

THE RUNNING TEXT IS DEAD: INVITING THE READER TO LEARN FROM A BULLET-POINTED PERITEXT-PATCHWORK TEXTBOOK

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Abstract

This study investigates the relationship between the running text and the many peritexts commonly found in newer textbooks, along with the associated consequences for textbased learning. The paper is a theoretically driven case study that looks at the textual composition patterns in a language arts textbook for lower secondary schools in Norway. In particular, I investigate how these textual composition patterns facilitate learning from text—a main tool in the text analysis is comparing the signaled intentions in the text with the implied reader's fulfillment. The main finding of the study is that by enriching a textbook with many peritexts that contain essential content, one risks inviting the implied reader to employ a memorization strategy, even though the intention is to invite the implied reader to use deep-comprehension cognitive strategies. This is connected with the lack of running text. Without enough running text to synthesize the content, the running text appears dead, and rather than learning from the text, students are more likely to receive a memorization invitation from the text.

Keywords: textbooks; textbased learning; implied reader; running text; peritext

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1. INTRODUCTION

Although modern textbooks' highly multimodal design of images, lists of bullet-points, and graphics may have the potential to expand the meaning-making (Maagerø & Winje, 2010), it might also have the potential to create comprehension challenges (Kress & Van Leeuwen, 2006; Skjelbred & Aamotsbakken, 2010a, 2010b; Tønnesson, 2010; Veum, 2013). Multimodal textbook research explores what consequences the change from verbal to visual texts has for reading textbooks. A comprehensive history of Norwegian textbooks points to increased multimodality as the most salient change in recent textbooks, and claims that this calls for a more complex reading competency (Skjelbred, Askeland, Maagerø, & Aamotsbakken, 2017, p. 527).

The present study investigates the need for a complex reading competency from a different angle than multimodality, namely via the relationship between the running text and the many peritexts found in newer textbooks. Paratexts within the textbook—the *peritexts* (Genette, 1997)—are in the educational text genre meant to function as elements aiding a reader learning from the text (Skjelbred & Aamotsbakken, 2010a). However, the concept of peritext presupposes that there is a *text* in which these peritexts are situated. The text's main body is often called the *running text*, and in a textbook, this would refer to the text elements that run through each basic chapter unit and are not peritextual elements. The peritexts will typically be different sections with various functions in a textbook, e.g., various bullet-point (or bullet-point-like) lists such as summaries, glossaries, questions, and learning goals, placed together in a larger-scale arrangement, typically called a book chapter. Skjelbred and Aamotsbakken (2010a) have reported that these meant-to-be helpful paratexts of a textbook create a need for instruction and help from a teacher if a student is to benefit from the paratexts; even though the paratexts often are invitations to use cognitive strategies that are supposed to help students comprehend the text.

There is a tendency that newer textbooks in Norway are no longer self-instructing (Skjelbred et al., 2017, p. 526), so it might seem pertinent to investigate the teacher as a facilitator who opens up the text. However, this study will instead investigate how the text facilitates textbased learning. *Textbased learning*—or the concept Kintsch (1998) calls learning from text—requires deep comprehension (Allen & McNamara, 2020). To memorize a text, you only need to connect explicit information and relations that are explicit in a text. As a cognitive strategy, memorization is considered to promote less deeper-level learning than the strategies organization, elaboration, and monitoring (Samuelstuen & Bråten, 2005; Weinstein & Mayer, 1986). To learn from a text on a deeper level, background knowledge must be applied to fill in the gaps in a text (Allen & McNamara, 2020). Here, Allen and McNamara (2020) rely on Kintsch's (1998) model of comprehension, which is deemed the most prominent contemporary model (Cervetti & Wright, 2020, p. 238).

This theoretically driven case study seeks to describe one lower secondary Norwegian language arts textbook's textual composition patterns and how those patterns facilitate learning from text. I do this by analyzing the textual composition of the relation between running text and peritexts. As *composition* in a text is what "provides coherence and meaningful structure to spatial arrangements" (Van Leeuwen, 2005, p. 179), the *textual* composition tells us how the various peritexts and running text segments cohere and make up a meaningful structure.

The chosen textbook for the study has been among the top used textbooks for several years in Norway. Although one could argue that an analysis of one potentially poorly constructed textbook has limited value outside of a practitioner's scope, one could also argue that such an analysis could pinpoint how complexity helps and hinders student textbook comprehension. This study aims to contribute knowledge about what pitfalls to watch out for regarding the structure of a text facilitated for textbased learning. This study's research problem is: *How does textual composition in a textbook facilitate learning from text?* I will explore this research problem via three research questions:

- 1) What characterizes the peritexts and running text?
- 2) What characterizes the patterns of textually signaled intentions and the fulfillment of these?
- 3) How do the patterns facilitate learning from text?

