

EXPLORING READING EXPERIENCES OF THREE MEDIA VERSIONS

Danish 8th grade students reading the story *Nord*

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Abstract

The conditions for literary reading in schools are changing as young readers increasingly have the option of alternating between media, hereby encountering medium-specific expressions. Different media offer different sensory appeals and therefore provide distinct experiences. This article addresses these changes in reading conditions in a school context by investigating reading experience based on an empirical, phenomenological qualitative study of 8th grade students' reading of a specific work of literature, *Nord* by Camilla Hübbe and Rasmus Meisler, in three media versions: as a digital audiobook, as a born-digital narrative, and as an illustrated printed book. It analyses the qualitative data focusing on students' experiences of and reflections on the various literary media works and on how they, individually, integrate sensory appeals and vary in these appeals. The study shows how different material embodiments of literary works involve a distinct reading experience understood as a necessary interplay between cognitive and sensory activities, and how the type of media influences the reading experience. Based on our findings, we propose a model for understanding the reading experience that consists of the three dimensions: experience, materiality and comprehension. We argue that reading comprehension is necessary for a reading experience to even take place.

Keywords: literature in education, phenomenology, reading comprehension, materiality, reading experience

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Henkel, A. Q., Mygind, S., & Svendsen, H. B. (2021). *Exploring reading experiences of three media versions: Danish 8th grade students reading the story Nord*. Contribution to a special issue: *Working with Literature in Nordic Secondary Education*, edited by A.F. Gourvenec, H. Höglund, M. Johansson, K. Kabel and M. Sønneland (for the Nordic Research Network on Literature Education) with John Gordon. *L1-Educational Studies in Language and Literature*, 21, 1-29. <https://doi.org/10.17239/L1ESLL-2021.21.02.04>

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1. INTRODUCTION

The conditions for literary reading are changing as readers have the option of alternating between media, hereby encountering different medium-specific expressions. Different media offer different sensory appeals and therefore provide distinct experiences. The media through which the reading takes place in this intermedial textual landscape change the reading condition itself.

In the wake of digitization, empirical research has focused mainly on the circumstances of reading on screens, such as e-books, and on changes in reading habits. The number of studies on reading experiences facilitated by different media and on medium-specific relations regarding paper books, audiobooks and digital narratives is limited. Consequently, this article aims to address the changes in reading conditions (Pedersen et al., 2021) in a school context, by investigating reading experience based on an empirical qualitative study of 8th grade students' reading of a specific work of literature in three media versions: as a digital audiobook, as a born-digital narrative and as an illustrated print novel. The work in question, *Nord*, is written by Danish author Camilla Hübbe and illustrated by Rasmus Meisler. *Nord* is characteristic of our new media landscape where creators of literary works have a multitude of media at their disposal and can offer readers different mediated forms of the literary work. *Nord* was first conceived as a digital story narrated through written text, pictures, sound, simple animations and interactivity on a website and published in 2018. During the production, process which spanned a few years, the story was also transformed into an illustrated novel and published as a printed book in 2017, i.e. before the digital version. In 2018, the novel was recorded and published as an audiobook, narrated by Sandra Bothmann, available via various audiobook streaming services. *Nord* is a coming-of-age fantasy narrative about a 14-year-old girl called Nord, who sets out to find her missing mother. Along the way, she meets a squirrel boy, the three norns Urd, Skuld and Verdante, and the monster Nidhug, who is gnawing on the roots of the Tree of Life. Gradually Nord realizes that a new Ragnarök is brewing (Henkel, 2021). A contemporary reader is offered a number of entry points into this literary work, all of which engage different combinations of senses. So, what impact does this new reading condition have on the experience of reading?

The article uses data collected during the ongoing research project Reading Between Media at Aarhus University and VIA University College, Denmark, funded by the Novo Nordisk Foundation. Our understanding of reading experiences considers the materialities of specific media works as contributing components of the meaning-making process of reading. To understand and analyse reading experiences, our study takes a phenomenological approach as its methodological point of departure. The article answers the research question: What characterizes children's reading experiences of three different material embodiments of a literary work in a school context?

2. RESEARCH ON READING EXPERIENCE

Research on reading experience is not an extensive field, especially when it comes to empirical studies of students' reading experiences in a school context. There are well-established research traditions in relation to reading understood as a phenomenon and a competence and also in relation to experience, which is most often empirically studied on the basis of a psychological and/or phenomenological approach. Within literary studies, reader-response theory and reception theory, for example the work of Louise Rosenblatt and Wolfgang Iser, have been preoccupied with the reader's interaction with the literary artifact (Iser, 1978; Rosenblatt, 1995). Such studies have focused on the encounter between text and reader and the reader's participation in the formation of meaning, but have been less interested in the experience dimension and not at all in children's experience of reading literature in school.

Reading experience as a field of research is complex and interdisciplinary, which is confirmed by the editorial team behind one of the few books that explicitly has 'reading experience' in its title. In *Plotting the Reading Experience: Theory/Practice/Politics*, the editors write: "We are concerned with the possibilities of the reading experience and aim to disclose a—not the—heterogeneity of its functions, qualities, uses, and pleasures in a manner that should convey the ambiguity of our subject" (Rothbauer et al., 2016, p. 3). However, many contributions to the anthology have one thing in common: they are based on research originating in Library and Information Science.¹

In the 1990s, within the previously mentioned reader-oriented approach, some empirical studies were concerned with the readers' point of view but not their reading experience (Appelyard, 1991; Malmgren, 1998; Smidt, 1989). In recent years, a few studies have conducted on reading experiences specifically in relation to fantasy literature (Mikkelsen, 2005) and graphic novels or comics (Aggleton, 2016; Serantes, 2019). Within the field of literacy research, and specifically *multiliteracy*, beginning with the New London Group in the mid-1990s, the focus has been on multimodal and sociocultural aspects of reading and writing. The importance of mastering several forms of modalities is considered a requirement in order to be able to participate in contemporary communicative text practices (including Cope & Kalantzis, 2000, 2009; Gee, 2003; Kress, 2003; New London Group, 1996). Some scholars have conducted empirical studies, such as Margaret Mackey, who has studied how children make sense of narratives in different formats such as print, video, e-book, computer game and CD-ROM (Mackey, 2002, 2004). In her research, Mackey shows how young readers develop strategies for interpreting narratives through encounters with a diverse range of texts and media, however, without

¹ One of the contributors to the anthology is Gitte Balling who has conducted several empirical studies of reading experiences among adults (Balling, 2009) as well as a study of young people's (13-14-year-olds) attitudes toward and experiences of reading on screen and on paper (Balling, 2017).

including perceptual and aesthetic perspectives. In summary, knowledge is limited to reading experience, including aesthetic and phenomenological dimensions both theoretically and empirically, especially when it comes to children's experiences of reading literary texts of different materiality such as books, laptops and smartphones. Likewise, no previous research has been conducted on children's experience of reading a specific literary work in three different media formats.

