fairytale discourse through verbal modes and visual modes. It was observed that students and teacher perceived a combination of images and words. However, the manner in which the students and teachers predominantly spoke and wrote about this material – both in the classroom and later essays – suggests that both parties conceived of, produced meaning and knowledge, in only the verbal mode. This becomes particularly clear in the final student essays, in which they were asked to analyse an Andersen fairytale in words and images. In terms of representation, it is found that “double-modal” or multimodal material is actualised as what Kress & van Leeuwen would term a monomodal representation. Two of the teachers later acknowledged this and came to understand the potentials found in other kinds of teaching, meaning-making, knowledge production, and learning (cf. A45, and chapter 10). Indeed, it was recognised that this would lead in the direction of multimodal media pedagogy and semiocy. At the same time the necessity of questioning their own fundamental, historically and socially developed conceptions of teaching and learning was acknowledged. By implication this is found to have affected even teacher understanding of the relationship between signs, epistemology and ontology.

4.1.4. Multimodality and sociocognitive sign-theory

Both Kress & van Leeuwen, being educated in a systemic, functional, linguistic tradition, draw on a social semiotic sign-theory, which advocates a triadic conception of meaning-making understood as form, meaning and function. This discards the classical dyadic conception of sign found in (post-) structuralism. Moreover, both have attempted the development of this approach beyond linguistics, acknowledging the new multimodal paradigm. In extension they question the linguistic vocabulary used in understanding meaning-making. Kress, along with Robert Hodge, made an important contribution towards this in *Social semiotics* (1988), a work, which refers to C.S. Peirce and Voloshinov, among others. In *Literacy in the new media age* Kress continues to circle around the relation between sign-making and sign-makers:

The signs of all representational resources are recognised as ‘motivated’ conjunctions of form and meaning out of the interest of the sign-maker, whose ‘use’ of representational resources is agentive and transformative. Sign-makers act out of their interest but with an awareness, more or less explicitly held, of the history of the resources, expressed as the force of convention. (Kress 2003: 169)

As we see quite clearly in this quote, the belief of structuralism in *arbitrariness* is replaced by *motivation*; the *form-content* dichotomy is replaced by a relation between *form, meaning and function* in the sense that all sign-production is intimately related to the transformative agency of the sign-maker in context. It is noted, considering the ongoing discussion of socio-cognitivism vs. purely cognitively oriented meaning-making approaches and purely socio-culturally oriented approaches, that Kress speaks both in *singular* of the sign-maker and in *plural* of the sign-makers. Kress, and multimodal theory in general, balances on a sign-oriented socio-cognitive approach to meaning-making.

Kress speaks of something more: He consistently argues that multimodal sign making, not simply verbal meaning-making, semiotic competence or simply literacy, forms the basis for knowledge production in what he terms the new media age. In relation to this, we should also note that Kress (in Kress 2003: 40 and Kress et al. 2001) does not claim to be dealing primarily with *learning*, but with a prerequisite for learning, meaning-making, and the relation to knowledge production in context. In terms of a field of research, meaning-making belongs to semiotics and, to some extent, curriculum studies. Learning, however, belongs to psychology and curriculum studies. What connects meaning-making to learning, and semiotics to psychology, in Kress' view, is the assumption that different kinds of multimodal mediated meaning-making leads to different kinds of learning. As he puts it: "Both learning and sign-making are dynamic processes which change the resources through which the processes take place – whether as *concepts* in psychology or as *signs* in semiotics – and change those who are involved in the processes. This makes both learning and representing/communicating into dynamic active processes, far removed from inert notions such as 'acquisition'." (Kress 2003: 40).

American educational researcher David Shaffer, being inspired by Kress, has further elaborated on this idea, adding post-structuralistic thinking to it, as he suggests the notion *epistemic modes* in the study of curriculum subjects, particularly Science (Shaffer et al. 2004, Shaffer 2007). The idea is that modes, meaning-making, knowledge production and learning are interwoven and historically dynamic. However, in Shaffer's view, the link between meaning-making and knowledge production is not unproblematic. Whereas Kress' approach to this question is rather liberal, perhaps even radical – especially in some of his oral presentations (Kress unpublished). In this sense Kress has a tendency to acknowledge any kind of personal semiosis as knowledge production. The relation between semiosis and knowledge thus becomes an unproblematic continuum:

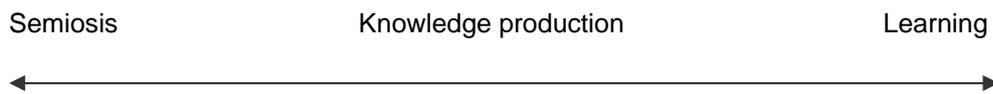


Fig. 4.1.4.1. Kress' continuum between semiosis and learning.

This conception is tempting, because it is simple, but for this very reason it also brings with it all the drawbacks associated with ideal types. In real terms, it is necessary to distinguish between various levels or contexts for knowledge production. Student knowledge production and reflexive self-conception of said knowledge, should be contrasted with an analysis of *social* – in Gee's terms, 'external design grammar' (Gee 2003, cf. above) – conceptions of the knowledge domain being addressed. For instance, this could be focusing on what peers or the teachers think, reflecting broader conceptions of knowledge or design grammars. This seems educational commonsense, and the main point in Dewey's pragmatic theory of knowledge (1997, the chapter "Theories of Knowledge"; cf. also later).

My point is not to discredit knowledge production among students; rather, it must be argued that the dynamics of teaching (and researching) subject matter requires sensitivity towards different versions of knowledge being produced and negotiated in classrooms. These banal theoretical points – which draw on complex philosophical debates (cf. e.g. Searle 1992) – have methodological and analytical consequences for this study. In the fieldwork, epistemological and curricular *commitments* of specific semiotic learning resources are contrasted with empirical data regarding how the teacher and students actually *realise* meaning in utilising these resources. Not just any kind of meaning-making within the semiotic domain being addressed by the designed curriculum and its agents (the teacher and intervening researcher) is recognised as legitimate. It is important, for both designer-researcher and teacher - who operate on different levels - to be able to 'critically frame' this aspect of valid knowledge production, while being sensitive to potential transformative practices that students and teachers might produce in expanding and reconfiguring the knowledge regime of the particular school subject.

4.1.5. Peirce, multimodality and subject-related didactics

Scrutinizing multimodality beyond its own self-understanding helps us understand the insights and limits to this theory building. Comparing multimodality with aesthetics is one way of doing so, as demonstrated above. Another way, which will be pursued here, happens by relating multimodality to the Philosophy of Science and Educational Philosophy. More specifically, the work of Charles Sanders Peirce, particularly his approach to semiotics and impact on Dewey becomes relevant.

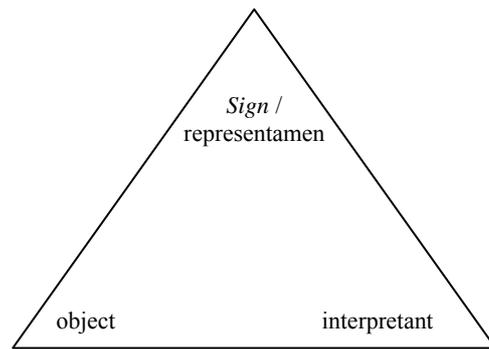


Fig. 4.1.5.1. The three dynamic elements of semiotics, according to Peirce. Cited from Peirce 1994.

Peirce's work is immense, heterogenous and, to some extent, esoteric.⁴⁹ Nonetheless, both international and Danish educational philosophy has exhibited a growing interest in Peirce and the influential role he has played in modern philosophy and a number of other fields.⁵⁰ It will be argued that Peirce may be understood as a unifying feature for the fragmented theories of semiosis, media pedagogy, curriculum thinking and Nordic subject-related didactics, including the didactics of "Danish". Peirce was a philosopher and, like Dewey, highly inspired by the epistemology of Kant. Peirce sought to relate his ideas to a new pragmatic, action-oriented theory of signs, *semiotics*, which was again based on his epistemological invention: abduction (cf. chapter 2, p. 22ff.). As Kress and Hodge characterize Peirce in their reconstruction of social semiotics (1988), it is precisely this action-oriented conception of sign-production that informs their conception of semiotics and which they wish to attribute to the understanding of meaning-making. As Peirce puts it himself, in a famous quote, "By semiosis I mean an action, an influence, which is, or involves, a co-operation of *three* subjects, such as a sign, its object and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs" (cit.en. Hodge & Kress 1988: 20). Peirce rephrases this definition in slightly simpler terms, stating that *a sign is something that for someone stands for something* (Ibid.). Note the remarkable resemblance between this definition of the sign and Buckingham's definition of a medium (cf. 3.1.3, p. 49f.).

As the figure illustrates, what the sign 'stands for' in Peirce's conception, depends on the dynamic *inquiry* (inquiry being a concept Dewey has from Peirce) of the material *sign* (also called

⁴⁹ The collected work of Peirce is still only on its way; so far it has only been completed in a thematically organised version. The standard edition is the Peirce Edition Project, Peirce 1998; cf. also www.iupui.edu/~peirce/.

⁵⁰ Jørgen Dines Johansen, among others, introduces Peirce in Denmark in the 1960ies. In the last two decades we have seen a growing number of publications about Peirce, such as Johansen 1993; Johansen & Larsen 1994; Stjernfelt 2007. In the design-based research context I am inspired by, Peirce is also referred to, and linked to Dewey, as in Barab & Squire 2004.

representamen), the *object* (an idea), and the *interpretant* (an equivalent sign in a person's consciousness). Trying to understand the concept of *interpretant* is highly disputed among Peirce readers. Hodge and Kress are sceptical and argue that: "Unlike Voloshinov, he [Peirce] has internalized the transaction that constitutes thought, presenting it as a fact of personal psychology without explicit roots in the social process, and this is an important weakness in Peirce's theory" (Hodge & Kress 1988: 20). From the perspective of empirical research one must agree fully. There is no such thing as de-contextualised, non-social sign-reading in a classroom with more than 20 students negotiating (loudly) about how to read the signs of Andersen material. Nor is the student "alone", mentally speaking, when he or she sits at home writing an essay on an illustrated Andersen fairytale.

On the other hand, it is disputed whether Peirce was the personal psychologist or cognitivist, as Hodge and Kress claim. Consider the following statement by Peirce from *Some Consequences of Four Incapacities* (orig. from 1868): "We have no power of Introspection, but all knowledge of the internal world is derived by hypothetical reasoning from our knowledge of external facts..." (Peirce 1998: Vol 1, p. 30) However, in Stefan Hopmann's optic Peirce remains, in contrast to Dewey, an individualist/cognitivist (Hoppman, forthcoming).⁵¹ As Hoppman argues in regard to Dewey's pragmatism – or rather "instrumentalism", as Dewey phrased it himself – meaning-making and knowledge production are linked as one and the same thing. It develops in a collaborative teaching and learning process, in which the learner (and this may come as a surprise for popular thinking on Dewey) is not the main goal. Solving a problem is! Whereas Peirce emphasises the ontology of what is intelligible through inquiry *for me*, the individual, Dewey emphasises what is intelligible through inquiry *for us*, that is, the society *en miniature*, working together in classroom practice. Hoppman explains the relation didactically in figure 4.1.5.2, hence constructing a connection between semiotic sign theory, curriculum thinking, and Nordic didactics. We shall return to this connection in the concluding section for this chapter, when the model that synthesises Peirce, Dewey and the *how* and *what* of multimodal media pedagogy within MTE/StLE is designed.

⁵¹ Hopmann is a researcher in the history of curriculum and *didaktik* history and theory (cf. e.g. Gundem & Hopmann 1998).

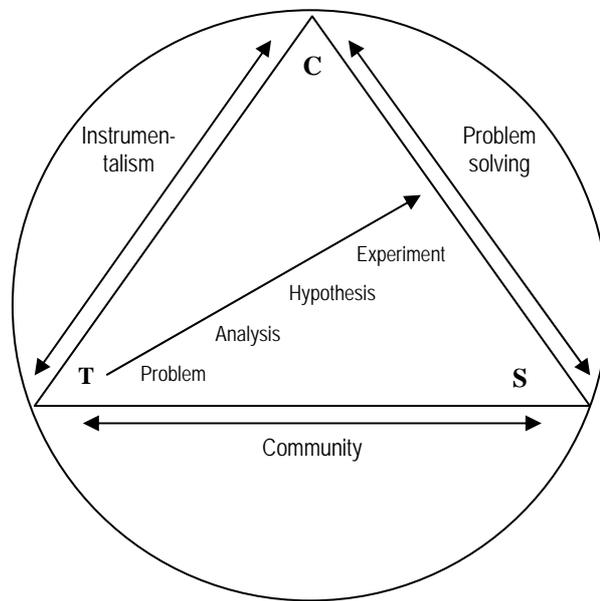


Fig. 4.1.5.2. Dewey's curriculum theory in Hoppman's didactical interpretation. Sign-codes: T: Teacher, C: Content, S: Student. Arrows represent dynamic relationship; circle, a dialectical unity.

For now we will return briefly to my illustrative analysis of experiment 3, again making the abstract theories presented previously more concrete. If we were to apply Peirce, Dewey, and multimodality to the use of a picture book in experiment 3, we could say that the *representamen* is made up of a multimodal sign (particularly the signs of words and images being foregrounded more or less equally, depending on the specifically illustrated work selected by a class), which stands for an *object*, the multimodally represented fairytale discourse. In analysing data, this object is found to be actualised predominantly as a monomodal object by the *interpretant* – here understood as both the *individual* student and the students as a *group* of individuals collaborating together in class. The reason why a sign is actualised the way it is and – just as interestingly – the way it is *not* actualised by teachers and students within a specific subject-related context, is a fundamental question to be pursued in the intervention analyses.

4.1.6. Bridging multimodality and media pedagogy

As we know from chapter 3, theorists within media education and media pedagogy are beginning to apply the theory of multimodality. Multimodal concepts are used, but not defined (or at least only defined in a very perfunctory manner). This is one of the weaknesses and challenges of media pedagogy. In the following, 'translations' between definitions found in the theory of multimodality, media education and media pedagogy will be attempted.

From Buckingham we have learned that a medium should be defined as the material which is in-between communicators – an inherently socially and culturally constructed *means* carrying 'effects' or 'information' between communicators. The medium-as-a-means-for-distributing conception is shared by the theory of multimodality. However, multimodality seems to be able to supplement or

clarify Buckingham's notion of 'information' as carried by media. 'Information' is probably a poor metaphor, although it is very popular in the discourse of the Information Society.⁵² In positive and constructive terms we might, therefore, suggest that when Buckingham and others speak of information in media, they should in fact rephrase and speak of communicated mediated modes.

From Meyrowitz we have learned that media could be conceptualised in a triadic manner, which seems to resemble a general social semiotic understanding of communication. The theory of multimodality draws on the same basic understanding of communication. Another, more specific, translation between multimodality and Meyrowitz can also be made. When Meyrowitz refers to 'production variables' we could equate this notion, to some extent, to modes.

One might ask why we have had to spend so much energy (in chapter 3) on reconstructing the positions of Buckingham, Meyrowitz and others, if they are easily translated into a theory of multimodal media education. My answer is that not all insights from media education need to be translated into the multimodal framework, and vice versa. Media education and media pedagogy are knowledge based disciplines with long, empirical traditions for offering classroom and curriculum related reflections of *what* media education/pedagogy should be about – in terms of conceptual learning – and *how* it could be practiced. The theory of multimodality does not offer these insights. Ignoring what may be learnt from media education/pedagogy, would be to throw out the baby with the bath water. On the other hand, it does seem that the vocabulary must to be refined in a world where it becomes increasingly difficult to understand what media is and how communication works and shapes social life among (young) people (Livingstone and Lievrouw 2002; Livingstone 2002). Multimodality, and particularly the dynamic relationship between mode and medium, explained above, offers an important, necessary new concept for a world of texts and contexts, which is becoming increasingly complex – both semiotically and technologically speaking.

4.1.7. *What is a medium, then – and a text, and a genre?*

So, what is a medium then? The synthesizing definition goes as follows: A medium is an intervening material used motivationally for meaning-making by at least two communicators embedded in a communicative context. The medium is always already marked with modes, hence

⁵² As the sociologist Richard Sennett pointed out critically in a key note-presentation at 17th Nordic conference on Media Research (2005): 'information', nowadays in the market and management discourse, is the dominant, and preferred, metaphor for bilateral, asymmetric meaning-making; whereas communication is the vernacular metaphor for unilateral symmetric meaning-making. Information and communication refer to two fundamentally different conceptions of meaning-making, which imply different worldviews, and different views on human agency. Sennett suggests that we, as theoreticians, insist on promoting communication in many contexts, including democratic contexts such as formal education.

constructing a text. A text is the constellation of modes and media embedded in a context. The modes and media may be realised as independent and interdependent of each other in the dynamic communicative and contextualised process. In a given context, the text and – by implication – the medium serves a communicative purpose among persons. In terms of motivation, the way communicators use the medium in any given context, represents a social genre. In this sense, the social is seen as constructing perception and meaning-making of the medium. Vice versa, the medium may construct the social and its perception and understanding. Depending on the genre, the content, form and function of the medium (and/or relations among these elements) are foregrounded in the dynamic process of perception, meaning-making, and use.

4.1.8. A final word on multimodality as methodology

As shown, the theory of multimodality operates with a broad understanding of modes and media. This also affects the way it is applied in empirical studies. Its methodology and methods of data gathering fall under this heading of course. For instance, some multimodal studies are interested in how the teacher acts physically, using bodily modal resources, while speaking of a certain topic. Although interesting studies have been made pursuing these interests (cf. e.g. Franks & Jewitt 2001), analysis becomes infinitely complex if one is to consider and collect data from all semiotic resources, which might be part of the subject-related communication process in class. At least, in the framework of this study, it is found to be impossible and irrelevant. To systematically collect and integrate this full range of meaning-making resources for analysis is superfluous.

More generally, this study claims that multimodality has served, first and foremost, as a theoretical optic, which is useful in revising the conception of media and, in extension, reflecting on the availability of Andersen resources. Secondly, and related to this, multimodality is used as an analytical tool for reflecting on the analysis of collected data from the *in situ* participant observations. A rich variety of student and teacher produced constellations of modes and media have been collected: PowerPoint presentations, Word documents, tape recordings and audio-visual products, such as the journalistic film referred to in the Introduction (chapter 1). The attentive reader will notice that a modal meaning beyond verbal meaning-making has been foregrounded, when it is mentioned that Karen, the teacher, in speaking of her knowledge about Andersen, shook her head while saying: “there was certainly much I did not know” (A1, A44). This seems to confirm, in terms of physiognomy, what is claimed verbally. This is yet another example of multimodal media data analysis. Also, field notes have been made that refer to multimodal meaning-making when a certain bodily mode was indeed foregrounded in a given observed

situation: E.g. the observation of students smiling when presenting their storyboard of a new Andersen fairytale animation. This type of multimodal data has been permitted to inform data analysis of events and practices; which is not to say that this has been done systematically for classroom research.

Thirdly, theory of multimodality is used against multimodality itself. This is done in terms of finding an adequate name for the type of competence related to multimodality and, by implication, mediated meaning-making. The theory, as represented by Kress (2003, chapter 4), insists on referring to multimodality within the umbrella notion of literacy. However, if we wish to avoid expanded notions of literacy, a terminological alternative is required.

Another way of criticising the theory of multimodality is to argue that it has an unacknowledged *bias* related to the axis of the sign and the social: Multimodal studies are more sign-oriented than socially oriented, some claim. Kress argues that multimodality presents a social theory of meaning-making. Others argue that it focuses less on what we observe people doing to ‘meaning-making resources’ in concrete locations than do media ethnographers. Rather it focuses more on what ‘meaning-making resources’ do to people, to the extent that we can observe this in fixed textual outcomes. In so many words, multimodal studies become text analysis. The pragmatic response to this critique is that the two approaches are “complementary”, as Kress once explained to the present author (cf. digital research log, A24). It should be the research question that guides the methodology, data collection, and later data analysis – more on this in chapter 5.

4.2. What is competence?

4.2.1. Working definition

So far, we have defined ‘multimodality’ and ‘medium’ within the conceptual principle of ‘multimodal media competence in MTE/StLE’. In this section the disputed and oft used notion of ‘competence’ will be clarified and defined. In an English-speaking context ‘competence’ – or ‘competency’ – is commonly framed and used in negative terms. However, as will be demonstrated, several prominent Anglo-Saxon educational thinkers, going back to Dewey, actually employ the term in a manner, which is becoming ever more influential in Nordic curriculum/didactic research.

As a working definition, derived from American socio-cognitive educational theory, we may propose the following: Competence “is understood as the ability to act on the basis of understanding” (St. Julien 1997: 261). This definition of competence resembles very much a definition of *subject-related competence descriptions*, which the present author and colleagues within subject-related didactics in Denmark (first and foremost Mogens Niss (1999), a Danish

professor in the *didaktik of mathematics*), suggested in the preparation of future educational reforms. Indeed, it was adapted and presented to the participating teachers of this intervention study in the initial phase (cf. A30). The definition is a translation into English, applied to “Danish” (in order to generalize, we could substitute “Danish” with “MTE/StLE”, or any other standard language school subject name):

A “Danish” competence is a knowledge-based preparedness to act expediently in situations, which contain a certain kind of “Danish”-related challenge.⁵³

Although this sounds simple, perhaps even redundant, the two definitions of competence cited imply a complex, situated, activity oriented, and knowledge based understanding of teaching subject matter or aspects of subject matter. Certainly, these definitions can be refined and made more robust, which will be done below. However, we must first present a brief review regarding the negative or neutral discourse of competence often found in educational research.

4.2.2. *The dominating discourses of competence*

Theorists within media education/pedagogy and multimodality tend to employ the term of ‘competence’ either in relation to a semiotic unit or a teaching method.

When it refers to a semiotic unit, it functions predominantly as a synonym for *literacy*. However, literacy, as we know from chapter 1 and 3, can refer to a number of differing semiotic abilities: It might be the ability, skill, and/or reflexive mastery (dependent on the complexity of the approach) to consume and produce reading, but also to write; to do the same with reading/writing *plus two or multiple modes*, beyond linguistics; to do the same with *media*; with constellations of *media and modes* or with *semiotic domains*, as in Gee’s (2003) thinking.

When ‘competence’ refers to a teaching method, the term is often negatively associated with the reproduction of knowledge transmitted to a student, who is seen as a passive *tabula rasa*. Vocational training is the prototype for this conception of ‘competence’. Critics suggest that the principles of vocational training ought to be generalised to all of pedagogical contexts, including formal teaching of subjects. As a counter-reaction, competence critics suggest a better alternative to competence, such as *learning, design, literacy practice* (using literacy as an expanded concept). *Bildung* has also been employed, particularly in the Nordic context. When theorists advocate ‘design-’ or ‘literacy

⁵³ The same formulation in Danish, applied to “German” as a subject (quoted from Busch et al. 2004: 19): “En (tysk)faglig kompetence er en vidensbaseret parathed til at handle hensigtsmæssigt i situationer som rummer en bestemt slags (tysk)faglige udfordringer.”

practice’, which occurs predominantly in Anglo-Saxon contexts, the argument is that these alternatives allow for a number of positive aims being fulfilled, such as ‘personalising’, ‘innovative’, ‘transformative’, ‘critical’ semiosis (cf. e.g., Kress unpublished, New London Group 2000; Lankshear & Knobel 2003). This is not the case for thinking about competence. The implication being, of course, that the criticism of ‘competence’ can become rather harsh in prominent Anglo-Saxon educational circles.

In a Nordic context, competence produces positive, neutral as well as negative connotations. We have already analysed the ‘media pedagogical’ preference for *Bildung*, which allows discursive space for competence. Some Nordic philosophers of education, however, are also quite harsh in their critique of competence. Danish educational philosopher Jens Erik Kristensen (2003) argues, for example, that competence is the term that serves the reductive need of the market. In this sense competence becomes vocational training. Kristensen considers the traditional approach a better alternative, such that focus should be on ‘allgemeine’ *Bildung* [almendannelse], especially in upper-secondary education.

Nonetheless, these discourses are rejected within the scope of the present study. From the perspective of this dissertation one could even say that the criticism of competence is exaggerated, misleading, and even conservative at times, such that many applicable features of the concept are lost in the process. As suggested in the introductory remarks in chapter 1 and in the genealogy of media literacy in chapter 3, a more precise, descriptive and productive approach towards the concept of competence must be developed. This can then be applied in the teaching of MTE/StLE.

Firstly, we may delineate competence by refraining from *simple* reference to reading, writing, oral or semiotic proficiency in MTE/StLE. Secondly, it is necessary to give a clear definition, which incorporates a *holistic and complex* approach to competence. Although the risk of instrumentalism or “vocationalism” in competence thinking is acknowledged, it will be argued that competence could bring us an important step forward in terms of developing new teaching-learning practices and rationales for school subjects in formal primary and upper-secondary teaching. Competence thinking will thus inspire an emphasis on meaning-making for *the student*, instead of the teacher, which in return emphasises student ability to attain complex, subject-related, knowledge based conceptual *goals*, instead of linear problem solving, which emphasises encyclopaedic, fragmented curriculum elements [pensum, in Danish]. Correspondingly, although positive aspects of using the design category – promoted to the extent of fame by the New London Group (2000) – are acknowledged, this category – as used in an educational context – has its

limitations. One problem is that it can easily be misunderstood, given that it is predominantly used in the domain of industrial production of functional-aesthetical products, and not in curriculum thinking. Certainly, this could change due to theoretical intervention, but we should consider whether it is worth the effort.

Another pragmatic argument for sticking with competence is that the term is currently employed in the real world, and increasingly so, in public discourse, national educational policies (e.g. UVM 2003b), curricula plans, everyday educational speech in schools, among teachers and managers, and in classrooms, among teachers and students. It is also widely employed in international frameworks for subject-related, formal education and in frameworks for life-long learning (e.g. COE/Council of Europe 2006). It is a term, which has gained political power within education on a macro-, meso- and micro-level – a situation, which is expected to remain stable for decades to come.

Pragmatically, it is therefore suggested that educational theorists and analysts modify the discourse of competence in ways that supports, rather than simply rejects the term. If we choose to ignore the competence discourse, researchers remain in the ivory tower of (education) research, imagining that science controls reality – and not the other way around.⁵⁴

4.2.3. (Re)constructing competence

The kind of competence pursued and applied here does not associate competence with any particular semiotic unit; nor is competence thought of in any instrumental, reproducing, unitarily cognitive way. Rather, it is understood in the same perspective as Østerud when he states that: "...it involves the person as a whole, while unbound by traditions..." (2004: 173). This comment points to a potential holistic, 'human' aspect of the term that is generally *not* acknowledged. The genealogy of Østerud's approach to competence is, briefly put, the Danish educational philosopher Stefan Hermann (2000), who has offered an overview for Nordic readers, on the development of competence thinking, in which he points to both continental and Anglo-Saxon theoretical work on the concept. In Europe he points, among other sources, to a recent OECD research project called *DeSeCo* (Definition and Selection of Competencies: Theoretical and Conceptual Foundations, cf. Rychen & Salganik 2003). *DeSeCo* is a constructive European genealogy for a positive (re)construction of competence which will be reflected upon. Another genealogy, as suggested vaguely in one of Hermann's notes, would take Dewey and Anglo-Saxon pragmatic educational theory as the point of departure. If we pursue this link, it will bring us towards advanced knowledge

⁵⁴ For a critique of this belief, cf. Helga Nowotny, Peter Scott and Michael Gibbons' *Re-thinking Science* (2001).

production and curriculum design theories (Bereiter & Scardamalia 1993; St. Julien 1997; Luke 2003). Both genealogies will be elaborated on, and it will be shown that they have striking similarities. Furthermore, both attempt a positive definition of subject-related competence, which can be made operative for didactic design and analysis.

4.2.4. Competence in context: The European DeSeCo approach

In DeSeCo's approach, the discursive tendency to employ 'literacy' in an expanded way that is interchangeable with 'competence' in current policy-driven assessment frameworks (such as the PISA project, cf. OECD 2000, or the media literacy movement) is briefly discussed, and swiftly rejected. First and foremost this is because it has not "eliminated many of the terminological difficulties stemming from numerous and imprecise uses of the word" (Rychen & Salganik 2003: 52f). Being inspired by, among others, Weinert (2001), the alternative strategy chosen is to define competence in a precise and delineated manner. Hence, DeSeCo takes a *demand-oriented and functional* approach to the concept of competence involving two dimensions: an *internal* structure dimension, and a *context* dependent dimension. This leads to a socio-cognitive definition, or as the authors prefer to formulate it: a psycho-social definition of competence: "A competence is defined as the ability to successfully meet complex demands in a particular context through the mobilization of psychosocial prerequisites (including both cognitive and non-cognitive aspects)." (Rychen & Salganik: 43)

Rychen and Salganik argue that the personal development of competence goes way beyond schooling and curriculum. It is a concept for a holistic life in society. In this manner, the theoretical or rather philosophical, scope is as broad as when Dewey explores the relation between the citizen (including the child), the curriculum and society (Dewey 1902; Dewey 1997). Indeed, this also applies to Drotner's pursuit of adequate metaphors for media pedagogy taking a person's life and complex integration into society as the point of departure (cf. chapter 3, p. 41ff.). Drotner found that competence would be an instrumental term, while DeSeCo constructs it in a way it is not. Elaborating on the broad perspectives of the notion, Rychen and Salganik emphasize that the primary focus should be on: "...the results the individual achieves through an action, choice, or way of behaving, with respect to the demands, for instance, related to a particular professional position, social role, or personal project." (Op. cit.: 43) It would be unfair to claim that this competence approach is in the pocket of the market.

Contexts are legion for personal, social and professional competence development, and contexts are *never the same*. This implies that innovative and transformative thinking is in fact a prerequisite

of any teaching and learning situation. As a DeSeCo researcher argues (drawing heavily on Piaget), people – including teachers and students – always have to *adapt* to new situations. Also, teachers must continuously establish situations, which require adaptation (Oates 2003). Analogically, in intervention studies, intervention researchers have to establish situations, which require teacher adaptation (as suggested by Randi & Corno 1997).

According to DeSeCo, the complexity of any potential competence-developing situation is related to two dimensions; as illustrated in figure 4.2.4.1.

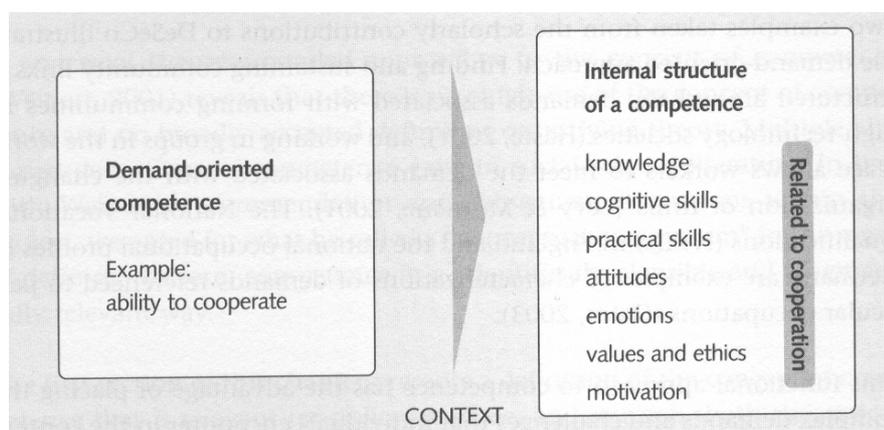


Fig. 4.2.4.1. DeSeCo's model for a demand-oriented competence concept

As we see, the competence-developing context involves a complex demand and an internal structure for a competence, encompassing a wide range of cognitive, intellectual, and psychological attributes. These attributes are not static; rather, they are dynamic attributes that arise in social interaction and depend on cooperation with other persons in a particular time-space situation.

The authors make it clear that the underlying assumption of the model is that the relationship between the individual and society is dialectical and dynamic. They sum up that: “Competencies do not exist independently of action and context”. Instead, Rychen and Salganik continue, “...they are conceptualised in relation to demands and actualised by actions (which implies intentions, reasons, and goals) taken by individuals in a particular situation...” (Op. cit.: 47, my emphasis). Note the parallels to Buckingham’s emphasis on concepts, and Kress and van Leeuwen’s emphasis on actualisation.

In relation to this intervention study, it will be argued that the DeSeCo approach offers a positive and general reconstruction of the competence concept. It can be used to refine the suggested definition of subject-related competencies in a “Danish” context and thus, the research and practice of subject-related didactics. Furthermore, the DeSeCo model lists vital elements that we should

consider integrating into the model of multimodal media pedagogy in MTE/StLE. Specifically, this should be done in the design of experiments and the analyses of their outcome. In short, the model and designed experiment should include considerations regarding: *a subject-related demand, individual internal structure for students, collaborative work, and local context*. The DeSeCo framework reflects the embedded commitments in the curriculum programme of experiments 1-4 in the intervention. This is not to say, however, that it describes the actualisations of the experiments. Analysis will show that the potential for applying competence thinking in actual teaching are there and some of these potentials are actualised – even expanded. However, analyses also demonstrate, as indirectly suggested by Rychen and Salganik, that actualisation is very dependent on individuals, and that these individuals – the teachers and students – might not be familiar with the didactical and pedagogical demands of competence thinking.

4.2.5. Anglo-Saxon competence thinking: Towards knowledge producing classrooms

DeSeCo represents a declared “pragmatism” (Ryschen & Salganik 2003: 42) in its approach to competence thinking, but spares only a little space on elaborating on its pragmatic genealogy. In order to understand DeSeCo’s pragmatism and relate it to Anglo-Saxon approaches, not the least of media pedagogy, we must now turn our attention towards it from a historical perspective.

Dewey is probably the proper starting point for a history of American conceptions of competence. While knowledge is the single most important term in Dewey’s educational theory – at least in *Democracy and Education* (1997 [1916]) – it is important not to relegate competence too far, wherefore we take it up here.

In the chapter on “The Nature of Subject Matter”, Dewey uses the concept of competence when giving the following example: “The knowledge of a farmer is systematized in the degree in which he is competent. It is organised on the basis of relation of means to ends—practically organized.” (Dewey 1997: 190) This quote seems to be speaking about competence as ‘vocational training’; however, if we interpret it in the context of *Democracy and education in toto*, there is more to it. Dewey’s example indirectly narrates the pragmatic theory of knowledge and subject matter. Even for a student, knowledge should be related to *use*, or in DeSeCo’s optic, a demand for context that requires more than intellectual, scientific knowledge. As we know, from elaborating on Gee’s and Shaffer’s prerequisites (cf. chapter 3, p. 41ff.), Dewey wishes to reverse the hierarchy of scientific *knowledge* (as a noun) and practical *knowing* (as a verb) in curriculum theory. Any kind of teaching and learning situation, formal or informal, should involve an authentic, practical demand for students to understand and engage. The theory of knowing that Dewey advocates is a theory that

places the idea of competence thinking, with its activity and product oriented emphasis, at its centre. Competence is thus equivalent with the active verb ‘to know’: the dynamic, situated activity of a person working with other people towards an outcome in terms of a product, a behaviour, a choice, a thought, due to the specific instigating demand.

Almost a century on, this knowing/competence approach is still being elaborated within socio-cognitive educational thinking in the US by John St. Julien, whose formulations parallel Dewey and DeSeCo remarkably well. In researching the curriculum field of science teaching, St. Julien argues: “From the viewpoint of situated cognition, competent action is not grounded in individual accumulations of knowledge but is, instead, generated in the web of social relations and human artefacts that define the context of our action.” (1997: 261) His web metaphor leads to the suggestion that we should conceptualise the practice of teaching and organisation of competence development in terms of relations, or *connectionism*. In connectionism, the student becomes a semi-autonomous thinker, instead of a canonized “I” or Cartesian subject:

In a curious way, situated cognition has restated the importance of a theory of knowledge. Some things remain the same: Knowledge remains the foundation of competence; knowledge continues to transcend the bounds of the personal. Knowledge can still be considered to reside in objects. But things change as well: Knowledge is firmly material; it is distributed outside the head; knowledge is decidedly social and always situationally contingent. (Op. cit.: 264)

St. Julien’s inspiration from Dewey is evident; and so is his rejection of the taxonomy of knowledge production related to B.S. Bloom (1952). Bloom represents the most prominent and influential *cognitivist* position in modern educational theory across the world, including recent Danish educational reform of upper-secondary education. In St. Julien’s optic, Bloom’s taxonomy constructs a de-situated, abstract, and instrumental approach to teaching and learning – far from a connectionist approach. Bereiter and Scardamalia (1993) reach the same conclusion in their studies of expert knowledge production.

Bereiter and Scardamalia propose a simple continuum of competence – from novice to expert – instead of the extremely detailed and, in their view, self-contradictory propositions of Bloom taxonomy of knowledge. Instead of asking *what expertise is*, they redirect the question towards activity and ask *what experts do?* This marks a shift from an ontological to an epistemological approach to competence. Their answer is that experts are the ones: “...progressively advancing on the problems constituting a field of work, whereas the career of the non-expert is one of gradually constricting the field of work so that it more closely conforms to the routines the non-expert is

prepared to execute” (1993: 11). Real experts – or “super users”, as Danish media pedagogy researcher Birgitte Holm Sørensen (2005) speaks of in reference to so-called ICT “nerds”, surpass themselves and the knowledge known. In this way, knowledge becomes a noun and a verb, a result and a process, and an objective and subjective activity – integrating expertise transformative practice as a potential, and important, actualisation.⁵⁵

Bereiter has worked further along the lines of expert knowledge production within classrooms, arguing that if we were to develop a culture for students, of what he terms a ‘Knowledge 3 Society’ (equivalent with what others term a Mode 2 Society, cf. Gibbons et al. 1994 and chapter 2.6, p. 36), teaching with the aim of expertise is required as a general principle:

...in the past it [liberal education] has been seen as largely a matter of gaining possession of an existing understanding of the known world, such as Aristotle’s or those of the medieval *Summae* or later the enlightenment project of Diderot’s *Encyclopédie*. There were, of course, students who went beyond these fixed understandings to construct knowledge of their own, but in doing so they went well beyond the expectations of the curriculum and perhaps even beyond its allowable limits. The proposal to make knowledge building the principal activity in schooling would mean enlarging liberal education so as to encompass both the grasping of what others have already understood and the sustained, collective effort to extend the boundaries of what is known. (Bereiter 2002: 25)

This may sound like elitist education, but Bereiter argues, as do other theorists (e.g. Scharmer 2001), that it is rather a curriculum/didactical approach that meets the expectations for a majority of students being raised in a contemporary *culture of production*. This is, among other things, due to technological developments. Australian educational researcher Carmen Luke is one of the sharpest analysts of the link between new technologies, media, culture, identity, and pedagogy. In “Pedagogy, connectivity, multimodality, and inter-disciplinarity” (2003), she makes a diagnosis of post-industrial schooling in a macro- and meso-context:

...educators have tried to come to terms with the contradictions between industrial-model schooling based on static print/book culture and competitive individualism and the collaborative learning possibilities and deterritorialized meaning-making and knowledge configurations enabled by new technologies. (Luke 2003: p.398)

⁵⁵ One may worry that Bereiter and St. Julien’s critique of Bloom is a bit one sided. Bloom’s taxonomy also has a multitude of verbs and actions connected to knowing, cf. Bloom et al. 1956. Perhaps, it is the use, to which Bloom’s taxonomy has been put, rather than the taxonomy itself that is criticised.

Her point is that digital technologies reconfigure traditional text genres and forms. In extension they generate new modes of textual practice (such as emailing, chatting, online shopping and gaming) among communicators and students that are inherently web-based. For this reason they imply a connective collaboration that may lead to learning and knowledge production. Luke stresses that what is typical for new technologies is that they compress and reorganize spatial and temporal relationships at the trans-national level, a good example of which could be people, not knowing each other personally, in massively multiplayer digital games on the Internet, like in *World of Warcraft*. As a special interest for educational researchers Luke specifies that this creates "...more confined and delimited spaces for inter-subjectivity such as the school and classroom" (Ibid.) In a more general perspective, it is argued that knowledge production within classrooms can reflect and contest contemporary culture if one chooses a socio-cognitive, or as Luke terms it: 'constructivist' approach to learning, acknowledging all potential constellations of modes and media:

...collaborative, constructivist, and problem-based learning are a powerful conceptual antidote to pedagogy as transmission and knowledge as parcelled facts and objects, accessed monologically through designated official media. One of the potential effects of the constructivist turn has been the reconceptualization of knowledge acquisition and production as process, as design, as contextual, as situational, and, ultimately, as contestable, deconstructable, and criticizable. This locates knowledge and learning, rather than technology, at the centre of pedagogy. Computers and connectivity are but one resource among a platform of knowledge and communication sources that support, rather than drive, a critical, learner-centred constructivist pedagogy, and teachers remain an indispensable component in this mix. (Ibid.)

As we have seen from various Anglo-Saxon research perspectives, the idea of the genuinely *knowledge producing classroom* seems to be not only a potential but desirable aim for curriculum design, especially regarding school subjects addressing semiotic meaning-making, such as MTE/StLE.

In principle, culture changes curriculum design. On the other hand, some things remain constant, as stressed by Luke and many others. Here we may mention acknowledging the importance of the teacher. Luke seems to suggest that the starting point of any learning process is still the teacher. Hopmann suggested this, and a vital role for the teacher will be a central feature of the synthesizing model presented later on in the present dissertation.

To sum up Anglo-Saxon competence thinking represents a positive approach to conceptualising competence. It opposes knowledge production as individual reproduction of knowledge transmitted by a teacher. Rather, new knowledge could and should be produced in the classroom community.

We cannot and should not expect classroom communities to produce genuinely new scientific knowledge as a general demand (unless we advocate the fallacy of understanding knowledge production as simply sign-making). If we think back on the New London Group's proposal regarding the four-staged process of teaching (cf. chapter 3, p. 41ff.), many concrete curriculum designs may have – as a legitimate goal – simply to situate a certain area of knowledge, let the teacher, perhaps assisted by others, offer overt instruction, leading to collaborative critical framing in the classroom community. This is done without reaching the stage of transformative practice, which is understood as the stage of potential new knowledge production.

It may, however, be proposed as a hypothesis that the newer the phenomenon dealt with – say new media and technology – the more likely it is that classrooms produce genuine new knowledge about this phenomenon, e.g. in the shape of project reports or creative-analytical products. Upper-secondary school students working with multimodal media pedagogy addressing H.C. Andersen, represent a good instance of moving towards the production of new knowledge that can compete with scientific knowledge found on tertiary levels. As we shall see, there are indications supporting such a claim, e.g. in the analysis of animated H.C. Andersen fairytales (chapter 11).

4.2.6. Competence in a Nordic and Danish educational research perspective

It may be useful to develop the contemporary pedagogical and didactic thinking of competence in Denmark in particular, because it is in this context that the intervention takes place and because the theoretical thinking in this context has influenced the theory-development of the present study, which leads to the model of multimodal media pedagogy. As will be argued, learning psychologists, curriculum researchers and media and ICT pedagogical researchers are beginning to develop and acknowledge a competence approach to teaching and learning in Denmark (cf. e.g. Bang 1998, Niss 1999, Busch et al. 2003, Bundsgaard 2005, Drotner 2001a, UVM 2001c, UVM 2003a, Glerup 2005). The focus is on Bang, Busch et al. and Bundsgaard in the following:

The learning psychologist Jytte Bang (1998) is an advocate of competence-oriented, didactic thinking, acknowledging that the concept is new in a Danish context both for educational researchers, teachers and other agents in the educational system. In Bang's understanding, competence is a process of *externalisation*, which could be adapted to and integrated into the theory and practice of subject-related didactics. A warning is issued, however, against reductive methods observed in educational interventions (Bang 2003: 16ff.), as in the case of the so-called CASE-project in England (Adey 1999). Bang finds that the social dynamics of classroom practice are oversimplified, and that the trustworthiness (Bryman 2004: 545; cf. chapter 5, p. 159ff.) of findings may

be weak. In other words, observing seemingly positive results from specific interventions with a declared competence-oriented approach may lead to an over-interpretation of how this could and should be generalized into educational practice in general. This warning will be kept in mind in relation to the empirical analyses of this study, particularly the concluding remarks regarding the implications of the invention for the school subject in general.

As stated in the ‘working definition’ section above, the author of the present dissertation has co-contributed to a definition of competence as applied to subject-related teaching (Busch et al. 2004). This may be termed “The Danish Definition” on subject-related competence development and it sets the stage for further scrutiny. It will be argued that the Danish definition approximates the thinking of DeSeCo because it advances an approach to teaching school subjects that takes the ability to tackle a concrete demand as its point of departure. The Danish definition seeks to encourage students to develop, mobilize, and invest their existing competencies in a knowledge-based manner, taking the demands of the situation into account. Students are conceived as agents, leaving space for “transformative practice” that leads to expertise. Re-examining each of the words in the definition, one might consider replacing the expression ‘knowledge-based’ with the word ‘insightful’ – rephrasing the definition of subject-related didactics as follows (using “Danish” as a school subject as the exemplified context):

“Danish”-related competence is an insightful preparedness to act expediently in situations, which contain a certain kind of “Danish”-related challenge.

‘Insightful’ was the word used in the first version of this definition (cf. UVM 2002). It is a word, which connotes a more holistic approach towards knowledge production, encompassing some of the “soft”, or rather hermeneutic (Gadamer 1960), personal-interpretative elements that DeSeCo also acknowledges – including emotions, interests, values and ethics of the agentive students. One might even argue that ‘insight’ would encompass the vital aspects of the *Bildung* tradition, focusing on the identity-developing, formative side of education (cf. chapter 3, including sections about Drotner and Østerud; and cf. Krogh 2003, whose position is explained in section 4.3, p. 134f.). In this way, the definition could create a synthesis between *Bildung* and curriculum theory. One could also argue that a definition of competence that includes ‘insight’, would meet some of the demands placed upon it by the holistic conception of literacy associated with new literacy studies (Street 1984, Barton 1994, and others). This approach struggles precisely to convince the formal school system to acknowledge practices outside school – such as social life, personal history, and culture – as part of the literacy agenda within school.

Jeppe Bundsgaard attempts to integrate the competence approach of DeSeCo with the *Didaktik* tradition of Klafki (1998) in his dissertation ‘*A contribution to the subject-related ICT didactics of Danish*’ (Bundsgaard 2005, my translation), arguing that the working definition of Busch, Horst and Elf (2003), though functionally oriented, retains an inherent problem. More specifically, it defines competencies from the “inside out”, taking the inner logic and pragmatic-historical development of curriculum goals of school subjects as the point of departure. In this sense it redefines the goal of the subject in competence categories, such that it reflects the needs and demands of society and people. This is a well-known strategy for subject-related didactics, Bundsgaard argues (cf. Bundsgaard 2005: 155f.). Nonetheless, the problem is that it may lack authenticity. Metaphorically speaking, each school subject becomes a self-contained bubble. The goals – and more broadly speaking, the rationale – of the school subjects and schooling in general do not seem appropriate to the demands and realities of contemporary life.

Alternatively, one could work from the outside in, and define the competencies of a school-subject, such as “Danish” (on a lower level within “Danish”, the competence demands of ICT, or media pedagogy), using a general curriculum (or, in German, *allgemeine Didaktik*) strategy. As Bundsgaard sees it, DeSeCo suggests the latter strategy asking, first and foremost, what *key competencies*⁵⁶ life requires. In extension, it encourages local contexts to respond to these key competencies, setting up more concrete competence goals. This strategy implies that key

⁵⁶ This is, indeed, indicated in the title of the final report.

competencies have to be adapted and translated to a number of educational contexts such as the organisation. Furthermore, it requires a reconfiguration of educational systems with their range of school-subjects and related goals. As one can imagine this could lead to a massive reconfiguration of the educational system, given for example that the goals of school-subjects, in many countries (including Denmark), are not systematically formulated in, nor practiced according to competence goals.

The problem raised by Bundsgaard in fact constitutes a dilemma: if one strategy is chosen, the other is immediately ruled out. Bundsgaard partially acknowledges the strategy of subject-related didactics and the potential involved in integrating a functional understanding of competence from the inside out. Indeed, the approach is characterised as a pragmatic strategy. However, it is rejected because of qualms regarding the inherent conservatism of school subjects. Instead, the alternative strategy is taken up, which could be characterised as a radical or speculative, top-down, from-macro-to-micro-approach. One cannot help but object that this appears paradoxical considering the dissertation (ibid) constitutes an instance of action research in terms of methodology, containing little qualitative data to substantiate his position.

For this reason Bundsgaard's critique seems a *non sequitur*. The argument is too optimistic regarding top-down educational reform and too sceptical about the dynamics of school subjects, hence not acknowledging the power of local school culture. Considering research on educational reform (Randi & Corno 1997; and in a Danish context Borgnakke 1996), we can conclude that school subjects and their curriculum goals change first and foremost due to intervention by agents within the social system of the school subject itself. 'Agent' refers first and foremost to teachers and students in a local meso-context and, secondly, teacher and student unions (e.g. Dansk lærerforeningen in Denmark or NATE in England), policy makers and theorists on a macro level. Also, one can mention opinion makers at different levels, who are interested in developing the school subject according to demands of society and people, while being sensitive to the historical rationale and continuity of the school subject.

When media education theorists such as David Buckingham and Julian Sefton-Green (1996), raise the issue of the practice of "English" and media education, they do so from an action research-oriented position. Indeed, their claim carries authority since they are both former and/or active teachers of the school subjects. They do not argue for a romantic reconciliation of practice and theory or between policy and theory, but rather seek to exercise what they term theoretically informed yet empirically grounded approaches to the potential change of practice. They are very

well aware of the limited impact of their research and that intervention at the macro-level of politics and dominant discourses are necessary in order to establish lasting changes. However, they are aware of lacking impact from educational reforms, when local contexts and interests have not been taken into account.

The reception and adaptation of the working definition for subject-related competence (Busch et al. 2004), reflects the complex dialectics of change within the educational system and, more specifically, the rethinking of school subjects in their adapting to competence thinking. Although the project leading up to the definition was funded by the Danish Ministry of Education, as were four other previous reports,⁵⁷ this theoretically developed approach was, not surprisingly, only partly adapted to concrete curriculum plans by policy-makers and administrators in the bill regarding reform of upper-secondary education, eventually adopted in Parliament in 2003 (UVM 2003b). Some elements of the competence approach were reflected in the working definition (and in several other books and articles which might have inspired the work). For instance, all curricula plans for school subjects in the upper-secondary system now contain the expression: “Eleven skal kunne...”, or “The pupil must be able to...” This reflects a functional approach to competence, being rooted in the curriculum and not didactical tradition. Obviously, we should consider critically (see the empirical analysis) whether this formulation will be read and assessed instrumentally, leading to a practice where the teacher simply focuses on and valorises measurable abilities. On the other hand it could lead to a holistic demand-oriented teaching practice, which can only be assessed through inference, as the DeSeCo report underlines. Echoing Bereiter & Scardamalia (1993) it is stated that:

Whenever judgments are made about competence (e.g., in the case of assessments), it is therefore not a matter of finding out whether an individual does or does not possess a particular competence or component, but rather of determining where along the continuum from low to high an individual’s performance falls. (Rychen & Salganik 2003: 49)

In this sense, DeSeCo rejects any kind of simple evidence-based approach to competence teaching, but also teaching and learning in general.

Anticipating the empirical analysis to come, it can be said that the teachers who collaborated in this intervention programme knew the ‘Future’-reports (cf. footnote 57) and the approach to

⁵⁷ *The Future of Danish* (UVM 2003c), *The Future of Foreign Languages* (UVM 2003d), *The Future of Science* (UVM 2003e), and *Competencies and Math Learning* (UVM 2002) [My translation]

competence given in the reform when first approached. A large degree of uncertainty and scepticism was expressed, however, regarding an interpretation and adaptation of these new intentions. One pragmatic reason being, not surprisingly, that they had not been given time to read and reflect on the new ideas. As pointed out earlier, we know from educational research on curriculum reform and from sociological and philosophical research, that no new policy-driven theory, such as an educational theory of competence, can be *implemented*. The term is simply not adequate for what happens in the process of educational change set forth by reform. What happens is *adaptation*, reinterpretation and actualisation from a local perspective. For this very reason a certain amount of pedagogical and didactic conservatism in practice, is unavoidable. Local agents, particularly teachers, control the process of change. It follows from this that we should begin considering how this central agent, the “Danish” teacher of the specific school and “Danish”, or more generally MTE/StLE – is approached in advance. A subject-related competence definition that takes this into account is likely to be adaptable.

4.3. What is MTE/StLE?

For decades the abbreviation MTE has been widely conceived as a neutral term referring to mother tongue education. However, in contemporary culture and discourse the meaning of this term has slowly begun to change, so as even to become problematic. Some find MTE to be a misleading and perhaps even marginalizing category. For this reason Standard Language Education (StLE) is proposed as an alternative – a terminological shift that has occurred even in international research institutions. On the other hand, the International Mother tongue Education Network (IMEN) and the International Association for the Improvement of Mother Tongue Education (IAIMTE) suggest, by implication that MTE is a valid term and that research can be conducted on its basis. Once again, we face the problem of translation. Let us attempt to overcome the problems and history of MTE in pursuit of a better alternative that may integrate multimodal media pedagogy.

4.3.1. Problems of terminology in Denmark and elsewhere

In Denmark, MTE has been an institutionalised and rather neutral abbreviation for mother tongue education. It has even been viewed as a stable description for teaching the dominant first language of the country in a school-subject, as Denmark has shifted to become increasingly multi-cultural and multi-lingual. The same may be said of language at primary, secondary and tertiary educational levels. Hence, in Denmark, most Danes speak “Dansk” or “Danish” and Denmark has had a school subject named “Dansk” for more than 150 years. All citizens must attend this school subject for at

least nine years. However, this homogeneous description of the school subject is, in fact, simplistic and reductive. The practices and events of “Dansk” include far more than teaching Danish language and conceptions of Danish culture. In one sense language *is* taught, improving student competencies to read, write, talk and listen to Danish. Other subject matters and associated competencies, such as literature, media, and communication are also taught however.

In a sense, “Dansk” is a mess, as pointed out in the first dissertation regarding the *didactics* of this subject (Mortensen 1979: 13). It is a collection of practices and disciplines based on knowledge developed within the humanities in the 19th and 20th century. The subject retains a historically determined complexity, which seems overwhelming and difficult to understand and navigate for many students and teachers. The present author has attempted to sum up the main disciplinary positions in “Danish” (Elf 2006a). Six positions were located that frame the subject and were found to be active in everyday classroom learning resources. These positions were: *existential, society-related, psychological, textual, culture-oriented, and cognitive*. No wonder that a recent quantitative study found a majority of Danish students in upper-secondary school claiming to be confused about the goal and contents of “Dansk”, and that this confusion affected their ability to learn the subject (Beck & Gottlieb 2002).

During the last 20-30 years MTE has, in general, become increasingly complex due to migration and other phenomena related to globalisation. Thus, in Danish educational discourse and in political and public debate, MTE has referred to mother tongue education for so-called ‘ethnic Danes’, while ‘new Danes’ – often children of refugees – were acknowledged in their need to speak more than the official, standard ‘tongue’. “Danish as second language”, as the school subject has since been termed, is a fast-developing school subject, which affects the traditional use of the term MTE and the practice it refers to (cf. UVM 2003a). Hence, in Nordic second language research contexts, the concept of MTE is now used predominantly, for the ethnic-native language education practice, say Turkish as a language.

In a broader international perspective the tendency is the same. Let me permit a personal anecdote from an international conference in London regarding *Digital Generations* in 2003. Media scholars dominated this conference. During an informal conversation with a female media scholar from Australia it was found that researching the potential integration of “media pedagogy and mother tongue education” awoke a response of suspicion – even anger. This researcher did not conceive of MTE as a neutral term. As explained in the article: “*English as Mother Tongue in Australia*” (Sawyer 2006), the term is indeed used in research and curricular discourse. Thus, in this

woman's childhood she must have been taught "English". However, Australia is a country with many ethnic groups, among which are aboriginals and many immigrant groups, whose mother tongue have been under a process of marginalisation, which has created an arena for cultural conflict. This may have affected her understanding of the term "mother tongue education".⁵⁸

Generally, the term is moving towards the periphery of international research issues. Alternative concepts are used, such as 'first langue teaching' (abbr. L1), 'standard language education' (abbr. StLE; being the institutionalised term within the AILA organisation, cf. AILA 2007), 'the language arts' (the concept used in the US; cf. Flood et al. 2003) or 'language as subject' (abbr. LS, a term met in a current Council of Europe initiative (COE 2006)). However, the critical question is whether these alternative concepts solve the problem of transparency and ontology: Are they precise and representative in regard to the object of reference? Do they refer to previous, actual or potential practices in classrooms?

4.3.2. A brief history of MTE

As indicated earlier, the invention of the Danish and Nordic mother tongue school subjects took place in the romantic epoch of the mid- and second half of the 19th century (Mortensen 1979, Herrlitz et al. 2007]). Instead of teaching Latin and classics, the dominant language spoken and produced by Danes was increasingly construed as the discourse of national language and literature to be taught in schools using specific methods that would serve the romantic-modern rationale of nationhood. A famous quote by Professor V. Andersen from the University of Copenhagen, in 1912 demonstrates this quite clearly:

...we must forward the school subject of Danish language and literature as the major subject from the humanities in the erudite school – as the subject within the boundaries of our language and tribe that is best qualified to solve the most important task of any humanist school: to bring *Bildung* to people. (Andersen 1912, my translation)⁵⁹

This normative approach to MTE/StLE represents an existential, nationally oriented, mono-cultural and monomodal rationale within the didactics of "Danish". One could claim that it still represents a strong rationale among some researchers and teachers; I even dare to claim, as a hypothesis backed up by international, comparative research (van de Ven 2005, Sawyer & van de Ven 2006, Herrlitz

⁵⁸ This problem also exists in Denmark. Gunna Funder Hansen, among others, has clarified this, cf. e.g. Funder Hansen 2002.

⁵⁹ Original quote in Danish: "Vi skal hævde lærefaget dansk sprog og litteratur som den danske lærde skoles humane hovedfag – som det fag, der indenfor vort sprogs og stammes grænser er bedst egnet til at løse enhver humanistisk skoles vigtigste opgave: at forme mennesker." Cit.en. Henriksen 1978: 7.

& van de Ven 2007, Ongstad 2005, among others), that if we scrutinize the genesis of mother tongue school subjects in many Western, modern societies, the history and rationale will have a common denominator: Nation, tribe and identity formation are intertwined in a romantic, individually-oriented, and yet nationalizing construction of the mother tongue subject and its agents.

Current policy developments in the curriculum of MTE/StLE in many countries, including Denmark, such as the *de facto* implementation of a literary canon in the school subject of "Danish" (UVM 2004), and the focus on teaching and testing the basics of *literacy* only seems to reinforce this ideology. As leading mother tongue education researcher Sigmund Ongstad (2005) has put it, the current development in MTE/StLE, paradoxically reflects an increasingly simplistic approach that does not meet an increasingly complex world in terms of linguistic changes.

MTE/StLE researcher Piet-Hein van de Ven, who has made several historical and comparative studies, speaks of *four competing paradigms*, which have developed over the last 150 years. van de Ven presented this hypothesis at the AILA meeting in 2005 referring solely to the context of the Netherlands. Later, he has synthesized and generalized his proposal in collaboration with Wayne Sawyer, speaking broadly about four paradigms of mother tongue education across national context, which they term: an academic paradigm, a developmental paradigm, a communicative paradigm, a utilitarian paradigm (Sawyer & van de Ven 2006). Their proposal has been mapped in table 4.2.1. Their argument is that the field of MTE can now "...be accurately characterized as polyparadigmatic..." (Sawyer & van de Ven 2006: 5). The four paradigms are found in contemporary MTE/StLE discourse and practice across the world, though with a dominance of utilitarian thinking, which evolved in late 20th century.

Their map of paradigms is a helpful tool for describing the ideological and logonomic complexity of MTE/StLE. On the other hand, one must be sceptical – as are van de Ven and Sawyer – whether the framework grasps all aspects of the historical and contemporary practice of MTE/StLE considering fundamental differences among countries.⁶⁰ We should at least be sceptical about some of the categorizations and demarcation lines constructed within the table. We should, for example, consider whether the distinction between developmental, utilitarian and communicative paradigms is valid. The communicative paradigm certainly captures vital aspects of current theories regarding the integration of media education with MTE/StLE, and meets aspects of the integrated multimodal media competence teaching being developed here. On the other hand, it

⁶⁰ As stressed by Hahn 1999, there are great differences in conceptions of nationhood, statehood and citizenship in various national contexts, which may effect conceptions of school subjects.

does not acknowledge the use of ‘competence’, at least not if this concept is to be identified with ‘utilitarianism’, instead of with the developmental paradigm, as is often seen. Indeed, this demonstrates that the paradigmatic map is not fully coherent, at least not in the theoretical approach of the present dissertation. We should not expect that any MTE/StLE subject to truly represent any of the paradigms, as is always the case with ideal types. Nonetheless, the empirical analyses will demonstrate that this map is indeed interesting to apply when characterizing professional identities and practices among the four teachers collaborated with and observed in the intervention study.

In a way, Sawyer and van de Ven’s map is too complex. In the macro discourse of MTE/StLE, there is a strong tendency to consider MTE/StLE simply about *language and literature*. This is a dominating “dyad” – as IMEN has expressed it (IMEN 2006: no paging) – of notions that frame the subject-practice and at the same time constrains it. Although many researchers are critical of this, they reproduce and/or support it as they gather international MTE/StLE research frameworks and networks, often with a historical debt to linguistic research, such as AILA, PISA, and the Council of Europe (with its so-called Language Policy Division). These (often politically driven) external design grammars reflect the internal design grammar of MTE/StLE as a disciplinary research field, hence constructing the dichotomies of productive and counter-productive, inclusive and exclusive language-literature when representing the school subject. Little discursive space is left for innovative thought regarding the school subject as it focuses on media and technology. Intentions of making fundamental interventions into the rationale of the subject, such as in this study, where the language-literature dyad is replaced by a mode-medium dyad, are invited and yet limited because they indirectly question a solid ideology and logonomic system.

It is not reasonable to suppose that AILA and the Council of Europe consciously support exclusive and/or nation building tendencies in MTE/StLE – quite the contrary. However, these institutions end up doing exactly this, due to the conceptual frameworks they take over from research history and school tradition.

Time / Century	Paradigm and tradition	Legitimacy: Why?	Topics: What?	Teaching-learning: How?	Knowledge regime	Agents
19 th	Academic paradigm; Latin tradition	Cultural heritage, nation building, disciplined moral socialisation	Written language standards: Grammar and High literature.	Monologic: imitation, reproduction, memorisation, transmission	Knowledge as result: Stable, objective; e.g. canon	Government, academic teachers
First half of 20 th	Developmental paradigm; tradition of <i>Reformpädagogik</i>	Personal development, climbing social scale by individual merits	Language in use (written and spoken): Children's language, authentic language, youth books, creative writing	Monologic + dialogic: Exploratory, creative, experience based, learning by doing.	Knowledge as process and result: subjective and objective; new canons, e.g. of youth books; cultural heritage.	Teachers, some academicians, empirical scientists.
Sec. half of 20 th	Communicative paradigm; tradition of linguistic turn.	Personal development and emancipation; social equality and meritocratic	Whole language teaching: Skills and reflection related to language in use and social repertoire of texts; broad text offer: media, drama, movies, pop texts	Relatively dialogic: Room to student experience, knowledge, and negotiations of the relevance of the subject for themselves and society.	Knowledge as process and result: subjective and objective; not necessarily textbook oriented.	Teachers, didacticians, teacher educators.
End of 20 th	Utilitarian paradigm; technical-modern tradition	Future societal development, especially economic progress; meritocratic	Transactional language abilities: reading, writing e.g. referential texts; skills training	Relatively monologic: Disciplinary, normative, standards; national heritage transmitted.	Knowledge as result: Relatively closed and objective; canon taught yet discussed.	Policy makers, psychometric researchers, market representatives.

Table 4.3.2.1. Competing paradigms of MTE/StLE. Keywords, extracted and arranged in a table, from van de Ven 2005 and Sawyer & van de Ven 2006.

4.3.3. *Beyond the dyadic split: MTE/StLE approximating media and semiotics*

The general result of the dominant language-literature rationale of MTE/StLE is that new critical prospects have difficulties being included on a *permanent* basis in the social system of MTE/StLE. In the long run, critical and innovative research(ers) positioned within or on the edge of MTE/StLE studies (Buckingham, Gee, Drotner, to mention a few), become marginalised. Of course, interventions can and have been made, and are reported back to the field, but in general another *regime* rules. This is not only the case of MTE/StLE related curriculum/didactic studies; educational interventions, in general, as pointed out by Warschauer (2005), lack the *power* to create permanent *change*. We should bear this in mind, as we consider the impact of this intervention study.

In this light, some MTE/StLE researchers, such as Gee referring to an American context (2005), become rather pessimistic in terms of developing the subject in innovative and authentic ways. Gee sees macro structures such as fast capitalism, a new work order and neo-conservatives demanding only 'basic skills' from MTE/StLE as powerful parameters. In a more optimistic tone, researchers gathered in IMEN have attempted to tackle the problem of authentic re-conceptualisation as a challenging prospect, balancing pragmatically between the historical rationale and the challenges of contemporary society. As it is put on the IMEN homepage in defining its research programme (RP):

The RP aims at keeping a balance between research on language and literature (as part of MTE), and cater for research on other aspects of MTE that do not fit this dyadic split, such as media, semiotics, text, ICT, drama, StLE as L2 education etc. (IMEN 2006: no paging)

Sigmund Ongstad, partly responsible for this statement being a member of IMEN and also a former convener of the mother tongue research network within AILA, has studied the demarcation lines of MTE/StLE repeatedly, both in a local, Norwegian context, and in an international comparative perspective (cf. e.g. Ongstad 1997, Ongstad 2004). In general, he addresses the conceptualisation of MTE/StLE as follows: The question, what is MTE? is the answer! The point is that an essentializing and naturalizing conception of MTE/StLE is problematic and has to be questioned. We cannot and probably should not give a positive, stable definition of *what* MTE/StLE is across the world, and how it should be taught; that is, defining, in absolute terms, its content and method. Instead, we should stress critical, and epistemological, reflection on the matter, acknowledging the social and historical construction of the research field and practice.

In this way, Ongstad frames the discussion regarding MTE/StLE in a manner similar to Robert Morgan (1998), who speaks from a Canadian context on media education moving beyond radical

pedagogy and towards integration with MTE/StLE. Morgan is rather critical about this development, and presents a criticism, which is relevant to this study of teaching Andersen. For example, he offers empirical evidence of how school leaders in Canada attempt to comply with public discourse on canonical teaching, encouraging media education teachers to teach Shakespeare using a movie simply as an appetizer.⁶¹ The teachers spoken to by Morgan are rather tired of such suggestions and the dominance of literary classics in general – even within media education. Analogically, one could ask: does this study simply run the errand of conservative politicians advocating for the use of Andersen in a media pedagogical framework, such that it becomes reduced to being a teaser for literary pedagogy? It will become evident in Part III that this is not the case. Morgan argues (as did Buckingham a few years earlier in his analysis of “English” in England) that fundamentally different conceptions exist in Media education and MTE regarding crucial notions such as *text*, *culture*, and the *role of the student*. His proposal for the practice of media education is – obviously echoing Dewey’s concept of ‘knowing’ – as follows:

I have argued here for the adoption of concepts like utterance, performativity and the quotidian in order to reclaim what most students already know: that media in everyday life are experienced as processes of making and remaking rather than merely as 'texts' for decipherment. Going beyond textualism and radical critique means shifting our attention to the *verbing* of media experience instead of the *noun* of text, to active subjects-in-culture rather than inert meanings-in-texts. It also suggests that we should retire current professional self-definitions and romantic narratives that locate media teachers as heroic warriors rescuing Critical Reason, Authentic Expression and Truth from a debased Mass Media (Morgan 1998: 128)

This specific proposal for a marriage between media education and MTE/StLE is striking in the way it uses well known concepts (such as ‘utterance’, ‘performativity’, ‘the quotidian’) from the communicative and semiotic paradigms. What is also interesting in regard to the curriculum research level is its urge to reconsider the assumptions and demarcation lines of both media education and MTE/StLE. Both Morgan and Ongstad, it seems, would argue that MTE – like media education and related topics, including semiotics – are contestable fields of research and teaching practice. However, these approaches are also seen as *approximating* each other. This idea is backed up by other researchers interested in the practice of MTE, as approached from an internal or external perspective, some being researchers in semiotics, others being from a multimodal tradition, learning theorists, and others seeking an inter-disciplinary approach.

⁶¹ Cf. the section “Not Shakespeare: Issues of Access and Constituency”, Morgan 1998: 109f.

To exemplify we may approach the volume where Morgan's article is cited. Here we find Bill Green on the pursuit of what he terms 'teaching for difference'. Being inspired mainly by semiotics and discourse theory, teaching for difference is a principle which establishes "...a particular relationship between discourse and subjectivity – as a matter of taking up and working with particular subject-positions as these are made available in and through discursive practice and struggle." (Green 1998: 179). This position comes close to Danish researcher Ellen Krogh's position in terms of theorising the discourses of "Danish" (Krogh 2003, cf. 4.3.4, p. 143f.). Green argues that changes in technology and media provoke "...deep effects..." in discursive practice and that:

...an important shift is underway from canonic forms and orders of knowledge, culture and textuality to what can be called the realm of the techno-popular. In terms of English teaching, this means shifting from literature to media, and hence from literary culture to popular culture as the focus for curriculum practice. (Green Op. cit.: 180)

If we apply these formulations to H.C. Andersen, whose work is indeed considered canonical both in Denmark and by international literary experts (in a plenary speech from 2005 Harold Bloom considered that Andersen to be part of his (in)famous Western Canon, Bloom 1994), we reach the designed set-up of the experiments made in my intervention study. Broadly speaking they focus on Andersen's fairytales as popular techno-culture, not canonized literature. Green acknowledges the future existence of MTE in the curriculum, but reconfigures the school subject in fundamental ways. As he eloquently puts it, this would affect both its "study objects" (Op. cit.: 179) (the conceptual shift from literature to media) and its "study subjects" (Ibid.) (the individual and collaborative acts of teachers and students). In his view, teaching for difference is an *excessive* practice for all agents at the meso-level of education, which includes leaders. Also, at the macro-level this applies: "...with regard to curriculum and institutional protocols and frames, and the formal logics of timetabling and disciplinarity." (Op. cit.: 190).

Being a professor of English at The Institute of Education (University of London), Günther Kress has addressed the content and methods of MTE in an attempt to overcome the dyadic divisions (Kress 1995, Kress 2003, Kress et al. 2005); it is relevant to consider this approach, among other reasons because it has inspired this study, both methodologically and theoretically. One of the most condensed reflections of MTE/StLE are formulated in *Writing the Future: English and the Making of a Culture of Innovation* (1995), which contains ideas strikingly similar to Green. As suggested in the subtitle, Kress argues that all reflections on "English" or other school subjects – be

it theory-making or curriculum plans or public debates or classroom practice – are always oriented towards a future that we cannot know, but must visualise. What is imperative for Kress is not to suggest a MTE subject reflecting the demands of the 19th century, as he criticizes the British National Curriculum for doing. Instead, it should navigate the prospects of the 21st century acknowledging, among other things, the development of multimodal reality in a number of public and private domains. In *Writing the Future*, written for a teacher organisation called NATE, he quickly acknowledges the reality of actual classroom practice, including its massive constraints. On the other hand, he argues that theorist such as himself have to be, not only critical of current developments, but should be able to: "...shift to the design of possible alternatives..." (Kress 1995: 5, my emphasis), contesting the practice of teachers through theoretical and empirical "intervention" (Ibid.). This would reflect the requirements that beset future society. In this sense, Kress takes a critical-constructive research position, which is very close to that of Klafki (1977, 1998), the work of Buckingham & Sefton-Green (1995, 1996) and, of course, the New London Group (2000).

4.3.4. "Didactization" as a research goal for subject-related studies

As Ongstad (2005) argues, reflecting on universal theories of MTE/StLE, the question of what MTE is, is precisely what is at stake, and should be discussed critically and constructively, not the least in order to offer some discursive resistance towards the growing simplicity of global political and public discourse.

Ongstad offers the theoretical concept of *didactization* for this reflexive discussion on any school subject. This has its roots in Nordic-German educational theory. Regardless of their methodology and specific subject(s) of interest, subject-related studies are practices of *didactization*.

Didactization is reflection *on* school subjects: "Subject-related didactics is not the subject itself, but anything *about* the subject that bears meaning on the development and work with it" (Ongstad 2004: 20, my translation). This definition offers a wider approach towards MTE/StLE didactics than is commonly practiced. Generally, curriculum or subject-related studies refer to the triadic model of *what*, *why*, and *how*. The triadic model we saw with, for example, Hopmann was derived from Plato's dialogue *Menon*, and highlights the relationship between *content*, *teacher* and *student*. For Ongstad, however, these two models are but two possible perspectives on the concept of 'subjects'. He suggests, quite radically, that *didactization* is exercised not only by policy-makers and educational researchers, but also – perhaps even first and foremost – in classroom practice, by teachers and students. Indeed, this is reminiscent of Dewey's functional and holistically oriented

pragmatism. The conclusion is therefore that if researchers look for teacher and student didactization in practice, they will find it.

If we consider the research that has been conducted on MTE/StLE, it becomes apparent that a paradigmatic shift has occurred over the last 20-30 years, at least in some European countries. As Herrlitz and van der Ven (2007) make clear, MTE/StLE research related to IMEN and other networks, has detached itself from a narrow focus on the ‘hows’ of subject-related teaching, thus, the ‘whats’ and ‘whys’ that result in curriculum justification and foundation have come centre stage. This acknowledges that research is not value-free, but raises questions: “...inseparably connected with the conflict regarding dominant and alternative norms, ideologies and cultures.”(Herrlitz & van der Ven 2007: 18) In Nordic countries, a classroom-based approach to MTE/StLE curriculum and didactic studies has been pursued (cf. e.g. doctoral theses by Smidt 1989, Malmgren 1992, Hetmar 1996, Ingerslev 2002, Bundsgaard 2005, Henningsen 2005, Kaspersen 2005). Some research is more theoretically oriented, while insisting on the ‘whats’ and ‘whys’ discussion and international theory-making, as in Ellen Kroghs dissertation from 2003. My own study, as any educational intervention, attempts to strike a balance between theory and empirical classroom-based analysis creating a synergy between the two.

Krogh further develops the concept of subject-related didactics in her analysis of didactic discourses of “Danish” in the dissertation *Et fag I moderniteten* (Krogh 2003). She sums up her general finding on the analysis of subjects in the following way:

I have argued the case for conceiving disciplinary didactics [fagdidaktikken] as theoretical praxis. By this is meant that disciplinary didactics constructs its field as a double movement between view and object. It is, in reference to Lars-Henrik Schmidt, defined by its research ethos rather than its theory construction (...). As scientific disciplining, disciplinary didactics is therefore sensitive towards historical, cultural and institutional contingencies, the same applies, of course, to meta-reflections on disciplinary didactics like the present [dissertation]. (Krogh 2003: 45, my translation and adding)

In later articles, Krogh has characterized such an approach as didactization with reference to Ongstad (cf. e.g. Krogh 2006, Krogh 2007b). One of her specific findings regarding “Danish” is that the two dominating discourses – or “fixation pictures” (Krogh 2003: 108ff.), as she metaphorically puts it – of “Danish” in the upper-secondary school system, are not surprisingly

language and literature.⁶² However, this may very well change due to processes of didactization, which she calls for both in a Danish and international context. In order to make didactization operative and rethink the dynamics of knowledge production for school-subjects in general, and particularly MTE/StLE in the Danish upper-secondary system, she argues that we should conceptualise subjects as dynamic triadic entities, containing the following components:

- *Subject-related culture* (the genre culture of the subject),
- *Knowledge forms* (its ritualised manner of producing knowledge)
- *Rhetorical profile* (curriculum plans and subject-related debate).

From the perspective of the social semiotic framework of the present study, this is an alternative way of conceptualising what has been termed the ideological complexes and logonomic systems of a social practice, such as the practice of a school subject. Krogh's model helps rethink and rephrase the rationale of MTE/StLE in critical-constructive ways. It inspired the design of this study, and it informs the analyses of the intervention in Part III.

4.4. What is multimodal media competence, and semiocy, within MTE?

The goal of the theoretical exercise in the previous chapter and the sections above has been to pursue a new theory of what is traditionally referred to as: "media education within MTE". The intention in unravelling the concept media literacy has been to describe a potential, designable meso-domain within a school subject:

1. It must take into account the fact that this theoretical enterprise requires a conception of school subjects as totalities.
2. It requires a conception of other subjects across the curriculum related to this subject, such as the vocational school subject "Media education" found in many upper-secondary school systems along side MTE/StLE.

It was proposed that the rationale of media pedagogy within MTE/StLE was 'multimodal media competence', and that the rationale of MTE/StLE was semiocy. Having elaborated the basic meaning of these concepts in order to construct a model that describes the dynamics and relations of the concept, we must now subsume them within a common framework. This will be done tentatively, through modelling, defining and explaining.

⁶² This conclusion is based on a detailed analysis of all available research of the didactics of "Danish" for the last decade, which hence offers a full over-view of Danish research at that time. Cf. Krogh 2003: 74ff.

4.4.1. *The model*

Summing up the theoretical findings, which have led to the model, it is worth reviewing the concept of competence-oriented actions envisioned. It places the teacher in a central position, requiring reflexive, subject-related, didactic thought on how to initiate and carry through the student processes regarding knowledge production. The teacher should be able to organise an inquiry-based, situated, instructive, critical, and transformative activity so as to ensure that the student accentuates productive meaning-making and not mere reproduction of fragmented knowledge. The functional, activity-oriented aspect is therefore stressed. On the other hand, one must remember that knowledge or "content" plays an indispensable role in the process of teaching multimodal media competence.

The resources that can be used in multimodal media pedagogy within MTE/StLE are, in principle, any constellations of modes and media. However, in the selection of modes and media, the teacher should consider what kinds of resources are found appropriate to the design. This is an instance of an inquiry-based activity that relates to a chosen "content" and topic. An example of such content could be Hans Christian Andersen fairytales, seen from a multimodal media pedagogical standpoint. It follows that not all modes/media are continuously relevant. They must reflect interests and demands at several levels. The resources made available should therefore be exercises of complexity that will encourage and stimulate the classroom and individual student in the *Bildung* process. This will at the same time meet the demands of the curriculum in terms of formal teaching. Those two ends might not meet, making teaching in formal schooling an ambiguous and conflicted enterprise. Having made these preliminary considerations the proposal for a model comes to take the following shape:

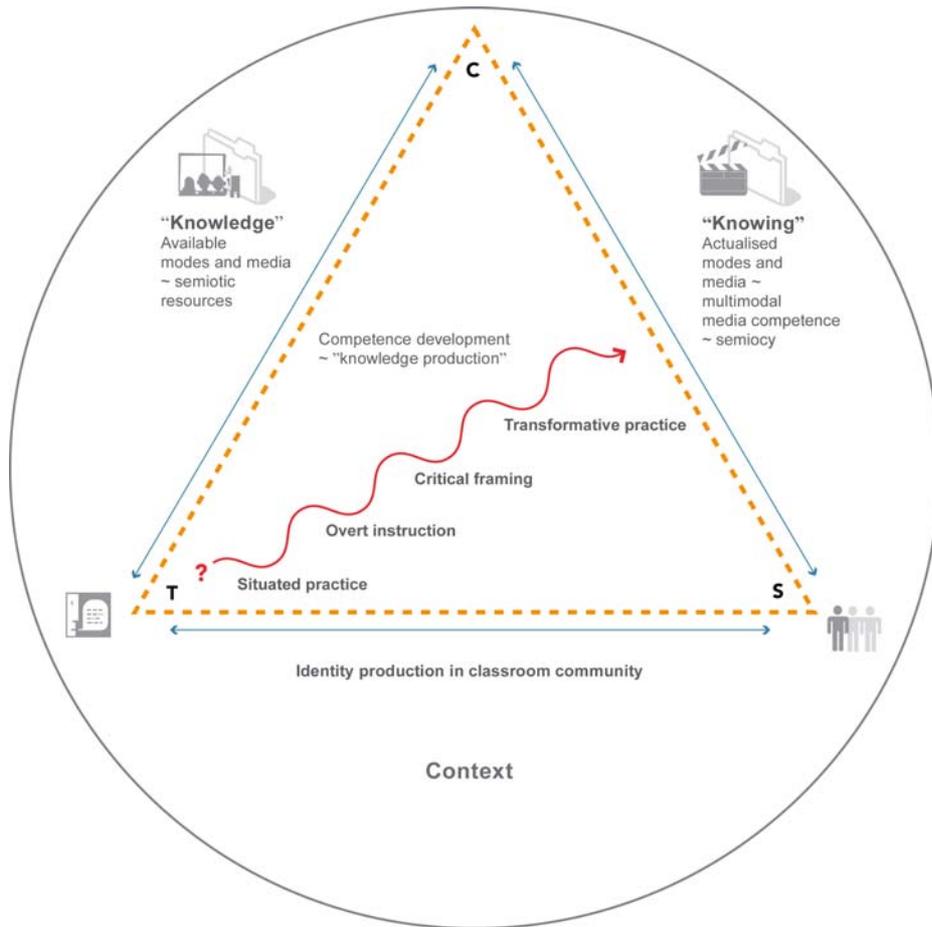


Fig. 4.4.1.1. A model of multimodal media pedagogy and semiocyt in mother tongue education/standard language education. Sign-codes: “C” stands for content, “T” for teacher, “S” for student, “?” for subject-related question or challenge presented to students.

Note, among other things, the portfolios on each side, which signal that any learning resource always contains of a variety of Available Designs. This includes, as an example, a film being watched in class. Correspondingly, on the right-hand side, the students produce a portfolio containing a variety of products, which are “the Redesigned” which may include a film or more modestly, as in experiment 4, pre-production notes for a film and reflections on the process of work. Note also the arrows surrounding the triangle running both ways. They signal that content (C) is not a completely stable entity, rather it is constructed by the teacher. Content is embedded in context, in which we find agents such as students (S) found in class, whose identities (Gee 2001) co-produces, in discursive processes of negotiation, the conception of content, which the teacher (T) draws on when preparing a specific curriculum design, like in the case of teaching Andersen in a process of four experiments. Obviously, other agents of content influence the teacher’s choices also. Examples are academic research and knowledge, teacher training, the curriculum plan of the MTE/StLE

subject in a specific country and learning resources available at school. These are affected by, among other things, economy, physical and other constraints and possibilities at school.

The dynamics of knowledge production is thought in a way that progressively enables student acts of understanding, which is represented by the oscillating line in the model – it shapes meaning with and about constellations of modes and media. Modes and media are clustered in what Gee (2003) terms semiotic domains, which students address and actualise due to local, personal and pragmatic perspectives, assisted by their teacher. Different strategies can be conceptualised and adapted when organising the teaching process, depending on the class and the students. Instead of using a Dewey-inspired ‘problem-solving’ strategy or Thavenius’ ‘functionalisation model’ (1995), a four-staged model introduced by the New London Group (2000) is suggested instead. However, we should remind ourselves that researchers applying this model in collaboration with teachers have experienced problems. In extension, the empirical analysis should be critical about this strategy.

In any process of multimodal media pedagogy we should install the demand of a product. Such a demand may lead, as termed on the right hand side, to ‘actualised modes and media’. Seen from an evaluative point of view, this product gives a hint of what is often referred to as “the outcome” of the teaching-learning process. However, outcomes can only be inferred indirectly, as DeSeCo (Rychen & Saldanik 2003) stresses. An outcome can never be measured in instrumental ways. Outcomes are considered to be signs – or ‘Redesigns’ – of available resources that students produce knowledge from in the process of learning, hence demonstrating multimodal media competence related to the specific inquiry with more or less expertise (Bereiter & Scardamalia 1993). It follows from this that the proposal for a definition of multimodal media competence within MTE/StLE is as follows:

Multimodal media competence within MTE/StLE (e.g. “Danish”) is a knowledge-based/insightful ability to act, in expedient, expert-like ways on demands related to multimodal media within the constrained formal school domain of MTE/StLE (e.g. “Danish”).