In the following, I will present the theoretical framework for this study. This theoretical framework deals with the implied reader of textbooks, textbook composition, and more specifically comprehension aspects of textbook composition. After that, I will present the study's method of analysis, and lastly, share and discuss findings.

2. THEORETICAL FRAMEWORK

2.1 *The implied reader of textbooks*

In this study, a premise for investigating how the textbook facilitates learning from text is that a text can invite the reader to comprehend something via signaled intentions and how these signaled intentions are fulfilled. This relation between signaled intentions and the fulfillment of these constitutes *the implied reader*, a theoretical structure inscribed in the text. According to Iser, "[...] the concept of the implied reader designates a network of response-inviting structures, which impel the reader to grasp the text" (1978, p. 34). This network is not a real reader but offers the real reader a role to play. The concept has been used in research on history textbooks (Garske, 2017) and has been adapted in more detail concerning mathematics textbooks (Berger, 2019; Weinberg & Wiesner, 2011; Wiesner, Weinberg, Fulmer, & Barr, 2020). Weinberg and Wiesner (2011) define the implied reader as "the embodiment of the behaviours, codes and competencies that are required for an empirical reader to respond to the text in a way that is both meaningful and accurate" (Weinberg & Wiesner, 2011, p. 52). From their definition, it is clear that the goal is to find

out what is needed for an accurate reading of the textbook, and that lack of comprehension is seen as shortcomings on the student reader's part due to a discrepancy between the implied reader and the student reader.

Instead, I am more interested in the textbook's structure, namely what *gaps* in the text can cause trouble for the implied reader. According to Iser (1978), a 'negation' is when something signaled in the text is canceled. The cancellation creates a different fulfillment of the reader's role than what was signaled. A *gap* accompanied by tension will occur for the reader. The tension from such a discrepancy may enrich a fictional text, which was the type of text Iser (1978) treated, but that is not given for an informational type of text such as a textbook. Iser was open to the idea that if one considers that different text types presuppose different readers' attitudes, it is possible to apply his theory to informational texts (Maagerø & Tønnessen, 2001, p. 73).

Reading a novel that does something unexpected—something different from what was signaled—might cause an aesthetic experience and make you more entangled in the text (Iser, 1978, p. 131). However, one hallmark of the textbook is that it is facilitated to communicate knowledge that the student reader can understand and learn (Selander & Skjelbred, 2004). Rather than an enriching literary experience, gaps in a textbook combined with a reader's attitude of seeking new information would possibly cause comprehension difficulties. Since the content in a textbook can be presumed as unknown for the student reader (Selander & Skjelbred, 2004, p. 36), I will argue that such a reader will have trouble understanding if there are gaps between signaled and fulfilled. For example, if a type of text box in a textbook is explicitly signaled and said to contain "the most important information," but then sometimes instead presents 'extra' fun facts that are not necessary information, then, a reader for whom the disciplinary content is unknown, will not be able to discern between extra and important facts. Moreover, the text will seem less coherent and make less sense—it will be hard to discover how the important information is connected if unimportant information impersonates important information. Thus, I posit that tension-filled gaps resulting from negations might give neither an aesthetic nor an informational experience in the textbook genre. Reading research has found that high-coherence text does not necessarily lead to better comprehension since low-coherence text can stimulate the high-skill and high-knowledge reader to more active processing (McNamara, Kintsch, Songer, & Kintsch, 1996; McNamara & Kintsch, 1996). Thus, high-skill and high-knowledge readers will probably not only try to memorize a low-coherence text to comprehend it. However, McNamara et al. (1996) and McNamara & Kintsch's (1996) research concerns linguistic gaps, not gaps resulting from the tension between signaled and fulfilled, and the relation between peritext and running text. The concept of the implied reader is a way of addressing this issue.

2.2 *Textbook composition and comprehension aspects*

Modern, multimodal textbooks demand a complex reading competency, but textbooks differ in the extent to which they invite students to employ the complicated reader positions needed to achieve this complex reading competency (Skjelbred & Aamotsbakken, 2010b). Tønnessen (2013, p. 163) adds that the complex multimodality of the modern textbooks she investigated requires that the reader herself must shape the presented text into knowledge.

These challenges resemble what Kress (2003) has called *reading as design*, where there is no fixed order in which elements are to be read. Thus, the reader herself, rather than the author, is given authority over the text (Domingo, Jewitt, & Kress, 2015), and the reader must decide in what order to link the various elements on a page. This characteristic can be seen even clearer in online texts, where it might not be obvious which is the main element or even which units are necessary. Nonlinear reading paths (Kress & Van Leeuwen, 2006, p. 205) in newer textbooks are not clear and given, as they were before when the main verbal text reigned almost exclusively (Kress, 2003, p. 46; 2010, p. 46). Also, Veum (2013, p. 33) found that although newer textbooks at first glance may seem more pedagogically facilitated and less demanding than older ones, the multifaceted functions of presenting, engaging, involving, influencing, and entertaining the reader all at once might actually make the modern textbook voice a more complex and challenging experience for the reader.