In empirical cognitive studies of reading, there has been no particular focus on the reading experience. Rather, research has focused on students' reading comprehension when reading digital texts. Different text formats have been investigated, including PDF files (Mangen et al., 2013), multimodal texts (Støle et al., 2020) and html texts (Alisaari et al., 2018). These studies discuss certain variables of significance for reading comprehension when reading digital text, including text length (as scrolling is considered taxing on the cognition while reading), text types, eye fatigue, and time (as it is more time-consuming to read screen texts than printed texts). While Mangen et al. found that students prefer to read PDF files on a screen, although their comprehension of the content is poorer than when reading on paper, and Støle et al. found that the comprehension is generally poorer among students who read on a screen, Alisaari et al. show that there is no difference in the comprehension when reading on paper and on a screen when a number of factors are taken into account. Mangen et al. (2013) and the Stavanger Declaration (E-READ, 2019) have contributed significantly to discussions about the appropriateness of an uncritical digitization of school materials. Among other things, reading digital and digitized texts requires specific knowledge about digital text genres and text formats and the development of a variety of reading comprehension strategies and search strategies (Bundsgaard, 2008; Strømsø & Bråten, 2008).

3. THEORIZING MEDIA-SPECIFIC READING EXPERIENCES

In this study, we draw on the developing field of "reading studies" (Skjerdingsstad & Rothbauer, 2016, p. 3), which sees reading as related to "individuals and their subjectivity, but also as part of their practice as social and cultural beings" (ibid., p. 4). Understood in this way, reading implicates cognitive processes of encoding and decoding text as well as touch, tangibility, embodiment and action: "It encompasses registration and reception, but it is also a *doing* in a corporeal dialectics—a practice. Reading is a craft strongly linked to the hands as well as to the position of the body and the surroundings in which it takes place" (ibid., p. 7). Unlike the studies mentioned in the previous section and in continuation of this understanding of reading, we combine an aesthetic and experience-oriented approach with an emphasis on how materiality and medium-specific meaning-making differ in the students' encounter with the three media versions in the school context.

With this focus on materiality, we highlight the meaning of objects and their own conditions as well as interactions between people and objects. The objects in this study are the three materializations of *Nord* and how these different materializations

convey meaning according to the students. The focus on materiality contributes to the comprehension and conceptualization of the reading experiences of the three versions of *Nord*, partly due to emphasis on the specific materiality of the individual media versions, partly due to the emphasis on the significance of materiality in a school context, which in this case is the reading situation in the 8th grade and the sensory shifts caused by technological developments. Our approach to materiality is especially inspired by the scholarship of N. Katherine Hayles. As a reaction to an emerging tendency among poets and writers to use digital technology as a literary media form, Hayles argues for the need for a media sensitive understanding of literature. Similar to textual scholars such as McGann (1991), Hayles (2002) argues for the indispensable “embodiment” of literature. According to Hayles, the traditional understanding of literature has emphasized the “mind” of literature at the expense of its “body” and thus its ways of materializing. Breaking with this understanding, Hayles proposes the concept of the *media-specific analysis* (Hayles, 2002, 2004, 2008) as an analytical approach that focuses on the relationship between form, content and media. This approach is adopted into our empirical investigation.

We draw on Gitte Balling’s theorization of the reading experience, which engages with modern aesthetic theoretical understandings of experience, specifically aesthetic experience. This tradition has reconciled the tenacious split between *Erlebnis* and *Erfahrung*. *Erlebnis* is associated with phenomenological experience, with the “immediate sensation tied to the experienced moment” (Balling, 2016, p. 38), while *Erfahrung* is associated with the accumulation of knowledge and skills gained from events or “a meaning-making process” (ibid., p. 43). The duality that emerged from German Romanticism and exists in the German as well as the Danish language is reflected in the distinction between *Erlebnis* and *Erfahrung*: *oplevelse* and *erfaring*. However, this duality of the two terms is embedded in the single English word experience and the French *expérience*. In aesthetic theory, the idea of the aesthetic experience encompasses both dimensions: “[aesthetic experience] is a broad concept that psychologically implicates emotional and cognitive, sensory and reflective processes, and temporally embraces the notions of having an experience and of being experienced—both the immediate event and the reflection that an experience creates in the subject” (ibid., p. 40). Based on these aesthetic philosophical understandings, Balling conceptualizes the reading experience as a *literary aesthetic experience* that includes both a sensuous, phenomenological event and a cognitive meaning-making process.

Hans Ulrich Gumbrecht describes the aesthetic experience in a similar way, as a “tension-filled simultaneity of effects of meaning and effects of presence” (Gumbrecht, 2012, p. 7), with presence understood as the tangible effect on human senses, emotions and bodies. This clarification is especially relevant to our investigation of the reading experience, as it embraces the effect on the experience of a concrete meeting between a reader and the materiality of a work. In his work, Gumbrecht advocates that “Reading for *Stimmung*” is a new position in the academic

engagement with literature which concerns the “tone”, “mood” and “atmosphere” of a text. The changing moods and atmospheres of a text affect the reader as a specific, physical encounter between our bodies and the material components of a work, which in turn affects the reader’s psyche or “catalyze[s] inner feelings without matters of representation necessarily being involved” (ibid., p. 5). As such, Gumbrecht argues for the interdependence between aesthetic experience and material components, and in this way the experience becomes a contributing factor to comprehension.

On this theoretical basis, our empirical investigation explores the characteristics of the reading experiences of different material embodiments of a literary work, and how reading via different media influences the reading experience in a school context.

4. METHODOLOGICAL APPROACH

In accordance with our theoretical understanding of reading experiences, our methodological approach to the qualitative study of reading experiences is inspired by phenomenology. Our main interest is to explore our informants’ experiences of reading the three versions of *Nord* are perceived by our informants. In the phenomenological view, people are seen as sensing beings who are active co-creators of their own world, and the bodily being in the world is considered essential for cognition, just as body and consciousness are seen as cohesive quantities (Merleau-Ponty, 1962). A crucial point put forth by Merleau-Ponty is that consciousness, body, world and language are intertwined dimensions, and that human consciousness and perception are bodily embedded. He writes: “The perceived world is the always presupposed foundation of all rationality, all value and all existence” (ibid., p. 13). Both as a theoretical stance and as a qualitative method, phenomenology provides the opportunity to relate to human existence: “Where the subject is understood as a bodily, socially, and culturally being, situated in the world” (Zahavi, 2018, p. 117).

We use the phenomenological approach to closely monitor how reading experiences as phenomena materialize in the students. The use of phenomenology as a method is motivated by an interest in understanding phenomena based on the participants’ own perspectives and their efforts to describe the world as it is experienced by them, based on the understanding that: “The important reality is what people perceive it to be” (Tanggaard, 2017, p. 87). Therefore, we review the students’ experience of reading the three materializations of *Nord* from a firsthand perspective to be able to take into account subjectivity’s co-constructing role through the analytical process and in order to grasp what is characteristic of this phenomenon of “intersubjective validity” (Brinkmann & Tanggaard, 2010, p. 190).

4.1 Data collection and conditions

In order to study and capture these media-specific reading experiences, the data collection took place in a natural setting in classrooms in a public school during class, and it consists of a variety of qualitative data material, each in its own way elucidating the phenomenon of a reading experience.