From a didactic research perspective, student outcomes are interesting to analyse, as Buckingham and Sefton-Green point out, because they shed light on:

- How students interpret media related inquiries and domains, hence contributing to reflection of the actual Available Designs.
- Potential knowledge production within the school subject.

- How teachers reflect on student outcomes, and the knowledge production as a whole (which we term Designing), because they, too, produce an interpretation, from a specific perspective, of the school subject through a specific locally situated experiment.
- Production regimes, genre regimes, reception regimes and knowledge regimes of the school subject are revealed giving insight about the logonomic structure and ideological complexes of the subject.

The production of such insight is what we in general term *didactization* (Ongstad 2004).

4.4.2. *Semiocy and MTE/StLE*

The irony of unravelling the theory of media literacy has been that it opens up a general theory of meaning-making. This transgresses traditional disciplinary borders between media pedagogy, “mono-modal” reading and writing pedagogy, literary pedagogy, communication pedagogy, and other kinds of pedagogies. Traditional disciplinary and curricular boundaries do not seem to make as much sense as they did previously. This has to do with cultural and technological developments that produce new heterogeneous texts and cultures of use. The literature/language dyad found in the dominant rationale of MTE/StLE seems reductive because it reflects a theory of semiotics inappropriate to contemporary semiotic practice. In looking for a more adequate, operative alternative it was replaced, as indicated in the model, by a modes/media dyad that allows us to speak of and situate texts in the broadest sense.

Theorists from the fields of media education, media pedagogy and MTE/StLE point at the necessity of acknowledging student abilities (e.g. Buckingham 2003, Drotner 2002); some emphasise competence, others literacy/literacies to produce meaning, in a general semiotic sense. This raises the question whether multimodal media competence could be condensed into the notion of semiotic competence or simply *semiocy*. As explained in the introduction (chapter 1.2, p. 4), *semiocy*, as a concept, is not new, but was presented and vaguely defined as ‘extended literacy’ in a report regarding the future of Danish (UVM 2003c). The rethinking of media education towards multimodal media pedagogy implies a movement towards *semiocy*. Complex semiotic resources are present in culture (Kress & van Leeuwen 2001), so why not address them fully in teaching and learning, using an adequate terminology to describe its rationale?

How should we define this abstract concept: “*semiocy*”? This is a notoriously difficult question. Nonetheless, here is a suggestion:

Semiocy is a person's insightful meaning-making competence to act on the basis of collaborative understanding and knowledge in an expedient, expert-like way upon a situated demand related to semiotic domains and their textual resources.

Semiocy therefore involves a person's competence to handle and further develop all potential semiotic resources available in contemporary society. It is a principle that acknowledges both the collective functional-utilitarian *and* personal-formative need for people to be able to consume and contribute to a full range of semiotic domains and practices in a complex modern culture. Indeed this happens in creative, critical and knowledge-based ways, including in MTE/StLE classrooms all over the world. However, semiocy is the generalized principle of why this should be the case.

One of the advantages of this definition is that it opens up the aspect of working with the full complexity of the meaning-making processes found in texts. These are normally disintegrated in both an institutional and didactical sense. Semiocy, as a concept, refers to a new integrative conception of the 'whats', 'hows' and 'whys' of school subjects concerned with cultural meaning-making. It readdresses the concept of semiotic competence in a way that moves *beyond* the critical semiotics paradigm of the 1970s (as Buckingham, 2003, has convincingly argued) and *beyond* the one-sided functional approach often associated with similar concepts, such as textual competence or communicative competence. The concept intends to move *towards* a post-critical pedagogy of difference in which both the object of study and the student objects are in play (Green 1998).

In informal learning settings, outside school, there is no doubt that children and adolescents develop and practice semiocy in unsystematic ways. Some become extremely competent in many domains, while others become competent in only a few domains. Much attention has been paid in recent years to the so-called digital divide (cf. e.g. Livingstone & Bober 2004, Drotner 2001a). Research has shown that Western societies develop two different groups of media users, *high* users and *low* users, creating a new system of privileged and unprivileged in terms of semiotic competence, or semiocy. In this sense the formal school system has a responsibility to compensate in regard to this difference. Here, the system teaching MTE/StLE – not “Media education” – should play the main role of teaching vital aspects of semiocy. MTE/StLE is a compulsory school subject; “Media education” is not. Therefore, the main power of knowledge production and competence development lies within the former. In MTE/StLE, aspects of complex semiotic society must be addressed *en miniature* with a differentiation of emphasis at various levels. In primary school, much attention should obviously be paid to literacy (reading and writing). However, this should be done with the framework of semiocy in mind, rather than teaching literacy as if writing is encountered

and learnt in monomodal, non-mediated ways. In the interview of a teacher of animation during one of the experiments (cf. chapter 11, p. 347ff.; and A42: Field notes from experiment 4) it was put as follows (I paraphrase): *When children start in school, many of them know how to draw, but the more they develop a student identity, the more they de-learn this competence. Due to schooling, they develop from being multimodally to monomodally competent, which is an absurd waste.*

How the progression of semiocy should be organised, is an open question, which will not be addressed directly. Indirectly, though, examples will be offered of the level of expertise at upper-secondary levels of education. These might be developed as a work in progress, through four experiments addressing Andersen that formed the empirical part of the intervention.

The adaptation of the model at the meso-classroom level is related to, and dependent on, a rethinking of MTE/StLE. This must be done on behalf of, not only teachers and students in class but, agents of the school subject. In other words, multimodal media competence and semiocy concepts should also be reflected in the general curriculum and assessment protocols of MTE/StLE. If these concepts are not discursively generalised at macro levels, any experimentation with the concept – as in this study – is bound not to have any long-lasting and integrative impact. Teaching multimodal media in competence-oriented ways within MTE/StLE should be acknowledged, not only as an acceptable or supplementary, but as a central way of producing knowledge. Students should be enabled to develop knowledge reflecting this rationale that might even go beyond the knowledge regime of MTE/StLE as a subject. This applies to classroom communities and in evaluation procedures, such as national exams, individually and collaboratively. There is no doubt that this would imply a change of the logonomic system and ideology of school subjects. The present dominant rationale seems to be the utilitarian teaching of language and literature from an existential-national(izing) point of view. One of the goals of any kind of subject-related experiment with “Danish” is to revise this rationale of MTE/StLE-related knowledge production.

4.4.3. Semiocy and multimodal media competence

It is necessary to define the difference between semiocy and multimodal media competence if both concepts are to be implemented. In this dissertation, semiocy is understood as the overarching goal and rationale of MTE/StLE. Multimodal media pedagogy, with the rationale of developing multimodal media competence, is embedded in this rationale. Therefore, multimodal media pedagogy is understood as an integrative sub-pedagogy of MTE/StLE that *accentuates* the modes-and-media aspects of meaning-making. It draws on historically gained insights and knowledge from media and multimodal studies, particularly Meyrowitz’s: content, form, function, while at the same

time approaching the knowledge domain in a potentially cross-disciplinary innovative way. As argued, other sub-pedagogies of MTE/StLE – such as literary pedagogy, and writing pedagogy – should be conceptualised in the same integrative way.

Objections or rather evaluations regarding the limitations of the semiocy and multimodal media competence concepts can be made and should be considered. Empirically speaking, evaluations from teachers and students will be included and play an important role in Part III.

Theoretically speaking, one objection is that the concept of semiocy is too broad, leading to the following critical question: ‘Does semiocy not encapsulate the goal of *all* school subjects, hence making all cats grey’? Returning to my argument in the beginning of this chapter (cf. 4.1, p. 103ff.), there is a difference between focusing on meaning-making as a *goal* and as a *means*. Any school subject uses semiotic resources or multimodal resources, as Kress et al. 2001 would put it, in order to teach: Resources are used as mirrors representing the world in transparent and “immediate” ways, to use Grusin and Bolters terminology from *Remediation* (2000). MTE/StLE does this too. For example, we claim to teach students about anthropological and historical life – space and time – using texts as a source. A traditional literary pedagogical approach to Andersen is, precisely, to use his fairytales to reconstruct the up-coming of bourgeois life in the 19th century. But in the practice of MTE/StLE subjects around the world we do something else too, and particularly within language and media pedagogical approaches. We focus on *how* texts, media, represent and communicate the world in “hypermediate” ways, to use Grusin and Bolters vocabulary again. We look at the frame. In this sense, MTE/StLE has a *double role* related to the teaching and learning of semiotic resources.

4.5. Summary of chapter 4 and conclusion to Part II

Summing up chapter 4 and the theoretical Part II, one may say that three questions have guided this part, which we may now answer:

- 1) Question: What were the purpose and implications of seeking an alternative vocabulary for teaching media pedagogy that went beyond media literacy?

Answer: It has become clear that media literacy is an influential, to some extent inspiring, yet problematic and reductive concept in media education / media pedagogy that could and should be reconceptualised. Drawing on insights from media studies, multimodal studies and theory on competence and knowledge, this has lead us to the alternative universal

concept multimodal media competence, which broadens the scope of media pedagogy. The alternative seems better because it covers the semiotic practice of contemporary life and allows for a clearer didactic conceptualisation of teaching media in formal schooling, including MTE/StLE, including teaching H.C. Andersen from a media pedagogical approach, which should be remembered, was the original purpose of the funding of the present study.

2) Question: What implications follow from developing a model of multimodal media pedagogy applied to MTE/StLE?

Answer: The proposed model of multimodal media pedagogy represents a new conceptualisation of the school subject “Danish” and generally MTE/StLE. The model of multimodal media pedagogy suggests that the goal of such pedagogy should be multimodal media competence, which contributes to the broader goal ‘semiocy’. Such a goal represents a new techno-semiotic rationale of MTE/StLE, which challenges and questions already existing paradigms of the subject. Teaching multimodal media competence is to teach *about* multimodal media working *with* multimodal media – with a priority of the former on behalf of the latter. Multimodal media competence includes knowledge of concepts related to modes and media, on the one hand, and meaning-making practices related to the same on the other, in which we individually and collaboratively create meaning, identity, and knowledge. It should be stressed that multimodal media competence is not bound to the context of “Danish” and formal education. On the contrary, it is a competence related to the broader competence of semiocy, which involves a person’s competence to handle and further develop all potential semiotic resources available in contemporary society. This competence is demanded and engaged in everyday through life – from toddlers watching TV to elderly people writing an e-mail. However, semiocy in general and multimodal media competence, in particular, can be addressed and accentuated in formal schooling, which should happen in the compulsory subject MTE/StLE.

3) Question: What are the operative uses of the model for empirically oriented didactic research?

Answer: The upper-secondary school system in Denmark is a specific and special context, in which multimodal media competence can be taught, practiced and learnt. Also experiments with multimodal media pedagogy can be made. It follows from this that the model for

developing multimodal media competence could potentially function in school as a model that teachers – and designer-researchers – use for designing experiments, for experimenting and for analysing such experiments. The learning resources made available in such experiments should allow students to actively co-design and redesign available resources. Through such design processes it is assumed that students can learn to master aspects of multimodal media competence. It is expected that in a local school context, the consistency and clarity of systematic theoretical investigations – as warned by Thavenius 1995 – is replaced by the analysis and description of messy and ambiguous classroom processes and practices. There, the theory of the field rules just as much, or more so, as the theory of the intervening designer-researcher and the research field. So far, our theoretical investigations have helped us analyse small empirical aspects of the intervention study, focusing on some of the available learning resources and illustrating a few points about their potentials, actualisations and interpretations by teachers and students. Now we will conduct empirical analysis based on a systematic approach to data production and data selection and the chronological analysis of the ongoing intervention process. Here, teachers and students will have an important say regarding the credibility of the theory of multimodal competence and semiocy.

These three points will guide us in the following chapters. Since the applications are many and wide reaching, they will be taken up continuously and operationalised successively in the many cases involved in for instance the quasi-experimental stage, rather than in one master-operationalisation. This has many advantages that relate to the Design-Based approach advocated in this dissertation (cf. chapters 1, 2 and 5). First of all, a master-operationalisation would have hampered the fieldwork and perhaps even made impossible the successive adaptations that occur there. Such a stringent application of these considerations would then become obstacles rather than a means for further advancement of real applicable knowledge. Secondly, the true implications of these theoretical explications may first become apparent when studied in terms of the implications they have for the teachers and classes that are included. What reactions occur, what perceptions develop, and how do the theoretical considerations change in this meeting? Lastly, we may first present a true understanding and synthesis of the three theoretical dimensions above, following a meeting with the micro-practices found in the field.

In this sense the full implications of the theoretical ideas cannot be fully predicted on pure principles of mind, they merely present a heuristic guide when seeking out new knowledge.

Part III: Analysis

Initial meeting with teachers

January 26th 2004, 10 A.M: The four teachers and I sit together around a table. After extensive correspondence over e-mail in an attempt to schedule a meeting⁶³, we have arranged a six hour convention in the institute research library.⁶⁴ None of us have met before. One of the teachers picked me up in a car this morning and took us on the 200 km ride to Odense. I wish I had my tape recorder turned on during that ride (but I guess the recording would have been too noisy): The teacher expressed interesting responses to what I had conveyed to them regarding the project, and what it was like being a teacher. I will have to make notes in my research log when I get home. We present ourselves, where after I present the overarching framework of the intervention project, inviting critical comments spanning anything from observational logistics in the classes to the content and method of the four experiments – particularly the pilot experiment. There is still time to revise the first experiment before the teachers are to use it in actual teaching the following month. My tape recorder is ready on the table. The atmosphere is a little tense, but the teachers begin to chat collegially and I explain why I want to record the session. They don't mind - so, I press the button.

Purpose and perspective

This *in medias res* of the first meeting with the involved teachers is a short narration of an incident, which occurred at a specific time and place relevant to the empirical analysis of the intervention study. It is found that the description constitutes a suitable beginning for the empirical analysis found in Part III of the dissertation. Following the theoretical abstractions of Part II, it helps us get back to more practical issues and acknowledges what is often referred to as the messy reality of intervention research and qualitative research in general.

In order to reconstruct this little event, it has been necessary to consult the research log (A24). Other data sources from the meeting include audio recordings, which were transcribed (A29), documents such as handouts (A30) and so-called teacher profiles (appendices 25-28) and so forth.

⁶³ Gratitude is expressed to all participants in taking time in spite of busy work and private lives.

⁶⁴ At the Institute of Upper-Secondary Education at the University of Southern Denmark in Odense, which is now called Institute of Philosophy, Education and the Study of Religions.

These are research tools that raise general questions of methodology, which must be addressed systematically:

1. What is the research design of the study?
2. What were the principles guiding data collection that would later allow me to offer this other accounts?
3. What were the principles guiding data selection?

These are indispensable questions of social science research and they will be answered here. Indeed, this continues or elaborates on the arguments presented in chapter 2. It will be demonstrated that the approach of DBR is more complex than, and perhaps not as uniform as advocates of DBR claim (e.g. Barab & Squire 2004, cf. chapter 5, p. 159ff.). It is therefore necessary to reconstruct the principles of data collection and selection and provide a solid framework for empirical analyses of the intervention process.

These analyses will then take up most of space in Part III (chapters 6-11). The analytical process is divided into five phases following a chronological principle:

- 1) The pre-experimental phase, which includes ‘framing the context’ in chapter 6 describes the institutional setting, the teachers, schools, classes, and students that are approached, and which come to compose the four case studies;
- 2) The first part of the experimental phase, which includes in-depth analyses of experiments 1 (chapter 7) and 2 (chapter 8);
- 3) The intermediate phase, which includes reflections on the intervention process based on data from a meeting with the four participating teachers (chapter 9);
- 4) The second part of the experimental phase, which includes analyses of experiments 3 (chapter 10) and 4 (chapter 11);
- 5) The post-experimental phase, which includes evaluations of the process based on data from the participating teachers, students and the researcher (chapter 12).

Part III will be followed by Part IV that concludes on the findings and discusses the relationship between theoretical and an empirical approaches. The basic question of the dissertation is reviewed: Have we moved towards semiocy? Do theoretical and empirical explorations suggest similar findings?

Chapter 5. Principles of data collection and data selection

5.1. Principles

In this chapter, which concerns principles of data collection and data selection, it will be argued that the present DBR study – and DBR, in general – employs commonly accepted principles of social science. These guide systematic data generation and selection for analysis. In a certain sense, this constitutes a post-hoc argument, however. Reflecting on the present study it has been found that it must present a stronger case for this, than has been found with other instances of DBR (cf. the following sections). Indeed, this regards especially research methods and principles for data collection and selection. Initially, DBR was perceived as a robust, well-defined and realistic methodology, but, in several instances, it has been found necessary to reconsider and modify the approach.

In order to avoid such problems in the future, an analysis of the relationship between DBR and social science in general is found in the first section below. Here, it is necessary to clarify the nature of the DBR methodological approach and, in extension, examine the most relevant evaluation criteria and validation types that are applied in the project. This will lead to a chronological phase-by-phase description of the systematic methods for producing data and the sources of data that these methods lead to. This offers an overview of the large corpus of data made available (for opponents of the dissertation only) in electronic appendices. At the end of the chapter, the research question will be reconsidered in light of the described principles for data collection and selection and explain how the concrete analyses will unfold in correspondence with the model developed at the end of Part II.

5.2. Problems in the relationship between DBR and Social Science

When the term: ‘commonly accepted principles of social science’ is applied, it refers to standard handbooks on the topic (Denzin & Lincoln 1994; Hopkins 1993, but primarily Bryman’s *Social Research Methods* (2004)). As Bryman points out, it is commonly accepted that any study should be able to explain its: ‘criteria of evaluation’. In the case of qualitative studies Bryman argues – inspired by Guba & Lincoln (1994) – that *trustworthiness* is the core evaluation criteria.

Trustworthiness refers to four basic validation types:

1. 'Credibility'
2. 'Transferability'
3. 'Dependability'
4. 'Confirmability'.

These terms substitute other validation terms known from *quantitative* research. Later, we will take up these terms in regard to their operationalisation in this study.

We must ask why DBR is vague about its evaluation criteria and validation types. A recent article by DBR researchers illustrates the problem. Reviewing other DBR studies, the authors conclude that: "Design-based research is not in itself a methodology, but a research approach..." (Herrington et al. 2007: 4094). The article implies that the vast amount of empirical data that such a study produces becomes a problem, as is the case for the present dissertation. Analyses of this data may easily become abstract and/or detached from the very empirical origin with which DBR is supposed to be concerned. Thus it risks marginalising meaning makers in the field and inhibiting what Hopkins (1993: 152) terms the: "triangulation of perceptions". This may lead to ethical problems concerning the use or misuse of participants in a study: Are their opinions reported and are they reported objectively?

As pointed out in the introduction (chapter 1), DBR constantly faces the dilemma that arises between deductive approaches and the inductive enterprise of giving a voice to agents of the field, their concerns, and their interpretations. Ideally, DBR should coalesce the deductive with the inductive, the objective with the subjective and become multi-vocal in its research strategy like those qualitative, abductive methodologies which it is most indebted to and acknowledges, namely action research (Zeichner 2001), participative inquiry (Reason 1994) and other pragmatically oriented methodologies (cf. chapter 2, p. 22ff.). But it does run the risk of becoming mono-vocal and unfair to its research object due to its quest for theory-making.

DBR – both theoretical and empirical – does not give recommendations on how to address these problems. On the contrary, we may find somewhat misleading elaborations on its research design and relevant analytical methods. For example, in the study by Squire et al. (2003), the researchers explain that they employ the analytical strategy of: "...a qualitative case study approach designed to illuminate the uniqueness of each case, and reveal sources of variance and invariance across the cases..." (Squire et al.: 473). Compared to standard social science methodology, it is unclear what

‘illuminate’ means in terms of validation. Also, we may ask why they characterise their investigation as a: ‘case study’? Applying Bryman’s framework for describing typical research designs, it could be argued that their study – like any other DBR study – is more than simply a case study. It is rather a *qualitative, quasi-experimental multiple-case study with elements of a comparative and longitudinal study*. This is the most precise definition of the research design of DBR and we shall go into detail regarding what this means in the next section. Here, the point is to stress the *complexity* of the research design in DBR being greater than claimed in other publications. In this way, the research design and the related research methods, evaluation criteria and validation types for DBR become unclear and unresolved. For the same reason, we will re-consider the research design of DBR from the point of view of Bryman’s approach to social science in the next section.

5.3. DBR as a ‘non-typical’ research design

Bryman (2004: 33ff.) distinguishes five ‘typical’ research designs for social science:

- ‘Experimental’
- ‘Cross-sectional’
- ‘Longitudinal’
- ‘Case study’, and
- ‘Comparative research’.

He simultaneously argues that features from two or more designs may be combined into ‘non-typical’ designs. Making things ever more complex, he argues that qualitative and/or quantitative strategies may be applied to these research designs. On the other hand – compared to the epistemological reflections developed in chapter 2 – Bryman’s methodology seems less complex because he operates with only two research strategies: deductive and inductive. For this reason, he does not acknowledge or apply the ‘abductive’ research strategy. Bryman’s understanding of deductive reasoning is broad however (cf. Bryman 2004: 8ff.). It could be argued – without going into details – that it also includes what advocates of abduction term abductive reasoning (cf. my epistemological reflections in chapter 2, p. 36f.). Thus, in spite of our terminological rather than epistemological controversy, Bryman’s framework may be considered useful for characterising the

research design of this study and its basic principles of data collection and analysis. This will be demonstrated in the following sections going through each concept involved in the present definition, applying them to the present study.

5.3.1. *The present study is qualitative*

By ‘qualitative’, Bryman means – in his broadest definition – that research: “...tends to be concerned with words rather than numbers...” (Op. cit.: 266). He also foregrounds three other features of qualitative research:

- An *interpretive* epistemological position;
- A *constructionist* ontological position;
- An *inductive* view of the relationship between theory and research.

This study takes these various approaches as an outset, albeit with some corrections: It is indeed interpretive and constructionist.⁶⁵ However, these two approaches must be adapted. Using a rich variety of research methods (cf. 5.5, p. 179), qualitative data of *multimodal*, mediated, meaning-making performed by agents in the field, has been collected, such that it cannot simply be understood as monomodal ‘words’.

As indicated above, the relationship between theory and data in social research is understood as abductive, rather than inductive (cf. chapter 2, p. 36). However, it must be acknowledged that the generation of inductive theory is based on agent meaning-making and therefore plays a vital role in the analytical and empirical sections of the research.

This study is not a purely qualitative study: In the post-experimental phase (cf. later), students in all four cases were given a questionnaire with both (open) qualitative *and* (closed) quantitative questions. These regarded media use inside and outside school, and a few questions on their prior experience with media and technology related to the Andersen experiments (cf. A51). In *selecting* data for analysis it was decided not to include the quantitative data set in any systematic manner. This had three reasons:

⁶⁵ The research tradition of the New London Group and other theorists drawn on in order to develop the model of multimodal media pedagogy should demonstrate this quite clearly.

- Student media use was not found directly relevant to answering the didactically oriented research question, rather it offered contextual information;
- Focus is primarily on the reflections given by the participating teachers, rather than the students;
- Limitations on the extent of space needed in the dissertation to report and apply the data (It will be saved for another study).

Contrary to other advocates of qualitative research (Hammersley, undated), there is, in general, no reservation against triangulation of research methods that use both ‘words’ and ‘numbers’, for the reasons given above.

5.3.2. The present study is quasi-experimental

Bryman explains the so-called classical experimental research conducted in laboratories with experiments and control groups, which are measured quantitatively. However, he also acknowledges the possibility of quasi-experimental social research, which is qualitative. In such research, he argues, it does not make sense to speak of control groups, which is a concept that belongs to quantitative research. Rather, we should think of quasi-experiments as natural experiments or evaluation research: Natural experiments: “...are 'experiments' in the sense of entailing manipulation of a social setting, but as part of a naturally occurring attempt to alter social arrangements.” (Bryman 2004: 39). Qualitative evaluation research recognises: “...the importance of in-depth understanding of the context in which an intervention occurs and the diverse viewpoints held by the stakeholders.” (Bryman 2004: 40). Bryman refers to a specific evaluation study that: “...sees the outcome of an intervention as the result of generative mechanisms and the contexts of those mechanisms...” (Ibid.). This is similar to, but not identical with the description offered so far of the research design for this study. The four cases cannot be conceived as each others’ control groups. Rather, they are comparable natural settings or contexts.

One may criticize Bryman for not comparing quasi-experimental methodology with studies of action research, which would be quite relevant. Perhaps the reason is a certain bias in Bryman’s own approach towards social science. He notes that action research: “...by and large has not been a popular form of social research...” (Op. cit.: 276). Others would disagree, since this ignores some of the historical insights into quasi-experimental research gained within educational action research

(from Lewin 1948 (suggesting the concept ‘joint reflection’) to contemporary research, cf. e.g. Zeichner 2001, Beck 2006) and media pedagogy (e.g. Buckingham & Sefton-Green 1996).

Nonetheless, if we stay within Bryman’s framework, we may conclude that the present study is quasi-experimental and that it has parallels to what Bryman terms evaluation research. Ironically, Barab & Squire (2004) argue that DBR is *not* evaluation research, since the main focus should be on iterative theory-development. In this study, however, balance is stricken between theory-development *and* empirical and indeed evaluative accounts of the design processes. This should become particularly clear in the analyses of the experiments, within which the context of four cases will be described through the so-called: “Designing and Redesigned processes”, in which agents of the field – teachers and students – express their interpretations of the processes going on. This helps us understand the ‘generative mechanisms’ of the intervention.

5.3.3. *The present study is a multiple-case study*

As demonstrated above, researchers within DBR tend to believe that they are conducting case studies. This is not a sufficiently precise characterisation. Bryman distinguishes case study *design* and case study as a *research feature* of a research design that combines other features. *Towards semiocy?* uses ‘case’ in the latter meaning. A genuine case study design is: “...concerned with the complexity and particular nature of the case in question...” (Op. cit.: 48), and the case is associated with an intensive examination of: “...one location, such as a community or organisation...” (Op. cit.: 49). A well-known disciplinary example of case studies is ethnographic fieldwork where the participant observer absorbs him or herself for a longer period of time in the field in order to generate theories inductively.

Immersion has not been applied to this study: First of all, *four* locations have been examined, each related to teaching one class each by Karen, Jane, Susanne, Peter respectively (and later Jean, at Jane’s location). Indeed, this occurred at separate schools. Bryman would term this a *multiple case study*. Each case is *not* understood as: “...an object of interest in its own right...” (Bryman p.50), as Bryman describes a case study. Rather, these cases are chosen in order to explore a theory. Bryman argues that this is typical of case study approaches. The present study was initiated by a search for *eight* “Danish” teachers from different regions in the country.⁶⁶ This would ensure a rich source of data, allowing participating teachers to drop out without jeopardizing the whole project.⁶⁷

⁶⁶ My research log (A24) and documents from the pre-experimental meeting and other documents (A30) demonstrate this. This was recommended in consulting my main supervisor in the pre-experimental phase.

⁶⁷ In coordination with PhD-supervisor.

Arguments regarding the scale and timeframe for the study have resulted in a reduced approach involving to *four* teachers.⁶⁸ While the results that follow from a limited data-set may not be as wide reaching as could be desired, the study does result in sufficient data to present a conclusion, upon which it is possible to expand given further funding. In the following we will consider what limitations we must take into account because of the restricted data set, but also what positive conclusion we can draw from the data, which is actually present.

One of the consequences of working with multiple cases – particularly when working alone as a researcher – is that the detail in which each case is examined is lowered. Thus, it is not claimed that the four cases have been studied with the greatest possible detail, as demanded by Bryman for a case study design, but merely to the level of detail, which is adequate for the given scientific issue to be solved. In the four pertinent cases, the teachers and their classes were visited a number of times during the experiment (details are offered later for each separate case), but a full year was not spent at each school, nor were all lessons observed for any given case. It is acknowledged that this choice influences the main evaluation principle for the study, in that the trustworthiness related to the understanding of one single case is weakened. However, one must ask if this is a substantial reduction in trustworthiness. Also, one must ask, whether or not the decline in trustworthiness is not offset by the better quality of data obtained in the comparative approach (cf. next section). Lastly, as is often observed, the process of gathering data is beset with the problem of marginal utility, that is, for every additional observation its relative value declines. In statistical terms we therefore ask what the minimum number of cases ought to be, rather than the maximum. The main point is that the research design and the chosen research strategies should make it possible to address the research question.

Bryman suggests that in order ascertain validity it is important to discuss what type of case is chosen for a particular study. He distinguishes (Op. cit.: 51) between:

- ‘Critical cases’
- ‘Unique cases’
- ‘Revelatory cases’
- ‘Exemplifying cases’

⁶⁸ In coordination with PhD supervisor.

We shall return to and apply this vocabulary soon. First, however, it shall be considered how other DBR studies have considered the same issue – case – in other terms. Squire et al. (2003) claims that the informant teachers represent an instance of “convenience sampling” (Op. cit.: 473). This is considered problematic for two reasons:

First of all, ‘sampling’ is used in relation to cases and qualitative research. As Bryman stresses, case study researchers: “...do *not* think that a case study is a sample of one” (Op. cit.: 51; emphasis in original). Paradoxically, Bryman uses the term ‘convenience sampling’ neutrally in other parts of his book (cf. Op. cit.: 100ff.). In this sense, Bryman seems theoretically inconsistent. This aside, the point is that the concept of ‘sample’ belongs to a tradition of quantitative studies that applies evaluation criteria quite differently from those applied to traditional qualitative studies. Samples are related to the idea of *external validity* or *representativity*. Qualitative studies do not make any strict claims on *representativity*. Instead, Bryman argues (Op. cit.: 51) with Guba & Lincoln (1994) that the idea of *representativity* should be substituted with the idea of transferability in qualitative research.

The second reason why “convenience sampling” is considered problematic is obscurity regarding whether convenience refers to a critical case or another type of case. The authors of Squire et al. 2003 exemplify the problem as they explain their cases: “Based on convenience sampling, four classrooms were selected for this study. Two of the participating teachers also significantly contributed to the development of the ActiveInk curricula, and the other two were teachers with whom the researchers had few to no prior relations” (Op. cit.: 473). Thus, in this use of ‘convenience’, participants are not randomly chosen, but may instead be particularly interested in and suitable for the intervention. Bryman defines ‘convenience sample’ as: “A sample that is selected because of its availability to the researcher” (Bryman Op. cit.: 538), but this says very little and does not solve the problem.

If we dismiss the notion of ‘convenience sampling’, how should we characterise the type of cases sought for in general in DBR. More particularly how should the informants Karen, Jane/Jean, Susanne, and Peter be characterised? Using Bryman’s vocabulary, one could argue that they predominantly *exemplify* cases moving towards *critical* cases. Exemplifying cases simply represent “...an apt context...” (Op. cit.: 51) that provides the suitable context for a research question to be answered. This is the approach for this study: a school setting was sought where one could explore the rethinking and integration of media pedagogy, MTE/StLE, and H.C. Andersen in terms of

theory and documentation. However, the fact teachers particularly interested in working with the integration of media pedagogy and “Danish” being explicitly identified and chosen moves this study towards a ‘critical case’ study, explained as follows: “Here the researcher has a clearly specified hypothesis, and a case is chosen on the grounds that it will allow a better understanding of the circumstances in which the hypothesis will and will not hold.” (Ibid.). It is noted that this formulation suggests an important indirect recommendation of data selection and analysis, which guides the study: One should analyse and report whether data confirms or rejects the hypothesis.

As we shall see later, one validation strategy for doing so looks for so-called positive and negative/rival cases (Hopkins 1993). The four cases found in the present study may seem relatively homogeneous at first sight, since all teachers were interested in exploring media pedagogy within “Danish”. However, we will see that they differ in interesting ways when analysing their profiles and the experiments. This diversity and complexity should come to the fore in any qualitative analysis.

5.3.4. The present study is comparative

One of the consequences of seeking multiple case-studies is that the study becomes comparative. This influences both the process of data gathering and data analysis. Bryman acknowledges that the qualitative multiple case-studies approach: “...exhibits certain features that are similar to experiments and quasi-experiments, which also rely on the capacity to forge a comparison.” (Op. cit.: 55). The advantage for such studies – in terms of evaluation criteria – is the potential to look for and locate patterns of similarity and difference between cases. Two or more cases improve the validity of inductive theory building. However, this may also be a disadvantage. Being obliged to report on comparisons could result in the researcher losing sensitivity in regard to the individual case as an object of interest in its own right. Thus, in terms of validation, the dependability and credibility of findings in each case are contested. This is an unsolvable paradox, which I find that Squire et al. (2003) downplay when claiming without hesitation that they simply illuminate the uniqueness of each case.

Reflecting on the present approach to comparative data collection and comparative analyses of cases, data was collected systematically from all four cases, such that it may be compared. While this happen, problems were experienced in relation to Bryman’s points.

For example, in terms of data collection, it was planned to register participant observations an equal number of times, spending the same amount of time on each location in each experiment. However, this turned out not to happen. One reason had to do with practical issues such as

cancellations, sickness, travelling etc. Another reason may have to do with *bias*: In retrospect one case – the case of Karen – was studied in greater detail than the others. This was not planned nor intended, but it may have to do with the close proximity to that particular case and that many “successful” outcomes came to occur at that school. In the next section we shall find how this relates to validation, where the evaluation criterion in question is termed: ‘confirmability’.

The general point is that a completely objective and balanced collection of data is not possible or perhaps even useful in comparative qualitative research. Rather, qualitative data are generated due to circumstances of the research process.

In terms of data analysis, another problem must be acknowledged: The present author is inclined to dwell on one particular case – including the rich data of student work – at the expense of other cases. While a deeper understanding of that case could have been chosen, comparison is often prioritised over *thick description* and in-depth micro discursive analysis. This choice can be defended at least in two ways. Firstly, all raw data is available for opponents of this dissertation; in this sense the dependability criteria of qualitative research is respected. Secondly, there is an ethical dimension to this analytical strategy: it has been chosen to respect the contract made with the four teachers participating in the project. They engaged in the project expecting reports back to them individually and as a group on how the practice of each case in comparison with the others was observed. In a later research report on the project focus on data from one case only, may be sought out and studied in greater depth on its own terms, hence strengthening the credibility of that case analysis.

5.3.5. *The present study is longitudinal*

The last point to be made on DBR and this study is that it is longitudinal. Longitudinal designs are normally associated with quantitative designs; however, ethnographic fieldwork, intervention studies and other types of qualitative research include a longitudinal element also. The main point of longitudinal studies is to study change over a period of time. This requires that one distinguishes between certain stages or phases of a research process and makes these stages and phases visible in the research report – again strengthening the dependability criteria. As Ludvigsen (in press) has pointed out (cf. chapter 1, p. 17), DBR is interested in studying the change of what he terms: ‘epistemological participant structures’ and ‘social scripts’. Furthermore, he underlines that a longer period of time is required for studying this. While this is sensible, a different research strategy and theoretical concepts are employed, in order to explore and analyse this longitudinal element.

In this study, the longitudinal interest regards social semiotic change on macro-, meso-, and micro-discursive levels (Hodge & Kress 1988; cf. also chapter 2, p. 32). As Kress and Hodge point out, the discursive levels and the relations between them are not stable analytical entities, but defined according to the social context being studied. The macro level of this particular study has already been addressed from several perspectives: For example, a historical perspective regarding the global discourse of multimodal media pedagogy and the dominating conception of MTE, including national curricula – this is part of the macro discourse. The meso-discursive level refers to local and specific educational contexts that frame the intervention, as will be demonstrated in the next chapter: the institutional setting of a specific Danish commercial upper-secondary system (abbreviated ‘hxx’), the teachers participating in the study, their concrete schools, classrooms, classes and students. The micro-discursive level refers to concrete actualisations of meaning-making through modes and media in each phase of the intervention. Obviously, in terms of raw data there is an enormous quantity of such actualisations.

This dissertation distinguishes categorically (also when explaining the project to the participating teachers) between pre-experimental, experimental, intermediate, and post-experimental phases, reflecting a time-span of a year or so. It has been imperative to collect data from all phases and this will be reported on in chronological order, to provide an impression of change. In between phases change is focussed upon in three interrelated ways, which could be termed: ‘Design change’, ‘teacher change’ and ‘student change’:

- *Design change* is associated with the exploration of whether the rationale and model of multimodal media competence develops iteratively in the course of experiments: Do the teachers, students and the researcher-designer suggest a revision of the design principles, or can we confirm them?
- *Teacher change* has particularly to do with an interest in exploring whether the participating teachers change their understanding of the intervention and, more generally, the rationale of “Danish”. In the next chapter, teacher profiles of the four teachers participating in the study will be unfolded on the basis of interviews. Later in the intervention process, the interpretations of these four teachers are documented based on different methods: field notes, including unstructured interviews, a research log, self-completion evaluation schemes, containing evaluative questions about the experiments designed by me for the teachers for each experiment; structured interviews, group meetings. In this way, it will be possible to

make systematic longitudinal analyses and suggest findings regarding the change or non-change of these teachers' interpretation of the research question. In other words, the research design allows us to greater understanding of level of how a primary 'agent' of the school subject – the teacher – understands a design-based process of change.

- *Student change* is associated with my analyses of students and student work in the course of the intervention. This is the *least* systematic study of change conducted. In this sense, this is neither a study, which regards learning nor a study about the didactics of “Danish” as seen from the perspective of the learner.⁶⁹ Due to the didactically oriented research question, data is analysed from student work as ‘exemplifying cases’ (cf. above) that may contribute to reflections on the rethinking of the school subject.

Having said this, there is one student whose work is repeatedly analysed, and that is the work of a student anonymised as Danny. Danny is found in Karen’s case. Danny – it is found out through inductive research in the course of the first experiment – is particularly interested in multimodal media pedagogy, and has developed out-of-school experiences and competences at an advanced level in this domain. In retrospect it could be claimed that Danny represents a *critical case* contrasting the exemplifying cases. Also, it is interesting to foreground his work in a longitudinal approach, since it strengthens the validation of the intervention project. Danny represents an interesting ‘rival case’ as compared to students in general. In this sense, he adds to the understanding of the complexity and variety in the fieldwork.

The question of evaluating whether change occurs is difficult to answer. In a constructionist, socio-cognitive approach to competence-oriented teaching, the trustworthiness of such evaluations is related to the main evaluation criteria and several validation tests, including respondent validation and triangulation (cf. 5.4, p. 173f.; cf. also chapter 4.2, p. 119f.). The main challenge is to avoid a one-sided subjective researcher- or theory-driven interpretation of change. Ludvigsen (in press) argues in general that the longitudinal element strengthens the ‘ecological validity’ of DBR (“A concern with the question of whether social scientific findings are applicable to people’s everyday, natural social settings”, Bryman Op. cit.: 539). This point is based on the assumption that changes should be explored in its natural environment where new ideas are not simply implemented, but adapted over a longer period of time.

⁶⁹ In a Danish context, Vibeke Hetmar (1996) has made a PhD, which gravitates towards such a perspective.

Often, such processes of *empirical* design adaptation are simplified by design *theoreticians* (e.g. the New London Group's (2000) use of 'designs of change'). Several practical problems arise when making qualitative longitudinal DBR studies, especially when resources are limited. One problem is related to data collection. For example, in the empirical study structured interviews were sought out with all five participant teachers in the post-experimental phase. However, at that point of the research process a teacher – Susanne – did not wish to spend time giving an interview (as reflected in A47), and the interview was never made. There were several reasons for this. One was that the teacher had already evaluated the intervention in writing through the self-completion evaluation scheme, and argued that all pertinent information had been given. As a self-critical researcher interested in source triangulation and saturation, this does not seem to be the case, however, it would be a violation of ethical standards related to field work (George & Jones 2001) to convince my research participant that her perception was wrong, and force the interview. Thus, there only exists post-experimental interviews – and transcriptions – for Karen, Peter, Jane and Jean (cf. A48).

In this sense, longitudinal data collection becomes divergent and asymmetrical, which could be seen as weakening the credibility of the study. On the other hand, one may question – as pointed out earlier – whether the ideal of symmetry can or should be pursued in qualitative research with a constructionist approach.

A further problem is related to the aim of reporting *all* phases of the intervention process in detail. This regards particularly the analyses of experiments in which the process of semiotic change going from Available Designs, Designing and The Redesigned are described. Other DBR studies focus upon analysis in one phase and only narrowly so. In the case of Ludvigsen (in press), a moment-by-moment analysis of particular events (based on video recording) is made. Another instance are the rather short descriptions of the Designing and the Redesigned phases within experiments (Squire et al. 2003). We could follow Ludvigsen's *frog's perspective* on empirical DBR analysis (a micro discourse analysis). Contrarily, in the case of this study *a bird's eye view* is often chosen in the analysis, for example when analysing 'Designing events' in classrooms (based on field notes and audio and/or video recordings). This means that the representation of events observed and noted in field notes become condensed. This is an analytical tradition well-known and acknowledged within processual anthropological and ethnographic research (e.g. Hastrup 2003; Borgnakke 1996) and the same method is applied by Squire et al. 2003, albeit less detailed than in the present study). In analyses, this means that we make comparisons across cases of student work and teacher data without necessarily representing data in the dissertation and making a close micro

discursive examination of modes and/or media. In social semiotic terms, a strategy is used where macro-, meso- and micro-discursive analysis is applied in alternation.

One or two experiments could have been favoured and focussed upon using the same type of micro discursive data as Ludvigsen. This would have freed resources, including time and space, for making an in-depth analysis of data using advanced techniques of analysing patterns of meaning.⁷⁰ Considering the many phases that need to be reported, it cannot be avoided that a basic understanding of social situations is sometimes lost. Concrete experiences of events are often represented in relatively abstract ways as patterns of practice. This will be compensated by describing events and situations, among other places, in the beginning of the Designing section for each experiment. It could be argued that the strength of the bird's eye view – in combination with the comparative element – is that it offers a broad panorama of context(s) which influence cognition. The weakness of a frog's eye view is that it loses sight of contexts in a larger spatiotemporal scale and accentuates cognitive change rather than contextualised cognition. Considering the theoretical framework based on situated cognition, which critiques purely cognitive approaches to didactics/pedagogy, this methodological and analytical strategy is found to be consistent.

It should be noted that in order to ensure a basic 'visibility' of empirical analyses, all data is made available for the opponents of this dissertation, stored in archives for further scrutiny (cf. Appendices). This is an important 'auditing' validation technique of the evaluation criteria, which Bryman terms: 'dependability'. In addition, some data is copied into specific appendices due to analysis. Some data are analysed in detail and become what we may term: 'primary data', whereas other data remains raw or 'secondary data'. This means that some audio recordings are completely transcribed, while others are not. The reason for doing so will be explained in a later section.

In conclusion, the ethical perspectives for the study and DBR in general, must be stressed once again: It was found essential to respect the contract made with the participant teachers in regard to reporting back on all experiments. Any indication of not collecting data for analysis would have resulted in a serious decline in confidence among teachers and students, such that they may have opted out of the project all together.

Summing up on the type of research represented by my own (or perhaps any) DBR study: the present study *Towards semiocy?* is a qualitative, quasi-experimental multiple-case study with

⁷⁰ Cf. e.g. Harry et al. 2005, who combine grounded theory with the analytical software Atlas.ti.

elements of a comparative and longitudinal methodologies. It is quite evidently a ‘non-typical’ research design. However, it is a consistent research framework closely related to the research interest of the study. In order to make it a trustworthy framework, let us now establish a set of evaluation criteria and validation types for this type of research.

5.4. DBR evaluation criteria and validation tests

As described earlier, trustworthiness is the overarching criterion of evaluation for qualitative research. Inspired by Guba & Lincoln (1994), Bryman (Op. cit.: 273) explains how this principle is related to four concepts and four core questions:

- *Credibility*, which parallels internal validity in quantitative research, can be tested by asking the question: *How believable are the findings?*
- *Transferability*, which parallels external validity, can be tested by asking: *Do the findings apply to other contexts?*
- *Dependability*, which parallels reliability, can be tested by asking: *Are the findings likely to apply at other times?*
- *Confirmability*, which parallels objectivity; can be tested by asking: *Has the investigator allowed his or her values to intrude to a high degree?*

It shall now be explained and exemplified how these concepts and their related validation tests regard to this study.

5.4.1. Credibility in this study

Well-known validation types – and tests – for evaluating the credibility of research, are: respondent validation and triangulation types, including perception triangulation, triangulation of sources of data, negative cases/rival explanations, and saturation. In the following we will take these up in turn.

Respondent validation “...is a process whereby a researcher provides the people on whom he or she has conducted research with an account on his findings.” (Bryman Op. cit.: 274). In DBR, this is an indispensable validation type. Respondent validation is utilised at different phases and in different forms within this study, also it occurs in both formalised and non-formalised formats. For example, the formal meeting in the intermediate phase was arranged in order to lay out some

findings and theories generated inductively from data collected in the first experiments. These were to be discussed with the respondents (cf. chapter 9, p. 302ff.). The aim was “...to seek corroboration or otherwise of the account...”, as Bryman puts it (Ibid.). Later, in the post-experimental phase, a similar meeting was arranged and combined the initial result – due to a triangulation method – with final individual teacher-interviews (cf. chapter 12, p. 399ff.). As Bryman points out, respondent evaluation “...is not without practical difficulties...” (Ibid.), which experience confirms. Indeed, problems are not only related to ‘practicalities’, some, according to Bryman, arise due to: defensive reactions on the part of the research participants, censorship, a reluctance to be critical, and the problem itself: “...whether research participants can validate a researcher’s analysis, since this entails inferences being made for an audience of social science peers.” (Ibid.). These issues all arose in the present study.

The issues cited from Bryman, question some assumptions of action research and intervention research; the idea of mediating research and practice turns out to be more complex than often assumed. Another problem has to do with resources for data treatment and analysis. Ideally, the designer-researcher should have time to transcribe and analyse transcripts in the process of research. However, this was experienced as highly time-consuming, and could not be done before the intermediate meeting. Nor have resources been found to transcribe all types of respondent validation coming from teachers and students. Thus, these data were available as raw audio data, which were listened to and referenced to in the last meeting with the teachers. This makes the credibility and confirmability of the research weaker. In retrospect or in preparation for a new research project, allocation of resources for transcribing such data would be insisted upon.

Perception triangulation means reporting different perceptions in the field, based on the constructionist assumption that various agents perceive events and situations differently due to different experiences and interests. This is also a very important aspect of DBR, not the least because it ensures both the credibility and confirmability of the study. Thus, the perceptions given by students, teachers, and the designer-researcher on events, situations and, general semiotics work quite differently and will be reported. In the analyses perception triangulation will be offered at different phases, with a particular focus upon teacher perception, starting with the description of teachers based on interviews. Another teacher data source is the self-completion evaluation scheme that teachers were asked to fill in after each experiment. Thirdly, the post-experimental interviews described above are understood as a part of perception triangulation. In each experiment and in the post-experimental phase evaluation genres are integrated, which allow data for student perceptions

also. This includes reflective writing in experiment 1, group conversations (recorded) in experiment 2, essays in experiment 4, the work of the *journalistic groups* across all four experiments, focus group interviews, and questionnaires. There is a huge amount of data, which reflects student perception. These perceptions are reported to some extent. However, as argued earlier, intensive and systematic examination is not made for this data due to the focus on teachers. Dissertation opponents have access to all raw data.

Source triangulation is related to perception triangulation. By source triangulation is meant using different research methods – generating different types of data – that can be used to cross-check observations and findings and make richer and complementary reports of the social reality being studied. In this study, a rich variety of well-known data sources have been used: Fieldwork notes, tape recordings of teaching (analogue), videotape recordings of teaching (analogue), photography (analogue), interviews (using audio recordings), teacher and student documents and media (including paper documents, DVDs, audio and videotapes and digital files), research logs (including researcher reflections and screen shots of virtual learning environments), e-mail communication.

One may wonder why analogue – non-digital – technology is used. There were two reasons: *Departmental resources* and *my relatively low level of digital competence*. Resources had to do with the fact that no digital tape or videotape recorders were available for stipends at my research department at the time of data collection. Moreover, no efforts were made to train stipends in using digital technology for data collection besides from equipping them with a lap top and – somewhat ironically – offering a PhD course on how to analyse digital data using advanced software. Thus, I used my analogue audio recorder almost at all occasions of fieldwork and interviews.⁷¹ Videotape recordings were conducted only as a supplementary data source during observations of experiments 3 and 4. These are enclosed as videotapes in the appendices of empirical data as raw, secondary data. Transcription has not been conducted for the videotape data, since they are considered to be a secondary data source, used only as a cross reference for reconstructing situations if audiotape recordings are considered unsatisfactory. Had a multimodal analysis of classroom teaching been sought out this strategy would not have been valid; in the context of this study and its research question, it is sufficient however.

⁷¹ Later I learned from students at Jane's school (case 2) that I could have used my lap top and shareware software to make digital recordings. There is no doubt that the designer-researcher's processual development of digital competence has influenced the design of experiments. In terms of analysis, it may also influence the credibility and confirmability of my evaluations of teacher and student multimodal media competence.

Negative cases and *rival explanations* are an important aspect of research credibility. It parallels perception triangulation in the sense that contrasting perceptions should be sought for in analysis and foregrounded in order to represent the variety of the field studied. Hopkins argues that these validation types increase the understanding and credibility of “principal explanations” (1993: 155) while, simultaneously, supporting alternative explanations.

Saturation, or theoretical saturation, is a disputed concept known from grounded research (Glaser & Strauss 1967; Strauss & Corbin 1998). Hopkins compares it with measurement validity in quantitative research; however, in qualitative research it should be rethought as a test that searches for: “...frequency and distribution of a phenomenon.” (Hopkins 1993: 154). It is a process whereby you continue collecting data for exploring an emerging category and confirming its importance. In the case of this study, systematic saturation tests are not made. To put it differently and positively: The validation strategy helps me understand the type of analysis made and the kind of argument developed. For example, in the analysis of experiment 3 – which is an intervention about the teaching of verbal and visual modes found in illustrated works of Andersen – ca. 70 student essays were collected and analysed. Following continuous scrutiny, signs of frequency and distribution confirmed that students do not seem to perceive the visual modes. The perception and meaning-making of verbal modes dominates in student analyses, not the visual nor the interdependent multimodal visual-verbal modes. One reaches a point in data analysis where one is no longer surprised about the content and form of the next essay. This allows generation of a hypothesis, which claims that so-called visual literacy is not strong, at least not in this context, and that a logo-centric discourse dominates the student reception and production of work. Other sources from teachers (that is: source triangulation) backs up and enforces this discourse, which results in theoretical saturation – and eventually the credibility – of a hypothesis stronger. On the other hand, other validation tests of the experiment related to other evaluation criteria may question the hypothesis (cf. next section).

5.4.2. Transferability in this study

The question whether findings apply to other contexts should not be understood in the strict sense of representivity and external validity known from quantitative research. Bryman does not offer any specific validation tests that may help check the degree of transferability. In broader terms he suggests that: “...qualitative findings tend to be oriented to the contextual uniqueness and significance of the aspect of the social world being studied.” (Op. cit.: 275). Reports on empirical

events and practices should allow the *reader* to make: "...judgements about the possible transferability of findings to other milieu." (Ibid.)

This preoccupation is addressed at several levels in the analyses and it is closely linked to the multiple-case comparative element of the research design. For example, possible transferability is evaluated when making comparisons between one teacher's evaluations of an experiment in his or her unique setting with the evaluation of the other teachers. If there are similarities, it becomes trustworthier that findings are possible in other milieux and with other teachers that have not been in contact with the intervention. When comparing the analysis of a student product with other student products in the same class or in other classes, this tests transferability. When comparing field notes from participant observation in one case with field notes from other cases, transferability is tested also.

Returning to the example of the visual and the verbal from experiment 3 (cf. 5.4.1, p. 173), the transferability criteria could be used for critical self-scrutiny. When presenting the hypothesis regarding logo-centrism to a colleague at my research department (which is termed: 'a key respondent' in the theory of validation techniques; cf. Hopkins 1993: 156), this person suggested that the finding was closely related to the fact that H.C. Andersen was being used as the main learning resource, and that the study was being conducted in the context of teaching "Danish". If other less canonized resources had been used and experimented within another school subject, it was quite possible that the finding would have turned out otherwise, thus *not* confirming my logo-centrism hypothesis. One could respond that this point sounds logical and that it challenges the trustworthiness of the analysis. However, it is still only a *hypothesis* and needs to be empirically verified. In other words, this objection points towards further research rather than being a strict refutation of the initial position. On the other hand, it does not weaken the *credibility* of the inductive, logo-centrism discourse theory generated from that specific social situation.

5.4.3. *Dependability in this study*

Dependability parallels the question of reliability and asks whether the findings are likely to apply at other times. In qualitative research the basic way of fulfilling this criterion is by: "...ensuring that complete records are kept of all phases of the research process (...) in an accessible manner..." (Bryman, Op. cit.: 275). Peers can then act as auditors: "...to establish how far proper procedures are being and have been followed." (Ibid.)

In this study, this criterion is respected by enclosing almost all data – with the exception of raw audio tapes and videotapes – from the empirical research process in appendices given to the

opponents of the dissertation; and the tapes can be required by the opponents. It is hoped some of the data will be made publically available in anonymous format in the future through my personal homepage. For the opponents, a protocol of data is arranged both chronologically and systematically, and next section will offer a chronological account of the data related to each phase of the intervention. This is backed up by Appendix 5, which offers a systematic overview of data. Some data is digital and is handed over to the opponents as digital copies on a CD-Rom. All data, is stored at University of Southern Denmark, including paper copies of data on which analytical notes have been made, early drafts of problem formulations, research material on Andersen, anthologies on media theory, national debates about mother tongue education etc.⁷² This data is also accessible and may be required by the opponents. Bryman notes that qualitative research frequently generates extremely large data sets. Physically speaking, the data of this study – roughly speaking – takes up four square meters.

5.4.4. Confirmability in this study

Asking whether the investigator has allowed his or her values to intrude should test confirmability, as Bryman puts it: “...it should be apparent that he or she has not overtly allowed personal values or theoretical inclinations manifestly to sway away the conduct of the research and findings deriving from it.” (Op. cit.: 276).

In DBR, this is a particularly delicate matter since it tests theoretically developed hypotheses and, to some extent, is inclined to confirm and revise a model developed initially. There is an acute risk that DBR projects expected “success” (Squire et al. 2003: 469) since external organisations – sometimes private – have invested many resources in developing learning resources, technologies, prototypes, and expect economic outcomes. Theoreticians might also be tempted to collect data and select data that confirms theory – hence making a tautological circle argument – because the confirmation of a theory/model that stands the test and that “works” is much more popular than the alternative, particularly among practitioners and politicians inspired by evidence-based research. On the other hand, an empiricist or utilitarian would be more inclined to oversee the theoretical implication of own results.

In the case of this study, which is indeed in part privately funded, it is imperative not to allow the model and hypothesis of multimodal media competence and semiocy to control evaluations of the empirical intervention in general and the experiments in specific. One simple way of reminding of

⁷² It could be discussed whether problem formulations and the latter are to be categorised as data, but if we are to follow the logic of Guba and Lincoln (1994), this must be so.

this is to put in the question mark in the title of the dissertation: *Towards semiocy?* This is a serious question, which hopefully is reflected in the analyses. In an earlier draft, the question mark was not there, also it is recognised that this reflects an approach to analysis, as criticised by key respondents. The conduct of validation tests related to the credibility criterion is an important tool in order to ensure confirmability and objectivity, also the ‘auditing’ strategy of laying out all data is yet another way of ensuring confirmability and – in the end – trustworthiness of the study.

5.5. A chronological account of the data collection in this study

We have now reached the point where a chronological phase-by-phase description of methods for producing data and sources of data that this lead to will be presented. Comments will be added about reasons for using a method and how it contributes to an evaluation of the study. The account is supplemented with the *Data Protocol* (A5), which offers an overview of and information about accessibility to the corpus of data. The primary data are available electronically in appendices for opponents of the dissertation. If they are not available in appendices, they can be requested from storage and sent to the opponents. Due to the nature and amount of the data, they are not anonymized in the appendices. Opponents should be aware of this if they refer to these data in public. The account will follow the chronology of the five phases sketched above:

5.5.1. Pre-experimental phase

In the pre-experimental phase of the intervention the project formulation was developed according to theoretical and methodological approaches. Prospective preparations were made for the empirical intervention. Data collection reflects these processes. Data sources in the pre-experimental phase were:

- *The research log.* The log starts in 2003 at the very beginning of the project and ends, in principle, with the defence of this dissertation. The research log is both a physical book, which is not enclosed in the appendix, but can be requested, and a digital research log file, which is enclosed electronically as A24 (containing 76 pages). The research log is a well-known tool within processual methodologies, particularly ethnographic research. Sometimes it is used as the sole source of data. In this study, it supplements other sources in the use of triangulating methods. It contains a rich variety of reflections, notes, copies of data etc. referring to the process of research. In the process of data collection it is sometimes found easier to use the physical logbook than a lap top, e.g. when making participant observation.

The first field notes of participant observation were made in the physical book but later copied into digital files. It strengthens – in different degrees – all four evaluation criteria.

- *Interview guide for interviews with the “Danish” consultant* [fagkonsulenten i dansk]. In preparation for the intervention and recruiting teachers to participate as key informants, a telephone interview was conducted with the “Danish” consultant in hbx at the Danish Ministry of Education in order to attain a broader understanding of the setting and context. The interview guide is enclosed in A54. Notes from the interview are made in the log.
- *E-mail communication*. In the process of research, some of the e-mail correspondence with participating teachers and others has been kept. In A6, the e-mail invitation to participate in the project is excerpted. Other correspondence may be requested. The e-mail data reflect intentions on behalf of the researcher-designer and reactions from teachers and other agents in the process of the intervention. These data strengthen all four evaluation criteria.
- *Audio tape recordings of pre-experimental meetings and transcriptions*. The pre-experimental meeting between the designer-researcher and the four participating teachers has been recorded in full on tapes 1 and 2. These are in storage and may be requested. The full transcription of the pre-experimental meeting is enclosed electronically in A29. Data is used for analysis when framing the context (cf. chapter 6, p. 191ff., and later).
- *Documents from pre-experimental meetings and other documents*. Documents made by the designer-researcher for the first meeting (and handed out or shown to participating teachers) and other occasions. Enclosed digitally in A30. Documents used for first visits at schools; see A7. Highlights the dependability and confirmability of the study.
- *Teacher profiles*. The profiles of the four teachers participating in the project. The profiles were based on telephone interviews, notes from these, and drafts made by the present author and sent to the teachers, which they could fill in, correct and later confirm. The profiles were made in January 2004 after the pre-experimental meeting. The profiles are enclosed in the appendix electronically in the following order: A25: Profile of Karen; A26: Profile of Jane; A27: Profile of Susanne; A28: Profile of Peter. The profiles are used for analysis in the next chapter, ‘Framing the Context in the Pre-experimental Phase’, and later chapters. Strengthens the credibility of the project and is useful for perception triangulation.

- *Problem formulations and supervision* include various versions for project problem formulations and notes from meetings with the two supervisors reflecting the processual development of the project, including working papers on Hans Christian Andersen resources and notes about the shift in scale from eight cases to four cases. It is a matter of discussion whether this is ‘empirical data’. These may be requested. Strengthens the dependability and confirmability.
- *Theory and field documents*. Refers to ca. 20 binders and a number of books containing articles about Media Theory and Media Pedagogy, didactics, methodology, ICT, “Danish” etc. collected continuously in the process of study from 2003 on. May be requested. A3: The concept of semiocy explained in a report about the future of “Danish” is an excerpt of this material. Strengthens the dependability and confirmability of the study.
- *Student documents*. In my first encounter with the students in the four cases they were asked to solve the informal task of defining media and offering examples of media. Students answered in both analogical and digital terms. These have been collected as data and stored. They document perceptions of media, which strengthens the credibility of the study.

5.5.2. *Experimental phase I*

“Experimental phase I” refers to data collection in experiments 1 and 2. Some of the methods, sources of data and explanations regarding evaluation are similar to those found in the Pre-experimental phase; if this is the case, a cross-referential note: ‘See above’ is made:

- Research log. See above.
- E-mail communication. See above.
- Experimental learning resources. In each experiment, experimental learning resources, which are also termed ‘Available Designs’, were sent to the teachers. These are found in A8 and A12. These offer an exact representation of the resources sent to the participating teachers before the experiments. In this sense, the dependability of the study is strengthened.
- Field notes. In the process of experiments 1 and 2 field and participant observations were made for all four cases and produced field notes, which could later be used for analysis. Original field notes of experiment 1 are enclosed electronically in A31 (in a folder divided into four folders referring to the names of the teachers) and experiment 2 in A32 (similar

system). These have been printed and stored in the field notes in an analogue paper version with hand-written analytical notes (can be requested).

Fieldwork and participant observations are both useful for registering concrete activities, behaviours, meanings related to locations and situations in time and space, and to some extent, cognitive and intellectual meaning-making and reflection on behalf of the teachers and students, if they have time to engage in short, spontaneous interviews. My guide for making field notes, which was developed and refined during the first experiment, and the actual field notes reflect this. Fieldwork is *not* very good for understanding the deeper levels and quality of intellectual knowledge production manifested by students, such as thoughts (completely inaccessible) or knowledge embedded in work products (more accessible). Here, other research methods and data sources are more useful.

While making participant observations, the role for the present author was explicitly defined as a non-teacher, and a researcher. Teacher and student reactions would largely reflect this. Occasionally, answers could be given to questions in class, if it was clear that deep insight was held into the designed curriculum due to the quasi-experimental design. However, it was first and foremost the teacher who held primary authority in class.

In terms of validation, field notes strengthen the credibility and transferability of the study in particular.

- *Screen shots from LMS.* As an element of fieldwork, screen shots of teacher and student work were taken on the learning management systems (LMS) used in the four classes/cases. This is, in a sense “virtual field work” (Hine 2000). These are found electronically in the digital research log and in some of the appendices with field notes. Strengthens credibility and transferability.
- *Teacher documents.* Documents produced or used by teachers in the process of teaching; collected in fieldwork; include time-schedules, learning resources and evaluation notes, among other things. Analogue. Can be requested. Strengthens credibility and transferability.
- *Student documents from experiment 1.* Documents produced by students available for data collection in the process of experiment 1. Documents include student products related to the commitments of the experiment, including evaluations of the experiment. They also include the work of the journalistic group, if made. Due to the design of the experiment, all documents are digital and available in electronic form in A33 (which is a folder containing

four sub-folders and further subfolders referring to the four cases). Additionally, an analogue version in print with hand-written researcher notes is available and may be requested. For analysis, three excerpts from this material are made: A9: John's letter and reflection text in experiment 1; A10: The work of two journalistic groups in experiment 1; and A11: Nina's reflection text about her review of "Engelen" in experiment 1. Strengthens credibility and transferability in particular.

- *Student documents from experiment 2.* Documents produced by students available for data collection in the process of experiment 2. Documents include student products related to the commitments of the experiment and evaluations of the experiment. Due to the design of the experiment, original student documents are predominantly analogue: audio tapes, hand-written evaluation notes of student work, hand written evaluations of the experiment. However, some data was originally in digital format. Moreover, the analogue student recordings have been digitized by the present author. Data is found in A34. The analogue student material may be requested. See A5 for details. For analysis, one excerpt is made from this material: A2: Oral evaluation of three girls from experiment 2. Strengthens credibility and transferability.
- *Audio tape recordings of experiments 1 and 2 and transcriptions.* During fieldwork, the designer-researcher carried with him a tape recorder in order to make unstructured interviews and record classroom sound. Tapes 3-6 contain recordings from experiment 1, and tapes 6-10 contain recordings from experiment 2. Notes from and transcriptions of the recordings are made in the following order: A35: Notes from and transcriptions of experiment 1. A36: Notes from and transcriptions of experiment 2. These appendices contain analytical notes too. Tapes can be requested. Supplements other sources from participant observation (field notes, documents). Strengthens credibility and transferability.
- *Hand-written and electronic research notes.* In the process of analysing the data from experiments 1 and 2 a large quantity of hand-written and electronic notes were produced. May be requested. Some of the digital notes are found in digital folders in the student documents appendices. Strengthens the credibility, dependability and confirmability.
- *Self-completion evaluation schemes for/by teachers.* As a part of attaining qualitative, evaluative reflections from the teachers on the experiments, these were asked to answer – in writing. A number of questions made by the researcher-designer on a Word file were sent to

the teachers. The teachers were also asked to return the evaluations. The evaluations of experiments 1 and 2 are found in A37: Evaluations from teachers of experiment 1 and A38: Evaluations from teachers of experiment 2. Karen (case 1) and Susanne (case 3) never returned an evaluation of experiment 1; Jane evaluated experiment 1 and 2 in the same document claspings answers together, which weakens the credibility of this data source. On printed, analogue versions of the evaluations analytical notes have been made, which may be requested. An excerpt has been made of this data set in A13: Quotes from teacher evaluations about experiment 2. The purpose of this method is to strengthen all four evaluation criteria; in particular, the credibility of the study.

5.5.3. *The intermediate phase*

The intermediate phase includes reflections on the intervention process based on data from a meeting with the four participating teachers. The methods and sources of data are:

- The research log. See above.
- E-mail communication. See above.
- *Digital Audio and audio tape recordings of the intermediate phase meeting and transcriptions.* The intermediate meeting between the designer-researcher and the four participating teachers is recorded in full length digitally and on tapes 31-33. Three teachers attended the meeting, Jane cancelled. Digital recordings are available in A39. The tapes are stored and may be requested. The transcriptions of and analytical notes from the meeting are enclosed electronically in A39. Transcriptions are also found in an analogue, printed version with hand-written notes. May be requested. Strengthens all four evaluation criteria.
- *Documents from intermediate meeting.* Documents made by the designer-researcher that analyse the intervention so far, documents preparing the next phase and data collected from the experimental phase I (see above); handed out or shown to participating teachers. These documents are collected and made available electronically in A40. Strengthens the dependability and confirmability of the study.

5.5.4. *Experimental phase II*

Experimental phase II refers to data from experiments 3 and 4. To some extent, the methods and sources of data are similar to those of experimental phase I. Sometimes I use the cross-reference note: 'see above' or 'see also above':

- Research log. See above.
- E-mail communication. See above.
- Experimental learning resources. See also above. The resources are found in A14: Available Designs for experiment 3 sent to teachers and A20: Available Designs for experiment 4 sent to teachers.
- Field notes. See also above. Original field notes of experiment 3 are enclosed electronically in A41 and of experiment 4 in A42. Field notes are printed and stored in an analogue paper version with hand-written analytical notes, which may be requested.
- Screen shots from LMS. See also above. Screen shots of experimental phase II are found electronically in the digital research log and in the appendices with student documents from experiments 3 and 4 (A43 and A44; see also below).
- Teacher documents. See above. Analogue. May be requested.
- Student documents from experiment 3. See also above. Due to the design of the experiment, all documents are digital and available in electronic form in A43 (which is a folder containing four subfolders and further subfolders referring to the four cases). Additionally, an analogue version in print with hand-written researcher notes is available and may be requested. For analysis, three excerpts are made from this material: A15: Group work in experiment 3; A16: Lisa's essay about *The Shadow* in experiment 3; and A18: Excerpt from Peter's evaluation.
- Student documents from experiment 4. See also above. Due to the design of the experiment, all documents are digital and available in electronic form in A44 (which is a folder containing four subfolders and further subfolders referring to the four cases). Additionally, an analogue version in print with hand-written researcher notes is available and may be requested. For analysis, two excerpts are made from this material: A1: Transcripts and frames from the journalistic film in experiment 4; and A23: Danny's essay evaluation of the whole intervention in Danish.
- Audio tape recordings of experiments 3 and 4 and transcriptions. See also above. Tapes 11-16 contain recordings from experiment 3, and tapes 17-21 contain recordings from experiment 4. Tapes may be requested. With a few exceptions, the tapes are not transcribed. This is different from experimental phase I. Tapes were listened through several times, and

notes have been made regarding their content in the digital log and in hand-written notes, which may be requested. For analysis, it has been decided to make transcriptions of the following: A17: Transcription of interview with Lisa in experiment 3; A21: Interview with Sven at The Animation Work Shop in experiment 4; A22: Interviewing students in case 1 on bus to The Animation Workshop in experiment 4. Strengthens credibility, transferability and dependability to some extent; since recordings are not transcribed the contribution to evaluation is weakened.

- Videotape recordings of experiments 3 and 4. During experiments 3 and 4 videotape recordings were attempted of classroom activity and activities elsewhere related to the experiment (as part of a source triangulation strategy). Recordings are sometimes hand-held and sometimes fixed, predominantly directed at the blackboard and the teacher and/or student(s) standing there. Videotapes A-F contain recordings of experiment 3. Videotapes G-H contain recordings of experiment 4. The videotapes were seen by the researcher-designer as part of reconstructing situations in the process of empirical analysis; a few notes are made in the digital log. Tapes are not (multimodally) transcribed. They can be requested. Strengthens credibility, transferability and dependability to some extent; since recordings are not transcribed the contribution is weakened.
- Photographs. During experiment 3, 13 photographs were taken of classroom activity in the four cases. This was part of the source triangulation strategy and the purpose of being able to reconstruct the cases and their locations. Photographs are taken with an analogue camera. Photos may be requested. One illustrates an analysis. Strengthens credibility, transferability and dependability.
- Hand-written and electronic research notes. See also above. In the process of analysing the data of experiments 3 and 4, hand written and electronic notes were produced. May be requested; some of the digital notes are found in the student documents appendices.
- Self-completion evaluation schemes for/by teachers. See also above. The evaluations of experiments 3 and 4 are found in A45: Evaluations from teachers of experiment 3 and A46: Evaluations from teachers of experiment 4. Note that Jane's substitute – Jean – wrote the evaluation of experiment 4 in case 2. On printed, analogue versions of the evaluations analytical notes have been made. May be requested.

5.5.5. *Post-experimental phase*

In the post-experimental phase of the intervention data has been collected that would retrospectively evaluate the process of the intervention. Methods and sources of data are:

- The research log. See above.
- E-mail communication. See above.
- Self-completion evaluation schemes for/by teachers (from experimental phase II). See also above. The evaluations of experiment 4 contain questions and answers reflecting the intervention as a whole. Thus, this source of data is added to the list of sources from the post-experimental phase; the data was used in the structured interviews with teachers. Strengthens all four evaluation criteria; in particular, the credibility of the study.
- Structured interviews with teachers. Immediately after the teachers had sent their self-completion evaluation scheme about experiment 4 (which also contains questions about the intervention as a whole) individual structured interviews were conducted with the teachers regarding the intervention, lasting 45-60 minutes. Karen was interviewed at her school. Peter was interviewed at his school. Jane was first interviewed alone at her school, and later she and Jean were interviewed together at the same place. Susanne did not want to be interviewed (see above). The interview guide used for the interviews is found in A47: Structured research interviews of teachers – a guide (in Danish). The full transcription of the interviews plus analytical notes is found in A48: Transcription of structured research interviews of teachers. Tapes can be requested. Strengthens all four evaluation criteria, although transferability and credibility is weakened due to the missing interview with Susanne.
- Focus group interviews of students. In all four cases, a group of students was picked out and interviewed about the intervention by the researcher-designer. The interview guide and other material for the interviews is gathered in A50: Material for focus group interviews. Interviews are not transcribed, but listened to in the process of analysing empirical data. Tapes may be requested. Strengthens all four evaluation criteria to some extent; since interviews are not transcribed, the contribution to evaluation is weakened.
- Student questionnaires. Students in all four cases were asked to fill in a questionnaire regarding the intervention. The questionnaire is found in A51; it contains both closed and

open questions. The questionnaire is not analysed in detail. The answers have been read and analysed with the purpose of obtaining knowledge about and an understanding of the student background (including precise age, sex etc.) and media use inside and outside school. The questionnaires are stored and may be requested. Strengthens the credibility, transferability and dependability of the study.

- Student documents about the intervention. In experiment 4, students were asked to write an evaluative essay about experiment 4 and the intervention as a whole. Thus, this set of data is included both in the experimental phase II (see above) and in this post-experimental phase. See A44. Strengthens the credibility, transferability, and dependability.
- Documents from post-experimental meeting. Documents made by the designer-researcher for the meeting; include data from the intervention; analytical notes; a guide for reflection, among other things; handed out or shown to participating teachers. Available in A49. Strengthens the dependability and confirmability of the study.
- Audio tape recordings of the post-experimental meeting. The post-experimental meeting between the designer-researcher and three of the five participating teachers (Jane and Jean had to cancel) is recorded in full length on tapes 34-36. The recordings are not transcribed. The tapes are stored and may be requested. Instead, notes about the meeting are made in the digital research log. Contributes to the perception triangulation strategy and strengthens all four evaluation criteria to some extent; since recordings are not transcribed, the contribution to evaluation is weakened.
- Other interviews. In order to understand some of the contextual processes of the cases/schools in which the interventions have occurred, interviews were made with a pedagogical director and a vice-director at Peter's school (case 4), a pedagogical director at Jane/Jean's school (case 2), and an ICT-director at Karen's school (case 1). Tapes were listened to; the interviews at Peter's school were transcribed, see A52. Tapes can be requested. Strengthens the transferability of the study in particular.

5.6. Moving towards operative analysis

Moving towards operative analysis, the research design, and the described principles of data collection and data selection will be connected with the general research question of the project and the model of multimodal media competence developed at the end of Part II.

The research question asks how we may didactically rethink and integrate H.C. Andersen fairytales, media pedagogy, and mother tongue education/standard language education in “Danish” at commercial upper-secondary level. In Part II, this question was explored in a *theoretical* manner – with a few illustrative empirical examples. In the chapters to come (Part III) this will be explored *empirically* – relating empirical reality (or rather “discursive realism”, as Drotner et al. 2003: 46 has put it) to theory. The foregrounding of empirical reality will be made by following the principles of the ‘untypical’ research design described earlier in this chapter and using the research methods, data sources, evaluation criteria and validation tests described in sections above.

Hopkins (1993) suggests that four phases should unfold chronologically in empirical studies: 1) initially, one should collect data that allows the researcher to construct a basic making sense of situations, 2) then, we should make tests of trustworthiness through validation, 3) following this, we should interpret empirical findings through generation of and comparison with theory, 4) and finally, we should recommend actions that may or could lead to a change of reality (this is a stage which is particularly relevant within intervention research).

In the context of this study, Hopkins’s recommendation is taken into consideration, although not as rigorously as he suggests: Empirical observation and interpretation *is* intermingled. To some extent, however, analyses of the *experiments* will unfold (as explained briefly in chapter 2) parallel to this system: concrete descriptions of learning resources will be offered in the section entitled: ‘Available Designs’; observations of meaning-making related to design events and situations will be reconstructed in the sections: ‘Designing’ and ‘The Redesigned’ using different validation methods; interpretations of this empirical data is offered by relating it to the model and the categories within this model; and recommendations for actions will be offered, which imply confirmations and/or corrections of the model and the Available Designs of the following experiment.

The model depicts the basic categories and relations between categories of multimodal media pedagogy and assists the designer-researcher within DBR both to design interventions – including experiments *and* the interpretation of data. It is a reminder of the constant categories – Content, Teacher, Student(s), Available Designs, Designing processes, Identity production in classroom communities, The Redesigned, and the Context – in multimodal media pedagogy that we should look for. In the next chapter, the broader context of this intervention is analysed referring to data from both macro-discourses and meso-discourses (cf. chapter 2, p. 32, and this chapter above for definitions of these categories).

It is the analyst's task to *present* data related to these categories in a trustworthy manner. The qualitative quasi-experimental design makes it evident that different data emerges at different phases. Thus, analyses will also differ from phase to phase in terms of representing the reality of intervention and teaching, even within experimental phases. If we are to use a metaphor for analysis, a flashlight will illuminate the model at different places and show data that relates to different categories due to the nature of the experiments and the dynamic, situated development of the experiments.

It should be clear from the chronological account of data, that the corpus of data is enormous. The account also illustrates, however, that the model has guided the data collection in quite structured ways that seeks to offer a thick description of reality. In the pre-experimental, intermediate, and post-experimental phases *contextual* aspects are foregrounded that are not directly related to experiments. Contrarily, in the experimental phases data that relates more directly to *processes of teaching* moving from the left side of the model ("Knowledge") via the Teacher, the question mark ("?"), and the different stages of knowledge production ending at the right side of the model ("Knowing") is foregrounded.

On a personal note, considering my own professional background, like many other media pedagogy researchers (e.g. Buckingham) I come from studying the mother tongue subject as a predominantly literary, content-oriented and academic phenomenon at the university. In the interpretation sciences we have known for a long time that the inseparable subjective/objective relationship is a general principle of hermeneutic interpretation (cf. e.g. Gadamer 1960, Eco 1990). However, what is challenging in educational intervention studies is that the kind of texts we interpret refer strongly to and are embedded in social life. Socially embedded texts are clearly *not* to be thought of as autonomous texts, as New Criticism and other textually and hermeneutically oriented disciplines have attempted to teach scholars within the humanities for centuries, particularly within MTE.⁷³ It follows from this that it is necessary to inform the analytical approach by some mixture of disciplines from the humanities and the social sciences.

⁷³ Cf. Fleming 2006, Buckingham 1990a.

Chapter 6. Framing the context in the pre-experimental phase

As we should expect from our established model on semiocy (cf. p. 147), context plays a vital role in subject-related meaning-making processes. Hence, we need to frame the context of this intervention. In this chapter the context will be analysed at a macro- and meso-level, addressing questions of institutional setting (including curricular documents), teachers, schools, classes, students, and perhaps a bit surprising, H.C. Andersen as a discursive context.

6.1. Institutional setting – "Danish" in hhx

The overarching macro-institutional setting for the intervention was *hhx* and more specifically "Danish" within *hhx*. *Hhx* stands for *Højere handelseksamen*, a commercial upper-secondary school education within the Danish *gymnasium* system, which takes three years to complete. Furthermore it aims at developing formal competence for continued study at the tertiary educational level. Annually, approximately 25.000 students go to a *hhx* school on a daily basis, with a slight majority of girls. When students begin in *hhx*, they are approximately 16 years old and have attended school for 9-10 years. After *hhx*, a majority move on as trainees in organizations.

The reason for choosing *hhx* over other upper-secondary educations was based on principles related to the research design. *Hhx* is 'an apt context' (cf. previous chapter) for conducting this kind of intervention: First of all, *hhx* has in recent years been a pioneer in experimenting with multimodal media pedagogy within "Danish" at final written exams, handing out CD-ROMs and allowing access to the Internet (UVM 2000c, UVM 2000d).⁷⁴ This has made a wide variety of mode and media constellations available for analysis at exams and, equally important, afterwards in classrooms, where attempts have been made at enhancing the teacher and teaching knowledge about such materials. Qualified teachers, with relevant experience, sufficient understanding and motivation for the research were more likely to be found here. In addition, it was to some extent expected that these schools would be geared, in terms of technology and teacher training, for teaching media. Indeed, this regarded particularly digitally media, due to the above mentioned piloting initiatives and intentions in official Ministry of Education documents regarding the integration of ICT in *hhx*. This condition created better circumstances for the realisation of intervention goals and its intended exploration of multimodal media pedagogy. As demonstrated in

⁷⁴ While new approaches have been taken, these have not been referred to in the terminology presented here.

the Introduction (chapter 1, A24-A29), the participating teachers did not experience and interpret their ICT and media competence in as ideal terms as expected. Nor were the schools as technologically geared as expected, which will become clear in further analysis.

In historical terms hhx has an extensive track record of incorporating new teaching strategies and methods. These are, furthermore, market oriented, emphasizing task-, project- and across the curriculum oriented teaching (Brinkkjær 2000, Gleerup et al. 2003), with a focus upon societal functionality. In this context, ‘competence’ appears to be conceived as a positive or at the very least neutral didactic concept.

Hhx has existed for more than a hundred years. It is rooted in a 19th century countermovement against the traditional Erudite School [Latin Skolen] system, where traditional conceptions of *Bildung* (cf. Part II, p. 40ff., and Part III, p. 156ff.), became the background for the dominant *gymnasium* line, [Alment Gymnasium] or stx. It was not until 1972 that hhx was acknowledged as part of the formal and competence-giving school system. From a contemporary view, the concept of *Bildung* that applied to this educational setting and its subjects have been described as *economical-cultural Bildung* (Gleerup et al. 2003). ”Danish” is a compulsory subject all three years and is seen as contributing to this overarching goal. In the ”Danish” in hhx Act’, from 2000, the over-arching purpose of the subject is described as follows:

In ”Danish”, the purpose [formål] of teaching is for the student to develop his or her ability to use the language in a precise and varied manner and to develop textual understanding through the experience of and work with literary and other textual forms. (UVM 2000e: no paging, my translation)

A clear and familiar formula is given for ”Danish”. It expresses a conception of language-and-literature as opposed to ‘other textual forms’, which delineates it from modes-and-media. This position is repeated in other upper-secondary curricula, most significantly in stx (Krogh 2003, 2006). This does not imply that media education has not been explicitly included or practiced. The concepts of ‘extended text’, ‘mass communication’ and ‘pragmatics’ in 1970s curricula, has given rise to a need for media education in hhx-”Danish”. Generally, however, media education has played a marginal position, not the least in student projects (as documented in UVM 2001a).

Danish media scholars (Schrøder 1988, Lehrmann 1996, Drotner 2001b) argue that teaching media education in formal schooling, especially in upper-secondary education, seems to be governed by teacher scepticism towards media. In this regard, media was seen as manipulative. This perspective was derived from the academic agenda of the 1970s. There the aim, using

Buckingham's (2003) terms, was *demystification* of the ideological constructs that functioned through media. Considering the average age of teachers this might not come as a surprise. In 2003, the average age of "Danish" teachers in upper-secondary education was almost 50 years.⁷⁵ The majority of "Danish" teachers received their university education at a time when "Danish" and Media Studies disciplines were dominated by the Frankfurter School and ideology critique. These approaches seem to stick at the tertiary level. When the present author studied "Danish" at the University of Copenhagen in the beginning of the 1990s, *Mass Communication* was still the name of a compulsory discipline.

This brief historical diagnosis of 'media pedagogy' within hhx gives an impression of the radicalism and "otherness" that an intervention programme, utilising a systematic multimodal media pedagogical profile, represents. Such an approach moves across well-established ideological and discursive hierarchies and regimes. On the other hand, it is important to stress that the intervention programme was made in a specific historical circumstance, where a systemic revitalization of media pedagogy within MTE/StLE in upper-secondary education had been experienced due to technological developments, but also because of the upper-secondary school reform.

In the process of planning data collection, other settings were considered in regard to the intervention itself (cf. chapter 5, p. 159ff.). One tempting possibility has been to combine teachers from different subjects, instead of only "Danish". This would emphasize the *comparative* aspects of school subjects. As Danish media pedagogy researcher Birgitte Tufte and others (Tufte 1995; Semali 2000) have pointed out (and as I have argued for indirectly in Part II), media pedagogy invites teaching and even research, across the curriculum. The reform of upper-secondary education also invites cross-curricular teaching, development and research. Taking an outset in Andersen, a meaningful and interesting cross-curricular research project could have been designed. As a matter of fact, contributions were given to a *development* project (DIG 2005) on Andersen as a cross-curricular issue, addressing a number of school subjects in all *gymnasium* lines. Research on how this project is adapted in real classroom settings would be very interesting, as would an exploration of how the concrete experiments designed for "Danish" work in a cross-curricular setting. This would strengthen the transferability of the present study. On the other hand, a research project along those lines would require a different research interest and research question. This will be kept for future studies.

⁷⁵ The exact data for "Danish" teachers are the following: "The teacher age-profile (according to teaching competencies) in 2001/2002: Section over 60 years of age: 6.9%. Mean age: 47.5." Data taken from UVM 2003f: appendix 3.