2.2.1 *Bullet-point lists in textbooks*

One type of multimodal element that needs linking is bullet-point lists and ordered lists, elements that are often found in modern textbooks' peritexts. Lists serve the purpose of categorizing by abstracting and separating units of content from each other in a visual space (Ledin, 2015). Djonov and Van Leeuwen (2014) have pointed to that there is a certain ambiguity to bullet-point lists in that foregrounding information might make the content more available, while at the same time, condensing information might twist or flatten the meaning. This ambiguity gives bullet-point lists both a potentially positive and a potentially negative effect. This ambiguity is also visible in Kress' (2003, p. 17) characterization of bullet points as a layout feature that makes the information more insistent, urgent, official, and "[...] not meant to be continuous and coherent, not inviting reflection and consideration, not insinuating themselves into our thinking [...]". Such a characterization of bullet points does not make them seem an advantageous layout feature for learning from text.

2.2.2 *Patterns of textual composition in textbooks*

According to Bruner (1960), specific topics or skills will not make much sense without their context from a field of knowledge. Thus, for Bruner (1960, p. 31), what would be advantageous for learning is a structured pattern that provides context. That

pattern would be to start with the fundamental idea, or what I would call the *whole*, from there going to specific topics or skills, what I would call the *parts*, and ending with tying the knowledge together, a *whole*. Such a basic chapter pattern in a textbook would be in opposition to a textbook that presents parts of information without relating them to a whole. A text that lists many isolated facts without stressing the connection between various concepts would instead implicitly invite the reader to memorize the facts rather than understand them, thus inviting the reader to use the cognitive strategy memorization.

The pattern whole-to-parts-to-whole could also be characterized as analytic-synthetic. 'Analytic-synthetic' is derived from the term *analysis* to separate a whole into its parts (Merriam-Webster, 2020, #2) and *synthesis* in the sense of composing or combining parts or elements to form a whole (Merriam-Webster, 2020, #1a). The distinction between *analytic* and *synthetic* approaches here resembles an old debate in comprehension instruction about whether comprehension instruction should start with a *whole* that is to be analyzed or whether one should start with the parts to synthesize them together to a whole. There is an easily recognizable connection here between analytic versus synthetic approaches and the hermeneutic theory of understanding. The basic hermeneutic circle consists of whole and parts. The parts can only make sense from the whole, and the whole can only make sense from the parts (Alvesson & Sköldbberg, 2009, p. 92). However, in trying to reach an understanding of a text, a reader needs to presuppose that there is a whole, a completeness of meaning. This is needed in order to assume that the text is intelligible; what Gadamer calls having a "fore-conception of completeness" (Gadamer, 2004 [1975/1989], p. 294). To apply the metaphor of the hermeneutic circle to patterns of textual composition in textbooks is to look at how the implied reader is invited to engage in the comprehension process. When the goal is to facilitate textbased learning, the text structure can benefit from knowledge of how the reader seeks understanding. The reader seeks a whole, but also to relate the parts to that whole.

3. METHOD

3.1 *An instrumental single-case study*

The present study is a case study (Yin, 2014, pp. 16-17) that investigates how one particular textbook invites the implied reader to learn from the text. The study can be characterized as a theoretically driven *instrumental* case (Stake, 2005) because the aim is that the analysis of this particular textbook can illustrate the challenges of learning from textbooks and contribute conceptual tools to analyze textbooks. The case study was implemented by close reading in order to provide an in-depth text analysis. I have used the analysis as a starting point for *analytic generalization* (Yin, 2014, p. 41). By that, I mean that the theory I apply in the analysis is used to explain more generally the challenges of inviting the implied reader to learn from text.

Simultaneously, this explanation highlights the difficulties of creating a text that invites the implied reader to learn from the text.

By applying the concept of the implied reader to the analysis of textbooks, the study is able to describe and explain a text-structure-created need for a complex reading competency in student readers. For the implied reader of a textbook, who, after all, is reading the book to learn something new, the content can be presumed unknown (Selander & Skjelbred, 2004, p. 36). Therefore, it is possible to make assumptions about what will be problematic in the text structure that is troubling for a student reader by investigating where the gaps are when all content is new and unknown.

3.2 Data: A language arts textbook

The data (see Table 1 below) in this study is one textbook for the 8th-10th grade of lower secondary school in Norway: *Nye kontekst 8-10* (Blichfeldt & Heggem, 2014a) in the subject Norwegian language arts. There were two criteria for the choice of this textbook. The first criterion was that it had been around long enough to have undergone at least one revision. From that, I assumed that sales numbers were relatively high, and therefore that the commonly occurring opinion about the textbook was that the quality is excellent or at least good enough. Sales numbers for textbooks are not available to the public, but to the best of my knowledge, via the common perception, *Nye kontekst 8-10* has been one of the two most used Norwegian language arts textbooks in Norway for the years it has existed. The other criterion was to pick the textbook that subjectively looked the most updated and modern by its highly multimodal character and a foregrounded disciplinary focus on key competencies, the latter in compliance with the adjusted national curriculum from 2013. Since then, a new national curriculum has been implemented in the fall of 2020, and a newer version of this textbook was published, but I have no information about how many schools have which version.