A pilot study was conducted in a single 8th grade class of 27 students, followed by a study of an entire year group consisting of four classes. The 89 students in the 8th grade year group were divided into three groups, which were allotted time to read during 14 teaching lessons over a period of three weeks. The three groups read the printed, audio and digital version of *Nord*, respectively. The groups were formed by the four class teachers with a focus on homogeneity. However, there were more students with reading difficulties and dyslexia in the audiobook group and the digital group, as the teachers considered the book version too difficult to decode or understand for some students. It is a common practice in Danish schools to provide dyslexic students with digitized texts or audiobooks to ensure that they have access to the school materials (Svendsen, 2016). Therefore, the three groups are not directly comparable, which is taken into account in the analyses.

The primary activity during the lessons was reading, but with the inclusion of various didactic tasks, the result of which we refer to as student productions. Our research interest was to observe and explore what characterizes the reading experiences of the three versions. The student productions are used as data to illustrate and express the students' reading experiences, but they were also used as a tool to help the students to focus and reflect on their reading experience. Our entire data set comprises both the pilot and the main study, 116 students in total, and can be divided into two overall categories: 1) Individual and group student productions: reading logs, video logs, image and audio collages, and video recordings of class presentations. Only four students did not hand in any kind of production. 2) Participatory classroom observations (Kristiansen & Krogstrup, 1999) and semi-structured group interviews (Kvale & Brinkmann, 2015).

We have used data triangulation to obtain both verbal and nonverbal statements as well as observations, which is important in order to be close to the study's subject field with regard to the phenomenological aspects of reading experiences and to obtain sufficient material. Of course, this is not without challenges, as the amount of data is extensive, so, in this article, we have focused on coding and analysing group interviews, video logs, observations, and collages as well as the presentations of these (see figure 1). This selection of data represents both formal (group interviews) and informal (group video logs) situations for the students to express themselves as well as verbal and non-verbal (image collages) forms of expression. We draw on articulation analysis in our analytical approach (see section below).

Figure 1. Data selection

| DATA SELECTION | |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GROUP INTERVIEWS | Seven transcribed group interviews, including one interview that was accidentally not recorded. Our observation notes from this interview were coded instead. One student representative from each group of readers was present at each interview. This means that 21 students were part of the group interviews, seven from each reader group. |
| OBSERVATION NOTES | Observations made by our group of researchers and research assistants. |
| GROUP VIDEO LOGS | 30 transcribed video logs. The video logs were given as a group assignment and each video log includes two to three students. The students were asked questions about their experience of reading <i>Nord</i> in each media version and asked to make a video with their answers. |
| RECORDED ORAL PRESENTATIONS OF IMAGE COLLAGES AND REVIEW OF IMAGE COLLAGES | Transcriptions of the students' oral presentations of their image collages. All students were asked to do a collage using images, colours and shapes expressing their reading experience of <i>Nord</i> , and all students were asked to present their collage in front of the class. |

We were faced with four main challenges when the research design met the reality of the 8th graders. First, it was difficult to “isolate” the reading experience, so we had to interrupt the students’ experience and immersion in assignments where they had to reflect on the narrative. Second, it was difficult to investigate the reading experiences in a phenomenological sense in group interviews, since experiences of e.g. mood and atmosphere in a literary narrative cannot always be verbalized, so the students’ statements quickly became generalized and evaluative rather than being spontaneous descriptions. In other words, it is difficult to encounter the phenomenon “in itself”, which was the phenomenological ambition. Third, some of the students in the three mixed groups from four different classes in the same school year became insecure outside their own classes, and this had an impact on the attempt to create a natural setting. Fourth, it was our intention that the audiobook group should listen to the narrative via their mobile phones so that they could move around, but it was not possible in practice as they listened via computers. As such, it was not possible to incorporate the mobile, multisensory aspect often foregrounded in studies of audiobooks into our research design (Have & Pedersen, 2016; Pedersen et al., 2021). These situational factors have an impact on the cogency of the study, and we refer to them in the following analyses. Such contingency is a condition in qualitative studies (Dahler-Larsen, 2010, p. 90). We study exactly how the students

experience, think and act in their field and focus on their understanding and practices in a school context.

4.2 Analytical approach

The analyses were carried out in a phased process inspired by other phenomenological analysis processes of a similar nature in Nielsen (2018) and Tanggaard (2017). Specifically, they were carried out using the data analysis software NVivo, through which our group of three researchers reviewed and coded all data material. We are inspired by Nielsen's articulation analysis and her understanding that an "articulation is sensuous—it can be seen, heard, felt, or otherwise perceived" (Nielsen, 2018, p. 65). We have followed her idea of the processual analysis work, in which she argues for a move from an open sensory attitude, over an associated attitude and to a thematic attitude (*ibid.*), just as we analyse both verbal and nonverbal expressions and statements by the students. In the analysis, we developed codes together (see figure 2) through several joint coding sessions. Via this joint iterative process of analysis, our codes emerged through both theory and the data itself. In addition, we coded larger units of meaning according to the authenticity and inclusion rule for qualitative analyses (Dahler-Larsen, 2010, p. 43-49).

In the presentation of the analyses in this article, we have selected representative quotes to exemplify the points. As the collected data is very extensive the quotes cannot provide the full picture of the material on which the analyses are based. The quotes have not been edited and rewritten, but they may have been abbreviated, which is marked with [...]. Furthermore, they have been translated from Danish into English, whereby nuances may be lost.

Figure 2. This display shows the codes that emerged from our analyses and the frequency of their occurrence in relation to each media version

| Codes | Digital story | Audiobook | Book |
|---------------------------------|---------------|-----------|------|
| Experience | 68 | 48 | 36 |
| Atmosphere | 28 | 20 | 16 |
| Immersion | 23 | 21 | 27 |
| Materiality | 93 | 60 | 33 |
| Body | 11 | 23 | 5 |
| Interaction: word, image, sound | 37 | 2 | 24 |
| Pace | 16 | 25 | 8 |
| Comprehension | 20 | 26 | 33 |
| Memory | 21 | 25 | 23 |
| Mental representations | 9 | 16 | 12 |
| Metacognition | 38 | 40 | 37 |
| Distraction-concentration | 15 | 24 | 8 |
| Visual interpretation – basic | 12 | 21 | 17 |
| Visual interpretation – deep | 12 | 9 | 13 |

5. FINDINGS

We have analysed the data material based on three main theory driven themes: “reading experience”, “materiality” and “reading comprehension”. During the process of analysis sub-themes (see figure 2) emerged inductively.

5.1 Reading experience

Empirical studies show that the character of the reading experience as a physical and mental phenomenon is not easily described. Even adult readers with a high level of reflective capabilities have difficulty verbally describing their reading experience (Balling, 2009). Balling and Grøn (2012) argue that one of the reasons why it is difficult to verbalize a reading experience is the *polyfunctionality* of language, meaning that a word can accommodate a multiplicity of meanings that may vary depending on the composition, function, context and recipient. Furthermore, this also has an impact on the interpretation of the verbalization in a collective space as different readers may assign different meanings to the same word. In our study, this proves to be especially striking when students present a whole range of interpretations of the word “experience”. Moreover, a reading experience is not only a verbal, but also a phenomenological and psychological phenomenon where cognitive and rational experiences mix with sensuous, bodily and unconscious layers of meaning. This poses a challenge for descriptive language in the communication of

reading experiences as well as our ability to understand the dynamics between these dimensions, which is reflected in our analyses.