6.2. Teachers lost and found – the process of recruiting key informants

Some data on the process of recruiting teachers – or rather “key informants”, as Bryman (2004: 540) would term them – must be presented. This will contribute to the trustworthiness of the intervention. The strategy for locating and selecting the participating teachers followed the principles of quasi-experimental case studies (chapter 5). The participating teachers were not easily found, nor were they as willing as expected. It is the impression that education researchers tend to follow a tradition of selecting already known, research-experienced teachers and schools. A good example of doing so is Buckingham & Sefton-Green’s studies (1995, 1996). Initially, Buckingham was researching Sefton-Green (as a teacher), who eventually joined forces with Buckingham at the research level. This created an integrated research unit (Sefton-Green later became an individual researcher himself). The tendency to couple experienced teachers with experienced researchers is similar in Denmark. The same schools are used for different research and development project (e.g. because they are close to universities, or the researcher might have taught there or has friends or colleagues at the school etc.). This, in itself, is not problematic as long as one acknowledges how this may influence the trustworthiness of the study.

In the present study it was decided not to co-operate with schools and teachers with former research experience. This may strengthen the credibility and confirmability of the intervention: The present researcher therefore had no personal relations or biases regarding the participants (confirmability); and it may offer a greater diversity in terms of teacher perceptions (credibility). In the beginning of the recruitment phase it was decided to go through the official ”Danish” consultant for hhx at the Ministry of Education, who was known beforehand. In a semi-structured interview with this person regarding hhx (cf. A54), the consultant was asked to recommend schools and teachers that would be interested in the project. This top-down, centre-oriented “consultant strategy” of teacher selection, however, lead to names, but no recruiting: E-mail-correspondence has been kept from these persons and suggests that the project was considered inconvenient or constraining.⁷⁶

Alternatively, an open e-mail invitation was applied. This helped recruit three out of four teachers. The fourth and last teacher was a former student at the University of Copenhagen, who was recommended by a professor in linguistics. A copy of this e-mail is found in A6, in order to

⁷⁶ One teacher turned out to have a Master’s Degree in ‘media pedagogy’ and seemed rather interested in collaboration. This did not come about when the conception of media pedagogy was detailed. In terms of validation, the teacher could be characterised as a negative case (cf. chapter 5). Learn more about the teacher’s reasons for rejecting the intervention would strengthen credibility and confirmability, since it could help scrutinize the assumptions and prejudices of the intervention. Regretably, the teacher did not respond to further correspondence.

give an impression of how the project was constructed discursively in relation to the teachers in the first instance. The e-mail was sent from me through school directors to teachers or directly to teachers appearing on homepages of schools with a profile that suggested interest or experience in teaching media in "Danish". The mail was sent to hhx schools in various regions of the country. The e-mail openly encouraged teachers, who were interested in integrating media pedagogy with "Danish" using H.C. Andersen as an example, to respond. In intervention projects, teachers are often reluctant to participate due to time constraints and work pressure. In order to negotiate this problem, the e-mail explained that funding had been promised to a small-scale Research & Development project from the Ministry of Education to cover some of the time teachers would spend on my project. Later, this funding was received.

Receiving responses from teachers who were superficially interested, information about the project was further detailed. Among other things, it was explained that teachers deciding to join the project should choose what they perceived the class best qualified, for the purpose of the project. In this way 'an apt context' and 'critical cases' (cf. 5.3, p. 161ff.) were sought. Teachers should also consider the intervention project to last a year and thereby plan accordingly for teachers and students alike, such that they must concern themselves with Andersen without diversion. Beginning experiments in January 2004, the participating classes could not be upper-secondary classes in their third year. It was preferred that they be second year classes.

6.3. Framing processes of teacher adaptation

As indicated, four teachers – Karen, Jane, Susanne, Peter – from four different schools, in four different regions of the country (Western Jutland, Northern Jutland, Southern Zealand, Northern Zealand), *did* respond positively to the invitation and decided to join the project. In initial interviews, they were asked why they wanted to join the project and what they thought about it, which lead to a specific type of data, which is termed 'Teacher profiles' (cf. appendices 25-28). In the case profiles (next section), a detailed analysis of answers is presented. As suggested in the Introduction (chapter 1), all four teachers highlighted *the possible use and integration of ICT* as a main reason for participating. Although this seems a positive embracement of the project, it was interpreted as an incident of *adaptation*, that is, a re-interpretation, from a teacher's point of view, of the intentions formulated by me. In the invitation it was stressed that the theoretical starting point was media pedagogy, including an *expanded* notion of media. Hence, media was distinguished from technology, and particularly the politically focused ICT pedagogy. However, the teachers, as suggested, identified media predominantly as a synonym for ICT. Methodologically speaking, this

was one of the first encounters with perception triangulation. It confronted the perception of the designer-researcher intruding from the “outside” macro system forcing certain theoretical ideas. Teachers not only identified media with ICT, but were also more concerned with the *organizational* aspect of media pedagogy – teaching *with* media – within their school context than the didactic aspect of using media within subject-related teaching, teaching *about* media as a *conceptual* aspect. This distinction was continuously emphasised in dialogue with the participating teachers, underlining that focus was on subject-related didactics, though acknowledging the organizational aspect. In-depth analyses of the four experiments will clarify the organizational aspects of ICT technology and that it did indeed become an important aspect of multimodal media competence development.

Reflecting on the initial process of collaboration with the teachers, all four participating teachers expressed concern, early in the process. This regarded especially meeting too often outside their school setting. The schools would not fund such meetings, teachers argued, and nor did they have the time to meet too often due to family and work. Since the intervention was meant to go on for a year, they all agreed to meet *three* times, as was hoped and planned in the early pre-experimental phase (cf. also chapter 5. p. 159ff.). The meetings would proceed as follows:

- In a *pre-experimental* phase, in January 2004, before the pilot study/experiment 1 were to begin;
- In an *intermediate* phase of the project, in August after experiment 2 had been finished;
- In a *post-experimental* phase in January 2005 after having completed all four experiments.

For all practical purposes, this structure was maintained.

The idea of these group meetings was to establish arenas for reflection in the genre of what, Steen Beck, has termed *Socratic dialogue* (Beck & Reesen 2004: 37, my translation; cf. also Beck 2006). For the designer-researcher, meetings would offer data on the credibility and transferability of the project, also it would add to the idea of collaboration among teachers and the designer-researcher, which is a vital aspect of DBR. For the teachers it could have direct impact on their practice in certain types of intervention methodology – such as action research (Zeichner 2001). In such arenas reflection is indispensable. The *few* collective meetings were compensated by setting up a virtual discussion forum on a Blackboard intranet site. The site was used by the designer-

researcher to deliver the curriculum design that the teachers would need for the pilot study and consecutive interventions. It would also serve as a forum where the participating teachers and the present designer-researcher could share ideas and experiences, being able to make intranet-links to the learning material we might refer to in our discussions. At the meeting the teachers acknowledged this idea. However, the discussion forum was never exploited, although efforts were made to encourage reflection, asking questions and sending messages to the teachers. Semi-political documents regarding ICT pedagogy in upper-secondary education (UVM 2001b) suggest an idea of computer-mediated collaboration among teachers precisely with the purpose of teacher reflection and innovation. It must be concluded that this idea was *not* adopted by the teachers collaborated with, also, we might consider whether such a method is desirable in intervention studies and development projects. Time and work pressures were the main reasons offered for the passivity of the virtual forum. Another good explanation might be the lack of tradition regarding reflective *practice* (Schön 2000) and *didactization* (Ongstad 2004; cf. 4.3.4, p. 143) among teachers from different schools.

The lack of cross-case didactic reflection in the computer ‘medium’ (Meyrowitz 1998, cf. 3.2.2.3, p. 64ff.) was compensated not only by physical meetings but also by conversations on a local school basis. Here, the participant teachers reflected on the intervention before and after teaching, conversing informally in the teacher common room. The teacher common room is a space for the relatively free and open discussion about teaching. Several field and research notes from my research log reflect this. Critical and self-critical reflection was established, often involving nearby colleagues in the discussion. To some extent, field notes from such conversations show that the topics were engineered by the present author; in this sense, the credibility and dependability may be questioned. On the other hand, it is claimed that the common room is indeed the cultivated context for didactical reflection. This is where judgments are made regarding potentials and constraints for every aspect of teaching and learning. Indeed, this is often done harshly when commenting on students. One incident, in speaking with Jane about a successful class that day, a nearby colleague commented along the lines (reconstructed in field notes): ‘Yeah, okay, but that’s just because it is a good class. Generally, that kind of teaching cannot be practised’. Similar utterances of scepticism occurred in the teachers’ common room while doing field work at Karen and Susanne’s schools.

Such comments suggest the existence and power of well established teacher ‘regimes’ – to put it in socio semiotic terms – when trying to introduce interventions in real life settings. These represent, almost discretely, a type of negative cases that questions the credibility of the study,

particularly the perceptions collected from the four key informants: Karen, Jane, Susanne, and Peter. It was experienced quite early on in the process that these four teachers, who had willingly taken the risk of trying something new, would in fact become a bit isolated. She or he is placed on the limit between what is perceived as possible (the norm) and impossible (anomaly). One should remember this – not the least when considering the impact of an intervention following the conclusion of the intervention. On the other hand, such collegial comments also demonstrate that the present author was included among the teachers as a legitimate “researcher”. No problems were experienced in visiting the schools doing fieldwork and participatory observations. It was found, however, that school directors and teachers were almost too relaxed about formal procedures for entering the field following ethical standards.

Considering the constraints of my own research programme (economical, among others), it was *planned* to do participatory observations in more or less half of each teacher’s lessons involving the experiments – in reality, it was less. In each of the analyses of experiments, the number of visits will be accounted for. As suggested and discussed in chapter 5, one might object that *all* lessons in the experiments should have been observed in order to obtain a complete and rich understanding of what was going on. In practice, this would have required at least 40 visits around the country, which was impossible in terms of time and economy. Also, regarding the exploration of the research question, one may argue that such observational omissions had a positive outcome, because it encouraged the agents, and particularly the teacher, to think and act on his or her own. Often, presence in the classrooms incited questions on aspects of the experiment / Available Designs, sometimes forcing a momentary change from participant observant to teacher or ‘author of learning resources trying to explain his intentions’.

The data may be over-interpreted (e.g. the field notes for experiments; cf. appendices), but the absences also imbued a sense of dynamic development, which had emerged in-between visits, and which could otherwise not have been easily observed given too great an immersion. Teachers would come up with ideas about the adaptation of the experiment that would not have been thought of. In the methodology of ethnographic research (e.g. Bryman 2004, chapter 14; Hastrup 2003; Drotner et al. 2003, section 2) it is generally recommended that one should spend a lot of time living in the field. In psychological lab experiments, within educational science, the researcher, goes without saying, is also thought of as being present or nearby controlling the situation. In educational interventions, however, experience shows that this is not necessarily desirable or an ideal. The teachers may become innovative precisely because the designer-researcher is not present. As Randi

and Corno (1997) explain: “What have often been documented as teachers’ adaptations of innovations may have been teachers’ innovations created in response to the contexts in which they work.” (Cit. en Squire et al. 2003: 471). In other words, we should remind ourselves that DBR creates a semi-naturalistic context with the double goal of producing local impact and developing theory. The researcher not being present in the setting for observation (which, in any case, is impossible; think of group work, or virtual work) might make the context more authentic, and this may strengthen the trustworthiness of the intervention study.

6.4. Case profiles

In the following, the four key informant teachers participating in the intervention become gateways, so to speak, to the four cases. In sketching the cases, school settings and students in this section, the descriptions are constructed from the teacher’s point of view. Later, descriptions of the students, classes and school settings will be presented from a student point of view. The case profiles will, not surprisingly, vary given the fact that we are speaking of four individuals. However, there are also invariant features in the description of the teachers. For instance, all participating teachers were less than 50 years of age. They taught in schools in four different parts of the country, all located in regional towns (50.000 or less inhabitants). For ethical reasons, schools are anonymised and fictitious names employed for the teachers.⁷⁷ The main data sources for the case profiles are the teacher profiles (A25-A28), transcripts of the pre-experimental meeting (A29), field notes, and the research log (analogue and digital: A24).

6.4.1. Case 1: Karen teaching a second year class in Central Jutland

Karen teaches a second year hhx ”Danish” class in Central Jutland. In 2004, during the initial meeting, Karen was 47 years old with 15 years of teaching experience, working in a hhx school in a rather big town in the central part of Jutland. The town is characterised by trade and industry. Karen lives in the same city with her family, including two children and a husband. Karen teaches ”Danish” and ”English”. She has taken an academic degree in these two subjects at the university. Being unemployed in the beginning of the 90s, Karen took courses on ICT and started to use it intensively at home. This has made Karen very interested in teaching with ICT. She uses the term “technology freak” about herself.

⁷⁷ Names are not (with a few exceptions) anonymous in the appendices, which – unlike the dissertation – is not publically available. Cf. A53 for a key to pseudonyms.

Karen teaches classes in which all students have laptops, including the one Karen chose for this project. The class is a second year class with 21 students, which collaborates very well, including the girls, as Karen sees it. Using a laptop and the wireless intranet system of the school, Karen hardly ever uses paper when teaching this class. It is Karen's mission to replace paper completely with digital learning material. In the beginning, this was difficult to understand for the class and it created disciplinary problems, for instance in handing in papers using e-mail. This problem, however, was handled and solved developing routines and habits for ICT use.

At Karen's school, ICT is seen as a very important part of future curriculum development. Reflecting policies of the Ministry of Education, it is considered "...a prestige project...", as Karen puts it. Karen supports this idea. Although she ranks the wireless system and *Netstudier*, the learning management system (abbreviated LMS) made available for the teachers, as not working very well she believes it should be possible to use these technologies as part of this project. Karen believes that colleagues at the school are quite conservative towards the use of new media and feels a bit isolated.

Although Karen is a technology freak, she is also very concerned with quality in the integration of media and "Danish". Karen sees literature and the student ability to analyse literature as the most important goals of the "Danish" subject. She describes Hans Christian Andersen as "the Mouton Rothschild of Danish Literary History" and expressed scepticism when presented with the idea of working with animated fairy tales (in the fourth experiment, cf. chapter 11, p. 347ff.). Karen was particularly interested in how to use digital media in order to improve the quality of teaching literature.

6.4.2. Case 2: Jane teaching a first year class in Northern Jutland

Jane is 44 years old, and has ten years teaching experience. Jane's educational background from the university is "Danish" and *Film- and Media Studies*. She teaches both school subjects (the latter being a compulsory, highly popular, subject). Jane has experience with pedagogical development projects, having contributed to the development of a pilot project, where the Ministry of Education allowed the use of CD-ROM at final written exams (cf. UVM 2000c, UVM 2000d).

Jane's school is located in a rather remote section of northern Jutland. She lives with her family (another woman and two small children) more than a 100 kilometres away in Denmark's second biggest town, Århus. Jane's school is expanding. Like Karen's school, it sees ICT as an important element of future schooling at advanced levels. It has established a wireless network in all areas of

the school. Like any other teacher at the school, Jane has a laptop. However, there are no “laptop classes” in this school.

The class Jane has chosen to work with is a first year class with 31 students. It is a so-called International class, which means that it travels abroad and communicates through e-mail with classes in other countries. In the class, not everybody has laptops. About half of the students bring their private laptops, these being primarily boys. The rest have to go to computer rooms or open computer areas. Alternatively, Jane can make a reservation for laptop wagon and bring it to the classroom, which is cumbersome.

Jane is rather sceptical about the positive use of ICT in ”Danish”. One of the problems, as Jane sees it, is that it helps the students already doing well, while it makes it even more difficult for those not doing so well. Another problem is that the school LMS, called Blackboard, works slowly and seems to be too complicated. Jane only uses it for messages and bibliographical information for the students. Jane questions the objective of the school system and indeed also the whole upper-secondary education reform. It is suspected that its true purpose is to cut back on the number of teachers. Jane has formerly worked for the union of upper-secondary teachers.

Jane thinks almost all students in the chosen class have an “intuitive” approach towards media, and that some of the students are extremely good with ICT skills. These students tend to help their peers. The general problem for students regarding media is reflection and critical judgement. Jane believes that new digital communication has made critical mass media analysis even more important than before. According to Jane, texts from an age before the students were born (around 1987), are perceived as “strange”. Pedagogically, Jane believes that a first year class is not ready to work project and problem orientated; at least they need a lot of guidance.

Jane experiences that many students have problems understanding the legitimacy and purpose of ”Danish”. Thus, it is a positive thing that the intervention programme, as Jane expresses it, “...presents the old media of Andersen in new media...”, offering the students a learning goal, which seems relevant to the media culture they engage in outside school.

6.4.3. Case 3: Susanne teaching a second year class in Southern Zealand

Susanne is 39 years old and has taught ”Danish” for six and a half years. Susanne also works at the school as a student advisor. Susanne’s academic background from the university is ”Danish” and “French”. Moreover, Susanne has a degree from the Danish Open University in *Media Studies*. Susanne teaches all three subjects. Susanne’s school is located in the southern part of Zealand. It has just merged with another institution.

The school has no wireless Internet and Susanne considers the technology at the school to be “not too good”. Still, Netstudier, the same LMS as in Karen’s school, can be accessed on a number of stationary computers located all over the school and from at home (like the LMS in the other settings). Susanne, like Jane, lives more than 100 kilometres from work, in Copenhagen. She has a husband and they have kids in school. Susanne’s time schedule is tight.

Susanne has experience with pedagogical development projects and has taught rhetoric at courses arranged by the National Association of ”Danish” Teachers. Susanne is proud of being a teacher in hhx, rather than stx, because this institutional setting is good at producing “pattern breakers”, that is, students who did not expect to take an upper-secondary education.

The class Susanne has chosen to work with is a second year class composed of 22 students. Susanne describes the class as “sociable”. The reason why Susanne has joined the intervention programme is that “...it could be exciting to learn about a new approach to a well-known subject...” (Andersen). Also, Susanne is expectant and looks forward to “...work in new ways”.

6.4.4. Case 4: Peter teaching a first year class in suburban Copenhagen

Peter is 37 years old and has studied ”Danish” and Psychology at the university; and he teaches the same subjects in school. Peter’s school is located in suburban Copenhagen, close to Peter’s home (he has wife and three small children). Peter claims that in this region hhx has a relatively low status compared to stx (this is contrary to statements made by Karen and Jane claiming that, in their regions, hhx it is the first priority of many students and their parents).

Peter has taught for 13 years in spite of him being the youngest teacher in the group of participating teachers/key informants. Besides the teaching job, Peter is taking a master’s degree – on and off – in Nordic Literature and Philology. Peter is also interested in the theoretical development of the ”Danish” curriculum, being familiar with the project and work regarding the Future of ”Danish” (UVM 2003c). He finds that the focus in the report on competence was important. At work, Peter leads the team of ”Danish” teachers that meets in order to share ideas and, as mentioned earlier, also has a job as ICT pedagogical manager, though not at all feeling like a “super user”.

The school, as with Karen and Jane, focuses a lot on ICT and offers *Blackboard* for everyone – but only stationary computers. In every classroom there is a newly installed laser projector that can be connected to a stationary computer. It is the general experience among the teachers in the school that there is a discrepancy between technological *availability* and *use*, especially subject-related use.

The class Peter has chosen for the project is a first year class composed of 29 students. Peter characterizes the class as being “skilful” and “engaged”, though: “...texts before 1960 are like a foreign language to the students”. Peter emphasizes that the learning material for the experiments must be realistic – not too complex and long. He thought a curriculum programme extent of 10 lessons or so over a period of three weeks, to be fine.

Peter seems to be most interested in literary approaches in ”Danish” and has joined the project because he likes Andersen and the romantic period and wishes to become more competent in integrating ICT in ”Danish”. Peter is familiar with the CD-ROM project (that Jane had co-produced), but claimed that it had not really improved anything: It leads to work with different text types, but the “analytical result” – including grades – is the same. Peter claims that students do not seem to care that new media and modes are being used.

6.4.5. Comparative cross-case analysis in the pre-experimental phase

Comparing the four cases, at this early level, it will be argued that some similarities and differences are found with certainty, while it can be suggested that other arise speculatively.

Speaking of similarities, the study deals with two first year classes (case 2 and case 4), and two second-year classes (case 1 and case 3). This gives differences in student age, student experiences⁷⁸ and curriculum demands (cf. also next section). Note that the two first year classes (case 2 and case 4) have considerably *more* students than the second year classes.

Cases 2 and 4 use the same LMS; and case 1 and case 3 accordingly. All four teachers have relatively little experience in using such a system, case 1 being a bit more experienced than the others.⁷⁹ All teachers have studied ”Danish” at a university level. This, however, is also a parameter where variance becomes evident. Besides ”Danish”, teachers have had rather different educational backgrounds and disciplinary approaches towards the mother tongue subject and media education. They have, as Gee terms it (Gee 2001; cf. p. 79), different combinations of N-, I-, and A-identities. The interesting question is how this might relate to their D-identity in their actualisation of teaching-learning relations with students.

Another way of addressing teacher identity is to focus on differences in terms of expressed preferences for topics and pedagogy. Comparing teacher statements with Sawyer and van de Ven’s

⁷⁸ This includes what teachers refer to as their professional and personal “maturity”.

⁷⁹ In interviews with the teachers, it has been suggested that we use the school LMS as a mandatory and continuous part of the teaching-with-media pedagogy in the experiments, thus acknowledging and responding to the importance that local school culture and national school policy seem to have in this aspect. That suggestion was received with enthusiasm because it urged the teachers to try it out in an integrative subject-related way.

framing of competing paradigms in MTE (cf. chapter 4.3.2, p. 137ff.), it has been attempted to allocate teachers in terms of the *dominating* paradigm they seem to be giving voice to and any *alternative* paradigm they might tend towards. It is suggested that:

- *Karen*'s professional identity is predominantly rooted in the *academic paradigm*, with a tendency towards the communicative paradigm.
- *Jane* seems to be rooted in the *communicative paradigm* with a tendency to incorporate rationales from the developmental paradigm.
- *Susanne* seems to be rooted in the *communicative* paradigm, with a tendency to incorporate rationales from the utilitarian paradigm.
- *Peter* gave voice to an *academic* paradigm, with a tendency towards the utilitarian.

Obviously, these characterisations must be considered vague in terms of validity. They are an interpretative way of framing their professional identities as “Danish” teachers.⁸⁰ Such a framing allows the analyst, abstractly, to compare cases. However, if we trust the characterisation, we note that the teachers perceived the intervention differently, at least to some extent. While none of them have similar profiles, two of them (*Karen* and *Peter*) have preferences for an academic paradigm and two (*Jane* and *Susanne*) have preferences for a communicative paradigm. We might expect, taking these speculations a stage further that the teacher interpretation of the intervention process, including the Available Designs of the experiments, will differ due to their differing professional identities. From an analytical point of view, these characterisations makes it possible to offer so-called *intentional explanations* – one type of causal explanations, as advocates of abductive science would argue – of what is going on in classroom practice.

6.5. Student screening

Although student data has been compiled on gender, race, class, ethnicity and media use, collected through a questionnaire undertaken at the end of the intervention in February 2005 (cf. A51), no systematic description of students will be offered using these parameters. Due to the research question and hypothesis, this investigation does not undertake or imply a representative,

⁸⁰ Gitte Ingerslev has made a more systematic phenomenographic PhD study of teacher and student positions within “Danish”, 2002.

quantitative study in a classical sociological sense, such that these parameters could serve as explanatory factors. On the basis of the questionnaire one may, however, indicate, some general characteristics regarding the classes and their students, in order to develop a broader, qualitative understanding of the cases studied. This includes reference to an orally instructed experiment made with the students on my first visit at the schools presenting myself and the project. The experiment was about student conceptions of media.

The total number of students in the four classes (February 2004), when the first experiment began, was 103 (21 in case 1, 31 in case 2, 22 in case 3, and 29 in case 4). The total number of students in February 2005 when it ended was 96 students. Analysing the questionnaires, it was found that students in the first year classes (cases 2 and 4) were 16 + years of age, a majority being 17 in February 2004 when the intervention began. In the second year classes (cases 1 and 3) students, accordingly were 17+ years of age, the majority being 18. In classes there was found an even distribution of girls and boys (with small local variances). Both observations correspond with knowledge of class composition in *hhx*. In case 1, one student was remarkably different in terms of age: Flemming (anonymised), was 40 years old, using *hhx* as a re-education platform after having worked as a truck driver. Flemming asked, often in a humorous-critical way, many questions regarding the experiment. In this way he contested the assumptions and offered ‘rival explanations’ (cf. chapter 5, p. 176f.) regarding the intervention. These challenges were interesting and would strengthen the credibility of the study. Perceptions of him and several other students from all four cases will be documented in analyses of experiments.

An even gender distribution would, quantitatively speaking, not imply an even distribution of “affinity grouping” among girls and boys. On the first visit and later in the four classes, a typical and not very surprising pattern was found: Girls would predominantly sit next to girls in groups of girls, and boys accordingly. In teaching-learning processes that included group work where students may pair voluntarily, students predominantly pair according to gender. As we shall see, some teachers attempted to change this through intervention.

On the first visit, following as presenting the scope and general aim of the project, students were given a simple experimental task ending the lesson: They were to write a paper or send the present author an e-mail answering two questions: 1) Give an answer to the question: What is a medium?, and 2) Give examples of media.

Before the answers are presented, we might ask: Why this task; why is it relevant? As we know from the theory of multimodal media pedagogy, it is vital to be aware of the conceptual

understanding (knowledge), competencies, and motivations that students bring to the classroom (cf. Part II, p. 40ff.). What is striking is the difficulty to comply with this demand, not the least when approaching a class as a designer-researcher being an outsider. Previously an attempt had been made in using other data sources: Firstly, teachers were asked about *their* perception of student media competencies. This would offer some insight albeit the credibility of such a teacher perception could be questioned considering teacher technology-oriented understanding of media (cf. sections above). Secondly, qualitative and quantitative studies regarding young people's media culture have been consulted (e.g. Drotner 2001a, Livingstone & Bovill 2001, Buckingham 2003). Some findings in Drotner's survey (data are collected in 1998) show that young people in Denmark use a rich variety of media. More than 9 out of 10 watch TV every day, call someone using a telephone, listen to a CD or audio-tape and watch video. Her research also shows that the use of media is very much guided by social appropriation. Young people use media that can contribute to their personal and social interests – the medium in itself is not interesting.

In relation to the present study, making an initial classroom survey, using a questionnaire more or less similar to the one used in Drotner's survey, was taken into consideration. Eventually it was decided *not* to follow such an approach at the outset. Instead, the questionnaire was employed at the *end* of the intervention process. If used in the beginning, focus would have become blurred for the students. Methodologically speaking, it might have constructed a clear distance between the research subject and the researched object.

In characterizing the answers from the questionnaire, the students in the four cases do not seem to represent a culture of media use different from what is found in the larger Danish survey by Drotner, although some things had clearly changed since Drotner's 1998 survey. What did students answer to the first question? Performing a cross case comparison of the answers from the 87 students and using the analytical optic of what was termed the three media competencies inferred from Meyrowitz (content, form, function), it is found that student responses are dominated by a *content*-oriented media conception focusing on the 'information' sent to the public by mass media. To a lesser degree they acknowledge the formal or aesthetic, conception; and less so do they acknowledge functional aspects of media. Another interesting result inferred from these data, is that the students predominantly see themselves as passive receivers, not active producers of media. Moreover, they do not seem to discriminate popular media. Their theoretical conception of how to deal with them is dominated by "critical" approaches. One student claims that critical approaches might help students resist media "manipulation".

When visiting the classes this first time, the students were given a presentation of the intervention, 30 minutes before being given the task of defining a medium and giving examples.⁸¹ Students listened respectfully, as if being exposed to ‘overt instruction’ (New London Group 2000, cf. chapter 3 and 4). Afterwards, some students defined a medium, and gave examples, resembling more or less precisely my presentation. In this sense the credibility of the student response is seriously weakened. On the other hand, it was also found that their answers were very much a *personal* interpretation of what a medium is and what examples might be. An anonymous answer from a student in Susanne’s class (case 3) documents this point. The writer claims that media ‘know-how’ is necessary to be critically informative, offering the example: “Football – where a team plays bad, they are criticized by the media” (my literal translation). Media, in this excerpt, is conceptualised as a grouping of critical agents addressing a popular content matter. The writer seems to be a boy. From an academic or a teacher’s point of view, the boy’s conceptualisation might seem far-fetched. Contrarily, it will be argued that it demonstrates a mix of content and functional media competencies driven forward by personal and local interests and knowledge as this applies to the student. This is what medium *means* to him. That is *his* point of departure in terms of media pedagogy, becoming an agent of the intervention. That is *his* literacy theory, as literacy researchers Barton and Hamilton (1998) would put it; or in the framework of this particular study it is his theory of semiocy. We might choose to ignore or correct it, which could put off and disengage the student all together. Before doing so, we should not consider his media conceptualisation exotic by studying table 6.5.1. This table offers a list of all *examples* of media suggested by students in the four classes:

⁸¹ In A8 one can observe the keywords (in Danish) used for the presentation, getting an impression of how I constructed the intervention initially in relation to students. It is interesting to note that a definition of media is used that I do not use in the present dissertation after having reflected on theory of media.

Television, advertising, commercials, ads, Internet, newspaper, telephone, sms, people that can speak with the dead, magazines, radio, audible/verbal/visual forms, animations, pictures, still pictures, books, mobile phones, a TV programme about football, the news on TV, *Se og Hør* [a magazine like *Hola*], 'anything from a sign to a tv programme', computer, poster, telegraph, fax, paper, media convergence, blackboard, moving commercials, posters, movies, radio, music, 'simply anything, many things we don't think of, are in fact a medium, endless possibilities', 'All tools that can be used to distribute information, news, your message', 'all kinds of "distant contact" between people', pamphlets, video, web sites, letters, TV series, murals, 'magazines with beautiful models which influence us', presentations, songs, jokes, anything that can pass information on to others, persons, art, 'media are everywhere', journalism, theatre, books, 'media manipulate and affect people', *BT* [a newspaper like *The Sun*], *Tv2* [a Danish TV station], *Ritzau*, *CNN*, *BBC*, *TV2.dk.*, Internet newspaper, free newspaper, comics, bus stops, trains, e-mail, text TV, "etc."

Table 6.5.1. Student examples of media. My translation

Looking at the list, it is obvious that students do not deal with a common, clear, uniform understanding of media. Rather, what we observe are diverse, personally, socially and culturally constructed conceptions of media. Some of the examples, (cf. Part II), are indeed examples of media, while others are examples of technology, modes and genres. It was found interesting that particularly Jane's class (case 2) emphasizes critical aspects of media. Considering the case profile of Jane (cf. above), one might suggest a causal or intentional relation between teacher conceptions and student conceptions of media. Wrapping up this section on student screening, we may say that a rich variety regarding perceptions of media was found. This contributes to the understanding of the complex 'context' of the intervention that the intervening designer-researcher should take into consideration when designing the first experiment.

6.6. "Andersen" as a discursive part of the context

As argued, the context of a specific intervention process is made up of a number of co-signifying elements, so far only some of these have been highlighted: the institutional setting and its general curriculum demands; the teachers, their identities and (their view on) local school culture; the students, including their media conceptions. Another contextual discourse must be addressed before approaching the specific experiments. This regards the discursive role that "Andersen" as a signature plays in this context.

In Part II we have already to some extent analysed the manner in which Andersen is constructed in the Danish education system. It is argued that he is predominantly seen and taught as a monomodal, literary, to some extent nationalized and to a large extent canonized writer. The number of academic and popular books and articles written about Andersen from this point of view

could fill out a library. Some examples are Andersen 1942; Rossel 1996; Andersen 2003; de Mylius 2005. This dominating literary academic approach to Andersen affects the conception of Andersen both among students and teachers. In the current presentation of the intervention to the participating teachers (A30) and to the participating students (A7), it was attempted to stress the difference of the experiments in regard to such a literary position. Instead, it was made clear that we were to focus on his work in new and old media.

This was not supposed to present any problems. In retrospect, testing the confirmability criterion, one must now ask how much impact this information had on teachers and students. In the analyses in the following chapters, we will see that the very notion “Andersen” is interpreted quite differently by students, teachers, and the intervening researcher. This is indeed an example of the necessity of perception triangulation. Data indicates that several students, after they had heard my first presentation, expected to learn more about *the person* Andersen and were later disappointed that this approach would not be addressed. For example, field notes from the observation of case 4 in experiment 1 (A31), demonstrate that the question of whether Andersen was gay (this refers to a widely spread idea which is still supported by literary critics (cf. e.g. Heede 2005; Wullschlager 2000)) was posited. Throughout the intervention these kinds of questions, addressing a high interest in Andersen’s biography, were often posited.

As argued earlier, Andersen is predominantly taught in biographical and existential ways or as a representative or rather a producer of literary history (more specifically contributing to the shift from romanticism to modernity) among “Danish” teachers. What about the four participating teachers, how did they understand him? Due to the initial interviews and the pre-experimental meeting and the profiles developed at this early point, it is argued that they confirmed the general picture. They had experimented with modes and media other than paper and words. They had worked with readings and illustrations. However, they would not use such material in final exams. Rather, such material would be used as an appetizer for teaching Andersen from a historical and literary point of view. The analyses will offer specific data on how the teacher perception of Andersen influenced the design processes of the intervention.

6.7. Negotiating the framework of the four experiments

Developing the framework of the intervention and its experiments was in itself planned as a collaborative process due to the ideas of DBR, at least to some extent. The quasi-experimental nature of the study required that prior control of the intervention. One may question, as will be demonstrated in this section, whether collaboration was in fact an option.

As suggested in the pre-experimental presentation to teachers and students (A30), the multimodal media pedagogical approach to Andersen was insisted upon and this approach was to be made operative within four different experiments. Each experiment would hypothetically test a particular (multi)modal aspect of available Andersen fairytale resources in order to explore whether such resources would enable the development of multimodal media pedagogy and – simultaneously – make sense within the context of “Danish”. In short, this is the idea of the research question being explored theoretically and empirically.

It was suggested to the students (A7) that we:

1. Begin with the mode of writing in experiment 1;
2. Then move on to oral approaches and reading in experiment 2;
3. Then move on to the relation between stable images and words in experiment 3;
4. Finally work with animation in experiment 4.

This was the basic operative framework for the intervention. Also it was explained that the purpose was to develop and potentially reflect on and change the way we teach and learn Andersen and the way the school subject is taught.

Beforehand, more complex and faceted sketch of the intervention and the experiments were presented to the participating teachers (A30; A8).

To them it was proposed that experiment 1 was to be about writing in the sense that writing is the foregrounded and basic mode for a complex curriculum resource in which students would be able to work individually and collectively, receptively and productively with computer-transmediated fairytales and 19th century newspaper reviews available on the Internet. One aspect of the ‘critical’ approach would be the introduction of a so-called journalism group compounded by students. These journalist-students would be asked to produce a critical meta-view on the whole experiment in modes, media and genre of their choice.

In experiment 2, oral approaches would be foregrounded. To be more precise, several old and contemporary readings of Andersen fairytales on audiotape, computer, audiovisual and written material about how to make readings would be made available for work in the classroom community. Again, students would be able to work collectively, individually, receptively and productively in addressing the complexity of an often-overlooked mode (orality) and its interlaced

media within MTE/StLE. The experiment would be structured as a competition both within the class/case and in-between the four classes/cases. Again, it was expected that a journalism group would be established encouraging the teacher to establish collaboration between students and a local radio station.

In experiment 3, Andersen picture books and other visual representations of his fairytales, produced from mid-19th century up till now, would be made available. It was imagined that the principles of collective/individual, receptive/productive work and of meta-level journalism groups remained the same. The experiment would address, and question the commonly held assumption – proposed by Kress (2003) – that young people in contemporary society are visually literate because we live in a visually dominated society. In other words, the aim was to test whether they are experts in terms of visual competence when it comes to the resources of Andersen. Empirical media pedagogical research from a Danish context (Christensen 1997, Christensen 2003) has suggested that this might not be the case. Moreover, it was found particularly interesting to note that picture books do not only represent one mode – pictures. They communicate both visually and verbally. In a sense, they demand a complex multimodal, or at least “double modal”, competence from the students. Would it be possible to address this point in teaching?

Finally, experiment 4 deals with “more media”, as a student in Peter’s class, Beth, later reconstructed my presentation. This refers to 20th century animated Andersen fairytales, produced in Denmark and abroad, but also material about these and other animations, made available in class for knowledge production. It was expected that the teaching-learning process would include the possibility of visiting what is sometimes termed as “extra-mural” or authentic learning environments: The Animation School in Viborg, Jutland, or a similar place in Copenhagen. Again the principles of collective/individual, receptive/productive, and meta-level journalism groups were repeated.

Although this sketch was necessarily premature it was imagined that these experiments would be one way of integrating the fundamental principles of multimodal media pedagogy with Andersen within the context of actual “Danish” classrooms. At that point in the research process the exact model of multimodal media pedagogy had not been developed and synthesized. However, it must be argued that the sketch is informed by the theories of multimodality and media education, particularly the works of Kress (2003) and Buckingham (2003), which were adopted into my project at that time.

Interestingly, Peter contested the progression of modes and media as presented in the framework of experiments at the pre-experimental meeting.⁸² This observation is important to note in the light of the ongoing evaluation of study trustworthiness, not the least when we later analyse the evaluations from teachers of the experiments. Peter suggested that the chronological order of the experiments should be *reversed* because students might feel that it would be easier to understand animations rather than writing/criticism in the beginning. In our discussion on this matter the other teachers agreed to some extent. Being influenced by theory it was, however, argued, with reference to the report on *The future of Danish* (UVM 2003c), that the study should begin with those modes which are considered to be at the core of the mother tongue subject, namely writing and orality. The four teachers accepted this argument reluctantly. However, as we shall see in the next chapter, some of Peter's expectations did seem to be confirmed. It should be added that after the meeting one key respondent of the project – a colleague of mine, Jeppe Bundsgaard, a PhD in the didactics of ICT in “Danish” (cf. p. 131f) – was told about Peter's objection (cf. research log, A24). Jeppe agreed with Peter. On the other hand, he also understood the reasons for maintaining the basic progression of the intervention.

From a methodological point of view, Peter's objections point at issues of credibility and confirmability in the study. In a sense, they even question the specific research design. In terms of credibility, Peter's perception of the practice of teaching is different from mine; ontologically, we construe the reality of teaching in different ways at this point. My perception is related to problems of confirmability: As the intervening designer-researcher it is acknowledged that there are both theoretical and pragmatic reasons for defending the present approach. Other theories were permitted to set the agenda of the intervention, thus making it less sensitive towards the context which was supposed to guide the collaboration. Pragmatically, it is acknowledged that very little time was available to prepare the first experiment. Having to prepare another experiment about animations would have put serious pressure on the milestones for the study. This raises the question of the ‘collaborative’ nature of intervention methodologies and the present study. It became clear early in this intervention process, that the project was not planned in a way that allowed for collaboration. As other DBR researchers have pointed out (Herrington et al. 2007), one may question whether there is time to do a DBR study within the time limits of a PhD. Although this may sound sceptical, it is important to underline that data was indeed produced that allow for interesting data analysis

⁸² Cf. A29: 27ff. In Danish, Peter says: ”Jeg tror det med kritikken (pilotforsøget) er det sværeste for dem”.

related to the research question of the project. However, it is also important to acknowledge that the data are influenced by the conditions and contexts in which they were produced.

Time would indeed become an important parameter in the process of this intervention. Although a sketch had been made of the four experiments and their progression, it was only possible to make a full design for each experiment one at a time, as the teachers were informed. Ideally, it was sought to observe how each experiment would evolve and be interpreted in the field, before designing another experiment was initiated. This would allow teachers and students to influence both the concrete design of the following experiment and on revisions of the model upon which the design was based. In this sense, it would allow for an iterative and pragmatic approach to design based intervention, as prescribed by the methodology.

However, as accounted for in the research log (A24), and as will become evident in analysis of the following phases of the intervention, the process did not evolve quite as automatically and frictionless as expected. The basic structure of four experiments stayed intact, and, as mentioned in chapter 5, the planned process of data collection proceeded as expected, although with some exceptions. Underestimated factors were: pragmatic influences, such as lack of time for reflecting on the data from one experiment before designing the next experiment and the lack of feedback from teachers (only one teacher, Peter, handed back an evaluation of experiment 1 at the right time) which would help me revise the design of experiments. Consequently, the following narration regarding the experiments is both a 'typical' DBR-oriented narration with the twofold goal of exploring empirical impact and theoretical implications of applying a theory (the hypothesis of multimodal media pedagogy) to empirical practice and a meta-narration about the potentials and constraints of the chosen methodology.

Chapter 7. Experiment 1: Writing reviews, becoming critical

7.1. Introduction

Writing pedagogy and literary pedagogy are generally considered to be two separate, institutionalised and well-defined teaching practices and research fields within MTE/StLE. Normally, they are not associated with media pedagogy. In the design of experiment 1, however, writing about H.C. Andersen is seen from an alternative cross-disciplinary point of view – that of multimodal media pedagogy – which intends to integrate the teaching of Andersen’s mode of writing in fairytales with concepts developed in media pedagogy. One basic concept known from media pedagogy – *critical media literacy* – will play an important role in this regard.

In collaboration with the four participating teachers, this experiment was termed a ‘pilot project’ by the researcher-designer. In the collaboration between the researcher-designer and the teachers we were all aware of the fact that we would be making a practical experiment that may develop differently than expected. Thus, the collective approach was development-oriented and explorative. The teachers later reflect on this in their evaluations of the experiment. The auxiliary hypotheses for the experiment were and are quite specific.

- Firstly, it is claimed that the teaching of writing – in the genres of Andersen fairytales and reviews found on the Internet – follows the principles reflected in the model of multimodal media pedagogy and may contribute to the development of multimodal media competence among teachers and students within the context of “Danish”.
- Moreover, it is claimed that this experiment may help us reflect on possible changes within the practice of teaching Andersen in “Danish”.
- It may also help us reflect, more generally, on changes in the teaching of the subject MTE/StLE.

These hypotheses are tested by analysing the experiment from three different perspectives:

- Available Designs,

- Designing,
- and the Redesigned (cf. chapter 2, p. 30).

Peter writes, in an initial spontaneous comment on the experiment in his evaluation: “The pilot experiment content, as well as the material was way too extensive.”⁸³ As suggested by Peter’s evaluation, the hypotheses are not confirmed one-sidedly. Rather, inductively oriented analyses of empirical data offer complex and, to some extent, contradicting insights on how the experiment impacted. On the one hand this regards practice – including teacher conceptions, student reflections, and local school culture – and, on the other hand it leads to theoretical reflections on the model of MTE/StLE and research design. Methodologically, the pilot project/experiment 1 made it clear that we should be critical about the idea of being able to judge whether an intervention is simply a success or not within DBR.

7.2. Available Designs

As explained in chapter 2, a designed curriculum consists of Available Designs, which are semiotic resources representing knowledge that might be actualised for meaning-making and knowledge production. However, in the specific analysis of a designed curriculum and an experiment, the Available Designs should be further detailed. DBR researchers (Squire et al. 2003: 476) suggest that learning resources always represent a number of embedded ‘commitments’, which they term: *epistemological, curricular, pedagogical, social, and technological* commitments. These terms will be applied also – some under the same heading. The ‘commitment’ metaphor in itself seems pertinent in the sense that it becomes possible to study dynamic, local, agentive meaning-making on behalf of teachers and students.

- ‘*Epistemological commitments*’ refers, if we are to relate it to Sawyer and van der Ven’s thinking of MTE (cf. 4.3.2, p. 137ff.), to the paradigm and tradition of a school subject, but also to topical questions.
- ‘*Curricular commitments*’ refers, more specifically, to topics, the ‘whats’ of the practice and events of a school subject.

⁸³ Excerpt from A37.

- ‘*Pedagogical commitments*’ and ‘*social commitments*’ refer, roughly, to the ‘*hows*’ of the teaching-learning relation.
- ‘*Technological commitments*’ is the material means for establishing the didactical situation, related to the teaching-learning relation and, indirectly, to topical and paradigmatic issues.

One might consider using the term ‘media commitments’ instead of ‘technological commitments’, but this will not be the case in the present dissertation. The latter term helps us better distinguish the teaching *about* and *with* media aspects of multimodal media pedagogy. Furthermore, an additional commitment will be developed. For want of a better term this will be

- ‘*the integrating commitment*’, which refers to the over-arching ambition of the research project. This permeates the perspectives from the traditionally separated disciplines of media education and MTE/StLE using Andersen as a case in the search for a new MTE/StLE-related didactic rationale.⁸⁴

7.2.1. *Technological commitments*

Technologically speaking, the learning material was produced using digital technology to make a simple compilation of Microsoft Word documents, which most schools, at least in Denmark, can produce and use. It follows from this that the designed curriculum was not, as seen in relation to other types of intervention and design based research, an expensive, time consuming or complicated e-learning web design: Teachers, with no particular training, could have produced it.

The curriculum relied, in part, on already available Andersen related resources on the Internet: An archive of Danish literature (www.adl.dk; cf. chapter 1, figure 1.6 for picture) in different formats (HTML, ascii), including all fairytales and other texts by Andersen including biographical texts, and a web archive with reviews on Andersen’s tales taken from journals, papers etc. from the times when Andersen published. These were found on a homepage produced by researchers and developers from the University of Southern Denmark (www.andersen.sdu.dk; figure 7.2.1.1).

⁸⁴ The Available Designs of experiment 1 sent to teachers is found in A8. Analysing a designed curriculum that the designer-researcher has designed obviously suggests a potential bias problem and questions the confirmability of the analysis.

These resources are produced with the objective of use in school settings, among others. One might question whether they are in fact suitable for teaching, as we shall see in the analyses, or too demanding. They are open sources with no copyright restrictions unlike material used in later experiments; and one of the Word documents in the designed curriculum made available for students on the intranet would contain links to these learning resources.

How would students access these resources and for what purpose? The course of the teaching/learning process was explained in other documents clarifying the goal, course of activities, and other tools to use. All this material was produced in a manner that could be sent through e-mail to the teachers – who could then adapt it, according to their interests and motivations *qua* the digital productive nature of ICT based material (Livingstone & Lievrouw 2002). Eventually, they would then upload it on the LMS of their class before beginning the process of teaching.

LIV	Værk	Anmeldelse	Anmeldt i	Anmelder	Dato
VÆRK	Agnete og Havmanden	Anmeldelse af: H.C. Andersen, Agnete og Havmanden, Dramatisk Digt.	Maanedsskrift for Litteratur	Monrad, D.G.	1834
RUNDT OM ANDERSEN	At være eller ikke være	Anmeldelse af "At være eller ikke være"	Nord og Syd	Goldschmidt, Meir Aron	1857
FORSKNING	Billedbog uden Billeder. Anden forøgede Udgave	Anmeldelse af <i>Nye Eventyr. Første Bind. Anden Samling</i> (1845)	Berlingske Tidende	ukendt	23.12.1844
Bibliografier	Bruden fra Lammermoor	Dramatisk Litteratur	Maanedsskrift for Litteratur	Wilster, Christian	1832
Anmeldelser	De røde Skoe	Nogle Bemærkninger med Hensyn til Digteren H. C. Andersens Poesie	Dansk Ugeskrift	Hauch, Carsten	30.1.1846
Søg	De to Baronesser	Anmeldelse af "De to Baronesser" (samt <i>Nye Eventyr</i>)	Nord og Syd	Goldschmidt, Meir Aron	1849
Hjælp til søgemaskinen	Den grimme Ælling	Nogle Bemærkninger med Hensyn til Digteren H. C. Andersens Poesie	Dansk Ugeskrift	Hauch, Carsten	30.1.1846
Eventyranmeldelser	Den lille Havfrue	Nogle Bemærkninger med Hensyn til Digteren H. C. Andersens Poesie	Dansk Ugeskrift	Hauch, Carsten	30.1.1846
Romaner	Det døende barn (Moder, Æg og træet)	Nogle Bemærkninger med Hensyn til Digteren H. C.	Dansk Ugeskrift	Hauch, Carsten	30.1.1846
Anden prosa					
Drama					
Digte					
Værker alfabetisk					
Anmeldelser bragt i...					
Anmeldelser alfabetisk					
Anmeldelser kronologisk					
Anden kritik					
Anmeldelse					
Konferencer					
Artikler					
Motiver					
STUDIER					
TITLER OVERSAT					
LINKS					

Figure 7.2.1.1. Screen shot of one of the Internet resources in the pilot study.

Although this might sound simple, it should be noted that it indicates the necessity of functional technology at the schools in question and that the teacher is able to use it. In other words, it requires digital and multimodal media competence at the school organization level. If the school is not committed to this, the teacher and the students cannot be either. This is one particular meso-micro relation when it comes to the establishment of multimodal media pedagogy.

Furthermore, the design implies an unusual procedure – in social semiotic terms, a rupture of production and reception regimes – for both the participating teachers and the students. Gee (2003) has stressed this in speaking of video games and learning – technology is interlaced with social life.

The students in this type of teaching will be given both oral and written instructions through a digitally mediated text. Hence, a new social classroom genre (Ongstad 1997) is established, which again implies a new positioning of the teacher and students. The fact that the material is produced in ways that are not aesthetical to the same degree as published material, could also imply confusion and misunderstanding. On the other hand, they might be more informative and student-oriented than normal oral instructions given by the teacher.

7.2.2. *Epistemological commitments*

In terms of epistemological commitments, which we might rephrase, according to my model of the didactics of MTE/StLE, as commitments towards *knowing*, it will be argued that the pilot study, in general, was committed to an integration, or permeation, of perspectives from the two institutionalised disciplines of media education and mother tongue education. More specifically, it highlighted the topic often referred to as *critical media literacy*.

Buckingham claims that the teaching of critical media literacy is somewhat archetypical of the practices and problems of media education – both in Media Studies and English/mother tongue education (2003: Chapter 7: “Becoming Critical”). Media Studies inspired by the 1970s would interpret critical media literacy as: “...distanced analysis and explicit theoretical argument.” (Op. cit.: 120) about text types from popular culture, typically involving a thorough understanding of advertising and its manipulative signifying discourses, where the producers of such media formats are seen as conspiring against the public. English/MTE/StLE approaches critical media literacy in another way, emphasizing, Buckingham argues along the lines of Bourdieu: “...‘personal appreciation’ and discrimination on the grounds of cultural value...” (Op. cit.: 119), designating authority and value to special practises of criticism. This could involve literary criticism in journals and newspapers, but also the *teacher’s* ability and power to make judgments regarding the reading, speaking and discursive quality of texts in the classroom setting. In other words, one of the problems of this widespread celebration of critical media literacy, also seen among contemporary media researchers (cf. Semali 2000 for an example in an American context), is that it does not allow discursive space for the *emotional* pleasures that young people often experience in their encounter with media (including advertising). To offer criticism, the present author was taught in primary school ”Danish” three possible approaches: Being positive, neutral, or negative. However, the

practice of making critical judgments using one of these approaches, which everybody engages in on an everyday basis, does not seem to be legitimate in the school system, including the social system of MTE/StLE. Thus, there is a discrepancy between critical practice inside and outside school.

Alternatively, Buckingham neither suggests that negative approaches should be left aside nor does he advocate that *anything goes*, as often related to postmodernism. Rather, he questions the idea of ‘correct’ criticisms, foregrounding the often overlooked relations between power and knowledge at the collective level and (self) reflection and identity formation on a personal level. He suggests that ‘being critical’ should be dealt with and addressed as a processual social practice and taught in the classroom in a way that allows students to ‘become critical’ in a dynamic process that combines personal and collaborative reflection and study, but also conceptual and productive activity-orientated strategies.

Indirectly, this understanding of critical media literacy – which could be renamed *critical multimodal media competence*, in order to avoid terminological inconsistencies – is an argument for civic preparation, addressed *en miniature* in school subjects. Relating this to the history of education, it follows the reasoning of Dewey (1997), Klafki (1977, 1998), and the New London Group (2000), who argue accordingly, that *inquiry*, *dialogue*, and *designs of meaning* are basic categories for the maintenance and development of democratic societies. Democracy begins and ends in the micro setting of meaning-making permitted or not in the classroom. Designed curricula addressing *critical semiocry* is a disciplinary, domain specific way of working with over-arching goals of education.

7.2.3. Curricular, pedagogical and social commitments

Going from abstract epistemological commitments to more concrete curricular, pedagogical and social commitments, we should ask: How does critical multimodal media competence relate, potentially and actually, to the designed curriculum of the pilot study taking Hans Christian Andersen as the point of departure?

For one thing, the specific title of the curriculum, made known to the students through the learning material, was “Good, No Good! How to Criticise Andersen – and Your Classmates.” The title echoes the Andersen fairytale “Klods-Hans” ([Clumsy Hans], Andersen 1855) known by most kids (and adapted to popular, massively distributed media and genres, such as animation). It addresses the concept of criticism or rather making an argument in public. In the tale, a poor and clumsy, but intelligent, peasant tries to convince a princess that she should become his wife.

Eventually he does so in such a convincing – and funny – manner that she chooses him instead of the peasant’s more posh brothers and other “fine” people. As pointed out by several literary critics (e.g. Sørensen 1993), according to mid-19th century standards Andersen was performing harsh social criticism in the mode of writing. This criticism is still very relevant to address in the 21st century, also in upper-secondary classrooms.

Ref.	Name of tool	Description of tool	Related step(s)
A	Good, No Good! How to Criticise Andersen – and Your Classmates	Describes the goal and activities of the curriculum programme. (Teachers were encouraged to redesign it, if necessary, so it would meet the language and level of understanding of the students). Several pages.	1-5
B	How to find Andersen fairytales and reviews	Links to the two main Internet resources, www.andersen.sdu.dk and www.adl.dk , offering explanation of how to find material. 1 page.	2
C	Tool to make observations of web pages	Allows students to analyse content, form and function of web pages, asking explicit questions, thus helping to critically understand and use a web page. Several pages.	2
D	How to characterise a review	Document that scaffolds and prompts students in characterising the 19 th century review they find on the internet. 1 page.	2
E	Three types of Andersen reviews	Offers categorisations, examples and reflections on three types of Andersen reviews, scaffolding the development of a (narrow) genre perspective on criticism. Several pages.	3
F	John Chr. Jørgensen: <i>Sprogblomster i spinatbedet</i> .(1999).	Excerpt from academic book about the language of criticism. Contains considerations of the relation between language use and media use. Scaffolds and prompts the students in understanding and producing their own piece of criticism. Several pages.	3, 4
G	Evaluating the programme from the point of view of the subject.	Offers focus questions that prompt students to reflect in retrospect on their own knowledge production in relation to the subject of “Danish” during the curriculum programme. 1 page.	5
H	Evaluation of the programme from the student’s point of view.	Allows students to reflect on the teaching material and the design of the curriculum programme. 1 page.	5

Table 7.2.3.1. Tools in experiment 1. Steps correspond with table 7.2.3.2.

As indicated, these conceptual points were made accessible in the learning material on the LMS (cf. later), but teachers were not explicitly asked to teach them directly. As argued earlier, the teaching-learning process is thought of as indirect teaching requiring ‘designs of meaning’ trying to situate,

in the first place, the topic for the students. Trying to achieve this, the class was divided into two main groups. One main group composed of the majority of students in the class were asked to develop a critique and another group composed of two students, which was asked to play the semi-authentic role of *journalists*.

As explained by Michaels and Sohmer (2002) in reflecting on the New London Group model for teaching, role playing is an important asset of successful – that is engaging, motivating, and meaning-producing – teaching. The “Journalism Group” was one way of complying with this theoretical assumption. The journalism group was to make critical reports and eventually write an article about experiment 1 as it progressed. The journalists were permitted to use media and modes that *they* found useful and relevant. Thus, they would have to work with subgenres within journalism, such as interviews. If they did not *know* this genre, they would have to search for knowledge about it, using the teacher as a consultant that might offer ‘overt instruction’ or ‘critical framing’, such as suggestions for further reading. Its goal was rather loosely defined: it was – in Thavenius’ sense (1995) – functionalistic, beginning with a question mark, requiring a high degree of student responsibility and engagement, including creativity and technical skills. It was the teacher’s responsibility to choose the composition of the journalism group, but apart from that the teacher had no control of the group. We might characterize the journalism group as a *meta*-group; a student-controlled institutionalised or ritualized form of critical framing (NLG 2000) within the class community: Journalists should not only critically *reflect*, but explicitly *communicate* reflections on the subject-related process of producing knowledge within ”Danish”.

The main group composed of the rest of the students, was met with the over-arching goal of developing a critique of a H.C. Andersen fairytale based on the understanding – receptively speaking – of earlier forms of criticism. The class had previously worked with these and constructed knowledge about them. The teacher was offered different resources and tools, as described in table 7.2.3.1, which he or she could choose to make available on the class LMS or in print. As we shall see, teachers chose quite different strategies in using this material.

Step	Social Activity	Pedagogy	Curricular Knowledge Production	Meta group
1	Plenary work in classroom	Situated Practice and Overt instruction	Intro by the teacher about the curriculum programme, presenting the goal, the resources, the tools, and the products that students are required to produce.	

2	Group work inside and outside classroom / computer rooms / home.	Situated practice 'and Critical Framing	In groups, students have to find and characterize – in writing – an Andersen fairytale and a review of that fairytale from the 19 th century using internet resources. They should also make a small comment about the media they use while doing so. Moreover, they should make notes on how they feel about the fairytale themselves. The step is finished when these reflections are uploaded on the LMS.	Journalists choose their medium strategy and upload a small report of phase 1 on the intranet.
3	Plenary work in classroom.	Critical Framing and Overt instruction	Class meets in plenum to present, share and discuss work from step 2. Afterwards, the class reads theory about making criticism: They are shown three authentic types of criticism that Andersen received while he lived: 1) someone writing a review of his fairytale in a journal (public criticism), 2) people from the literary society of that age, including writers, commenting in letters to Andersen on his work (semi-public), and 3) personal letters from friends, typically women who were his fans (private). The material is presented in class by the teacher and/or students and discussed in plenum.	Journalists present their work, so far, to the class through a power point presentation, and receive criticism.
4	Group work inside and outside classroom / computer rooms / home.	Critical Framing and Transformative practice	The groups continue to work collaboratively with the purpose of producing their own critical text of the chosen fairytale. The text should be produced in a contemporary media and genre drawing on one of the three critical text types presented to them (public, semi-public, or private). They are allowed to experiment, e.g. pretending that Andersen still lives, and that they can write a sms to him. Collaborative work in groups includes making a first draft, receiving critical remarks on that draft from the group mate, and writing a final text that is uploaded.	Journalists continue to prepare their publication in an authentic setting (local newspaper) or elsewhere.
5	Plenum work in classroom	Critical Framing	The students get evaluative feedback on their work products from the teacher. The students write, individually or collaboratively, so-called reflexive texts or answer some questions about the curriculum programme, which they then upload on the intranet. This material should be read by everybody in class and used for final discussion in plenum of the learning outcome.	Journalist present their work to and is evaluated by the teacher and class

Table 7.2.3.2. Steps in the curriculum programme in experiment 1.

This observation implicated self-critical revisions of the model or, more specifically, the amount and complexity of material one should make available, which eventually had consequences for the subsequent design of experiment 2.

Contrary to the open-ended instructions given to the journalism group, the teaching and learning process for the main group was, beforehand, less open-ended. As table 7.2.3.2 demonstrates, it was explicitly structured and defined through various steps. Steps would require student-centred activities within peer groups of two students referring to the class and the teacher under the limitation of a deadline. In other words, the class was dependent upon group work – including the uploading and presentation of group work – and vice versa. The teacher would play a more dominating and instructing role towards the main group compared to the journalism group. In Thavenius' terms, the teaching-learning process was more instrumental than the one of the journalism group. On the other hand, the designed curriculum would still allow – as suggested in table 7.2.3.2 – elements of situated practice, critical framing, and transformative practice. At least, if students wished or rather were competent, to actualise these potentials.

It follows from this that during the process the journalism group should present its work to the classroom community and receive feedback – like in real life. In democratic real life, journalists, too, are subjected to criticism. It was also suggested, in the learning material, that the journalism group could try and contact a local newspaper to get their works published, hence giving the class programme/experiment a general feeling of situated practice and potential transformative practice. What students did might matter to someone beyond the classroom, having impact on the local community. Being a part of a research project, obviously, they experienced, and later reflected on this fact. As we shall see, the experiment might even have impact on the school subject "Danish", and the teaching of Andersen in a larger perspective.

7.2.4. The integrating commitment

If we are to compare this design with the sketched theoretical model of integrating media education or more generally media pedagogy and mother tongue education, perhaps it is demonstrated that the curriculum design initiates dynamic processes of reflexive study and practical work, which could potentially develop student multimodal media competencies, *foregrounding* the mode of writing. It involves several instances of allowing students to produce and make their own knowledge explicit, 'translating' what they experience into new constellations of media and modes. This translation originates, conceptually and productively, from criticism in historic/diachronic and contemporary/synchronic genres made available for students. The aim is to let them understand forms of criticism by playing with social identity and professional, domain specific roles in public, semi-public or private spheres. Therefore, the design potentially contests the common conception

that criticism is simply a well-known, stable, written, verbal genre in a newspaper, with its distant and authoritative form of representation.

Focusing on some of the semiotic resources by and about Andersen, the design implicitly contests the conception of his work as canonical. As argued earlier this is, roughly speaking, the commonplace conception in Denmark nowadays: Andersen is seen as a writer whose literary and cultural value is impossible to question. Anticipating my analysis of *Designing and the Redesigned*, students would reflect this conception when they had to make their own criticism of Andersen's fairytales arguing that you cannot criticise a literary icon like Andersen. However, when applying a *critical multimodal media competence* approach on Andersen, focusing on reviews of Andersen from the 19th century, students will have the opportunity to experience that Andersen's canonical status is socially and culturally constructed.

There is a certain irony here: From the point of view of several of Andersen's contemporary critics in the 19th century, Andersen was not worthy of becoming a part of the *Parnassus* of Danish culture. This was due to the "fact", explained in third person objective style in some of the reviews given to the students in this experiment, that he did not write literature that complemented the formula of aesthetics at that time (claiming that literature and other higher arts should represent *the good, the true, and the beauty*). Critics even suggested that Andersen's "childish" style was *damaging* to personal development – the *Bildung* – of children.⁸⁵ Andersen was quite aware, almost neurotically so, of this public conception and used communicative means to change it. He deliberately attempted to *brand* himself in the vernacular spheres of professional "societies" and elite families of bourgeois and the reminiscence of nobility. Specifically, he did so operating in the spheres of the semi-public and the private, encouraging established writers/colleagues to express their positive views of his work and touring throughout the country performing readings and, hence, developing personal acquaintances with prominent people, not the least, their wives. These dignitaries would eventually respond, among other places, in private letters written to Andersen, some of which were shown to the students. Other instances were commentaries in journals etc.

The story of Andersen reaching canonical status is therefore the story of modern communication and the power of using modes and media purposefully. However, at the outset of Andersen's career, his production was seen as trashy popular culture – something which should be designated social

⁸⁵ The anonymous critic writes in 1836: "Af Herr Andersens Eventyr ville sandsynligvis de tre første: »Fyrtøiet«, »Lille Claus og store Claus« og »Prindsessen paa Ærten« kunne more Børn; men det er saa langt fra, at Disse deri ville kunne finde nogen Opbyggelse, at Anmelderen end ikke tør indestaae for denne Læsnings Uskadelighed." Cit.en.: A8, Bilag 4; orig. *Dannora. For Critic og Anticritik* on www.andersen.sdu.dk.

space only *outside* cultural institutions among people (children, women) with a low degree of *habitus* (Bourdieu 1984). It was not to be permitted *within* the dominating and powerful social institutions with higher degrees of *habitus*, such as the school curriculum of the mother tongue subject. This modern *Bildung* perspective – in Thavenius’ (1995) and Drotner’s (2002) sense – is implicitly and potentially something that students can experience and reflect on through the designed programme. They are even encouraged, through the task of producing their own forms of criticism, including the one produced by the journalism group, to rethink and transform Andersen’s status. In a global educational perspective, such a critical multimodal media competence approach to a literary classic could probably be applied to other canonized literary classics, such as Shakespeare, Goethe, and so forth. This would include manner in which they had gained cultural value *due to* criticism.

To sum up the integrating commitment, the designed curriculum merges multimodal media pedagogy with the well-established literary pedagogy of mother tongue education, suggesting an integrated position, which balances conceptual understanding, often emphasized in media education, and practices of working modes, predominantly reading and writing, emphasized in mother tongue education. Conceptually, it highlights the fact that mediated representations of the world are indeed contestable, biased versions and interpretations of the world. This opens up a discussion of the importance of meaning-making among audiences and implicitly acknowledges the valuable judgments of ordinary people (such as friends in the times of Andersen and today’s students in the classroom). It suggests a dialectical relationship between media and the social, illuminating that criticism is highly influenced by the social shaping of media.

In terms of the power-knowledge dynamics of the school subject, the experiment could be interpreted as a way of questioning the authoritative position of the teacher. In many ways, the teacher is not the active, meaning-making and meaning-controlling agent. It was an open question, in the designed curriculum, whether the teacher should give grades to student end products. Of course, this had to do with the piloting nature of the programme. But still, the existence of the journalism group and the epistemological, curricular, social and pedagogical approach within the experiment raises the question whether grading is yet another mediated (quantifying) form of being critical, with only relative power and no absolute authority. In other words, the teacher and students in this experiment were, to some extent, aligned partners. Possible inversions of authority were presupposed and allowed. Both parties were subjects *of* criticism, but also subjected *to* criticism, especially if the journalism groups wished to exploit the full potential of criticising the events and

practices of the class – as they actually did. In this sense, the class could act as a classroom community of learners dealing with critical semiotic, while at the same time negotiating what Gee terms I-identities, D-identities, and A-identities (Gee 2001).

7.3. Designing

Designing is the work performed on or with Available designs in the semiotic process (New London Group 2000; cf. chapter 2). As explained in chapter 5, this work will be evaluated empirically by using a number of research methods and validation techniques, so as to relate this to the model of multimodal media pedagogy.

An important source of data for studying Designing is field notes.⁸⁶ They offer concrete observations of activities etc. seen from the point of view of the designer-researcher. These notes are triangulated by other sources reflecting the process from the point of view of the primary agents of the work process, namely teachers and students. These sources include written teacher and student evaluations reflecting the process. Although these sources reflect retrospectively – not instantly – on the process of work, it may be argued that they construe credible accounts of work performance in the process as seen from *their* point of view.

In this section, it has been decided to focus on these teacher and student perceptions first, not the least in order to ensure the credibility of empirical analysis. It should be noted that in this piloting experiment 1, problems were experienced of not receiving more than two – or rather one and a half – teacher evaluations based on the self-completion evaluation scheme sent in advance to the teachers. Several times all four teachers were encouraged to return evaluations, but this was ignored. My only explanation for the lack of data is that teachers had to get used to the collaborative intervention process of reporting back and reflecting on the experiment in writing. In later experiments, teachers would become more systematic in their feedbacks and the trustworthiness of this data therefore becomes stronger. Similar problems with student evaluations and reflections were also experienced.

After presenting teacher and student perceptions the designer-researcher's perception of the process of work will be presented. Based on field notes, the research log and documents, design events will be reconstructed with the purpose of analysing teacher and student work. Later, in The Redesigned section, this is triangulated by other sources of data, primarily student products which

⁸⁶ In experiment 1 I visited the four cases 19 times making participant observation of 25 “Danish” lessons. I made fieldwork in Karen's case six times observing six lessons; I visited Jane's case 5 times observing 5 lessons; I visited Susanne's case four times observing six lessons; I visited Peter's case four times observing 8 lessons. Fieldnotes are found in A31. For a full account of research methods and collected data, cf. chapter 5 and A5.

represent “an outcome”, as the New London Group (2000: 23) would put it, of the Designing process.

7.3.1. *Teacher perceptions*

Evaluations regarding experiment 1 were received from Jane and Peter. Thus, it is possible to refer to the evaluations from them and compare how they respond to the same questions. Peter sent his evaluation immediately after experiment 1. The evaluation from Jane was sent after finishing experiment 2, where she combines the evaluations of experiment 1 and 2 (cf. A37); although in her comments she distinguishes between the two experiments, this produces a serious problem of credibility related to her evaluation.

What can we learn from Peter and Jane’s evaluations? A few basic points will be highlighted:

As already demonstrated, Peter was quite sceptical about the design of the experiment. The available resources and the inquiry-based challenge for students seem too ambitious both in terms of content and quantity.

Jane largely backed up this argument. The following are her ‘first thoughts and comments’:

The pilot functioned well enough. However, the experiment may have been too lengthy. ALSO! We did not have enough time because we were heading for Belgium/France in the middle of everything and the students were focused upon this EU-trip. Much had to be done in this regard, wherefore the experiment was not prioritized as highly. There were many appendices and instructions. The great amount of material made class a bit slow at times. I consciously shortened down the course, both for pedagogical reasons and because of time constraints.⁸⁷

⁸⁷ Original quote: [Piloten fungerede godt. Forsøget var nok for langtrukket. OG! Vi havde ikke tid nok, fordi vi skulle til Belgien/Frankrig midt i det hele og denne EU-tur var eleverne meget fokuserede på. Der var i den forbindelse meget at lave og derfor blev selve forsøget nok ikke prioriteret så højt. / Der var mange bilag og anvisninger. Det store materiale gjorde undervisningen lidt for træg i perioder. / Jeg afkortede forløbet bevidst både af hensyn til pædagogikken og tiden.]

Jane focused upon contextual constraints related to local school culture. In a sense, it seems that the experiment played a minor role in the minds of the students and the teacher due to other aspects of schooling. We may interpret this as a test of study confirmability: An intervening designer-researcher might think that his research project becomes the most important aspect of going to school for those participating in the intervention. This is not the case here. The quasi-experimental process depends on ‘natural’ contextual constraints, which are always already present. One of the main reasons for making quasi-experiments in natural environments – instead of simply theorising – is to become aware of such unexpected, generative mechanisms.

Another important point is that lengthy nature of the experiment becomes clearer. This point is repeated several times by Jane. We will learn that this relates to her understanding of subject-related pedagogy. Her idea is, basically, that a designed curriculum should not last too long.

Jane also criticizes the design of the available learning resources. Contrary to Peter, however, she *reacts* to what she dislikes. She explains (and my field notes confirm) that she adapts the Available material by reducing the amount of material made available for students.

In the evaluation scheme it was asked whether: *the suggested approach opened new perspectives in accessing Andersen*⁸⁸ and whether the suggested approach opened new perspectives in teaching Danish⁸⁹. Both Peter and Jane answered: “Yes”. What does this imply about the process of Designing? It means that the process of adapting the commitments of this experiment to practice was an innovative process, which challenged their personally established regimes of producing knowledge through genres within a “Danish” classroom. They must somehow have reflected on how the experiment challenged the rationale of “Danish”.

Jane and Peter argue – in different ways – that there is a discrepancy between intentions and realisations as regards theory and practice. This also occurs between the perception of what happens and student perceptions of the same. Peter puts it in the following way responding to the question of ‘How do you consider the learning processes and disciplinary payoff for the students?’⁹⁰

It is difficult to evaluate in general terms. The payoff has clearly differed from student to student as regards learning processes as well as disciplinary payoff. If I was to present a general evaluation anyway, I would say that the disciplinary has not been so great, but that most have learnt quite a lot in regard to independent use of it, including the Blackboard. There were too many disciplinary goals in the pilot project. These regarded the analysis of older, critical texts, analysis and evaluation of homepages,

⁸⁸ [om undervisningsoplægget åbnede nye perspektiver for tilgangen til Andersen]

⁸⁹ [om undervisningsoplægget åbnede nye perspektiver for tilgangen til danskundervisningen]

⁹⁰ [Hvordan vil du generelt vurdere elevernes læreprocesser og faglige udbytte?]

development of power point presentation, development of own critical texts and so forth. In one wishes to focus upon learning processes and disciplinary content it is probably important to have few and simple goals for the academic payoff. Especially when one, as here, uses it and conference systems, which the students do not necessarily know.⁹¹

Peter suggested, among other things, that the experiment did not foreground conceptual knowledge related to the subject. Nor did it foreground – more specifically – knowledge related to concepts regarding multimodal media and critical media literacy integrated with a focus on Andersen. Rather, focus was on ICT and the challenges of using it. Jane had a similar critical point about the use of ICT. On the other hand, she argues that students: "...gained substantially from the pilot, even though the critique focused upon the amount of time spent on searching."⁹²

Summing up, we see that teacher perception of the work process in experiment 1 both differ and contain similarities. It is believed that they contribute to an understanding of the reality of the experiment. They also stress potential differences between teacher and student perception.

7.3.2. *Student perceptions*

Written student perceptions about the experiment are found in the small evaluation schemes that they were asked to fill in and upload to the LMS in the process of the experiment. They are also found in a *reflection text* they were asked to write at the end of the experiment. Not all students filled in and later uploaded as they were asked to, wherefore the data set is rather heterogeneous.⁹³ This should not come as a surprise. Similarly to the participating teachers, these students were asked to engage in new practices, which were unfamiliar to them. This challenged their perceptions of producing knowledge and working with new genres within the subject. Moreover, it is questioned whether the genres made for methodological evaluation and reflection were produced in pertinent ways.

The points made by students in these genres were often repeated. It is found that the elaborated reflection texts summarise many of those points. Thus, focus will be on the content of this data. In

⁹¹ [Det er svært at vurdere generelt. Udbyttet har tydeligvis været forskelligt fra elev til elev, både med hensyn til læreprocesser og fagligt udbytte. Hvis jeg alligevel skal vurdere generelt, vil jeg sige at det faglige udbytte ikke har været så stort, men at de fleste har lært en del om det at arbejde mere selvstændigt med brug af it, herunder Blackboard. I pilotprojektet var der for mange forskellige faglige mål, eksempelvis analyse af ældre, kritiske tekster, analyse og vurdering af hjemmesider, udarbejde powerpointpræsentation, udarbejde egne kritiske tekster etc. Hvis man vil fokusere både på læreprocesser og fagligt udbyttet, er det nok vigtigt at have få og enkle mål for det faglige udbytte. I særdeleshed når man som her anvender it og konferencesystemer, som eleverne ikke nødvendigvis er videre bekendt med.]

⁹² [fik meget ud af piloten, selvom kritikken gik på, at de skulle bruge for meget tid på søgning.]

⁹³ Cf. A33.

the reflection texts, almost all students claimed that they had *never* tried to work with a topic like this in “Danish” and/or in relation to Andersen.⁹⁴ The experiment is described as “new”, “different”, “alternative”, and thus, as some conclude, probably not really something that belongs to the curriculum of “Danish”. Other students, however, contrast this perception.

It becomes clear from the student data that most of them had made reviews of movies in primary school, but they have not had to do it in regard to a specific genre and medium. As Nina – one student in Karen’s class – states it, in primary school they could “...just express their views”. Here, they were asked to express themselves in a new genre. In cases 2 and, particularly, 4 a majority of the students reject or are sceptical towards the idea of the designed curriculum, even the whole intervention project. Often, they explained that the use of ICT influenced their work. This backs up the perception given by Jane and Peter. On the other hand, especially in cases 1 and 3, we find a dominating pattern of students reflecting positively about the programme. They struggle to understand how it could help rethink the practice of “Danish” in the future. The reflection text of Nina, in Karen’s class – which I would regard to be an exemplifying case (Bryman 2004; cf. 5.3, p. 161) – demonstrates this (cf. A11).

The main point of this brief analysis of student perceptions is that perceptions vary a lot both within and between classes. The group of students is rather heterogeneous and their work and assessments differ substantially. This backs the general impression that Peter expressed in his evaluation regarding case 4.

7.3.3. Designer-researcher perceptions

What kind of semiotic work was found? It will be shown that five themes emerge when making a comparative analysis of the four cases: *complexity*, *diversity*, *technological constraints*, *discipline*, and *assessment*. These themes predominantly refer to aspects of what is simply termed the context in the model of multimodal media pedagogy.

7.3.3.1. Complexity

Most strikingly was the fact that teachers and students had to deal with several aspects of complexity.

One type of complexity diagnosed by teachers related to the learning resources. The teachers expressed a problem of quantity and a problem of quality: There was a lot or too much to read and a

⁹⁴ Later in the intervention process, when a questionnaire is given to all students in the pre-experimental phase, this finding is confirmed by student responses. In terms of evaluation, this is an example of saturation that makes it relatively credible that this is true.

lot or too much to understand. This was the immediate reaction received through e-mails when distributing the resources in preparation for teaching. Field notes also document that teachers would explain to me on my first visit of fieldwork, that *they* understood the underlying rationale of the experiment. The problem was that *students* would not. In three out of four cases, Karen being the exception, they found the design unusual and challenging because it would disperse a lot of the activities and responsibility to the students.

One of the concrete challenges prepared for the teachers was to consider the adaptation and, in step 1, initial presentation of the material students – both on the LMS and orally in a way the students could grasp. It was expected that teachers would redesign, producing *new* learning resources more suitable for students, but they did not. This became clear when observing learning management systems on which the resources were made available for students, and when making observations of the first lessons. Seeing it from the perspective of multimodal media pedagogy, they more or less exported the ‘Available modes and media’ into the didactic triangle of concrete classroom teaching without transforming them.

It took some time to understand why the teachers had not adapted the material to local classrooms. Their own answer was simple: In three out of four cases (Karen, Susanne, Peter) *time constraints* made them think that they would only be able to produce a schedule with key words and explicit dates. Besides from that, they reproduced the material sent to them. The schedule would be uploaded along with the material developed by the present author in an unedited form on the LMS and shown to the students on a digital projector in the first lesson. The initial interpretation of this teacher strategy was that it was counterproductive. A lengthy Word document in size 12, with a lot of bullets, written explicitly as a guide for teachers, was considered too complex for the students to grasp. Ironically, this turned out to be wrong – at least partially. Some students demonstrated no problems reading this guide. Others demonstrated severe problems.

Jane (case 2) offered an alternative strategy: She uploaded only a few of the tools made available withholding the rest (though the uploaded tools referred to them) and presented the goal of the programme *orally* never showing the guide to the students, as observed it in the first lesson. Jane seemed a bit stressed and uneasy about the experiment design. Thus, it does not come as a surprise that she expresses this in her later evaluation. Students in her class later (A33) questioned her classroom strategy, arguing that it had confused their impression of curriculum demands. Jane

acknowledged this quite openly.⁹⁵ For her it was a deliberate strategy. Jane offers a ‘rival explanation’ of how one should deal with the complexity of the Available Designs compared to the other participating teachers.

Although the teachers largely reproduced the Available designs, other interpretation was indeed going on in the process. Analysing observations of the first lesson in all four classes, it is found that all teachers, in different, subtle ways, orally reinterpreted the goal of the curriculum. For example, none of them would explicitly refer to the title of the learning material – “Good, No Good! How to Criticise Andersen and Your Classmates” – or spend much time on explaining the conceptual goals in terms of knowledge and practices to be addressed and worked on. Such subtleties would be impossible to begin with in order to initiate an inquiry-based teaching process it was found. Instead, they focused, in terms of competence, on the specific activities and tasks students would have to engage in.

During a conversation with Peter the impression arose that he had reinterpreted the objective of the whole pilot programme as a way of working with broader issues of learning, such as competence- and product-oriented teaching. In this sense, experiment 1 had become a meta-experiment foregrounding pedagogical commitments, teaching learners to learn, to echo Bateson (1972), instead of being an experiment whose main purpose was to integrate subject-related epistemological and pedagogical commitments moving towards multimodal media pedagogy. At that moment, Peter’s interpretation was understood as a sort of reductionism, which could lead to a lack of ambition in terms of exploring the potentials of the experiment. The unifying concept and the full complexity of the didactic model of semiocy embedded in the designed curriculum seemed to evaporate. It was expected that it would be difficult for students to understand the connection between the semiotic resources made available, the initial question mark of the programme and the complex progression in the experiment - including a receptive analysis of the old reviews and production of a piece of criticism working collaboratively and individually. Considering Peter’s reflected evaluation of the experiment (cf. above) and his later reflections, including those given after finishing all four experiments (cf. A48) – this interpretation must be revised. It could be argued that Peter taught, acted and reflected quite sensibly. The point is that Peter was simply responding pragmatically to his own interests and student needs as he understood them: Many of the students, particularly in his and Jane’s first year classes, asked for teacher reduction of complexity. Students wanted a sort of *reframing* of the designed programme in ways that might

⁹⁵ A36 contains transcriptions of experiment 1. On tape 6 [Bånd 6], page 41ff, there is a conversation between Jane, a student I name Marie and me discussing this point.

make sense to them and their experiences with and conceptions of – not criticism as a genre – their understanding of the mother tongue subject and H.C. Andersen. Hence, teachers were forced to make conceptual reinterpretations in order to establish identity making in the classroom community (in Gee’s D-Identity, recognised in dialogue). Here are two examples of the micro discursive level that may help strengthen the trustworthiness of this proposal:

1) Too much complexity, at least for a majority of students, could be experienced on the level of *verbal language use* in learning resources. The phrase: “...characterize the style in the review found on the internet...” found in a tool, was to help students characterize a review (cf. table 7.2.3.1, row D). It caused great frustration because the word “style” was apparently a little known. This had not been expected from the designer-researcher’s point of view. The learning material was designed in a way that allowed students to find out what style refers to in one of the other tools (by John Chr. Jørgensen, row F); but students would not make the connection, and neither would the teachers. Instead, teachers would take over and use their own prior knowledge of the concept style. It was observed one example of this in case 3: Susanne, the teacher, was familiar with and had taught the class in rhetoric. She would quickly explain “style” by drawing on lessons made in other occasions with the class. This teacher would also later use rhetoric to categorize the different types of criticism in categories (logos, ethos, and pathos). This was not expected to be relevant, but found productive none the less.

This observation teaches a lesson about understanding the model of multimodal media pedagogy, and particularly the relation between what is termed “Knowledge”/semiotic resources and what is termed ‘overt instruction’. The resources of overt instruction do not necessarily come from external learning material. It may also very well come from the diverse knowledge found in the minds of teachers. It may sound banal, but the teacher is always a fundamental resource of knowledge. Allowing this knowledge to be used should always be structurally embedded in a designed curriculum. There are good reasons for linking conceptual knowledge from an external learning source with conceptual knowledge already developed within a classroom community. On the other hand, a teacher might consider to what degree he or she should draw on already established knowledge or should animate students towards searching and producing knowledge on their own.

2) At the micro level, it could also be observed that Internet navigation was experienced as challenging and frustrating for a majority of students. This was particularly clear when observing students using the site with reviews from the University of Southern Denmark (figure 7.2.1.1). What had seemed like a direct resource of valuable reviews, only a few clicks away, turned out to

be the first step towards a black hole for many students, running wild on the Internet. Perceptions were significantly different. To a certain extent, the designer-researcher had expected this: The learning material contained a tool that anticipated that problems might occur when asking students to search for fairytales and reviews. The tool offers detailed explanations of links and what-to-do (cf. table 7.2.3.1, row B; and A8), but this tool did not seem to be useful for a majority of students. Their “searching competence”, as Bundsgaard (2005) terms it, was quite poor.

Like Bundsgaard, it was found that such searching competence needs to be developed: A majority of students expected to search the homepage, but experienced otherwise. Field notes contain several accounts of this. The Internet, with its complex constellations of modes, medium and genre – often thought of as *familiar* for young people acting in semiotic domains outside schooling – was de-familiarized when they had to act as *students* completing a specific subject-related demand. Within the logic of the designed curriculum, it would be a productive event if students managed, competently, to cope with this challenging and surprising complexity. Some students approached this issue in surprising or we might even say *transformative* ways: if they could not make it one way, suggested by the designed material or their own spontaneous approach, they would, due to collaborative work, choose another approach. For example, if they could not understand the navigation structure within the university web site, they would use Google to search for reviews on Andersen.