Table 1. Profile of textbook analyzed

Context info	Textbook analyzed→	<i>Nye kontekst 8-10</i> [«New context 8-10», base book]
Grades covered		Grades 8-10
Pages total		Base book: 424
Pages in the overarching sections analyzed		Overarching sections 1-9: 390

Note. The *Nye Kontekst 8-10: Lærerens bok* [Nye Kontekst 8-10: The teacher's book] (Blichfeldt & Heggem, 2014b) accompanying the textbook was consulted where relevant in the analysis.

During the analysis, I have taken into account how the book's creators invite the reader to use it. Textbooks have explicit instructions and reader's guide sections with advice on how the textbook is to be used in the classroom. Such explicit invitations have guided the interpretation of implicit textbook signals.

3.3 *Analysis of textual composition*

In the following, I will present how I analyzed the textbook for this study. For RQ1 (see Table 2 below), concerning what characterizes the peritexts and running text, I investigated the peritext types and their distribution. I analyzed the composition of the various peritext types and the running text within a basic chapter unit. I did this by organizing peritexts and running text hierarchically in a chart based on their function for the implied reader.

Next, I calculated the distribution of peritext types and running in the nine overarching sections of the book in order to quantify the share of the text given to each peritext type. In particular, I quantified the share of the book given to bullet-point or bullet-point-like lists, both within the running text and in the textbook in general. I calculated each element's share by measuring the height given to it on each page, which had an average height of 23 cm, with top and bottom margins excluded. I did not measure the width. If a peritext type, e.g., the "Tips"-peritext, filled an entire page, I counted it as one full page even if half of it was devoted to an illustration to the peritext. For the running text, I discerned between verbal text and elements other than verbal text merged into the running text. Those elements could be images, bullet-points or bullet-point-like lists and tables, or other graphics. I used the overall category 'running text' to include images, graphics, tables, and bullet-point or bullet-point-like lists, while the subcategory 'bullet-points in running text' includes only bullet-point lists, tables, or lists that are numbered or otherwise graphically foregrounded as a list. Small exemplary text quotes have not been counted as bullet-points unless two or more are listed consecutively. Lists with a few text lines to each bullet point have been included as bullet-points as each item still functions as part of a list more than a standard paragraph. For RQ2, I analyzed what was signaled and fulfilled for the implied reader. I investigated this in detail for three specific peritext types in the case textbook. This analysis step included discerning between analytic and synthetic patterns that focus on parts, a whole, or a movement from whole to parts or from parts to a whole.

Finally, based on the analysis described above, RQ3 interprets how the patterns invite the implied reader to learn from text. I differentiated only between whether memorization or other deeper-level strategies was invited.

Table 2. Overview of analysis steps

Research problem: How does textual composition in a textbook facilitate learning from text?	
Goal of analysis step	Analysis steps
RQ1: What characterizes the peritexts and running text?	1. Identifying peritexts and running text 2. Organizing peritext types and running text hierarchically in a chart 3. Distribution calculation by measurement of peritext types and running text share in all nine overarching sections 4. Distribution calculation by measurement of running text elements, i.e., verbal running text, images, bullet-points or bullet-point-like lists and tables, or other graphics
RQ2: What characterizes the patterns of textually signaled intentions and the fulfillment of these?	5. Analyzing what is signaled and fulfilled for the implied reader 6. Interpreting analytic and/or synthetic patterns
RQ3: How do the patterns facilitate learning from text?	7. Interpreting whether the implied reader was invited to memorize or to learn from the text by applying a more appropriate cognitive strategy.

4. FINDINGS

In the following, I will present the findings concerning what characterizes textual composition patterns regarding the peritext types and running text (RQ1), what characterizes the patterns of textually signaled intentions and the fulfillment of these (RQ2), and how these patterns facilitate learning from text (RQ3).