5.1.1 Reflections on experiencing Nord

This section centres on articulations that are connected to “experience” in the group interviews and in the selected student productions (see figure 1). Due to our research interest, the readers of the three media versions were specifically asked in the group interviews and in the reflection assignments to describe how they *experience* reading *Nord*. The interpretations of the word “experience” and the answers to the question differ in emphasis across the three reader groups.

Readers of the illustrated book reach for simple evaluative statements such as “it was fine reading it [...] it’s a good book”. Words such as “surprising”, “unpredictable”, “exciting” and “strange” were used. Others chose less positive words such as “hard”, “complicated”, “boring” and “confusing”. The experience of reading is also interpreted by this group of readers as something that is either easy or difficult. Accordingly, the readers’ articulations regarding the book are generally characterized by an *evaluative* stance towards experience—experience as passing judgement on or assessing the object. This evaluative stance is found in all three groups of readers, but was most dominant among the readers of the book. This can be related to the above-mentioned duality of *Erlebnis* and *Erfahrung*. These readers are inclined to express their reading experience as an interpretation of the result of reading, thereby emphasizing the dimension of *Erfahrung* in the concept of experience.

Conversely, the readers of the audiobook focus on their bodily reactions or feelings while listening. Most frequently, these reactions include a feeling of relaxation, that it felt good to “just listen”, while some expressed a feeling of restlessness or intensity. Listening to the audiobook is described in positive terms by some, while others are less positive and highlight the length of the audiobook: “It may be a bit annoying to sit and listen to it for three hours”. The narrator’s voice is emphasized as a contributing factor to these responses.

The readers of the digital story describe the experience of the digital mode of reading as something good in itself, as a “good” and interesting way of reading: “I experience it as good, yes, when it becomes digital”. However, although this student’s assessment is explicitly positive, it does not necessarily mean that the student felt immersed in the story (see the following section on “Immersion”).

5.1.2 Atmospheres and moods

In the group interviews and in the students’ own video logs, the three groups of readers were asked to describe the *Stimmung* in *Nord*. In the coding of our data, we found that there is a remarkable number of codes related to atmosphere or mood in the video recordings of the students’ oral presentations of their image collages, in

which they were asked to express their reading experience of *Nord* and to reflect on the atmosphere. This is especially prevalent among the readers of the audiobook. It might indicate that the experience of atmospheres or moods is better or easier to express visually. The atmosphere is predominantly thematized in the verbal responses from the group reading the digital story. As Gumbrecht writes in relation to the idea of *Stimmung*: “Specific moods and atmospheres are experienced on a continuum, like musical scales. They present themselves to us as nuances that challenge our powers of discernment and description, as well as the potential of language to capture them” (2012, p. 4). This difficulty manifests itself in the students’ uncertainty: “You feel a bit insecure-like”, “it’s not a really happy sound-like, it’s more like whistling”. The use of “agtig” in Danish is similar to the use of “like” in English and can indicate that the students are searching for the right words to describe what they sense and feel.

The readers of the digital story describe atmosphere as an imposing feeling. These readers also associate atmosphere with genres, e.g. thrillers: “a bit thriller dynamic-like”, “horror film-like”. One student explicitly describes the sound as being conducive to the atmosphere, and another student describes the sound as being productive of the feeling of the atmosphere and of the feeling of being “where things are happening” (as elaborated on in the following section on “Immersion”). This relates to Gumbrecht’s concept of “the production of presence” (2004), meaning the bringing forth of a spatial relationship to the world and its objects. Students are touched by the sound of the story. They also tend to associate colour to the feeling of atmosphere: “The colours, they are like very gloomy and dark”, “very grey and sad”, “but the summer house, it’s more like happy days. It’s like light colors”.

The voice of the narrator is linked to the atmosphere by the readers of the audiobook and described as directly contributing to different moods: “If her tone is a little gloomier, then the atmosphere gets a little eerie-like”. This contributing factor is especially connected to empathizing with the protagonist’s feelings. Just as with the readers of the digital story, the audiobook readers connect colours with atmosphere: “Sometimes there is a very dark-like atmosphere-like”. They take note of changes in intonation, emphasis, and pauses, and ascribe positive value to these changes, which in turn supports their understanding and the feeling of empathy and immersion: “And you can kind of tell it from ... for example the mood in her voice, there you can tell that it’s not like ... like a little green-like, like a happy place to be”.

For the readers of the book, atmosphere tends to be something that can be perceived—e.g. an “oppressive”, “gloomy” or “tense” atmosphere—especially in relation to the fictional characters. However, for one student, atmosphere or mood is also something that can be evoked in the student if a lot is happening in the narrative: “There is just a lot going on and ... you think ‘what will happen now?’”.

5.1.3 Immersion

In the group interviews, the readers of the three versions of *Nord* were all asked how and to what extent they felt immersed in the story. We can make a general distinction between two kinds of immersion, what we might call technological immersion, i.e. how digital systems such as video games can facilitate immersive experiences in a fictional, virtual world, and phenomenological immersion, i.e. the sense of being immersed in a fictional world (Mangen, 2008; Ryan, 2001). The latter kind of immersion is a process based on the reader's own mental and cognitive abilities to create a world from the material embodiment of the narrative at hand. This distinction is valuable for our study, although Ryan and Mangen are particularly interested in how texts can be immersive, whereas we are interested in how the students articulate their experience of immersion.

Just like the question of "experience", the question "How do you immerse yourself in the story?" led to different interpretations among the students. A common denominator in the answers across the three groups was, again, an assessment of whether the story was easy or difficult to become immersed in, e.g. "I would also say medium difficult to get immersed in". Words and phrases in the answers to the question of immersion included: "being absorbed by", "engrossed in", "being able to sense the mood", "a feeling of being present in the action" and expressing a wish to keep reading.

With regard to the production of atmosphere as described above, readers of the digital version explicitly describe the multimodality of the digital story as decisive for their sense of being immersed: "It is very interesting that you kind of have both text, sound and pictures and ... that we are like more within this world [...] than if we were sitting and reading a book, because we are kind of moving and all that". Several students articulate an experience of being present within the digital story, e.g.: "Then you just feel like you are right there where things are happening ... because of the rain effects and things like that".

Apart from finding the story easy to become immersed in, immersion is not widely thematized among the readers of the audiobook. One reader points out that reading with headphones and being "engrossed" in the story makes it possible to spend positive energy on imagining how things *look* without having to read the words: "I could just listen to it, and that I think was ... it was probably the best way if you kind of want to [...] create your own images. It's by listening to an audiobook" (see the section "Mental Representations" below).

Readers of the illustrated book point to a link between being immersed and using their imagination to create mental representations. Like the other groups, the readers of the book are able to point to medium-specific aspects (Hayles, 2002) that support or trigger their sense of immersion. In this case, it is both "the text", i.e. the written text and the language, and the illustrations that are highlighted: "Yes, I think I am able to immerse myself in it pretty well. But the way it's expressed is also pretty good [...] Then I am able to create an image of how it looks". One student describes

the meeting with an illustration: “that is when the imagination starts and you think: what if there is something magic about this thing, and what can it do, and how is it important?”. Conversely, one reader also considers the written text and its structure a challenge in terms of “entering the book” or becoming immersed in the book. Lastly, one book reader describes the experience of being immersed as “being inside a bubble”, “dreaming away into the universe” and “seeing it in the eye of one’s mind”.