It should be underlined that there were huge differences in the competencies among the students, in terms of being able to understand and receive instruction through the material and using the web pages. In evaluations (A33), some students would argue that the home pages were completely impossible to use and others that it was fun and easy. This discrepancy could be characterised as an indication of the *digital gap* (Livingstone & Bober 2004, Drotner 2001a), which refers to the difference between high users and low users in the age of Internet communication.

Although this systematic problem seems to be found in these four cases, it could be argued, from a chronological point of view, that student and teacher first impressions of and experiences with overwhelming complexity (including inaccessible Internet homepages) seemed to vanish the more the pilot programme progressed and the further the intervention developed (which is documented analysing the Redesigned in section 7.4 below). In a sense, complexity was transformed into simplicity or even diversity (cf. next section). Relating this observation to the model of multimodal media pedagogy, it must be concluded that the perception of complexity, due to a new way of teaching with and about Andersen in new media and modes, is in itself a relative and processual

category embedded in context. Perceptions were not related *only* to exterior constraints such as lack of time or lack of transparency in the learning resources, but were also related to cultural or ideological complexes within the school system, such as well-established local procedures and genre conventions. The perception of complexity was produced not only by the social system of the subject "Danish", but also by the prior knowledge of teachers and students on the practices in other school subjects and school culture in general at the meso-level.

7.3.3.2. Diversity

The diversity in student choices of fairytales and related reviews is remarkable. In each of the classes it was found that students would choose at least six different fairytales for further work. In total, eighteen different fairytales were chosen in the four classes, many of which are not well known and rarely taught in school, let alone read outside school. Many of the students were surprised about Andersen being so immensely productive: Lisa, in Peter's class, argued⁹⁶ that: *compared to the familiar teaching scenario of students and the teacher reading the same text handed out beforehand, the way of working was significantly different – and better: In peer groups, students would surf & search and eventually find & print the fairytale and corresponding review they found interesting – and then go on, on their own, with the demands of the programme.*

Not only Lisa, but many students and teachers perceived the freedom of choice and text diversity as positive. Many of the students expressed that they found these alternative fairytales as one student put it, 'good although they were not famous'. Unity was found through diversity. If we are to generalize this finding a little further, students experienced the negative consequences of canonizing processes and dealt with them positively: Canonization had brought with it a *narrow* impression of Andersen's work and had *not* prepared them for its diversity or rather complexity. But students seemed to overcome this problem in purposeful ways. How come?

Firstly, one could argue that diverse student selection was *media-provoked*; by Internet technology and its interactive features. This is a techno-deterministic explanation, which has some merit. Secondly, offering a more socio-technological explanation, Internet use was dependent upon: social, pedagogical and epistemological commitments embedded in this particular design. We may mention making it relatively student-oriented, or more generally, competence-oriented. If asked students would suggest this in their theorization about the Designing process. Obviously, some

⁹⁶ I refer here to an unstructured interview made with Lise during field work, as documented in field notes: A31, Feltnoter fra Peters case, page 7f. The interview was also taped but regrettably the recording was later erased by a mistake (cf. Digital research log, A24, p. 20), so a paraphrase is made from field notes and memory.

would simply say that “really, there was no reason” for choosing the fairytale; others that they chose a particular text because it was a *short text* that could be dealt with quickly, hence offering instrumental explanations. Others again, however, explained that they would deliberately choose a fairytale *they did not know* or use a review *they did not agree with* as a point of departure for selection. In other words, they wanted to learn something new – hence choosing a more reflexive, *Bildung* oriented strategy.

One exemplifying case, taken from field notes: In Karen’s class (A31, Karen: page 3), two students (John and Ken) were working together,. They were searching for a fairytale on www.adl.dk and they were quite impressed about the number of fairytales he had written. They explained that they had chosen the fairytale “Den uartige Dreng” [The Naughty Boy] because of the name of the title. Apparently, the potential ‘naughtiness’ of the title had appealed to them in an emotional or ironic way. These two boys sat together at the back of the classroom, and they did not express any particular interest in “Danish”, contrary to other students being more engaged. On the other hand, this task of offering them the opportunity to choose a fairytale on their own seemed to engage them. It could be argued that their personal investment relied on a design curriculum that offers students the authority of choosing a text, which is again related to the idea that personal interests do not hinder new knowledge production and self-transcending, transformative practice – on the contrary. We shall return to the work of Ken and John later when student products in The Redesigned section are analysed.

7.3.3.3. *Technology: Teaching in the age of paper*

The most evident, invariant, and in many ways constraining factor in the Designing processes observed in the four school settings was massive problem with technology, especially the use of computers and digital networks. To put it in a popular way, the technological means for meaning-making did not seem to mean much for leading agents on the schools. They acted as if they still lived in the age of paper and photocopies. A huge discrepancy was found between the ways teachers had described the ICT infrastructure of schools, (in being loyal to their schools’ policies reflected in the official web pages of the schools and in official documents of the Ministry of Education promoting “integration”), and the continuous breakdowns and problems experienced almost every time field work was conducted at schools. There was a massive incongruence between macro-, meso- and micro-levels. The question was not *whether* technological problems would occur, only *how many*. This inductive finding made shifted focus in terms of observation. Thinking

constructively, it became interesting to observing *how the teacher and students would respond to problems*.

This problem is not simply a question of a short-term thing to be easily solved. Rather, it reflects a structural lack of understanding of the importance of technology for knowledge production in the 21st century. This finding is one of the reasons why the dialectical socio-technological relationship between teaching *with* media and *about* media when speaking of multimodal media pedagogy has been stressed. If technology does not work or if teachers do not know how to make it work, they will not ever reach the point of launching media they could teach about. Thick description strengthens the dependability of this proposal:

At Jane's school (case 2), a wireless network was made available – at least in principle. In reality, it would break down if too many students used the intranet at the same time. In one occasion the teacher had to use a computer room, among colleagues called the “monkey cave”: A closed room without windows where there would not be chairs for everybody. Thus, some students would have to work in other places and would not receive collective messages from Jane. Jane was observed responding to the ICT situation with despair and irony; confirming the impression she gave before the pilot study.

In the school setting of Susanne (case 3), which probably had the poorest ICT equipment, the teacher would feel insecure about the use of computers and a projector – like most of her colleagues. This had consequences for Susanne's relationship to the students, especially the boys, who would constantly mention her lacking ICT competence. The teacher would keep up good spirits, but the mood was affected by the situation. In later experiments (in the autumn) this would have rather dramatic consequences.

In Peter's class (case 4), the simple use of the Danish letters æ, ø, å in file names, could be uploaded to, but not downloaded from the Blackboard LMS system, thus ruining computer mediated collaborative work and producing evaluations among students going from *irony* to *loathing* (A33). As Line stated in an evaluation: “Generally, I hate all ICT [...]. It is unpredictable stuff. But it's the future, so all one can do is suck it up and deal with it.”⁹⁷ This does not exactly sound like the positive embracement of ICT, as envisaged by the Net Generation guru Derek Tapscott (1998). Several students in this class also claimed they could not access the LMS from home. This prevented students who happened to be sick, to participate fully in the programme or gave them a good excuse.

⁹⁷ [Generelt så hader jeg alt it. It er noget uforudsigeligt stads. Men det er jo fremtiden, så det er bare med at bide i det sure æble.] Cf. A33, Peters case, Elevevalueringer, Bilag 5, Line.

It should also be noted, observing the design of the two different LMS used by the teachers, that *Netstudier* was much better suited for collaborative computer mediated teaching than Blackboard (research on the usability of Blackboard for learning seems to confirm this impression; cf. Sindø forthcoming). *Netstudier* has a folder system (cf. figure 7.2.1.2) similar to the one known from Windows and Apple computers. Here, it was relatively easy for the teachers to create and personalize group folders and folders for teaching material that everybody could access. Blackboard does not have this feature. Instead, it contains a feature called Group Pages, located on the interface far away from the learning material. Jane could not create these group pages; it demanded (the slow help from) an ICT supporter to do so. One should remember that this was the same class in which the teacher had withheld learning material in the beginning in order to reduce complexity. It should not come as any surprise, then, that only a few of the 13 groups in the class had uploaded material for the plenary presentation and talk in step 3.

In Susanne's first lesson in the pilot study, it took more than twenty minutes to get started. This kind of "time expenditure" was not unusual in the classes of Jane, Susanne and Peter. In that particular lesson, the screen was difficult to read from where the present author sat in the back, due to sun light from the roof; this proves the point that architecture indeed plays a role in media pedagogy. The screen repeatedly said "Please wait", which seemed a frustrating, but proper metaphor if one (like Buckingham, and I) sees media use as a necessary, yet subordinated prerequisite for teaching about media, effectively.

Karen's class (case 1) was found to be the most productive in dealing with any kind of technology related problem. This is not surprising given that she was a 'technology freak' and that it was a 'laptop class'. In a sense, the class was cultured into problem solving because of extensive media use. No dominating signs, as often suggested in popular comments on laptops in classrooms, were found of *misuse* on behalf of the students (normally, I would place myself at the back of the classroom, discretely observing what was going on in their computers). To some extent, the school, at the meso-level, also seemed prepared to support ICT related problems. For example, Karen dropped her laptop on the floor in the middle of the pilot study, but would quickly get another. Due to the backup system, she could easily download the content of the hardware of the former computer and be ready for further teaching. Karen acknowledged her own limits in terms of ICT competence inviting students to help. In her class, several boys were ICT specialists; what the Danish media learning researcher Birgitte Holm Sørensen (2005) has named *super users*. Perhaps it

is preferable to call them the affinity group of super students (in a didactic context, there are no users, this is a market metaphor, only students).

Super students were also found in the other classes, but in Karen's class they were allowed, to a much higher degree, to help the teacher and peers if problems occurred. One of the reasons might be that this was *socially acceptable* in the classroom community and that technological commitments were seen as intertwined with epistemological and curricular commitments. In Peter's class, contrarily, a boy willing to help the teacher was "booh'ed" and patronised, especially by girls. In that class, super students were segregated as 'the affinity group of ICT nerds'. This boy would socially exclude himself in his aligning efforts to act, momentarily, as a teacher supporting the curriculum commitments of the class. Peter encouraged this kind of segregation to some extent because he did not acknowledge the student competence as valuable for the knowledge production in class.

To sum up, one could develop the following auxiliary-hypothesis based on one of these observations: The quality and quantity of media pedagogical teaching in mother tongue education is proportional to the quantity and quality of technological problems.

7.3.3.4. Discipline: The Stalinist vs. the Anarchist

Discipline, in relation to subject-related work, has become a delicate educational matter. At least this is the case in Denmark, since an OECD report recently pointed out – in the aftermath of the PISA programme – that Danish primary school pupils to be bad readers. More specifically: discipline seems to be a problem in "Danish" classrooms hindering subject-related knowledge production (Directorate for Education 2004). This research could be mistaken, given the problematic research methods of the report. However, observations did find an important pattern between collaboration, discipline, and knowledge production. This is most clearly demonstrated in comparing the two cases from Jutland, Karen's class and Jane's class.

Jane's class was, as already suggested, a homogenous and disciplined class which collaborated very well together. By this is meant that the class was concentrated on doing curriculum related work during class. There was a clear distinction between leisure time and lessons. Some MTE/StLE researchers, such as Kress (2000), would argue that this cannot be expected any longer in a neo-capitalistic and media-saturated western society. Nonetheless, observations support this claim: entering the classroom several minutes before class began, being positioned in the back of the room. This allowed observations of how the students used their laptops when class began. They would all,

almost always, close windows that were not related to the subject and open those that were when the lesson began. The use of cell phones was not allowed during class; nobody questioned this ban.

It is reasonable to suggest, as an auxiliary-hypothesis, that this *disciplined behaviour had predominantly to do with the role played by the teacher*. Student maturity (considering this was a second year class) also plays a role. As explained earlier, it had been relatively easy for Karen to establish routines and rules in this class. Karen described herself – somewhat ironically, of course, as a “Stalinist” in terms of discipline in general and specifically media use within class. This identity was necessary in order to deliver good teaching, including the teaching with and about media.

What makes this observation interesting for one thing, is that it seems to break with the common idea that laptop classes produced undisciplined classroom behaviour. Instead, it could be argued that it is the role and authority of the teacher that produces disciplined classroom behaviour or not, including good collaboration. It also breaks with the idea – expressed by a girl in Peter’s class – that girls don’t like to use computers and to work with computer mediated text types. No evidence was found of this in Karen’s class; on the contrary, she argued that in this class girls got more interested in the subject of “Danish” because they had computers.

The complete opposite of the “Stalinist” approach was Jane (case 2), who would describe herself as “anarchistic” and argue that this teaching style fitted the class – and generally the youth. Jane would allow blurred limits between leisure and lesson. This would result in me observing, for example, boys fighting during group work, having music or other modes and texts (movies, video games, news) constantly playing on laptops and students checking sms messages.

The delicate question, then, is whether the context and culture for knowledge production using Jane’s anarchistic approach is just as good as Karen’s Stalinist approach? I would argue that it could have been the case, but that it was not. As we have seen in the section about teacher perceptions, Jane would disagree. In my perception, Jane was not sensitive enough towards the needs of the students, which is backed by student analysis. As suggested earlier, one of the students in Jane’s class, Marie, questioned the teaching and learning culture in the class. She explained that those who did want to learn something joined in groups. They were the discrete *anomalies* of the class, who benefited from the design of the designed curriculum because they could work on their own simply reading the instructive documents that eventually were made available on the LMS by Jane and uploading their student products in folders. Other students would not meet any of the demands, leaving empty portfolios behind.

Thus, the question arises whether an unpleasant mechanism of social segregation was going on in case 2, *enforcing* hierarchical patterns instead of breaking them. The few good students would productively help other good students, while the majority, the less good or weak students, would “collaborate” with each other in counterproductive ways. When student products were to be collected, first by the teacher and later by the present author, it would become very clear who had had the biggest problems. In an indirect way, this proves the point of designing curriculum programs in a product-oriented way, because the (lack of) product clearly indicates whether processes on Available Designs have been functioning. It also proves the point of a disciplined teacher that controls the process of knowledge production. The knowledge production process begins with and should be guided continuously by the teacher, as suggested with the spiral arrow in the model of multimodal media pedagogy. If this is not done, identity production within the classroom community may develop, but knowledge production will not occur among all students.

7.3.3.5. Assessment

As the steps of the curriculum programme unfolded, one question that was repeatedly raised by teachers and students was whether there should and would be given any grades and on what basis these grades should be given. In the Available Designs it was suggested that no grades were to be given, due to the piloting nature of the experiment. However, one of the reasons this question was raised, had to do with discipline: Teachers and students in some of the classes, especially in Susanne’s and Peter’s classes (cases 3 and 4), considered it to be a useful way of promoting and sustaining motivation. From the point of view of radical pedagogy, this might sound absurd and instrumental, but it appears that this is how motivation works in the minds of upper-secondary school students accustomed to an educational system that favours grades.

The challenging question for the teachers therefore became: *Which criteria* should and could be used. One of the problems of establishing such criteria – as the teachers expressed it – was that the productive task that demanded the students to make a piece of criticism in a contemporary medium and genre chosen by students, was interpreted as a *semi-creative* task. This made Karen wonder: ‘How could one evaluate creativity?’ Theoretically, this is a question that has been pondered for decades, but not fully answered within media pedagogy (cf. e.g. Buckingham & Sefton-Green 1992, 1995).

Another question was *whether quantity was related to quality?* A striking regularity was observed in all four cases, to some extent provoked by the written guide for teachers (A8), which stated that a student would be allowed to write a sms to Andersen – this would be one way of

solving the creative task. This would be just as hard, in terms of completing and fulfilling a genre using a specific constellation of mode and medium, as writing a lengthy review for a newspaper. It was the designer-researcher's perception, which produced adaptation: All teachers ruled out this option as being ridiculous and students also commented on it, saying that it would be "too short". So, quantity did play a decisive role in assessment practices and, implicitly, in knowledge production. It was found that there is a rigorously defined parameter that served as "the right quantity", namely 3 pages! This is apparently the norm(al) quantity for the dominating writing genre in "Danish", the essay ("stil", in Danish).

When the question of assessment came up this would be one of the occasions where the present author assisted and participated in the classrooms and was, indeed, *participant* observer. It can be confirmed that consistent assessment procedures are quintessential if one wishes media education to permeate and integrate with "traditional" mother tongue education. The general rule is that if you wish to change the practice of a school subject then change the assessment system; in this way, conversations with teachers quickly led to considerations of the interrelationship between micro-, meso- and macro-level discourses. As mentioned earlier (cf. 6.1, p. 191f.), in hhx there have already been made experiments with the assessment procedures for written exams, which seem promising for the multimodal media pedagogical standpoint advocated here. A recommendation to the teachers could be that they establish provisional categories for assessing the portfolio of products that the students would deliver and upload. These categories were to be openly presented to the students. One suggested category was to evaluate to what extent the students completed medium and genre specificity chosen to write in. This, ultimately, turned out to be one of the criteria in three out of four cases. But several other criteria were added, as we shall see later in the analysis of case 1. The main point here is simply to state, that assessment was evaluated as being an important aspect of any media and mother tongue education practice. If the Available Designs were to be revised and used again, it would have to be complemented with this dimension. Thus, this would inform the design of experiment 2.

7.3.3.6. *Summing up on the analysis of Designing*

The analysis of Designing processes confirms from different perspectives and – using different data sources in triangulating – that local culture indeed plays a role. Other specific DBR studies (Squire et al. 2003) exploring design based curricular change confirms this, in the sense that we should acknowledge the primacy of local culture. The point is that the way a specific, designed curriculum may impact on a subject and its sub-goals – in this case the development of critical semiocy – is

dependent on local constraints, agentive needs and interests. The perceptions and themes foregrounded in analysis suggest specific constraints and needs/interests. One could object that some of these themes are about broader pedagogical issues and, thus, not relevant to a didactic analysis of the integration or disintegration of multimodal media pedagogy, MTE/StLE and Hans Christian Andersen. Contrarily, it could be argued that the possible integration of these three entities is precisely dependent on an in-depth understanding of specific contextual, local constraints. Hopefully, narrations like the ones made above make it easier for other teachers to understand some of the potential pitfalls, but also some of the productive potentials of multimodal media pedagogy. The actualisation of potentials for any subject-related curriculum programme is dependent on teachers being able to handle constraints in pragmatic ways at the meso-level of the school setting. The capital C standing for Context in the model of multimodal media pedagogy vaguely suggests that such constraints exist on many levels. The present Designing analysis of a quasi-experiment broadens our understanding of the generative mechanisms of the context that influence subject-related knowledge production. Other contexts, themes, hypotheses, explanations, understanding, etc. could be highlighted and might have affected the knowledge production processes too. The main point, however, is to understand that the teaching of media and mother tongue subject-related curricula – such as writing reviews with the purpose of becoming more critical and creative in the approach towards modes and media, indirectly developing students critical semiocy – are embedded in contextual matters. Moreover, Designing analysis produces a social semiotic background for understanding and evaluating the outcome of designed curriculums; outcome, in this study, is termed: The Redesigned.

7.4. The Redesigned

The Redesigned, as defined by the New London Group (2000; cf. p. 30), are the resources that are produced and transformed by Designing. In experiment 1, the Redesigned refers specifically to the resources looked at and collected from the communicative context of digital student portfolios in the LMS of the four classes. In terms of materials that were the outcome of modes and media in experiment 1, these reflected student knowledge production related to the staged demands of the designed curriculum. Obvious questions can be asked about this material: Did the class seem to comply with the competence goals? What signs of knowledge are found and not found? We might also ask whether unexpected material is found.

The analysis will approach such questions focusing on case 1, the case of Karen. The reason for this focus on case 1 in the analysis of the experiment is that it strikes a balance between being

critical and exemplifying case (Bryman 2004; cf. also chapter 5.3, p. 161ff.). It is *critical* in the sense that the quantity and quality of data is rich and allows us to analyse several aspects of the commitments of the experiment, including the commitment of allowing a group of journalists to produce a product (contrary to case 4 and, to some extent, case 2). It is exemplifying since another case – case 3 – has similar characteristics. It should be underlined that in the course of analysing the four experiments, focus will be on one case each. In all four analyses, there will be a shift from focusing on one case to comparisons with the other cases.

The concrete analytical strategy here is to take the digital folder/portfolio of John and Ken referred to earlier as the point of departure. Observations are made about their specific production resources. There is nothing extraordinary about this group – they are exemplifying cases in Bryman’s sense (2004), as compared to the work of other students and groups in that case and other cases. From that point on, comparisons will be made with other portfolios in their class arguing that what Ken and John do is to reflect a pattern of similar practices in that class. This is to a large degree dependent on the adaptation processes that Karen, the teacher, co-produced. In terms of evaluation criteria, such a comparison tests the transferability of one set of data – that of Ken and John – with a larger set of data within the same local context, which may strengthen the trustworthiness of empirical analysis. The same point could be made about the following step in analysis. Here, comparisons will be made with the other cases, focusing on the outcome of the journalism groups. This will lead to conclusions, implications and discussions for experiment 1 regarding the local impact and the applied model of multimodal media pedagogy within MTE/StLE.

7.4.1. John and Ken in Karen’s class (case 1): The naughty boy(s)

John and Ken worked together in a group. In their folder we find seven documents, uploaded on different dates complying, to some extent, with the processual demands of the curriculum. They produced documents for midway plenary presentation and two versions of each their own criticism plus reflection texts on the experiment. What are missing are peer reviews from each of their first versions of their own piece of criticism.

More specifically, John and Ken have found and uploaded Andersen’s fairytale: “The Naughty Boy” and a review of the fairytale from the Internet, including background information about the review (something which they have copied and pasted into a Word document). John and Ken have not made any particular comments about the review and background information. This can be justified: The purpose of making this document (cf. table 7.2.3.2, step 2) was to be able to make an oral presentation in front of the class that could lead to plenary reflection. With this document,

which was shown in front of class on a digital projector using their laptop, they could easily narrate the review from 1836 written anonymously. The review presents an objective discussion in high style of why the fairytale “The Naughty Boy” is repulsive and should never be exposed to children – it could damage their personal development. John and Ken have entitled the Word document “the bølge dreng anmeldelser”. In English, this would mean something like “the naughty bucker reviews”. There is a sense of parody in the document title – parody often being used by students engaging in media education, Buckingham (2003) argues – which I would suggest reflects their personal reason for choosing the fairytale and review: They are provoked by the reviewer’s opinion, which, in contemporary culture, seems completely out of context. On the other hand, it can be subjected to parody.⁹⁸

John and Ken’s parodying approach is also reflected in other documents. As demanded, they have produced two versions of their own piece of criticism – a draft and the final version – plus a text from each of them, in which they reflect on the experiment. Both John and Ken have experimented with writing of *a personal letter* to Andersen. It is quite clear – due to the relatively similar products – that they have collaborated during the process and also learnt from the theory made available about types of criticism. What is transformative, however, about their personal letters – particularly that of John’s (A9) – is that it *imitates* the genre of a letter, albeit genuinely. John’s first draft begins and ends in the following way:

After having read your fairytale: ”Den Uartige dreng”, I had to contact you. Your fairytale made a great impression upon me and my children. It warms and shows that not all people are bad, since the noble poet accepts Amor as his own son. Your fairytale also exemplifies brotherly love as well as the sudden shifts of opinion that occur, when Amore shoots the poet in the heart.⁹⁹

(...)

All in all, I find this fairytale very profound and would like, at a convenient time, to discuss it with you, since I find your authorship extremely inspiring and feel that by having read all your fairytales that I have attained at deep insight into your life as an author.

⁹⁸ Buckingham (2003) writes in the section “The politics of parody”: “...imitation frequently involves *parody* – that is, a self-conscious and exaggerated use of dominant conventions for the sake of comic effects or ridicule.” (Op. cit.: 165, his emphasis)

⁹⁹ [Kære Hans Christian Andersen / Efter at have læst deres eventyr ”Den uartige dreng” måtte jeg kontakte dem. Deres eventyr gjorde et stort indtryk på mig og mine børn. Dit eventyr varmer og viser at ikke alle mennesker er onde, da den ældre digter tager Amor til sig, som var han sin egen dreng. Deres eventyr viser også næste- kærlighed såvel som den hurtige meningsændring man danner sig, da Amor skyder digteren i hjertet.]

Love,

Grethe Nilsen
Langkærvej 3
7400 Herning
Danmark]¹⁰⁰

The playful, parodying attitude is applied with great stylistic expertise, making several positive remarks and indirect analyses and interpretations of Andersen's fairytale, including its theme about affective love. John communicates directly to Andersen as if they lived at the same time.

Interestingly, he also plays with the gender of the writer, John suddenly becomes Grethe Nielsen – hence negotiating with N- and A-identities (Gee). Names carry with them certain connotations. In John and Ken's generation the name Grethe is unusual. The name was more popular in earlier decades.¹⁰¹ In other words, John and Ken may have wished to suggest the connotation of an older woman, perhaps in her fifties.

In John's reflection text, he explains why he has written this type of text. He personally likes to receive letters, he argues. He did not write his letter to Andersen in an e-mail or sms because he felt that these technologies (my word) tend to make self-expression too spontaneous, which he wished to avoid, simulating a distinguished writer like Andersen.

Through these self-reflecting remarks John signals in indirect language that he has understood the important relationship between style, genre, media, mode and also the cultural and social epoch in which one writes. In Meyrowitz' (1998) terms, he demonstrates media competence in terms of content, form and function. He does not embrace any kind of digital technology, as assumed in the superficial notions of the so-called digital generation. Instead he uses modes, media and a genre, which he feels serves the meanings he wishes to express. He is 'becoming critical' in ways that are consistent with the way Buckingham and others would like critical media literacy to be taught in classrooms.

But is he a knowledge producing "expert" if we evaluate his products from this experiment? Karen, the teacher, gives John a grade above average (9). The criteria for grading, Karen explains in class, is the average of grades in five categories used for all students in the class. Karen openly

¹⁰⁰ [Alt i alt syntes jeg dette eventyr er meget dybsindigt og vil gerne ved lejlighed diskutere det med dem, da jeg finder deres forfatterskab yderst inspirerende, og jeg føler at jeg ved at have læst samtlige af deres eventyr har fået en dybere indsigt i deres liv som forfatter. (...)]

¹⁰¹ It is difficult to back up such impressions of connotations with empirical evidence. Danmarks Statistik (www.dst.dk) publishes, however, a statistic showing the 25 most popular first names in Denmark since 1985. Grethe is not among them. A consultant has explained to me (in an e-mail) that among those people living in Denmark in 2008, the year 1942 is the year in which most people named Grethe are born.

admitted that it was difficult to evaluate student work and that the categories were tentative and provisional. The categories were, and I quote from the teacher's document:

Sense of style and form: to what extent is the writer [student] aware of the use of his or her literary technique?

Content: How much concrete material is there in the text?

Creative features: What ideas are used?

Use of material: Does the writer use the available resources and tools?

Consequence: To what extent does the writer stick to the frame that he/she has outlined?

As we see, these criteria, in themselves, represent an act of adaptation and reinterpretation of the Available Designs, suggesting new subject-related concepts that are indeed open for discussion. These categories were uploaded in a document to the LMS in order for the students and the teacher to return to them at any time, perhaps adopting them in other situations.

7.4.2. Case 1 – some general characteristics

The example of John and Ken and the responses of the teacher to their products are interesting in the sense that it productively and, to some extent, creatively adapts and reflects several of the intentions of the design and its commitments in relation to the integration of multimodal media pedagogy and mother tongue education. Analysing the rest of the material of the class in similar ways, I would argue that the example of John and Ken is not extraordinary for the class in general, but quite different from the material found in the other classes.

To summarize the analysis of Karen's class, it is a dominating feature among the students that they go through processes of experiencing, understanding and to some extent handling the competence-oriented demands of the curriculum, the latter being done in terms of dealing receptively and productively with criticism. All students are conscious about writing to a certain type of audience and situation, be it public, semi-public or private. This does not mean that they all handle this functional competence like experts; but they address it in a basic attempt at making their texts authentic.

From the teacher's point of view (me referring, in terms of data, to notes and transcriptions of field work (A35), field notes (A31) and the research log (A24)), the curriculum programme and the whole idea of the intervention is interpreted very positively. Karen acknowledges that she has been

exposed to new perspectives on both H.C. Andersen and the mother tongue subject in terms of conceptual understanding and pedagogies, especially regarding ways of making students and the teacher work and collaborate in dialectical processes of study, reflection, analysis and production. Karen remarks that in some ways she lacked professional knowledge and also practical experience in order to fully exploit the perspectives of the Available Designs. For example, she found it challenging to teach about the functional relation between *medium and use*, knowing very little about the history and sociology of media (including the distinction between the public, semi-public, and private spheres; cf. A8). Karen added, though, that this could be improved by repeating the programme several times, incorporating the responses from students and theoretical inputs from me.

In this way Karen reflects a point which is imperative to design based research methodology, namely to repeat interventions iteratively and self-critically learning from the experiences in order to revise and redesign the designed curricula programs, including the models they are based on.

7.4.3. Case 1 – Compared with cases 2-4

To some extent, the findings in Karen's class are contrasted when we compare them with findings in cases 2-4. In cases 2-4 it becomes clear that some students have trouble dealing competently with the *productive* genre of criticism. To the extent that students have uploaded products (sic!), a majority of students have produced knowledge *receptively* about different types of criticism – uploading and characterising other critics' reviews. Among some students, this receptive competence is not redesigned, however, into a productive competence of producing an individual piece of criticism.

Specifically, many students will state explicitly that this is “a review” in, for example, “a newspaper”. A genre and medium analysis of their products demonstrates, however, that this is not really the case. Rather, it is a text closer to the genre of a literary analysis in the format of an essay containing a relatively long resume and expressing personal views. Comparing the reviews with the specific genre demands expressed in the task, one dominant problem is that the reviews are often not addressed to an authentic receiver coming from a private, semi-public or public sphere. Rather, the receiver seems to be the teacher.

Another interesting finding is that students in these classes seem not to be able to criticise classmates in the group. Going through all evaluative texts by students across all four cases, it is found that students experienced the task of characterizing and criticizing the university homepage containing reviews the easiest task. The task of writing criticism was perceived as more or less

difficult. The task of criticising the group mate – that is, to evaluate formatively in the process of writing – was experienced as the most difficult task.

The question is how far we are able to go in the interpretation of these concrete comparative findings based on relatively few data. Findings cannot be generalised in the sense of external validity. But they may strengthen the transferability of the study in the sense that they test the model empirically and raise interesting questions about the integration of multimodal media pedagogy with the “traditional” school subject. Some readers may recognise aspects of these findings in their own practice, or imagine that they applied the experiment in their own context. From a designer-researcher view, the following conclusions are made, often formulated as questions:

- Regarding the model and its dynamic spiral arrow of knowledge production, it seems that a problem may arise in the process of going from the phases of overt instruction and critical framing into the phase of transformative practice.
- Another problem seems to be related to authenticity, which is related to yet another aspect of context: It is difficult to bridge the student textual practice *within the context* of the school with the practice *outside the context* of school.

The two domains are not really connected. With some exceptions, student criticisms represent no authentic genre, at least not in the way this concept was intended in the Available Designs. One tempting interpretation is to claim that authentic genres are marginalized within the school subject, and that receptive analysis, more than productive work, dominates knowledge production in the school domain of MTE/StLE. On the other hand, the finding may very well fall back on problems of confirmability, which is related to a problem in the design of the concrete experiment: Indeed, the designer-researcher’s idea of authentic genres was not perceived accordingly by three local contexts. One reason may be that the very idea of authentic genres is difficult, if not impossible, to realise and actualise. After all, no one else but the teacher would read the reviews by students; the writing situation was, in a sense, fictitious. Perhaps this has influenced the way students interpreted the approach in solving the productive critical task.

As the title of this chapter suggests, one main objective of experiment 1 – inspired by the critical media literacy movement – was to make students become more critical. The findings in the four cases suggest that the spectrum of becoming critical within MTE/StLE, and other subjects, should

be broadened and addressed in a variety of textual and social genres that play with the concepts and practices of becoming critical. Considering student evaluations, my findings suggest – as a challenge for teachers and teacher training – that the more personalized and socially related the type of criticism is, the more emotional it becomes and, thus, the harder it becomes for the students to produce it. Writing and reading are practices embedded in social and psychological aspects of life, as new literacy researchers underline (Barton 1994, Gee 1996). This should be acknowledged and respected in the process of integrating multimodal media pedagogy.

Another interesting question is:

- Whether and how the teacher plays a role in the student process of knowledge production.

The model suggests that they do and the experiment offers some empirical insight on how. As we have seen, there is invariance across the four cases in terms of the diverse selection of different fairytales. Here, teachers seem to have applied the same teaching strategy. There seems to be, nonetheless, variance in the diversity of the student work products in terms of being able to combine writing style with choice of media and genre, including the simulation of an audience/receiver. In Karen's class during the Designing process students seemed to become increasingly aware of concepts used in making criticisms and thus became better at doing and reflecting on it. To some extent, this also seems to be the case in Susanne's class. In the first year classes this does not seem to happen quite as significantly. How can this difference be explained?

As already suggested in the analysis of Designing, it could be argued that there is an important relation between the way the teacher approaches and remakes the design of the curriculum and the way the students remake the remaking, so to speak. The teachers are the gateways and gatekeepers of the potential integration of media pedagogy and mother tongue education. In this experiment it was found that the teachers in case 1 and 3 valorised the *theoretical* scaffolding of academic input about different types of criticism more than the teachers in case 2 and 4. This helped the students attain a better conceptual understanding of what criticism is about. Obviously, one should consider whether differences in teacher strategy could have something to do with contextual parameters, such as the fact that classes 1 and 3 were second year classes composed of substantially fewer students. A setting with fewer and older students, probably having a better “study competences” [studiekompetence] (Beck & Gottlieb 2002), makes the teaching of theory more likely to become a success.

In terms of The Redesigned there were other regularities among cases 1 and 3 on the one hand side, and 2 and 4 on the other side.

It was in cases 1 and 3 that the *journalism groups* turned out to become very successful: In case 1, two boys, Danny and Mike, programmed and produced a whole website, which included multimodal meaning-making such as consecutive interviews with students, perfectly designed short articles, statistics of how students rated the project (yet another kind of ‘quantitative’ criticism), pictures of social life in class etc. (cf. figure 7.4.3.1 and A10). Danny was a typical super student/user. He explained that he had around 1000 hours of experience with web programming. He argued that the website they had designed for the project could replace the LMS offered by the school hence improving the teaching quality. And he found that this experiment, at last, allowed him to use some of his communicative competencies in school. He would be able both to exploit the full potential of the open task given to the journalism group and help students in the “main group”, even arguing that he had learned what they had learned too. He was demonstrating, in the present perception, an extreme expert-like competence towards the experiment. Or, to put it differently, the competence-oriented design suited a student like him very well. For reasons of transferability, it should be noted as an important background information that his mother was a ”Danish” teacher in primary school. Danny did not seem to be an average exemplifying case; rather, he was a rival or critical case compared to other students (cf. also 5.3).



Figure 7.4.3.1 Screen shot from Danny and Mike’s journalistic work in case 1.

In Susanne's class, two girls, Anne and Ellen, who were appointed journalists, performed well too. Susanne had selected Anne and Ellen knowing that their student performance was high in "Danish" and other subjects. Anne and Ellen would choose another, indeed purposeful, approach due to their former competencies, some of which were gained in primary school. They contacted the local newspaper and eventually got their article published, thus situating the project in the local community (cf. A10). In the article they combined verbal and visual forms of expression, using a drawing of Andersen, among other things. They had to get the copyright permission to use the drawing before doing so, thus experiencing and reflecting on important sociological and economical – that is, functional – constraints and potentials in public meaning-making. In the article students reported on the project, not only in descriptive, but also in valorising ways. As a student quoted in the article puts it: "Instead of the everyday classroom teaching I actually find it very motivating to do something on your own, that is, 'out in the field'". That a student expresses this to a student-journalist and not to me as a designer-researcher, might make this statement more credible for students in class: Here, "pleasing" of the researcher is not an evaluation problem.

Another aspect that strengthens the credibility of the suggestion that a pattern emerges between cases 1/3 and 2/4 is that the journalists in both Susanne's and Karen's classes express open scepticism about the perspectives of the research project and its aims. As the journalists in Susanne's class put it, closing the article: "Students are questioning whether it is ethically correct to pull out the stories of H.C. Andersen from the media they are used to, or whether it is important for the stories to adopt the development of future media." This is aptly put! This is a way of re-formulating the research question of this project: 'How to integrate?' Such didactic critical-constructive remarks are not found on behalf of journalist-students in cases 2 and 4. That students are able to rephrase the core question of the project reflectively demonstrates that the experiment has had quite some impact in their local classroom culture. It is a concrete example of subject-related design-based adaptation. In a sense, one can ask for no more from a design-based research perspective.

For the analyses of experiments 2-4 to come, it should be noted that the journalism groups in Karen and Susanne's classes would continue throughout the whole project. They became popular both among students and the teachers. In cases 2 and 4, on the contrary, the journalism groups were not popular. In experiment 1 the two groups did produce material that, to some extent, would resemble authentic journalistic work, but they never reached the point of actually publishing a product within or outside the context of the classroom. When evaluating data about this non-event,

so to speak, data suggest that it may have something to do with teacher interpretations. Peter, the teacher in case 4, argues in the teacher evaluation of the pilot study (A37), that the differentiation of the class into two groups – the main group and the journalism group – is hard to handle both for teachers and students and should be avoided: It led to social exclusion, instead of creating a critical classroom forum. Karen and Susanne would disagree when we spoke about this at our midway meeting in August (A39). In other words, triangulation reveals different perceptions among teachers regarding pedagogical strategies, which intermingle with knowledge production. The comparative analysis suggests that Peter’s generalising claim rather reflects a certain perception of teaching “Danish”.

Peter had described himself in ways that made me characterise him as predominantly literary and academic in his thinking. It is thought that he proved this to be true in his adaptation of experiment 1. One could argue that his profile made it difficult for him to teach experiment 1 in the sense of not exploring the full potentials of multimodal media competencies among students. The example of the two students Susan and Christine composing a group in Peter’s class can illustrate this (A33 and A53). Susan’s personal letter to “Hans” begins in the following way:

Hi Hans

I have read your new fairytale. It is so cute. It will be a success among the kids. Unless it makes them scared of sleeping, if this Ole kid isn’t in their taste ☺¹⁰²

And it ends like this:

I think it’s ok to write about how dreams affect people’s daily lives. In this way, if that’s what you want to do, it is easier to frighten the bad and naughty children. ☺

Well, I must go.

Just say if you need help another time alright?

Hugs from me.¹⁰³

¹⁰² [Hej Hans / Jeg har læst dit nye eventyr. Hvor er det altså bare sødt. Det skal skam nok blive en stor succes blandt de små. Medmindre den altså vil gøre dem bange for at sove, hvis nu ham Ole drengen ikke lige er falder i ungerne smag ☺ (...)]

¹⁰³ [Netop hvordan drømmene har en effekt på menneskers dagligdag, synes jeg godt, at du kan fortælle om. På den måde, hvis det altså er din hensigt, kan du også bedre skræmme de slemme og uartige børn. ☺ / Nå, men jeg vil smutte for nu. / Du siger bare til, hvis du skal have hjælp en anden gang, ik’?! / Knus mig]

The work products are found to live up to the demands of the experiment. They demonstrate – in their own contemporary way of writing personal letters to Andersen – knowledge of critical text types combined with personal engagement and wit, including the integration of verbal-visual signs from sms-language (smileys). These are found to be much better than the products of the rest of the students in that class.

Peter does not acknowledge the quality of the girls' work. In other words, the credibility of the designer-researcher's perception should be questioned. The problem, in his perception, is that they had written *personal* letters of criticism similar to those of John and Ken. The girls reflected precisely in their reflection texts that they were enthusiastic about being allowed to do this. Peter, on the other hand, seemed to forget that this was allowed. Evaluating their work, he focused on delayed deliveries on the LMS, giving both students a grade below average. This would frustrate and haunt the motivation of Susan and Christine for the rest of the time of the project. One may ask why Peter did not acknowledge their work. He could have forgotten the intentions in the learning material, due to lack of time. But one might also ask whether it had something to do with the fact that the girls were writing a culturally "low" genre. These were personal letters in a contemporary language using verbal and visual modes, challenging the dominating genre regime of the school subject. A social semiotic approach would at least suggest this possibility.

Theoretically, it could be argued that the variance and invariance between the cases have to be understood in relation to historically constructed ideological and discursive regimes that, to a large extent, dominate the practice in different social settings, such as schools. In terms of genre regimes, both teachers and students in "Danish" are brought up, so to speak, with the loose convention and genre of writing essays in school. It is the genre of essay writing that rules productive writing in "Danish" classes, as in mother tongue subject classes in many other countries. As researchers in Denmark have argued (Gregersen & Tøgeby 1992), echoing international research (cf. Berge & Ledin 2001 and Kress 2003 for an overview), the paradox of this approach, and especially the practice of essay writing, is that "stil" only exists and refers to the social space of the school system itself. It is not a socially situated genre used in authentic situations of professional or personal life; literary novels and other special genres perhaps being the rare exceptions from the rule.

This fact, and the fact that alternative genre approaches are quite rare in the practice of "Danish" from primary school to upper-secondary school, implies – seen from a multimodal media pedagogy perspective – that students are taught not to see and reflect upon the relation between media use, mode and situation. In outside school domains, students spontaneously experience this on an

everyday basis, but in school they are not allowed to practice it. This discrepancy between the development of everyday multimodal media competence and school genres of multimodal media competence makes it quite challenging to work with new genres of criticism in the class, and to create space for productions in new constellations of modes and media. As we shall see in the analyses of the following three experiments, this finding will be repeated under new conditions.

7.5. Conclusions

The hypothesis of experiment 1 was two-folded. Firstly, it was claimed that the teaching of writing in the genres of Andersen fairytales and reviews found on the Internet following the principles reflected in the model of multimodal media pedagogy may co-contribute to the development of multimodal media competence among teachers and students within the context of “Danish”. Secondly, it was claimed that this experiment may help reflect on possible changes within the practice of teaching Andersen in “Danish”. It may also help reflect, more generally, on changes in the teaching of the subject MTE/StLE.

The first claim has been demonstrated, namely that the didactic model of semiocy in MTE/StLE was inspired and completed by the design of the learning material. However, some of the primary agents – teachers and students – would disagree, to some extent. The answer to the first claim is therefore unequivocal. Ideally and indirectly, teachers confirmed that the experiment *could* co-contribute to the development of multimodal media competence and reflections about this competence. They all confirmed that the designed curriculum had been eye-opening as regards the teaching of Andersen and the teaching of “Danish”. Focusing on students, a qualitative analysis was made of their redesigned work products. This analysis offered in-depth signs of multiple competencies evolving in student work, both in terms of making media and reflecting on processes, thus becoming more competent. The analysis also found, however, that many students had problems in terms of understanding relations between media, modes and genre, especially in their own production. This could partly be explained by the teacher’s way of interpreting this relation, which again is related to larger historical, discursive and ideological constraints within “Danish” and MTE/StLE in a broader perspective.

This brings us to the evaluation of the second claim. Considering the piloting nature of the experiment, one may argue that the experiment did not develop badly, but considerably well, and that it had a lot of impact. When teachers took over the learning material, it was found that teachers and students remade it through the process of Designing, also this occurred in productive ways (seen from the point of view of the intentions of the Available Designs). The remaking relied

heavily on local constraints and agentive interpretations. As highlighted, themes such as the technological infrastructure of the school setting and the teacher's way of reacting to it, the teacher's assumptions about classroom discipline, and teacher and student preparedness, or one might say competence, to cope with complex computer mediated learning material. All this was new and excessively demanding, yet also productive in terms of producing new reflection related to the practice of the school subject and learning about H.C. Andersen.

In the present interpretation, the conclusion is that the Available Designs of the experiment *could* be used in order to establish a committed competence-oriented curriculum programme that would meet the understanding of sense-making of the model through the use of modes and media, its dynamic, staged understanding of the teaching-learning process and its vision of the knowledge production that might be an outcome. Obviously, other kinds of Andersen resources could have been used establishing a similar programme. Similarly, a programme could have been established using the same resources *without* allowing teachers and students to work in competence-oriented or multimodal media-oriented ways with Andersen.

On the other hand, the simplicity of the theoretical model is contrasted by the complexity of empirical reality. This raises the question whether the model is too complex for classroom practice, and whether the designer-researcher – or DBR in general – is naïve about the impact of theoretical models (which is to say that there is a validation problem related to confirmability). Critical questions about the model emerge: Does the theoretical understanding of teaching reflected in the model differ ontologically from a pragmatic understanding of teaching? Do too many (new) things occur at the same time when applying this model (as suggested by Peter)? Does it become too complex to analyse the implications of the intervention?

7.6. Limitations and implications

This research study, like any other study, has limitations in the sense that epistemological and methodological constraints affect knowledge production. The general problems of doing this kind of research have been analysed in chapters 2 and 5. Here, a few concrete aspects that have seemed important in the analysis of experiment 1 will be foregrounded.

One of the problems of doing DBR has to do with the researcher's role as both designer and analyst, particularly when working individually. One could argue that the ideal situation when doing DBR, including field work, is to work in research teams. This allows researchers to share and analyse everything from ideas for the Available Designs to impressions of the field and the interpretation of field notes and other empirical data. The research team can also be used to discuss

the evaluation of empirical data. In this way, research teams would improve the trustworthiness of a study. However, one could also argue that other meaning-making structures, including power structures among researchers, will then also begin to influence the construction of knowledge. In this PhD study, it goes without saying that work has happened in isolation.

This study is based on a group of teachers that was particularly interested in making change. These are characterised (cf. chapter 5.3, p. 161ff.) as critical and exemplifying cases. The analysis of experiment 1 confirms this. It could be argued that the teachers participating in this study did everything they could to engage and confirm a personal interest in the integration of multimodal media pedagogy with “Danish”. On the other hand, they clearly worked under time pressure while experiment 1 went on, being unable to focus solely on this project alone. The life of an upper-secondary teacher is a discontinuous and stressful one. Considering the lack of teacher evaluations and student products of the experiment, an important lesson was learnt about the nature of DBR: A design-based researcher understands an intervention as a continuous chronology unfolding due to an intended logic and a theoretical order; participating agents, however, may experience it as discontinuous and fragmented, focusing rather on “what works” in a specific classroom.

One could raise the hypothetical question: What would have happened if the designed curriculum were handed over to a “Danish” teacher who was not really interested in didactic change or media. Or imagine an even less intervention based approach, simply encouraging teachers to develop and apply a media pedagogical perspective to H.C. Andersen, or another writer, or another element in the “Danish” curriculum. What would happen? Would anything happen? What are the future implications of this experiment and the aftermath of intervention?

As already suggested, models of media pedagogy and mother tongue education proposed by Buckingham and many others and rethought by me (in Part II) suggest the model of semiocoy for teaching modes and media as very challenging to the everyday practice of “Danish” teachers: such models are top-down-oriented and could very well lead to disintegration instead of integration if not informed, guided and supported by a researcher who has had the special and somewhat unrealistic opportunity of working the idea through thoroughly and relating it to practice. One could also argue (as Peter did) that the model was interpreted and applied in too ambitious and complicated ways by me in the making of the Available Designs. This argument was supported by students, particularly in Peter’s class, arguing that teacher instructions would be more effective if made orally by the teacher, not in computer mediated writing.

These objections are acknowledged – indeed, computer supported collaborative learning can be exaggerated – and it is attempted, in experiments 2-4, to learn from this, as demonstrated in the coming chapters. Nonetheless, the best empirical *anti-thesis* to these claims is the finding in case 1, Karen’s class, where the designed curriculum seemed to suit *everyone* in the classroom just fine. In a sense, case 1 represents a negative case. Here the explanations that make sense for cases 2-4, are not equally valid. Rival explanations are necessitated.

It is therefore suggested that the final conclusion of experiment 1 is that it demonstrates a dilemma in DBR: If complexity in the theory-informed designed curriculum is reduced, this may *increase* adaptation flexibility for teachers and perhaps also better meet: “...the zone of proximal development” for students. On the other hand, this will *decrease* the “regime-contesting” elements of the experiment, hence not pushing forward the teachers in their quest for a change of the subject. Within the context of this study, this implies that we should not meet the demands – suggested by many theoreticians – of developing student competencies that would prepare them for a complex semiotic knowledge society.

There are strong indications of the designed curriculum in the pilot study representing an approach, which is radically different from everyday practice. The positive effect of trying out such a subject-related radicalism is that it represents what Brian Street has called: “...the sternest test...” (1999: 6) of new teaching conceptions. This testing approach is but one way that educational research can work critically-constructively with the development of MTE/StLE and, in a larger perspective, the cultural development of society and the dialectical relationship of this society with the school subjects, as the over-arching goal.

Chapter 8. Experiment 2: Teaching media and/or Andersen through oral readings

8.1. Introduction

In experiment 1 an event that anticipated the focus in experiment 2 on mediated oral readings – or more broadly put: mediated speech and sound – was observed. The event went as follows:

Hanna and Ben, two students working together as a group in Jane’s class (case 2), were in the process of searching for a fairytale and a matching review on the Internet. They shared a laptop sitting outside the classroom in an open, noisy “transit hall” with peers and the teacher moving back and forth and music in the background. Still, they were able to work. They found the fairytale “The Nightingale” (in Danish) and decide to read it aloud directly from the screen, taking turns. For fifteen minutes, without interruptions, they read the text, creating an intimate and intense situation. After finishing the story, Hanna starts to cry. Ben, not knowing what to do, silently looks at her and into the screen. Marie, the ‘journalist’ asks, caringly, what is going on? Hanna replies, “It was touching, the story was so touching”. Marie caresses her cheek. Hanna wipes her eyes. She and Ben continued their work.¹⁰⁴

This observation reassured me, in my preparations for experiment 2, about three things: 1) Unlike what some teachers claim, 19th century Andersen tales might still matter to 21st century students – their computer-mediation does not change this in any significant way; 2) Intentions of a designed curriculum (committed to, say, writing reviews and becoming critical), might not match actualisations (unless crying is understood as criticism), and luckily so! And 3) Andersen fairytales are relatively easy to read aloud. This probably has something to do with the embedded modern oral style of the fairytales (Brandes 1994 [1869]), which, in part, made Andersen world famous.

Some practitioners and theoreticians of MTE/StLE might argue that teaching reading is a conservative and non-authentic way of addressing the mode of speech. Contrarily, the hypothesis of experiment 2 (as will be analysed here, using the same template as in experiment 1), is to argue that if we use a multimodal media pedagogical approach towards Andersen readings, we might be able to establish events and practices, in which students are faced with engaging and demanding competence goals, which in turn make them produce authentic knowledge. The Available Designs of experiment 2 attempts to integrate disciplines – oral pedagogy, literary pedagogy, media pedagogy – that are normally disintegrated and fragmented. The actualisations of the experiment

¹⁰⁴ Cf. A31, Feltnoter fra Janes case, Samlede feltnoter.

allow us to further explore ways of integrating modes with media, understanding some of the conceptual and contextual constraints and potentials we should be aware of. One main empirical finding, is that both teachers and students question whether such an experiment teaches anything about Andersen per se. Rather, some claim, it teaches something about media. Does the experiment develop a disintegrating disjunctive understanding, or an integrative conjunctive understanding of multimodal media pedagogy within “Danish”?

8.2. Available Designs

8.2.1. Technological commitments

Experiment 2 very much employed the same technological means as in experiment 1.¹⁰⁵ Having learned the lesson of complexity from experiment 1 (teachers would not have time to redesign the material so that it suited class or time to read the material thoroughly; also students would not want to be “flooded” with information), several efforts were made to design the learning resources as accessible and applicable: One-page Word documents were produced for direct upload on the LMS. One document would explain the over-arching goal of the experiment; a number of other documents, divided into two types, would explain *Steps* and offer *Appendixes* that included tools and other resources (cf. later for specific descriptions). Some of the appendixes would contain links to public learning resources, such as on the DR Homepage (Danish Broadcasting Corporation), so computers and Internet access was occasionally required.

What was new in experiment 2, technologically speaking, was related to the foregrounded mode and media of the experiment. A CD-ROM with copies of historical readings of Andersen tales using a CD compilation called (in my English translation) “100 famous actors read H.C. Andersen” (Andersen 2000; see vignette for cover picture) was produced. This was *not* open source, wherefore

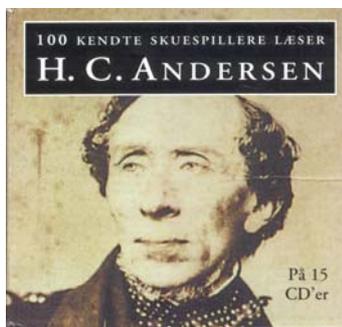


Figure 8.2.1.1. Vignette of CD.

I had to track the copyright owners. This, indeed, would be a constraining factor if a teacher were to do the same thing. The copyright owners kindly gave permission to copy the readings onto a CD-Rom – not onto the LMS – and use it as freeware due to the research project – “next time” it would cost money. It follows, that student-centred computer-supported teaching was reduced: Due to copyright restrictions, it was not possible to make the readings available for

¹⁰⁵ The material sent to teachers is found in A12.

students *themselves* to choose and listen to if they found it necessary. As we shall see in experiments 3 and 4, copyright restrictions influence the design of technological, curricular and pedagogical commitments and represent a *dominating economical constraint* for multimodal media pedagogy in general. It simply restricts freedom of choice.

It should be noted, though, that the present author also constrained student freedom of choice in terms of access to modes: In the designed curriculum students would only be allowed to work, receptively and productively, with *two* Andersen fairytales: “The Teapot” and “The Naughty Boy”. In other words, the fairytale diversity of experiment 1 was reduced deliberately in order to allow students to focus on one fairytale. This, it was thought, might make clear that the same text could be formed and function in different ways or, to put it in Meyrowitz terms, it would help highlight the triadic relation between (the) three fundamental media competencies related to the content, form and function of Andersen fairytales.

In a teacher guide – explicitly made for teachers only – the subject-related rationale of the experiment was explained offering several types of advice and reflection (similar to those presented in this Available Designs section). It was stressed, among other things, that teachers would have to prepare for the arrangements by planning for recorders and recording rooms at school. Furthermore, they might consider printing – in paper – some of the learning resources in order to hand them out to students so as to supplement the material made available on the Internet. Practical advice often seems banal (particularly when highlighted in a dissertation). In reality they are not. They are crucial for classroom based knowledge production.

8.2.2. *Epistemological commitments*

When referring, above, to critics of teaching reading, it should be considered an implicit reference to the Genre School and, more broadly, socio-linguists who have contributed to a new understanding of speech. These stress, among other things, the importance of teaching reading in school, particularly in MTE/StLE.¹⁰⁶ Generally, the Genre School would argue that understanding and valorising speech should change. In one word, the hierarchy of *writing and* (or rather *above*) *orality* should be questioned and the didactic reflections about both modes should become more *functional*.

In a seminal article on oral meaning-making, Michael Halliday (1987) claims that education research on orality and the teaching of it has traditionally focused on *artificial* speech instead of *natural* speech. Generally, if speech is taught, it is taught in the shape of prepared oral speech:

¹⁰⁶ Kress (2003: 92f) introduces the history of the Genre School.

readings, drama, and debate. Alternatively, Halliday is interested in studying speech as spontaneous, less-reflected language, that is, as the way we speak it in actual communicative contexts and genres. The more he analyses speech using this approach (and the SFL framework, which lies outside the framework of this dissertation), the more he acknowledges speech as a complex and interesting phenomenon to explore and teach, as is writing. He identifies both differences and continua between written and oral ways of meaning-making and indirectly he contests the common sense epistemological assumption that literature "...is the most complex and enriching use of language".¹⁰⁷

Danish linguists and MTE/StLE researchers have begun to broaden the conception of speech in "Danish" as well, to some extent, making a turn from the artificial to the functional: Mads Haugsted (2004) has generally stressed the difference between 'oral teaching' and 'teaching about orality' – the former being addressed much more than the latter by "Danish" teachers. Haugsted, however, takes rhetoric and aesthetics as the theoretical point of departure for teaching speech, among other modes, focusing particularly on drama – that is, prepared speech. In this sense he parallels Peder Skyum-Nielsen, a Danish professor in Media studies who has recently published learning material in cooperation with DR (the Danish Broadcasting Corporation), offering examples on its homepage on 'good sound' reminding us of classical and technical, rules of good speech (2003).¹⁰⁸ This material was used as a resource in experiment 2 (cf. below). It should be added that this was done with a critical ulterior motive, from the point of view of the designer-researcher: Skyum-Nielsen does not take a functional or rather a socio-cultural approach and it was hoped that the classes would contest his suggestions when preparing and producing their own readings.

It may be that Skyum-Nielsen has a lesson to learn from Danish socio-linguist Erik Møller, who, in an article addressed to "Danish" teachers (1998), underlines the continuum between writing and orality, claiming that cultural, social and technological developments – such as the everyday use of an answering machine, or watching television or listening to the radio – demonstrate the fact that several speech-like oral genres are widely distributed in functional and personalized ways. This might be an argument for addressing these modes from a social-linguistic point of view in "Danish" teaching. Equally, the Danish Ministry of Education report on the future of "Danish" (UVM 2003c),

¹⁰⁷ The quote is from a recent, unpublished, report (November 2005) produced by a European Council group of researchers reflecting on a future research project about a general framework for languages of education, including mother tongue education.

¹⁰⁸ This learning material has been followed up by a theoretical study on speech in Skyum-Nielsen 2008.

whose main writer was Danish socio-linguist Frans Gregersen, argues the contradiction in although people in their everyday lives use speech far more than writing, it is taught so little in school.

In the light of this critique, experiment 2, taking Andersen readings as a point of departure, might seem like a backlash. As will become clear this is not the case. The sketched functional or *pragmatic turn* within the theory of speech is fully acknowledged and it is claimed that it may be integrated into classroom practices – even about readings – by applying media pedagogical classroom strategies. It follows from this that the socio-linguistic approach towards speech, though trying to represent a “natural” position, is too linguistically and monomodally oriented. None of the socio-linguistic research regarding orality has, so far, explored how we might teach the mode of speech related to, firstly, other modes, including other audible modes (say, music); and secondly, the meaning-making and indeed competence-demanding potentials of teaching *constellations* of media and multimodality, acknowledging the full interacting complexity of semiotic resources as a socially and culturally developed phenomenon. Certainly, we are only beginning to understand the epistemological implications of teaching speech/sound, media and other semiotic resources within MTE/StLE in integrative receptive, productive and generally knowledge producing ways.

Experiment 2 is, however, on the verge of doing so. Indeed, as will be demonstrated in the empirical analysis of Designing and the Redesigned, it seeks to do more than that. Reading Andersen was the obvious point of departure, if one wanted to address the mode of speech, but potentially, one is able as a designer/researcher and teacher to mix orality with other functional commitments of orality/media knowledge production. Whether it will happen depends, to some extent, on the design of curricular, pedagogical, and social commitments.

8.2.3. Curricular, pedagogical and social commitments

The title of experiment 2 was “The Best Andersen Reading – a Competition”. This suggests a consciously chosen *popular* social genre or “format” for multimodal media pedagogy. The competition-experiment was organised, like in experiment 1, as a process going through steps (cf. table 8.2.3.1). The end goal that would direct the class(es) was a recorded reading that should serve as a contribution to a voting session, in which the classroom community should decide which group had produced the best reading. In order to be able or rather competent to do so, the class would have to gain experience and constructed knowledge about ‘good readings’ by listening to and discussing professional readings from other decades and by being offered tools (cf. table 8.2.3.2) and theory about the topic. To some extent, it would be the teacher’s responsibility to choose how (much) these resources were addressed, but tools should be accessible for students at anytime on the LMS.

In general, students would have to work in a competence-oriented teaching-learning process that would require individual, collaborative, receptive and productive, knowledge processes. Students were confronted with a specific demand that they must act upon understanding the situatedness of their work, both within and outside the classroom. They would be “broadcast” within class during the voting session and also, potentially, in-between classes: The two best readings would be taken to the midway meeting among the teachers and the researcher, who would then decide, which group should win the competition as a whole and earn the price (200 DKR, or around 20 £) based on a discussion on the elaborated criteria for good readings of the four classes.

It should be added, anticipating criticism on this point, that the competition genre was not a radical invention. Rather it was a takeover at the meso-level of a nationwide reading competition of Andersen-tales that had been arranged several times by the Association of ”Danish” Teachers for primary school (age up to ~15). The question in this intervention was whether students and the teacher in upper-secondary education would take it seriously also. Preparing the experiment, the teachers were asked what they thought. All four teachers found it a good idea. Jane replied in an e-mail (my translation): “It is my experience that students in hxx are crazy about competitions as the foundational principle: Let the best man win (and earn most!!!)”. We shall later learn how the students responded to the competition genre.

Step	Name	Social Activity	Pedagogy	Curricular Knowledge Production	Meta group
1	Intro	Plenary work in classroom	Situated practice, Overt instruction	Intro by teacher about the programme presenting the goal, the tools, and the products that students have to produce. Reasons for engaging in this topic are suggested. Historical evidence of the relation between Andersen and orality are offered. Groups are defined. Step described in 1 page for LMS and/or paper.	The journalism group is established and given its task.
2	Constructing Criteria	Group and plenary work in classroom	Overt instruction, Critical framing	Preparing the production of readings and later the voting session, the class reflects on what criteria can be developed for the characterisation of a good, contemporary Andersen reading. Questions about target groups, modernisation of language etc. are suggested. Tools that might scaffold this are made available. Step described in 1 page for LMS and/or paper.	Journalists work on their task

3	Technique	Plenary work in classroom	Overt instruction	The class is taught, reflect upon and <i>make</i> body exercises that are useful before making readings. Two tools containing advice and links to hands on examples of readings and exercises are available. Step described in 1 page for LMS and/or paper.	
4	Production	Group work and computer-mediated collaborative work.	Critical framing, Transformative practice	Students are equipped with recorders and asked to produce their own reading drawing on what they have already learned and the tools offered. Groups are encouraged to upload initial notes and ending notes about the production: How they interpret the fairytale, how they plan to adapt this to the reading etc. Step described in 1 page for LMS and/or paper.	
5	Competition	Plenary work in classroom	Transformative practice	Students present their recorded readings in a competition. Students are allowed to vote using 3, 2, and 1 point. The teacher acts as <i>notarius publicus</i> . The best and second best group continue on to the “national” competition (among the four classes). Step described in 1 page for LMS and/or paper.	Journalists present their product.
6	Evaluation	Group work and plenary work	Critical framing, Transformative practice	Students are equipped with recorders and asked to evaluate, orally, in 10 minutes in their groups, the programme. They are prompted to “talk freely”. If they are not able to initiate the discussion on their own, they can use some scaffolding questions. Afterwards, groups meet in class, they listen to one group recording, and start evaluating collectively. Finally, they hand over the tape to the teacher. The teacher can choose to respond to this in a collective evaluation. Step described in 1 page for LMS and/or paper.	

Table 8.2.3.1. Steps in the curriculum programme of experiment 2.

Like in experiment 1, it was suggested that there should be a main group and a journalism group. The goal of the journalism group would contribute, it was believed, to the sense of authenticity and meta-reflection – or, to use the word of the NLG, the potential “situated” and “transformative practice” of the curriculum programme. The goal of the journalism group was to focus on the same mode as the rest of the class, but with a different objective and competence-goal in mind. They were asked to produce a mediated product *in sound* about the project, focusing on the happenings of experiment 2, if possible in collaboration with and broadcasting it on a local radio station, hence

drawing on an informal “beyond the classroom” learning site.¹⁰⁹ The instruction for the journalists was formulated as in experiment 1, in an open way requiring a high degree of student responsibility and product focus. And again, the teacher was given the role, in relation to the journalists, as a consultant-instructor, she/he being informed, in the lead-up to the experiment that the collaboration with a local radio station might be an option that should be prepared beforehand.

Ref.	Name of tool	Description of tool	Related step(s)
A	Short presentation	Describes the goal and process of the curriculum programme. 2 pages for LMS and/or paper.	1-6
B	The programme – step by step	Describes the steps, their main goal, and the allowed time. 2 pages for LMS and/or paper.	1-6
C	The journalists' task	Describes the goal of the journalism group. 1 page for LMS and/or paper.	1-6
D	Picture gallery of Andersen making readings	Demonstrates in drawings, photographs, and sculpture, how Andersen acted in social reading situations. 2 pages for LMS and/or paper.	1
E	Andersen readings in 1864	Presents Andersen's schedule for public readings (compiled from www.andersen.sdu.dk). 2 pages for LMS and/or paper.	1
F	Critics about the relation between Andersen and orality	Offers small samples of criticism focusing on Andersen and orality. Samples derive from 19 th to late 20 th century academic critics and Andersen himself. 3 pages for LMS and/or paper.	1
G	Georg Brandes' first treatise on Andersen	Students are introduced to Brandes' treatise on Andersen, originally from 1869. Links to treatise are available on the Internet, and some pages of it are attached as pdf-files to be uploaded on the LMS and/or paper. (Brandes is a famous 19 th century critic of modernity, inspired by Nietzsche. Generally, in “Danish” in upper-secondary school, he is taught as the theorist of the modern breakthrough in Denmark.). 1 page (intro) + several pages (treatise).	1, 2
H	Knud Wentzel: What Andersen does is always the right thing	Newspaper article by academic scholar Wentzel critical about the construed orality in the artistic fairytales of Andersen – opposed to the more spontaneous orality in earlier folklore tales. Several pages for LMS and/or paper.	1, 2
I	The Naughty Boy	A fairytale by Andersen copied from the homepage of The Royal Library. 2 pages for LMS and/or paper.	2, 4
J	The Teapot.	A fairytale by Andersen copied from the homepage of The Royal Library. 1 page for LMS and/or paper.	2, 4
K	The reading	Inspirational material from the Association of “Danish”	2, 4

¹⁰⁹ Cf. Buckingham 2003: chapter 12 on the potentials and problems of doing so; and Thygesen 1974 for a local, Danish analysis of the political-cultural rationale, grounded in emancipatory media pedagogy (Enzensberger), for creating local radio stations.

	competition arranged by The Association of "Danish" Teachers	Teachers' homepage containing information, student examples, good advice, and even audiovisual demonstrations about reading technique for LMS and/or paper.	
L	Good sound – according to Peder Skyum Nielsen	Some specific advice from a new book – <i>Vellyden</i> – about speech written by a professor in media, including links to a DR homepage offering authentic examples referred to in the book. 1 page + links for LMS and/or paper.	2, 3, 4
M	Good reading – according to Claus Tilling	Some specific advice from Claus Tilling, organiser of the reading competition arranged by The Association of "Danish" Teachers. 1 page + link for LMS and/or paper.	2, 3, 4
N	Poster	A poster showing a drawing of Andersen in a reading situation along with the title of the programme. 1 page for LMS and/or paper.	1-6
O	The Teapot and the Naughty Boy on CD	A CD recording of the Teapot read by actress Clara Pontoppidan and The Naughty Boy read by actor Arthur Jensen.	2
P	The Teapot	An audio cassette recording of The Teapot read by actor Sigfred Johansen.	2

Table 8.2.3.2. Tools in experiment 2.

8.2.4. The integrating commitment

As pointed out in the theoretical section, the present conception of multimodal media competence implies an interacting collective and personal formation perspective – a *Bildung* perspective – that tries to integrate informal experiences with formal schooling and the historical, institutionalised practices of mother tongue classrooms.

In a broad perspective, experiment 2 addresses such perspectives by drawing indirectly on student experiences and reflections on prepared speech and sound mediated multimodally in a number of contemporary semiotic domains. This includes very dramatic and contemporary examples: Every student has experienced Internet-distributed Al-Qaida videos, in which terrorists, sometimes even their victims, read the reasons for decapitating people – a travesty which requires a personal and indeed critical, multimodal media competence towards readings in order to be dealt with constructively. It is believed that MTE/StLE, among other school subjects, should ensure this competence among all citizens.

But one might also relate the experiment more specifically to the historically, culturally and socially produced actualisations of Andersen and his fairytales in Denmark and elsewhere. A

popular saying in Denmark is that “we get Andersen into our veins through the mother’s milk”. The most common initial oral, intimate encounter with Andersen tales in Denmark is bedtime reading. Indeed, Andersen is delivered to us as an inseparable part of our mother tongue. Canonization begins in early childhood.

Andersen’s personal diaries (Andersen 1971-1977) suggest that this was also the case 150 years ago, not only in Denmark, but in British children’s hospitals and other places around the world. High and low, his fairytales were sold, often as pulp pamphlets where he toured with public readings (as suggested briefly in one of the learning resources, in order to give students a general impression of the historical context). In bedtime situations and public readings the fascinating and, to some extent, subversive content of his tales could be *told* by the writer, the mother, the nanny to people from all layers of society, whereas they in school and other public domains (as we know from experiment 1) were considered too controversial and were therefore marginalized. Andersen, himself, originating in a low class family, deliberately wrote and rewrote the tales so that they would take on an oral air about them, which was easily transmitted to children and adults alike. This created a simple, but powerful aesthetic relation between content, form and function that still works, regardless of the historical period, as is seen with Hanna and Ben (cf. 8.1, p. 259). The social power of the orality in Andersen’s tales is actually what the Danish 19th century theorist Georg Brandes highlights in one of the tools made available for class (cf. table 8.2.3.2, G). The question is whether that power retains a marginalizing force in schooling. Let us consider, briefly, how Danes continue to acquaint themselves with his tales, particularly as regards orality:

- In early childhood, including in early primary school, most Danes experience his tales, predominantly in non-writing, through face-to-face readings or mediated readings in compact discs or audiocassettes, in which professionals select, read and interpret the stories.
- Later in primary school, they are presented either as written story, which class might start to analyse or they are presented as oral readings that the teacher uses in order to develop the student ability to read aloud and make oral presentations. Other modes, such as visual illustrations, are also addressed in primary school, as shall be argued in the analyses of experiments 3 and 4.
- In upper-secondary education, it is suggested that readings of Andersen fairytales are also used, but not with an emphasis on the importance on their oral style and function. There is

no quantifiable evidence of this, rather it is a hypothesis based upon talks, among other sources, with teachers included in the collaboration. They expressed that they might use Andersen readings – Peter even assisted with one of the audio readings of “Thepotten” [The Teapot] that he used a lot – as an entertaining means or an appetizer for approaching the mode and disciplinary approach that matters in ”Danish”: *The written text analysed with literary methods*. In that sense, they use readings the same way Andersen animations are used in MTE/StLE (for instances of this outside Denmark see Grahame 1991 and the analysis of experiment 4 in chapter 11). They serve as a didactical *means*, not a *goal*.

To sum up on the integrative knowledge producing potentials of teaching Andersen, orality and media, the cultural and social use and valorisation of orality in Andersen’s fairytales has changed dramatically during the last 150 years, both outside and inside school. Likewise, it changes dramatically during the lifetime of a Danish student moving from early childhood to formal upper-secondary education. The oral, functional actualisation of speech-like style in the written tales is replaced by a distanced suppression of the same. The multi-layered, socially powerful, signifying potential of orality that the tales can catalyse in school is reduced *because* of school, or rather the historically developed knowledge regime of MTE/StLE.

Seen in this respect, the controversial nature of experiment 2 becomes apparent. The Available Designs would be committed to (re-)installing some of the potentials of mediated orality, suggesting approaches and purposes that, in that context, are unfamiliar to the students and indeed the teachers. Experiment 2 initiates a reflection process regarding personal identity making *vis-à-vis* knowledge production, in which early childhood experiences of Andersen tales are seen from a scrutinizing point of view. This is because it highlights the *representational and communicative* nature of the tales or, more generally, the functional manner in which we, as audiences in different contexts, construct knowledge about them. In other words: Ostranénie, that is, de-familiarization! (Sklovskij 1991 [1916]) The tales are made less natural or stranger, in the mother tongue classroom. The empirical question is: How were potentials actualised?

8.3. Designing

As in experiment 1, we begin the description of the Designing process by analysing teacher perceptions first, based on their retrospective evaluations. Contrary to the analysis of experiment 1,

the analysis of student perceptions is postponed until the Redesigned section.¹¹⁰ Instead, we move on to the analysis of designer-researcher observations drawing on field notes about student and teacher activities, but also other data. It should be noted that in experiment 2 the four classes were visited two to four times each, observing lessons and conversing with the teacher and students before and after the lesson (in total, 14 visits, including 21 hours of teaching).¹¹¹

8.3.1. Teacher perceptions

In this experiment, all four teachers returned a teacher evaluation of the experiment.¹¹² As argued in the analysis of experiment 1 (Chapter 7), these evaluations offer some insight into how they perceived the process of working with the Available Designs. The evaluations are not lengthy reflections on the experiment *in toto*, at least not compared to the reflections on Available Designs above. Rather, the teachers comment briefly on specific aspects of the experiment. Initially, there was a lingering impression that their brief comments were influenced by their busy work schedules and that the time available for reflection was limited. Later, at the intermediate meeting and in the post-experimental phase, when structured interviews were conducted, their reflections were examined at length and elaborated.

In the evaluations of experiment 2, there is a dominating tendency of the four teachers experiencing the experiment quite *positively*. This becomes particularly clear if we remember Peter's critical evaluation of experiment 1 and compare it with his 'first thoughts and comments about experiment 2':

...it was laid out in a more manageable and limited scope, both as regards the content and material of the experiment in the course of the class. I also thought that the pupils would consider it more exciting than the pilot project.¹¹³

As we see, Peter perceives the design as realistic and potentially relevant for students. However, the design process is not experienced in a purely positive manner. Rather, Peter experienced once again a discrepancy between intentions and realisations. His evaluation suggests that, in the process of

¹¹⁰ The main reason is that I have limited data on student perceptions due to the way I constructed the experiment: The only way students were asked to reflect retrospectively on the experiment would be orally by recording their own evaluation. Several groups did not do this.

¹¹¹ Field notes of experiment 2 are found in A32, Student documents from experiment 2 are found in A34, Notes from and transcriptions of audio recordings of experiment 2 are found in A36.

¹¹² In the following I quote from A38 containing the four appendices; cf. also A13 in which certain quotes are highlighted. Note that the evaluation by Jane is about both experiment 1 and 2; this questions the credibility of her evaluation.

¹¹³ [det var langt bedre tilrettelagt, mere overskueligt og begrænset i omfang, både mht. forsøgets indhold og materialet til undervisningsforløbet. Jeg forestillede mig også, at eleverne ville synes det var mere spændende end pilotforsøget.]

teaching the experiment, several problems and constraints were identified. Some were related to conceptual knowledge production and others to ICT. This will be detailed in the next section.

Karen (in case 1) was also slightly frustrated about the redesigned outcome of the experiment, and argues – like Peter – that the outcome was influenced by many pedagogical problems and technological constraints. Her evaluation suggests, among other things, that students were not able to read the instructive files on the intranet; that the recording equipment was not good enough; that students did not take responsibility in group work. Considering that this is the “laptop class”, which seemed to be accustomed to the use of computers in “Danish” during experiment 1, these developments were somewhat surprising. On the other hand, it underlines the situated nature of teaching and knowledge production. The discipline in one class may shift quickly and it may be difficult to explain why this happens.

In spite of these negative evaluations of empirical reality, Karen and the other teachers acknowledge that the experiment points towards new perspectives in terms of teaching “Danish” and teaching Andersen. Karen specifically comments that she had never thought of Andersen in relation to orality, but that the learning resource, with its mix of curricular and social commitments, suggests a new angle on how one might work with this in the future. Being both critical about the normative practice of “Danish” and self-critical about her own personal approach, Karen states:

This suggests a viable method for including orality. Especially because the subject is so “traditional” – we all know how to manage a H.C. Andersen study group – or so we thought.¹¹⁴

Susanne did not experience the same kind of technological or other problems as Peter and Karen. She argues that students became increasingly engaged and motivated due to the design of the experiment. The following are her first thoughts and comments:

The experiment was very interesting to work with and I came to think that the students who in everyday work were not the best in Danish suddenly attained stardom, either because they were good at reading aloud or good with technology. I thought the idea of having a journalist group fantastic, since it presents an opportunity to give different students a central function in class. In addition, and as a teacher, it becomes possible for me to give students who had a negative impression of the pilot project a positive experience in experiment 1.¹¹⁵

¹¹⁴ [Dette er et godt bud på en metode til at inddrage mundtlighed på. Især fordi emnet er så ”traditionelt” – vi ved jo alle hvordan man kører en H.C. Andersen emnekreds – troede vi]

¹¹⁵ [Forsøget var meget interessant at arbejde med og noget som jeg kom til at tænke på er at elever som til daglig ikke er de stærkeste i dansk pludselig kan gå hen og få stjernestatus, enten fordi de er gode oplæsere eller gode til teknik. Jeg

Susanne's enthusiasm is difficult to ignore. For some reason this case developed quite positively. Several aspects of her evaluation will be analysed further in the next section. In the Redesigned section this case will be taken as the point of departure.

In the case of Jane, the experiment was perceived differently. It should be noted before making analyses that it is problematic to draw findings from Jane's written evaluation, since she assimilated evaluations for experiment 1 and 2. However, some of her evaluative comments are specifically about experiment 2. With the use of other data sources – field notes and the research log – it is possible to reconstruct the references in her evaluation. First of all, she informs that she reduced the amount of time spent on the experiment (this is backed up by my field notes, cf. A32, Jane). To a certain degree, she expresses scepticism about the experiment. However, Jane also explains – encouraged by one of the questions in the evaluation tool – that the best discussions within experiment 2, "...arose in connection with listening to the professional recordings of fairytales."¹¹⁶ One way of interpreting this comment is to suggest that she experiences the quality of *receptive* work as better than *productive* work. On the other hand, this answer is contrasted by her answer to the question: "Do you have examples of pupils/groups you would like to emphasise?"¹¹⁷ Here, she answers:

There were 2 groups who recorded several times with various intonations, pauses and so forth. They asked for help in evaluating which interpretation functioned best. They attained a good sense of how a reader interprets the material.¹¹⁸

Here, she suggests that receptive and productive work develop hand in hand and that oral readings are linked to the conceptual development of interpretation. In a sense, she argues that literary pedagogy is integrated quite well with multimodal media pedagogy in this experiment. This conclusion might be too positive. In the evaluation it is stated quite clearly that both students and she became tired of the experiment due to its length. This point is repeated several times. As she comments on the student evaluations (which I understand as evaluations of experiment 2):

synes ideen med at have en journalistgruppe er fantastisk god, den giver mulighed for at give forskellige elever en central funktion i timerne. Desuden kan jeg som lærer give elever med en dårlig oplevelse i pilotforsøget en god oplevelse i forsøg 1.]

¹¹⁶ [...kom i forbindelse med aflytning af de prof. Indspilninger af eventyr.]

¹¹⁷ [Har du eksempler på elever/grupper du særligt vil fremhæve?]

¹¹⁸ [Der var 2 grupper, der indspillede flere gange med forskellig intonering, pausering etc. De bad om hjælp til at vurdere hvilke tolkninger, der fungerede bedst. De fik fin fornemmelse for, hvordan en oplæser tolker sit stof.]

They look forward to me 'teaching by myself' again, as they say! They considered the whole thing too drawn out, wherefore much of the enthusiasm was lost. I am inclined to agree with them on this.¹¹⁹

Comparing this comment with the evaluation from Susanne (cf. above) makes it quite clear that teacher perceptions differ remarkably and that the experiment must have unfolded quite differently in the four settings. Local culture and local teacher/student interpretations play a vital role, once again.

8.3.2. Designer-researcher perceptions

Designer-researcher perceptions are based on the data from field work, the research log, and documents, including the evaluations also analysed above. Analysis of this data suggest that some of the dominating patterns found in experiment 1, both within and across cases, were dominant in experiment 2 also. I will highlight themes about *Technology, Complexity, Pedagogy and Knowledge Production, and Assessment*. However, in observing this experiment other dominating themes emerge, which are related to the curricular commitments of this specific experiment. These are termed: *(Non)available knowledge, Student competence, and Identity (in) production*.

8.3.2.1. Technology

When observing the use of technology in experiment 2 it was found that problems and potentials from experiment 1 were repeated: Access to computers and other digital technology was limited in three out of four cases. As part of the infra-structural problems, it was found that in all four cases the class suffered from constrained access to teaching rooms where groups could work in silence with recordings. Peter's evaluation confirms frustration regarding this issue. Equally, teachers and students had a lot of logistic problems related to the purchase of audio cassette players for class. In three out of four cases, schools did not own any and had to be borrowed elsewhere. Some of the recorders malfunctioned or were too difficult to use.

Due to the observation of technological constraints in experiment 1, particularly in regard to accessing the LMS in this experiment, computer based collaborative activities were reduced in the designed curriculum. Students seemed to be able to download documents from the LMS. However, students experienced continuous problems with malfunctioning wireless networks and breakdowns of the LMS, producing a general sense of apathy; case 1 being the exception. Again, Blackboard

¹¹⁹ [De glæder sig til at jeg igen 'selv skal undervise' som de siger! De vurderede, at det hele blev for langtrukket og derfor røg en del af entusiasmen. Det er jeg nok enig med dem i.]

seemed less useful for collaborative teaching and learning than Netstudier. Blackboard was time-consuming and difficult to use for both the teacher and the student. Peter considered whether he could replace it with a homepage in experiment 3 – Jane almost gave up on using it.

The most productive strategies for dealing with technological conditions were found in case 1 as in experiment 1. We might say, using Karen's own words, that she and the class had developed a "Plan B" in terms of multimodal media competence. For example, when Karen was to demonstrate speaker examples from the DR homepage using her laptop and loud speakers, for some reason it did not work (cf. A32, Karen). Plan B was quickly established: students would use their own laptops to access the homepage, and did so successfully, where after they put on their earphones and listened to the examples on their own. This created the rather extraordinary event of me observing an almost silent class clicking through examples on their screens producing a discrete cacophony of low volume speaker noise that disturbed no one. Finally, the class discussed what they had heard, maintaining the collaborative approach and collective discussion.

The general conclusion on the use of technology is this: Severe technological constraints were found at the meso-level. To some extent this hindered the actualisation of the commitments of experiment 2. A majority of students and teachers were not trained to handle these constraints effectively. Technological constraints did not stop the experiment, but rather lowered the quality of knowledge production in the process going from inquiry and situated practice via overt instruction and critical framing to transformative practice.

8.3.2.2. Complexity

Complexity in terms of the design and use of learning resources was experienced as being *decreased* by teachers in three out of four cases – Jane's class being the exception. In Karen, Susanne and Peter's teaching, almost all the files with steps and appendixes were made available on the LMS systems *before* beginning the programme. Peter and Susanne chose to supplement the intranet-mediated material with a hardcopy compendium handed out in the first lesson. Furthermore, both contributed with additional material (on assessment and interviews, cf. later), hence becoming co-designers. Karen, the techno-teacher, not surprisingly, chose to stick with the computer. Both teachers and students in these three cases seemed to have gotten used to the computer and intranet mediated establishment of learning resources – it was becoming habitual through repetition.

As we have seen, Peter stated explicitly in his evaluation that the experiment was "...laid out in a more manageable and limited scope, both as regards the content and material of the experiment in

the course of the class.”¹²⁰ This is backed up by students. Reviewing field notes and other documents, none of the students were found to express difficulties about understanding the overarching “golden thread” of the experiment or the specific instructions in the material. No technical words seemed too difficult to understand – at least not in the instructive material.

In contrast, it was observed that Jane – in case 2 – chose from the beginning to reduce the suggested amount of lessons by 50%, uploading only a few of the learning resources and using the technique of oral instructions as the dominant approach. Interestingly, she offered didactical reasoning for these strategies when asked by me. She argued that *decreasing* the number of learning resources and activities, the programme would *increase* student overview and hence decrease complexity. She acknowledged that she was not used to long processes of project-oriented teaching and did not like that kind of approach. One of the reasons given was that they did not suit the class and its “anarchistic”¹²¹ students. In her view students would prefer shorter learning arcs and less material to produce knowledge from. To some extent it turned out that she was right, as will be demonstrated later: When students were to make productions in her class, one could argue that the anarchy of the class resulted in a creative and genuinely transformative practice – this was not found in the other cases from this experiment.