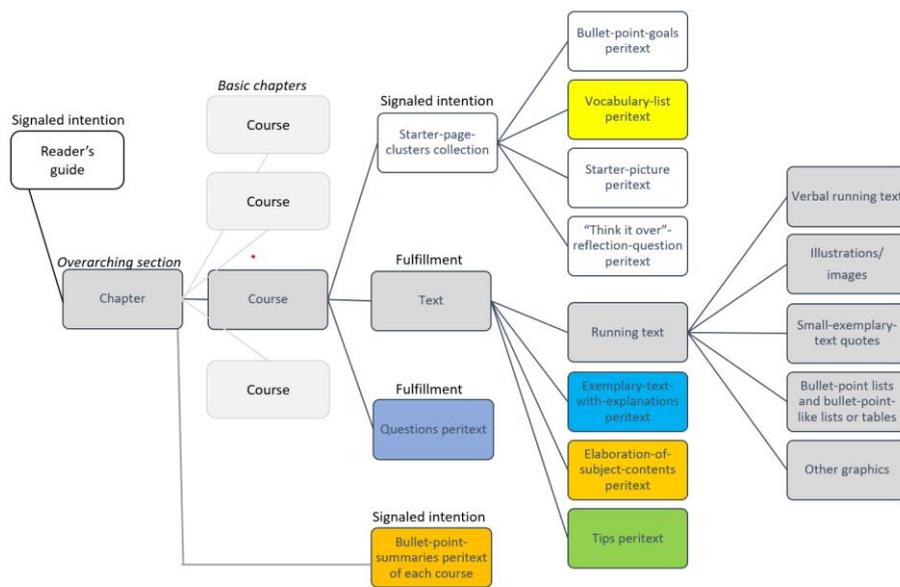
4.1 Characteristics of peritext types and running text usage

The basic chapter units in *Nye kontekst 8-10* have a very uniform structure of various types of peritexts in addition to the running text (Figure 1 below). The reader is prepared for this textbook's peritext types in the reader's guide (pp. 2-3, see Figure 2 below). The only text element not explained is the running text, which is a way of signaling that it is to be presumed there as the 'normal,' unmarked, and primary text. It is seen as not needing an explanation. It is taken for granted, and in this way, it is not unreasonable to assume that the running text carries the main meaning-load, or the *functional load* (cf., Kress, 2003, p. 46), in the textbook.

Every overarching section—called 'chapter' ["kapittel"] in the textbook—contains several basic chapter units—called 'courses' ["kurs"] in the textbook. Each basic chapter has a starter page with the same collection of peritext types (see example in Figure 3 below). These peritext types all signal an intention of what the implied reader will learn. This signaled intention is evident from the reader's guide instruction that explicitly talks about the peritexts as preparatory for the learning in the following chapter. The signaled intention is also evident from how these starter peritexts contain bullet-point learning goals in the upper-half right section and a yellow-marked vocabulary list to learn in the margin. Two peritext types that more subtly signal what is to come are the starter picture used as whole-page background,

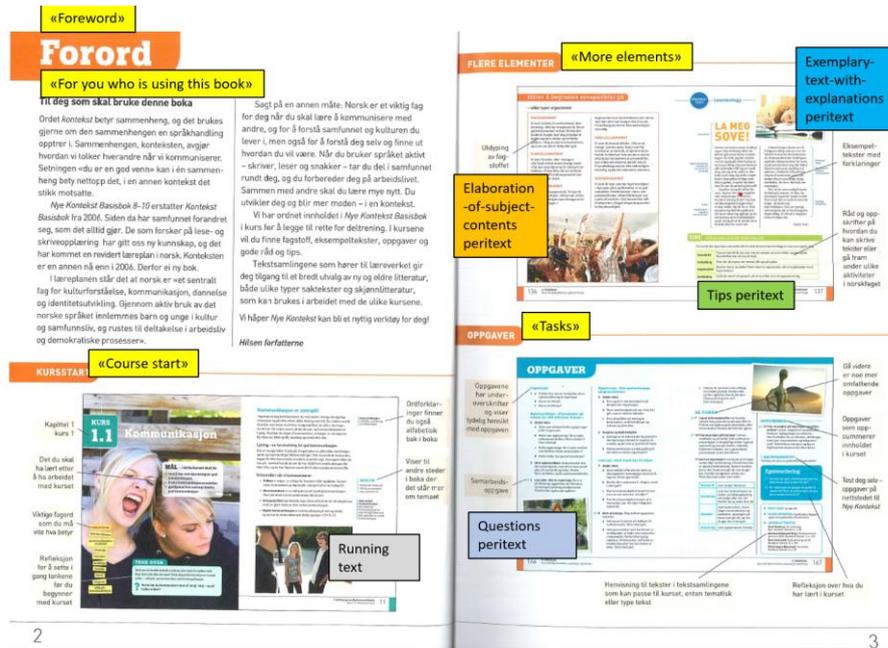
and at the bottom of the page, a colored box with a reflection question called “Think it over” [“Tenk over”]. (All translations are by the author of the article). Both are supposed to prepare the implied reader for what is to come in the basic chapter.

Figure 1. Textual composition in Nye kontekst 8-10



Note. Figure 1 is a simplified chart in that only the subdivision of the category running text is shown down to a detailed level. Thus, the figure clarifies what different types of peritexts the running text contains. The grey boxes to the right of the running text show what types of elements the running text contains. Each of the peritext types may also contain several different elements. The lack of details in these cases is due to the macro-focus of this analysis. The translation of peritext names are by the author of the article.