To sum up, this analysis section has demonstrated the various themes that emerged in the students’ own understanding of what it means to experience a narrative via their respective media versions.

5.2 Materiality

In this part, aspects of the students’ articulated reading experiences that are associated with materiality are analysed. From the perspective of materiality, literary texts and their forms of expression are seen as more than representations, as they affect the experience and the senses and are haptically embedded (Gumbrecht, 2012). The multisensory interaction with a codex/book, computer or tablet interface becomes crucial for the attribution of meaning during the reading experience (Hayles, 2002, 2004, 2008; Henkel, 2017). As we combine a phenomenological understanding with a materiality-based understanding of the reading experience, it results in a notion of literature as an embodied, linguistic, sensorial and abstract phenomenon embedded in a context, which provides the foundation for the following analyses. The notion of textual embodiment corresponds to the understanding of the sensory and particularly the haptic appeal of texts.

5.2.1 The body in the reading situation

In this section, we highlight statements and observations that relate to the body, understood as the body’s position while reading and reflections associated with the senses that are stimulated when the students read. As the phenomenological approach points out, the body is always present in every project and in every perception: “It is our *point of view and our point of departure*” (Zahavi, 2018, p. 93).

Among the students who read the print version of Nord, the physicality and materiality of the book are verbalized as something positive. Several students express how they enjoy the book’s *bookishness* (Hayles, 2013; Pressman, 2009, 2020), that it is a “book book” and “having something to read with”. Pressman’s concept of bookishness refers to “creative acts that engage the physicality of the book within a digital culture” (2020, p. 1), e.g. through cut-outs and artistic play with format, fonts, etc. In our study, the book’s general and specific bookishness as a cultural symbol and object is reflected in the way the students ascribe positive value to the book as a physical artifact, meaning that they can orient themselves, flip back

and forth and thus navigate it. Among the readers of the book, there are no reflections in relation to the body's position while reading.

Among the students who read the digital version of *Nord*, there are many statements regarding the use of the senses. The students especially talk about using the visual and auditory senses, but also tactility. Like the readers of the book, they do not reflect on the body's position while reading.

Among the students who read the audiobook version of *Nord*, a number of new thematizations emerge that are not found among the other readers. First, there are questions of what the eyes should rest on in the room. One student says: "I feel I was missing illustrations to look at". Second, reading the audiobook was in itself mentioned several times, e.g. it was "a bit boring in a way to just sit and listen". Third, there are many statements about the position of the body while reading, each time about reading being a sedentary activity, "you just sat", etc. In total, "sit" and "sat" were mentioned 16 times in the 23 statements that we have analysed under "audiobook" and "body". The body is *perceived* as fixated, which objectively is also the case with the other two versions, but here it is thematized. One student is asked if he/she would have liked to take a walk while listening to the audiobook and answers: "I could not imagine that, because it might have made things worse if I walked". Combined, the statements point to the naturalized preconception that the reading situation is a sedentary activity, where the body is at rest and/or without significance for the reading.

5.2.2 *The interaction between writing, image and sound*

In this part of the analysis, we focus on the students' experience of relations or interaction between the forms of expression: writing, image and sound. Hence, we address the students' experience of the inner materiality of the texts, i.e. how the embodiment of the three formats is experienced (Hayles, 2002, 2004). There are only two statements from audiobook readers (see figure 2), as their version does not give rise to reflections on the interaction between writing, image and sound. The monomodality is considered difficult in audiobook reading, which may also be due to the lack of a physical artifact which the eyes can focus on. One student puts it this way: "It is not traditional [...] where you sit and read what is written—shown ... that is, black on white".

The readers of the book assess the relation between writing and illustrations in *Nord* differently. Some students highlight the illustrations as an important and wonderful help for their experience and comprehension. However, one student sees the illustrations as a distractor. Several readers of the book rate the illustrations in the book as secondary in the reading process compared to the writing, e.g. "I read the text and look just a little at the illustrations". This is supported by our observations. However, the opposite can also be observed, as some students highlight the illustrations as primary, interesting and thought-provoking, where "the imagination, it just kicks in". In addition, the readers of the book often emphasize

illustrations when they of their own volition highlight something they find interesting in their video logs. Several students choose to foreground illustrations they find interesting even when they do not fully comprehend their meaning: “because you can think about the way it is also drawn and something like that”. Another student has noticed how the relation between the writing and the illustrations changes in *Nord* and in some places expands and becomes ambivalent, according to Nikolajeva and Scott’s concepts (2000). The student refers to a specific graphic figure in the form of a hexagon which has an ambiguous meaning: “It does not completely explain it ... [no] the illustrations do not completely explain what it is, so there you have to think yourself, uh, what it can be and stuff like that”. Yet the overall picture of the readers of the book is that they predominantly attach the greatest significance to the writing.

Among the readers of the digital story, on the other hand, it becomes evident that they take in the narrative by means of writing, image and sound. A form of multisensory reading takes place here, where several forms of expression are absorbed at the same time, which is experienced as something positive. However, the students also mention the possibility of isolating one of the forms of expression, e.g. looking away from the screen while listening to the voice. One student experiences that the simultaneity of the forms of expression may sometimes be disruptive to the reading. In the digital story, the colours and mood-creating functions of the sounds are highlighted as interesting, elements that can propel the reading forward: “If it was kind of, you know, kind of creepy-like, if there was some kind of a little background noise, then you would like to find out what happens there, that is, further ahead, then you feel more like reading on”. The interactivity in the digital version is highlighted and valorized by a number of students. Furthermore, it seems that the interactivity may sharpen the attention in relation to the narrative, meaning that when the students interact with the narrative virtual environment, the multisensory experience may increase their narrative focus. The students articulate that they read in a multisensory manner, i.e. by applying several senses at the same time: “I let the voice read aloud while I follow the text, and sometimes I look at the illustrations. The voice is pleasant to listen to”. Another student says regarding this simultaneous sensing or *polyaesthetic* (Engberg, 2013) experience: “It was just suddenly strange to have to relate to all those things at the same time”. Directly asked which senses they use, some students highlight their vision in relation to looking at the illustrations, especially the changing colours from chapter to chapter, which they consider as having great significance for their sense of the mood in the story.

5.2.3 *Navigation and narrative drive*

In all three groups, thematizations around navigation emerge, i.e. students’ reflections on how to find their way around and orient themselves in their respective versions. Navigating the audiobook may be difficult: “The reading is going ok, but

there is a lack of breaks in the chapters, it quickly goes on”, and it is described as annoying that you cannot “just read again”. The audiobook’s fixed pace and progression is experienced as frustrating, because the navigation is unfamiliar and difficult. Given the naturalized reading of a book by flipping its pages, unsurprisingly, the readers of the book do not mention navigation. Interestingly, though, they refer to pages in their descriptions: “The first ... some 70 pages where they are not outside and start hiking”. In a similar way, they use the illustrations to orient themselves in the literary space and, more specifically, as focal or reference points in their reading. The readers of the book appreciate its physical appearance and the familiar way of orienting yourself in it: “I am much more into such a physical book, you can just pull it out and open it where you left off”.