The students in her class would not express an altogether positive conception of the teaching strategy. When a lesson started students would typically express *uncertainty* in regard to the goal of the lesson (cf. field notes, A32, Jane). When students were asked to work in groups, Jane would spontaneously try to help some groups, offering good advice and guiding them forward, while other groups would remain disoriented. It seemed that a majority of students did not experience any “golden thread”, no meta-level understanding of the experiment and its purpose and were not allowed access to this kind of understanding. In the present perception this increased the complexity of the experiment.

Moreover, in Jane’s class there was no journalism group that might have been able to pursue and represent the meta-level understanding explicitly – this genre was not made optional by Jane. In the other three cases it was established willingly by Susanne and Karen and reluctantly by Peter, due to his impressions of experiment 1.

¹²⁰ Original text in Danish, cf. A13, section A.

¹²¹ This expression was meant in positive terms.

8.3.2.3. (Non-)available knowledge

The experience of complexity is also related to processes of making knowledge *available* or *non-available*. This aspect is found to be particularly important since it is related to the question of ‘overt instruction’, which is reflected in the model as an important phase. Thus, it is foregrounded as a specific theme.

Although Peter stated, in his evaluation of experiment 2, that the “...content was adequate” (cf. A38), data shows that a specific type of content was *inadequate* for teaching, this point regards the academic texts (by Brandes and Wentzel, cf. table 8.2.3.2). These resources, about the relationship between orality and Andersen, could potentially offer complex historical and theoretical insights into form, content, and function. In Buckingham/Domaille’s (2003) terms, this could be expressed as aspects of language, representation, production, and audience, but was *not* used by any of the teachers. Jane did not upload it, while the other teachers did. All four teachers agreed that this material was considered interesting teacher background material, but that it would be impossible for students working on their own to understand. Teachers would have to spend quite some time in class performing overt instruction if students were to understand and use this kind of theoretical knowledge.

Not all theory was used in marginal ways however. The somewhat popular, technical-theoretical material with concrete advice for good readings (by Skyum-Nielsen 2003, and Tilling, cf. table 8.2.3.2) was considered useful in the establishment of criteria for practical production and competition – it was taught by all four teachers. In her teacher evaluation Karen writes that the “...relatively long and theoretical introduction ensured that the programme did not develop frivolously.”¹²² What she was here referring to technical-theoretical material and not the academic texts.

At the end of the experiment students evaluating the experiment orally would sometimes remember and list rhetorical-technical aspects (A34). Interestingly however, they would also critique the programme for *not* having addressed conceptual relations between orality and Andersen. In their view background knowledge was missing. A dominant conception in all four cases (cf. also below) was that students believed they had learned something about oral practices but not about orality as a conceptual knowledge domain – particularly not in any integrative relation to Andersen. Peter agrees when assessing the outcome of the experiment in his evaluation, arguing that student outcome in terms of knowledge production was:

¹²² Original text in Danish, cf. A13, section B.

...fine in regard to the technical aspects of reading aloud and fine in regard to evaluating the quality of other readings according to criteria. In terms of analyzing fairytales and characterizing the oral narrative style for HCA I do not think they have learned enough new material / enough substance. However, it can be difficult to evaluate, since these are still first year pupils and have arrived from very diverse backgrounds in primary education.¹²³

As suggested, both Karen and Susanne perceive the experiment in less critical or rather positive terms. The question therefore becomes whether we can explain Peter's evaluation. In part, one could blame the "unsuccessful" outcome in Peter's case on the designed curriculum and the designer/researcher: No spare time was planned specifically in the step-by-step curriculum plan for a plenary discussion of the academic texts. In our later midway meeting in August Peter argued that this was indeed necessary if students were to be given a chance of understanding them; a point with which one can only agree.

On the other hand, one may argue that it reflects a specific type of teacher adaptation and regime of knowledge production within the subject on upper-secondary level. Teachers *could* have chosen to use the academic texts if they found it relevant. Brandes is indeed taught within *literary pedagogy* in upper-secondary education. At oral exams you risk "picking" a text by him. Critically, we may ask why not also use him within media pedagogy, as in this experiment? Could it be that an implicit knowledge regime dominates media pedagogy within MTE/StLE? Buckingham (2003, chapter 8) suggests that creative production seems to have become the legitimate – sometimes the only legitimate – kind of activity in media pedagogy. In Danish primary schooling the creative aspect of media pedagogy is very much prioritised, not the least due to interventions by media pedagogy researcher Birgitte Tufte (1995, 1998). Contrarily, some Danish research suggests that creative production is *not* legitimate in literary pedagogy within MTE/StLE at the upper-secondary level, at least not in "Danish" in Denmark.¹²⁴ Although conceptual knowledge about media is available *outside* the classroom, it does not seem to gain access *to* the classroom. If this is the case, it is a major challenge of multimodal media pedagogy and teacher training, to contest these prioritisations. Otherwise students might not learn, as Peter put it in his evaluation, "anything

¹²³ [Fint mht. den tekniske side af det at højtlyse, og fint mht. velbegrundet at kunne vurdere kvaliteten af andres oplæsninger. Mht. at analysere eventyr og karakterisere HCA's mundtlige fortællestil mener jeg ikke, de har lært noget nyt/ nok reelt. Det kan dog være svært at vurdere, da de stadig kun er 1. års elever og kommer med meget forskellige forudsætninger fra folkeskolen.] Cf. also A13, section C. A13 offers a synoptic presentation of teacher evaluations.

¹²⁴ My colleague, Peter Kaspersen, who is a PhD in literary pedagogy and "Danish" (Kaspersen 2005), has been experimenting with creative writing in "Danish" on upper-secondary level drawing on the same hypothesis, cf. Kaspersen 2007.

new/enough substance”. They will *do* something, in a behaviouristic sense, but their doing will not lead to new knowledge production in a cognitive sense.

8.3.2.4. *Student competence*

The question of whether teachers and the learning resources were perhaps demanding too little in terms of theory and conceptualisation is related to Peter’s suggestion (and numerous observations by the present researcher regarding *advanced* student competence in terms of grasping and characterizing orality and sound in readings and other genres). Particularly in step two, when students were listening to and later discussing the professional readings in class¹²⁵, but also in step 4 when sitting in groups producing their own reading: Here they sought discursive negotiations on how to deal competently with this demand at several levels related to content, form, and function.

- In terms of *content* they would for instance point out that old Danish words had been replaced with newer words and that students might do the same in their production.
- In terms of *form* they would state that the reading of a particular word or section of the text seemed sad, but that in their own production it should not sound like that.
- In terms of *function* it would be specified that the historical readings were too slow and seemed artificial – a new reading for a contemporary audience of young people would have to be crazy and “exaggerated”.

In other words, many students seemed “orally alert”, they had dispositions for “oracy” and their acts with orality, so to speak, were expert-like. They expressed personal attitudes and opinions about good sound and good readings, which eventually contested the criteria and hierarchy suggested by the academic Skyum-Nielsen.

Table 8.3.2.4.1 demonstrates how the classroom community in Susanne’s class developed its own criteria for good readings based on a long and engaged plenary dispute in which both boys and girls participated, making jokes (even with sexual connotations) and being serious at the same time about the significance of the criteria. What is striking about the list from Susanne’s class is that it implicitly advocates a more functional, contemporary and informal approach to readings than Skyum-Nielsen suggests. Technical-rhetorical aspects, such as pronunciation, are included, but

¹²⁵ One example of discussions is found in field notes from Peter’s case; cf. A32, 19 April 2004.

personal-formative *interpretative* aspects such as ‘knowing the text’, ‘breaking loose from the text’, and ‘empathy’ are added. We shall return to the winning reading, performed by a boy in Susanne’s class, in the Redesigned section.

Skyum-Nielsen’s Academic Criteria	15 criteria developed in Susanne’s class
Pronunciation of words [artikulation] Pronunciation of a unit of breathing [frasering] Pace [tempo] Pausing (including breathing) [pausering] Strength [styrke] Choice of stress [trykplaceringen] Height or tone of voice [højden eller tonelejet] Tone or melody [tone- eller melodigangen] Ring and resonance [klang og resonansen] Degree of muscular tension [muskelspændthed]	Pace [tempo] Pronunciation [articulation] Pause [pausering] Empathy [indlevelse] Relaxedness [afslappet] Knowing the text [kende teksten] Strength [styrke] Stress [tryk] Rhythm [rytme] Ring [klang] Break loose from text [frigøre fra teksten] Splitting up and forming streams of air [opdeling og forming af luftstrømme] Emotion [stemming] The choice of reader (authority) [valg af oplæser (autoritet)] Body language [kropssprog]

Table 8.3.2.4.1. The 15 criteria for a good reading developed in Susanne’s class – compared to academically developed criteria made available as a learning resource.

It should be stressed that this does not argue that all students were orally competent, rather that oral competence was a disposition among *some* students. The design of the curriculum programme made it possible to draw upon this in the classroom community as a whole. The teachers did so to some extent, but it must be suggested that they could have done so even more, hence increasing the complexity of the conceptual knowledge production about speech in a specific mediated genre in class. Interestingly, but not surprisingly, the journalism groups in three out of four cases proved just how competent students might be in terms of producing sound not in the genre of readings, but in a journalistic genre and domain, as we shall see later in the analysis of The Redesigned.

8.3.2.5. *Pedagogy and knowledge production*

The pedagogical and social organisation of the experiment related to knowledge production – suggesting a main group and a journalistic group and demanding different degrees of student work and responsibility from both – was again interpreted quite differently by the four teachers. In experiment 1 a distinction was made between Stalinist and Anarchistic teaching strategies. We can apply this “field metaphor” again – although with more ambiguous and paradoxical outcomes in the analysis of this experiment. Here, the analysis and valorisation of the Anarchic and the Stalinist teaching strategies was somehow reversed, demonstrating that Anarchist strategies might be quite productive too.

As suggested, Peter in case 4 reluctantly accepted a journalism group and continued to question the general organisation of the experiment. Here it was argued that its product and group-oriented way of teaching was giving a much higher – perhaps too high – priority to student responsibility compared to what students were used to. Peter found that a majority of students expressed a wish for, as he put it once talking to me, “information, punishment, and control”. On the other hand, he would not accept this, rather he was annoyed by student discipline, including poor student presence in class (he handed over the detailed report (which any teacher has to make) of student presence), and acknowledged that the social and pedagogical commitments of the experiment responded to intentions in the reform of the commercial upper-secondary education. So, he loyally adapted the pedagogy embedded in the experiment, however observing sceptically, from a distance, what might happen.

His most radical and didactically interesting act was to produce *an extra evaluation session* as the last element in the curriculum programme (as suggested but not reflected in his teacher evaluation; A38). This is how the design event is perceived: Peter presented the evaluation in class, arguing that several students in their oral, recorded evaluation had talked about returning to “traditional teaching”. Thus, he had designed a scheme in which he asked students, among other things, to define what “traditional” could mean. The scheme included a specific question related to a “traditional” curriculum programme he had taught some months earlier about news criteria. The question was: “What were the names of the five criteria?” Students spontaneously signalled that they did not seem to remember this. Before actually reading the written answers Peter, almost triumphantly, used this outcome to demonstrate the point that traditional teaching – which students defined, almost uniformly, as teacher controlled teaching or “blackboard teaching” – might not lead to any productive outcome either. It was likely that in traditional teaching, students would quickly

forget what they had learned. Reversely, he argued that students could have learned something valuable from experiment 2 that they were not aware of and could not express yet precisely due to the untraditional approach.

Peter's act is an interesting and complex example of didactization catalysed by the intervention and it teaches an interesting lesson about the relationship between pedagogy and knowledge production. Peter reviews his understanding of the teaching-learning processes in "Danish", while at the same time teaching the subject. One cannot be certain however that his perception of how students were thinking resembles actual thinking among students. Both the oral and written evaluations in this class were collected and it was found that a majority of the students/groups did in fact *not* prefer traditional teaching, but rather a *variety* of teaching strategies – predominantly strategies similar to the ones used in the intervention project, because they seemed to be more engaging. This source triangulation tells us that, in terms of evaluation, Peter was making a point, which was not entirely credible. Rather, it was a projection of his reflections. The written evaluation was made in order to negotiate with the students – and him self – whether the design of the experiment was good or bad. To put it differently, it sought to understand whether it could be integrated within "Danish". He was loyal to, but at the same time sceptical about, the multimodal media pedagogy presented in the experiment. In Gee's terms, he was negotiating his D-identity as it related to "Danish" or perhaps even related to teaching school subjects in general.

This double play was also demonstrated in Peter's approach towards the journalistic group. He allowed the group (contrary to Jane in case 2) and he would not try to control or offer any particular help to the group. However, he *did* make it clear to the journalists that they should produce a "radio spot", hence controlling the scope of their work. This instruction was overheard and it seemed that Peter was unaware of the potential connotations of this particular word. Weeks later, when the group eventually played its product in class, after the class had finished the reading competition, it turned out that it had interpreted Peter's advice quite literally. A spot is a very short commercial-like introduction to a story. Thus, the group had produced a spot about the intervention project which lasted less than a minute! Field notes from the day the group presented their work and another day when the class evaluated the experiment (A32; Peter, 3 May 2004 and 10 May 2004) show that Peter interpreted this outcome critically. His response is understood as a proof of the fact that students could not comply with the student-based pedagogy and that they had not acted in subject-related and competence-oriented ways.

In the Redesigned section analysing the product, this perception will be questioned. Generally, we might ask whether quantity corresponds to quality (cf. also previous chapter). This journalistic product was short, but it did comply with a genre, in quite original and creative ways, imitating a speaker's voice, using jingles, etc. It demonstrated multimodal media competence on the premises of that domain, in spite of *not* collaborating with a local radio station or being offered any technical advice.

In contrast it will be argued that Susanne was perhaps less ambiguous and more explicit than Peter towards the journalistic group, the paradox being that because she instructed them in "Stalinist" ways she created space for them to act in Anarchic or rather competent, and student-controlled ways. For example, *she* made arrangements in advance with a local radio station and even made a reservation for "studio recording and editing" underlining that the group had to plan the programme and make raw material in advance; *she* insisted that some elements or sub-genres, should be included in the interview (such as three interviews, including one with me). Also *she* decided which students were to form the group in order to ensure a good mix of competencies.

In Susanne's perception, multimodal media competencies were related, in part, to gender. She explained to me that she experienced trouble being a female "Danish" teacher teaching boys. I would sometimes observe this quite clearly in the classroom: Boys were less interested participating in "Danish"-related activities, being more disruptive. As we know from experiment 1, in her class several boys were continuously bringing attention to her lack of technological competencies. The interesting thing about experiment 2 was that she used the journalistic genre to deal with these problems. She hoped that putting two boys into the journalism group – two boys who had had serious problems in experiment 1 – would offer them the opportunity to invest their technical competencies and eventually contribute to the knowledge production in "Danish". It turned out that she had very positive results of doing so, as suggested in her evaluation after the experiment:

Louis turns out to be a phenomenally good reader. Pete can retain concentration by being the one who writes the synopsis. Jack was angry at having misunderstood the written assignment in the pilot project, but has become reasonable again by having a positive experience in connection with producing radio.¹²⁶

¹²⁶ [Louis viser sig at være en fænomenal god oplæser. Pete kan fastholde koncentrationen ved at blive referatskriver. Jack blev sur over at have misforstået den skriftlige opgave i pilotforsøget, men er blevet god igen efter at have fået en succesoplevelse i forbindelse med radioproduktion.]

It almost sounds like a surprise, analysing Susanne's evaluation, that boys are capable of demonstrating competencies related to "soft skills" such as interpretation paired with technological skills. But this is indeed what happened.

What about the declared Anarchist teacher, Jane, then? In terms of using and making learning resources available or rather *not* available, Jane would decrease student-based teaching because she reduced access to instructions that could have helped students work on their own. On the other hand, her diagnosis of the class being Anarchistic proved its point in one particular, remarkable phase of the experiment: When students were to produce readings, they suggested that instead of using audio cassette recorders, it was much better to use the laptop. In the process of preparing the learning material this possibility had been considered, but it was found that no software was available on a typical computer for recording long time sequences (the recording facility in Microsoft Windows, e.g., could not at that time). Boys in the class, however, knew open source programmes (on www.download.com) that could be downloaded for free that would allow for unlimited recording time. Furthermore, they suggested that the microphones in headsets, plain and cheap and available at schools, could be used when making the recordings and that some other open source programmes could be used for editing the recording. Jane's response to this suggestion was very receptive: "Go ahead, great idea!"

Peter contrasts this response. In his class, boys were observed suggesting that computers could be used for recording. Peter, however, overruled this idea and insisted that students should use the old-fashioned recorders. In a sense, Peter was responding rationally. In fact, he simply lived up to the recommendation of the designer-researcher expressed in the learning resources. Peter was demonstrating the same kind of technological conservatism that had been suggested in the Available Designs – which reflects a lack of knowledge. It would probably have been productive if Peter had acknowledged the expertise of the students. Jane did. She acknowledged the importance of *not* being in control, not having the full knowledge authority and not being able to foresee all potentials and constraints of technology related knowledge production. This is why the Anarchistic teaching strategy is suggested by the present author as more productive than the Stalinist approach in terms of allowing space for creative and transformative student-based practice within "Danish" as a subject, at least in this situation.

Eventually, all students in Jane's and Susanne's classes produced their recording digitally.

Susanne borrowed digital recorders at the local radio station, encouraged by the editors at the station, pointing out that they would need the reading in a digital version if they were to use it: Demands outside school domains produced new thinking in formal school domains.

In the production phase, one particular group in Jane's class, which produced its reading in cut-up sequences was observed: The student-reader would use his voice in exaggerated and artificial ways in order to interpret, almost like a crazy comic, the story. This aesthetic choice was technically demanding for his voice, so he needed a break once in a while. Also the technical knowledge in the group of boys solved the problem. Later on the group would simply mix the sequences together producing a reading that would later win the competition in that class. Based on their insight into media, technology and a creative interpretation of the reading task, taking the contemporary situation and the audience (the class) into consideration, they dealt with the demand of experiment 2 in expert-like ways.

What can we infer from these observations, in terms of competence and didactic reflection? We have reached a more multi-faceted understanding of how adaptations of semiotic resources may develop differently in different classroom contexts, due to several reasons, among which teacher approaches, not the least towards students and their resources, play a vital role. The above analyses of Jane's approach have expressed some scepticism, especially in regard to the Anarchic teaching strategy; it seems to resemble what Buckingham terms radical pedagogy (Buckingham 1998b), which he suggests we need to move beyond. On the other hand one must acknowledge its *potentials* in terms of transgressing and rethinking the production and reception regime of the school subject, given the right subject, the right students and the right context. This same kind of radical experimentation was not observed among the student groups in Karen's class (case 1). They did not use their laptops for recording; they simply accepted the routines and procedures suggested in the learning resources. The question is whether this conservative approach was productive, which will be elaborated on in the Redesigned section.

8.3.2.6. Assessment

The teacher problem of constructing valid assessment criteria for experiments with an unfamiliar multimodal media pedagogical approach was dealt with in this experiment, by making it a collective and individual problem of the classroom community. Hence, assessment was established as an aspect of the knowledge producing processes at different levels and in different situations, trying to make students construct conceptual assessment criteria through their own experience and their encounter with theory. So, students would be assessing professional actor readings; academic

assessment criteria; the production of the group reading; other group productions in the final competition and, finally, allowing journalistic groups assess the whole experiment in a way that represented a public eye on the whole project. In this way assessment was constructed as both a formative and summative didactic genre: Students were both *subjects of* and *subjected to* evaluation. Evaluation constituted both a textual process and texts in themselves. The traditional assessment hierarchy between teacher and student(s) was seriously questioned, offering students a high degree of responsibility for the quality of the knowledge produced. The classroom community constructed the criteria for assessment as a process of negotiation. As we have seen, they were capable of, and quite engaged in doing so. All students, to some extent, addressed and participated in some sort of assessment practices where they were in control. If we were to relate this to the model of semiocy, in which they were forced into critical framing, figure 8.3.2.6.1 demonstrates one sample of a student assessment of the five readings in the competition. The criteria focus very much on form.

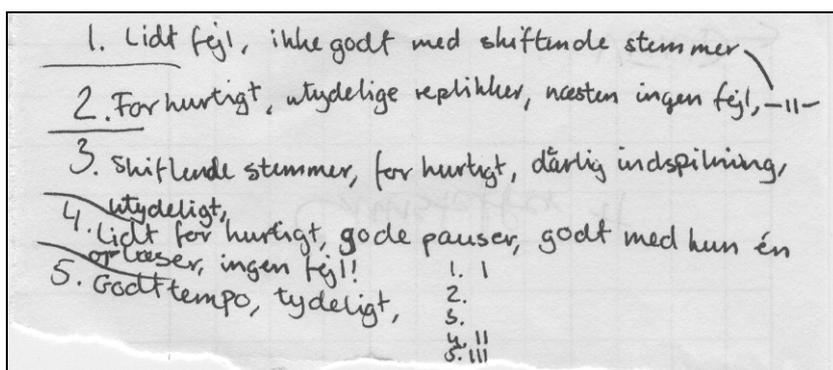


Fig. 8.3.2.6.1. Student evaluation of reading from case 4. The text says, in English, maintaining the syntax: 1. Some error, not good with different voices / 2. Too fast, indistinct replies, almost no errors, [same as 1] / 3. Changing voices, too fast, bad recording, indistinct / 4. A little bit too fast, good breaks, good with only one reader, no mistakes! / 5. Nice pace, distinct.

Like in experiment 1, the kind of assessment that would be most difficult to practice for the students would be *self-assessment* or, to use the New London Group terminology also used in the model for the development of multimodal media competence, *critical framing* of one's own competence. A question that came up in all four classes when students were to actualise the competition session was this: "Can you vote for yourself?" As designer-researcher this question was not anticipated. Teachers would look at me, asking my opinion; this was another case of me taking/being given the active role of *participant* observer or teacher. Thus, I was forced to offer a solution. My answer would be to attempt a discussion, in all classes, about whether it would be objective and ethical to

vote on your own group if, in fact, you found it qualitatively bad. The result was that in all classes it was allowed. Generally, it seemed that students stayed objective when voting: There was consensus in all four classes, about which reading was the best.

Another situation, in which critical framing of one's engagement and competence in the project was established and found difficult for students to handle was the final oral group evaluation in step 6. Many students did not show up to this event, apparently not prioritising it or seeing it as part of the designed programme or school subject practice. Those who did turn up predominantly handled the activity instrumentally: In the tool (cf. A12), it was underlined that the group should try and talk freely about the experiment. If they were not able to do so, they should use some guiding questions, which tried to combine closed yes-no questions with demands of explaining why the group answered the way it did. Most groups would not be able to establish any free discussion. There were exceptions, though; in the next section some of the discussions will be highlighted.

Part of the trick in establishing these final oral group evaluations was to check whether students would practice what they had now been taught during the process: Would they handle the demand in competent ways, demonstrating that they could reflect on and at the same time use mediated speech in functional ways? Analysing the recordings, the dominant answer is – no. Although they knew that others would listen to their reflections, in several groups it was difficult to hear what students said and (as indicated above) their reflections were not advanced, inviting for further reflection. Obviously, one could question the validity of this finding: Was it situation-dependent? Was the evaluation session – including the questions – constructed in a problematic way, etc.? These evaluations demonstrate that when students thought they would not have to act as students they lowered their performance. Indirectly, they demonstrated the difference between formal academic domains and semiotic domains, between activities considered to be schooling and activities not considered as schooling. By many of the students, the oral evaluation was not understood and valorised as schooling or, more specifically, knowledge production within MTE/StLE. It was an exterior, instrumental activity. This influenced the student approaches and proved that a speech-mediated competence is indeed situation-specific.

8.3.2.7. Identity (in) production

In traditional MTE/StLE teaching the dominant mode of communication is oral conversation, seeking to establish a specific classroom genre: The dialogical, sometimes polyphonic, conversation about a text leading to student identity and knowledge production (Dysthe 2000). Something similar and at the same time different went on in this experiment. When observing classroom activities

strong emotional reactions in speech were experienced numerous times to be combined with other modes, such as laughing, clapping, giggling, protesting, crying out “NO”. These reactions were expressed particularly when students were working directly with readings, receptively and productively: This was a special case of identity production. The mode and genre seemed to transgress student self-conception, including their threshold of decency. Their personality and conception of social codes was contested through collaborative and collective work. In peculiar ways we might say that a process of *Bildung* – that is, historical and spatial identity production – was produced due to the use of mediated speech and other modes. This became particularly clear when the students listened to the old reading of Danish actress Clara Pontoppidan (1883-1975). Her reading of “The Teapot”, produced decades ago, is extremely slow, when seen from the perspective of a contemporary adolescent. Several students stated that the reading had frustrated or bored them to the extreme. From a formalistic view (Sklovskij 1991), the mode of speech was made strange to them; from a hermeneutic view (Gadamer 1960, Mortensen 1999) we could add that the historical consciousness was developed through the mode of speech (instead of writing) and we might even add, psycho-dynamically (Freud 2001), that they were experiencing a sort of Freudian *Unbehagen* expressed bodily. They felt a distance between their own “natural” way of speaking, and other persons’ way of doing it – and had hard times acknowledging, accepting, and understanding this difference.

On the other hand, this experience produced a sort of inter-textual and multimodal trans-mediation of historical and cultural horizons: One mediated mode, orality, produced by voice, was linked instantly by students with modes and culturally produced meanings in and of other media. All four teachers managed to produce this kind of inter-textuality and trans-mediation when teaching/demonstrating the readings in front of class. Susanne, for example, while playing the reading of Pontoppidan, projected an Internet homepage demonstrating that Pontoppidan had been a very popular and beautiful movie star, starring a lot of movies, among others a classic comedy, *Støvsugerbanden* [The Vacuum Cleaner Gang] that most Danes have seen. Likewise, when students were listening to another reading, which was deliberately chosen because of the reader, who is also a famous actor, all students in all four classes would spontaneously respond when hearing the first sound: “Hey, this is Meier”. Meier is the name of the folkloric character played by actor Arthur Jensen in a very popular Danish TV-soap from the 1970s, *Huset på Christianshavn*, broadcast several times on the television, including in this decade. The reader of the Andersen tale, as recognised by the students, was Meier. In this way, an interesting connection between “low culture”

tv-experiences and high culture Andersen literature was suddenly produced. Students listened to and identified the fairytale “The Naughty Boy” through the reading-interpretation by Meier. We might call this *Bildung* in the age of multimodal techno-popular culture! Something strange was made very familiar, almost cosy [hyggeligt]. Speech was addressed both as an objective text and a subjective experience in different constellations of time and space. This encounter with multimodal media history would indeed inspire students to design their own readings and reflections.

8.4. The Redesigned

As in chapter 7 in regard to experiment 1, this section on the Redesigned will take a particular example of student production as a point of departure for characterizing the material outcome in one class and later compare this with other student products in that class and in the other classes. The Redesigned – or material outcome – in this experiment, refers to produced readings, journalistic products, group notes, and (oral) group evaluations. My focus will be on case 3, Susanne’s class. This case – in this specific experiment – is considered to be a critical, unique case. Here, we find the winning reading of Louis’ group, which demonstrates, some interesting dynamics between *gender and multimodal media pedagogy*. In the same class, the journalistic product – an hour-long radio programme broadcast on a local radio station – is analysed for its complex and competent construction of a narrative, which mixes a number of modes and sub-genres offering vital knowledge production and a meta-view about the practices in class – more generally, about the topic and rationale of experiment 2. Afterwards, this case analysis will be compared with analyses of the rest of the cases/classes, reflecting on how commitments or intentions in the Available Designs are adapted in the Redesigned. Moreover, we will take student evaluations, written teacher debriefings, research interviews and dialogues with the teachers from the intermediate meeting into consideration. This leads to broader conclusions about local impact, implications for the theoretical model and limitations in terms of empirical evaluation.

8.4.1. Louis in Susanne’s class (case 3): The quiet boy and expert reader

The reason to focus on Louis and the winning group in Susanne’s class is not that the reading was particularly innovative. Compared to the “exaggerated” reading in Jane’s class, it was not. The reason is that it can be used to retell an interesting story of a quiet boy in class, Louis, who surprised everyone, including Susanne. As suggested by Susanne, it is a story about how male students and multimodal media pedagogy may fit very well together.

Already in experiment 1, at the initial visit to that class Louis was noticeable: He was the single person in class who brought a laptop attracting a lot of attention from the other boys, particularly in the breaks, where they would surf on the Internet and play videogames on the laptop. While Louis had status he also acted like an exotic, lonely rider. Susanne told me that she had hard times trying to make him talk and engage in "Danish". Teachers in upper-secondary school sometimes speak of 'quiet girls' – Louis, however, was a quiet boy, much quieter than the other boys. Often in class, when boys would be bragging or making fun, he would be sitting quietly behind his laptop screen doing something that others, including the teacher, would not know about. In experiment 2, however, he blossomed and this had to do with his personal background and experiences – his identity. A first sign was when Susanne was to run through the exercises about reading technique, encouraging students to stand up, making odd sounds in order to warm up, for example. Almost everybody would protest, loudly – except Louis. It turned out that he had been singing in a choir several years and had no trouble understanding *why* exercises were important. His reaction affected the peers instantly and helped the teacher.

In his group, composed of two boys and two girls, he was observed to work seriously with the others. The group constructed a list of criteria for good readings, different from Skyum-Nielsen's suggestions and different from the class. The criteria were as follows:

The Criteria of Louis' group (in Danish)	The Criteria of Louis' group (in English)
Variation i stemmen, altså at den går op og ned Tydelig udtale Tempo Lever sig ind i historien Styrken i udtalelserne og trykket man ligger i Laver stemmen om fra person til person i historien det gør den mere spændende Oplæseren skal selvfølgelig have læst historien før Brug nutidigt sprog uanset hvordan det står i historien Oplæseren bør være afslappet	Variation in voice, that is, that it goes up and down Clear pronunciation Pace Empathy with/in the story Strength in pronunciation and stress Changing the voice from person to person[,] this makes it more exciting Obviously, the reader has to have read the story in advance Use contemporary language no matter how it is used in the story The reader has to be relaxed

Table 8.4.1.1. The criteria of a good reading developed in Louis' group (case 3)

In the course of the programme, this list was uploaded onto the LMS in a 1 page Microsoft Word document, hence contributing to collaborative knowledge production. In addition was found a paraphrase of the two fairytales, which would help the group – and others – understand the fairytale better, before producing it as a reading. Eventually, the group chose to produce “The Teapot” and present it in the competition.

In the competition, when everybody was listening to the readings, this particular reading was played as the last one (all readings are found in A34). After listening to it, something special happened. As we say in Danish, ‘an angel went through the room’. The room was completely silent for a brief moment and everybody thought the same thing: What a nice, aesthetic experience listening to this reading and how surprising that Louis would be able to deliver it.

Everybody in class gave that reading three points. It is hard to pinpoint the specific production variables, to use Meyrowitz’s term, of what made it good. Listening to it later as a designer-researcher comparing it to the criteria constructed by the group, the reading practices what the list theoretically suggests should be done. There is a match in the translation of modes, to use Buckingham’s term (2003; cf. also chapter 3.1.1, p. 47), from reflection and knowledge to practice.

Somewhat paradoxically, the group later recorded a rather instrumental evaluation of their own work, which lasts less than two minutes. They never establish a free discussion about the experiment (which they were encouraged to, cf. A12). Instead, Louis reads some of the suggested questions mechanically and they all respond. In other words, the form and function of their evaluation was not particularly good. However, some of the content is interesting because it casts light on the potentials of the experiment: Firstly, the group points out that the experiment was exciting because it was a different way of teaching. In other words, they highlight the importance of the pedagogical and social commitments. Louis then reads aloud, citing the evaluative formulary, ‘whether they have gained new knowledge about orality – generally and in relation to Andersen? If yes, how?’ They reply yes, mentioning the importance of *pronunciation, pausing, and pace* – hence highlighting particular technical-rhetorical speech variables. Next question Louis reads is ‘whether the designed programme was fun – or perhaps sometimes embarrassing? If yes, why?’. The group does not agree. Louis replies that it was not embarrassing. A girl responds arguing that it has been very funny, but sometimes embarrassing because it is not nice to hear your own voice. Louis objects this, saying that “that is not a problem”. Louis’ reaction seems logical, considering his background. In this little discursive negotiation, the two students construct different D-identities: Due to their different personal conceptions of speech, they assess and valorise the teaching and learning of

speech in a classroom setting differently. For a teacher, the negotiation may clarify that they would have different needs, in terms of developing their mediated speech competence: One student might be on top of the situation, handling it in expert-like ways, whereas other students might feel very insecure, handling it as a novice. The final question they answer is ‘whether they have become better at listening to readings and at assessing whether a reading is good or bad?’ This invites for reflection on speech, seen as an objective and more distanced phenomenon. The girl replies that after having discussed quality criteria in class, one has become better at assessing others’ reading. Louis agrees.

If the general impression of the group evaluation is that students are guardedly positive, the impression of Susanne’s evaluation of this group, and particularly Louis, is unconditionally positive. Again, we see that source and perception triangulation is an important source for testing the credibility of empirical data; or to put it in epistemological terms, agents in the field may construe reality in different ways: There is not one true, objective representation of classroom reality or of the outcome of this experiment. In Susanne’s view Louis is *one* out of two main reasons for her concluding comment that this experiment, both in terms of its curricular and pedagogical commitments, catalysed a breakthrough in the efforts of making boys become more active and knowledge-producing within ”Danish”. Louis, in this experiment, proved Susanne’s vision of hhx as being the school for pattern-breakers. The integration of technology and production strategies related to media and genres helped this breakthrough come through.

8.4.2. *The journalism group in case 3*

The other main reason for Susanne’s conclusion is the product outcome of the journalism group. The group (2 boys, 2 girls) produced a radio programme that lasted 48 minutes (cf. A34). The programme was produced for and eventually broadcasted by the local radio station in the town where the school is located. Its content, form and function can be paraphrased, roughly, in the following sequences (minutes) – hence offering a first, raw, interpretation of data:

0-2) A song is performed by a Danish pop group [dansktopmusik]. The song fades, and a speaker girl (student) presents the theme and scope of the programme. (Sometimes she speaks fast; she has a soft voice).

2-17) A song written by Andersen is announced and played (“Hist på vejen slår en bugt” sung by Mogens With). The speaker then introduces a telephone interview with ”Nikolaj Frydensbjerg Elf”, the researcher. (They had interviewed me about the rationale, problems, perspectives etc of the project. We talked together for at least 30

minutes; here it is reduced to 10). After the interview, they play another Andersen song (“Danmark mellem tvende have”).

17-22) Interview with Danish professional actress and reader Susse Wold (who is world famous in Denmark). Wold explains, among other things, that to her, Andersen readings represent something “very Danish”. The fairytales are also written for adults, in her view. As an adult, one understands the “middle tones” [mellemtonerne]. She tells that she travels around making public Andersen readings both in Denmark and abroad (recently in Hong Kong!), being appointed an official “Andersen Ambassador” by the Hans Christian Andersen 2005 Foundation. When she reads, she does it by heart, without a text. She argues that Andersen’s tales are perceived better when being spoken, not read aloud. She mentions some of her favourite fairytales, one of them being The Teapot.

22-26) This is followed directly by Louis’ reading of The Teapot.

26-28) The speaker explains that this reading will be part of a competition among four classes. Then, another Andersen song is played (“I skovens dybe stille ro” by Lene Siel).

28-38) The speaker explains that she has made a telephone interview with Anne Sofie Oxenvad, who teaches and directs drama. Oxenvad argues that everything in Andersen’s universe is inspired [besjælet]. She emphasizes that one of the fantastic aspects of Andersen is his use of oral language style. At the end of the interview (which is perceived, at least by me, as a bit too long), the interviewer lists the criteria for good readings that the class has produced and asks what she thinks of them. She finds them very useful, particularly the point about playing roles. On the other hand, she stresses that one should not dramatize too much, because there is a lot of irony in Andersen’s tales.

38-40) An Andersen song is played (“Brødre ikke langt herfra”, sung by Mogens Wieth).

40-44) Interview with Susanne, the teacher. Susanne explains that it has been exciting to try something new. The purpose has been to test new teaching methods focusing on media. Susanne believes that she, as a teacher, has developed because of the project and so have the students. She is asked if something has surprised her. She replies “yes”, referring to the story of Louis and boys who had lost the concentration but were re-activated. She admits that much has been new to her and that she had been on shaky ground. She does not believe that the experiment has changed her view on Andersen, but his texts have gained new topical interest by incorporating new media.

44-48) The programme is ended pointing at perspectives. The speaker explains that the experiment has increased student interest in working with cultural heritage. An Andersen song is played, again a rather romantic version (“Er du dus med himlens fugle?” sung by Poul Reichardt)

Briefly characterized, this programme of further theorisation and reflection *about* Andersen and orality is produced *with* and in a contemporary, mediated, multimodal aesthetic form – probably more engaging than reading 19th century critics. Several elements of this production could be analysed in detail, relating it to the developed model of multimodal media competence. Due to limits in the dissertation, however, this will not be taken up here. On a general level it is claimed that the programme actualises most of the didactic potentials of the journalistic genre suggested earlier: it both represents (as a mediated object) and communicates (as an experienced process), in situated, instructive, critical even transformative ways – the vital aspects of knowledge production that are part of not only the specific experiment, but the project as a whole: the content, teacher, students, context, semiotic resources, identity production, process of knowledge production and the semiotic outcome. It offers a fantastic resource for the class and a broader community, for meta-level reflection of “Danish”/MTE/StLE practices and events in school. This regards both locally and in a broader perspective, formally and informally.

Hence, the radio programme is not only relevant to citizens in the local town, it is also highly relevant for the classroom community of case 3 – Susanne and the students – in order to start an evaluation of the experiment. It would also be interesting to use as an example of classroom-produced subject-related *didactization* in teacher training on tertiary levels because it demonstrates just how far students – given the right context – can reach in terms of producing a result, an object, within limited time. This makes it possible to reflect on a “Danish” topic, its related teaching-learning process, the main agents of such a process and even the implicit knowledge regime and rationale of “Danish”.

For instance, when the students, in the programme, ask both the teacher and me *what-*, *how-*, and *why-*questions, they are in fact opening up the school subject to a fundamental discussion of its ideological and logonomic structures. When they use the particular clips from the interviews with Wold and Oxenvad they contest, more or less consciously, any kind of instrumental, technical approach to readings found among their fellow students, some academics and teachers. When they use music to interpret Andersen texts, they point at a multimodal genre that is seldom taught or learned in “Danish”; the programme does not start to analyse this trans-mediation, but we may say that they integrate a marginalized genre in the school subject. When they contrast Wold’s comment: ‘she loves to read “The Teapot”’ with Louis’ actual reading of the same, they are contrasting formal school activities with outside school activities, suggesting that the teaching of reading in school should attempt to reach a professional level that could compete with real life. In Gee’s (2003)

words: activities in *academic domains* are not for academia only, they are potential *semiotic domains* and authentic situations where “real people”, real identities, expect to be entertained and challenged aesthetically.

To sum up, in this programme the crucial elements of multimodal media pedagogy and particularly the established meta-level genre within it, is put into play. The advanced use of technology employed by the group is, in a sense, made invisible and irrelevant. Technology is not the issue but the premise, as it *should* be in any process of multimodal media pedagogy within “Danish”. It is a background *means* for the visualized goal: multimodal meaning-making among MTE/StLE students that wish to contribute to processes of collective and personal formation, vitalizing historical and geographical perspectives. We may even go a step further and argue that this empirical data does not simply present knowledge production of specific modes and/or media, but rather demonstrates an integrated knowledge-based and innovative use of them. In this sense, we may characterise it as a piece of “extended literacy” or semiocy. The journalistic programme reached a level of semiotic expertise comparable with the journalistic outcome by Danny and Mike in experiment 1 and, as we shall see, in experiment 4. Not surprisingly, final evaluations from the members of this group and Susanne were highly positive.

8.4.3. Case 3 in general

In spite of the punctual statements by Louis and his peers in their evaluation, they communicate the dominating conceptions in this class. In their oral evaluations and during my participant observations students would evaluate the experiment on a continuum between being guardedly and being unconditionally positive, using words such as “funny”, “different” and “challenging” – not “embarrassing”. The “popular” competition genre played a role for their engagement. Other aspects and themes students would speak of in the oral evaluations would be parallel to the themes highlighted by Susanne in her debriefing and other evaluative data from her. Particularly the *differentiated design of the teaching-learning process* was vital for the outcome. It resulted in teaching where more students would be engaged and active. It also led to some harsh comments among the boys on ‘traditional teaching’, which they seemed tired of. Some students would miss elements of theorisation or deeper understanding. As suggested by Susanne in the radio programme, the classroom community and herself did not seem to have changed its general conception of Andersen. Rather he was re-vitalized through media. The same point, we should remind ourselves, was made in the journalistic product in experiment 1 in this case.

8.4.4. Case 3 – compared to cases 1,2, and 4

In the present view, none of the other cases actualised and transformed the potentials of the Available Designs to the extent and depth as in case 3. On the other hand, the themes found among students and teachers in reflections and evaluations about the experiment are very similar.

In terms of produced readings, a majority of the groups performed loyally or conservatively, in relation to the demands of the designed curriculum and the genre. A few groups, particularly in Jane's class (case 2), tried to take new avenues that would rethink the use of technology. This technological and indeed digital competence was related to a desire to go beyond the traditional limits of the reading genre – contesting the genre regime, if we are to use social semiotic terms – employing *dramatical exaggeration* and *parody* (Buckingham 2003, cf. chapter 7) as means for a contemporary production that would be responsive to young people.

In terms of journalistic products, groups in three out of four cases were established and produced a product. In this quantitative sense we might consider it a positive result. In Karen's class Danny and Mike continued as journalists, producing *a simulation* of a radio programme (cf. Buckingham 2003 on simulation). They knew that the local public radio station in their town had just been bought and changed into a commercial station only playing music. Hence, they experienced in practice, how general economic and social constraints in (local) society matters to media and the actualisation of multimodal media pedagogy within school. This counterproductive context, compared to case 3, had direct impact on Danny and Mike's simulation: Although being very competently made, exploiting the means available and using some of the same sub-genres (speech, interview, music) as the group in case 3, adding irony and parody, including making polite fun of the research project, the teacher, students and the journalists themselves in inspiring and critical ways, it did not seem serious enough, that is, it lacked overt instruction. Danny and Mike (self-)critically comment on this in their evaluation, suggesting that they should have had more input and feedback.

In Peter's class, as indicated earlier, the group produced a "spot", which was never taken seriously. In my opinion the students solved the genre demand of the designed curriculum in transformative ways: They *simulate*, as in case 1, that the spot is broadcast in a "real" radio programme and the speaker, deliberately it seems, uses his voice in an old-fashioned emotionless fashion. Theoretically they cannot be blamed for making a short production; quantity in itself is not a criterion for qualitative processes of knowledge production, particularly not when the teacher sanctions the genre without being conscious of it. If we ask whether a less than a minute spot could

be just as competence developing and worthy of recognition as an hour-long programme, my answer would be yes. It depends on the local context and the way students are challenged and how they develop their multimodal media competence in the process.

In terms of evaluations, the most dominant theme, repeated again and again by the students, can be summarized by a comment made in Peter's class by one of the students in the oral evaluation and later repeated and applauded by Peter: "You learn something about media through Andersen, not something about Andersen through media".¹²⁷ This chiasm reflects one of the most significant, dominant, patterned themes of the intervention as a whole: The theme of *integration or disintegration*. The integrative element was embedded in the Available Designs as a commitment, a potential. The analyses above of observed practices, including assessment of self-assessments, suggest that this integrative commitment was actualised as a kind of doing, but it was not actualised as a meta-level *reflection*.

One way of interpreting this is to claim that it demonstrates a discrepancy found in ethnographic studies of media pedagogy between *what is said* and *what is done* (e.g. Drotner 1994). In this particular school context, it seems that this discrepancy is conceived by students in the following dichotomising formula: *Either* you work with Andersen constructed as a specific literary-disciplinary practice related to topics and teaching-learning processes *or* you work with media constructed as a specific disciplinary practice. A similar way of thinking is suggested by the teachers, particularly Susanne and Peter. The point is that Andersen-literary pedagogy and Andersen-multimodal media pedagogy is dichotomised. And more than that; student and teacher evaluations suggest that they are also prioritised in a hierarchy related to legitimate knowledge production within "Danish"/ MTE/StLE, including its teaching-learning classroom strategies. As suggested in the analysis of the "extra evaluation" in Peter's class, there is a strong conception of "traditional" teaching. Analysing the written evaluations in Peter's class, it is found that the norm for teaching "Danish" is: traditional teaching at the blackboard with the teacher in control, the teacher handing out a short story in advance and analysing it in class, predominantly with a psychological-existential or historical "epochal" angle, as a collective plenary activity that can be finished in one or two lessons. Thus, "Danish" is first and foremost identical with a rather conservative version of literary pedagogy applied on 'literary-historical' authors like Andersen.

¹²⁷ The student quote is found in A36: Notes from and transcriptions of audio recordings of experiment 2; cf. the folder: Noter til elevoptagelser i tre cases/Peter's class. In Danish, the student quote goes in the following way: "I stedet for undervisning om Andersen gennem medier er det blevet undervisning om medier gennem Andersen". Peter's applaud is from A32: Field notes from experiment 2/Peter/10 May 2004.

Contrarily, multimodal media pedagogy and New London Group teaching strategies are identified with what might be termed vaguely as some other school domain! The hierarchical system looks like this:

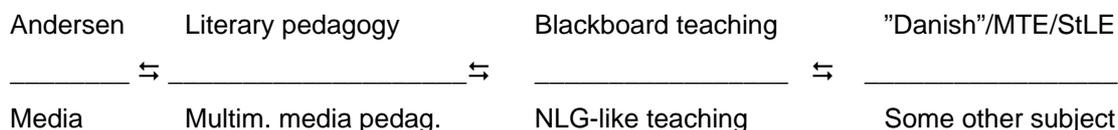


Table 8.4.4.1. Structural hierarchies when teaching Andersen in "Danish".

One of the student groups that dared to make a relatively free oral discussion of the experiment constructs precisely this structure (some of their conversation is quoted in the introduction; cf. chapter 1 and A2). In the course of the 10 minute conversation, three girls in Karen's class – Signe, Anne, Mette – negotiate the knowledge outcome and relevance of the experiment. The group is focused on reading skills, like most of the students and Karen herself in that class. After arguing on whether they have learned anything, Mette, the most critical of the three, acknowledges that: "okay, although you obviously knew (before the experiment) that you had to pronounce clearly when reading aloud, maybe you did not know how conscious you had to be about it" (Mette puts stress on the word conscious). To use Buckingham's Vygotsky-inspired terms (cf. chapter 3.1.2, p. 47), Mette and the others acknowledge that they have been in the process of moving from spontaneous to reflected conceptualisations of speech and orality. Later in the conversation, however, this knowledge is valorised as provisional and illegitimate. As the dialogue goes on in the concluding part:

- Mette but okay I believe it has been fun, because it has been different
- Anne yes it has been fun because it has been different, but in terms of content, I really do not know
- Signe no
- Mette no really I do not know how much you can use this afterwards
- Anne no
- Mette but okay I think it has been nice with a bit of variation
- Signe yes that is true
- Mette compared to normal analyses

Anne yes, I know what you are saying¹²⁸

We might consider this conversation as honest talk or talk not trying to please a researcher or a teacher – but not necessarily talk that represents the final truth about the potential knowledge production that can be actualised through this experiment and in the intervention project as a whole. This is the perception of three students. Contrarily, the perception of the designer-researcher is that the expressed dichotomies between what is *fun* and what is *subject-related*; what is *normal* and what is *different/variation*; what is *useful* and what is *not*, reflects the suggested regime of knowledge production for "Danish". The intervention transgresses the practiced norm of the school subject *negatively*, so to speak; the normative line is revealing itself through the very overstepping of the line. One might expect that students and teachers had different views on experiments that overstep the line, but my findings do not confirm that hypothesis. The student evaluation differs only to some extent from Karen's evaluation (case 1), as we find it in her written debriefing to me.

Karen's evaluation – particularly her discontent about "Disney-Andersen" – demonstrates Karen's professional identity and her ambiguous view on "Danish". In some situations, she thinks and judges in a paradigmatic academic-literary way, which is not far from a majority of the student conception of the school subject in all four cases and the conception of it represented by Peter, Jane, and Susanne. However, in other situations she thinks in a predominantly communicative or even semiocoy-oriented way. In any case, a taste regime is definitely a dominant practice, to a large extent, in the four cases: 'Good' is identical with teaching and learning canonical literature, it seems. The regimes of production, reception, genre and knowledge are, indeed, solid and well known. Yet, some of the redesigned material found in the four cases seems to represent a provisional anti-thesis to this general structure and its underlying ideological complex.

8.5. Conclusions, limitations, implications

Considering the local impact of the experiment and its implications for the proposed theoretical model, the conclusion here is similar to that of experiment 1, namely that the experiment engineered a discursive reality in which it was demonstrated that Andersen *could* indeed be taught in ways that adapt a multimodal media pedagogy framework in integrative ways. The material is there, available in the semiotic domain of contemporary culture and can be transported to the domain of upper-secondary education in ways that establishes a competence-oriented process of knowledge production. Empirically, the Available Designs led to valuable, reflexive knowledge processes

¹²⁸ Cf. A2 and chapter 1, note 11.

among some students, dependent on the case/class as analyses of the Designing and Redesigned phases demonstrated. On the other hand, this conclusion is the conclusion of the intervening designer-researcher and differs somewhat from the conclusion developed by the primary agents of the field at the meso-level: the teachers and the students.

Two of the teachers, Karen and Susanne, found the experiment productive in terms of creating positive local impact in the class and on their own approach to the "Danish" subject. The two other teachers, Peter and Jane, were more sceptical about the design and its implications. In this way, a divide was found between the teachers and cases analysed in the first year classes and second year classes – similar to the divide found in experiment 1.

The experiment analysed in relation to the proposed model suggests that our understanding of contextual constraints and potentials – the capital "C" in the model – has become multi-faceted. In particular, normative student and teacher conceptions and local institutional culture plays a vital role in the actualisation. Reflecting on the spiral arrow of knowledge production and its different phases data was found suggesting that teachers need to deal with problems of 'overt instruction', both in terms of offering digitally mediated instructions and academic theory. Teachers must develop strategies that ensure that students are confronted with and may actively learn from both contemporary and historically oriented theoretical conceptual thinking related to multimodal media. 19th century theory like Brandes' (1994) text about Andersen – which is now available in searchable format on the Internet – might be just as relevant as 21st century theory. If the design of multimodal media pedagogy fails to understand this, the process of student knowledge production might become fragmented, lacking deep understanding and reflection (as experienced but not explained by participating students). Doing something without knowing why is counterproductive. Theoretically, we may add that it does not reflect Dewey's (1997) idea of knowledge production. He would insist on teaching academic knowledge in a holistic way. On the other hand, we should note, as a finding, that students might be able to contribute to the construction of authentic conceptual knowledge about a given subject, as seen in the case of the journalistic group in Susanne's class.

Another finding related to the capital C is that the structure of local leadership at the institutional meso-level of the school and learning environments in the local community plays an important role. Particularly in case 3 – Susanne's case – the school management backed the experiment, managers supported it financially and flexibly when Susanne asked for money for the radio station; and the radio station, correspondingly, acted flexibly and assisted, indirectly, with financial help by allowing the class to become a part of the informal learning setting. In total, this created a synergy

that would improve the outcome and success of the experiment in terms of reaching its goals or commitments. Experiment 2 represented a breakthrough in terms of combining formal and informal learning environments in this intervention. The experiment proved the potentials of informal learning environments.

In the group of teachers, this point was discussed later in the August midway meeting (cf. A39 and next chapter). Peter acknowledged the potentials of using this institutional resource as part of the multimodal media pedagogical teaching strategy (hence criticising himself for not having acknowledged this). On the other hand, he questioned whether this finding could be generalised. If a main finding from this project would be that "Danish" teachers should collaborate with local radio stations, he argued, local radio stations might become tired of schools and schools would spend a lot of money. This point is acknowledged.

In terms of evaluating the impact of epistemological and curricular commitments on practice, the experiment demonstrated in interesting ways – some of which developed by the students – that orality should be understood in relation to a functional, or pragmatic, approach. Skyum-Nielsen's learning material from 2003 (and his later theoretical study, 2008) does not represent this position, whereas some of the meaningful and rather fascinating student productions (both readings and journalistic productions) do. Skyum-Nielsen represents a normative rhetorical-critical approach to mediated sound – somewhat similar to the nostalgia expressed by Neil Postman (1985) – in which fast speech is related to cultural decline. This may lead to a problematic approach to orality in which dramatization and personal hermeneutic interpretation sensitive to contemporary teenage audiences is not allowed. This is a bit ironic given that modern rhetoric is indeed taking the audience or the receiver into theoretical consideration (cf. e.g. Fafner 1992). In Skyum-Nielsen's learning material a young popular Danish radio host (Casper Christensen) is criticised for speaking way too fast, pronouncing words cannibalistically. The student in Jane's class that produced the "exaggerated" reading uses his voice in similar ways. In both cases Skyum-Nielsen's evaluation would be negative: They are not complying with the criteria of good reading. What Skyum-Nielsen does not understand is that the radio host, like the student, speaks the way he does and becomes popular precisely because he is aware of the broadcasting situation or the functional medium setting, in Meyrowitz's terms. If the host talked the way Skyum-Nielsen suggests, he would be boring, fired and replaced by someone else. If the student tried to produce his reading according to Skyum-Nielsen's criteria, the rest of the students in class would have been bored, like they were with some of the other readings. Transformative practice and expert-like multimodal media

competence is reached by acknowledging personal, creative and genre-breaking approaches in knowledge production.

The analysis of empirical data from experiment 2 has helped us explore and contest the limitations and potentials of the school subject from a certain perspective. I am quite aware that some of the conclusions are abstract interpretations, which seem relatively detached from the concrete meso-level of the four cases of the intervention project. However, it could be argued that they may offer a deeper understanding of the complex knowledge production that goes on or may go on in “Danish”/MTE/StLE classrooms. As we have seen, teachers, students and theoreticians have developed their own local and personal theories of the practice of “Danish”. Inductive analyses of this experiment confront such theories. Analyses also cast a critical light on deductive theoretical assumptions and the model that inform the intervention.

This brings us to the designer-researcher’s final reflection on experiment 2, which is prospective: How would/should the findings of the first two experiments influence the design of experiment 3? Although it is not possible to make the kind of in-depth analysis of the experiments done here, it was possible to draw some “quick and dirty” conclusions based on evaluations from teachers and students. In the process between finishing experiment 2 and beginning experiment 3 almost three months later, some resistance was registered towards the project, both among students and teachers. Particularly one of the teachers (Jane, as we have heard) cut down on the scope of the experiment asking for more liberty and she also argued that several of her students were “missing her kind of teaching” or becoming tired of Andersen. In Karen and Peter’s classes similar responses arose among students. Karen pointed out, for example, that Flemming, the 40-year-old former truck driver, was feeling insecure about this experimental kind of teaching. Flemming would not write this openly to me, only state it orally to Karen.

On the other hand, through intensive dialogue with the teachers, particularly during the intermediate meeting in August (cf. next chapter), it was found that the three other teachers (Karen, Susanne, Peter) were still very enthusiastic about the project, and their enthusiasm was carried over to the students, among which many expressed very positive experiences with the experiments. In extension it was concluded the over-arching framework and model of the intervention was to be retained revising and changing some aspects.

Chapter 9. Reflexive intermezzo: The midway-meeting

As referred to in the previous analyses, an intermediate meeting with the teachers was planned in August 2004. The purpose of this meeting was to establish an arena for reflection on the intervention, in which it would be possible to lay forward observations and tentative analyses for the teachers to comment upon. At the same time the revised sketch for the experiments to come would be presented and teachers would have the opportunity to comment and revise this also. In other words, the meeting served as an arena for both retrospective and prospective reflection in trying to grasp the processual dynamics of the intervention process. Methodologically the meeting served as a means for evaluation: it was important to test – to the extent that it was possible within the limited time frame of the meeting – the credibility, transferability, dependability and confirmability of the study as it had evolved so far. From the teachers' point of view the meeting could serve as a reflexive arena that also formed part of the development project supported by the Ministry of Education, for which they were directly responsible and would have to write a report on.

In this chapter the following is taken up:

- The contextual framing of the meeting (all material for the meeting is gathered in A40)
- The dominating themes suggested by me and discussed in plenum.

The meeting was recorded audio-digitally, from which transcriptions and notes were made (A39). A rough classification of the themes that arose during the meeting was developed, based on material prepared for the meeting. Transcriptions of some of the discussion were carefully developed and other sections are covered extensively. It is argued that the themes emerging from the discussions reflect the processual dynamics of the intervention process and offered insight on how it should proceed. It also deepened the participating teacher and the designer-researcher understanding of the research question regarding the integration of Andersen, MTE/StLE and multimodal media pedagogy.

9.1. The unstable framing of the meeting

The meeting was held at the same place as the initial meeting: at the University of Southern Denmark, so it was on the designer-researcher's territory, so to speak. We met four persons. Jane cancelled the appointment due to illness in the family. This was obviously a problem, considering that she played a vital role in the intervention and had adapted the experiments differently than the others (cf. chapters 7 and 8). Jane could have contested the consensuses in our conversation challenging reflections and conclusions.

The plan was for us to meet over six hours: from 10-16. However, the meeting lasted only until 15, since the teachers wanted to get home. The meeting had been rather difficult to arrange in the first place, since teacher managers had not been fond of sending the teachers off. The programme planned for the meeting was undermined to some extent. It had been proposed in advance that we spend the morning with teachers *retelling* their experiences of the first two experiments – theoretically experimenting with the genre of subject-related didactical stories (cf. Nordenbo 2005) – trying to establish space for reflection *and* communication about subject-related issues. This was to be followed by my presentation of *dominating themes* across the experiments and the events that we could reflect upon. And finally, we were to talk about upcoming experiments. We also had to decide who had won the reading competition.

However, Susanne suggested at the beginning of the meeting that the programme should be reversed, which was supported by Peter. Susanne was rather harsh: She could not really see the point in retelling something that we all knew what was, on the other hand, the practical organisation of the coming experiments was important and she had some ideas for change. This reaction came as a complete surprise to me. Initially, it was interpreted as instrumental resistance towards *didactization* (Ongstad 2004; cf. chapter 4.3.4, p. 143) and was therefore valorised negatively: This proves that the teacher(s) do not wish to change their conception of "Danish" and are not in any way 'reflective practitioners' (Schön 2000). Later, having read more theory about intervention and design based research (Barab & Squire 2004, Randi & Corno 1997, Borgnakke 1996), acknowledging the regime of the social system within which Susanne works, the suggestion was easier to understand. Susanne was reacting pragmatically as a teacher who needs to respond to problems related to her classroom practice – that is her first priority.

My initial negative reaction occurred according to a researching rationale, in which reflection and critical discussion of divergent interpretations to events was not at all certain and hence foregrounded as a topic in itself. The object was stable to Susanne, whereas it was unstable and

subjectively constructed in my view. The event demonstrates fundamental *differences* in interests and positions that teachers and a researcher represent and construct when trying to meet collaboratively in an intervention programme. Differences cannot be healed, so to speak, only highlighted. So, the actual compromise was that we dropped the recounting of events and went straight on to the dominating themes that had been identified.

9.2. Dominating themes – from a researcher’s point of view

Preparing the meeting, having roughly analysed the collected data, this was handed out as a discussion guide with a list of themes found to be dominating:

Danish (original)	English (my translation)
1. Det faglige formål i de afviklede forsøg	1. The subject-related purpose of the completed experiments
2. Arbejdsformens betydning for fagligheden	2. The importance of working methods for subject-related knowledge production
3. Forholdet mellem mit forsøgsoplæg og jeres realisation	3. The relationship between my Available Designs and your actualisation
4. Skoleinstitutionelle forhold	4. Institutional conditions on school
5. Færdigheder, viden og refleksion	5. Skills, knowledge and reflection
6. Evaluering	6. Evaluation
7. It-konferencesystemets betydning for undervisningen	7. The importance of ICT / LMS for teaching
8. Det "anderledes" i vores forsøg	8. What is "different" in our experiments
9. Danskfagets didaktik og mediepædagogik	9. The didactics of "Danish" and media pedagogy

Table 9.2.1. Themes for midway reflection.

If one has read the analyses of experiments 1-2 in the dissertation (chapters 7 and 8), it becomes apparent that the list summarises some of the points returned to and analysed in detail there. Behind these themes, there were formulated a number of questions that could be drawn on in the conversation. On the other hand, the aim was to maintain a degree of openness in the conversation, so we would not have to go through all themes in the order above. Methodologically speaking the structure of the conversation was planned in a way that ran between highly structured and semi-structured conversation (Kvale 1994). Some of these themes will be highlighted and related as they developed in the conversation.

9.3. Themes elaborated during the meeting

9.3.1. Working methods changing the traditional school subject

In the discussion teachers repeated and underlined the importance of experimenting with *working methods*, as we had done.¹²⁹ They were not arguing that "Danish" teachers had not used student-, group-based and project- or product-oriented teaching previously. These strategies have been known for decades, but it seemed that the precise use and progression of these strategies in these experiments had functioned very well. They could even be seen as an interesting concrete response to intentions in the reform of upper-secondary education: The reform advocates competence-oriented teaching, but teachers are insecure how to adapt this. Traditional group work has a tendency to become very static, demanding too little, they agreed. Adding product-demands and personal evaluation to group work, like we had done, changed this.

Variety, in terms of mixing working methods, was also important. The teachers were not arguing for a rejection of traditional teaching any more. However, they acknowledged that many colleagues probably taught in a traditional way and that this controlled behaviour, both among students and colleagues. Students had been taught to expect this kind of teaching. In extension, habits and norms related to the teaching of "Danish" was an important theme to address and question. It was suggested that this had an impact on the teaching-learning processes, knowledge production and the rationale of "Danish".

9.3.2. Institutional conditions at school

The teachers underlined the importance, at the meso-level, of institutional conditions at the school and support from school management in order to actualise the potentials of the experiments.¹³⁰ Technologically speaking, it was experienced as a major constraint that:

- The LMS might not work or that it was not suitable for teaching (Peter stressed this);
- That computers might not work;
- That the intranet might break down;
- That there were not sufficient rooms for learning.

¹²⁹ Cf. e.g. A39, Transskriptioner af og noter fra midtvejsmøde, p. 27ff.

¹³⁰ Cf. e.g. A39, Transskriptioner af og noter fra midtvejsmøde, p. 15.

While the teachers have various experiences it was found that the architectural infrastructure, in so many words, was not up to date. As Peter pointed out, infrastructure problems are a very good excuse for students not to do what they are asked. In multimodal media pedagogy infrastructure is particularly important, given its many technological requirements.

Teacher training was also highlighted. Training is necessary if the idea of integration promoted in the intervention is to be adapted. Before the reform, teachers told, ICT had been a school subject on the school timetable, now it had been removed and teachers were expected to integrate ICT in their teaching. The design of the experiments had been a good answer to how it could be done, but had at the same time highlighted the institutional constraints for doing so.

9.3.3. *Assessment*

Teachers agreed that assessment was perhaps one of the most difficult activities to establish in class, in relation to these experiments and more generally.¹³¹ The ambitious idea formulated in the reform of students being able, at a meta-level, to reflect on their own learning process and outcome was assessed by the teachers as unrealistic. Karen argued that assessment was not really relevant for the content of "Danish" and that too much emphasis was placed on it. The teachers also had trouble assessing the experiments, as demonstrated in their self-completion evaluation schemes. On the other hand, the teachers acknowledged the power of well-established assessment procedures. Karen raised the question, feeling insecure, how one might declare these activities for the official oral exam in the third year. As explained: if she was to *dare* do that, she needed to supplement with what was termed a "traditional sidecar", such as a historical theme about romanticism. Teachers talked this through intensively and found that elements of both experiments 1 and 2 could be declared, but that it was "dangerous" – not least for weak students. Examiners might also offer severe resistance. The teachers were also worried that technology would fail.

9.3.4. *The didactics of "Danish" and beyond*

Generally, the experiments were considered contesting and to have the potential of changing common assumptions within "Danish" – about what to teach, how and why.¹³² In the self-completion evaluation schemes it was asked whether they considered the experiments to offer new perspectives on both Andersen and the school subject. Our conversations faceted the teachers' understanding of this question contrasting "new" with "traditional" "Danish". All three teachers considered that the experiments fitted within the curriculum of "Danish". On the other hand, they

¹³¹ Cf. e.g. A39, Transskriptioner af og noter fra midtvejsmøde, p. 33ff and p. 4f.

¹³² Cf. e.g. a discussion about using journalism groups in A39, Transskriptioner af og noter fra midtvejsmødet p. 44ff.

had experienced a lack of knowledge, expertise and authority – that is multimodal media competence and semiocytic teaching these experiments. In other words, a discrepancy between theory and practice, or between intention and realisation, was found. It was discussed whether these experiments were owned, so to speak, by "Danish" as a subject and "Danish" teachers or whether the demands and commitments formulated in the Available Designs were invitations for cross-curricular activities.¹³³ Susanne suggested that collaborating with other teachers in cross-curricular projects might offer the required expertise, enhancing the quality of teaching. School subjects such as Drama, Media Studies and Art were mentioned.

9.4. Midway conclusions and processual planning

Perhaps the most important finding of this reflexive intermezzo was the engaged discussion itself: It communicated and reflected differences, but also negotiates consensus in teacher conceptions of the school subject "Danish". It forced us to legitimise why we thought and valorised as we did. In this sense, Susanne's initial pragmatic desire to deal concretely with the content and form of future experiments was replaced and elevated to a high level of reflective discourse about the implications of the experiment and MTE/StLE in general, which was grounded in empirical experiences and scenarios. We might say that through discursive identity making, we produced an affinity group: The affinity group of the intervention – contrasted with the anonymous "Traditional "Danish" Group".

Some of our discussions would have direct impact on the design of the coming experiments, as will become obvious in the next chapter. The participant teachers still seemed very interested in meeting the commitments of the intervention and in challenging themselves and their conceptions of "Danish" – except one, perhaps, the missing teacher in this meeting: Jane.

Although Jane had had a good excuse for not participating, she had not been part of this meeting, which marginalized her further. In August it was not certain whether she would stay as a participant in the research and developing project. Some signs suggested that she would not: The few readings that students in her class had produced in experiment 2 had vanished from the LMS of the class. She was repeatedly encouraged to reconstruct them, but Jane blamed the school and the students and did not know where to find them. At the same time, she had signalled that she might go on parental leave in late autumn. Finally, after our midway meeting, I send a first draft of experiment 3 to the teachers with the result that Jane signalled that she would cut down, again, the number of lessons to a maximum of 3 lessons. I mentioned this to Karen trying to understand her reasons and

¹³³ Cf. e.g. A39, Transskriptioner af og noter fra midtvejsmødet p. 54f.

deal with the situation from a research point of view. This resulted in a quite unexpected reaction, which I would never have sanctioned if I had been aware of it: Karen wrote an e-mail to Jane scolding her for not taking the project serious and insisting that she stayed spending the number of lessons suggested by me! When I later received a copy of the e-mail, I expected that Jane would pull out – she had every right to do so. Luckily she did not. She reconsidered and spent more hours than first announced working with experiment 3. She also arranged the handing over of the responsibility for experiment 4 to another female teacher, Jean. Jean expressed resistance towards the idea of the project, as we shall see, but Jane managed to convince her. This eventually produced a rather interesting and unexpected dynamic development, in which the same class would collaborate with a new teacher with the same experimental structure. I would meet another teacher conception of the experiment and the class. Local culture and teacher interpretations indeed play a vital role in the intervention.

We should note that classes went into a new school year, changing the constellations of school subjects. This might cause some distress, which could affect their engagement.

In terms of methods used for data gathering it was decided to supplement the developed toolkit (cf. chapter 5, p. 159ff., and A5): In addition to *in situ* field notes and audio recordings, it was decided to supplement with a camera and a video camera. The video camera would sometimes stand on a mount overlooking the class from behind and sometimes be carried by me. I was aware of the potential negative impact that a video camera might have on the teacher and the students. Methodological theory has stressed this (Adams & Biddle 1970; Silverman 2001) and my first experiments using a video-recorder emphasised this: One thing is being recorded and hearing your own voice on audiotape – some are embarrassed about this. Another thing, which is potentially even more embarrassing, in some people's view, is being recorded on video. This reaction against the use of video camera was in fact expressed at the beginning of experiment 3 by some of the students and teachers. Generally, however, it was judged that they would become accustomed to it and the method was applied in my participant observations of both experiment 3 and 4.

Chapter 10. Experiment 3: Teaching picture books, illustrating logo-centrism

10.1. Introduction

In recent decades, theorists both in a global context and a local Danish context have attempted to elaborate the concept ‘*visual literacy*’ testing the popular claim that young people, brought up in an increasingly visual world, are becoming visually literate on an expert level (Messaris 1994, Christensen 1997, Christensen 2003). Messaris and Christensen would argue that visual literacy can be distinguished from other literacies; however, they do not find evidence for the popular claim and conclude that teaching is indeed necessary. Correspondingly, curricular texts of MTE/StLE and other school subjects worldwide point out that visual literacy should be part of the topics of the school subject. The fundamental problem in this thinking, however, is that it continues to conceptualise in a monomodal way what is multimodally and semiotically complex. It is an optic rooted, in part, in the Western aesthetic tradition of *purism*, as I shall argue later. Modes are separated: Images are theorised and taught as such, words are theorised and taught as such, but very seldom is any link made in-between the space of these modes and very seldom is any interest shown towards how we might produce knowledge in classrooms on the basis of the way we perceive in mediated multimodal ways.

Experiment 3 focuses on a small part of the abundance of so-called Andersen picture books and other works that interpret his fairytales visually, and which have been available in modern culture in Denmark and elsewhere for the last 150 years. This highlights the problem and intends to move beyond it. The dominating mono-semic approach is contrasted by Available Designs, which establish multimodal media pedagogy with the goal of developing student multimodal media competence, accentuating meaning-making relations in the triad of words, images and students. The main finding, empirically speaking, is that when teachers and students are confronted with Andersen fairytales in imagery and words, being strongly encouraged to approach it in ways that address the constellations of modes and media, they don’t. The mode of writing remains dominant, traditional literary pedagogy takes over and the visual serves as an *appendix* in student products and reflections. Some ruptures in this hegemony are found though, both among students and teachers. They acknowledge in retrospect that they did not actualise the potential meaning-making resources that are there, quite literally, in the texts in front of them. Jane, one of the participating teachers,

offers a potential explanation pointing out that it is particularly difficult re-orienting the focus of knowledge production when working with known texts, such as canonized literature by Andersen.

Preparing this analysis, I had the opportunity to present this finding to Jay Lemke, who is a widely acknowledged semiotic and educational researcher.¹³⁴ His brief comment was: “This is what we call logo-centrism” – a comment which hits the spot. Logo-centrism, which we can define as a narrow and reductive semiotic emphasis on literacy in a verbal sense, seems to be the most simple and at the same time strong concept to use when explaining the progression of the experiment. Classroom space could have installed and developed an aspect of *semiocy* among students. Instead, logo-centrism was reinstalled. The experiment demonstrates, in negative, the discrepancy between practice and theory.

10.2. Available Designs

10.2.1. Technological commitments

Technologically speaking, the Available Designs was rather simple and teachers would be familiar with it.¹³⁵ Firstly, there were the Word-documents explaining steps and offering learning material, produced as simply and adaptable as possible, for students and teachers to use on the intranet. Technological equipment, obviously, should be available to do so. Secondly, and related to this, the journalistic groups would be asked to produce a homepage about the project. Equipment and software should be available for this. Thirdly, and crucial for this experiment, a digital compilation of the word-and-image illustrated works and other visual interpretations was made (cf. A14 for all

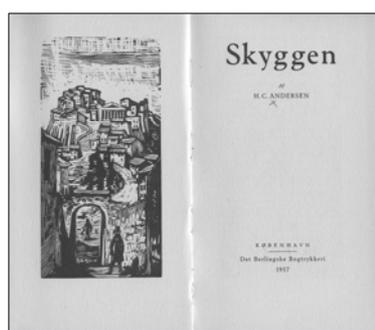


Fig. 10.2.1.1. A look-up in an edition of “The Shadow” with thirteen illustrations by Povl Christensen (Andersen 1957).

visual material, and the two vignettes on this and the following page). As explained thoroughly in the teacher guide and suggested in the learning resources for students, there exist thousands of illustrated books with Andersen fairytales. This was a tradition that Andersen started himself, publishing his first collection of illustrated fairytales in Germany (Andersen 1849). From then on, illustrated books have been produced in countless editions: popular and exclusive, high and low, for children and/or adults, home and foreign. Furthermore, artists have produced a number of paintings and other types of visual forms inspired by the fairytales. In the

¹³⁴ I spoke with Lemke in the summer of 2005 at the *Games, Learning & Society* conference in Madison, Wisconsin. For Lemke’s semiotic position, cf. e.g. Lemke 1994 and 2005.

¹³⁵ Cf. all material sent to teachers in A14.

experiment, one could have chosen to ask students to find and select among this enormous material becoming more accessible in the networked information society. Indeed, this was a task suggested as *part* of the teaching process; initially, however, I narrowed down complexity focusing on the fairytale “The Shadow”. Technically, I produced a CD-ROM compilation of illustrations and other visual interpretations, spanning over 150 years and made it available to the teachers, who would then make it available to students – at least if they found it relevant.

Teachers were allowed to distribute these pictures on the intranet, but *only* for a limited time because of copyright restrictions. The law in Denmark claims a 70 years period of limitation for pictures. Each teacher’s school had to pay a little less than 100 Euro to use the pictures from the 1930s and on and teachers were only allowed to upload them for three weeks. The school administrations and I used many resources dealing with this bureaucracy. Schools would only pay these expenses due to the research project. This observation proves the general point that multimodal media pedagogy is intertwined with and severely constrained by economic and social constraints at a macro- and meso-societal level. The paradoxical, conservative rule is that *the more modern and the more authentic a medium and mode, the more expensive and difficult to use for teaching*. On the other hand, it was an authentic learning lesson, including for the “journalists”: It was stressed that they had to consider copyright restrictions – otherwise it might cost *them* money.

10.2.2. Epistemological commitments

As argued in one of the background texts for teachers (an excerpt from Elf 2006b), for almost a century several critics engaged in word-and-image studies and new art history (Wendy Steiner (1982), Norman Bryson (1994), W.J.T. Mitchell 1995, among others) have argued that the visual mode cannot be separated from other modes and meaning-making resources in a communicative context. Epistemologically, it is therefore necessary to leave behind the purist conception, known at least from G. E. Lessing (1911 [1776]) and on, that “the arts” are separated due to the fact that the logic of the word is completely different from the logic of, in Lessing’s case, the static sculpture. Contrarily, Steiner suggests that:

”The spatial versus the temporal arts” begins to be too gross a characterization to be useful, and we are forced into a much more technical scrutiny of the way the media of the two arts function, a scrutiny that lies at the center of structuralist aesthetics. (Steiner 1982: 50)

Steiner uses this point to analyze both avant-garde works of art by Magritte, Breton, Lichtenstein and “low art” comics by Edward Gorey. Her general point is that we need to investigate, in

academic research and teaching, the semiotic complexity of interacting modes and media: how they represent and communicate meaning functionally, in contexts – such as classrooms, we may add.

W.J.T. Mitchell, one of her post-structuralistic American colleagues, suggests more harshly – in an article from 1995 whose title I borrow for this chapter – that the very separation of verbal and visual literacy is rooted in struggles about knowledge and power between academic

domains and social systems. As he puts it, verbal institutions compete with the visual institutions, not allowing space, in many ways and on many levels, for the acknowledgement of the meaning-making potential in-between modes and media. Institutional struggles are found on tertiary university levels and obviously also on secondary and primary educational levels. Some school subjects and teachers are allowed to teach predominantly the verbal and others the visual, but not both. A circular system is thus established, which makes this epistemology difficult to change: "Danish" teachers gain their disciplinary authority and competence to deal predominantly with words, and particularly literature, from their teacher education at tertiary levels. Seen from the point of view of modern culture and semiotic domains – not academic domains – the problem is that material communicative contexts are always already *dialectical*, in Mitchell's view. Kress and van Leeuwen (2001) would name them *multimodal*. Their point and their pragmatic epistemological position is the same: Both parties argue that it has become quite obvious that a number of concrete texts that confront us in everyday life represent words, images and a space in-between that can be and is co-constructed by the consumers of the text. Mitchell, analysing different kinds of communicative contexts – down to Saussure's basic model of the signifier and the signified using the example "tree"/[an image of a tree] – suggests that the relation between the word and the image can be grasped in the formula *versus/as*: There are both differences and similarities in-between verbal meaning-making and visual meaning-making, when actualised by people. Kress and van Leeuwen suggest similar points, and so do students and teachers, as we shall see. But how can we apply this idea to Andersen in the design of actual learning resources for "Danish" in hhx?



Figure 9.2.1.2.
"Selfportrait (as H.C. Andersen's The Shadow" by Danish artist Martin Bigum, 1999.

10.2.3. Curricular, pedagogical and social commitments

The curricular commitment of this experiment – stressed and underlined in many ways – was to focus on the interactions between media, the modes of images and words. The title of the

programme, hence, was *H.C. Andersen's "The Shadow" in images and words*. Note the order in the title; it was trying to *reverse* a dominant regime: images *before* words. In the resources of the Available Designs it is suggested, from different angles, that if images are taught and learned in "Danish", there is a strong tendency to look "right through" them. It follows from this that it is *not* a general practice to acknowledge the image as a mode in its full complexity with a *content*, a *form*, a *function* and relate this to the content, form and function of the *verbal* mode.

This critical hypothesis can be backed up empirically in many ways. Generally, we should remind ourselves of the curricular formulations of "Danish" in hhx (cf. chapter 6, p. 191ff.). The school subject operates with an extended notion of the text, with a priority of literature on behalf of other text types. Literature is *supplemented* with something more; teaching and learning about visual images is allowed, but has to serve as a *vehicle* for the dominant mode and pedagogy. In the midway meeting with the teachers this interpretation was suggested and confirmed.

Another, more concrete, way of backing up the hypothesis, is by referring to an official document by the Ministry of Education called 'Advice and hints' (*Råd og vink*, UVM 2000b). This is a guide with much indirect normative power. An excerpt was offered to the teachers and students as a learning resource in the experiment (cf. table 10.2.3.1, J). The document explains how pictures are used for knowledge production in "Danish" teaching, and "Danish" exams. The argument is that a paradigmatic shift has occurred among "Danish" teachers in all gymnasium lines, going *from* using analytical concepts, methods and tools from the visual arts *to* a kind of 'picture reading' [billedlæsning]. In picture reading, images serve as an appetizer, a point of departure for what is considered central: discussions of *themes* and *ideas*, dialoguing as it might be, with other texts referring to a literary historical period.

Indirectly, the document argues *against* both formalism and semiotic mystification, advocated for in Denmark among "Danish" teachers in the 1970s (cf. e.g. Olivarius 1976) and still represented strongly many places. Alternatively, in my interpretation it sanctions a *literary* cross-aesthetic approach to pictures, which we should scrutinize critically. Danish academics and writers of learning material have written books and articles applying this kind of picture reading (cf. e.g. Christensen & Kristensen 2002), referring to *inter-textuality* as the method. However, inter-textuality, in this kind of practice, is another word for activities that have a strong tendency to work with cross-aesthetical artefacts from a literary, philosophical or thematic angle. Little attention is paid to a formal visual interpretation and even less to a combined verbal-visual, functional approach. What is argued for in *Råd og vink* is a non-formal approach to image reading, where

historical, literary conceptual knowledge takes a prominent position. You should read through the images and focus on their *immediacy* instead of their *hyper-mediacy*, to echo Grusin and Bolter (2000).

The formulation was made available for students and teachers as a way of highlighting the norm, the sanctioned knowledge regime among upper-secondary ”Danish” teachers – stressing that they should be both aware of and at the same time critical in addressing the *interactive* relationship between the pictures, words and student meaning-making competencies when working with “The Shadow” in images and words. It was expected that it would be *very* difficult for the teachers and students to do this; they are not trained for it and the macro level does not sanction it – so, indeed, it was an intervention.

Speaking more concretely, the steps and progression of the designed curriculum can be studied in table 10.2.3.1. As you can see, some of the activities are less specified and structured compared to previous experiments. Step 2 simply suggests that the classroom community should ‘work with the topic’. Step 2 makes a reference to a tool in which 15 Tasks and working questions are briefly framed (cf. table 10.2.3.2, E). The point is *not* that all students should work with all these questions, but to present a scope and allow a choice for the classroom community: What knowledge do they wish to focus on; hinting at teacher and student interests and competencies might resonate with this topic?

Step	Name	Social Activity	Pedagogy	Curricular Knowledge Production	Meta group
1	Goal and content	Plenary work in classroom	Situated practice, overt instruction.	Intro by teacher about the programme presenting the goal, the tools, and the products students have to produce. Groups are defined. Step described in 1 page for LMS and/or paper.	Journalism group is established
2	Working with the subject	Plenary work in classroom and group work	Dependent on the choice of tasks. Situated practice, overt instruction, critical framing, and/or transformative practice.	A palette of 15 different activities is suggested (cf. tool E). The teachers and the students choose in a collective process of decision-making which activities should be pursued. It is suggested that class has between 3-5 lessons for this. All activities include student presentations in class. Step described in 1 page for LMS and/or paper.	Journalists present ideas and get feedback about the homepage.
3	Essay	Plenary work in classroom and individual	Critical framing, transformative	Students prepare, produce and give the teacher an essay about one out of five suggested illustrated Andersen tales,	Journalists present their

		work at home	practice	including "The Shadow". They are allowed to add a creative illustration. Grades are given, but not for any creative work. Step described in 1 page for LMS and/or paper.	product.
4	Teacher evaluation	Individual and plenary work.	Critical framing, overt instruction	The teacher returns, to each student, the essay with a grade and a written comment and offers collective oral comments. This opens up for discussion. Step described in 1 page for LMS and/or paper.	
5	Student reflection	Individual work in classroom	Critical framing, situated practice	Students write, in class, a reflection text about the programme. Step described in 1 page for LMS and/or paper.	

Table 10.2.3.1. Steps in the curriculum programme of experiment 3.

Compared to previous experiments, this approach marks a shift in design and didactical thinking informed by the processual intervention. I try to comply with a wish, expressed by some of the participant teachers (particularly Jane) and some of the students (referring to "traditional" teaching), for more flexibility and influence on the teaching process.