Figure 2. The reader's guide of Nye kontekst 8-10 (pp. 2-3)



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To be able to apply the same terms in other cases, I have used my own concepts, e.g., “questions peritext” instead of “tasks” [“oppgaver”].

There are three types of recurring peritext types in addition to the running text in the basic chapter text, although not all of them are present in all of the basic chapters: the orange-marked “Elaboration of subject content” [“Utdyping av fagstoff”], from here on called ‘elaboration peritext;’ the green-marked “Tips” [“Tips”] box, and the blue-marked exemplary text with explanation keywords in the margins. The green-marked tips peritexts are always bullet-points, the orange-marked elaboration peritext is always in the form of some list, but the layout may vary. Whether all of these three peritext types are present in a basic chapter depends on the topic. At the end of each basic chapter, there are two to four pages of questions—most often two pages—with content and subtitles in line with the basic chapter’s content. The questions-peritext’s arrangement creates a predictable structure for the tasks, where the reader can find a familiar subtitle from the basic chapter unit with tasks about that subtopic. At the end of each overarching section, there is a collection of bullet-point summaries from the basic chapter units belonging to the overarching section. This peritext of summaries is called “In short” [“Kort sagt”], and although it

comes at the end, it represents a signaled intention of what the implied reader will learn from each basic chapter unit in that it signals what the essential content of each basic chapter unit was.

Figure 3: Example of basic chapter starter page (p. 178) in Nye Kontekst 8-10



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In this book, it is hard to see the running text as a privileged text element compared to the other three recurring in-chapter peritext types. Although the recurring peritexts appear to be peritextual elements, they present new information in the same way as the running text and contain important information, according to the

learning goals and vocabulary list, which might not be found elsewhere. For example, it seems like the elaboration peritext represents the most critical information in basic chapter 2.4, where the running text only covers half a page, while the elaboration peritext covers two and a half pages. The running text in this basic chapter provides insufficient information to learn the vocabulary list words and answer the questions at the end of the basic chapter. Out of 8 vocabulary words, 5 are only found in the elaboration peritext. Similarly, to answer the 12 questions at the end of the chapter, 5 of them demand that you have read the elaboration peritext, and 5 more of the questions imply that the content in the elaboration peritext is important to give a good answer. Thus, it seems possible to say that this textbook does not rely on the running text to carry the functional load (cf., Kress, 2003, p. 46).

4.2 *The distribution of running text and peritext types*

In the textbook sample of 390 pages, the distribution is 68% peritext versus 32% running text (see Table 3 below). It is to be expected that the questions peritexts take up quite a bit of space (26%) in a textbook, but the remaining 42% peritexts are still more than that of the running text. If we only look at the peritexts within the basic chapter unit (cf. Figure 2), i.e., excluding starter peritexts and questions peritexts, and counting only the tips, elaboration, and the exemplary text peritexts, the share is 23%, and thus smaller than that of the running text. However, if we consider the number of bullet-point lists in the textbook, we find that the tips and elaboration peritexts consist mainly of bullet-point lists—also, the running text contains a large amount of bullet-point lists. The running text contains both verbal running text (16%), bullet-points (10%), and other graphics/illustrations (6%). These numbers tell us that the share of bullet points, counting bullet points in the running text and the peritexts that mainly consist of bullet-points (the tips, elaboration, and basic chapter starter peritexts), totals 39% of the nine overarching sections of this textbook. The verbal running text (16%) and other graphics/illustrations in the running text (6%) comprise collectively only 22%, almost the same as the recurring tips, elaboration, and exemplary peritext types (23%). Thus, a small number for the verbal running text and a very large number for bullet-point lists.

These numbers tell us that *Nye kontekst 8-10* has what I would call a patchwork structure, where the running text does not have a privileged position, even though this was signaled in the reader's guide. Since the peritexts in the textbook contain content that is signaled as important and not found in the running text, it is unclear for the reader which type of text element carries the functional load (Kress, 2003). The running text's small share of the total text makes it difficult to speak of running text versus peritexts (Genette, 1997) at all. When the running text has no privileged position compared to the peritexts, there seems to be little basis for maintaining a clear distinction between running text on the one hand and peritext on the other.

The large number of bullet points further separates, abstracts, and fragments (Ledin, 2015, p. 22) the content and the appearance of the running text. With such a

peritext-patchwork structure, the presence of a thin overarching section will not compensate and facilitate synthesis of the content. Instead, the implied reader is invited to ‘use’ parts of the text (Kress & Van Leeuwen, 2006, p. 205), one could say almost like a handbook. Thus, the distribution of running text and peritext types in *Nye kontekst 8-10* invites the implied reader to focus on separate parts of information in a basic chapter unit. For the implied reader to fulfill what is signaled by each basic chapter’s rigid composition, the analytic-synthetic pattern, the reading role becomes quite a much harder task. Instead, this textbook’s actual prevailing pattern is a parts-to-parts composition or attempted synthetic—one where the running text is dead.