There are many statements about navigation in relation to the digital version, as the students perceive it as different and foreign. Navigating the story by finding interactive stones is described as “a bit awkward”, “easy” and “fun”. During our observations and in the interviews, some students express that they master this way of getting around in a story and draw on their knowledge from navigation in computer games, while it is the opposite for students who cannot draw on this experience. One student assesses that “it worked fine” and describes that he used the “gamer keys”. Another student uses a gaming metaphor as he describes the reading as a “mission”. For most students, the interactivity is positive and motivating, as they set the pace themselves and describe that they dwell on e.g. illustrations or writing. The materiality of the digital version of *Nord* is in some respects reminiscent of the computer game’s phenomenological space (Walther & Larsen, 2019), where the reader sometimes takes over the protagonist’s point of view and senses. This is assessed by the students as positive and supportive of the experience and immersion. Two specific places in the digital version are mentioned by several students, where the reader must partly turn the picture around and partly help the main character across a rough and surging sea. In both places, the reader becomes an interacting part of the narrative. Several students also explain that they use their fingers to drive the story forward. Although they do not have prior knowledge about reading and navigating the narrative, it mostly creates a sense of curiosity and immersion and a desire to find out how they can navigate the narrative.

The audiobook readers become more frustrated due to the lack of experience navigating an audiobook, in addition to its abstruse navigational structure and its relatively fixed progression. The readers of the book do not thematically refer to progression as they control the reading pace themselves, and navigation is a naturalized practice.

During our data collection, we observed that reading comprehension seemed to be both a challenge *and* a prerequisite for the students’ reading experience. In our joint coding sessions this condition became even more evident and resulted in a number of codes related to reading comprehension (see figure 2). Hence, in our analysis we have combined aesthetic and materiality-based perspectives with knowledge about reading comprehension from a cognitive approach.

5.3 *Reading comprehension as a foundation for reading experience*

This section sheds light on the way in which factors that are significant for the reading comprehension help to characterize the students' reading experience of *Nord* in the three versions. In the analysis, we draw on the cognitive approach to reading where reading is considered fundamental based on "the simple view of reading" (Gough & Tunmer, 1986). In this context, reading consists of two types of processes. While reading, word identification processes are activated, i.e. decoding and syntactic processing, along with processes of a higher order targeted at the reader's active meaning-making while reading, i.e. inferences and metacognition (Perfetti et al., 2007). In addition, a number of other factors have an impact on the overall reading process, including linguistic knowledge of language, lexicon, text types, background knowledge and "memory for text" (Ehri, 1995). These processes are seen as reciprocal with an ongoing impact on each other during the reading.

5.3.1 *Mental representations*

The reading experience is made possible through the reader's ability to create a mental representation of the text, and this requires active inferences (Broek & Kremer, 2000; Perfetti et al., 2007). Inferences draw on the working memory and the reader's memory capacity, because a current mental representation must be maintained while new text information is incorporated and processed (Kispaal, 2008). In the interviews with the students, we explicitly asked whether they form "inner images". In our analyses, it turned out that the students know, understand and relate to their experience of forming inner images in their descriptions, which is a concept that has a strong presence in the Danish school system. In this article, we juxtapose the students' use of the concept *inner image* with the theoretical concept *mental representations*.

The readers of the print version describe how they form inner images primarily on the basis of the written text. Their mental representations are thus based mainly on the decoding of the written text. Although there are illustrations in the book, they are not mentioned as essential for the process of creating mental representations to any great extent. One reader describes how reading the print version gave her an experience of being able to access the entire book content as an inner film: "I kind of dream myself into the universe, so I kind of imagine that it's happening". One reader does, however, emphasize that the illustrations support the understanding of the book. The difference between these student statements may be related to the students' preconditions. Students with an automated decoding will probably read the book with very little attention to the illustrations. An automated decoding requires so few resources that a large part of the cognitive capacity can be used to comprehend the book, including the process of creating a consistent mental representation of the text. On the other hand, students who do not decode automatically, or have difficulties with the decoding, will experience having to spend

much more cognitive resources decoding, and they will therefore find it difficult to form a consistent mental representation of the text. These students will probably find the illustrations useful.

The readers of the digital story describe how the images more or less replace their own image-making. However, there are situations where they talk about image-making, e.g. when something surprises them or if they become distracted and look away from the screen. This indicates that they adjusted the mental representation either if it did not match the images in the digital version or if the images were not adequate. For these readers, the images are thus primarily used for the formation of mental representations, while the written text is used for that purpose by the book readers.

The audiobook readers are the only group of readers who do not have access to visual support, neither in the form of a written text nor in the form of illustrations. In this way, their version differs significantly from the others in that the only sensory input is auditory in the form of a narrator. In addition, they have the playback interface where they can see a playback bar on their device. With respect to their ability to form inner images, this group relates in particular to the impact of the narrator. It turns out that several students have difficulty creating a consistent mental representation during this type of reading: "I also kind of feel that with an audiobook [...] you do not use your own imagination very much, so it is more her [the narrator] who is kind of saying what it is". They also stated that it can be difficult to stop and reflect on what is read and to go back if there is something you did not quite understand.

However, there are also readers of the audiobook version who point out that it gives them a better opportunity to form their own inner images, while it also requires energy to form them: "You had your own ... imagination. Although it could be a bit tiring [...] that you kind of had to figure out the images yourself, it was also [...] a fun thing, because then the story was more what you wanted it to be". The students thus describe how listening to an audiobook requires more of their imagination than other types of reading. The explanation may be that they experience that the listening provides unobstructed access to the content of the text, so that their cognitive resources are available for the comprehension process. On the one hand, this is experienced as something positive by some because they have access to the text, and for an active reader that can lead to a good process. On the other hand, it is experienced as something negative by others because it requires a lot of resources and strategies while reading which some students are not necessarily used to activating—or which have not even been developed. It turns out that some of the audiobook readers had an expectation that it would be easier to read the audiobook, that it would be a form of relaxation, but it turned out that it required a high degree of energy and activity to create a consistent mental representation while reading, because there was no visual support.

5.3.2 *Metacognition*

An active reading attitude requires metacognition which can be defined as knowledge of one's own cognitive processes while reading as well as monitoring and adjustment of these through the conscious application of strategies if the understanding fails (Baker, 1994). Reading can be seen as a form of problem solving, where you actively use strategies to strengthen the comprehension. For example, while reading, you need to actively draw inferences in order to create a coherent mental representation of the text (elaboration strategy), or when you stop during the reading because you do not think you properly grasped the content (monitoring strategy), or when you reread the text in order to remember it (memory strategy), or when you emphasize important words in the text/make a graphic model (organizing strategy) (Bråten, 2008; Bråten & Strømsø, 2003).