Ref.	Name of tool	Description of tool	Related step(s)
A	Poster	Shows the headline and Bigum's 1999 visual interpretation of the fairytale. 1 page for LMS and/or paper.	1-5
B	Short presentation	Describes the goal and process of the curriculum programme. 2 pages for LMS and/or paper.	1-5
C	The programme – step by step	Describes the steps, their main goal, and the allowed time. 2 pages for LMS and/or paper.	1-5
D	The journalists' task	Describes the goal of the journalism group. 1 page for LMS and/or paper.	1-5
E	Tasks and working questions	15 different tasks and questions related to the topic that classes should choose from. Headlines and purposes were as follows: 1) "Read and analyse one of the illustrated editions of "The Shadow""; 2) "Go through theory"; 3) "Make a close reading of a look-up" (in a specific edition); 4) "Compare illustrations" (in <i>time</i> (from mid-19 th Cent. until now) and <i>space</i> (foreign illustrators vs. Danish)); 5) "Illustrations of other Andersen fairytales" (produce an archive and present it in class); 6) "Is Andersen The Shadow?" (there is a strong tendency to identify the life of Andersen with characters in his tales, including "The Shadow"); 7) "Focus on technique" (illustrators, through history, use different techniques: e.g. wood engraving, aquatint, digital drawing; what do these names refer to, and what do they imply in terms of meaning-making?); 8) "Periodization" (is an illustration or visual interpretation related to contemporary philosophical, ideological etc. tendencies in society and culture?); 9)	2-3

		<p>“H.C. Andersen as visual artist” (Andersen produced picture books, paper cuttings, and drawings; web links to this material encourage students to describe and relate it to his writing); 10) “Illustrations vs. free visual interpretations” (what does it mean to illustrate, and when is an image an independent visual interpretation?); 11) “Illustration as creative task” (how would students illustrate “The Shadow” now?); 12) “Excursion” (to the Andersen Museum in Odense housing an impressive collection of illustrated fairytales); 13) Images and mass communication (reasons behind making illustrated editions, becoming popular, and selling); 14) “Target analysis” (of some of the illustrated editions: To whom are they produced, how, why; and how should a new edition look like?); 15) Essay (prepare the work with the essay, cf. step 3). 3 pages for LMS and/or paper.</p>	
F	Info about illustrations/other visual interpretations	Factual, bibliographical information about the illustrations available on the intranet. 3 pages for LMS and/or paper.	1-5
G	Links	Collection of links, particularly useful for the tasks suggested in step 2 (cf. above). Links to illustrations of Andersen tales, his own visual work, photographs of him, etc. 2 pages for LMS and/or paper.	1-4
H	Introduction to theory	Includes and comments, briefly, a number of excerpts from theoretical articles (Christensen 1997; Dal 1969; Dal 1975; Elf 2006b, Fafner 1995; Hallberg 2000; UVM 2000b; Kjörup 1991; Christensen & Kristensen 2002; Sørensen 1993; Christensen 2003). Students can order a copy of this from the teacher if they find it useful for solving the task(s) they are working with in step 2. 2 pages for LMS and/or paper.	2-3
I	Excerpt from <i>Start format</i>	An excerpt from study (Elf 2006b) about works of art, typically books, that combine words and images. Several pages.	2-3
J	<i>Råd og vink</i> about picture reading	Excerpt from the publication of the Ministry of Education about picture reading. 1 page for LMS and/or paper.	1-2
K	Images	Reproduced, scanned images of illustrations and look-ups from books, and other sources. A total of 31 images, uploaded on the LMS.	1-5

Table 10.2.3.2. Tools in experiment 3.

Didactically speaking, we might argue that this leads to a Northern-European *Didaktik*-oriented kind of teaching. In the *Didaktik* tradition, as argued by Westbury (2000; cf. also Haue 2007, Hudson & Schneuwly 2007), there is a strong tradition for giving teachers the responsibility and authority to reflect on and determine what should be taught and how. It follows from this that learning material produced by publishing companies is often designed in a way that offers conceptual knowledge and sometimes even suggestions for student activities. At the same time, Westbury argues that in the Anglo-American curriculum tradition we often find a more rigid and

instrumental teaching procedure controlled from above or centrally by curricular documents and officially sanctioned learning material. The organisation of step 2 was one way of trying to address and unite the European didactic tradition with the curriculum and design based research-approach towards multimodal media pedagogy. It was expected that the open-ended structure of step 2 would, potentially, invite less experimenting and become counterproductive in terms of producing new didactical knowledge among students and teachers related to the image-and-work interaction. In the Designing and the Redesigned sections, we shall see what actually happened. A change, compared to observations in experiments 1 and 2, was indeed observed.

Speaking of the mix of curricular and pedagogical commitments, it was again suggested, but made voluntary, to divide the class into two groups operating with a journalistic group and a main group. As part of the more ‘traditional’ approach, instructions for the journalistic group were relatively more detailed this time – offering “must-“demands” and “suggestions” – in order to structure and inform the work of the groups. Still, however, the student-journalists would be given the main responsibility of the process and the teacher should be a consultant. Teachers were encouraged to compose a group with different student competencies, including technical ICT competence. The defined demand of the journalistic group, sketched already during experiment 2, was to produce a homepage about the project in general, focusing on experiment 3. There was a certain topic-related logic related to this choice of medium and genre: A homepage would be suitable for the representation of words and images by Andersen – and the teacher and students – addressed in the main group. Moreover, homepages are highly relevant to be able to act with competently, as several theorists argue (e.g. Erstad 2004). Obviously, other meaning-making resources beyond words and images – such as video – could be used, if the technological conditions allowed it. In case 1, where Danny and Mike had already produced a homepage and would continue as journalists together with a girl, the group was asked to revise and update it in collaboration with the rest of the class. They were sent off on a self-critical and transformative journey, we might say; hinting at the model for teaching towards multimodal competence.

10.2.4. The integrating commitment

As indicated above, Andersen was a visually engaged artist. Scholars characterize him as an “eye person”. This refers, first, to his verbal writing – he makes many references to other arts, particularly paintings and the act of seeing in his work. And secondly, it refers to his manifest, material production of drawings, paper cuttings, picture books, collages of newspaper articles, pictures, words etc. (studied by Heltoft 1977, among others). Third and finally, he actively initiated

the tradition of illustrating his fairytales, letting Vilhelm Pedersen, a Danish illustrator, produce the first wood-engraved illustrations for a collection of fairytales translated into German, printed and sold there in many prints. Andersen knew that – like the oral style – images attracted children of all ages and would help him enter many homes, high and low, in Denmark and internationally. Andersen was thought globally and market-oriented, about the distribution and impact of his stories, in more than one sense. One and a half century later, the scholar Erik Dal presents, in one of the theoretical texts offered for class, 150 foreign and a similar number of Danish illustrated works – just picking out the most prestigious: For instance, El Lissitsky has illustrated some of his fairytales. There are all the hundreds and thousands of illustrated editions of his fairytales less known to and acknowledged by (Dal's) high taste criticism, but enjoyed every day all over the world. In terms of cultural history, Andersen was living in what is nowadays termed the visual breakthrough – part of the modern breakthrough – and he contributed to it himself. Referring to illustrated Andersen works and other visual interpretations of his work can retell the history of modes and media and particularly the history of combining words and images.

The experiment should be somehow situated in student practice, directly and indirectly. Indirectly, there is no doubt that children and young people consume a large number of media and genres that combine words and (stable) images, such as journals and comics. The assumption is, without offering empirical backing, that most Danish children own and have looked at a number of illustrated Andersen fairytales, if not at home, then at school. But it is likely that they have *not* looked at an illustrated version of “The Shadow” and most probably they have not worked with or been taught this kind of material in a consciously prepared, theoretically informed way that demands an advanced multimodal media competence. The different editions of “The Shadow” made available in this experiment demands precisely that. The fairytale, as a verbal story so to speak, is often characterised as one of Andersen's fairytales for grown up people and adults. At least this is suggested in a foreword by Villy Sørensen (Andersen 1995) in one of the illustrated editions of “The Shadow” made available for class (illustrated by Svend Otto S.). One might argue that this has inspired and affected the illustrations and other visual interpretations found for this fairytale. The available visual material is not childish or Disney-like. The fairytale has inspired artists to interpret the fairytale in congenial ways using both realistic and grotesque styles. This might help stimulate and at the same time challenge student perceptions and reflections on mediated images and words. In this way, progression and *Bildung* perspectives are embedded in the experiment. The point is not simply to teach and learn mediated modes as means for instrumental,

referential communication; it is about personal and collective meaning-making processes in a local classroom context – hinting at global perspectives.

The global perspective can be addressed, in this experiment, in several ways (as signalled in table 10.2.3.2, E), for instance as a target analysis of illustrations made for global audiences or by addressing the suggested question: “Is Andersen the Shadow?” There was a certain didactic reason for raising this question. As we have heard from earlier observations, students express what I will not hesitate to term *a biographical desire* towards Andersen (I borrow this expression from Heede 2005). Epistemologically speaking, the rationale of new criticism and the dogma of the autonomy of the text compete with the rationale of biographical, referential, approaches. Concretely speaking, there is a strong tendency to identify a fictitious character in Andersen’s writing with an empirical person, the author that lived. So, Andersen might be, for example, identified with the Shadow and/or the character called “the writer” in the story. This is a clear tendency in several Danish illustrations of the fairytale: The visual representation of these two characters resembles the portrait – or rather, the icon – of Andersen (known from photographs, linked to in the tools). Interestingly, this is *not* the case in an illustration by foreign illustrator Wehnert. In his representation, the Shadow is an unidentifiable person, empirically speaking. In this way the material might also open up critical discussions of national(istic) constructions of Andersen’s fairytales in words and images. This could potentially affect the students in the task of writing an essay. But as we know from experiments 1 and 2, very much depend on the actual, situated Designing process.

10.3. Designing

The conclusion from the Designing process is relatively harsh, as already suggested in the introduction. Analysing the field notes for the 16 visits made during this experiment, very little evidence was found pointing towards the commitments of the Available designs (cf. field notes in A41). Although *more* visits were made than in experiment 2, the data offers *less* empirical backing for actualised potentials. This interpretation, however, may be turned upside down. If we consider the interpretive work of participating teachers and students to be sensible and logical, we may claim positively that many local re-interpretations of the commitments were made and that the purpose of empirical analysis is to understand the generative mechanisms of these interpretations. Thus, as in the two previous analyses of experiments, the presentation will be initiated by teacher perceptions.

10.3.1. Teacher perceptions

When analysing teacher perceptions the teacher evaluations (A45) are applied once again. This time evaluations were received from all four participating teachers without problems.

What is particularly interesting in the teacher evaluations, as compared to previous evaluations, is that this time three out of four teachers respond “no” when asked whether the experiment opened up for new perspectives on teaching Andersen and teaching “Danish”. Karen is the exception. She responds “yes”. These are her ‘first thoughts and comments’ when receiving the Available Designs:

What is this? Has this not been sidetracked in regard to the text as such? – these [thoughts, my addition] show that I didn’t know anything about the subject and had not seen the potential, which was found there. I had always considered illustrations as a secondary thing and have not been attentive to the quality found in many of them.¹³⁶

Susanne evaluates in a similar manner, feeling disoriented and insecure, particularly regarding the teaching of pictures:

I think it seemed a bit confused with so much freedom. This connects with my own uncertainty in regard to image analysis. I enjoy working with traditional analysis, but more was needed. I can see what [is there, my addition], but I am not sure that the pupils can see it.¹³⁷

Susanne was one of the teachers who responded “no”. The point is that during the experiment, she felt that she never got a grasp, on the intentions of the Design.

Not surprisingly, a main point found in their evaluations to me, is a call for conceptual tools and teacher training. All four teachers seem to experience great difficulties in teaching about the mediated relation between words and images. The theory made available did not seem to solve this problem. Most theory was considered more or less unreadable for students; whereas the theoretical text I had written was unreadable and too philosophical for the teachers. As Peter explains in his ‘first thoughts and comments’:

¹³⁶ [Hvad er nu det for noget? Er det ikke et sidespor i forhold til den egentlige tekst? – disse [tanker] viser at jeg ikke vidste noget om emnet og ikke havde set de muligheder, der ligger i det. Jeg havde altid betragtet illustrationer som noget sekundært - og ikke været opmærksom på den kvalitet mange af dem har.]

¹³⁷ [Jeg synes det virkede lidt uoverskueligt med så frie hænder. Det hænger sammen med min egen usikkerhed i forhold til billedanalyse. Jeg kan godt arbejde med den traditionelle analyse, men der skulle jo noget mere frem. Det kan jeg godt se hvad er, men jeg er ikke sikker på at jeg fik eleverne til at se det.]

An interesting proposal, but the background material is not applicable for the pupils. [It] required prior knowledge of image analysis if the pupils were to develop according to the given assignments.¹³⁸

Jane comments in her first thoughts and comments that it is particularly difficult to apply a visual-verbal approach when teaching canonized material like Andersen's fairytales:

I have become accustomed to the way you structure the collections of materials and so forth. This made the beginning far more accessible - I had an overview. It is my impression [that] this overview calmed the class and its work. It is a good idea to work with transformation/interpretation of a text through imagery. It is difficult to relate illustrations – what is painted, drawn, photographed – when known texts are coupled with the work.¹³⁹

More or less consciously, Jane suggests a generic regime: "Classics" such as Andersen are difficult to teach from alternative disciplinary angles: they are always already historically and culturally produced as being literary. On the other hand, she finds it helpful to use illustrations or visual pictures in general as an "anti-blocking tool" that opens up literary analysis. Peter agrees: images are a means, not a goal.

In spite of some differences, Jane and Peter also seem to agree on how to interpret the potentials and constraints of the experiments. Jane and Peter believe explicitly that they were asked to do something with images that they were familiar with. Karen and Susanne believe they were asked to do something differently with images that they were *not* familiar with! After finishing the experiment Karen and Susanne acknowledged that they had done as always – teaching more or less the same way as Jane and Peter. Susanne and Karen point towards something beyond what is already known and done within "Danish" as a school subject. They reflect self-critically on and communicate the fact that alternative meaning-making and knowledge producing potentials might be possible. And they acknowledge that they have to be steered rigorously towards this through the design of the learning resource, as they had been in experiments 1 and 2.

Later I shall return to some of the other comments in these evaluations.

¹³⁸ [Spændende oplæg, men baggrundsmaterialet ikke anvendeligt for eleverne. Krævede forudgående kendskab til billedanalyse, hvis eleverne skulle kunne komme nogen vegne i forhold til de stillede opgaver.]

¹³⁹ [Jeg har vænnet mig til den måde du opbygger materialesamlinger etc. på. Det gjorde starten langt mere tilgængelig – jeg havde overblik. /Det er min opfattelse af dette overblik gav klassen lidt mere ro i sjælen og arbejdet. /Det er en god ide at arbejde med transformering/tolkning af en tekst via billedmaterialet. /Det er svært at holde sig til illustrationer – det malede tegnede fotograferede – når der samtidigt knytter sig kendte tekster til arbejdet.]

10.3.2. Student perceptions

In Peter's and Susanne's teacher evaluations it is interesting to note that they find it puzzling that students perceive the experiment more positively than they do.

A dominating point found in student evaluations across the four cases (A43) is that the Available Designs are perceived as an intense and demanding curriculum programme with more structure than in previous experiments. Students seemingly want to feel pressure, to be confronted with product deadlines instead of group and plenary work with no real consequences. In this sense the design of the experiment was considered to be good.

Students also found it relevant to work with pictures. They seem more accustomed with this. However, it is also quite clear that only few students understood that it is actually the combination of pictures and literature that is foregrounded in this experiment.

10.3.3. Designer-researcher perceptions

When the designer-researcher makes a review of the data collected from the Designing process, this results in a profound ambiguity. Briefly summarising the four cases, it was observed that:

- In case 4, Peter walked 'the path from literature towards formal aesthetics and back again', as he put it in a particular moment when I visited his school;
- In case 3, Susanne felt like she was 'back to where she started, almost';
- In case 2, Jane's 'lessons broke apart';
- In case 1, Karen only slowly 'opened a gate towards pictures'.

In several instances, it was difficult to locate the connection between the observed lesson and the experiment. Teachers would express a similar conception: Peter and Jane expressed that they did not find experiment 3 particularly eye-opening, blaming this outcome (politely) on the design, whereas Karen and Susanne claimed that they had not *done* or taught anything new in their actual teaching. Rather, *reflecting* on the material in retrospect, they admitted that it might suggest something that went beyond their actual practice and the practice of the school subject in general. A majority of students in all four classes, on the other hand, would argue, in the process of Designing, that they experienced a challenging and enriching learning experience. Over and against this, the researcher found little empirical evidence of this reflection in analysing their activities and products.

There were some important exceptions however: interesting ambiguous discrepancies in terms of sense making within "Danish" classrooms were found in the Designing process of this experiment. We may narrow these ambiguities down to three themes:

- *The complexity of content,*
- *Literary pedagogy vs. visual pedagogy, and*
- *Open and closed strategies for knowledge production.*

We shall explore these points in the following.

10.3.3.1. *The complexity of content*

Complexity, in terms of using the digital, Word-based learning resources did *not* seem to be a problem anymore. All teachers expressed the designed curriculum to be simple in use and easy to understand. Some teachers adapted and edited it digitally (e.g. making their own power point presentations). Peter added new analogue material in a paper handout. No students expressed dismay at the learning resources; they only expressed this at the necessary, assistant ICT (computers, the wireless net etc.) at the school, which was still not working perfectly. One may conclude that students and teachers had gotten used to the technological design. This observation makes one wonder whether the problems expressed in the previous experiments by students and teachers about the 'too ambitious', 'too long' and 'too complex' design of the learning resources were related to a real problem or whether realisations in experiments 1 and 2 were also, predominantly, indebted to other things, such as new challenging, subject-related epistemological, curricular, social and pedagogical commitments that contested normative teacher and student practice.

In experiment 3, it was the *content* that was complex and challenging. It became clear that what was referred to above as the *epistemological* commitment was demanding for both students and teachers. To teach and learn Andersen fairytales as *both* pictures and verbal language would be very difficult to understand and accept. It would require the adaptation of new academic knowledge and the ability to use this with regards to the tasks and demands related to the textual constellations made available. In social semiotic terms production, reception and knowledge regimes were challenged in the "Danish" classroom. In terms of empirical evaluation, this finding tested the confirmability of the intervention. In a sense, the designer-researcher was revealed as being slightly naïve. In confrontation with the certain knowledge about a topic, it was expected that this would also be known by the teachers or at least easily adapted by them. Clearly, this was not the case.

10.3.3.2. *Literary pedagogy vs. visual pedagogy*

In three out of four cases the teachers started the experiment by running through a literary analysis of the fairytale without referring to pictures – Jane being the exception. The teachers installed an intermediary step before reaching step 2 (cf. table 10.2.3.1): In a traditional classroom setting with the teacher taking up most of the time in asking questions and getting answers they would search for and find the main *motifs, themes, characters, symbols* etc. of the written fairytale. Many sensible points were stated and written with chalk on the blackboard, students writing everything down. This was the kind of “traditional teaching” that several students were referring to and longed for in experiment 2. Not a word was mentioned about pictures, even though classes were using an edition of “The Shadow” with two (Svend Otto S.) full-page illustrations just in front of their eyes. When doing field studies it is sometimes more interesting to observe what is *not* said or done than observing what *is* said and done. This was one of those moments. The classroom community was blind to the most visible. Or perhaps the designer-researcher was blind to his own biases.

As suggested, Jane would begin the experiment in another way, being more attentive towards *pictures first* and the relation between visual interpretations and the fairytale – in that order. This vantage point could be explained as a result of her teacher profile/identity being a trained teacher of Media Studies (and familiar with Roland Barthes-inspired analyses of commercials, among other things; cf. her profile in A26). In her evaluation Jane reflects (A45) that she had told her colleague Jean – who was to replace her in experiment 4 – about experiment 3 and that Jean had been quite shocked because she thought it to transgress the norm of “Danish”, which was not Jane’s perception at all. Jane’s approach could also be interpreted as a result of her conception of pedagogy, always trying to pursue the untraditional, critical, “anarchic” path (cf. previous chapters).

Regardless of the explanation, this is what happened in her lesson: Initially, she asked the students to find illustrations of “The Shadow” on the Internet or the intranet, upload them to a folder on the intranet and present them to class arguing why they had found them interesting. This responded to some of the suggested 15 tasks in step 2. Some students did this, in interesting ways. For example, a student “Sven” had focused on an abstract painting by COBRA painter Carl-Henning Pedersen (one of the images made available). This initiated an interesting discussion in class about realistic and abstract representations and student attitudes towards such (several students had strong objections towards the abstract representation, as often seen, preferring the realistic code). But a majority of students did not respond at all to Jane’s task. Instead, they acted in the disinterested way often found in that class.

At a certain point Jane concluded that the lesson “was breaking apart”. Her reaction was to (re)turn to a well-known literary pedagogy. In the following lesson she presented a thorough literary analysis – a master interpretation – of the fairytale seen as a verbal text outlining three potential interpretations. She argued that “The shadow” could be analysed from three perspectives. Below are found the blackboard notes:

- the decline of bourgeois society
- a disintegrated personality (with special reference to Freud)
- the biographical life of Hans Christian Andersen.

In this situation the classroom was silenced and everybody seemed to concentrate, since subject-related knowledge production was going on. And yet this seems an almost surreal design event. The experiment was being radically reinterpreted. The production of meaning could only vaguely be related to the committed accent on the *relation* between modes and multimodal media pedagogy in general.

Following this observation there were no expectations to find the word-image relation addressed in later student essays. From a social semiotic point of view, Jane had rational reasons for doing what she did. The lesson “worked”, but the experiment fell apart. The experience also confirmed some theoretical expectations, which had been developed from empirical analysis. This refers to the expectation that students have a *biographical desire* within ”Danish”, which is supported by teachers. As we see above, Jane sanctions the biographical reading. Jane even asked the students to do homework, in which they made notes for a Freudian interpretation of “The Shadow” for the next lesson.

In case 4 Peter suggested a similar Freudian-biographical connection in his teaching, handing out extra theoretical material about this angle. He also reflects quite literally on the student “biographical desire” in his evaluation.

Susanne convinced students, after some negotiation, that they should all discuss the biographical angle too. In Karen’s class the biographical desire was also actualised, with a critical stance though. In all four cases, however, the dominating pattern is that literary-biographical pedagogy takes over when a combination of visual and literary pedagogy is suggested in relation to Andersen. The intended commitments were adapted into a concrete practice that does not integrate visual pedagogy

with literary pedagogy. Instead, the pedagogies would be disintegrated and put into a clear conceptual hierarchy. The visual becomes a detached supplement.

It was not that teachers did not teach about pictures at all. Peter explained to me – and reflects in his evaluation – that before the beginning of the experiment, as a preparation of it, he had run a programme on picture analysis focusing on the *formal* aspects of pictures. He began the experiment by taking the class on a little excursion to a big abstract painting hanging on a wall in school interpreting Andersen’s fairytale “The Little Mermaid”. Recalling the model of multimodal media pedagogy, we may characterize his act as a ‘situated practice’-strategy signalling to the students: ‘Look, you are surrounded by pictures in your everyday life and some of them relate to literature and what we are doing in ”Danish”’. But this kind of activity-oriented visual pedagogy was not *integrated* in experiment 3, dealing with the mediated image and word constellations of the “The Shadow”. In Mitchell’s words (cf. 10.2.2, p. 311), what was found, in Peter’s case and also the other cases, was words *vs./above* images. Not a *dialectical* teaching and learning space of looking at/reading images *vs./as* words. The extra handout Peter gave to the students came from a book entitled *Litteraturens veje* (Fibiger & Lütken 2002; ‘the paths of literature’), and Peter’s class would indeed walk the literary path, confirming or even reinforcing the teacher profile made of him initially. The clearest example of this was a situation in Peter’s class, right after the experiment, which will close this chapter and open up the analysis of experiment 4 regarding animated Andersen fairytales (cf. 10.4.4, p. 340).

10.3.3.3. *Open and closed strategies for knowledge production*

In order to offer a balanced, credible evaluation of the Designing process, it should be noted and retold that some openings towards image and word dialectics and multimodal media pedagogy were found among all teachers in the four cases. The most explorative observations in this matter are found in Jane and Karen’s cases. Preliminarily, it should also be noted that we must remember that the epistemological and curricular commitments of experiment 3 require the production of new meaning-making relations that have not been addressed in any elaborated way at an academic level. To understand the meaning-making potential of mediated images and words, specifically related to the case of Andersen fairytales, is new – not only for students but for teachers and academic researchers alike.

Thus, in a sense, the classes would be the first to explore the potentials of a new way of analysing Andersen. Two general strategies among the teachers were found in doing so. One would move in the direction suggested by Bereiter (2002) when he speaks of knowledge classrooms

progressing into *producing* knowledge. Jane and Karen would use this strategy. The other, practised here by Peter and Susanne, would go in the other direction, *regressing* into a position that *reproduces* what is already known and familiar.

This difference became quite clear in the way the four teachers dealt with step 2 (cf. table 10.2.3.1). In Peter's case, instead of inviting an open negotiation in class, of *which* of the 15 questions/tasks students wanted to work with, *he* decided in advance, which questions and theoretical approaches were relevant. In this way he reduced complexity by reducing the scope and horizon of potential knowledge-based approaches – perhaps reasonably so. Peter had argued repeatedly in his evaluations of the previous experiments, that too many goals were lined up, and that this was too complex, at least for this specific class, to deal with. Thus, it seems sensible and logical what Peter decided to initiate in the classroom: First, he would use the intranet, a projector and a computer to run through the 31 images available in plenary work, allowing students to comment on each image. Later he would introduce the theoretical material by Dal as a paper handout. He had written four specific questions referring to expressions used in the text, such as: “What does Dal mean when he claims that illustrations can have very different attitudes?” and “What does the expression ‘formal-aesthetic elements in illustrations mean?’” The students in class would discuss these questions. This would lead to critically framing and overtly instructing teaching and learning processes – if we are to use the notions from the model – in which analytical and emotional perceptions of images were highlighted. In fact we might consider Peter's didactical choice to include more than well-known ‘picture reading’. Both formal and functional aspects of picture reading were addressed. Knowledge was co-constructed by students in collaboration with the teacher using the semiotic resources, but within a *limited knowledge domain* controlled largely by the teacher.

A similar strategy was used by Susanne, although she began step 2 differently. She opened up a negotiation of what class should work with. Students were to read all suggestions in advance and take a stand. It turned out that what interested students most were three themes, two of which many “Danish” teachers would probably consider marginal: “Target analysis” and “Pictures and mass communication”. The third was the biographically oriented task: “Is Andersen “The Shadow”?” Note that all three choices are oriented towards the social and cultural construction of illustrated fairytales – a functional, pragmatic approach was preferred by students.

Choosing this open teaching strategy is risky business, however, as Susanne quickly became aware of. When this ‘lesson of negotiation’ had finished and students left, she commented to me

that she was a bit concerned whether she would be able to offer ‘overt instruction’ to the students about the sociologically oriented topics. In other words, she questioned her own subject-related teacher competence. Her reason for participating in this intervention was to test and challenge her own professional standpoint and to learn something new, but she felt too insecure to do so in this instance. In a sense, she was acknowledging a principle that American media literacy researcher Henry Jenkins suggested recently as a general condition for teaching media in a global media-saturated knowledge society: “Everybody knows something, and nobody knows everything”.¹⁴⁰ Compared to the teacher role 50 years ago, perhaps less, this implies a major shift in teacher authority and identity. And we should add: Also student authority and identity. In this case, Susanne



Figure 9.3.3.1. Picture of sculpture interpreting “The Emperor’s New Clothes” uploaded by students.

decided not to carry through the open strategy and did not allow the sociological approach. Instead, she narrowed possibilities down in the following lesson convincing class that the biographical task would be the most interesting task to work with.

As a contrast or as “negative cases” (cf. chapter 5.3, p. 161ff.) it could be claimed that Jane’s and Karen’s cases confirmed that potentials may be

actualised in open-ended ways. Jane established group work, initially asking the students to pursue one of the suggested questions for them to choose.

They did, and even uploaded it on the LMS, so that peers would be able to use it later, including in step 3 when



Figure 9.3.3.2. Picture of cartoon interpreting “The Emperor’s New Clothes” uploaded by students

writing an essay. Their uploaded documents show, among other things that

students have searched for and selected among *contemporary* illustrations and visual interpretations of Andersen fairytales, many unknown to me.

For example, two groups found very different pictures for the same fairytale, “The Emperor’s New Clothes”. In one group, a picture of a

modern sculpture (figure 9.3.3.1) accompanied by information about the source was uploaded. In

the other group a popular cartoon accompanied by student key words, useful for plenary

presentation, was uploaded. The key words were: “Colourful, cheerful, funny, ironic, original,

untraditional”. The two pictures and others found by students contrasted each other and demonstrate some of the potentials of the space in-between words and images in a literal and expanded sense.

¹⁴⁰ Jenkins said this at the Games, Learning & Society Conference, Madison, Wisconsin, USA, 2005.

Student work opens up for how words might be interpreted quite differently due to contextual conditions and more generally they open up heavy-laden discussions of “high art” vs. “low culture” and distinctions in cultural taste.

Likewise in Karen’s class, instead of determining what everybody would have to focus on, she organised groups with students working with the theoretical topic *they* were interested in. These groups would produce their own material about the following questions/tasks: 4) “Compare illustrations”; 6) “Is Andersen The Shadow?”; 7) “Focus on technique”; 8) “Periodization”, and 9) “H.C. Andersen as visual artist”. Note that the biographical question pops up again, but note also the diversity in terms of topics chosen by students. We find a mix of interests related to media, modes, technology, literature, culture, and personal history, also, a mix of historical and anthropological angles are found in student products. One example is the work, in case 1, by a group in which we find John and Ken (the two “naughty boys” whom we met in experiment 1) and two girls elaborating the point that Danish illustrators make biographical interpretations, whereas foreign illustrators don’t.¹⁴¹ As part of the collaborative principle, suggested in the Available Designs, the five groups in case 1 uploaded their processual outcome onto the intranet with their laptops and presented it in plenary work. My participant observations of the work in these groups account for the conclusion that they were based on an authentic interest among students about the subject.

Why was this difference observed across the cases? As already suggested, it may be related to local classroom culture. Other possible explanations are that the open structure in the Available Designs, as explained above, encouraged teachers to return to more “traditional”, normative, practices. On the other hand, they were not forced to do so. On the contrary, we might also argue that teachers, being pedagogically sensitive to the ‘proximal zone of development’ for students judged that the chosen strategy was most suitable given student competencies. More critically however, we might argue that Designing processes are related to a lack of professional training, even a lack of professional *courage* – as suggested by Susanne in her evaluation – to move beyond traditional production regimes within ”Danish”. It is quite clear that individual teacher conceptions of the rationale of ”Danish” and the kind of knowledge and pedagogy that should be produced, play a decisive role for the design events taking place. One must note that it is only in Jane’s class with the anarchic, critical and creative culture, for better and worse, that *popular* visual illustrations embraced by the masses in well-known genres such as comics are foregrounded seriously by both

¹⁴¹ In A15 I have enclosed the group’s uploaded work.

students and the teacher. Referring to Sawyer and van de Ven's map of the four competing rationales of MTE/StLE (cf. chapter 4.3.2, p. 137ff.) Jane's case actualised a mix of the developmental and communicative paradigms. In the rest of the cases the academic, literary-grammatical paradigm was dominant.

10.4. The Redesigned

The dominance of the literary-grammatical paradigm becomes particularly evident when analysing the redesigned student essays across all four cases: Logo-centrism rules! A few alternative approaches pop up occasionally in student products and reflection texts. They are also found, as we shall see, in the products of the journalistic meta-groups. Case 4 in Peter's class will be taken as the point of departure for demonstrating this. Later a comparison will be made of this case with the other cases. Case 4 is not considered to be a critical case; unlike in the analyses of the previous two experiments, such a case, which would differ conspicuously from the other cases, is not found. All four cases are exemplificatory, which means that they represent an apt context for exploring the outcome of the experiment. One main point is that the teachers made preliminary didactic choices in different ways that would re-direct the intentions of the experiment, including intentions regarding the essay. Thus, we begin with an analysis of the adaptive choices made by Peter.

10.4.1. Case 4: Peter's initial adaptation

When first looking through the student essays from all four cases, it was surprising to such a degree that it became necessary to check the formulation of the essay task handed over to teachers. Particularly in Peter's class the impression arose that they had responded to a different task. The task formulated states the following (cf. A14 for Danish version):

Make an analysis of one of the following Andersen fairytales and its related pictures/illustrations:

- "The Shadow"
- "The Emperor's New Clothes"
- "The Little Mermaid"
- "The Snow Queen"
- "The Ugly Duckling"

Everything that class has worked with during the programme may be drawn on. It is permitted to enclose illustrations/pictures in the essay. A grade is given.

These formulations – particularly the word 'related' – are not unproblematic and could be interpreted in varying ways. However, adding that 'everything that class has worked with could be

drawn on', it was expected that potential polysemia could be compensated *given* the teacher's competence to teach and direct students towards productive reflections and analyses of mediated multimodal, that is, particularly word and image sense making. The full essay task also states that it was voluntary to add a creative illustration but that no grade would be given for this. Inspired by theory pointing at creativity and visual productivity as an important aspect of future schooling and multimodal media pedagogy (Buckingham 2003: chapter 8, Kress 2003), it would have been preferable to offer grades for creativity as well. This would have given greater emphasis to the creative-visual aspect. The evaluative design was a result, however, of negotiations with the teachers at the intermediate meeting and during informal talks elsewhere. They argued that they would not know how to grade creativity; that visual creativity was not a part of the curriculum; and that students would strongly object to it. On the other hand, they wanted grades as an integrative part of the essay task due to student motivation and curricular requirements.

After the final formulation of the essay task was handed over to teachers, it turned out that Peter changed the text (I collected this document in paper). He formulated the task in the following way (my translation):

Text material:	H.C. Andersen: "The Shadow" (1847) Illustrations by different artists (on Blackboard) Illustrations for "The Shadow" that you might find yourself (attach these)
Task:	Make an analysis and interpretation of "The Shadow" Select one or two illustrations by the same artist and analyse these briefly. Evaluate what implication [betydning] the illustrations have for the interpretation of the fairytale.

Some things have changed here which may explain why students performed the way they did. First, we note that student choices are reduced: Students are allowed to focus on "The Shadow" only. Peter has added the year 1847 in parenthesis. This may suggest that students should use this old verbal edition and not the verbal-visual edition offered in Available Design. It is not stressed that students can draw on all perspectives of the Available Designs. Thus, the deliberate semiotic "openness" of the word 'relation' disappears. Also, the analysis of pictures is to be brief, thus diminishing the importance of visual meaning-making – literally and in a broader sense.

After interviewing Peter in the pre-experimental phase it was claimed that his “Danish” identity would probably be informed by the academic, literary-grammatical paradigm. In some aspects of his adaptation of experiment 1 and 2 this has been confirmed, in other aspects it has not. In this experiment, we see that Peter adapts the Available Designs in a way that confirms this identity rather boldly – down to the micro discursive level of using one word instead of another.

The perhaps most interesting thing was Peter’s lack of *conscious* about the fact that he had changed the focus in the essay task. When asked about the reasons for making the change showing both documents, he was first surprised and then puzzled and finally he started to laugh. “He had to go home and think about this”, he said (cf. A41, Peter). He acknowledged that something had written the new text behind his back, so to speak. From a social semiotic point of view, we might say that ‘the writer’ was the dominant ideology – a literary-academic one – and its associated logonomic structure of the school subject controlled the production, reception, genre and knowledge regime. Peter’s reformulation of the task signalled that these regimes, including the essay genre *stil*, had to remain intact. And they did – to a large degree – as we shall see now. The work by the student Lisa and her classmates demonstrates this.

10.4.2. *Lisa and the rest: The genre of literary analysis and an appendix*

Studying modes and media, Günther Kress (2003) often asks a simple question: What does this material look like, literally speaking? If we pose this question to the 22 student essays collected from Peter’s class (A43), the answer is quite simple: They look almost the same. In 20 essays only written text are found – it seems as if these essays could have been on any verbally oriented topic. In three essays a picture is added to the dominating text. One student has enclosed her own illustrative interpretation too, as students were allowed to do.

Epistemologically, the same structure is found in all essays. In two thirds of the text, approximately 2-3 pages, we find a literary analysis of the fairytale not referring to any pictures, but focusing rather on the characters, themes, motifs etc. of the verbal texts, predominantly with a biographical, psychoanalytical and textual angle. This dominant section of the essay is often ended by a subtitle that says ‘Interpretation’ [“Fortolkning”] or ‘The message’ [“Budskab”]. *After* that, in the last part, we find an analysis of an illustration, often marked linguistically with the subtitle ‘Picture analysis’ [Billedanalyse]. One gets the impression that the written fairytale and the pictures analysed belong to two different worlds or rather two detached, remote, communicative contexts. Students simply could not have laid their eyes on “The Shadow” without looking at pictures. Nonetheless, they look right through or past them when they write about them. One example of this

is Lisa's essay.¹⁴² It is evident that the dominating pattern in these student essays is that words and images are separated and that words, in terms of reception and production of epistemic knowledge, are prioritised and valorised. The visual (analysis) is not regarded, it seems, as interpretation or sense-making; it is assigned the function of an *appendix*, a supplement.

In these appendixes, when the students comment on pictures, most of them refer to the Andersen edition with the fewest illustrations (Svend Otto S.), or they speak of an autonomous visual interpretation (such as Bigum's), whereas the editions that combine images and words intensively, such as the edition with 12 illustrations by Povl Christensen that make the fairytale look almost like a contemporary graphic novel, are completely ignored.

If this is the basic structure of the student products, it should be noted that few signs are found suggesting a dawning reflexive *integrative* look on Andersen fairytales. There is a vague discursive echo of multimodal meaning-making, so to speak, in many of the appendix-like final sections of essays. What students typically do is to explain why they have chosen a given picture. They then make an analysis of it, focusing on the content, form and/or function. Finally, some meta-comment on the relation between the illustrator's interpretation of the fairytale and their own literary interpretation of the fairytale is made. The two interpretations are often characterised as unproblematic, parallel and natural.

Lisa's essay can serve as an example. After having offered a more than two page long literary analysis of the text – in many ways interesting – she comments on the illustrations by Svend Otto S. Lisa is negotiating, explicitly, with herself whether the pictures “influence” her, as she puts it. She states (top of page 3) that the illustrator has chosen to illustrate the two most important events in the story; she then describes the illustrations in detailed ways that demonstrates indirectly that the pictures have indeed influenced her meaning-making and finally, in the last paragraph, she produces a conclusion on the whole essay that is rather ambiguous seen from the point of view of multimodal media pedagogy – by ambiguity is meant that she indirectly plays ping pong between a literary, a visual and a combined verbal-visual or multimodal conception of the fairytale. First, she argues, “illustrations have no influence on the way one reads the fairytale”.¹⁴³ This is followed by a different argument claiming that the first illustration does not engage the reader due to its formal shaping, whereas the second has “a greater meaning-potential for the reader's perception of the Shadow.”¹⁴⁴ She recognises, in other words, that images, being formally or aesthetically shaped,

¹⁴² Cf. A16 for a copy in Danish and a translation of the last lines in English.

¹⁴³ [Umiddelbart vil jeg ikke sige, at illustrationerne har nogen indflydelse på den måde, man læser eventyret på]

¹⁴⁴ [illustration nummer to har en større betydning for læserens opfattelse af Skyggen]

produce meaning, even identity and value for her. This reflection, however, is followed by yet another rejection of the meaning-making potential of illustrations. As she ‘generally’ puts it, in my translation:

Generally I do not think that these two illustrations affect my way of reading and interpreting the fairytale, since I find it natural that these two events are put into pictures. The two illustrations reproduce the two events. They narrate the same story and the fairytale. In this sense, I think the illustrator has been able to make good illustrations, which are not all that different from how the reader interprets the fairytale.¹⁴⁵

In these formulations Lisa walks the line from literature to semiotics and back again – just like her teacher, Peter. She argues that images influence us and they don’t; they represent, but in a natural way. It all seems very inconclusive and contradictory. Obviously, we cannot expect a clear answer from her, choosing sides, insisting on the meaning-making potential of pictures – particularly not when considering the constrained domain of ”Danish” within which she is producing meaning and, in which Peter has accentuated the literary approach in his task formulation.

In terms of grades, Peter gives her a 9 (which is above average in the Danish scale and equivalent with a C or 7). He adds the comment: “Several good points in the analysis of the fairytale – although you have trouble clarifying the message. Good analyses of illustrations. Language okay, though many comma errors (not all marked). 9 with arrow down.”¹⁴⁶ Not surprisingly, Lisa later confirms Peter’s approach in an evaluation.¹⁴⁷ Being asked: ”What was considered the disciplinary purpose of the course?”¹⁴⁸ she explains that this experiment had been about literary analysis. She also explains that the goal of the experiment had been to analyse an Andersen fairytale, focusing on the fact that he was writing for adults and not only children and adds: ”At the same time we have learnt about the life of H.C. Andersen in an indirect way, through The Shadow we have entered his life, as it was then, in a natural way.”¹⁴⁹

¹⁴⁵ [Generelt mener jeg ikke, disse to illustrationer påvirker min måde at læse og fortolke eventyret på, da jeg finder det naturligt, at det er disse to episoder der bliver illustreret. Illustrationerne gengiver de to episoder. De fortæller samme historie som eventyret gør. På den måde mener jeg, at illustratoren har formået at lave nogle gode illustrationer, som ikke er meget anderledes, end den måde læseren selv fortolker eventyret på.]

¹⁴⁶ In Danish: ”Flere gode pointer i analysen af eventyret – dog kniber det med bestemmelsen af budskabet. Fine illustrationsanalyser. Sprog ok, dog mange kommafejl (ikke alle rettet). 9 pil ned.”

¹⁴⁷ The evaluation tool is part of the Available Designs; and Lisa’s evaluation is found in: A43/Peters case/ Elevevaluering/elev_evaluering.

¹⁴⁸ [Hvad opfattede man som det danskfaglige mål med forløbet?]

¹⁴⁹ [Samtidig har vi lært om H. C. Andersen liv på en indirekte måde, gennem Skyggen er vi på en naturlig måde kommet ind på hvordan hans liv var dengang]

What Lisa calls ‘natural’ in this quote, is by no means natural, epistemologically speaking. Rather, it should be characterised as a socially, historically and culturally constructed actualisation of the biographical desire in “Danish” related intimately to the construction of H.C. Andersen. Lisa adds, addressing the pedagogy, that she had been very content with the well-known, traditional, individually oriented mode of working because it allowed her to freely meet the demand of “analysing texts and illustrations”.

If we dig into the rest of the student products in this class, a majority of her classmates agree. Traditional teaching had returned and it is a good thing. Some argue that this kind of teacher-controlled blackboard teaching might become boring.

Quite obviously, these evaluations are highly paradoxical, when seen from the point of view of the intervening designer-researcher. The point seems to be that if practice within ”Danish” is to be changed, Lisa, her peers and her teacher all together need to be contested. Discontent and frustration among students and teachers is a success criterion if the educational interventionist wishes to catalyse reflection that could form the basis for ideological and logonomic changes within the social system.

It also follows that the truth-value of “positive” student evaluations is highly contestable. Making a perception triangulation or a counter-evaluation it could be argued that Lisa, in the last paragraph of her essay, in the most abstract sense, is fascinated by and demonstrates the possibility of leaving a logo-centric paradigm behind when approaching a fairytale written by Andersen and illustrated by someone else. One must expect that if we followed Lisa in watching television or surfing the Internet, asking her what mode(s) she concentrated on, she would not hesitate to acknowledge the importance of images. We probably do not even have to go outside a school context, or even outside the domain of ”Danish” in this experiment in order to confront her with the fact that she enjoys images and find them meaningful. In a brief, low-structured interview made with her as participant observer in the last lesson of this experiment (A41) she was asked how she looked at the work made by the journalistic group, which had made a homepage about the project. We will hear her answer after a short description of the work of this group.

10.4.3. The journalistic group in case 4: An arena for multimodal homophobia?

As we know from previous analyses, Peter was generally sceptical about the establishment of the journalistic group, at least in this class. Still, he acknowledges the positive results from other classes, particularly how Susanne had managed to engage boys, in experiment 2 by allowing them to use their technical competencies on ”Danish” topics (cf. previous chapter and A39). Thus, Peter

chose to compose a group of four boys in the experiment. He had a feeling they were ICT nerds, which was correct. When interviewing them, it turned out that all of them worked professionally and earned money programming and/or reviewing homepages. They were ICT super users. The question was, whether they would also be ‘super students’ (Sørensen 2005) within ”Danish” – being able to comply with the subject-related demand of the group, producing a homepage that would live up to communicative demands?

In my interpretation, the journalistic group managed to comply with the demands of the task designing a multimodal homepage for combined curricular, epistemic and social work knitting the experiment and the whole intervention together in ways that placed the student(s) at the centre. As a computer-mediated learning site there is no doubt that their site is much better than the Blackboard learning management system offered by the school – just as good as the one produced by Danny and Mike in case 1 (which they revised in this experiment).

Many communicative details could be highlighted and analysed from the homepage. Only a few will be highlighted. Generally, it establishes a number of genres and subgenres that relate to the experiment and the intervention as a whole, but also involve the classroom community. As figure 10.4.3.1 (below) shows, one of the things the four techno-journalistic boys did, was to take a picture and present the winners of the reading competition in experiment two. On the same page you find a top bar, designed by them, that visually and verbally interprets (using a special visual technique and a particular old-fashioned orthography) the historical scope of the experiment / the intervention in an aesthetically and personally fashioned way. On the left hand side, one finds the main menu, defined by the students (translated into English they mean: front page, news, H.C. Andersen, Pictures, The process of the programme, Forum, Links, Sitemap, Login, The Class, Contact). Predominantly, the Forum was used for social relations offering a space for student emotion and engagement. To use the vocabulary developed in experiment 1 (chapter 7), it offered space for critical semiocy with everybody being allowed, in different ways, to have an opinion, even being silly. On the right hand side of the figure some of this is suggested too: Here, one sees a popular poll format asking students what their opinion is about the homepage using *slang* categories used by young people (e.g. “KANON”). Below, ‘news’ is foregrounded, making the homepage dynamic and processually oriented, like many authentic homepages. In the bottom one finds another sign of situated practice: A countdown to Andersen’s birth date – referring to the fact that this whole project was related to the Hans Christian 2005 celebration.

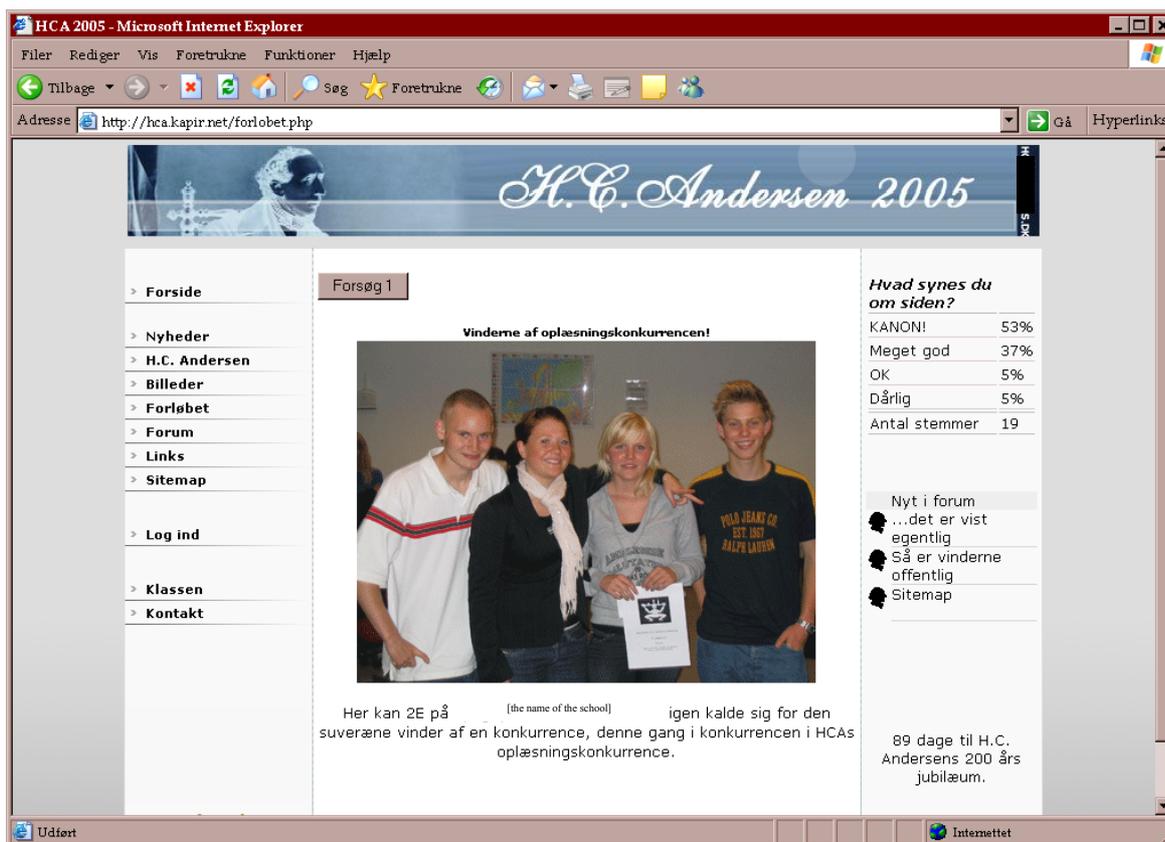


Fig. 10.4.3.1. Screenshot of the homepage produced in case 4 by four students.

Comparing this data with the model of multimodal media pedagogy, aspects of situated practice, overt instruction, critical framing, transformative practice and also identity production within the classroom community were addressed. Ideally, the homepage should serve as the meeting place for the classroom community during the experiment. In an interview with the group, they explained that the idea was for student essays to be uploaded to the homepage. In the Forum, students were asked what their open opinion was about the experiment, and students could write whatever they wanted, provided that they were logged in. Media learning concepts such as audience and also ethics regarding the use of media are built into the design of the homepage. Social activities are, almost literally, intertwined with cognitive, curricular and epistemic activities related to the experiment, thus practicing advanced theories of situated cognition and multimodal media pedagogy.

Some of the instructive material made available on the homepage is a cut & paste from the available learning resources on the intranet, but the majority is found elsewhere. Again this was cut & paste, such as offering a sample of illustrations of different fairytales, explaining in the student words, the scope and goal of the intervention etc. The journalistic boys explained that only time limits had constrained the amount of material available on the homepage. They explained that all of

them had spent 8–10 hours a day for a week, writing code after school designing the homepage etc. And still, they thought it had been fun. This is what could be characterised as motivation!

Peter, the teacher, was relatively content with the homepage. He gave the group a 9 (equivalent with C/7). This grade, he explains in a detailed evaluation, is the sum of two aspects: the “ICT” and the “Content”. About ICT he writes, briefly, that it is excellent work, good effects and functionality. In regard to content he has a number of detailed comments. He gives credit for the sitemap and links. He criticises the use of language: it is sometimes hermetic, not considering that a viewer unfamiliar with the project might look into it. He also criticises them for not mentioning enough about the biography of Andersen. Again, considering his literary-academic profile, this evaluation makes good sense.

On the other hand, this perception could be contrasted by a perception informed by the semiocy paradigm. If one was to take on the role of evaluating the homepage from that point of view, one might have pointed out other aspects, acknowledging the design more positively. One comment could be that the potentials of the homepage were not exploited fully. In fact, this was the opinion of the journalists and other students, including Lisa. We might say that what these students produced was only a first step, which could set off qualitative processes of collaborative reflection in the classroom community. The homepage could have been further developed and integrated with the intervention in experiment 4. In reality, it was not. This group, class and Peter never reached a point where they started to discuss the content of the homepage. As a designer-researcher I had not encouraged this in the Available Designs – which is a general mistake: Critical framing of the experiment(s) and their outcome is a crucial element for producing reflection that might open up multimodal media pedagogy and change the practice of “Danish” in classrooms. A discussion of the produced homepage and other of the journalistic products could have helped set off this process of didactization.

Like in the essays written by the majority of students in this class, the biographical topic is actualised and presented as one of the most interesting themes of the intervention project on this homepage. One must foreground, however, that the homepage approaches the biographical topic in a characteristic popular yet potentially problematic way: In ethical terms: in one of the polls, the journalistic group uses the homepage to combine their biographical interest/desire with their interest in sexuality and identity making. The poll asks whether students find that Andersen was a heterosexual or a homosexual. One might speculate whether the medium and genre *affords* – to use Kress’ (2003) word – this kind of questions to be expressed. My first perception of this poll was

that it made the homepage an arena for homophobia in disguise. This may be an over-interpretation and a lack of understanding for youth culture. As referred to in previous chapters, there was almost from day one of fieldwork, an excessive curiosity among students about Andersen's sexuality. Finally, through the homepage, they got the chance to explore it, one could argue. In other words, this poll may reflect that students attempted to deal with the sexuality – and, not the least, their *own* – openly yet discretely using the genre of a school homepage. Numerous other homepages on the Internet address sexuality in much more explicit ways; here, the sexual content seems almost innocent. From the point of view of multimodal media pedagogy, one may even argue that such multimodal mediated work on biography and sexuality could be used positively within "Danish". For example, a teacher could use this kind of student work for discussing questions of identity and identity politics – acknowledging and at the same time questioning student multimodal mediated meaning-making. Media pedagogy theoreticians like Drotner (2002; cf. chapter 3.3.1.1, p. 85ff.) might argue that this is the *Bildung* responsibility of the teacher in late modernity. Her point is precisely that the teacher of a school subject such as "Danish" should meet the students in their own accustomed and familiar media environments and then make these media unfamiliar by questioning content, form and function.

What did Lisa opinion about the work of the journalistic group? She *writes* nothing about it in her evaluation, as if it is not part of the experiment. The same goes with all other student evaluations. In this sense we could conclude that the journalistic group functions as an entirely disintegrated element of the knowledge production process within the experiment. No real computer mediated, networked, classroom community is established through the genre of this homepage. However, as Buckingham and Sefton-Green (1992, 1995) have pointed out, the content of student evaluations are highly dependent on the genre. Writing evaluations tend to address certain topics. Other forms of evaluations might be necessary in order to make the student address other aspects and attain holistic understanding. In an interview of Lisa it became possible to explore her perception of the experiment.¹⁵⁰ Lisa stated that she liked the homepage description of what they have been through in the experiments. In other words, she acknowledges the formative, evaluative function that the homepage and the journalistic group offers. She believes that a homepage is able to represent and communicate social and curricular-related processes simultaneously. Lisa also considers it important that others can see who the students are as private individuals.

¹⁵⁰ Cf. A17 for a transcription in Danish of a part of the interview.

10.4.4. Case 4, in general: *The literary-academic vs. the techno-semiotic paradigm*

As we have seen, Peter's evaluative comments to the journalistic group do not seem to appreciate the ability of the journalistic homepage. As John St. Julien would express it, he does not "web" (1997: 264) social and cognitive aspects of subject-related knowledge production. His evaluation of the experiment is interpreted in similar ways. Replying to the question: "Did the pupil-journalist group function and should we continue with it in the next experiment?",¹⁵¹ he offers some general thought about the pedagogy of the design of this experiment and even the design of experiment in general:

Yes, it worked very much. They have produced a very nice homepage, which was more technically impressive than in terms of content. However, they have with certainty not learnt anything about analysing H.C. Andersen fairytales, including the analysis of illustrations. I am not, generally speaking, positive towards the idea of a journalist group. In addition to the "gaps" they have in comparison to the rest of the class, then the separate journalist group complicates the role of the teacher somewhat. The written information can, when it works best, present the journalist group with a clear idea, timetable and so forth. However, there is not sufficient opportunity for them to receive help in the course of the process, without it being at the expense of the rest of the class and their planned course of events.¹⁵²

Peter argues that the experiment developed negatively and he wants to return to a pedagogy in which the teacher controls the teaching-learning process to a larger degree. Differentiated, student-based teaching and the integration of ICT should be marginalized. It also seems that he prioritises the teaching of literary analysis of fairytales and illustrations on behalf of students experimenting with multimodal mediated homepages on their own. Regarding the didactic of MTE/StLE (referring to Sawyer and van de Ven; cf. chapter 4.3.4, p. 143), this is interpreted as a teacher who wants to return to a predominantly literary-academic paradigm.

Empirical backing to this interpretation is found when observing Peter, not only in relation to this experiment and the intervention, but also in relation to other situations. In the following will be

¹⁵¹ [Fungerede elev-journalistgruppen – og skal vi fortsætte med sådan en i næste forsøg?]

¹⁵² [Ja, den fungerede i høj grad. De har produceret en meget flot hjemmeside, teknisk mere imponerende end indholdsmæssigt. Men de har jo med sikkerhed intet lært om at analysere H.C. Andersen-eventyr inkl. analyse af illustrationer. Generelt er jeg ikke så positiv over for ideen med en journalistgruppe. Ud over de "huller" de får i forhold til resten af klassen, så besværliggør en særskilt journalistgruppe i nogen grad lærerens rolle. Det skriftlige informationsmateriale kan – når det fungerer bedst – give journalistgruppen klar besked om ide, tidsplan mm. Men der er ikke i tilstrækkeligt omfang mulighed for at hjælpe dem i processen, uden at det er på bekostning af resten af klassen og deres planlagte forløb.]

found a reconstruction of a situation in which one of the journalists who had produced the homepage, David, was going to prepare another project together with some peers in class¹⁵³:

In a break, Peter consults three students who are planning a so-called SSO (SSO stands for *Større skriftlig opgave*; literally, ‘larger written task’, which they make in the second year of hhx, writing app. 15 pages. Students are allowed to work in groups and define, to a large extent, the task themselves). The group wants to write the SSO about a ”Danish” topic, they explain. The group is composed of one girl and two boys from the class: Sandra, Martin, and David. The conversation starts with Sandra saying, while Peter is listening, that she is trying to convince Martin and David that a book should be part of the analysed material. Martin objects. Sandra knows, he says, that “he has never read a book”. Peter laughs, so do I observing the conversation. Suddenly, David suggests, enthusiastically, that they could work with Danish movie director Per Fly’s manuscript for *Bænken* (a movie released in 2000 by Zentropa about lower class people – it has won several Danish and international film prizes). David knows that manuscripts are published, he says. Peter rejects this idea, talking it down. David has difficulties understanding this and so does Martin – both believe it is a good idea. In the end, however, they accept Peter’s refusal. The group leaves the classroom. A bit later, David returns. They have talked it over, David explains to Peter. Now they wish to work with adaptations of a novel. Peter gives a lukewarm reception of the idea, but says “okay” if the novel is foregrounded and “not the movie”, as he says. David leaves. I ask Peter what principles guide a SSO. He says that, in principle, they are quite wide, but he has decided that if students wish to write a SSO in his class, they have to write about literature no older than from 1980. Lowering his voice, he adds: “we want to avoid all those Stephen King-projects.”

It may be that Peter was tired, stressed, and busy or had other specific reasons for responding as he did in this situation. It may be that he was reacting quite logically. From the point of view of the model of multimodal media pedagogy this guidance is found to be problematic. It reduces some of the competencies that students may want to develop in relation to the rich variety of media, modes and genres in contemporary culture. David demonstrates what some academics (e.g. Jensen 2000) characterize as insight into *media convergence*. David is able to address interesting aesthetic mediated multimodal genres – the movie and its related manuscript – from a personal perspective. He is able to sketch an inquiry-based project which is situated in his own personal experiences and at the same time related to an acknowledged paradigm within the school subject, which we may term the communicative paradigm or perhaps even the techno-semiotic paradigm (cf. chapter 13, p.

¹⁵³ This is reconstructed from A41/Feltnoter fra Peter/26. oktober.

415). However, it seems that this student culture, media fascination and individual competence – Danish researcher Vibeke Hetmar (1996) would term it: *elevfaglighed* – in this particular situation is not sanctioned positively. Instead, a discursive power struggle takes place in which the literary-academic paradigm overrules a communicative/techno-semiotic paradigm. Peter guides the group of students into a text culture that the boys do not identify with. They identify with something else related to their life outside school. Considering David’s engagement in the homepage in this experiment and his career as a computer programmer outside school, his first choice for a SSO is not surprising. On the contrary, it is quite understandable.

The question is how far one may go in evaluating this event. As suggested, contextual aspects may have influenced Peter’s response in this particular situation and such aspects may very well weaken the transferability of this event. Other data found in his case clearly suggest that Peter has an *intention* to change his own practice towards multimodal media pedagogy. On the other hand, the event illustrates that intentions do not always match *realisations*. Also, it is found that this event could be interpreted as yet another sign that confirms the point that the literary-academic paradigm is quite dominant both at the meso-level of Peter’s case and on the meso-level of other teachers. In this regard it is found interesting to observe micro-discursive shifts that Peter uses in referring to his own individual opinion to a collective “we” when legitimising his refusal of David. It seems that his discourse is rooted in a logonomic system to ‘what is normally done’ at a macro level. The event proved just how much was created as an artificial quasi-experimental situation pushing the limits of Peter and the other teachers with this experiment and the intervention as a whole. Precisely because it was *not* related to the experiment/intervention it sheds light on the impact (or lack of same) of the intervention.

10.4.5. Case 4 – compared to cases 1, 2, and 3

If we compare, briefly and roughly, this analysis of case 4 with the other three cases, we find similar patterns, though not as clearly marked. The dominating pattern in the essays in all four cases is that we find the *appendix-like* structure with a clear hierarchy between the mode of words vs. images and literary approaches vs. visual and/or multimodal approaches drawing on a variety of media concepts.

The journalistic group in Susanne’s case 3 did a lot, but never reached the point of actually producing and publishing the homepage. The group stopped working well, members of the group blaming it on technological constraints at the meso school level and Susanne blaming it on the boys, including the wonder boy from experiment 2, Louis. From a strict product-oriented competence

view, the group did not meet the demand and was a failure. However, documents uploaded and evaluations clearly demonstrate that they produced a lot of potentially interesting multimodal mediated material about experiment 2.

The journalistic group in case 1 was the antithesis of the group in case 3. Danny and Mike were asked by the rest of the class to include a girl, so that they would stop acting as nerds! They did, with no problems, and made her help revise, improve and transform the homepage already designed. In a sense she worked professionally as a student-journalist in the age of a globalised network society: She went on a holiday during the experiment – this resulted in daily reports about media culture in the country she visited and responses to her peers about their work with the experiment uploaded on the homepage.

10.5. Conclusions and their limitations and implications

This brings me to my final conclusions considering the impact of the concrete experiment on local levels among teachers and students and, more broadly, how this impact or non-impact might help us reflect upon and potentially revise the model used for intervention. At the same time it is necessary to relate these conclusions to limitations in terms of methodology and implications for the design of the following experiment.

Considering the fact that a majority of the teachers did not find the experiment to open up for new perspectives on the teaching of “Danish” and Andersen, one could argue that the structure of the Available Designs was too loose. In another attempt with the same material and overarching goal of developing student and teacher ability to develop the competence to deal with mediated word-and-image fairytales, one should perhaps return to a more specified task and competence-oriented form known from the previous experiments. Less freedom of choice should be left over to teachers, if one wishes to move “Danish” and MTE/StLE in general towards a new perspective in terms of practicing and experimenting with semiocytic-oriented knowledge production. When writing MTE/StLE in general, this includes references to the potentials of working with illustrated work and other visual interpretations of other literary classics in other national contexts, such as Goethe in Germany, Dante in Italy, Shakespeare in English-speaking countries etc. If one wishes or dares to question the national(istic)-biographical construction of these authors within the mother tongue domain, one might consider whether non-national visual artists have interpreted the literary work in alternative modes and use this for comparisons in class. Doing this with Andersen was one of the positive side effects of this experiment acknowledged by many students and all the participating teachers.

Analysing the experiment, it has become evident that strong teacher conceptions of how a specific topic is taught, is a major contextual parameter. As we know from previous analyses, Jane was not particularly impressed by the suggested potentials of the intervention in general and experiment 3 in particular. We could blame this on the Available Designs not offering any new potential insights. As explained, the teacher in case 3 who was going to replace Jane going on parental leave – I call her Jean – had the opportunity to study the design of experiment 3 while it went on and found it quite radical. In fact, it made her consider pulling out of the intervention programme before even starting, but Jane (being loyal to the project) convinced her to try it out. It was expected that Jean's resistance would become an interesting part and perhaps a problem in experiment 4. Anticipating the analysis of experiment 4, Jean actually changed her negative view when she had time to study the material and started teaching it.

In Karen's case, the relation between means and ends, between Available Designs and the Redesigned, intention and realisation seemed to become more and more unambiguous the more the intervention went on – not least in Karen's own interpretation. As cited earlier, this becomes clear in her written debriefing to me, in which she argues, in a chatting, self-ironical and energetic style how experiment 3 had been one long process of revelation for her, both in terms of understanding the potentials of new topics, the teaching-learning process and the knowledge regime.

That she initially uses the word "quality" in her evaluation (cf. 10.3.1, p. 320) is interesting. Remember that in Karen's optic 'quality' is discursively connected to the 'Mouton Rothschild quality of Andersen fairytales', which is seen as a crucial parameter for the use of texts within "Danish". Disney is *not* quality, as she points out once again at the end of this evaluation, expressing her concerns about teaching animated Andersen fairytales in the fourth experiment. In her own words:

I am probably a bit fussy about H.C. Andersen: I think it is important that the original text is emphasized, without it being changed (you don't put sugar in a Mouton Rothschild either), and demonstrate a poor understanding for new interpretations [sic] – I may have a hard time in the last module – but it is the ludicrous Disney-mermaid that the pupils know – perhaps I'll get wiser.¹⁵⁴

This is not meant as a serious warning (as it was in the beginning of the intervention), but more like a self-ironical joke. Karen has become confident that this and the final experiment is bringing her

¹⁵⁴ [Jeg er nok noget pylret med H.C. Andersen: jeg synes det er meget vigtigt at den oprindelige tekst bliver sat i højsædet i uændret form (man kommer jo heller ikke sukker i en Mouton Rothschild), og viser ringe forståelse for nytolkninger – jeg får det måske slemt i sidste modul – men det er jo den elendige Disneyhavfrue, eleverne kender – måske bliver jeg klogere.]

and the students in class further in terms of producing valuable subject-related knowledge that is relevant for the purpose of developing the practice of ”Danish” – going *beyond* what is normally done. She ascribes this confidence, among other things, to the same repeated way the experiment is designed, arguing that this approach to a curriculum programme: “fulfils what we have wanted for years. Project work that does not end in dawdle.”¹⁵⁵

In general, Karen believes that we have now developed a design model – a so-called *columbusæg* – that caters for both the weak and the strong, making the strong stronger, but not the weak weaker. As we know from the analysis of case 2 in experiment 1, this is not necessarily so: Local culture and the teacher approach are important components too. The impact of the actual design of the learning resource is relative. Implicitly, Karen suggests the same point when she argues that teachers need to be trained continuously in order to maintain an explorative approach to the school subject.

This situated case-finding is encouraging, but not transferable considering the other findings. The dominant finding across the four cases is that the commitment of the experiment to foreground student competence to handle a mediated *relation* between words and images failed, more or less. On the other hand, the necessity of addressing this kind of teaching became clear. ‘Failure’ is probably the wrong word to use because the outcome is intimately related to a number of complex dynamic local constraints and potentials. It is more precise to argue that the word and image relation in Hans Christian Andersen’s fairytales in a Danish upper-secondary school context was interpreted locally in ways that produced a clear structural hierarchy between words and images, reproducing a well-known literary pedagogy that would not bring student or teacher competence to deal with this kind of material a lot further. On the other hand, a dawning reflection of potentials for doing so was found, as we see it most clearly with Karen. This dawning reflection is a very important first step in order to change practice in general at meso- and macro-levels, as suggested by contemporary researchers in organisational change such as Schön (2000), Engeström (2000), and the more general social semiotic theories suggested by Kress & Hodge (1998) and Giddens (1984).

Self-critically, one must question whether enough discursive space was allowed for critical reflection, both in-between teachers across the cases, between the teacher and students, between students and between teachers and the researcher. Reflection on practice seems to be an important asset of these intervention processes. I will defend the design of the experiment, though, in the sense that promising initiatives for creating this kind of critical reflection were embedded in the

¹⁵⁵ [opfylder det vi har villet/skullet i årevis. Projektorienteret arbejde, der ikke går op i lal.]

Available Designs, actualised and found productive: The homepages by journalists were one of the mediated arenas for this and different evaluative approaches – written and oral – were meant to prompt the same.

Due to time constraints, dialogue with teachers, particularly during and between this experiment and experiment 4 never reached any intensive level. In retrospect it would have been better to share more observations with the teachers and that teachers would have had more time to reflect together. This would have strengthened the credibility of analyses. But during the intervention and later, e.g. at the final meeting, when we were to meet and discuss the events, it seemed impossible to find the time and energy. The pragmatic order of the intervention and teacher reality inside and outside school made it impossible, not unlike other classroom based investigations. It is possible that the participating teachers will object to some of my interpretations of the observed processes of this experiment. My intention has been to present a holistic evaluation of an experiment and its subject-related perspectives from a critical-constructive point of view that can be recognised, if not acknowledged, by the participant teachers. I invite any discussion, hoping that I at least have laid forward data that others, including the teachers, can interpret and take a critical stance on too.

The *relevance* of addressing Andersen fairytales as in this experiment became evident while the experiment was being planned and carried through. First, Peter drew attention to a new book on the history of illustrated Andersen fairytales being published in Denmark (Borup Jensen 2004). I found it somehow encouraging that it was a former academic and active "Danish" teacher in upper-secondary education that had written the book. On the other hand, it clearly reinforced the words-above-images hierarchy. Secondly, a Danish Art Museum, Vestsjælland Kunstmuseum, arranged an exhibition during the 2005 anniversary year of H.C. Andersen that invited artists of any kind to interpret and experiment with "The Shadow" in mediated, aesthetic ways. This resulted in a number of works of arts using a rich variety of media and modes. Thirdly and finally – and this links this experiment with the fourth experiment – several animated versions of the fairytales were released and broadcasted on TV, such that images and sound were combined. In other words, the experiments we were struggling with, within the context of the school domain, seemed relevant to new developments in semiotic, artistic and commercial domains outside school.

Chapter 11. Experiment 4: Animations that move adaptations

11.1. Introduction

Animations (often referred to as cartoons) are one of the most promising areas of growth on today's entertainment market. Along with videogames, often converging with animation, it is one of the components of the so-called *creative economy* that is receiving a lot of attention these years from politicians, businessmen, programmers, education researchers, teachers, students etc. These people share a genuine interest in animation. Some are interested in making money, perhaps driven by the cruel assumption that citizens in Western societies have to find new strategies for competing with the cheap labour salaries of developing countries. Teaching and producing animations might be one of the answers to this problem. Others, like the student Gilbert who we are going to meet in this analysis, just enjoy watching animations and exploring the making of them, using a laptop while having boring "Danish" classes in school, without the teacher noticing it. Experiment 4 addresses such macro- and meso-potentials and problems of animations in contemporary culture, by adapting Andersen fairytales-as-animations from Disney's 1938 version of "The Ugly Duckling" to recent productions and an abundance of knowledge about animation to the classroom. The hypothesis is that these resources may move classroom adaptation locally in the four settings. Moreover, they may move our theories and models for teaching MTE/StLE.

11.2. Available Designs

11.2.1. Technological commitments

In terms of the instructive, self-made learning resources, it was easy to design the curriculum. Simple Word documents, perhaps even simpler than the ones designed for experiment 3, were produced and again uploaded on the LMS (cf. A20). They would be easy to edit and/or reproduce as hard copy compendium by the teachers, while computers and Internet connection would be required at school.

However, like in the previous experiments, additional topic-related resources produced by others had to be made available too, including Andersen animations. One of the concrete didactical questions to consider would be: *Which* animations to choose and *where from*? A large number of animated Andersen fairytales are available on the market, in libraries and, not the least, in "extramural" (that is, outside school walls) learning sites. These are both old and new, produced in

Denmark and elsewhere. Considering the emphasis in media pedagogical theory on the importance of new learning sites that motivate students, the latter would be an important resource to integrate and explore. For a start, we should note that resources are certainly there. In Denmark we find:

- The Danish Film Institute in Copenhagen (relatively close to where two of the cases are located) has developed a physical and virtual learning site for animation – paying particular interest to Andersen animations – that classes can visit producing their own animation in one day (cf. www.dfi.dk). So, instead of making classroom-based material available, one could choose to send classes off to this place.¹⁵⁶
- In Viborg, on the peninsula Jutland, relatively close to where the two other cases are located, we find The Animation Workshop (www.animwork.dk), which is a professional, internationally recognised school funded, in part, by the European Commission MEDIA programme educating animators for production. The Workshop offers tours for classes.

In terms of ‘situated practice’ and ‘transformative practice’ the media pedagogical potentials of visiting both places are evident. Nonetheless, it was not necessarily the easiest or, in terms of research, most interesting to exploit these learning sites fully. First of all, for pragmatic reasons, it was difficult to arrange a visit in collaboration with the teachers and more importantly, a whole day’s visit, particularly at The Danish Film Institute (DFI), would lead to a strong emphasis in the designed curriculum programme on the *productive side* of media pedagogy. This would in return remove focus from the *relationship* between production, analysis and theory making. The former is often found in primary school, while the latter, it is argued, is perhaps a necessity in an upper-secondary MTE/StLE context. These considerations eventually led to the following didactic design choice: It was arranged for classes to receive a 2-hour *presentation* by the DFI and The Animation Workshop – if teachers wished to prioritise this. As we shall see, two of them did, two did not.

In the design of the experiment, it was chosen not to suggest the teacher/classes a focus upon the most famous, best selling and, in a sociological and aesthetical perspective, very interesting Andersen animation, “The Little Mermaid” by The Walt Disney Company (1989).¹⁵⁷ Instead, two

¹⁵⁶ In 2005, the official Andersen celebration year, students would be able to visit the place and produce an Andersen fairytale using pre-designed digital props related to Andersen tales.

¹⁵⁷ One reason is copyright restrictions (cf. later); another is that I had been cooperating with researchers at my institute and teachers in upper-secondary education, in 2004, making a web based educational site focusing on Andersen, funded, like my PhD, by the Andersen 2005 foundation and distributed, during 2005, on the official Andersen 2005

DVDs released in 2005 with new Andersen fairytale animations (funded, in part, by the Hans Christian Andersen 2005 foundation, see vignette) were ordered and made available, in addition an older Disney production of “The Ugly Duckling” (1938) was also distributed in the groups.

The HCA 2005 co-funded animations were produced, in part, by an upcoming and very successful Danish animation company called ‘A. Film’, that recently produced the teenage blockbuster (at least in Nordic countries) called *Terkel i knibe* (2004). This company was preparing a cartoon movie called “The Ugly Duckling and Me” (A. Film 2006). Students would know the company and probably find the experiment ‘situated’ due to this reference. The DVDs are not open source material, but commercial and copyrighted material. Producer acceptance for free use over a limited time span was attained, due to research purposes – the DVDs were even given for free, understanding the potentials of spreading knowledge in education about animation. Normally, the DVD would cost around 20 Euros each and can be borrowed at a special library for teachers for a fee. In this sense economy was no constraint.



Figure 11.2.1.1. Cover of DVD with “Den Grimme Ælling”, 2005.

As one might guess from the front cover of the HCA 2005 DVD (see vignette), these animations are produced for a children’s audience. They were broadcasted, among other places, on *DR TV* during 2005, as part of the popular 6 PM children’s programming. The DVDs contain two animations each, approximately 20 minutes long, plus extra material (such as storyboards), being part of a series of Andersen fairytales. One of the animations was “Den Grimme Ælling” ([The ugly Duckling], Nordisk Film 2004). Analysing it as an adaptation of Andersen’s original fairytale, using Meyrowitz’ terms, we could briefly claim that there are similarities and also dramatic differences in terms of the *content* (such as plot, and lines), form (such as modal expression) and function (such as perception and distribution).

In order to contrast this contemporary Danish adaptation of Andersen fairytales, both in terms of technology, aesthetics and cultural and historical context of production and distribution, it was necessary to locate and make available a VHS edition of The Walt Disney Company animation “The Ugly Duckling” from 1938 (which is now available on YouTube). Aesthetically and

celebration site (www.hca2005.dk). In this project I contributed with a long and detailed designed curriculum focusing on the mermaid figure – from the antique *Odyssey* to Disney (cf. Arbejdsgruppe ved DIG 2005). Unlike in the PhD project, I know little of how it was used in actual teaching. It was a developing design project – not Design-Based Research.

multimodally, this 5-minute version is *without* speech, but *with* classical music. Indeed, this plays a dominating role, in that it changes the content, form and function of Andersen's ugly duckling discourse just as dramatically as the HCA 2005 version. In terms of copyright restrictions, this Disney version is on a video with other early 20th century Disney animations used only, as stated formally in the rolling titles, for educational purposes.

Clearly, this version was produced before The Walt Disney Company tightened its copyright policy to the extreme, not allowing, as Harvard Law Professor Lawrence Lessig (2004) has suggested, others do with Disney Co. as Walt Disney did with the Grimm Brothers, and we may add, what Disney Co. has done with Andersen.¹⁵⁸ Copyright constraints have been touched upon in the analyses of previous experiments. Lessig provides us with the best vocabulary for summing up the fundamental problem: Lessig distinguishes between a *permission culture* and a *remixing culture*. Disney Co. and other major commercial global media conglomerates create a *permission culture* instead of a *remixing culture*. From an educational point of view, a permission culture is not only a serious threat to and constraint of future multimodal media pedagogy that necessitates unlimited access to the teaching and learning of digitised and otherwise technologically mediated multimodal cultural resources found on the Internet and elsewhere (unless one wants copyright issue to be taught as the only topic, demonstrating a blank paper). A permission culture is also a threat to the new, networked creative economy and perhaps even a threat to personal freedom, in the Western World. In other words, a lot is at stake when reflecting on the constraints of material learning resources.

In the special case of this intervention, the copyright problem was highlighted but did not seriously sabotage design-based teaching (and research). The present researcher, the participant teachers and students attained permission, but only by avoiding the use of some of the most interesting contemporary cultural resources available in the market, such as Disney's "The Little Mermaid". The old Disney version could easily be borrowed for free at the teacher library. The required VCRs, DVD players, projectors and televisions are found in any classroom in Danish schools, so this would not become a problem either.

Another problem was related to the existence of the journalistic group. Again, the journalistic group would continue as an option in this experiment. The journalists were given the task of producing a product attaining the same level of multimodality as the object being studied by the rest of the class. In other words, they had to make a *film* and they were asked to do it in a format that

¹⁵⁸ Cf. Bo 2006: Michael Bo interviews Finn Gravesen, who refers to a parallel made by Lessig (2004), which Gravesen writes about in his own study on copyright and music in Gravesen 2006. Cf. also Benkler 2006.

could be uploaded to the Internet. Thus, copyright issues would become a constant challenge as it was stressed that anything they used in the film, including a soundtrack, should comply with copyright restrictions. Moreover, the journalistic group would need advanced digital equipment: Digital video recorders and software. Susanne, in case 3, had informed that her school had recently bought this kind of equipment and software for teaching Media Studies and she expected to apply it for this experiment too. She admitted not to know how to use the equipment, but expected that she would have time to find out in collaboration with the group. Teachers at the other schools had no such equipment at school and none of the teachers had this kind of competence. However, in Karen's class, Danny informed me that he had access to this kind of recording equipment and software on computers at home and knew how to use it, so he solved the technological problem, as seen before, in case 1.

11.2.2. *Epistemological commitments*

Considering Karen's expressed scepticism towards animations, we might initially take up the position of the sceptic: Is there *any* epistemological potential in teaching Andersen animations, be it by Disney or any other producer? Let us use Marshall McLuhan to explain that indeed, there are such epistemological reasons. In later sections we shall refer to other contemporary researchers reflecting on the necessity of teaching multimodal or 'multimedia' genres.

McLuhan is one of the founding fathers of not only Media Studies, studied and taught at tertiary university levels, but also Media education taught as a subject at secondary school levels. Strong arguments have been available demonstrating that multimodal mediated genres, consumed through new electronic technologies, serve as vital, everyday-entertainment configurations of social order and personal meaning-making and that this should be addressed in school. At least this has been the case since McLuhan's visionary speech on "Electronic Revolution: Revolutionary Effects of New Media" in front of a live audience of mother tongue teachers at the annual conference arranged by the American Association for Higher Education in Chicago in 1959. As McLuhan puts it, keeping the common student in mind – referring, more or less explicitly, to theorists such as Harold Innis, Claude Lévi-Strauss and Dewey – and prophetically anticipating insights by remediation and multimodality theorists:

(...) we have to regard our media as mythic structures, as massive codifications of group experience and social realities. And just as print profoundly altered the structure of the phonetic alphabet and repatterned the educational processes of the Western world, so did the telegraph reshape print as did the movie and radio and television. These structural changes in media myth coexist in an ever-live model of the learning

and teaching process. The changing configurations of this massive structure inevitably alter the bias of sight, sound, and sense in each one of us, predisposing us now to one pattern of preference, and now to another. (McLuhan 2003: 6)

While the model of multimodal media competence (cf. 4.4.1, p. 147) strikes out new paths in this sphere of research, it is obvious that McLuhan must be seen as one of the forefathers of the approach. In this 1959 speech he makes the often cited ‘*the medium is the message*’-statement, but as the quote demonstrates, he is much more refined than that. His arguments about the impact of new media on education, including new teacher and student roles, are breathtakingly contemporary. For example, he argues the following about *the teacher*, as if he was foreseeing the information age: “...the teacher is no longer the source of data but of insight” (Op. cit.: 10), hence stressing that the teacher is responsible for challenging students, forcing them into qualitative *Bildung* processes. He states the following about *the student*, as if he were foreseeing the digital culture of production and understanding a general principle of semiotics:

The fully motivated student is creative in his consumption and cognition. He is co-author and co-producer, so that the new teaching must increasingly cast the student in co-teacher roles. And, indeed, he is already potentially in such a position because of his vast intake of information in out-of-classroom experience, which is only in part shared by the teacher. (Ibid.)

One important difference between these quotes by McLuhan on the one hand, and contemporary theory about media and media pedagogy on the other, including my own position, is the objection to McLuhan’s techno-deterministic belief in the quick impact of new mediating technology on “our” social realities. This difference has a shift from structuralism to post-structuralism and from speculative to theoretically informed, empirical studies as its background. We now know that McLuhan’s determinism was overstated, at least in the context of formal schooling. It is definitely not confirmed by findings in the experiments analysed here nor is it confirmed on a contemporary global level (Buckingham & Domaille 2003).

One of the problems overlooked by McLuhan is the fascinating *familiarity* of the new multimodal electronic media. We are so familiar with massively distributed multimodal mediated *experiences*, since the advent of television, that we tend not to *reflect* on them as teachers and students, acknowledging their importance for meaning-making and cultural production. Animations are *familiar* to us, but need to be *de-familiarized* in order to be understood as ‘mythical’ patterns that profoundly change our ways of perceiving, understanding and productively communicating (about) reality.

Like McLuhan, and later Bill Green (1998; cf. 4.3.3, p. 140ff.), it will be argued that MTE/StLE is the proper, necessary *compulsory* school subject for starting this reflection process – not a vocational Media studies school subject. In MTE/StLE *everybody* gets the opportunity to meet and deal with aspects of the complexity of popular multimodal mediated genres. This makes it possible to deal better with this kind of meaning-making, receptively, productively, personally, collectively publicly and privately. The question is *how* we might be able to adapt this speculative argument to concrete practices, designed processes with curricular commitments with greater impact than McLuhan.

11.2.3. Curricular, pedagogical and social commitments

In general, the Available Designs in this experiment is informed by the model of multimodal media competence. Considering the process of knowledge production, the challenge would thus be to *situate* the practice of animation, offering *overt instruction* about it, enabling processes of *critical framing* and making *transformative student practice* possible. These abstract notions correspond quite well with early Danish research about the teaching of “multimedia”, including television, which will briefly be resumed in order to link the internationally informed model with theory from a more local Danish context.

Birgitte Tufte is the grand old lady of Danish media pedagogy, focusing on teaching TV across the curriculum in primary school (Tufte 1995, Tufte 1998). Her suggestion for a media pedagogical design is the so-called *zigzag model*, which evolves over three phases: 1) students start with productive-practical work, 2) attempt reflection on it, and 3) then return to production. There is no doubt that Tufte’s theory is echoed in the mix of curricular, social and pedagogical commitments of this experiment. At the same time, however, the theory is found to be relatively vague, particularly in its weak emphasis upon teaching conceptual knowledge. Tufte is an advocate of media pedagogy with a practical production tendency. Another problem is that she implicitly becomes an advocate of teaching *mass* media. Why mass media and not media in a more broad sense, including media for the few and media for your eyes only? The concept and priority of mass media is questionable in the age of a media and ICT saturated network society, as pointed out by contemporary media theorists.