Table 3. Distribution of peritexts and running text in *Nye kontekst 8-10*

Peritexts and running text	Number of pages	Percentage of total
Running text including graphics/bullet-points/illustrations	126.17	32%
<i>Bullet-points in running text*</i>	40.07	10%
<i>Verbal text in running text</i>	61.39	16%
<i>Other graphics/illustrations in running text</i>	24.71	6%
Basic chapter starter peritexts	44	11%
Overarching starter peritexts	18	5%
“Elaboration of subject contents”	26.41	7%
“Tips”	26.83	7%
“Exemplary text with explanations”	34.94	9%
Basic chapter questions peritext	100.65	26%
“In short” (overarching section summaries)	13	3%
Peritexts	263.83	68%
Basic chapter peritexts, excluding starter peritexts and questions peritexts	88.18	23%
Bullet points in running text and mainly bullet-pointed peritexts, excluding questions peritexts and exemplary-text peritexts**	150.31	39%
Total number of pages	390	100%

* Tables and numbered lists are included in the definition of bullet-points.

** The questions peritexts are excluded since there is no alternative way to present questions/tasks in a textbook other than listing them. I have not included the exemplary-text peritexts, although it could be argued that the keyword explanations in these peritexts function as bullet-points.

4.3 Textual composition in three different peritext types

Below, I will provide some examples of signals and fulfillment in three of the peritext types present in this textbook (RQ2), which will help clarify the consequences of a diminished running text. I will also present how the patterns I found facilitate learning from text (RQ3).

4.3.1 Vocabulary peritexts

The reader's guide states that the vocabulary peritext contains "[i]mportant subject words that you need to know the meaning of" ["Viktige fagord som du må vite hva betyr"] (p. 2). Half a page in *The teacher's book* (Blichfeldt & Heggem, 2014b, p. 21) is devoted to describing this peritext type's function and to suggesting various strategies the students can use to learn their vocabulary words. It is stated that students meet these words in the course and that these are words the students should be "[...] attentive to and learn in the course by working with the subject content [of the course]" ["[...] oppmerksomme på og lære seg i løpet av arbeidet med kurset"] (p. 21). Along with these explicit signals, the list of vocabulary words is awarded a central placement at the beginning of each basic chapter's starter page and foregrounded by how each word is highlighted in yellow as a separate yellow note. Vocabulary words are clearly signaled as important. Therefore, the reader should expect that the words are thoroughly explained and used extensively in the basic chapter.

However, this is not the case in *Nye Kontekst 8-10*. I found that sometimes vocabulary words are not explained at all, only applied or briefly mentioned. The words often seem arbitrarily chosen, and their meanings often seem to overlap partially. A few examples of such similar vocabulary words from the same course are plot and intrigue ("plott" and "intrige"), overlook and overview ("overblikk" and "oversikt"—these are two Norwegian words that could both be translated as 'overview'), keywords and notes ("stikkord" and "notater"), interpret and reflect ("tolke" and "reflektere"). The latter would be two different concepts, but the problem is that they are not explained or used in the course text as two different concepts (pp. 46-47). For overlook and overview (pp. 55-56), the first term is only mentioned once—in the context of getting an overlook of the text—glancing through the text. There the subtitle is "Get an overview" ("Skaff deg oversikt"). Adding in "overlook" as a vocabulary term and not just a word that helps describe the concept 'overview' is unnecessary and confusing.

Explanations are often not prioritized in the running text but rather left as glossary entries in the margins. When explanations for vocabulary words from the starter page are left in the margins, the implied reader becomes ambiguous. The vocabulary words are signaled as and explicitly labeled as important in the reader's guide and through the highlighted position on the starter page. Then, in the running text, they are marginalized by only being explained in the margins. Had they been explained in both running text and the margin glossary, the effect would be to underline that these vocabulary words are important. When focus on vocabulary words is missing from the running text—which one would think, as an outset—is where the functional load is positioned, the effect is a mismatch between what is signaled and the fulfillment of the implied reader. This incoherence causes tension in the text, which can lead to difficulties for a reader who is new to the content.

In some cases, for someone who is not a novice disciplinary reader, it will also become clear that although the *concept* is explained and is visible in the running text, the word listed on the starter page is not used. An example is “source reference” (“kildehenvisning”) in course 2.5 (p. 72), a word which is only mentioned in the questions peritext at the end of the course, although the *concept* has its own paragraph under the subheading “To provide sources” (“Å oppgi kilder,” p. 74) as well as an elaboration peritext (p. 75).