In the analyses of the students' articulation of the reading of the three versions of *Nord*, it appears to be a particularly important factor whether they experience being able to remember the content of *Nord*. The readers of the print version point to a connection between interest and memory: "I don't remember very well what I read because I don't think it's particularly interesting, and if I think it's boring, I always forget what I read", but otherwise it is not something that is articulated to any particular degree. One student emphasizes that it is possible to go back and reread a word if it is difficult to understand: "I was glad I had something like this to read. Because if there was a word I didn't fully understand, I could just go over it a few times". This shows that the student monitors her own understanding and uses a specific elaboration strategy.

For readers of the digital version, there is not much focus on remembering. Several students experience it as different and strange to have to read in this way. This may be why some of them make comparisons with known text types, e.g. audiobooks and textbooks. Precisely the new format may mean that more students relate metacognitively to what it is like to read it, i.e. relating to it as a "task" and to the "strategies" they use: "When she [the narrator] read out loud, I started reading. When she had reached halfway [through the text section], [...] I started reading in the middle, and then when I had finished reading it, I mixed it with what she [the narrator] had said, and then I could skip faster".

For the audiobook readers, the situation is different. Here, several of the statements are focused on the difficulty of remembering the content of the text. This is emphasized by the fact that several of the readers of the audiobook try to develop their own strategies to deal with this by neutralizing the visual inputs from the surroundings by e.g. looking at the wall or drawing while listening. This indicates that audiobook readers are meta-conscious while reading, noting that they have difficulty remembering the content and at the same time lack adequate strategies to remedy this. In other words, they succeed in monitoring, but they have difficulty adjusting the reading.

This point about the audio readers is further emphasized through our analysis of the students' visual interpretation of their reading experiences. The students created picture collages visualizing their experiences and interpretations of *Nord* and presented the collages orally to the class. In our analysis, we have emphasized whether the students exclusively reproduced the content of the narrative (basic), or whether they interpreted it through the use of metaphors or metaphorical use of visual effects (deep). This analysis supports the previous point, indicating that audiobook readers in particular are challenged in their comprehension, while this does not apply to readers of the other two versions to the same extent. An example of this is that some of the students had inserted pictures of nuns instead of Norns in their collages, and these students were primarily from the audiobook group. It indicates that they have had difficulty distinguishing "nuns" from "Norns", and that the lexical content of the word had been unknown or unclear to them. It also indicates that during the auditory reading, they have not been able to find support to establish this concept in the illustrations or as an orthographic identity in the written text. This is possibly reinforced by the fact that a relatively large number of the students in this group have reading difficulties.

6. DISCUSSION

Insights from the cognitive psychological approach to reading have proven to be key in the analyses of the reading experiences of the three media versions of *Nord*, as the differences between them have been clearly highlighted. In the audiobook version, the reader is exclusively offered a read-aloud text, without any written support. In principle, this means that the reader is exempted from/deprived of spending resources on the word identification process, while processes of a higher order, such as inferences and metacognition, must continuously be activated in connection with the meaning-making. The digital version offers the reader a screen text. Throughout the reading, the readers can thus be supported in the word identification process, but they are not fully exempted from/deprived of it during the meaning-making. At the same time, the reader is involved in the fictional universe of the text through images and navigation options. In the print version, a word identification process is used as the basis for the meaning-making, but as it is an illustrated novel, pictures are also included in the reading process. This difference is evident in the students' understanding of the text and thus of their reading experience.

In the following figure, we provide a condensed overview of the identified characteristics of the reading experiences of the three media versions:

Figure 3. Overview of the characteristics of reading experiences of the three media versions

| | ILLUSTRATED PRINT NOVEL | DIGITAL AUDIOBOOK | DIGITAL-BORN NARRATIVE |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| READING EXPERIENCE | <ul style="list-style-type: none"> focus on evaluative rationalizations; on <i>Erfahrung</i> articulate the written text, especially the language itself and the illustrations, as the factors that make them empathize with the narrative perceive and sense moods and atmospheres, e.g., in the meeting with illustrations | <ul style="list-style-type: none"> focus on bodily, emotional reactions; on <i>Erfahrung</i> and the variations in the voice are identified by the readers as triggering certain moods and a sense of atmosphere there is a tension between the focus on bodily reactions in the articulated reading experience and the passive reading situation in the school context | <ul style="list-style-type: none"> tend to combine <i>Erfahrung</i> and <i>Erfahrung</i>; focus on the medium and the digital reading mode itself multisensory reading, i.e., they often use the visual, auditory, and tactile senses simultaneously; interactivity sharpens their attention moods and atmospheres are evoked as a result of their encounter with especially the narrator's voice and the sounds |
| MATERIALITY | <ul style="list-style-type: none"> appreciate the physicality and familiarity of the printed book and their prior knowledge in terms of navigating the text and setting the pace themselves find it easy to concentrate in the school context the printed book as a medium and cultural symbol and object clearly stands out | <ul style="list-style-type: none"> the majority have no preconception of audiobooks and progression is mostly experienced as frustrating as the classroom is not an optimal place to listen, and as the audiobook affixes the reader to a table and chair some students independently find out how to navigate this listening space and get an immersive reading experience, especially due to the intensity of the narrator | <ul style="list-style-type: none"> no valorization in relation to the body's position during the reading the majority quickly find themselves navigating the narrative and appreciate the possibility for concrete "reading actions" created through the interactive elements, where they read scenically and sometimes take over the literary characters' point of view they articulate this as an experience of being present within the story |
| READING COMPREHENSION | <ul style="list-style-type: none"> they do not have difficulty remembering the content of the text create mental representations based on the written text degree of decoding skills is relative to whether the illustrations are used as a support for understanding paradox: they assess the illustrations as secondary to the written text, but at the same time the illustrations are highlighted when they point to something interesting or tantalizing | <ul style="list-style-type: none"> they have difficulty remembering the content of the text it requires a lot of resources and strategies to create a consistent mental representation and some students have not developed such prior knowledge and/or the ability to activate them expected the audio reading to be easy and were proven wrong they succeed in monitoring, but they have difficulty regulating their reading difficulties concentrating while reading | <ul style="list-style-type: none"> they do not have difficulty remembering the content of the text to a great extent the illustrations replace the process of making mental representations. However, the mental representation is corrected if it did not fit the illustrations relate metacognitively to this new kind of reading as a "task" and to the type of strategies they use they draw on knowledge from others experiences, e.g., computer games |

Based on our findings, it is interesting to note that for the readers of the audiobook version and the digital version, the medium itself is visible and manifests itself in their articulations of their reading experiences, while the medium is transparent to the readers of the book. From a cognitive psychological perspective, this may be explained by the fact that an automated decoding takes over the perception, as it

takes place without us having to be conscious about it. It might also be explained by a lack of genre and media knowledge, i.e. that the other two versions are new and unknown to the students, whereas they have greater knowledge of reading books. To the audiobook readers and digital readers, the medium itself, the images and the narrator are thus involved in their metacognitive reflections on both “person” (they themselves as readers and their preferred text version) and “task” (their ability to solve the task they have been assigned—to read the version). This does not apply to the readers of the book. Instead, they relate to other factors of importance to reading, e.g. motivation.