In a Danish context, Media Studies professor Ib Bondebjerg (2001) offers a supplementary or corrective answer to this problem, suggesting a more conceptually or content-oriented matrix of media education, regardless of the school subject, level and topic being dealt with. His matrix for media education – suggested specifically in the process of writing the report about ‘*The Future of*

Danish' (UVM 2003c) – is four-folded and should include: A) media history, B) media sociology, C) media aesthetics (including language), and D) practical media production. This approach will be integrated in experiment 4, both explicitly and implicitly. For example, in Tool L, for step 4 (cf. tables below), these four concepts are addressed as part of the 'overt instruction' elements in the programme. Obviously, Bondebjerg's four aspects could be related to Buckingham and Domaille's four-folded conceptual framework or to Meyrowitz' triadic thinking. They could be questioned in terms of their 'media'-definition. This will not be done in this design of the material. One reason is power/knowledge-related: Bondebjerg is "...a prominent name" among "Danish" teachers in upper-secondary teaching, more so than Tufte and much more than international researchers. Drawing on Bondebjerg might make the participant teachers take this conceptual and indeed theoretical approach to animations seriously, hence increasing the possibility of integration of academic theory during the teaching-learning process, which was found lacking in the previous experiments.

Obviously, students would not be confronted with these reflections. This would only be the case for teachers in a teaching guide. Necessarily, students, in all four experiments, were confronted with 'simpler' presentations of the curriculum programme. In experiment 4, the overarching, explicitly stated commitment was signalled, among other places, in the title of the poster (tool A): "Animated Andersen Fairytales" accompanied by a logo. Another tool to be presented by the teachers explained that students were going to develop their ability to handle the complexity of Andersen animations and animations in general.

It was stressed from the beginning that the experiment would be explorative in the sense that students and teachers would be striving to understand how this kind of phenomenon could be understood and addressed productively and receptively. Class would have 9-10 lessons (of approx. 1 hour) for the experiment. In order to reach its didactic goal, the processual activities of the learning community would be controlled more than in experiment 3, hence returning to the more curriculum-oriented design found in experiments 1 and 2.

The *journalistic* group was given a task that would, indirectly, communicate the meta-level discussion of the development and relevance of the experiment. More specifically, they were asked to produce, as indicated above, a journalistic genre employing the same kind of multimodal mediated complexity as animations; that is, a film about the intervention focusing on experiment 4 to be launched on the official HCA 2005 website. As we shall later see, this created a serious conflict in terms of research ethics, pointing at some problems of the intervention methodology. The processual, meta-level reflection was assisted by the suggestion that, for each lesson, a student from

the main group would write a summary of what was going on, quickly uploading this on to the LMS.

The *main* group would be split up into *animation groups* working collaboratively with the challenge of understanding animations in a process going from production to reception to production, hence following the product-oriented principle proposed by Tufte. ‘Production’, however, would not imply the finished production of an animation. As explained in one of the tools made available (tool I), a “real” process of media production runs through three stages:

- Pre-production,
- Production,
- Post-production.

Students in the main group would only be asked to finish the pre-production phase, presenting and delivering a document about their pre-production plans in a draft version and a final version. In other words, students were asked to visualize a multimodal product in predominantly monomodal ways, that is, in words. In the process of doing this they would necessarily have to consider, in reference to Bondebjerg, historical, sociological, aesthetical and practical-productive aspects of media making in interrelating conceptual and practice-oriented ways.

Step	Name	Social Activity	Pedagogy	Curricular Knowledge Production	Meta group
1	Goal and content	Plenary work in classroom.	Situated practice, overt instruction.	Intro by the teacher referring to tools A-F (cf. below). Groups established. Step described in 1 page for LMS and/or paper.	Journalism group established and given its task.
2	Gain knowledge about animation	Group work presented, in closing, in plenum and on LMS.	Overt instruction, critical framing.	Groups search for and produce a document with knowledge about animation useful for step 3, using tool H. If possible, the class visits The Danish Film Institute or The Animation Work Shop as part of this step.	The journalism group works with its task. It can choose, in

3	Production I	Group work uploaded, in closing, on LMS and presented in plenum.	Critical framing, transformative practice.	Animation groups begin their work with a pre-production, using tools I-J. Continues in step 5.	cooperation with the teacher and peers, to share its processual work.
4	Analysis of animated Andersen fairytales	Plenary work.	Critical framing, overt instruction.	The teacher shows and presents an analysis of animated fairytales, using tool L and M, leading to classroom discussion.	
5	Production II	Group work uploaded, in closing, on LMS.	Critical framing, transformative practice.	Animation groups finish their work with a pre-production, using tools I-J.	
6	Student presentation	Plenary work.	Critical framing, Situated practice	Animation and journalism groups present their work. Each presentation is criticised: what was good, what was less good? Would it be realistic to actually produce the pre-productions?	
7	Evaluation	Plenary work, individual work and focus group interview with researcher.	Critical framing, transformative practice.	Taking plenary discussion as the point of departure, students evaluate the whole intervention project, the majority writing an individual essay and 4 students being selected, by the class, for a focus group interview with the researcher.	

Table 11.2.3.1. Steps of experiment 4. All steps are described in 1 page for LMS and/or paper. In all steps, a student should write a brief summary of the lesson uploading it on the LMS.

In order to make their pre-production *knowledge based* – hence following the logic of competence-oriented teaching – main groups would at an early point, have to produce, present, and upload a document containing knowledge about animation. The point of step 2 was precisely to raise the collective level of knowledge based reflection or multimodal media competence, in class – both among students and the teacher. To gain knowledge about animation was in itself addressed as a challenge, even in an academic context. Compared to other constellations of modes and media, animation is a new and quite unexplored phenomenon. It must be acknowledged that the phenomenon in Tool B was difficult to understand, complicating conceptions of how it might be taught: Little is written about mediated multimodality. Kress (2003) suggests this, admitting that he is able to explain a lot about the meaning-making logic of writing and images, but very little about the dynamic interrelationship of these modes moving together in film and video games.

In this sense students, teachers, academic and education researchers, including me as a design-based intervention researcher, are structurally in the same boat, exploring a new phenomenon at different levels. McLuhan has stressed that teacher *under-information* and student *over-information*

must to be taken into consideration when designing teaching-learning processes. Easy access to the best knowledge available is an essential prerequisite. We cannot expect the teacher to know much about animation. Perhaps nobody, in an academic context, can offer that kind of knowledge any more, particularly when we speak of a digitised phenomenon. Researching available knowledge about animation, it was found that this kind of knowledge is *decentralized* or according to Manuel Castells, *networked* (Castells 1996, Castells et al. 2004). Experts are people in animation ‘affinity groups’ (Gee 2003) found in specialized contexts, such as web communities on the Internet, in private animation schools and, expectedly, in “power user groups” in classrooms. The design of experiment 4 attempts to reflect this seemingly new knowledge reality, establishing what we might term *open* knowledge producing contexts with links to the information highway, to use Bill Gates’ cliché, in step 2 and later steps. Thus, students are asked to construct knowledge about animation in groups uploading their findings on the LMS. A visit to an extramural learning site such as *The Animation School* and *The Danish Film Institute* is simply part of this knowledge-producing element – which is again a part of the overarching curricular goal.

Ref.	Name of tool	Description of tool	Related step(s)
A	Poster	Shows the title of the experiment plus a storyboard picture from pre-released material for “The Ugly Duckling and Me” by A.Film. 1 page for LMS and/or paper.	1-7
B	Short presentation	Describes the goal and process of the curriculum programme. 2 pages for LMS and/or paper.	1-7
C	The programme – step by step	Describes the steps, their main goal, and the allowed time. Informs that a visit to an “extramural” learning site can be arranged. 2 pages for LMS and/or paper.	1-7
D	The animation groups’ task	Describes the goal of the animation groups. 2 pages for LMS and/or paper.	1-6
E	The journalists’ task	Describes the goal of the journalism group. 3 pages for LMS and/or paper.	1-6
F	Check list for student products	Offers an overview of the products students have to deliver in the process of the curriculum programme. 1 page for LMS.	1-7
G	Handbook on film production	Pdf from the homepage of The Danish Film Institute explaining, in words and images, basic concepts for film and animation making for students. Several pages on LMS and/or paper.	2-5
H	The information highway to animation	Link collection referring to 1) the feature of the journal <i>Ekko</i> on animation from 2004 (www.ekkofilm.dk), 2) The Danish Film Institute Handbook on film production (cf. tool G) and its other resources about animation (www.dfi.dk), 3) The homepage of the Animation	2-5

		House, which includes a web based course on how to produce animations (www.animationshuset.dk), 4) The link collection of The Animation Workshop, leading to a rich variety of resources on the Internet (www.animwork.dk), 5) a reference to a dictionary defining animation. Pages <i>in legion</i> .	
I	How to make a pre-production for an animation	Describes the three phases of producing an animation, focusing on how to make a pre-production. Refers to tools J and K. 1 page for LMS and/or paper.	2, 5
J	Template for pre-production	Template (inspired by tool G) that has to be filled out by the animation groups, containing the following categories (defined in explanatory notes): Production company, title (of animation), genre, fairytale source, idea, plot, characters, manuscript, character drawing and public relations. 2 pages to be extended for LMS and/or paper.	3, 5
K	Example of pre-production plan	Uses A.FILM pre-released material (words and image) to exemplify how a pre-production can be made. 1 page for LMS and/or paper.	3, 5
L	Three media analytical approaches - for animated Andersen fairytales	Instructive document taking Ib Bondebjerg's matrix on media education (focusing on historical, sociological, and aesthetical aspects of media) as the point of departure for a teacher presentation and classroom discussion about animations, and Andersen animations in particular. Working questions suggested. 3 pages for LMS and/or paper.	4
M	DVDs and VHS	Animated Andersen fairytales made available on DVD (Egmont Imagination et al. 2004) and VHS (The Walt Disney Company 1938).	4

Table 11.2.3.2. Tools in experiment 4.

11.2.4. The integrating commitment

As suggested in the title, the analysis of this experiment demonstrates how ‘animation moves adaptation’. Each of these words has several layers, which will be sketched in the course of explaining the integrative commitment of the design.

Anticipating the analysis in the next section of the Designing processes, it was observed that a group of boys from case 2 (the new teacher, Jean’s, class), in preparing a power point presentation, would offer knowledge about animation for the classroom community. They cite an editor of a web article from the magazine *Ekko*, published by The Danish Film Institute claiming, in a popular tone, that “Animation moves”. Aesthetically, this is true: Animations are *moving frames*, like movies and drama, making it a dynamic and highly complex multimodal design requiring advanced multimodal media competencies in order to be understood. But there is more to it. The students suggest that animations are part of everyday media pleasures among children and young people: They are *moved by* animations – it is an important part of their everyday semioc process. This includes the economical attraction: Hhx students *move towards* animations simply because it is part of the fastest

growing economies in the world, exceeding the film industry (as reflected in one of the articles linked to in Tool H).

For the same reasons, the mother tongue subject in hhx should move towards animation. The integrative commitment of experiment 4 is that, in the process of adapting animated Andersen fairytales to concrete teaching, this will lead to the development of multimodal media competence, integrating personal formation, civic preparedness, and market preparedness (personal life, civil life, work life). Theoretically, the experiment integrates *meaning-making* and *money making* for the best of the individual and collective society. The intention of *hhx*, now and then, is that the profile of all school subjects – including ”Danish” – should move towards aesthetical-economical *Bildung* (cf. 6.1, p. 191f.). It is underlined, in the reform text of the new upper-secondary education that ”Danish” should pay more attention to media and communication, including ICT, acknowledging the new demands of the media-saturated knowledge society, in which Western societies can only compete through productive creativity and high-level competence.

What about adaptation, then? Semantically, the word adaptation has at least two functional meanings in two different domains. We can speak of adaptation in a media theoretical sense. Adaptation then, is a type of ‘trans-mediation’ (cf. 3.2.2.2, p. 61), ‘remediation’ (Grusin & Bolter 2000) or ‘remixing’ (Lessig 2004), referring to the process of, say, using an Andersen tale to produce an animation. And we can speak of adaptation in a pedagogical sense referring, as The New London Group among others do to the use of learning resources used in a teaching process, in which agents produce new meaning by transforming the Available Designs into Designing and the Redesigned due to local perspectives, including teacher conceptions and student interests.

From a subject-related didactic point of view, the connotations of animation and adaptation have not been allowed to meet and integrate functionally in a context like “Danish”. Instead, they have *disintegrated*, keeping animations and similar contemporary, mediated multimodal and popular electronic genres out of the mother tongue classroom. As committed researchers and teachers engaged in preparing students for the demands of future society, we must insist on trying to get them back into the classroom. From a design-based research point of view, hence, the goal is precisely to engineer and explore a situation, in which the two meanings of adaptation *can* potentially meet. This exploration might *move* our didactic conceptions of the school subject: its how, what, and why. Working on Shakespeare with other researchers and teachers from a British context has demonstrated that it *can* be done (Durrant & Green 2004; Grahame 1991). However, they offer very little empirical evidence of what actually happened in classrooms and how teachers

and students perceived it. Hopefully, the following analyses of the Designing and The Redesigned offer deeper insight into this.

11.3. Designing

Like in the previous analyses, we begin the analysis of the Designing processes by foregrounding how teachers and students perceive working with the Available Designs, drawing on data in which they evaluate the process in writing. This is later related to and to some extent contrasted with designer-researcher perceptions based on participant observation and field notes, among other data sources.

11.3.1 Teacher perceptions

The evaluative scheme that was handed over to the participating teachers in this experiment contained questions both about experiment 4 and the intervention as a whole. In this section we will only focus on the answers referring to experiment 4. Later in chapter 12, we will analyse the answers referring to the intervention as a whole and compare these data with other evaluative data from teachers and students reflecting on the intervention.¹⁵⁹

One point that all four teachers agree on is that the goal of the experiment is too ambitious. Once again, the designer-researcher, it seems, has not been sensitive enough about the local culture in which he intervenes. Peter formulates it as follows: “It looked exciting, but seemed unrealistic in regard to the allotted timeframe.”¹⁶⁰ Describing the process of going from one step to another, he observes that the students became increasingly stressed and disengaged. Peter explains that there are two reasons why the experiment is too ambitious for students. First of all, the time frame is too restricted. This is related to the second point, namely that the conceptual and theoretical level of the learning resources was too high. This was particularly evident in the description of the experiment goal presented to students.

Similarly, Jean – the new teacher in case 2 – points out as her first comment that the experiment was: “...exciting, but initially confusing.”¹⁶¹ Jean’s perception may be influenced by the fact that she had the same beginner’s problems as the other teachers had in experiment 1: understanding the design of the curriculum. Like the other teachers she also experiences that students have preliminary problems of understanding activities and goals. In an adaptive way she decides to

¹⁵⁹ I received the four evaluations from Karen, Susanne, Jean, and Peter immediately after finishing the experiment and without problems (cf. A46).

¹⁶⁰ Cf. A46. [Det så spændende ud, men virkede urealistisk i forhold til den afsatte tid.]

¹⁶¹ Cf. A46. [spændende, men forvirrende i starten]

prioritise some aspects of the designed curriculum instead of others and finds that students become more engaged as the experiment develops, particularly in the step in which they are asked to work productively-creatively with the task of making a pre-production. Karen and Susanne experience something similar.

Karen, Susanne and Jean explicitly answer “yes” when they are asked whether the experiment opens up for new perspectives on teaching Andersen and teaching “Danish”. Peter does not answer these two questions, which may be an accident. Considering his other elaborated answers, it seems that he agrees. However, like in evaluations of the other experiments, he and the other teachers find that there is a discrepancy between what *they* think about the experiment, its potential positive implications for the teaching of Andersen and “Danish” and what the *students* may think.

In general, the teachers are surprised at how little students actually know about animations. On the other hand, they all acknowledge the importance of students being productive, in spite of what they had expected. They had a hard time pointing out what it is, precisely, that is good about production. But they all observe that students became quite engaged when making pre-productions. Peter expresses scepticism about whether productive approaches marginalize conceptual knowledge production.

11.3.2 Student perceptions

When referring to student perceptions, we refer to essays that students write about the experiment and the intervention as a whole, as the final step of the experiment.¹⁶² Here it is only necessary to draw out a few findings made when studying those collected essays. In later sections of this chapter and in chapter 12 further analyses of the student evaluations will be presented.

It is a dominant pattern across all four cases that students find experiment 4 the most interesting and relevant. This experiment is perceived as both something *new* and *relevant* by a majority of students writing the essay. A majority of students describe quite thoroughly and elaborately what the goal of the experiment was. This contrasts teacher scepticism about whether students were able to understand the theoretical level found in the experiment.

The students’ relatively positive perception of this experiment should, however, be critically evaluated in a longitudinal and contextual perspective considering perceptions of previous

¹⁶² Cf. relevant folders in A44. Far from all students handed in their essays to the teacher. In case 3 (Susanne’s case) I was able to collect 5 essays, I collected 11 from case 2 (Jean), 14 from case 1 (Karen), and 21 from case 4 (Peter). The lack of data weakens the trustworthiness of the findings.

experiments also. This becomes clear if we focus on how students perceive the time pressure. For example, compare this evaluation of experiment 4 from the student Signe in case 1:

Experiment [4] was the most fun. It was a wholly new subject and something we otherwise would not have had in class. I think it is a good idea that teaching ought to follow developments in literature – currently, it is not images, but cartoons that we connect with fairytales. It has been a positive experience to make one’s own “story board” – that it is not nearly as good as what is made professionally is a different issue, The course of events demonstrated that one does not need to be trained or good at drawing to disseminate one’s own interpretation of things. It was a good idea to go to Viborg to see *The Animation Workshop*, before we began the work proper. However, we could have included more analysis, symbolism and such things in the experiment, since the whole thing was technically conceived with analysis of the camera and so forth. In terms of planning, this experiment was well planned.¹⁶³

... with this evaluation from the student Al in case 2:

...many found animation far more exciting than in the previous experiments. Especially the visit at *The Animation Workshop* helped capture student interest. There was too little time here however – from the beginning it became clear that the groups would not be able to complete their work in pre-production, which easily could have resulted in lesser engagement.¹⁶⁴

The difference and diversity, in terms of perception, is quite remarkable in these two quotations. Indirectly, Signe makes a comparison with the previous experiments arguing that the design of this experiment, including the timeframe, was good *too*. Most of her peers in this case agree with her positive perception. Al makes a comparison too arguing that the three previous experiments had not been very exciting, but that this experiment was better. However, he stresses that the time pressure influenced students negatively. I find similar opinions expressed in other essays collected from this case. Al is generally quite critical about the intervention.

Comparing these two specific student evaluations, it almost seems as if they refer to two different worlds or rather: two different interventions. Theoretically speaking, the intervention including experiment 4 is adapted quite differently in the two local cultures and the local agents interpret them quite differently. Relatively speaking, Signe’s perception of the experiment is a

¹⁶³ Cf. A44: Karens case, Elevevaluering (stile). [Forsøg 3 [=experiment 4] var nu det sjoveste. Det var et helt nyt emne og noget som vi ellers ikke ville have haft i undervisningen. Syntes det er en god tanke at undervisningen burde følge udviklingen i litteraturen, i dag er det jo ikke billeder men tegnefilm vi forbinder med eventyr. Det har været godt at lave sit eget ”Story board” at det så ikke kan måle sig med de professionelle er en helt anden snak. Forløbet viste også at man ikke behøver at være hverken udlært eller god til at tegne for at formidle netop din fortolkning af ting. Det var en god ide at tage til Viborg og se animations huset inden vi gik i gang med det rigtige arbejde. Dog syntes jeg godt der kunne være mere analyse, symbolik og lignende i forsøget, da det hele kun var teknisk anlagt med analyse på kamera og lignende. Dette forsøg var tidsmæssigt også godt planlagt.]

trustworthy account of student perceptions in case 1. Clearly it is not a trustworthy account of case 2. The credibility of the two perceptions is good, but the transferability in-between the two cases is weak.

11.3.3. Designer-researcher perceptions

In this section it will be analysed how observation was conducted in the Designing process, hence how triangulation and construction of the process appeared from a third perspective, namely that of the designer-researcher. The analysis is primarily based on my 14 visits at the four schools, which lead to approximately 20 hours of participant observation of the classes (including accompanying two of them on their visits to the Animation Work Shop during experiment 4).¹⁶⁵ We will begin with a general analysis of how teachers and students were observed to adapt and interpret the learning resources at an early stage of the process. After this, there will be a focus on data, which *contrasts* the knowledge production processes at different learning sites: First, at the learning site outside school and secondly, at school, in group work and in plenary work.

11.3.3.1. Semiotic resources, local complexity and change

Even though the ICT based semiotic resources appeared similar and were to be used the same way as in previous experiments, teachers still fought to make them teachable and learnable, not only for students, but for themselves. This is how teachers and students perceive it (cf. above), and this is how it was observed. Using the vocabulary of multimodal media pedagogy, the commitments of the *semiotic resources*, once again, hit the complexity of local classroom culture. Using the well-known concepts of *intention/realisation* in education research (cf. e.g. Malmgren 1992), some intentions embedded in the Available Designs seemed easy to realise, whereas others caused major difficulties. One can discuss whether adaptations were productive or counterproductive, which is an important part of the empirical dimensions in this study. In the following I will detail it further.

The ideal situation, one might expect, would be that all teachers had studied every semiotic resource in advance. Observations suggest that they had not. All teachers declared that they had trouble finding time to read the documents so as to attain an overview of the whole programme; receiving the material weeks in advance was not enough.

¹⁶⁴ Cf. A44, Jeans case, Elevessays. [(...) mange fandt animationsarbejdet langt mere spændende end de foregående forsøg. Især besøget på Animationsværkstedet var med til at fange elevernes interesse. Dog var der her alt for lidt tid – fra starten lå det klart at grupperne ikke kunne nå at færdiggøre deres arbejde med præproduktionen, hvilket nemt kunne have medført et mindre engagement.]

¹⁶⁵ Like in the previous experiments, my data from the Designing phase are field notes (A42) backed up by a research log (A24), audio and audiovisual recordings and document collection.

Karen explained the problem in a refined way¹⁶⁶: She slowly acknowledged the difference between the normal, non-experimental procedure of using her self-produced material, taking an engaged idea of her own as the starting point and the experimental procedure of using material coming from the outside. She would be more hesitant towards external material, not only because it was unfamiliar to her, but because it was not her own invention. It was expected, before the beginning of the intervention that it would be easy to adapt another person's designed programmes. On the contrary, it took more time. She expected that if I came back after she had taught the material three-four times, she was convinced that she would use it in an expert-like way. In a sense, she was explaining the difference between a *Bildung* and a curriculum approach (Westbury 2000), emphasizing the tradition and importance of teacher reflexivity and control within a German-Nordic context. Also, she was, methodologically speaking, explaining organisational problems related to design-based intervention studies and the limited trustworthiness of the observations made. What is reconstructed as 'outcome' is clearly co-constructed by the context of the intervention.

At the micro discursive level, the *specific words used* in the Available Designs could cause problems; pointing at too abstract or at least demanding academic discourse and biases of the intervening designer/researcher. Words like "media aesthetical" and "media historical" used (in tool B) for describing "the aim" [målet] of the experiment was observed to cause problems in Peter's class. Observations back up the perceptions expressed in teacher evaluations. Peter also argued that there were too many "can do"-formulations addressing the students. Students should be told what they "should do", he argued.

But there were also many exceptions – often expressed by students – that would test the credibility of these findings. For example, in Karen's class, several students explained that they "had no knowledge at all" about animation and thus found the topic *challenging*. Students in Peter's class on the other hand, had already gained specific animation competence because they had worked with the topic in primary school or in other school subjects in hhx, like "Design" or "Media studies" [Mediekundskab]. Thus, the suggestion that students in general found the experiment too demanding is problematic. Rather, the only credible finding that we may suggest regarding student competencies related to animation is that teachers should expect that young people have already gained informal animation competencies and, more generally, multimodal media competencies: These being quite diverse, spanning from novice to expert levels.

¹⁶⁶ Expressed in a small interview made with her in a bus when her class was going to The Animation Workshop, and also repeated in the film made by the journalists; cf. A1

This diversity, in terms of competencies, was anticipated and reflected upon in the Available Designs of experiment 4 (cf. tool D). It was made explicit that the teacher, in collaboration with the class, should attempt to compose animation groups such that they could draw on different student competencies. Group competence would be dependent on individual topic- and knowledge-related competencies among students and their competence to work together. The same principle had been embedded in other types of group work in the design of previous experiments, including the journalistic group.

Peter tried to actualise this principle in experiment 4 and had success doing it. Here is a reconstruction of the first lesson in experiment 4 in case 4, illustrating several of the themes mentioned above (cf. A42, Peter, 16 November 04): Peter displayed and read aloud the 1½ page introduction – from the LMS through a projector onto a screen – spending quite some time asking students what they thought words like ‘media aesthetical’, or even ‘animation’ meant, then listening to the responses and, finally, trying to explain how he understood them. The majority of the students in his class were quite enthusiastic about the experiment due to the topic. Not surprisingly, they had daily experiences with animations, but they also expressed difficulties conceptualising their experiences. Peter suggested that the class should return to basic concepts of animation, both practically and conceptually, during the process of experiment 4. He then established five animation groups. (There would be no journalism groups; he ruled out this option without mentioning it and the work in experiment 3, with the classroom website, would not be continued). Students with specific animation competencies and artistic competencies (due to the storyboard task) were actually found, within the group of students, and Peter managed to spread them out in different groups. Some students protested this grouping strategy due to social intrigues, but Peter overruled this, arguing that they should “...stop acting like babies”. At an upper-secondary level, he argued, they had to learn to cooperate in order to solve a task; that was the reality of life reflected by the demands in the new upper-secondary reform.

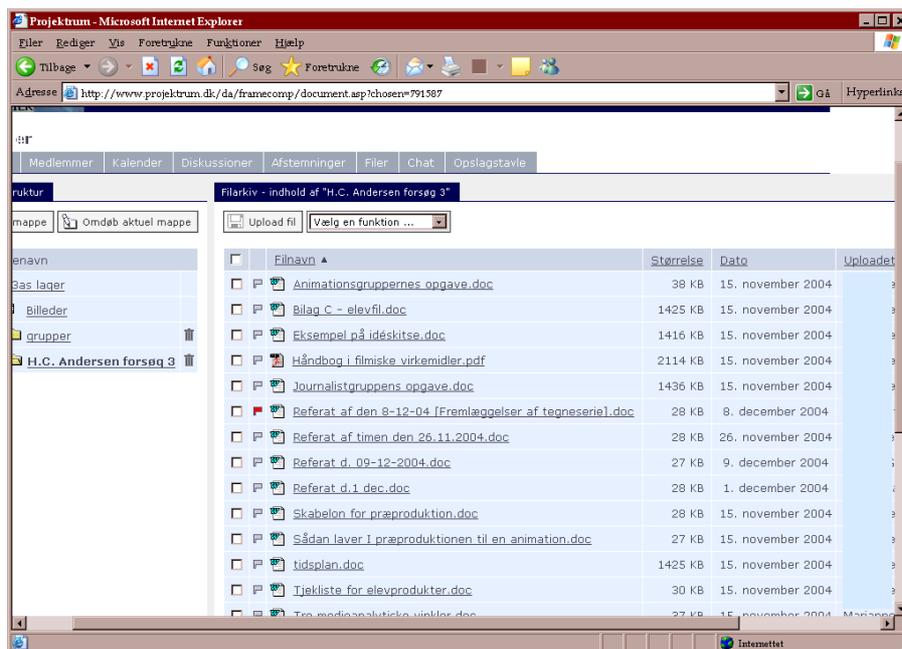


Fig. 11.3.3.1.1 Screen shot from the LMS of case 1 (Karen's class) during experiment 4. Files displayed in the middle are from the active folder "H.C. Andersen forsøg 3". (The experiment is numbered as "3" because experiment 1, in the development project, unlike in this dissertation, was named "Pilot project"). Above this folder, you find the folder "grupper" ('groups'). Here, student groups had their folders, with their names, for uploading and sharing material.

As in the previous experiments, Peter chose to supplement the digital files with a paper compendium. This was a good idea in that it seemed to help a majority of students in his class (who had earlier complained about the one-sided use of the LMS) getting a better overview.

Karen (case 1), not surprisingly, did no such thing and none of the students in her class longed for it, although they initially found the full experiment as presented on the LMS, with its 13 uploaded files plus extra files, including student summaries of lessons (cf. figure 11.3.3.1.1), a bit overwhelming in the start. The situation was similar for Susanne's case.

In case 2, Jean chose yet another strategy, which was similar to the one used earlier in terms of making resources available or not available: She uploaded a fraction of the documents onto the LMS at a time, arguing that it would "kill" the students if all documents were uploaded once and/or presented in a compendium. Thus, the digital folder of experiment 4 in Jean's LMS would be conspicuously empty compared to what we see in figure 11.3.3.1.1.

Jean's strategy was related to the class being infamous at school for performing at a low level, many having disciplinary problems and expulsions occurring. Although this was suspected, Jane had never mentioned it; on the contrary she had interpreted the behaviour of class as a creative, non-authoritarian competence in and of the class. This was contrasted, now, by Jean's more critical

conception: She presented me class grades during the latest grading session showing that students, in general, performed well below average. Somehow, it made sense in relation to my observations regarding the rather serious disciplinary problems affecting knowledge production in previous experiments. On the other hand, the evaluative status of such data is uncertain, but this issue will crop up again in the concluding part of this chapter.

11.3.3.2. *Producing knowledge at new learning sites*

As explained earlier, teachers were informed in advance about the possibility of visiting either *The Danish Film Institute* or *The Animation Workshop*. Two teachers – Jean and Karen, in Jutland – prioritised this. For different reasons Peter and Susanne did not: Susanne’s explanation was that there was no economical backing from school. Peter argued that it would imply “...too much at the same time”, referring to the complexity argument reflected in the analysis of previous experiment. The credibility of Peter’s argument is weakened, though, by perceptions found among students. Several boys from the class suggested in the first lesson of the experiment that it would be interesting to visit such a place. One of the boys knew the name and place of one of them. Peter would not change his plans though. From a pragmatic point of view, he *could* not. It takes time to plan a visit to an informal learning site and he had made his didactic choice in advance.

Nonetheless, two classes did visit the Animation Work Shop. The dominating impression is that these visits represented an important learning resource and co-contributed to the process of knowledge production. In the most general sense, the visits situated, to use the terminology of The New London Group, the goal and practice of the designed curriculum, offering students untraditional “hands on” experiences and knowledge that would enhance their knowledge-based competence to deal with the given task of producing their own 5 minutes presentation about animation and a pre-production plan. During the visits, several interviewed students applauded this potential, arguing that the visit was “useful”. Several students contrasted the visit with the well known category of “traditional teaching”, which, in this context, had *negative connotations*. As Sven, from case 2 puts it in an interview *on location* at The Animation Workshop campus¹⁶⁷:

Sven: I like to get out and see these kinds of things, and it seems more relevant, that is, it is something that I can use in school, instead of when we travel where

¹⁶⁷ In the interview, Sven is making references to the fact that this class is an International class travelling a lot. He is also making references to ‘people’ meaning students in his class; and he is referring to a presentation we had listened to, at the campus, by its creative director Hanne Pedersen, who had explained a little bit about how to make an animation. Transcription norm: cf. chapter 1, note 5.

there seems to be so much, well, then we go see a beer at, what's it called, the brewery, and many of us will not be using that for anything

Nikolaj: no – but this is more related to the purpose of the course (question)

Sven: yes – and if we like, when we make the storyboard, use some of the things she said, how to make it instead

Nikolaj: I thought it was quite fun with the things she said, right (question)

Sven: Yes, because it was stuff that I didn't know

(...)

Sven: I think people think it's relatively exciting if they have to do something about animations and then try to do or perhaps even become interested in what is actually going on

Nikolaj: yes

Sven: because then it's a bit different from regular "Danish" classes

Nikolaj: which is what (question)

Sven: slightly boring, where you sit and work on the basis of what you must do, perhaps making a presentation or something

Nikolaj: yes

Sven: that is pretty much what goes on

Nikolaj: yes

Sven: whereas here you are permitted to draw even though you aren't any good, but you are allowed to use your imagination, it's not an exact science, so I think people would rather do this, or, that is why they want to do this¹⁶⁸

¹⁶⁸ [Sven: jeg kan godt li at komme ud og se sådan noget her, det synes jeg også det er mere relevant, altså, og det er noget jeg kan bruge i skolen, frem for, når vi er ude og rejse, så er det meget, jo, så er vi ude og se en øl, hvad hedder det, på bryghuset, det er jo ikke lige det der er så mange af os der kommer til at bruge / Nikolaj: nej – men det her er sådan lidt mere relateret til formålet med forløbet (spørgsmål) / Sven: ja – og hvis vi sådan, når vi skal lave det der storyboard, der kan vi bruge noget af det hun sagde, hvordan man kan lave det i stedet for / Nikolaj: jeg synes det var meget sjovt, nogle af de ting hun sagde, ikk (spørgsmål) / Sven: jo – fordi, det var sådan noget, det vidste jeg ikke (...)jeg tror folk de synes det er forholdsvis spændende hvis de skal lave sådan et eller andet om animationer og så prøve og, selv sætte sig til og, måske endda få interessen for hvad det egentlig er der sker / Nikolaj: ja / Sven: for så er det lidt anderledes end den der normale danskundervisning / Nikolaj: som er, hvad (spørgsmål) / Sven: lettere kedelig hvor du sidder, får en tekst, og arbejder ud fra det, og måske skal lave en lille fremlæggelse eller noget / Nikolaj: Ja / Sven: det bare sådan, det er jo egentlig meget det der sker / Nikolaj: ja / Sven: hvor her får du lov og, tegne og, selvom vi kan ikke finde ud af det, men du får lov og prøve og bruge din fantasi og, der er ikke sådan et eller andet der bare, sådan er det og – så det tror jeg egentlig folk hellere vil, eller, det er derfor de gerne vil det her.] Cf. A21.

Roughly interpreting the interview, Sven experiences that the resources made available, including the visit and the demand of the experiment are tied together and make sense to him and his peers. The experiment constructs a kind of "Danish" teaching unlike what is usually experienced as "boring". He very much likes the creative-productive side, allowing space for "imagination", instead of a master interpretation by the teacher of a given literary "text". As suggested in the previous section, Sven's opinions were confirmed by many students in the two classes visiting this new learning site outside school in later student essay evaluations; although it should be added that some were more sceptical about the relevance than others.

But what was it, more specifically, that was 'useful' for the students? As observed, the students were confronted with at least three knowledge-producing aspects during their visit, which they could use in the sense that they could link them both to formal schooling and their lives in domains outside school: *de-familiarization of modes and media*, *authenticity*, and *media globalisation*.

11.3.3.3. *De-familiarization of modes and media*

As we know, one of the dominant modal hierarchies in "Danish" as a school subject is words-above-images. This modal hierarchy was clearly turned upside down in this setting. The structure that faced us all looked more like this:

Image

—

Word

It became quite clear as the students walked around on school guided by its creative director, Hanne. Hanne brought us to student rooms with young people making drawings for animations *in hand* from the first year and *on computer*, in 2D and 3D digital representations, the following two years. Images, storyboards, pictures were hanging everywhere on the walls. We stepped into a classroom, in which a teacher from Lithuania tried to teach students how to draw and animate *motion* playing and replaying the same video sequence of a man throwing a ball. We visited drawing offices where students exercised life drawing: A lot of nude pictures were hanging all over, which made students respond instantly, typically with jokes and laughs and some girls wondering, seriously, whether they could get a job as a life model: as in experiment 2 (about orality), social norms about bodily expression were transgressed and contested, but in an acceptable and safe way

due to the classical aesthetical-educational context. In a way, this little event in itself was a *Bildung* experience connecting an ancient aesthetical genre from the old Greeks with student personal identity formation. All generated by the fact that we were walking around on the campus of a top modern animation school where the visual was the first and foremost *mode* to handle competently if one wished to produce animation storytelling, regardless of the medium.

Interestingly, though, something else came before the visual competence, as Hanne explained. Her explanation points to a potential integration of pedagogies and *Bildung* perspectives within MTE/StLE. To be able to make a drawing of, say a character was not the point of departure for animation. This was rather the *plot*, which would imply all aspects of the animation. Students on this school should be able to retell the plot – that is the relation between the beginning, the middle, and the end – in no more than four lines. This plot, Hanne argued, would be related to the modes and medium of an animation. Essentially, Hanne explained what is taught in "Danish" classes when analysing a literary novel or a short story, emphasizing Aristotle's classical insight about narratives in *Poetics* (Aristoteles 1993; cf. 3.1.2, p. 45ff.). In this sense, media pedagogy and literary pedagogy were integrated in the words of Hanne, referring to concrete practical production. Indeed, it was demonstrated in some of the student-produced animations presented to us.

It was my impression that this emphasis on the plot and the visual was, at the same time, a familiarizing and de-familiarizing experience for the commercial upper-secondary students and the teachers silently walking along observing and listening. Both parties would learn from it in a subject-related didactic sense, experiencing and reflecting on the integrative commitment of the experiment. Several of the students expressed a painful awareness of their own pre-production task that they would never be able to draw as well as these semi-professional students did. Hanne reflected on this, arguing that everybody could draw and had been able at some level, in early childhood. The problem was that, during formal schooling, students were slowly taught to forget this competence. So they would have to re-learn and transgress their own self-conceptions. In any case, students did not have to be expert drawers in order to become a part of an animation production. Connecting to upper-secondary student competencies she underlined that the process of adaptation, taking Andersen as a point of departure, is a reflexive process, in which writing competence – describing the plot and other things in a pre-production – is essential. In other words, it is the combined multimodal media competence that is required when making animations.

11.3.3.4. Authenticity

This brings us to student experiences of *authenticity* catalysed through these visits. One aspect of authenticity was, of course, that the visit was useful for the student task. But another aspect would be if the visit connected to personal expectations and experiences in private life among students and how they might use and transform this in the handling of the demand in formal school.

Karen's class was the first to visit the school. I joined the class during the bus ride and had a chance to interview students before reaching The Animation Workshop. One of the student interviews is transcribed (cf. A22). In the interview, an attempt is made at relating students to the visit with the goal and plan of experiment 4. After a reluctant start, students begin to explain why they expect the visit to be interesting. Sandra explains that it can help them in their own work. Ina adds that, so far, groups have just started collecting "articles" on the topic they have chosen to speak about. She finds it "logical" that not all groups have to present the same topic, but that group presentations will offer "dense" [komprimerede] presentations. As the interview continues, the girls jump from the specific relevance of the visit to a more general consideration of the relevance of animations to the other experiments and their own personal experiences. As Ina explains, it is "clever" [smart] that after having focused on "writing" and "images", now animation follows, as a sort of synthesis.

This synthetic idea was suggested in the introductory text for class (tool B), and Karen had spent time explaining it. The interesting thing is that this girl repeats it and reinterprets it from her own perspective. It seems to help them understand the intervention and its total relevance (although none of them mention experiment 2 focusing on orality, also quite relevant for animations). In their view, it is a good thing to deal with the same subject from *different* angles. In later focus interviews wrapping up the experiment, it became clear that other students have a different opinion, but for these girls it made sense. As Sandra paradoxically points out, experiment 4 *is* about "Andersen" and *is not* about him. This is a good thing, in her view, as it allows her to further develop or "acquire" [tilegne sig] knowledge about Andersen.

It is important to note that sometimes when these students refer to "Andersen" they mean *the biography of Andersen* and sometimes they mean *the work of Andersen* and its multimodal trans-mediations. Like other pupils, Ina struggled with the integration/disintegration of media pedagogy dominated by a multimodal approach and literary pedagogy dominated by a biographical approach (embedded in traditional "Danish" teaching). Ina argues that the visit is particularly good because she "...knows nothing at all..." about animations. When asked whether this is strange considering

their childhood experiences – assuming that they have watched a lot of animations – they *reject* this assumption. They do not believe they have seen a lot of animations during childhood, but as Sandra describes TV consumption during weekends:

...well, now, if you turn on the tv on a Saturday or Sunday morning, all you see is cartoons – therefore it seems a bit strange that one knows absolutely nothing about it or how they are made – and why they are made as they are made...(A22)¹⁶⁹

Mette, the critical student from this class who was cited in experiment 2 (cf. chapter 8, p. 297), sits next to the girls. When asked about her opinion, she continues the critical attitude. She points out that we all know “...that Disney has the concept of a happy ending...”¹⁷⁰ in animations. The interesting thing will be whether local, Danish animators at The Animation Work Shop would have another interpretative approach to Andersen and animation in general.

An hour later, Mette’s question is actually answered by Hanne, the director, who highlights the ability to suggest an original idea for a story less conventional than the plot known from Disney productions – it is probably the most important thing for this school. It is a question of cultural identity, in Hanne’s view and the view of the school. This school tries to promote what Hanne terms a *European animation school identity* versus an *American animation school identity*. This is also one of the reasons why the MEDIA programme of the EC supports the school. As a designer-researcher – for once – it was found that micro-, meso- and macro-perspectives, even on a global level, were actualised in one and the same event. Hanne confirmed the importance of individuals – like Mette – living in, consuming and at the same time being critical about a globalised world that perhaps reduces the complexity of our cultural heritage. She can in fact act upon and try to change this. Students at The Animation Workshop do so professionally; Mette and her peers can do the same on a smaller scale in an educational context. How they do it, matters for their own identities and for collective culture. Drotner (2002) and Thavenius (1995) would probably characterise this event as a *media Bildung* experience; I would characterise it as a semiocyt event.

¹⁶⁹ [men nú, altså hvis man tænder fjernsynet en lørdag eller søndag morgen, det eneste der er, det er jo tegnefilm – så er det jo alligevel lidt underligt at man overhovedet ikke véd noget om det, og ikke véd hvordan de bliver til – og ikke ved hvorfor det lige er at de laver det sån]

¹⁷⁰ Cf. A22. [at Disney har det der koncept med at alt skal ende lykkeligt]

11.3.3.5. *Media globalisation*

Generally, media globalisation was a dominant aspect of things going on at the Animation Workshop campus. This global perspective may illuminate some of the global and non-national aspects of multimodal media pedagogy within “Danish”/MTE/StLE.

It was illustrative that we bumped into a class in which a teacher from Lithuania was giving a master class using advanced technological equipment. In other words, we met a teacher from a former poor Eastern European country, who was now a professional animator travelling around the world giving master classes when not animating movies. We were also told that he was part of the animation team of a multi-million dollar animation to be broadcast soon and that animators like him were often unemployed because they were hired from one project to another!

I never asked students what they thought about this little event. From a didactical point of view, it was interesting for several reasons however. The event demonstrated that *production and analysis* also go hand in hand in commercial practice. The dichotomy between analysis and creativity or, to use the categories of the model, between overt instruction and transformative practice is a false one. Nonetheless, it is a dichotomy, which is rather strong within MTE/StLE. This event challenged the dichotomy. The Lithuanian teacher demonstrated that it is not only students and teachers in MTE/StLE classrooms that analyse aesthetic artefacts; creative professionals do it also at a quite advanced level. Backing up this perception, Hanne later defined animation in front of class as ‘interpretation as a creative genre’. Her point was that one couldn’t be become a good animator without being good at interpreting texts, including literature. However, her point was also that you might become good at interpretation by working creatively.

The experience with the Lithuanian teacher also offered potential insights about the context or sociology of animations. To put it differently, it may enable the development of what Meyrowitz terms medium competence (cf. 3.2.2.3, p. 64ff.). In contemporary culture, animation is a market-controlled, globalised phenomenon made by a collective of more or less anonymous animators hired by a group of producers who have to deliver positive bottom-line numbers for the shareholders of the production companies. As Gee et al. (1996) have pointed out, globalisation goes hand in hand with fast capitalism and the teaching of multimodal mediated design processes in school should reflect this critically. Empirically speaking, meeting the Lithuanian teacher visiting the Animation Workshop enabled this.

We should note that if we address such critical, contextual and social aspects of texts/ Media/works of art this may challenge the dominating understanding of teaching within MTE/StLE

and not the least the teaching of literature and literary pedagogy. The dominant understanding of literature is a romantic one, in which we imagine literature as works of art that were and are created by an individual, ingenious artist not influenced by worldly aspects such as money. In relation to this, the tradition of literary pedagogy within MTE/StLE (described by Fleming 2006 in a European context, Mortensen 1979, Esmann 2000, Krogh 2003 and Kaspersen 2005, among others, in a Danish context), often focuses on teaching literature as works of art detached from sociological matters foregrounding the historical development of ideas. Teaching animations, including animated Andersen fairytales, may potentially open up sociological and cultural aspects, but it requires a change in cultural taste and a change in the perception of didactics and pedagogy.

To sum up the potentials of using the strategy of visiting learning sites outside school, students and the teacher were clearly taught that animations are not just animations – autonomous aesthetical texts – but related to a socially appropriating world in which worldly matters such as funding, public relations, audiences and other *functional* aspects related to a globalised world. These are again related to the form and content of animations that are unavoidable and necessary, also in a didactic perspective, to take into consideration. Being able to reflect on the relations between function, form and content of modes-and-media – or, to use Bondebjerg's categories (cf. 11.2.3, p. 353f.): aesthetical, sociological, historical and practical-productive aspects of media – is indispensable if one wishes to understand and competently deal with animations on an expert level. This knowledge-based competence simply seems to be a vital part of understanding contemporary society and being able to further develop it. Animation is *aesthetic fun*, but also *serious business* – reflecting some of the inequities of fast capitalism (Gee et al. 1996). As Hanne explained, without blinking: "In order to keep costs down, some of the drawing work is now sent to Asian countries, such as China. European animation is no more European than that!" From the point of view of education, we must therefore ask: Is this kind of information relevant within a MTE/StLE context? Surely it is, particularly when speaking of "Danish" within hhx.

Some boys from Jean's class (case 2) were particularly interested in the business side of animation. They asked, among other things, whether the production of animations converged with videogames. Hanne confirmed this. They also asked whether it was possible to make a living as an animator. Again, Hanne confirmed, without being romantic: Although we have heard of the growth of the creative economies industry, it is not easy to start something up on your own. Big media conglomerates hire animators on short-term contracts. She was suggesting that general economical structures seem to remain or are enforced, in this new kind of economy. The boys did not seem to

be discouraged by this. Perhaps this had to do precisely with the fact that they were part of a classroom culture dominated by creative and non-authoritarian thinking, particularly among the boys. Most radically, in a classroom observation a student called Gilbert was observed downloading software from the Internet. He explained that it was free software for creating your own animated videogames. This guy would not engage at all in the classroom-based activities of experiment 4 in that moment, although he probably used it as a legitimate excuse for surfing the Net. He would probably receive a reprimand from Jean if she found out what he was doing. Nonetheless, it is not certain whether his non-engagement was bad or good. He engaged in the affinity group of animators-on-the-net, instead of engaging in the institutional and discursive identity of being a student in class, asked to participate and contribute to the collaborative work about animations.

11.3.3.6. Producing knowledge at school

Although, in education research we often speak of the difference between outside and inside school learning sites, in a networked classroom reality one should begin questioning this distinction and valorisation. The learning site seems to matter less in a media-saturated culture. If you place people in a specific physical site, it is quite likely that they are focused on something somewhere else, mentally and materially – perhaps virtual space. Gilbert is a perfect example. Even before the advent of the Internet, Meyrowitz argued that television led to *No Sense of Place* (1985). Equally, in multimodal media pedagogy, particularly when dealing with relatively new phenomena, we, designers, teachers, researchers, should be aware that it is necessary to acknowledge this *site-loose* learning environment and exploit its potentials. This was precisely what was intended in experiment 4 sending students on *knowledge production journeys* although they were, literally, placed at school.

Briefly reconstructing the commitments in the designed curriculum, analytical and creative knowledge production was integrated in steps 2-5, asking students to make a 5 minutes presentation and a pre-production in two phases (first a sketch and a final version). In this experiment, I find that students engaged energetically in the creative-productive task. They were playing with knowledge, making it fun and serious at the same time. This finding has very much to do with the topic – animations: the way knowledge about this topic was available only on the Internet, the way this reflected student personal interests and competencies developed outside school. It was clearly, as McLuhan explained, the teacher who was striving to keep up with student competence and to acknowledge his or her new role due to the media dealt with. Clearly, the teacher was learning something from the students, which is not to say that the importance of the teacher was diminished

– the teacher’s role, in this experiment, was to serve as a facilitator both towards the animation groups and, if such a group was established, the journalism group.

Focusing on the animation groups, preparing their presentation, let me offer some observations leading to this finding. In Peter’s class, it was funny to observe (cf. A42) a short conversation at the end of the first lesson initiating the experiment: Reminding students of their homework, Peter said, almost automatically: ‘Read all the material for step 2, including web links’. The point was that students should make the presentation ready for use in the next lesson. A girl quickly and cleverly replied, however: ‘You cannot be serious, these links will send us off to an abundance of new links and homepages’. These comments made Peter correct himself acknowledging implicitly the principle of the knowledge/information society: ‘there is a whole world behind these links; orientate yourself’. But still, it was interesting to see that he tried to control the knowledge production process, thus continuing what in chapter 3 is termed the closing strategy. Eventually, it was *him* that chose which topics and articles to work with, instead of letting the groups choose these on their own as in Karen’s and Jean’s cases.

In a sense, we can speak of Peter’s *modern* pedagogy opposed to a *post-modern* strategy towards knowledge production (Lyotard 1979, Zembylas 2001) found among the others: Peter wanted to order and centre knowledge production in advance, whereas the others allowed knowledge production to be de-centred from the start. As a *result*, in terms of topics and angles presented by students the class became more or less homogenous. But the *process*, the way students experienced knowledge production, their experience of authority, would be different. Using Peter’s strategy, the teacher would have the main authority. Using Karen and Jane’s approach, students would have the main authority.

Empirically and practically speaking it is difficult, if not impossible, to judge one-sidedly, which strategy is correct. In principle, Peter would probably not be against the “postmodern” strategy, but would argue that he had reasons to think that this particular class would gain more from the modern strategy. In Jean’s class, as already suggested, some students would clearly benefit from the post-modern strategy and others would not. In Karen’s class it was found that everybody benefited from it. Producing knowledge on student premises almost became a game between the teacher and the students, hence negotiating, directly and indirectly, the (new) relation between teachers and students in a post-modern society. Theoretically we could characterise these events as more or less conscious reflections about the subject-related didactics of “Danish”, that is, its rationale, its ideological complex and logonomic structures. In the lesson where groups prepared their presentation, creating

a seemingly chaotic but seriously working situation Karen asked Hans (a student, cutting some paper) what on earth he was doing. He answered in a way that, on the surface of things might sound rude, but was in fact playful: “You will just have to wait and see”. Karen laughed.

So *what* and *how* did students present at the end of step 2? These are the two basic questions (in that order of priority) that a teacher practising multimodal media pedagogy should ask. In all four cases students offered a great variety of knowledge. The sum of presentations touched upon a wide palette of aesthetical, sociological, historical and productive perspectives related to animation accompanied by personal student perspectives.

In terms of specifics we may point out the presentation by Hans’ group in case 1 as a representative example (cf. A44, Karen, Gruppearbejde, Gruppe 5). The group presented some slides – from notes made in a Word document and uploaded on the LMS – and a physical artefact: the so-called *thaumatrope* being demonstrated in front of the class. Other group presentations in this case spanned *historically* from telling about and even demonstrating 19th and 20th century animation techniques such as the *zootrope*, the *thaumatrope* and digital animation techniques (the latter also demonstrated as a “moving” example, found on the Internet; some in naughty versions with tooth sticker persons humping!). They spanned *sociologically* from telling about and demonstrating animations produced in Denmark, in Japan (animé) and elsewhere by small and big, known (Pixar) and less-known companies, offering information about sales and income. They *aesthetically* referred to different aspects of form and function and they spanned *productive-practical dimensions* by the way students have found, or rather produced different examples that could demonstrate their points.

In Susanne’s class/case, one group was particularly refined, combining the productive with the analytical: they uploaded and presented *two* PowerPoints. The first offered reflections about animation (including a definition) and the second showed a small animation produced simply by using the power point software. Neither the teacher nor I knew that this was possible. In general, we might say that the visual anxiety of expression, marginalized by the verbal mode found in experiment 3, was overcome in this experiment. Finally, students demonstrated visual competence as an element in their multimodal media competence.

Obviously, the group presentations could and probably should be criticized by the teachers in order to enhance and further develop their competencies. The question is how critical a teacher should be. Peter was quite harsh. After the lesson with the presentations, he said to me that, ‘...he really did not find the knowledge offered by the groups good in any qualitative sense’. In terms of

how students presented their knowledge using media and technology, one of the interesting critical remarks coming from the teachers, was that groups tended not to exploit the necessary technological equipment and using the adequate media when making presentations. Peter and Karen were particularly intent at pointing out this problem, stressing that producing knowledge *about* media in a plenary setting is partly dependent on *how* media are used, in front of class.

From a researcher's point of view, this critique reflected a basic understanding of media pedagogy and seemed adequate – but also a bit ironic. The same thing could more or less be said about teacher use of media and technology in all four experiments. Numerous field notes refer to teachers having problems using media in purposeful and productive ways for subject-related knowledge production or using them at all. In one of the student summaries of the lessons in experiment 4, the student comments this problem, also, counting the minutes it takes before the teacher (Karen) is ready: “1,2,3,4, 5, 6, now she's ready, no she is not, 7,8,9, and here she comes, 10 minutes – and finally, we begin” (cf. A44, Karen, Referater). Loosing time on non-subject-related activities due to technological constraints is a general critique students make of their teachers: Teachers and schools in general, are seemingly technological novices and this constrains knowledge production. This is bad. What may be even worse is that teachers may not be very conscious about it. This becomes particularly evident in the use and misuse of learning management systems.

11.3.3.7. *The use and misuse of learning management systems*

According to observations, students clearly use the links made available on the LMS as an important resource to be *transformed*, due to their knowledge producing interests. The fact that they were digitally available for everybody and linked to the Internet seemed very productive. A good example is the work of a group in Karen's class. The group took the pdf-file from The Danish Film Institute and copy-and-pasted it into a new document adding their own comments hence producing a good group presentation. So, the LMS's were used *receptively*. On the other hand, they were not used *productively* to produce collective, mediated and sustainable knowledge. A majority of groups, including in Karen's class, did not upload their material in the process of the curriculum programme; it is a general pattern that they did not.

Compared to the model of multimodal media competence, the problem is that the theoretical idea of establishing a collaborative learning community is not actualised. Teachers did not seem to pay much attention to this. This confirmed the general impression from previous experiments, namely that it is quite difficult to integrate computer assisted teaching-learning processes as part of the

multimodal media pedagogy. It was not until *teachers* were encouraged to encourage *students* to upload the material at the end, in order to be able to collect the material as empirical data that most of the groups took this up.

Perhaps this finding simply reflects problems of confirmability in the design of this intervention – meaning that the concept of virtual collaborative work was misunderstood from the outset. It is suspected that there is a life-long or at least a ‘three year upper-secondary school long’ learning benefit from using the learning management system as an integrated and systematic part of this experiment and in fact in any kind of formal schooling processes. This is not a radically new idea, but suggested in several reports from the Danish Ministry of Education (cf. e.g. UVM 2001b); it is part of the protocol of the upper-secondary reform; and it is backed up by research focusing on ICT pedagogy (cf. e.g. Dillenbourg 1999, Cheesman & Heilesen 2001, Durrant & Green 2001). Media pedagogy and ICT pedagogy seems to merge more and more, Buckingham and Domaille (2003) have argued. This was the reason the participating teachers were informed before beginning the intervention that this was an important aspect and that they and the students should try and upload all relevant material onto the learning management system of class. This would serve both a short-term and a long-term goal. The short-term goal would be to support collaborative project-oriented learning processes in the learning community related to specific experiments. The long-term goal would be that the cumulated material could be used as a formative learning resource useful for the student’s and the teacher’s preparation of summative oral and written exams. Moreover it would help me collect data.

Some might object that teacher produced material is more relevant to save than student produced material. However, it is believed that the quality of student work produced through the presentations in experiment 4 and in the other experiments, was good. No “false knowledge” was produced and all student material could be a good starting point for further reflection. The same could be said about the genre of student summaries. The task given the classes, in experiment 4, of writing small summaries of each lesson worked out quite fine. Teachers adapted this idea. Summaries offered detailed information about what had been said and showed by students and the teacher – sometimes offering critical comments that were uploaded onto the class LMS in the folder for experiment 4. Student summaries were part of the continuous meta-level reflection of the designed programme. Obviously, another contribution to this meta-level discussion was the journalistic material reflecting on the knowledge production processes in a variety of media, modes and genre. In this experiment, only in Karen and Susanne’s classes were journalistic groups established and only one of them

managed to produce a mediated product, as demanded. This material will be analysed in detail in the Redesigned section.

So, in principle, all this material, including journalistic products, should become available for learning on the LMS of the classes. In reality, however, the idea of saving all material for later use was sabotaged – both by a majority of students, by one of the teachers or rather, her school (as in the case of Jane) and by ICT school officials and technicians at the meso-level. It came almost as a shock that during the summer break, in-between experiments 2 and 3, all student data were erased in two out of four cases. The explanation from the technicians was simply that a new year was beginning and that they did not really know where the old data had landed. So much for enduring Learning Management Systems and computer-supported collaborative learning!

During my fieldwork in experiment 4, officials responsible of the ICT infrastructure and its related pedagogy at Peter's and Karen's schools were interviewed.¹⁷¹ It was quite clear that in both schools there was no real acknowledgment of the formative teaching and learning potentials of saving student and teacher produced material. Policies pointed in that direction, but policies were not adapted, since many teachers would resist. Thus, learning management systems were mainly used for organisational, *informative* means, using ICT in the narrow way Richard Sennett (2005) has warned against: administrators sending information to teachers, teachers sending information to teachers and teachers sending information to students. They served no elaborated *communicative-hermeneutic* subject-related didactic purpose. In this way, Danny and Mike, the two super students in Karen's class, had argued that their homepage would be much more useful, in an integrative sense, if class was to establish an arena for collaborative subject-related work on Andersen as seen from a multimodal media pedagogical point of view.

11.4. The Redesigned

As suggested earlier, the redesigned material from experiment 4 to be analysed in this section is limited in terms of *quantity*. Students in animation groups were only asked to produce a group presentation and a pre-production plan in two versions. A pre-production would approximately take up the space of two pages, with a lot of text already written by others. There are approximately 5 animation groups in each class, hence producing a total of 30-40 pages of written data. Some teachers might object that this is too little to demand from students after a 10 hour long designed curriculum programme. However, from a researching point of view, exploring whether animated

¹⁷¹ In A52 a transcript is made of the interview from Peter's school.

Andersen fairytales might help us move adaptation in terms of contesting and reflecting on the rationale of MTE/StLE, this material has plenty of *quality*.

Taking Jean's class (case 2) and particularly the animation group in which Sven was a member as the point of departure, it will be demonstrated that the genre of student pre-productions is quite rich, even innovative, in terms of subject-related knowledge production. Logonomic structures regarding genre regimes, production regimes and reception regimes of the traditional mother tongue subject are indeed contested in this integrative creative-analytical work. This finding in case 2 is more or less invariant in all four cases. Thus, case 2 represents an exemplifying case. By contrast, variance is found in terms of the material outcome of the journalistic task. Only the journalism group in Karen's class (case 1) succeeded in making a film. When analysing the film, which lasts more than 8 minutes, it is argued that the group reflects aesthetically-didactically on potentials of experiment 4 specifically, and the intervention in general.

11.4.1. Sven's animation group in case 2: *The ugly bitch and the cultural turn*

Sven was part of an animation group composed of five boys, including the critical student Al (cf. above). From a superficial product-oriented point of view, the material they produced,¹⁷² complies only to some extent with the specific demands in the curriculum programme: No first edition of the pre-production is delivered and uploaded; the group did not comply with the processual working method and, hence, did not think collaboratively; the group only filled in *some* of the categories in the genre of a pre-production, taking only 1½ page of space. The group suggests a *title*, the *genre*, the Andersen *source* used for adaptation, the *idea*, the *plot* and *public relations* – as asked for. However, there is no material about other categories to be filled in: nothing about *characters*, no suggestions for *manuscript lines*, no *storyboard*, no *drawings of the main character*. Really, this is not enough, an upper-secondary "Danish" teacher might object, using quantity as a parameter for competence. Quantity, however, is a problematic parameter for judging competence. Qualitative categories might be better. If we start using them, we begin to acknowledge the knowledge producing potential of their work:

The *title* suggested is "The Ugly Bitch" [Den grimme kælling]. Most people will know that this title plays, inter-textually, with the Andersen fairytale "The Ugly Duckling" [Den grimme ælling]; indicated, by the group, as the source for adaptation. Fewer people, including a teacher perhaps, would consider that the title echoes youth language, particularly the kind of raw slang, with a sip of parody, found in favourite youth movies, including the Danish blockbuster animation *Terkel i knibe*.

¹⁷² Cf. A42, Jean, Grupperarbejder, Præproduktion for Al's (pseudonym) gruppe.

Being a bitch might be interpreted as being cool. Then there is the formal word play, impossible to translate: Ælling/Kælling. Quite clever and formalistic! In multi-layered ways, the students are demonstrating multimodal media competence through the title.

The pre-production also reflects *genre* competence. The group writes that the genre they have chosen is a “documentary”, which is an interesting *new* choice, in contrast to the genre of the Disney version of “The Ugly Duckling” that students had watched and analysed with Jean in class. The choice of genre is related to the *idea* and the rather unexpected suggestion about *public relations*. The idea is the following: “A modern interpretation of the Ugly Duckling with an ethnic approach – treating people’s perception of immigrants in Denmark”.¹⁷³ And the suggestion by the group for public relations and the type of audience is this:

The film is to be presented as school material with support from UdlændingeStyrelsen or some similar institution. It sets the stage for debate among pupils in the country, whereby the film is widely publicized. By lancing the film as a cinema event it would be a total fiasco, since people do not want to pay to see such an animation in that it is more polemic than entertainment per se among the audience.¹⁷⁴

The students clarify that by documentary they mean a *polemic* film. This is not entertainment; on the contrary, they argue that: it is important for the classes/pupils to consider the film carefully afterwards, which would be supported by a specially designed homepage. At the same time the homepage will answer many of the questions which create a division between Danes and new-Danes – why are immigrants not allowed to eat pork and what are the most important opinions in the Koran.¹⁷⁵

It is quite interesting to observe how these students combine, at a rather sophisticated, competent level, reflections about how animation may be combined with a homepage to develop what Buckingham has termed “civic preparedness” (2003). In this sense, they suggest an approach towards media use which Buckingham and other Danish curriculum researchers interested in culturally oriented school subjects (e.g. Jensen 2005) hope for. The group wants to engage in

¹⁷³ [En moderne fortolkning af Den Grimme Ælling, men en etnisk indgangsvinkel – behandle folks syn på indvandrene i Danmark]

¹⁷⁴ [Filmen skal lanceres som skolemateriale med støtte fra Udlændinge Styrelsen el.lign. Ligge op til debat blandt landets elever. Hermed bliver filmen bredt publiceret. Ved lancering som biograffilm ville filmen blive en total fiasko, da folk ikke har lyst til at betale for at se en sådan animation, da den mere lægger op til debat end at være en egentlig underholdning for tilskuerne.]

¹⁷⁵ “[Det er vigtigt at klasserne/eleverne bearbejder filmen meget grundigt bagefter, hvilket en specielt oprettet hjemmeside skal hjælpe til. Samtidig vil hjemmesiden give svar på mange af de spørgsmål som skaber splittelsen blandt danskerne og ny-danskerne – hvorfor må indvandrene ikke spise svinekød, og hvad er de vigtigste holdninger i Koranen?!]

identity politics using the aesthetic genre of animation in an educative context. The personal drama of Andersen's fairytale – often interpreted as a social and historical drama – is re-interpreted as a cultural conflict which should be addressed in democratic society, among other places in the classroom with its (apparently) strong prejudices about ethnicity and identity. On an abstract level, students suggest a *cultural turn* in the adaptation of Andersen in MTE/StLE; a turn which has been discussed in the humanities since the 1970s by many prominent cultural studies theorists from Raymond Williams (1976) and on. This becomes even clearer when we analyse the *plot* suggested by the group. The story should describe "...how difficult it is for the ugly duckling – an immigrant girl – to be accepted in Danish society."¹⁷⁶ Like in Andersen's original story this leads to a happy ending, however in a cultural sense. The plot continues like this (in terms of cohesion, the text has some problems):

...what she does to be accepted and the difficult process it is to attain acceptance among the Danes, but when she gains their trust things begin to change quickly, since they come to understand her and her beautiful soul. They learn to disregard the great differences in culture and background.¹⁷⁷

¹⁷⁶ [hvor svært Den Grimme Kælling – en indvandrer pige – har ved at blive accepteret i det danske samfund].

¹⁷⁷ [Herefter hvad hun gør for at blive accepteret og den svære proces det er at opnå danskernes accept, men da hun først begynder at vinde tillid blandt danskerne går det stærkt, da de får øjnene op for hende og hendes smukke sjæl. De lærer at se bort fra de store forskelle i kultur, baggrund etc.]

This almost sounds like a Disney ending, that is, a *didactical* ending in the “old” sense of the word – meaning a ‘lecturing’ or moralising ending. However, the ironic tone and the critical, even self-critical, implications of the plot and the whole idea described by this group of five white Danes makes the pre-production seem authentic and convincing. Worth producing!

Referring to Meyrowitz’s conceptual understanding of media competencies, we might say that the group demonstrates media *content* and media *function* competence, but not a lot of media *form* competence. Referring to Kress and van Leeuwen, the group does not work multimodally, but producing meaning in only one mode – writing – thinking monomodally, and quite conservatively, not the least considering the topic. Apparently, Sven and his peers do not *transfer* their visual experiences from The Animation Workshop and their group work in school into this pre-production genre. This should not come as a surprise, though, since we know from research on situated cognition that knowledge production is situation dependent and not easily transferable (Lemke 1997). In this case, the familiar productive regime of writing in student products seems to rule.

In many ways there is a logic related to the group outcome. And it should be underlined that what the group *does* write represents original and clever stuff. To put it more precisely, using categories from the semiocy model, it is a small piece of semiotically competent, knowledge-informed, creative, innovative and transformative practice situated in the student experiences. One of the other members in the group is Al. Al is probably the cleverest guy in class, getting the highest grades, being very analytical and very critical – and a bit lazy. He was observed playing cards with this group (when they should have worked with the categories that remained empty!). But it was also this group referred to earlier making the point in their PowerPoint presentation that animation moves. The close analysis of the work by the group shows that it in general is very interested in the social impact of animations, not only from an economical, but also from a critical, or even *ethical* perspective.

Summing up, in terms of demonstrating animation competence in the shape of a pre-production, we may judge that the work by the group not fully completed. On the other hand, working with animations productively, in the sense that they should fill in a clearly defined pre-production genre, has been done both creatively and analytically. This is an important goal to achieve, also at the upper-secondary educational level. These students are able, in expert ways, to analyse, reflect and productively actualise some of the potential uses of animation, suggesting, literally, that the genre could be developed, not only in terms of entertainment, but also for *semiocy* purposes in a formal schooling context.

”Danish”-related didactization is communicated indirectly in the material of this group, in setting out on a dialogue with my research intervention and its didactic interest: These students understand the aim of testing the limits of a specific school subject through the genre of animation. This was demonstrated in the conversation with Sven. Sven and his peers then use the same idea in their productive work in order to test the limits and cultural prejudices of their peers in a broader school context, contesting views on ethnic integration and nation building.

In other words, the group demonstrates that animation moves ”Danish”-related adaptation. This regards not only adaptation in the media productive sense, suggesting that an adaptation-as-animation based on Andersen could be produced and used for authentic purposes, but also adaptation in the sense of subject-related didactic research. By allowing students to work with animation in class in a competence-oriented way emphasizing student-based authority, they get the chance of contesting general structures and ideologies found not only within the local meso-context of the mother tongue subject being practised at their school, but also in a broader macro-perspective going beyond the semiotic domain of the classroom and into the academic domain of ”Danish” and more general public domains where cultural production is being discussed. If the animation they are suggesting was in fact produced, it would not make any money and would not become a blockbuster. But it would raise important cultural and educational questions about personal and collective identity related to national history and global society.

Perhaps even ”Danish” teachers will be offended. In a historical perspective, we know that there is a tendency to cultivate nation-tribe thinking within ”Danish” as a subject (cf. 4.3.2, p. 137f.). In the pre-production this group clearly questioned nationalising tendencies and cultural hegemony. The group asks, indirectly, what it means, to be-(come) a Dane. In this sense, the pre-production actualises one of Kress’ suggestions for topics dealt with in future MTE/StLE (cf. 4.3.3, p. 142): National identity should be put on the agenda in a denaturalising sense. Likewise, the report on the future of “Danish” (UVM 2003c) and the media pedagogy of Kirsten Drotner, recommended that the mother tongue subject make a paradigmatic shift from a strong emphasis on historical *Bildung* to more focus on geographical-spatial *Bildung* – beyond reading a literary classic in a Danish translation! Taking animated Andersen fairytales as a point of departure seems useful for this purpose, the analysis of the work in Sven’s group suggests. At least this is the case if we use a student-based competence oriented approach that integrates the analytical with the “imaginative” in the context of classrooms. Findings in case 2 in general and the other cases seem to support this conclusion.

11.4.2. General findings in case 2 and the other cases

It is interesting to note that, in the concrete classroom context where Sven's group presented its pre-production, a few so-called "ethnic", "new" Danes are found among students. Ethnically speaking, this class was the most diverse case, Susanne's class having a similar make up: 2-3 Danes from first or second-generation immigrant families with roots in Southern European countries (France, Ex-Yugoslavia, Turkey) were found. In both Karen's and Peter's classes all pupils were "old Danes". Generally, the ethnic perspective did not dominate the pre-productions in any of the four cases; rather ethnicity was addressed as one potential aspect of a larger interpretative optic, namely *youth culture*.

Pusher Keld



Bodyguard



Oprah Winfrey



Fig. 11.4.2.1. Material from a pre-production in case 3 drawing on Andersen's "Princess on the Pea".

When David Buckingham (1998b, 2003), Henry Jenkins (1992, 2005) and other media literacy theorists emphasize the cultural dimension in media education they certainly have a point compared to this experiment. Particularly students in case 2 catalysed the complexity and ambiguity of youth culture in productive work enacting their imaginative, creative, non-authoritarian desires. Porno, drugs, race, class, global popular culture, including Oprah and Paris Hilton, product placement and a rich variety of language use spanning from serious lines in the manuscript to parody, irony and raw slang was used as adapting elements in the pre-production work of these groups. Andersen fairytales in case 2 were rephrased into titles like [my translation]: "The Little Zippo Lighter Girl" (drawing on Andersen's "The Little Match Girl", about a hallucinating girl on drugs Christmas Eve), "Lada-Hans" (drawing on "Clumsy Hans" and his billy goat replaced, in this adaptation, by the former Eastern European car brand Lada), or, as found in case 3 (Susanne) "The Pusher on Crack" (drawing on "Princess on the Pea", cf. figure 11.4.2.1 for main characters in the story, found

on the Internet). It is difficult not to find these pre-productions funny and slightly scary. The target group, clearly, is youth in general and themselves in specific. Students use the pre-production genre for reflexive identity building processes narrating their personal experiences, trying to reinterpret them in the light of Andersen's fairytales.

In terms of filling out all the sub-genres and working multimodally, Sven's group was not representative of the dominating pattern. On the contrary, groups in all four cases produced an abundance of storyboards, character drawings, manuscript lines and new identities inventing production company in a processual way that would respect collective working processes, shifting back and forth between conceptual work and practices, as hoped for in theory.

Some animation groups respected the original text to a large extent, speaking of genres like "*Bildung* text" [dannelsestekst], "comedy" or simply "fairytales". This was the dominant pattern in cases 1 (Karen) and 3 (Susanne). These adaptations were generally acknowledged as better than the modernising, contemporary versions. Some students found contemporary versions disrespectful "over-interpretations", to use the word of Umberto Eco (1990). From a cultural studies point of view, in the line from Raymond Williams (1976), however, there is (almost) no such thing as an over-interpretation. There is only sense making from a pragmatic, local, community-based perspective. If this sense making is reflected in relation to subject-related aspects, we might even consider it to be valid knowledge production.

11.4.3. *Journalism as multimodal, mediated, aesthetical-didactical reflection*

The actualisation of the journalistic task in this experiment is quite illustrative of the general perception, particularly among teachers, of the journalistic genre in the whole intervention process. We may speak of a continuum in-between cases spanning from counterproductive to productive outcomes: In the negative end we find case 2, where Jean never mentioned the journalism task in class, not surprisingly, as she was more or less thrown into the class and the experiment. In Peter's class, as indicated, Peter briefly mentioned in the first lesson that the journalistic task was ruled out (by him) as an option. In Susanne's class, contrarily, a journalistic group was established and worked the task enthusiastically. Several documents proving this, containing detailed production plans, interview questions, introductory texts and a power point presentation with several illustrations, which the group imagined could be used for a film reporting on the experiment and intervention. However, the group was not able to transform its ideas into a film within the limited time. Practically, they did not step into the age of moving pictures, so to speak. This only happened in Karen's class, whose journalism group was, again, controlled by Danny the super student.

Hence, a well-known pattern between cases was repeated. Cases 1 and 3 managed to establish this meta-level group in the process of teaching the curriculum programme and one case even reached the point of demonstrating its potentials in a practical sense. Teachers in the other two cases focused on constraints, which led to non-actualisation. Case 1 and 3 contrast case 2 and 4. Is this a positive or a negative outcome? Should it make us conclude that the journalistic genre is a good idea or a bad idea? It could be argued that the actual product found in case 1, which will be analysed in the following, proves that it is indeed a good idea. Rather, it could serve as inspiration for similar applications. But let us first resume the didactical reasons for establishing a journalistic group in the first place. In one sentence: it allows for *aesthetical-didactical reflection*; or we might term it – with Sigmund Ongstad (1997, 2004) – a student-based genre of didactization. It allows students with special technological, communicative and journalistic competencies and interests to further develop themselves in subject-related work relevant for the ongoing didactical reflections of the classroom community and beyond. In Karen's and Susanne's classes it became very attractive to become a member of this group: students would even be annoyed when they were not elected (through a draw). The knowledge-related legitimacy of establishing this group within StLE/MTE is quite obvious. In this experiment, it was quite authentic, perhaps even too authentic, transgressing the boundaries of formal schooling and addressing new types of audiences: The group was informed that if the film were good enough, it would be broadcast on the official homepage of the Andersen 2005 celebration, which has many thousands of hits. Before reaching that kind of audience, however, the group would have to show its product to the class. Hopefully, the film would then be accepted for further broadcasting and at the same time offer a sort of retelling of the experiment. The intervention would then open up as a whole for critical reflection – critical framing, in the words of the New London Group (2000) – about the intervention and its didactical purposes. All work made by the journalistic groups in the intervention had that purpose, as we know. Obviously, the journalists' version of experiment 4 is but one interpretation. Each student was asked to evaluate the experiment in different genres: in this experiment, in classroom discussion and in a written essay. However, the specific advantage of the journalist mediated, evaluative genre and particularly a film, in contrast to other evaluative genres, is its aesthetical combination of content, form, and function, which is a sort of entertaining-critical way of launching collective, evaluative, critical reflections in a classroom setting. Everybody shares a moment of contemplation, as when sitting in a cinema; looking at themselves and their peers, studying their (own) activities and reasons for

doing what they had done. This is assumed to be particularly important when doing something new and experimental.

In experiment 4 the journalistic group (in Karen’s class) was made up by experts (Danny), novices (Flemming, the 40 year old truck driver) and a girl who was academically mediocre according to her own words, all working very well together. They clearly drew on each others competencies, being focused on the demanding goal. A brief summary of their film, watched in class, is as easy to reconstruct as the movie itself. It was very well structured. The film was sent to me by Danny accompanied by a special media player. It was never quite understood why he chose to use this player; undoubtedly, he had a good reason. The film lasts 8 minutes and 16 seconds,¹⁷⁸ had subtitles in English (all of which are found as excerpts in A1, accompanied by frames from the movie). Through a raw analysis we may divide it into the following sequences:

Time (sec./min.)	Content/form/function
0-9	Intro panning the classroom, showing students working and laughing, accompanied by soft music as a soundtrack
10-18	The title of the movie is presented on a black surface: “Project on [name of school]” on the occasion of H.C. Andersen’s 200 year anniversary”
19-1.32	I, as a researcher, am being presented with my name and title and interviewed at school in a quiet classroom. It looks like I am alone: Only my answers are showed; one cannot see the interviewer. I explain the goals of each experiment and the purpose of the intervention, in general. In a scene, I say: “I expect that we are going to change the subject of “Danish” in the schools.”
1.33-1.40	Intersection with scenes demonstrating student work from step 3 and 2 (in that order) in class and at the visit at The Animation Workshop, accompanied by new background music.
1.41-2.25	The subtitle “The trip to The Animation Work Shop in Viborg” is shown in front of moving pictures from the bus ride and accompanied by a new soundtrack; the subtitle then fades away and recordings from the visit of class at the school are shown, in small sequences, demonstrating different activities and students in close-ups and other perspectives.
2.26-2.50	A girl-student is presented with her name and title and interviewed the same way as I. In a scene she says: “It is a change compared to all other classes where you just listen to the teacher.”
2.51-3.40	The subtitle “Præsentation af teori” [Presenting theory] is shown in front of moving pictures from the classroom, focusing on the blackboard where five

¹⁷⁸ The film is found in A44, Karen, Journalistgruppe forsøg 3. For transcriptions and frames from the film, cf. A1.

	groups, consecutively, present their group work projecting power point presentations using a computer and laptop. Small clips from each presentation are shown, and then a clip with Karen, the teacher, commenting on the process of the programme.
3.41-4.59	Karen is interviewed about the project, the same way as I. One of the things she says is "I expect that the students learn many new things./ What they usually learn and a whole lot more because we are working in a new way." And later: "It is a good thing if we can make people as curious as H.C. Andersen was and I think we have succeeded in doing this."
5.00-5.13	Intermetzo with several clips from classroom work accompanied by cheerful music.
5.14-5.31	A boy-student (one of "the naughty boys", cf. chapter 7) is presented with his name and title and interviewed the same way as I. In a scene he says: "I have learned many new ways to work with Andersen."
5.32-6.51	The subtitle "Præsentationer af præproduktioner" [presenting pre-productions] is shown in front of moving pictures from the classroom. Groups, consecutively, present their pre-productions projecting power point presentations, including storyboards. Clips from each presentation are shown, occasionally filming classroom discussions about the presentation.
6.52-7.48	Danny, the journalist-student, is interviewed about his role, the same way as I and the others. He says, among other things: We have written articles and now we have produced a movie, so we have learned many different things." Later he says: "There might not be enough "Danish" education in a group of journalists".
7.49-8.16	Credits, accompanied by the cheerful soundtrack.

Table 11.4.3.1. The journalistic film in experiment 4 produced in case 1.

As suggested, the best concept for describing the genre of this film is *aesthetical-didactical reflection*. Both in terms of content, form and function it offers a rich variety of different perceptions and perspectives about the experiment-in-action in case 1, demonstrating that this class is moving beyond the traditional rationale of the school subject. All students and the teacher seem almost one-sidedly happy about the project, particularly highlighting the new way of combining 'academic matter' with 'ways of working', as Karen puts it in a scene. The film strengthens the credibility of my analysis of case 1 in experiment 4, confirming designer-researcher observations. One should expect then, that the journalists would be satisfied with the intervention. It is not that simple, however. In chapter 12, when analysing the teacher and student evaluations of the intervention as a whole, we will see that some scepticism is expressed by the student-journalists and particularly by the super student Danny. From a comparative and longitudinal point of view, it also

becomes clear that there are significant differences among students and teachers across the four cases regarding their perception of the intervention.

11.5. Conclusions and their limitations

The analysis of experiment 4 set off with a hypothesis: The teaching of Andersen animations would move mother tongue education “adaptation”, both at local meso-level and a macro-level. Moreover, it is suggested that the experiment would meet and reflect the challenges of global society with its emerging creative economy.

From a certain perspective the empirical analysis has confirmed this hypothesis. It is found that learning resources related to Andersen animations *can* indeed be made available in a way that will meet the suggested challenges in productive ways. Resources are relatively easy to integrate into a dynamic competence-oriented curriculum programme. It should be noted, though, that constraints are found in relation to problems of the so-called permission culture, restricting the teaching of and reflection about former adaptations known from cultural history. This culture constrains receptive work and, on a more general level, the freedom of expression and access to the global cultural heritage. Also, constraints at the meso-level of school administration are found in terms of offering the necessary economical, technological and educative resources for integrating animations in “Danish” as a subject.

Findings from the Designing and the Redesigned phases indicate that the commitments intending to develop student integrative multimodal mediated animation competence can be actualised at a meso- and micro-discursive level given the right circumstances. It is found that the didactical emphasis on conceptual knowledge production, pre-production and evaluative reflection *about* animations – instead of a one-sided emphasis on practical production – proved positive. On the other hand, no counterexample can be offered for testing this conclusion. Further research is necessitated.

Empirical data also demonstrates why the constraints on the *status quo* system of “Danish” might continue. Teacher and student conceptions related to the macro-ideology and -structure of the “traditional” mother tongue subject across schools, are again found to be a crucial factor. Well-known production regimes, reception regimes, genre regimes and knowledge production regimes are repeated. Indirectly, these regimes lead to non-actualisation and counterproductive knowledge production processes.

Although McLuhan (2003) argued more than 40 years ago that roles are changing in terms of students being more informed than teachers about new media, one may conclude that the teachers’

didactical level of reflection, in terms of foreseeing future potentials of teaching animations, was higher than the student level of reflection (with a few exceptions, Danny included). All four teachers argue that they were forced into teaching something beyond their actual knowledge level and professional competence. Nonetheless, all of them valorise this as positive, at least in principle (cf. next chapter for important variations). The teachers suggest an interesting strategy when trying to adapt a relatively new, modern, mediated multimodal phenomenon like animated Andersen adaptations. The teacher should *not* feel obliged to know everything about the topic in advance. Rather, the teacher should teach students that they too have a great responsibility in terms of co-producing knowledge. Students too should learn that their role is not simply to re-produce the knowledge known – to echo Bereiter (2002; cf. 4.2.5, p. 125ff.) – pursuing the same goal. They should learn that a competence-oriented goal like collecting knowledge about animation and producing a pre-production can be complied with in numerous serious and, at the same time, creative ways and that it is their student-responsibility to fulfil this goal. Local findings suggest that half of the students are socialised into this learning attitude and are able to approach the demand in expert-like ways.

The context of local classrooms has proved, once again, overwhelmingly rich and complex and this context has influenced the outcome of knowledge production and also the data collection on several levels. The “grade data” Jean offered to me spontaneously, was one example of this. Jean’s unexpected data made me revise my methods for data collection. It was decided collect the grades of the other classes in order to get an impression of the general performance level of students and the class. There were problems in doing this: It can be very difficult to see what grades are actually grading and more generally what teachers’ summative evaluations are evaluating (cf. e.g. Miller 2004). In other words, the credibility of such data is weak. On the other hand, grades could offer a general impression of how the classes were constructed and valorised within the local contexts by the participating teachers and, perhaps, they might also offer an impression of the competence level of the classes, which again would strengthen the “thick description” (Geertz 1973) or transferability (as Bryman, 2004, would put it) of the study. Thus, the three other teachers were encouraged to offer this material, too.

However, it turned out that none of the others wanted to hand over this material: Susanne argued that it would be against an ethical code. Peter showed, literally speaking, the grades of the class to me. Grades were low in this class, too; it was a “relatively weak” class, as he put it. If we compare this to the information about the general performance level of class that he offered in the pre-

experimental phase (cf. the case profile in 6.4, p. 199ff.), a significant change has occurred. Karen showed no grades to me, but repeated what she had said in the beginning of the intervention, namely that this class was “relatively strong”, functioning very well socially. Susanne suggested, also in her own words, that her class was rather heterogeneous. Disciplinary problems among the boys were a dominant problem in her view, which affected grades.

Although these evaluative statements are highly subjective and difficult to compare, they did confirm observations of what might be termed, for want of something better, the general working climate in the classes. Hence, it must be argued that these “grade data” add new insight to the explanations about the actualisation or non-actualisation of knowledge production within classes. However, it is impossible to distinguish the cause and the effect: Would the social climate be good because students were good at producing knowledge, or would it be the other way around?! When re-examining field notes, a dominant pattern emerges between cases 1 and 3, on the one side, and cases 2 and 4, on the other, as in other aspects of the experiments. Students in cases 1 and 3 were, generally, more responsive and constructive than in cases 2 and 4. Illustrating the difference, it was not unusual to find a group of boys in Jean’s class (case 2) playing cards or playing a videogame during a lesson, although it was quite clear – and became obvious in the analysis of their redesigned products – that the group had not worked a lot with a given task. No such behaviour was observed in case 1 and seldom in case 3. On the other hand, it should be pointed out, as we have seen in earlier experiments, that interesting, productive, even innovative and transformative practice were found in group work in Jean’s class as well.

In other words, no simple *general* causal explanations are given or can be given in this study, only provisional *local* explanations about the relation between contextual parameters and knowledge production; the relationship between these parameters, just like the relations, in general, of all the parameters in the didactic model offered, are highly complex, dynamical and dialectic. Context used as an educational research notion, as pointed out by Gee (2001), needs to be rethought and redefined beyond sex, race and class. The question is what alternative notions should be used. Generally, social semiotic and sociological notions have been employed. Gee proposes another concept – identity – which is applied where it is found relevant. However, one cannot remain fully convinced about the applicability of this concept either. In terms of empirical research it is very difficult to apply and evaluate. In this study, focus has been primarily on the identity of teachers, only offering limited data about them. If one wanted to offer an in-depth explanation about subject-related knowledge production in classes, one would have to focus both on teachers and students

using both quantitative and qualitative methods – including data on social background. This goes far beyond the scope of this subject-related didactic intervention study. At the same time, it demonstrates its limitations.

The present study and its methods for data collection lead to data from which one can only infer vaguely that the relation between social discipline and knowledge production might have to do with parameters such as teacher training, student and teacher formal and informal learning experiences, student culture, psychosocial classroom dynamics, local constraints at school, including technological constraints, general conceptions of schooling and the quality and design of the learning resources. No one-sided causal explanation can be pointed out in this socio-cognitive *web* – to use John St. Juliens' word (1997; cf. 4.2.5, p. 125f.) – in which the teaching and learning of a specific Andersen adaptation is taking place.

As suggested earlier, this experiment resulted in a serious ethical conflict, methodologically speaking. Part of the journalistic goal was to launch a film on a very popular homepage; this was part of the engaging element in the task. As the journalist group in case 1 eventually did deliver a product for this, being excited about broadcasting it to a national and international mass audience, it suddenly became clear that it would not be possible to broadcast it. In a sense, I experienced the limitations of design based intervention research and the difference between teaching and research. The problem was that in the film the group revealed the identity of the class and the school. For ethical reasons, such information cannot be revealed (although some education researchers, at least in Denmark, would probably argue that the content of this study is not particularly personal and hence, could be revealed). I found myself in the middle of a catch 22 conflict: having to disappoint the expectations of the students or overstep some basic ethical rules in research. I chose the former. Luckily, Danny understood the predicament. As compensation, I promised to retell his and the story of the group in the dissertation highlighting its inspiring potentials for all mother tongue teachers trying to integrate multimodal media pedagogy with MTE/StLE.

11.6. Implications

What are the implications, in a larger didactical MTE/StLE perspective, of these locally developed findings? The answer is: Hopefully they will change the automatic, yet paradoxical resistance towards teaching popular genres like adaptations-as-animations in MTE/StLE using traditional transmission-like teaching methods. There is no authentic, legitimate didactical reason for continuing this practice. The paradox comes from noting that outside school, from a commonsense point of view, it is quite uncontroversial to claim that a popular – perhaps *the* most popular – way of

getting to know literary classics, is by watching adaptations, such as animations. We do it all the time: Children, increasingly of all ages, watch animations and adaptations of literary classics. Likewise, young people and adults have for decades watched motion pictures or theatre plays, which might also be adaptations – say, Baz Luhrmann’s *Romeo+Juliet* (1996), along with any other movie or non-movie watched in a cinema or at home, in the “tele” or on the laptop (soon to become the same thing). Think of the enormous success of The Walt Disney Company’s *The Little Mermaid* (1989) based on Andersen’s fairytale (1837), produced and distributed side by side with hundreds and thousands of other cartoons going in or out, in multimodal ways, of the eyes and ears of people not really knowing or paying any attention to the cultural resources they “originally” draw on.

The paradox is, then, that when we focus on the teaching of the mother tongue subject in school, this kind of over-whelming informal *experiences* with and knowledge of massively distributed, digitally produced, mediated multimodal texts, which include adaptations, is not valorised as a valuable starting point for teaching about cultural sense making, but is instead marginalized. Sent away so to speak to other school and university subjects such as Media studies or simply sent out of the formal education system to informal learning settings.

Karen, the teacher in case 1, has expressed this point of view – although, as we have seen, with growing uncertainty – claiming that the Disney version of *The Little Mermaid* does not have the Mouton-Rotschild quality of literary originals. Her debriefings show that she still valorises literature higher than animations. Jean, the teacher of case 2 reflects, too, arguing, before the experiment sparked off, that she was a “Danish” teacher not educated to teach media, so how was she to teach this? Although some optimism is found in the evaluative remarks by the teachers, we also find a profound resistance and scepticism in their attitudes towards animations. To some extent this is quite understandable. They are trained at university to marginalize this genre; there is a tradition for not teaching it in school, particularly not at upper-secondary levels; and the protocols for final exams, that have great control upon what is taught and how, does not encourage experiments.

This general finding – the discrepancy between what is being experienced inside and outside school – is not surprising seen from the point of view of international research. Jenny Grahame, a British media education researcher, knows this attitude very well. In an article from 1991 that discusses how a fairytale adaptation such as *The Little Mermaid* subjected to “the full Disney treatment”, including merchandizing, could be taught from a media pedagogical view within

“English” as a subject, argues that adaptations are, generally used by English teachers as a means for making the “original text more accessible”. Media pedagogy is simply a way of promoting “the real thing”, literary pedagogy. Implicitly, problematic distinctions and hierarchies between literature-as-originals and movies-as-copies, between works of art and disposable cultural artefacts, between sacred individual artists and unimportant anonymous producers, between high culture and low culture and between using adaptations as a pedagogical means for something else instead of seeing it as a goal in itself are still very dominant in formal teaching. What Grahame finds, focusing on the teaching of adaptations, hence, is general themes discussed in cultural theory discussed for decades (cf. e.g. Huyssen 1986), which one should expect had been demolished due to the advent of post-modernism and cultural studies. In school, this is hardly the case. The excuse, in Buckingham’s (e.g. 2003) interpretation, is a discriminating and elitist argument about the missing “quality” of animations, claiming that students do not learn anything from this kind of material, or the pragmatic reasoning that it takes too long to teach animations and films, particularly if we are to let students work with the genre productively.

Present findings in this experiment suggest that both excuses are invalid and highly idiosyncratic – tainted by and repeating a dominant, constraining knowledge regime focusing on “traditional Danish”, rooted in a 19th century rationale of MTE/StLE.

In relation to animations this regime was observed in the preparation and actualisation of experiment 3 about words and images. As the teachers were told before the summer break: the focus in experiment 3, would be “The Shadow”. They instantly reminded me and themselves of an animation, produced by a Danish animator, called *Den skæve skygge* (1998, English title: *H.C. Andersen’s The Long Shadow*). This animation mixes the biography of Andersen with his fairytale “The Shadow” and other fairytales. The teachers had used this animation several times as an introduction to Andersen and they all, except Karen, suggested that we used it in the experiment. I found that it would be counterproductive to use the animation in experiments 3 and 4 because it could easily deviate the multimodal media pedagogical goal. Peter thought otherwise and chose to show the animation to the students anyhow. Testing my perception, students highlight this experience in experiment 3, as one of the positive aspects of the experiment. It complied with – this is my critical interpretation – traditional expectations and biases for literary pedagogy within “Danish”. The romantic idea that students, due to their media experiences outside school, should be particularly interested in media and offer strong resistance towards a literary way of teaching Andersen is not confirmed in my empirical analysis. Many students accept the dominant literary-

academic rationale of the school subject – although, as demonstrated, many “negative cases” are also found. Moreover, we should remind ourselves that this is an intervention that tries to integrate an extremely literary case – Andersen – with multimodal media pedagogy. This may also reduce the trustworthiness of the empirical analysis.

In general, ambiguous perceptions about popular mediated multimodal texts and particularly towards adaptations of literary classics pile up. The ambiguity becomes clear when one asks the participating teachers whether they have any personal experiences with animations in their private lives. Obviously they do. Jean, in her late thirties, having two kids, explained that her children and husband love animations and that the family sits together Friday night watching them together. She also admitted, speaking informally with me after an interview with her, that she is a bit tired of the traditional text hierarchy in school, not only in “Danish”, but also in the other school subject she taught, Spanish.

Jean suggests that there is a fundamental lack of authenticity and relevance in the relationship between what is going on inside and outside school. As explained earlier, a boy named Gilbert in Jean’s class, downloaded software during class. He explained that it was software for producing animated videogames. Within the knowledge regime of “Danish”, this kind of activity would not be accepted. Gilbert’s specialised multimodal media competence is not allowed within the “Danish” regime. Gilbert was not one of the well-performing students in this class – rather, he was hiding, anonymously, in one of the groups – which is *his* problem, not the problem of the school subject seen from the point of view of official schooling. The question is whether we can *afford* to marginalize these kind of multimodal media competencies and their related genres any longer in mother tongue classrooms in Western societies. Macro policies, related to “Danish” in hhx, actually argue that we cannot.

We should remember that hhx has a commercial, market-oriented profile. After the Danish upper-secondary education system was reformed in 2005, the hhx curriculum now speaks of ‘innovation’, ‘creativity’ and ‘globalisation’ (e.g. Gleerup 2005). This merely accentuates the historically developed rationale for hhx – described as ‘aesthetic-economical *Bildung*’ (cf. 6.1, p. 191) – reflecting the challenges of fast capitalism and its emerging creative industries economy, which Western societies have to exploit in order to be able to survive in the post-Fordist market (Gee et al. 1996 would argue). Hence, from a politician’s point of view, the competent ability to act on the basis of knowledge about digital animations is *hot* and knowledge about monomodal literary

classics is *not*. Gilbert's technology and product-oriented interests and competencies have potentials.

As Kress (2000) has pointed out, schools in post-capitalist society do not have the same status any longer and are in serious danger of reducing their importance. Unless public schooling wants to loose market shares to private, market-controlled school forms, the agents of the school subjects on both macro- and meso-levels should begin to understand and demonstrate an awareness of the fact that cultural resources could be taught in the perspective of being an economic resource that can be actualised in new modes and media. Andersen would be a good example in Kress' argument. Historically produced dichotomies and valorisations between high modes and low media, between what cultural resources belong to "us" in a national context, and to "them" in an international context do not reflect the reality of globalisation. The story of Andersen, and his animated fairytales adapted in this experiment proves this. Andersen himself was thinking globally: He used the world to develop the tradition for illustrated fairytales. And the world, including Hollywood, has indeed used him, adapting illustrations into a new medium and genre, the animation, creating a lot of aesthetically interesting artefacts and earning a lot of money on it at the same time. Now it is time, as suggested by Mette, the student in case 1, to re-conquer Andersen, reinterpreting or remixing his fairytales from a local, but not a nostalgic, multimodal media pedagogical perspective within "Danish" as a subject.

Chapter 12. Student and teacher evaluations in the post-experimental phase

At the end of experiment 4 and later in what is termed the post-experimental phase of the intervention, students and teachers were asked to evaluate the intervention using different methods and genres:

- Teachers were to write teacher evaluations
- Students were to reflect on the experiments in the genre of an essay
- Journalist groups would produce a film
- Some students would participate in focus group interviews with me
- Teachers were invited to individual structured interviews and
- A final post-experimental meeting with the teachers was arranged some months after finishing the last experiment.

It has been explained that not all of these methods proved successful or have offered interesting data. For example, the journalistic groups were ruled out as an option in some cases and one teacher declined the invitation for an interview. Nonetheless, the purpose of asking students and teachers to make these evaluations remains the same: to make them reflect in an almost Aristotelian way on each experiment in relation to the intervention *as a whole*, in an attempt to tie the intervention together as a manifold of narratives from the beginning, over the middle and the end. It was imagined that using such methods for creating a synthesis out of the intervention could produce data that would strengthen the credibility of the study. As a researcher-designer this could be used for evaluation of intervention impact both empirically and theoretically and it would allow the proposition of a trustworthy answer to the basic research question of the dissertation – the question of integration. In the concluding Chapter 13, we will reflect on whether this has been achieved.

This chapter will start out by returning to the journalistic group in case 1 and its film made in experiment 4, which reflects on the intervention. Later we will refer to other kinds of student evaluations based on essays and focus group interviews. Also, reference will be made to teacher

evaluations based on different sources: their final written evaluation, structured interviews and data from the final meeting in the post-experimental phase.

12.1. Learning vs. education: A student-journalist's evaluation of the project

As explained in the analysis of the Redesigned material from experiment 4 the journalists in case 1 offer a positive perception on the intervention as a whole, based on interviews with the students and teacher. However, they also suggest a *critical* stance on the intervention as a whole, which is quite interesting. Specifically, the group – meta-critically – interviews Danny, who had been part of this journalistic group during the whole intervention. As the excerpts from the film demonstrate (cf. A1), Danny acknowledges having learnt something genuine and worthwhile during all four experiments, both in terms of content and method. But he also questions, whether what he has *learned* in “Danish” is *education*. As he puts it at one point in the film (quotations from the subtitles in English, made by the group): “There might not be enough ”Danish” education in a group of journalists”. Danny seems to doubt whether engaged learning, meeting one’s interest, can be considered valid formal knowledge production (equating ‘education’).

This distinguishing comment came as something of a surprise to me, as a designer-researcher. Nonetheless, Danny repeats and confirms this double interpretation of the intervention in his written essay on the intervention.¹⁷⁹ His written evaluation seems both critical and self-critical, acknowledging that he may be judging things from a contemporary point of view, whereas he should evaluate it from a future-oriented perspective. For example, he irritably comments that his work has been dominated by technology, but later claims that technology is: “...something which is very important for the future, not just in an educational context, but all over the world.”¹⁸⁰ Danny argues that he misses being part of the other students’ work – not learning what they learn. In this sense he presents an argument, which parallels Peter’s case *against* student-differentiated teaching strategies. On the other hand, he is quite content about the fact that he has worked with media and communication and particularly journalism, because it reflects his interests and future ambitions. He later told me that he wanted to become a journalist.

He also writes that he would have preferred getting more (overt) instruction from the teacher about journalistic tools. But then again, he acknowledges that this is probably the price one has to pay if one wants to be given responsibility, which he enjoys. Danny’s evaluation is indeed ambiguous, even openly paradoxical – reflecting the complexity of “Danish” as a mother tongue

¹⁷⁹ Cf. A23.

¹⁸⁰ [noget jeg ser som meget betydningsfuldt i fremtiden, ikke blot i skolesammenhæng, men overalt i verden]

subject. There are several analogies between his reflections and the theoretical framework of this dissertation suggesting that the school subject is dominated by several paradigms, including a potential techno-semiotic paradigm in the future. As he concludes in regard to the entire project:

In regard to the future discipline of “Danish”, I have a feeling that it all connects well. This is possibly because my work has been very technically inclined, which I consider very important for the future – not just in an educational context, but all over the world.¹⁸¹

And later:

In my opinion, the most important conclusion in regard to this project is the disciplinarity of Danish and the feeling that one has possibly not learnt enough and extracted as much as possible in terms of disciplinarity. One ought probably, as mentioned earlier, turn this into something positive and regard it such that one, in working as a journalist, has not learnt what others have learnt, but in return retained something, which others have not, which presents inspiration to continue and explore the universe of journalism.¹⁸²

From a design-based intervention researcher’s point of view, one becomes both optimistic and slightly pessimistic reading this. Clearly, the intervention has created impact and change for Danny at a local level, which makes him produce transformative reflections about the school subject in general. Reflections – one might add – which are similar or perhaps even more radical compared to those of his teacher. If Danny’s reflections were accepted at the macro-level among all agents of “Danish” in hhx or beyond, this would produce a significant change in practice. On the other hand if Danny of all students is uncertain about the legitimacy of the work he has performed, what about the rest of the students in his class, all the students in all four cases and students in general? As we shall see in the following, they are not quite as positive in their reflections. Danny’s own final remark is comforting, however. What he suggests is that a dominant regime of “traditional Danish” exists, but should be overcome. The reason, in one word, is that the “world” is asking for competencies related to this pedagogy.

¹⁸¹ [I forhold til fremtidens danskfag har jeg en følelse af at det hele hænger godt sammen. Muligvis er det fordi mit arbejde har været meget teknisk præget, hvilket er noget jeg ser som meget betydningsfuldt i fremtiden, ikke blot i skolesammenhæng, men overalt i verden.]

¹⁸² [Den vigtigste konklusion omkring dette projekt er i mine øjne danskfagligheden, og følelsen af at man muligvis ikke har lært nok og ikke har fået nok ud af det rent fagligt. Man bør nok som tidligere nævnt vende det til noget positivt, og se således på det: Man har i sit arbejde som journalist ikke lært alt det de andre har lært, men ved nærmere eftertanke har man til gengæld lært noget som ingen andre har fået med, hvilket giver inspiration til at fortsætte og udforske journalistikkens univers.]

12.2 Student evaluations across the cases

Looking at the rest of the student essays in Danny's class (cf. A44) and listening to the focus group interviews made with students in this class about the experiments and the intervention as a whole, this is the general, dominating conclusion for case 1. Few students express themselves at the same high, reflexive level as Danny, but the dominating point is the same: The four experiments seem relevant or very relevant and legitimate for a future school subject called "Danish", and students find that they had been working in new ways, having enjoyed learning something new.

Likewise in case 3 in Susanne's class, this is the dominant perception. In the evaluations of this class – expressed in essays and focus group interviews – students are slightly more sceptical about the working methods, not the least due to technological constraints and to some students – particularly boys – having personal and social struggles with Susanne. But generally, they find the experiments very relevant. Some add that they hope it is something that will be used for exams, which was not the case.

Contrarily, but not surprisingly, this predominantly positive student evaluation of the intervention in cases 1 and 3 is contrasted by student responses in cases 2 and 4. Roughly speaking, half of the students in Peter's class (case 4) are rather critical about the relevance of the intervention in their essays. In the focus group, the students seem more positive. Several students have a hard time remembering, understanding and/or reflecting upon the purpose of the experiments. A great variance in terms of conclusions and explanations are also found in this class. Some students write positively about the intervention, using arguments quite similar to students in case 1.

In case 2, where both Jane and Jean taught, at least two thirds of the students are sceptical or overtly negative, expressing some of the same arguments as negative students in case 4. Several have a very hard time understanding the rationale of the intervention and feel like they have been cheated somehow. Some express concerns whether they have learned anything at all and whether the class will have time to catch things up on other matters before exams. Generally, they blame the intervention for being too long and the curriculum for being designed in a bad way by me, the designer-researcher. Some positive remarks or even evaluations being generally positive about the entire intervention are also found though, in case 2.

One way of interpreting these student evaluations, is to claim that the pattern found in the previous experiments is repeated: Students in cases 1 and 3 have, on the one hand, a tendency to share positive perceptions, while students in cases 2 and 4, on the other side, share negative

perceptions. Local classroom culture seems to play a vital role, as also suggested by other DBR studies (Squire et al. 2003). This pattern finds further support in teacher evaluations.

12.3. Teacher evaluations of experiment 4 and the intervention in general

Based on the data collected, in which teachers evaluate the intervention as a whole (cf. A46-A49), it must be argued that their evaluations narrate the story of four teachers that are *moved*, to use the metaphor from the previous chapter about animations, from a rather *defensive* position to an *explorative* position regarding the integration of H.C. Andersen, multimodal media pedagogy and “Danish”. In a sense, teachers become explorative and critical-constructive offering reflections that could help integrate multimodal media pedagogy within “Danish” beyond the case of focusing on Andersen. On the other hand, the four participating teachers have different views on the school subject from a paradigmatic level and they express different kinds of scepticism or negative perceptions about the intervention. This is the main finding in analysing the content of the evaluative data available: Written teacher evaluations (A46), structured research interviews (A47), documents from the final post-experimental meeting (A48-A49) and the research log (A24). I shall explain and exemplify this in the following, hence strengthening the trustworthiness of this finding.

In case 1 Karen backs up the whole intervention quite strongly, both in the interview in the journalistic film, in her written evaluation of experiment 4, which also contains questions about the intervention as a whole, and during my final research interview of her. This is an excerpt from the interview:

Nikolaj: What kind of media oriented disciplinarity have we attained?

Karen: It involves a consciousness about what one is doing, being conscious about what one is learning [perhaps ‘doing’, this word was barely audible]. That is ah it is form and content

Nikolaj: Yes

Karen: Which coagulates, where where, colleagues often (expressed with a tired voice) say woah disciplinarity, disciplinarity, these new approaches are fine, but at the expense of disciplinarity, at the expense of disciplinarity, which was the case, but I think we have found a stance or a method where disciplinarity or form and content become intertwined, instead on one taking all the energy from the other, if one can find a higher unity, I’m not saying that it has been attained yet, but we have moved towards that goal

- Nikolaj: Is it, is the new disciplinarity which we are attaining here, does it have to do with other types of textuality or media genres which have been activated and ahh combined with other media or approaches, or what (question)
- Karen: Yes, simply because it is possible
- Nikolaj: Yes
- Karen: So, you can wo-, you can work with images in a different way because it is technically possible
- Nikolaj: Yes
- Karen: Instead of, that is before, you were unable to use visual arts, because had such small useless copies (A48: 21, my translation)¹⁸³

As we see, Karen links technological developments with the development of teaching “Danish”. She refuses the opposition – often suggested by colleagues – between content and method. New working methods do *not* in her view necessarily lower the level of content. On the contrary, new technology related, to some extent, with new working methods may very well improve the quality of knowledge production within “Danish”. Karen’s positive evaluation is not surprising considering the previous analyses of the four experiments. Karen conceptualises teaching in a Deweyan way (cf. chapter 3 and 4) and points towards a potential techno-semiotic paradigm for “Danish”/StLE/MTE. It should be noted, though, that she remains sceptical and conservative on some points. For example, she acknowledges that when she first read the material for experiment 4, it was found a bit “dangerous”, hence suggesting a rather disturbing psycho-dynamic metaphor (which is repeated, even more strongly, by Jean). Karen still argues that animations do not reach the qualitative level of teaching “the original” literary fairytales. On the other hand, she acknowledges self-critically, in her

¹⁸³ [Nikolaj: Hvad er det så for en medieorienteret faglighed vi har fået ind / Karen: Det er noget med at være bevidst om det man foretager sig, at være bevidst om det man lærer [eller laver, svært at høre], altså det øh, det er form og indhold / Nikolaj: Ja / Karen: Der smelter sammen, hvor hvor, det er så tit kolleger (udtaler det træt) de siger, uha det faglige, det faglige, de nye arbejdsmetoder er fine, men det faglige, det koster, det faglige, og det gjorde det jo også, men jeg tror vi er ved at finde et eller andet sted, eller finde en metode hvor det faglige, eller form og indhold smelter sammen, i stedet for at det ene stjæler energi fra det andet, hvis man kan få det til at gå op i en højere enhed, altså jeg siger ikke det er nået det endnu, men vi er et stykke videre henne mod målet / Nikolaj: Er den, er den nye faglighed som vi ligesom er ved at finde frem til her, er den så, noget med at, der er nogle andre, teksttyper eller mediegener som man får på banen, og øh kombineret med nogle andre medie- andre arbejdsformer eller hvad / Karen: Ja, simpelt hen fordi det er muligt / Nikolaj: Ja / Karen: Altså du kan helt anderledes ar- du kan arbejde med billeder, på en anden måde fordi det er muligt, teknisk / Nikolaj: Ja / Karen: I stedet for, altså før, du kunne ikke bruge billedkunst, fordi du havde sådan nogle små lede kopier]

written evaluation, that "...the work with several media can connect student and teacher perception of what is interesting".¹⁸⁴ Indirectly, she suggests that didactization of the subject is needed, that this process should go on in everyday classrooms and be linked to research.

In case 2, the written evaluation from Jean on experiment 4, which was later triangulated with an interview at the school (with both Jean and Jane), is elaborate and offers several interesting points. Jean acknowledges that she has changed her professional conceptions considerably during the relatively short period she has been part of the project. In her written evaluation (A46) she states that her dominating feeling in the beginning was "fear" (which is considered to be a quite disturbing psychodynamic concept). Being asked to comment the following (deliberately provocative) statement: It is not relevant to the discipline of "Danish" to concern oneself with multimedia such as animation, whether receptively/analytically or productively?¹⁸⁵, she writes: "I probably had that preconception, but I have since changed my position!"¹⁸⁶. She adds, though: "But I understand the claim very well and, in reference to the present curricula requirements, also understand the apprehensions."¹⁸⁷ The logonomic structure – including genre regimes – on the macro level of the school subject is indeed echoed in her micro-discourse; it also casts light on some student concerns about exams.

Jean was not able to evaluate the intervention *in toto*, nor was Jane, who did not offer a written evaluation of experiment 4 or the intervention as a whole. The research interview with Jane, however, brought up the intervention. Here, she acknowledged that although she found the resources and commitments expressed in the four experiments relevant and, to some extent, eye-opening, she finds that the conception of *how* to teach these resources – the method – different from her own. She considered the Available Designs to be rather long, requiring a closed narrative structure of teaching that would not match her own pedagogy. She considers herself to be a "spontaneous" pedagogue. As she puts it in a rather fragmented conversation, jumping from one topic to another: "I think I attain that thing with the narrative, just by other routes".¹⁸⁸ When interviewing Jean and Jane together, they agree on several aspects of the intervention, including that a textual hierarchy related to the understanding of "Danish" exists in the subject:

¹⁸⁴ [arbejdet med flere medier kan bygge bro mellem eleverne og lærerens opfattelse af hvad der er interessant]

¹⁸⁵ [Det er ikke danskfagligt relevant at beskæftige sig med multimedier såsom animationer, hverken receptivt/analytisk eller produktivt?]

¹⁸⁶ [Jeg havde nok selv den opfattelse, før jeg gik i gang, men her bagefter har jeg ændret holdning]

¹⁸⁷ [[Men jeg forstår altså godt udmærket påstanden og i forhold til de nuværende pensumkrav, kan man godt forstå forbeholdene.]

¹⁸⁸ [jeg tror på at jeg får det der narrative flow med, bare, ad andre veje]. Cf. A48: 48.

- Jean: ...many at the upper-secondary level of education still have a warped conception of expanded textuality – such that one retains the high-literary approach that it must be the words on paper to be proper “Danish”
- Jane And it must preferably be in writing
- Jean: Yes, on writing right, that’s what I mean, right, that it is truly in writing on paper
- Nikolaj: Yes
- Jean: That’s what I mean right otherwise it doesn’t belong to the discipline of “Danish”
- Nikolaj: No
- Jean: So
- Nikolaj: Is this also reflected in examinations
- Jean: Yes
- Jane Yes, very much
- Jean: But it may also have something to do with praxis since it is really frigging difficult to handle watching video, racing forwards and backwards, so you must have several classrooms for teaching or preparation in play and those things
- Jane It is such a nuisance
- Jean: Actually, I had heard as much was the case in advanced “German” before, where they ahh used video, but this was dropped because of copyrights and such things, it was very hard on the teachers who had tried it right, so in practical terms it is, it is also much more demanding, right, with tonnes of equipment and copies every time right, of the same text, it is much easier to stand by the photocopier (A48: 52, my translation)¹⁸⁹

¹⁸⁹ [Jean: (...) flere i gymnasiet har stadig den der, vrængende indstilling til det der udvidede tekstbegreb – så man stadig har den der højliterære tilgang til at det skal være tekst på papir for at det er rigtigt dansk / Jane: Og det skal også helst være skrift / Jean: Jo på skrift ikk, det er det jeg mener ikk, at det er virkelig, ja, på skrift, på papir / Nikolaj: Ja / Jean: Det er det jeg mener med det ikk, ellers er det ikke rigtigt danskfagligt / Nikolaj: Nej / Jean: Så / Nikolaj: Er det også

As we see, Jane and Jean also suggest that the textual hierarchy in “Danish” is related to technological and other contextually related constraints, which influence not only “Danish” but other school subjects. Put differently, constraints of multimodal pedagogy operate across the curriculum.

In case 3, when Susanne evaluated experiment 4 just after having finished it, she was quite positive about the design of the project. She considered it to have been “educational” [lærerigt] and highlights the productive student-based aspects of the experiment as the most positive thing. This follows her pattern evaluating former experiments, stressing the importance of drawing on multiple student competencies developed outside school, as in the case of Louis in experiment 2. In general, she concludes the following about the intervention: “I am very positive towards the experiments, but still think they have been too comprehensive. I have therefore prioritized in regard to the amount of materials and assignments.” (A46).¹⁹⁰ Hence, Susanne suggests an adaptive approach to the Available Designs that would respect content and work method. She also suggests that the intervention as a whole has not been designed in a perfect way. Later at the final meeting, Susanne repeats this point and becomes sceptical about the intervention (cf. below). This makes her evaluation both different from and parallel to Peter’s evaluation.

In case 4, Peter’s written evaluation of experiment 4 is quite elaborate and far more sceptical and critical than Karen’s and Jean’s. Although he found the design of experiment 4 “exciting” [spændende] at first (cf. A46 here and in the following), and responds to the statement “It is not relevant to teach multimedia...” with “...rubbish, it can be very relevant...”, he is critical about aspects of the design, particularly those which were predominantly student-controlled. In this way, Peter and Susanne contrast each other. Looking at the intervention as a whole, he claims that students had big difficulties learning from and linking the four experiments. Peter also signalled that he had become tired of the project due to time pressures; in this regard, he mirrors the responses from Jane and Susanne. Later, when Peter and I meet for a research interview, he clarifies that the point is not that he is tired of Andersen or collaborating with me; rather, it had to do with the lack of payment for spending many hours trying to develop the school subject.

sådan, afspejler det sig også i, eksamensopgivelser / Jean: Ja / Jane: Ja, i høj grad / Jean: Men det kan også have noget med det praktiske at gøre, at det er da skide svært at håndtere at skulle sidde og se video, og fare frem og tilbage, så skal man have gang i flere under- eller forberedelseslokaler og sådan noget / Jane: Det er så bøvlet / Jean: Altså det jeg har hørt, man hævde det for eksempel i Tysk A førhen [et andet fag på hhx], hvor man brugte øh, videoer, men det afskaffede man så også på grund af copyright og alt det der, det var enórmt hårdt, de lærere der havde prøvet det ikk, så rent praktisk skal det jo også, er det jo også meget mere krævende ikk, med tusind apparater og tusind kopier hver gang så også ikk, af den samme, tekst, altså det er meget nemmere at stå ved kopimaskinen]

¹⁹⁰ [Jeg er jo meget positivt stemt over for forsøgene, men synes stadigvæk de har været meget omfattende. Jeg har derfor foretaget prioriteringer i forhold tekstmaterialer og opgaver.]

In general, Peter suggests in the interview that the very process of becoming more reflected about the school subject and its practice is the main outcome of the intervention. He says the following when asked whether he has experienced some sort of improvement [løft] regarding his reflections about the subject:

Nikolaj: Ahh – especially the disciplinary pedagogical improvements, that is disciplinary improvements, what do you say to that

Peter: - hm - - - well I think there has been, since I have read stuff, some material which I otherwise would not have had access to right

Nikolaj: Mhh

Peter: Which has, has ahh, which always results in some kind of disciplinary improvement – also pedagogically, well I probably think that there has been, I do not necessarily think that class, how does one say it, has become better, better than what it could have been otherwise

Nikolaj: No

Peter: But but there have been other things and it has presented a new perspective and thereby it has given a disciplinary-pedagogical improvement (A48: 6)¹⁹¹

Peter is aware that the contexts and perceptions among the four participating teachers may differ a lot and that he may have had other experiences than the others. As he says later, commenting on our coming final meeting:

Peter: It will be interesting to see how things ahh have developed and what the different perceptions of good and bad have been now I have not studied the others' debriefings but I could imagine that we have attained very different experiences in some of the experiments, while we have had the same experiences in others, which I could see was the case in their written assignments (refers to experiment 3), we have all made the mistake of producing a small ahh appendix with image analyses right

¹⁹¹ [Nikolaj: Øh – især det der fagligt-pædagogisk løft, altså fagligt løft, hvad vil du sige der (spørgsmål) / Peter: - hm - - - altså det synes jeg jo der er i og med at jeg har læst nogen, noget materiale som jeg ikke ellers ville have fået fingrene i nødvendigvis ikk / Nikolaj: Mhh / Peter: Som har, har øh, som jo altid giver en eller anden form for fagligt løft - og også pædagogisk, altså det synes jeg egentlig nok der har været, jeg synes ikke jeg synes ikke nødvendigvis at undervisningen at det, hvad skal man sige, at det vi har lavet er blevet, bedre end det måske kunne have været på anden vis / Nikolaj: Nej / Peter: Men men det har været noget andet og det har da givet et nyt perspektiv og dermed har jeg også fået et fagligt-pædagogisk løft]

and say that it is the shadow who ahh, as something that apparently is, no matter where we work with it

Nikolaj: Yes

Peter: Has it been the expressed form of the discipline of “Danish” which has dominated there?

Nikolaj: Yes (A48: 9, my translation)¹⁹²

This last comment refers to the findings of experiment 3, in which Peter seems to acknowledge somehow self-critically that both he and the other participating teachers are deeply embedded in a *literary and language-oriented*, perhaps even a logocentric, paradigm of “Danish”, at least when it comes to the teaching of Andersen. Indeed, he understands that this may have influenced the students. What he characterises as “...the form of the discipline of Danish” [danskfagets udtalte form] is what one would term a genre regime within the framework of social semiotics.

The post-experimental meeting with the teachers some months later was unengaged and did not offer many reflections about the intervention. This had very much to do with the design of the intervention, not the least its longitudinal element. As noted in the research log from that day (A24), only Karen seemed to have read the material prepared and sent in advance (cf. A49). Peter and Susanne expressed, explicitly, that they could not spend more time on the project after the meeting, one of the reasons being that this was the period when exams were taking place. Thus, we would have to postpone writing of the report.

Methodologically, one of the things learned from the meeting was that we had different perceptions of how one might evaluate an intervention. At an early phase of the intervention, there was a plan for us to reflect on data at the post-experimental meeting that the teachers could use in a report that they were to write and send in, in collaboration with me, to the Ministry of Education. However before the meeting, Peter and Susanne argued – by e-mail – that we should focus on writing the report at the meeting and when we eventually met at the meeting, they argued that the

¹⁹² [Peter: Det bliver interessant og se hvordan tingene er æh, er forløbet, og hvad de forskellige opfattelser af hvad der er godt og dårligt, og jeg nu har jeg ikke læst nærlæst de andres afrapporteringer, men jeg kunne forestille mig at vi er, har gjort meget forskellige erfaringer af nogen af forsøgene og at vi på andre punkter måske har gjort noget af de samme erfaringer det kunne jeg se eksempelvis på deres skriftlige opgaver, vi er alle sammen faldet i den der med at de er, lavet sådan en lille øh appendix med en illustrationsanalyse ikk og siger det er skyggen der, øhm som noget der åbenbart er, uanset hvor vi arbejder med det / Nikolaj: Ja / Peter: Har det været danskfagets udtalte form, der har domineret der (spørgsmål) / Nikolaj: Ja]

report should not have a length of more than 5 pages. This came as a big surprise to me. Some of the material sent in advance included empirical data on oral student evaluations in focus groups, which had been transcribed. It was suggested that this student perspective could form part of the report, which would not be possible within 5 pages. However, Peter argued that a student perspective was unnecessary because a report should be written from the point of view of teachers. His point was that the teachers had already evaluated the experiments and this evaluation would be representative for both teachers and students.

As a researcher-*theorist* I could only disagree – then and now – but I did not express this disagreement. This is rather interpreted as testing the biases of the designer-researcher. Clearly, the pressure of participating was underestimated. Also, it was not sufficiently anticipated that teachers may have other perceptions of the evaluation genre than a researcher. It became clear the genre of evaluating development projects was unclear.

Before we began writing the report at the meeting, an hour was spent reflecting on the intervention. The participating teachers were asked to retell *one* significant experience they would remember from the intervention. This was four months after finishing experiment 4, after evaluating experiment 4 in writing and after me having interviewed them (except Susanne). In the interviews, the participating teachers had seemed relatively positive (cf. above). At this meeting, three out of four teachers retold negative experiences from the intervention:

- Susanne retold the story from experiment 3 of how boys in her class had teased her – this had affected her deeply;
- Peter emphasized the problems of integrating the LMS, which neither he, the school nor the students were prepared for;
- Jane emphasized problems with the LMS;
- Karen, positively, highlighted that the use of the LMS in her case had facilitated true differentiated teaching.

It seemed that the group members, in listening to each other, made their evaluation take up a certain direction. In a longitudinal perspective, it was found that these predominantly negative and technology-oriented memories contrast the reflections that teachers make in situ. Data coming from situations closer to the time and place of previous experiments, including the interviews,

demonstrate this. The epistemological point may be that the teachers have changed their mind or it may be that their evaluations have been influenced by the context. From a socio-semiotic point of view it should be argued that utterances are deeply constructed by the situation and the larger context within which they are produced. Whether or not an experiment has had positive or negative impact – a core question in DBR methodology – depends partly on how, when and why we ask this question.

From an abstract theoretical point of view, the differences in these late teacher evaluations do not come as a surprise. On the contrary, they could be expected. The four teachers seem to repeat a pattern of different teacher identities and associated rationales that we have now been able to analyse in detail from the initial teacher profiles via teacher actualisations of and reflections about the four experiments, to this final meeting. It seems that Susanne and Karen share views in terms of conceptualising the school subject “Danish” within a predominantly *communicative* or perhaps even techno-semiotic paradigm, which has semiocy as its over-arching competence goal. This makes them more able to conceive and realise potentials in the intervention project than Peter, Jane and Jean. On the other hand, Peter, Jane and Jean were good at pointing out constraints of the project which test the transferability of the quasi-experiments. In terms of paradigmatic thinking of MTE/StLE, Peter seemed most clearly to be advocating a *literary-academic* paradigm, whereas Jane’s approach resembled the *developmental* paradigm in some aspects. Jean positioned herself in-between paradigms. Her evaluation of experiment 4 and my interview of her suggest that she retained a professional uncertainty about which paradigm she advocates. To put it in another way, she was uncertain whether she acknowledged her own personal belief, which pointed towards a communicative paradigm stressing ‘the extended text’ or whether she should respect the dominating literary-academic paradigm. In general, the cases therefore represent the complex diversities and ambiguities found in the school subject “Danish”.

Part IV: Epilogue

Purpose and perspective

The purpose of Part IV is to conclude the study by offering a chapter on main findings in the intervention study. This is followed by summaries in Danish and English, and References.

Chapter 13. Towards semiocy? Critical-constructive conclusions

The ambition of this study has been to explore in both theory and practice the possible integration of media pedagogy, mother tongue education/standard language education and the multimodal mediated resources of Hans Christian Andersen fairytales. The hypothesis was that a core concept termed semiocy would function as an umbrella concept for such an integrative process. Applying an abductive, Design-Based Research design – also characterized as a qualitative, quasi-experimental multiple-case study with elements of a comparative and longitudinal study – a *theoretical* section was suggested to clarify ‘semiocy’, so as to synthesize it into a model, which could inform an *empirical* section applying the model in four quasi-experiments over four cases. In the following we shall review the hypothesis by:

- Summarizing the evaluation of the empirical analysis of the intervention and its experiments;
- Reflecting on the theoretical work that has developed in the theoretical section, specific experiments and the meetings with teachers and students reflecting on the project;
- Discussing the implications of this review for the social system of “Danish” and, more broadly, MTE/StLE;
- Discussing the implications for future research.

13.1. Main findings of the intervention

As explained in the methodological chapter, one should distinguish between theory and practice when studying interventions in educational contexts. Theory cannot simply be application as an implementation – it is *adapted*. The adaptation process is generated by teacher and student interpretations and a number of variables related to local classroom and school culture. Epistemologically, we may argue however, using Hodge and Kress’ (1988) terminology, that a semiotic chain is manifest between theory and practice. The point is that interventions may be able to test, perhaps even change provisionally or permanently, the logonomic structure and ideological complex of a social system. This includes, of course, its agents: teachers and students. In the case of

this study, it has been argued that the intervention did indeed test a social system and its agents, namely “Danish” in Denmark in four local contexts during the course of a school year. Whether it has also produced change beyond this spatiotemporal context is an open question.

13.1.1. Theoretical conclusions

Theoretically speaking, it was assumed that it was possible to draw on insights from the theory of media literacy when trying to construct the alternative concepts of multimodal media pedagogy and semiocy. In this sense, a *semiotic turn* was proposed within media pedagogical practice. The ‘British School of Media Education’, ‘Media literacy conceptions in the US’ and ‘Nordic media pedagogy’ offered vital conceptual frameworks for such a semiotic turn from different complementary perspectives. Buckingham (2003) suggests in general terms that a classroom-oriented media pedagogy could potentially comprise three ‘vernacular discourses’: inclusion, empowerment, and multidisciplinary. Chapters 3 and 4 can be seen as an extended attempt at proving this, which lead to the proposal that the goal of multimodal media pedagogy should be called ‘multimodal media competence’. This was understood as the competence to act in insightful ways: analytically and/or creatively, individually and/or collaboratively, when facing specific demands related to content, form and/or functional (Meyrowitz 1995) aspects of mediated multimodal meaning-making. This multimodal media competence is related to a broader sense/meaning-making competence termed semiocy. The multimodal media competence and semiocy categories are syntheses of socio-cognitive theory, constructivist media pedagogy, multimodal studies and competence-oriented educational pragmatism in the Anglo-Saxon tradition. The four experiments represented in the intervention have attempted to integrate Buckingham’s three discourses and the concept of multimodal media pedagogy as a practical approach to field work.

The model that encompasses the dynamics of multimodal media competence and semiocy is depicted at the end of Part II. As argued above, one should ask in DBR studies whether empirical applications of the model have confirmed or revised the model. In this respect it is argued that the empirical tests in the four experiments have only partly confirmed that the model contains the true or right parameters of multimodal media pedagogy. If it is true that the principles suggested in the model have been adequately adapted to the experiments – including the process of knowledge production going from situated practice via overt instruction and critical framing to transformative practice suggested by the New London Group (2000) – one may argue that two participating teachers and their students suggest this as a robust and somehow adequate model for teaching. Over

and against this, two other participating teachers and their student do not necessarily find that the four phases fit their classroom culture and the teaching of Andersen. In this sense we have found reflection and acceptance as the two possible responses to the possibility of ‘inclusion, empowerment and multidisciplinary’. In any case, empirical testing has helped us understand the complex dynamics that the model may catalyse in being applied to actual experiments. Subject-related knowledge production processes clearly do *not* progress as anticipated by the model when confronted with real life. The goal of developing student semiocy may seem an unreachable goal in some “Danish” classrooms.

What is semiocy and what does it take to reach this rationale? One way of explaining the rationale of semiocy within MTE/StLE is summarized in table 13.1.1.1. The table draws on the categories proposed by Sawyer and van der Ven (cf. 4.3.2, p. 137ff.) for describing a paradigm for the school subject and, hence, makes this study comparable with conceptions of MTE/StLE in other studies.

Time / Century	Paradigm and tradition	Legitimacy: Why?	Topics: What?	Teaching-learning: How?	Knowledge regime	Agents
21 st century	Technosemiotic paradigm; rethinking a communicative, humanistic tradition.	Access and contribution to semiotic society functioning receptively and creatively, and individually and socially, within and across national borders.	Semiotic resources and their meaning-making potentials, with some emphasis, particularly in primary school, on verbal modes and their interaction with other modes and media.	Dialogic: Competence-oriented teaching in reflexive <i>Bildung</i> --oriented way integrating conceptual learning and practical production going through phases of situated practice, overt instruction, critical framing and transformative practice.	Knowledge as process and result: Socio-cognitive constructivism	Didacticians, teachers, some policy makers, students (particularly super users), market representatives

Table 13.1.1.1. The rationale of semiocy within MTE/StLE.

The explanations of topics, teaching-learning practice and knowledge regime in the table may seem highly abstract. Obviously, the semiocy rationale is a concept unfamiliar to “Danish” teachers; although, as pointed out in the introduction, it was coined in a report from the Danish Ministry of Education (UVM 2003c). As we have seen in empirical analyses, this concept has only been discussed indirectly with teachers and students. We have been able to discuss and reflect, on concrete aspects of semiocy using words and notions familiar to teachers and students. It is found much easier to reflect on and refer to a literary-academic rationale with teachers, than a semiocy rationale. The former is the name of tradition, so to speak, whereas the latter is the name of a potential future. It is therefore a rationale that explores, not what media pedagogy within MTE/StLE *is*, but what it could *become*.

13.1.2. Empirical findings and related theoretical work

As Thavenius (1995; cf. 3.3.1.2, p. 92ff.) has stressed, we should expect ‘conflicts, ambiguities, and compromises’ if we try to apply a new rationale (or, as he put it, a new conception of media *Bildung*) to social reality. This is precisely what has been found in empirical analyses. This claim therefore seems to have been verified in this study, suggesting possible mechanisms that affect this particular process. Table 13.1.2.1 presents an overview of local impacts and the related theoretical work of the four experiments.

Is the outcome presented in table 13.1.2.1 a productive outcome or a counterproductive outcome? Is it, as some design-based researchers would term it (Squire et al. 2003, Barab & Squire 2004), a *successful* outcome, or is it *unsuccessful* considering the many objections and critiques that were expressed by teachers and students in the course of the intervention?

In descriptive terms, it is a result that offers interesting subject-related didactic knowledge production (Krogh 2003; cf. 4.3.4, p. 143ff.) or didactization, as Ongstad (2004; cf. 4.3.4) would put it, regarding the practice of the school subject when this school subject is forced in the direction of multimodal media competence and semiocy. Potentials for moving towards semiocy are demonstrated. We shall enter into more detail about this below. On the other hand, it should be stressed that a complex range of negative constraints for *not* moving towards semiocy have also been found. Some teachers participating in this intervention do not share the vision of semiocy and the integrative approach of multimodal media pedagogy. Instead, they advocate another dominant rationale within the social system of MTE/StLE, which we have termed ‘academic’ or ‘literary-grammatical’. This seems to play a vital role in “Danish” in Denmark, as in the MTE/StLE subjects in other Western countries.

Experiment	Local Impact	Theoretical Work
1: Writing reviews, becoming critical	Increased teacher experience with and reflection on the potentials and, not the least, constraints and challenges of teaching Andersen within “Danish” from a “critical media literacy” perspective, in this experiment using computers and Internet/intranet resources. Teachers, in some cases, experienced new critical-creative genres.	Rethinking the concept critical media literacy towards semiocriticism focusing on the mode of writing in the media of the screen and paper and the genres of reviews and journalistic evaluation.
2: Teaching media and/or Andersen through oral readings	Re-vitalizing the seemingly traditional genre of readings among teachers and students. In some cases, increased teacher acknowledgement of drawing on student competencies when experimenting with mediated oral Andersen readings in analytical-receptive and productive-creative ways. Increased reflection, among teachers, on the complexity of designing learning resources in competence-oriented ways, including drawing on digital media.	Exploring the knowledge producing potentials of integrating oral pedagogy, literary pedagogy, and media pedagogy by teaching the genre of readings functionally in media broadcasted locally in classroom community and semi-locally outside school. Revealing the importance of normative student and teacher conceptions of “Danish”.
3: Picture books and illustrated logo-centrism	Teacher adaptation of a broad variety of images-and/or-words versions of Andersen fairytales, though in predominantly verbal, literary pedagogical ways. In two cases, teachers acknowledged problematic dominance of the mode of writing compared to the mode of images when teaching this kind of, in principle, multimodal mediated material.	Questioning the puristic disciplinary notion “visual literacy” from the point of view of multimodal media pedagogy focusing on the relation between words and images. Finding of logo-centric knowledge production regime.
4: Animations that move adaptations	Teachers learn that animations do move adaptation in terms of reconfiguring subject-related knowledge production. Teachers increased their understanding of, among other things, the fact that the role of the teacher changes when teaching complex new multimodal media. Students seem engaged in learning about “new media”, such as animations. In some cases, teachers acknowledge the knowledge producing potentials of practical student production based on experiences with authentic learning sites outside school.	Exploring the subject-related didactic relevance of teaching multimodal digitally mediated Andersen animations not only as a means but also as a goal, legitimised, among other reasons, by the so-called creative industries economy.

13.1.2.1. Local impact and theoretical work of the four experiments – some conclusions.

The four experiments demonstrate that if we are to move towards the semiocy rationale, the literary-grammatical rationale and its embedded regimes of production, reception, genre and knowledge practiced in everyday design events must be questioned critically. If one does so in constructive ways, pointing at rather concrete design-based alternatives, this may open up new practice. In this sense, the study points both at the present system of MTE/StLE and it points critically-constructively, in the tradition of Klafki (1977, 1998; Nordenbo 1983), at a future alternative.

13.1.3. *What? Conclusions about Available Designs*

But let us be a bit more detailed about the findings from empirical analysis of Designs of meaning that were to some extent artificially separated into three phases: Available Designs, Designing, and the Redesigned.

In terms of Available Designs, it was assumed from the beginning that a rich variety of semiotic resources related to Andersen were circulating in contemporary discursive reality (or, as Gee (2003; cf. 3.2.3.1; p. 72f.) puts it, semiotic domains) and that these resources were already to some extent taught in “Danish” classes and known by “Danish” teachers, yet in ways that were unlike the systematic pedagogical approach suggested by the model informing the intervention and the experiments. It was also assumed that students would have had previous experiences with this kind of material in their personal lives and primary education and that this had formed their conception of Andersen. Analyses of the field have offered empirical evidence of these assumptions, in many ways.

Generally, we may conclude that it was relatively easy to form portfolios of Available Designs that reflected theory and addressed the different objectives of the four experiments. However, material constraints in the phase of Available Designs are found, in some situations to be influenced by a *permission culture*, which has become more and more important the closer we get to contemporarily produced material published for a global market. There is therefore a gap between what is available in market-controlled semiotic domains (often found in the private homes of teachers and students) and what is available in the domain of formal schooling. This gap marks an important constraint of multimodal media pedagogy. It makes it exceedingly difficult for formal schooling to prepare students to act creatively and analytically in a society dominated by these kinds of resources.

13.1.4. How? Conclusions about Designing and the Redesigned

In the analyses of the Designing phases, which have used a wide variety of data sources and evaluation strategies, we have reached a far more complex, in-depth, empirical understanding of the components and dynamics of the model. The Context has been foregrounded, discussed and differentiated many themes, such as – at the observable, meso-discursive level:

- technological constraints,
- lack of material resources,
- lack of teacher training,
- problematic school infrastructure,
- school organisation
- leadership
- and management approach by the responsible researcher.

In extension of the last bullet point it has also been found that a designer-researcher coming from the outside may lack understanding of these constraints and that such lack of understanding may influence the design of learning resources and interventions negatively. In general clear research management is found to be a vital component of Design-Based intervention studies. This and other variables may be seen as determinants to the responses found among the participating teachers.

Also micro-discursive determinants have been found that determine responses in local classroom contexts. These are, among other things, that seemingly unimportant uses of single words used in a learning resource or by teachers or the designer-researcher, may have great, sometimes counterproductive, impact on teaching-learning practices and eventually, the knowledge students produce or do not produce.

At the macro discursive level, broader and more abstract themes related to the ideological complex and logonomic system of a school system have also played a vital role in teacher and student knowledge production and their reflections on the embedded semiocytic rationale. This includes dominant conceptions of “Danish” and regimes of production, reception and genres, both among students and teachers at the meso-level and in broader macro discursive levels, such as in normative curriculum plans.

In terms of paradigms, we have found what Sawyer and van der Ven (2006; cf. 4.3.2, p. 137ff.) have termed an academic or literary-grammatical paradigm to dominate teacher conceptions of “Danish” among the four teachers. Sawyer and van der Ven suggest the hypothesis that the academic paradigm within MTE/StLE, rooted in 19th century thought, has experienced a “restoration” in the late 20th century, which is supported by the findings in this study. It should be noted, though, that the communicative and creative-developmental paradigms also play an important role in the professional profiles of the four teachers.

In the beginning of the study, after initial talks with the teachers, it was found (as reported in chapter 6) that Karen and Peter shared the same professional profile and that Jane and Susanne shared profiles. Thus, one might have expected that these pairings would actualise the experiments in seemingly equal ways. Empirical analyses showed this not to be true. Rather we found a pattern between Karen and Susanne, whose actualisations in many ways seemed similar. We may conclude from this that they represented a more explorative strategy towards new ways of producing meaning (production regime) across the four experiments, introducing new genres (genre regime), allowing students to act more actively (reception regime), moving towards new kinds of knowledge production (knowledge regime), than they were used to. This had to do, in part, with ideological or paradigmatic pre-conceptions of “Danish”. They still did many things and made students do things, that would reflect a more traditional paradigm, but they often became self-critically aware of the constraints that made them do so. In this sense, we may argue that their actualisations pointed towards a techno-semiotic paradigm reflecting the rationale of semiocy (cf. table above). However, we may also argue that they do not depend entirely on their ideological conceptions of the school subject. Local school culture and the fact that they started the experiments with second year classes, that functioned relatively or very well, might have played a role too for their practice and evaluation of the experiments.

These discussions of different strategies for teaching reflect a broader discussion and understanding of the complexities of the subject-related didactic *how*-question; that is, planning the progression of a competence-oriented teaching-learning practice. As we have seen, different strategies for emphasis on and interpretations of what is termed situated practice, overt instruction, critical framing, and transformative practice have been tested. The general conclusion, in this regard, is that the organisation of progression is important if one wishes to encourage competence-oriented teaching. It is found that competence-oriented teaching, foregrounding student-controlled inquiry and activity, among other things, transgresses normative conceptions of what is termed

“normal “Danish”” by both teachers and students. The outcome of experiment 3, with its relatively traditional organisation and outcome represents the negative confirmation of this point in the researcher-designer’s view.

Like in other research trying to adapt the New London Group categories (e.g. Michaels & Sohmer 2002), it is found that translation of the categories, in the broadest sense, is necessary if one is to adapt the categories to Available Designs and Designing of multimodal media pedagogy. The two first categories (situated practice and overt instruction) have been easier to understand and adapt, both for the designer-researcher and, indirectly, the teachers than the two last categories.

One main critique of the experiments expressed by teachers was that conceptions of and tools for *assessing* student knowledge production were missing. During the Designing and Redesigned phases several questions of assessment have been raised, such as:

- What are the criteria of assessment?
- Are they quantitative or qualitative, or how do the two interact?
- Are they individually oriented or collaboratively oriented?
- Should student products be assessed according to a dominant “normal” academic conception of what “Danish” is or should they be compared to some initial understanding of expertise or mastery of multimodal media competence?

These questions are important to bring up and suggest possible future research. Indirectly, they evaluate the *quality* of teaching and learning. This is a legitimate and very important goal and a goal that has been marginalized in media education research for too long. If we are to relate assessment to the four categories of the New London Group, assessment must be associated with critical framing, although assessment is not emphasized explicitly in the theory-making of the group. In the model of multimodal media pedagogy/semiocy, critical framing is depicted as something that comes before the last phase, namely transformative practice. This seems to suggest that critical framing, understood as assessment, includes formative assessment, but excludes summative assessment of, say, student projects. This is a theoretical problem in the model and in the New London Group (2000) approach. Empirically it is not reflected in the Available Designs of the experiments and it must be argued that it should be reflected because combinations of formative and

summative assessment are necessary in any kind of subject-related teaching (Busch et al. 2003; Niss 1993).

This study does not give a full answer to the difficult question of assessment. Less ambitiously it has attempted in explorative, quasi-experimental ways to retell examples of how teachers, students and the designer-researcher have reflected on understanding and assessment processes for multimodal media competence as they become visible in student products. Our findings suggest that no such thing as a simple, unitary taxonomy of multimodal media competence can be established. This conclusion echoes a general theory of situated cognition. As Jay Lemke (1994) explains, the point is that subject-related knowledge processes are *content and context dependent* and cannot be understood apart from relatively specific social and cultural strategies for action:

A now long and distinguished tradition of dissenters (e.g. from Cole et al. 1971, Cole & Scribner 1974, to Lave 1988) have argued that higher reasoning processes are context- and content-sensitive, not context- and content-independent. People in this tradition have even wondered whether cognitive processes can be usefully described at all apart from specific social and cultural activities, or at least apart from relatively specific social and cultural strategies for action. (Lemke 1994: no paging)

Perhaps one of the reasons why multimodal media pedagogy has a hard time being acknowledged within MTE/StLE, including among some of the teachers we have followed in this study, has to do precisely with not acknowledging basic epistemological understandings of assessment within socio-cognitive theory. If we review the teacher assessments of student projects, one observation informed by situated cognition would be that they have a particular problem of acknowledging *creative* student competencies. Teachers seem focused on conceptual re-production – based on overt instruction – rather than theory-informed transformative production. The irony is that students, too, seem to have problems acknowledging their own productive competencies. Students and teachers reassure each other in the *status quo* of the classroom community system due to their mutual conception of “traditional “Danish””. The designer-researcher stands on the outside pointing at a new conception of (multimodal) media pedagogy that suggests new ways of approaching assessment.

13.2. Limitations of the research design and its conclusions

Having made these broad conclusions and empirical findings, one must ask – as Bryman (2004; cf. 5.1, p. 159) stresses – what level of trustworthiness they represent and what the limitations of the findings are.

Trustworthiness depends on evaluations of the credibility, transferability, dependability and confirmability of the study.

Throughout the empirical part, questions of credibility have been foregrounded by triangulating different sources of data. Hopefully, this has offered a sense of material perspective and a sense of diversity to the study, in which reality becomes a construct of perceptions.

Regarding transferability, this is related to so-called thick description of the cases or contexts being studied. The iterative and comparative approach to multiple cases in a longitudinal perspective was used in order to strengthen the transferability. We have found that cases are unique due to a number of aspects and that the findings in each case cannot be easily understood as representative in any general sense. On the other hand, these in-depth descriptions may make the cases more recognizable for other readers, which may strengthen trustworthiness.

Dependability has to do with access and insight into the full data set of a study from beginning to end. For opponents of this dissertation there is (almost) full access to all data through appendices, which should strengthen the dependability of the study. On the other hand, readers who only have access to this dissertation, may feel that important data is missing and that this weakens trustworthiness. This problem is acknowledged and attempts have been made to compensate for it by citing thoroughly from the appendices. Moreover, readers are welcome to contact me for access to data and I shall try to comply with this, perhaps only anonymizing data.

Regarding confirmability, this has to do with the researcher testing his own biases and theoretical aspirations – which seems quite relevant in DBR. One aspect of confirmability in this study is to consider how much the relative success of the experiments – seen from the point of view of teachers – depended on the fact that a designer-researcher was pushing toward a specific process of change for a specific period of time. In collaborating, these teachers were paid for making an extra effort. This was important!

In the course of analysis, some aspects of the designed study have affected its outcome, such as:

- Collaborating with critical-exemplifying cases (teachers and to some extent students) being willing to change their practice;
- Constrained resources for developing material and making participant observations and analysis;

- Working as an individual researcher, instead of being part of a research team that could help reflect on the design process and empirical data.

In terms of impact, such as making teachers and students actually choose and work with Andersen from a multimodal media pedagogical point of view, there was a heavy dependence on the conditions of the research design. Findings, in this sense, are highly context-dependent.

In any qualitative research, including quasi-experiments, it is impossible to make a so-called control group, but other kinds of data can be used for backing up this point. For example, in returning to Susanne's case 3 some months after finishing the last experiment, it was found that things seemed to have gone "back to normal". Upon visiting the students were asked to fill in a questionnaire about the project, and spontaneous interviews were made. One of the questions I asked was whether their "Danish" teacher had continued to use the LMS technology when teaching them. She had not, nor had any other teacher in any other school subject. One may object that the use of this technology plays a less important role in relation to the practice of multimodal pedagogy. However, this was not the only aspect of the intervention that was quickly left behind. The same students were approaching final oral exams and they deplored the fact that Susanne had decided *not* to use any of the material and angles worked with in relation to Andersen (in Denmark, teachers have to report this in advance). Susanne would make questions about Andersen at exams, but from a literary perspective. When asking Karen, in case 1, whether she would use the experiments for exams, the response was the same. She felt insecure about doing so.

Why do Karen and Susanne take those decisions? Perhaps the answer is that in oral exams in Denmark we find an examiner and an external-examiner coming from another school. Perhaps Karen and Susanne were afraid the external-examiner would not understand or acknowledge those alternative approaches they had experimented with. Also, they would have to take the risk of technology failures, which is particularly problematic and nerve racking at official exams (Jean articulated this fear, cf. A48). Such concerns are quite logical. Their explorative approach to the intervention ended at exams facing the dominating paradigm and regimes of "Danish".

Another backing of the claim that impact results were very much provoked by the research design is the following: During the intervention, there was an opportunity at my institute to initiate a nationwide competition funded by the Hans Christian Andersen 2005 Foundation that encouraged all students in upper-secondary education in Denmark to participate. Posters were sent to all schools announcing that students could participate in one of four categories. Three categories were literary;

the fourth category encouraged students to produce a “multimedia production” related to Andersen. No students responded to the fourth category, so no prize was given in this category. In comparison, more than 50 students replied to the literary questions. The four experiments presented in this dissertation are four suggestions of how students *could* have responded to this category, perhaps encouraged by their teachers. It seems that there is no tradition for doing this in an upper-secondary school context.

These negative case “auxiliary observations” are not surprising but simply illustrative of the point that the dominant way of teaching and thinking Andersen in upper-secondary education within “Danish” is literary, and that there is no strong (multimodal) media pedagogical tradition that might challenge this. Wrapping up the trustworthiness of the intervention, however, the main point is that the concrete and reflective work produced by teachers and their students remains, and this work is now transported through the present scientific tale, to discursive levels beyond local classrooms. The study has created instant impact at local meso-levels, but it has not created profound, long lasting change at macro-levels; this in spite of a large number of paper presentations and teacher courses about the project. In other words, it would probably still be very difficult to go out into the field of upper-secondary “Danish” teaching and find classes working the way we have done with Andersen. In a sense, it cannot be recommend that they did, at least not if this means performing four experiments in a row with Andersen. This is probably not a good idea, as pointed out by students. On the other hand, it was never the main research point of doing the intervention, that others should repeat the experiments. The point was to create local impact and develop empirically informed theoretical work about multimodal media pedagogy focusing on “Danish” and MTE/StLE as a school subject. In this regard, we have come far and conclusions are robust.

Hence, the main “impact” is a *theoretical* one: Reflexive work based on empirical analysis has revealed the borderlines of the school subject. The study has produced new knowledge in the field of subject-related didactics. The study has helped understand and tentatively point at a number of structures and complexes surrounding the practice and events of multimodal media pedagogy within “Danish”. New R&D projects are necessitated if we are to promote the rationale of semiocy in moving from theory to local practice. As media education and mother tongue education researcher Robert Morgan puts it pragmatically, we should approach *a media education in small letters* which “move[s] away from decontextualised ‘models of media education that work anywhere’” (Morgan

1998: 128). International comparative projects, that are both locally and globally sensitive, may be a viable path in this regard.¹⁹³

13.3. Why? Deconstructing dyads

One may reflect on why the dominant knowledge regime of MTE/StLE should be changed and how one could further support integration through subject-related research. At least the answer should be historically informed and pragmatic.

Let us briefly recall the history of the school subject once again: Since the mid-19th century, educational thinking in Europe has developed a strong tradition for identifying ‘mother tongue education’ with the general framework of teaching language and literature. Language-and-literature is the structural, binary formula within which we reflect on the actual and potential practice of a mother tongue subject in a specific country. Although this formula has proved successful and has taught citizens their national language and literary history, critical mother tongue education researchers (some of which rename themselves standard language researchers) and other kinds of curriculum researchers have begun, for several decades, to point at problematic aspects of this formula.

One fundamental problem is that it has served the function of nation building. This is a problem if one acknowledges – contrary to the romantic philosophy of the 19th century and many contemporary politicians – the construction of identities through reflexive processes based on material resources coming from and referring to an increasingly globalised and media-saturated world.

This critique opens up a characterization of the language-literature formula, as we found it on the homepage of the International Mother Tongue Education Network, as *a dyadic split* (cf. 4.3.3, p. 140ff.). IMEN calls for research that caters for alternative aspects of the school that do not fit this dyadic split, such as media, semiotics, text, ICT, drama and StLE as L2 education. The heterogeneous row of IMEN keywords intend to come to terms with a cultural and technological shift from the 19th to the 21st century, encouraging researchers, teachers and policy-makers to move beyond by drawing on new disciplinary optics that seem to grasp the complexity of contemporary, global, semiotic culture, while at the same time acknowledging – and this is important to stress – local nation-bound history and identity, including verbal language.

¹⁹³ Cf. Herrlitz & Van de Ven 2007. Cf. also a new Danish network working with the didactics of “Danish” promoting comparative work on a Nordic and European level (www.danskfagenesdidaktik.dk).

As argued, a theoretical way of re-integrating disintegrated disciplines is to suggest an alternative binary dyad; that of *modes-and-media*. These two simple notions used together could serve as a functional, robust and legitimate terminological alternative for MTE/StLE agents trying to dialogue with each other at micro-, meso- and macro-levels in classroom practice, teacher education and curriculum frameworks within and across national borders.

If and when we apply the mode-and-medium dyad, language would no longer simply be language. Rather, language is understood as two different modes, speech and writing. Equally, literature, including Andersen fairytales, could be understood as something more than a mode of writing. As this study has demonstrated from different angles, we are trained to teach literature in classrooms as *writing*, hence focusing on this single, independent mode, using historically developed analytical methods (predominantly biographically, existentially and textually oriented). The point is, however, that a monomodal approach is not enough; rather, it is inadequate for describing any textual reality. Alternatively, we may propose that if people (which we have also termed meaning-making agents) are to handle the full semiotic complexity of contemporary society in productive and creative ways, they need to understand writing in two ways: both as an *independent mode*, but also as a mode that works *interdependently* with other modes and a medium. In extension of this, they should be able to handle the fact that such ‘modes-and-media’ – which we have also termed textual constellations – are distributed and actualised differently by meaning-making agents in different communicative contexts. This includes students and teachers working in classroom communities.

With a foregrounded focus on modes and media, a new curriculum goal could be outlined, not only for MTE/StLE, but also for what the Council of Europe terms (cf. COE 2006), “...language(s) of (school) education”. As stated elsewhere (Elf 2007), we might call this goal *semiocy*. Semiocy is the next step after literacy. It involves the focused teaching of the competence to conceptually focus on, handle and further develop all potential semiotic resources available in contemporary society. It is a principle that acknowledges both the collective functional-utilitarian *and* the personal-formative need for citizens to be able to critically consume and contribute to a full range of semiotic domains and practices in a complex modern culture – addressed *en miniature* with different weight and emphasis in different school subjects, such as MTE/StLE, on different levels.

The teaching of language and literature in the light of the semiocy concept and the modes-and-media formula does not vanish. Rather the shift from literacy to semiocy, particularly within MTE/StLE, becomes a matter of progression: In primary school, the framework of MTE/StLE

should allow for the continuation of a strong emphasis on the teaching and learning of the mode of writing. Writing is a fundamental means for socio-cognitive development and is also in many domains still the dominant mode of meaning-making, not least in school subjects.

13.4. A receipt for the H.C. Andersen 2005 Foundation

Coming full circle, the designer-researcher wishes to acknowledge that the H.C. Andersen 2005 Foundation initiated this study, suggesting its basic media pedagogical point of departure. Let me acknowledge this by leaving summarizing receipt:

The study has argued that Andersen's fairytales can be seen as a rich resource of material in the shape of different constellations of modes and media – some produced across spatial (national) boundaries, and some across temporal boundaries – that can be used for teaching “Danish” at upper-secondary level, using a multimodal media pedagogical approach. If one chooses to do so, the potentials of moving towards a new kind of knowledge production that might be fruitful for students, citizens and culture emerge. But we should warn teachers and other agents that such an experiment requires a re-thinking of the ‘whys, whats and hows’ of teaching the school subject. Like other canonical writers in other countries, Andersen is on the edge, in-between, forcing us to reflect on the limitations of the present rationale of “Danish” / MTE/StLE.

One of the questions that have been discussed constantly during the study, both among participating students and teachers, between them and me, between me and other key informants is whether the study is about Andersen *or* about media pedagogy. That question cannot be answered as an either-or. Rather, the question is the answer: We should explore it. Some literary critics might object: Why not stick to a literary approach as we have always done? The best way of answering that question, apart from the thorough theoretical and empirical investigations made above, is to refer to Andersen himself or rather one of his late fairytales, “The Great Sea Serpent” (1871). If one reads this fairytale, which, by the way, has the subtitle “A contemporary-fairytale by H.C. Andersen” and was published for the first time in the illustrated journal *Illustreret Tidende* (which is now available, in a trans-mediated version on the homepage of the Danish Royal Library), one will learn how Andersen encourages us to be curious about the potential cultural, almost mythical impact of technology. In the fairytale we meet a small, curious fish fascinated by what the fish believes to be an amazing, enormous serpent that has suddenly plunged down into the sea world. As the storyteller explains, most of the creatures in the sea are afraid of this new modern thing and try

to avoid it. In contrast, there is this little fish that is too curious not to explore it. One of the dialogues between the fish goes like this:

Let it lie where it is! It doesn't concern us," said the most cautious of the little fish.

But the very smallest of them insisted on gaining some knowledge as to what that thing might be.¹⁹⁴

In the end, the curious fish understands what "that thing" is. The serpent is the telegraph cable that was wired at that time from Europe towards America. But in the fish's view, in the storyteller's view and in Andersen's view the cable produces knowledge beyond that. As the tale ends:

Deepest down of all lies the outstretched serpent, a blessed Midgard snake, which bites its own tail as it encircles the earth. Fishes and other sea creatures clash with it; they do not understand that thing from above. People's thoughts rush noiselessly, in all languages, through the serpent of science, for both good and evil; the most wondrous of the ocean's wonders is our time's... (Andersen 1949: no paging)

"The Great Sea Serpent" could be read as an allegory of contemporary multimodal media pedagogy. This curious fish has encouraged me to carry through this exploration of the meaning-making potentials of technology and, subsequently, media and modes of Andersen fairytales, although it has been a long and challenging journey. Now I have tried to convince other fish in the world of "Danish" and beyond that we should try to understand, and integrate, this new "wonder" in the school subject. If we do so, it will bring us towards semiocy, preparing us for future society. And, ironically, back to Andersen.

¹⁹⁴ Andersen 1949: no paging. This and the following quote cited from the Jean Hersholt translation of Andersen's fairytales available on the Internet, cf. Andersen 1949.

Summaries

Resumé på dansk

I denne afhandling – hvis titel *Towards semiocy? Exploring a New Rationale for Teaching Modes and Media of Hans Christian Andersen Fairytales in Four Commercial Upper-Secondary “Danish” Classes. A Design-Based Educational Intervention* kan oversættes til *På vej mod semiocy? En undersøgelse af et nyt rationale til brug for undervisning af H.C. Andersen-modaliteter og -medier i fire danskklasser i handelsegymnasiet. Et design-baseret interventionsstudie* – undersøges det om og i givet fald ud fra hvilket rationale man kan integrere mediepædagogik, modersmålsundervisning og H.C. Andersen-eventyr. Projektet er delvist finansieret af H.C. Andersen 2005-fonden.

Hypotesen, beskrevet i afhandlingens del I, er at man kan omtænke rationale for modersmålsfaget i retning af et mål som kan betegnes *multimodal mediekompetence*, inspireret af blandt andre teoretikeren Günther Kress. Dette mediepædagogiske mål refererer til et overordnet rationale for danskfaget/modersmålsfag kaldet *semiocy*, første gang lanceret i rapporten *Fremtidens danskfag*. Andersens eventyr som de dyrkes i domæner uden for skolen, uanset om vi taler om tegnefilm, illustrerede udgaver, oplæsninger eller elektroniske versioner af eventyrene på Internettet, lægger i sig selv op til en sådan tilgang. Spørgsmålet er imidlertid om den kan integreres inden for skolens og danskfagets domæne, og hvilken fagdidaktisk betydning det i givet fald vil få for forståelsen af fagets praksis.

Afhandlingens fremdrift består i at undersøge hvad der sker hvis dette tankeeksperiment forsøges gennemført, teoretisk og praktisk-empirisk. Forskningsdesignet kan karakteriseres som design-baseret interventionsforskning eller – udtrykt med samfundsvidenskabelige begreber – et kvalitativt, kvasi-eksperimentelt, longitudinalt studie af multiple cases hvori indgår komparative elementer. Det indebærer at der i del 2 udvikles en teori og en model for undervisning i multimodal mediepædagogik i danskfaget. Modellen anvendes eksperimentelt i del 3 til at udvikle, gennemføre og analysere fire undervisningseksperimenter om H.C. Andersen. Eksperimenterne gennemføres og reflekteres løbende af lærere og elever i dialog med og under observation af designeren-forskeren med henblik på at vurdere teoriens og modellens lokale adaptation på skoleniveau og dens mere universelle gangbarhed på et makroniveau.

I teoridelen udvikles *semiocy*-begrebet først gennem en arkæologisk udredning af den internationale forskningsretning *media literacy*, dernæst gennem en diskussion af kernebegreberne

multimodalitet, medie, kompetence og modersmålsfag samt deres indre sammenhæng og ydre relation til praksis. I den empiriske analysedel er det målet at give en troværdig beskrivelse af hvorledes eksperimenterne rent faktisk adapteres af fire dansklærere på fire forskellige hhx-skoler i fire danskklasser med i alt cirka 100 elever over et år. De empiriske fund er følgende:

Hvad angår læringsressourcer, også kaldet Tilgængeligt design, er konklusionen at det er muligt at udvikle materialer der reflekterer modellen for multimodal mediekompetence og semiocy. Der er relativ let adgang til at designe undervisningsforsøg der inddrager Andersens eventyr ud fra forskellige modalitet-medie-konstellationer, hvor man samtidig rammer de forpligtelser [commitments] der ligger implicit i modellen for multimodal mediekompetence. I de fire forsøg fokuseres på henholdsvis en skriftlig-verbal, kritik(er)orienteret tilgang med inddragelse af Internet (eksperiment 1), en mundtlig-lydlig oplæsningstilgang med inddragelse af digitalt/analogt optageudstyr (eksperiment 2), en ord og billede-tilgang med eksempler fra billedbøger og andre medier (eksperiment 3) og endelig en animationsorienteret tilgang med både analytiske og kreative opgaver løst både på og udenfor skolen (eksperiment 4).

Hvad angår dét elever og lærere gjorde ved og reflekterede om eksperimenterne, også kaldet Designing, er resultatet meget varieret, hvilket illustrerer en stor mangfoldighed og forskellighed i de fire cases. Eksperimenterne fortolkes både positivt og negativt, som en succes og ikke som en succes, som perspektivrige og ikke-perspektivrige for undervisningen af Andersen og undervisningen i dansk. Denne fortolkningsvariation repræsenteres både af elever og lærere, den er overvejende afhængig af hvilken case der er tale om, og hvilket eksperiment som reflekteres. Nogle ligheder går dog igen på tværs af cases. Én nemt iagttagelig modstand på alle skoler er dårlig it-infrastruktur, hvilket påvirker vidensproduktionen – eller manglen på samme.

Derudover kan man finde mønstre af mere ideologisk og såkaldt logonomisk karakter der både peger i retning af en succesfuld gennemførelse og i retning af det modsatte. Dette ses ikke kun i Designing-data, men også i den type data der materielt kommer ud af undervisningsprocessen, som betegnes det Redesignede (fx elevprodukter og refleksionstekster/afrapporteringer). Både elever og læreres gennemgående oplevelse af eksperimenterne, især de to første, er at de virker meget komplekse og anderledes i forhold til ”normal danskundervisning”. Der sker imidlertid en tilvæning til denne nye måde at (om)tænke danskundervisning i de sidste to forsøg; om end de fire lærere deler sig i to grupper: To lærere og deres elever (case 1 og 3) forsøger at forfølge de forpligtelser (commitments) der knytter sig til eksperimenterne, og to lærere og deres klasser (case 2 og 4) gør relativt meget modstand eller omfortolker dem. Ved afrundingen i den post-

eksperimentelle fase, hvor lærere og elever bliver bedt om at evaluere eksperimenterne og interventionen som helhed, præger denne udvikling også lærer- og elevvurderinger. Der er relativ stor spændvidde fordelt på cases i elevernes vurderinger. Lærerne vurderer samlet at interventionen har åbnet op for nye perspektiver hvad angår mediepædagogiske måder at undervise i Andersen på og i det hele taget undervise i dansk på.

Konklusionen i del 4 er at undersøgelsen har:

- 1) ført til en konsistent udvikling af et nyt teoretisk rationale for og en model til planlægning, gennemførelse og vurdering af semiocyt-undervisning, som Andersen kan undervises ud fra,
- 2) at vi har fået dybdegående kvalitativ viden om hvad der sker hvis dette rationale forsøges overført til praksis, og
- 3) at potentialerne vil have svært ved at blive realiseret uden for de konstruerede rammer af en intervention fordi fagets dominerende ideologi og iboende regimer for produktion, reception, genrer og vidensproduktion lægger op til noget andet.

Afhandlingen kan med dens teoretiske og empiriske analyser, der sandsynliggør en anden mulig praksis, være med til på kritisk-konstruktiv vis at rejse det fagdidaktiske grundspørgsmål om danskfagets og i det hele taget modersmålsfags legitimitet, genstand og gøren – populært betegnet dets hvorfor, hvad og hvordan.

English summary

Translated by Thomas Derek Robinson

In this dissertation, the title of which is *Towards semiocyt? Exploring a New Rationale for Teaching Modes and Media of Hans Christian Andersen Fairytales in Four Commercial Upper-Secondary “Danish” Classes. A Design-Based Educational Intervention*, it will be examined whether, and according to which aim, one may integrate media pedagogical mother tongue education (MTE) or standard language education (StLE) with H.C. Andersen fairytales. The project is partially financed by the H.C. Andersen 2005-Foundation.

The hypothesis, which is described in Part I of the dissertation, is that one may rethink the rationale for MTE/StLE so that it attains an aim that may be termed multimodal media competence. This is inspired by, among others, the theorist Günter Kress. This media pedagogical aim refers to

an overall rationale for Danish MTE/StLE called ‘semiocy’, which was first launched in the report *Fremtidens danskfag*. Indeed, Andersen fairytales – as they are experienced and approached in domains outside school, whether in cartoons, illustrated editions, readings or electronic Internet versions – set the stage for such an approach. The question is, however, if this may be integrated within the domain of disciplinary school-‘Danish’ and which didactic implication this would have in regard to understanding the praxis of the subject.

The movement of the dissertation consists in examining what happens if this thought experiment is seen through both theoretically and practically-empirically. The research design may be characterised as design-based intervention research or, as expressed with social scientific terminology, a qualitative, quasi-experimental, longitudinal study of multiple cases, within which is found comparative elements. As a consequence, Part II develops a theory and a model for teaching multimodal media pedagogy within the subject of ‘Danish’. The model is applied experimentally in Part III in order to develop and analyse four teaching experiments about H.C. Andersen. The experiments are continuously seen through and reflected upon by teachers and pupils in dialogue with and under supervision/observation of the designer-researcher, with the aim of evaluating the local adaptation at school level for the model and theory. Indeed, this included the universal validity at the macro-level.

The theory section develops the concept of ‘semiocy’ through an archaeological examination of the research subject called ‘media literacy’. Following this the concept is developed through a discussion of the core concepts of ‘multimodality’, ‘media’, ‘competence’ and ‘MTE/StLE’ with special regard to their internal coherence and outer relation to praxis. In the section which concerns empirical analysis, the aim is to present a credible description of how the experiments are actually adapted among four “Danish”-teachers at four different hhx-schools [commercial upper-secondary school], in four “Danish”-classes, with about 100 pupils, over the course of a year. The empirical findings are as follows:

In regard to the learning resources, also called Available Designs, it is found to be possible to develop materials, which reflect the model of multimodal media competence and ‘semiocy’. There is relatively easy access to designing educational experiments, which include Andersen fairytales according to various modalities and media constellations, such that one at the same time attains the commitments implicitly found in the model for multimodal media competence. The four experiments focus respectively upon:

1. A written/verbal *reading* approach, which is critique-oriented with the inclusion of the Internet;
2. An oral/audiative reading approach, with the inclusion of digital/analogue recording equipment;
3. A word /image approach with examples from illustrated books and other media, and
4. Finally an animation oriented approach with both analytical and creative assignments to be solved within and outside school.

As regards what the pupils and teachers did to and thought of the experiments – also called Designing – the results are very varied, which illustrates the diversity and differences found in the four cases. The experiments are interpreted both negatively and positively, as a success and not as a success, with perspectives for education and lacking perspective for teaching Andersen and “Danish”. These differences in interpretation are represented by both pupils and teachers and are mainly dependent upon which case is in question and which experiment it regards. There are however similarities across cases. These regard an easily observable resistance found at all schools in terms of poor IT-infrastructure, which affects knowledge production or lack thereof.

In addition one may find patterns of a more ideological and logonomic character that indicate both a successful application, but also the opposite. This is not only seen in the Designing-data, but also in the types of material, which have resulted from the teaching process, which is termed the Redesigned (for instance pupil productions and reflexive texts/debriefings). Both pupil and teacher experiences of the experiments (particularly the two first experiments) indicate a perception of complexity and divergence from “regular “Danish” class”. However, an adaptation occurs to the new way of thinking “Danish” class in the two concluding experiments, although this divides the four teachers into two groups. Two teachers and their pupils (Cases 1 and 3) attempt to live up to the commitments of the experiment, while cases 2 and 4 put up resistance or redefine the experiments. In the closing post-experimental phase, where the teachers and pupils were asked to evaluate the experiments and the intervention as a whole, this development is seen to make its presence felt. In sum, the teachers consider the experiment to have opened new perspectives as regard media pedagogical methods for teaching Andersen and even in regard to teaching “Danish” in general.

The conclusion, which is found in Part IV, is that the study has:

1. Led to a coherent theoretical rationale for and model of planning, applying and evaluating the teaching of ‘semiocy’, which may be applied to Andersen.
2. Attained an in-depth qualitative knowledge of what happens if this rationale is transferred to praxis.
3. Demonstrated that the potentials given in the findings are difficult to realise outside the constructed framework of the intervention because they clash with one of the dominant ideologies found in the subject, but also inherent regimes for production, reception, genres and knowledge production.

The dissertation may, with its theoretical and empirical analyses substantiate the possibility of another praxis, which may critically and constructively raise the disciplinary didactic question of what constitutes the legitimacy, object and praxis of MTE/StLE or more popularly its ‘whys’, ‘whats’ and ‘hows’.

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Note that Kbh. is an abbreviation of København [Copenhagen].

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