It seems that it is most prevalent for audiobook readers to have to deal with distraction, while readers of the book rather deal with concentration. Moreover, for audiobook readers, it is difficult to remember the content of the text. This may be explained by the fact that the readers are inexperienced listeners and that they lack strategies for dealing with this type of reading. Furthermore, the auditory reading does not allow for regressions while reading in the same way, if the reading of individual words requires longer processing; likewise, particularly difficult parts cannot be reread, if desired. None of the students stated that they had done that, and we did not observe it either. It is clear that the readers of the audiobook lack specific listening strategies. Based on our findings, we will argue that audio reading calls for specific subject didactic development. Research on the concept of multiliteracy has demonstrated how communication combines a multiplicity of modalities and has made important contributions to socio-cultural aspects of reading in different modes. However, this research has not addressed specific multisensory didactic strategies for how to e.g. perceive an audio text or become an active audio reader. As a result of our investigation, we are developing didactic strategies for audio reading.

The digital readers have text, recitation and images at their disposal while reading. They are thus not dependent on a particular form of reading (listening or decoding), but can use these as a simultaneous supplement. In principle, this may have a positive effect on their comprehension. It is important to point out that the analyses must be seen in light of the fact that there were most weak decoders among the audiobook readers (including students with dyslexia) and the readers of the digital book, and it could be surmised that this has had an impact on their experience of reading *Nord*.

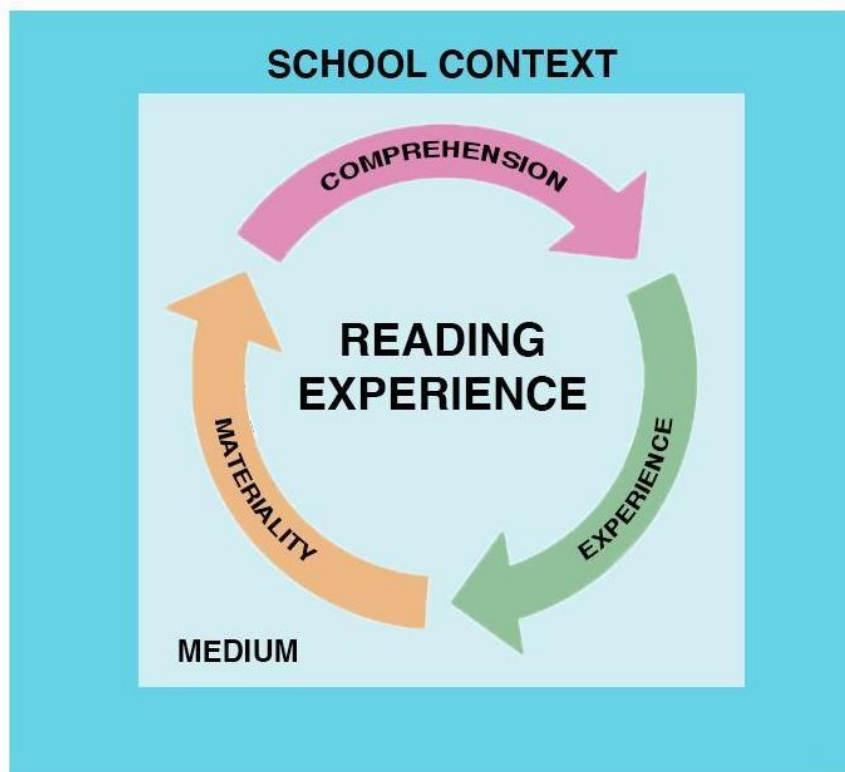
As mentioned earlier, studies of children’s reading experiences in different media are limited, especially when it comes to addressing the rising phenomenon of a literary work existing in several different media versions at the same time. As our study shows, the materiality of the individual media version gives rise to different reading experiences, which support the idea of each version constituting an independent literary work, but regarded together the versions comprise a literary *cluster work* (Mygind, 2019) where each version adds something distinct to the totality.

The qualitative study represents a snapshot of a specific group of students at a specific time from a specific geographical area and conducted in a school context. Hence, the cogency relies on the specificity of the investigated context. The earlier mentioned situational factors (see the “Data collection and conditions” section) have influenced the cogency of the study, which is a condition in qualitative studies (Dahler-Larsen, 2010, p. 90). We have sought to accommodate this through the methodological transparency and stringency of our study and joint process of coding and analysis, in order for the study to be able to point qualitatively toward potential patterns in reading experiences of different media versions. Still, to study and capture reading experiences based on a phenomenological approach is a complex matter since the experience of reading is both cognitive and verbal as well as aesthetic and embodied (Balling, 2009). We have sought to represent this using data triangulation including both aesthetic (the students’ image collages), bodily (our observations of the students’ reading) and verbal (the students’ video logs and group interviews) expressions. It is a key point that the phenomenological approach considers the individual’s perspective, its perception and expression of the reading experience as the analytical subject matter.

7. CONCLUSION AND FURTHER PERSPECTIVES

As we have explored the characteristics of 8th grade students’ reading experiences of three different media versions of a specific literary work in a school context, it becomes clear that the reading experience is dependent on reading actually taking place: that the students comprehend what they are reading, that they can remember it, that they can reproduce key parts, and that they can relate to themselves as readers (metacognitively). This means that the experience, understood as an aesthetic and phenomenological process, cannot stand alone, but is brought about by the students’ comprehension. Likewise, our analyses show how the materializations of the different versions create meaning in the encounter with the student. The embedding of the versions in a technical medium, i.e. book/codex, laptop or smartphone, has a decisive influence on both reading comprehension and experience. Materiality can be experienced as a barrier to both comprehension and experience, so that, e.g., if one has problems orienting oneself in an audiobook or a digital story this may create great difficulties in relation to understanding and sympathizing with the storyworld. Just as decoding is said to be a bottleneck for comprehension within cognitive reading research, our study shows that the reading comprehension becomes a bottleneck for reading immersion and experience. Based on our findings, we have developed a model (figure 4) that illustrates the interdependent components that impact children’s reading experience or possibility of having a reading experience in school.

Figure 4. The components of the reading experience in a school context



Hayles argues that only after the emergence of digital and electronic literature have we been able to view the book and the “print regime”, which we have been part of during hundreds of years, with new eyes (Hayles, 2002, 2008). In continuation hereof, our analyses show that the readers of the book appreciate and emphasize its physicality, and that they already in the 8th grade have a lot of experience navigating this kind of literature. This is different from the other two literary formats. When audiobooks and born-digital stories are included in reading practice in a school context, it becomes clear that the reading situation in the school is subject to a sedentary “body regime”, where reading is considered a predominantly cognitive, silent and solitary activity. In the reading facilitated by all three media, it is the readers’ encounters with the specific material components that evoke certain feelings or make them able to perceive specific atmospheres and feel immersed. In relation to this, it is noteworthy that the digital story facilitates a sense of being present within the story. With the audiobook and the digital story, literature reading has the opportunity to also become a sensory and bodily event which may also

benefit the reading of books. However, it requires the development of adequate literature didactics that integrate experience, cognition and materiality.

ACKNOWLEDGEMENTS

We would like to thank all the students and teachers who contributed to this study and the municipality of Silkeborg for their valuable collaboration. We would also like to thank the Novo Nordisk Foundation for supporting the project and, not least, our colleagues in the project Reading Between Media.

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