Since the content in a textbook is supposed to be new and unfamiliar, the implied reader would not have the prior knowledge to disregard the signals that say that the vocabulary words are important in the chapter. When the vocabulary word is only mentioned, and other content is given more space, the reader’s role is left with memorization of the meaning of the vocabulary word as a strategy to learn from the text—as opposed to the case of a teacher reader whose prior knowledge would help to sort out what is more important. The textbook’s implied reader will be left with the memorization strategy because the discourse of the text does not allow for a proper build-up of a relational understanding of the content since the vocabulary words are not systematically used in the course text. Instead, an instrumental, parts-by-parts understanding is what the reader is invited to attain. The reader is also left with the indirect message that the subject content of language arts is something you need to memorize, not understand, which does not reflect the discipline’s ways of thinking and doing.

4.3.2 Exemplary text peritexts

The reader’s guide in the textbook (p. 3) and *The teacher’s book* (Blichfeldt & Heggem, 2014b, p. 10) both state the same thing about the exemplary texts: They are “Exemplary texts with explanations” [“Eksempeltekster med forklaringer”]. When discussing the exemplary text in the 5.1 course, *The teacher’s book* suggests that a student task could be to read the exemplary text and “use some time on it” [“bruk litt tid på denne”] (p. 149). At the same time, the teacher should go through the elaboration peritext where the topic is “The building blocks in a narrative” [“Byggesteinene i en fortelling”]. This particular peritext is a bullet-point-like list with key terms—some of which are listed in the vocabulary peritext, while others are not. In other words, it is suggested that the teacher should let students attach several disciplinary concepts to the exemplary texts in an analysis of the text. Finally, in *The teacher’s book*, it is also stated that all exemplary texts in chapter 5 can serve as patterns or models [“mønster”] for writing (p. 148). Thus, the text signals that this type of basic chapter is meant to facilitate student analysis of the exemplary text by having the exemplary text be an integrated topic in the basic chapter, i.e., with analysis questions and writing tasks linked to the exemplary text.

There is no doubt that the exemplary text peritext is signaled as an exemplification of the basic chapter’s subject content. However, given how the exemplary text is integrated with the questions peritext and the elaboration peritext, it also

becomes clear that a focus on parts permeates the book. This focus on parts is visible in task 2 from basic chapter 5.1 (p. 186), which concerns the analysis of the chapter's exemplary-text short story. The task has questions from a-g that contain vocabulary from the chapter. The problem, in this case, is that the questions' answers are also listed more or less directly in the orange-marked elaboration peritext (see Figure 4 and Figure 5).

Figure 4. The elaboration peritext and the exemplary text of 5.1 (p. 180-181) in Nye Kontekst 8-10

Byggesteinene i en fortelling

Eksemplene i kursiv er fra novellen «Å falle for noen» på neste side.

Hovedperson
– Teodor

BIPERSONER
– Camilla, Christian

HANDLING
– det som skjer i fortellingen: Teodor i stålåmbakken

MILJØ
– stedet der handlingen skjer: en stålåmbakke et sted i Norge

PLOTT
– hele situasjonen med personer, prosjekt, miljø, handling – og hvordan disse påvirker hverandre: en klønete, men foretøket 14-åring som må stå på ski med sin vifte

INTRIJE
– konflikten, utfordringen eller problemet som er hovedsaken i en fortelling: ønsket om å bli kjæreste med Camilla, innbit rivalisering med Christian, motivet mot å gå på ski

PROSJEKT OG MÅL
– det hovedpersonen vil oppnå eller forhindre: å bli kjæreste på Camilla, å komme uskadd hjem

HINDRINGER
– manglet på skiferdighet, Christian

RISIKO
– å durme seg ut, å skade seg, å ikke bli Camilla

HJELP
– noe eller noen hjelper hovedpersonen: Camilla, Roks

TEMA
– det fortellingen handler om på et dypere plan: vennskap, tendens, hat ... i ungdommelig uønskerhet

BUDESKAP
– det vi oppfatter at forfatteren vil fortelle oss, kanskje: Selv den med klønete kan ha lykken med seg

Begreper handling, intrige, plott, tema og budskap kan være vanskelig å skille fra hverandre, siden de alle gir svar på spørsmålet: «Hva handler denne teksten om?»

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Novelle

Å falle for noen

Ette ville bli en drøtsdag! Teodor kjente det med det samme han våknet. Han hadde hatt mareritt om malta, og han hadde svevlet så han måtte vrenge av seg nattøyet. Nå sto han på badet og kjente etter om han ikke egentlig var syk. Det var skidag i dag, og sport var ikke det morsomste han visste. Kroppen hans var trossom ikke skapt for å bevege seg. Armene var blitt så lange og slang omkring når han gikk, og beina hadde en tendens til å filtrere seg inn i hverandre selv på flate gulett, og han hadde balanse som et egg på høykant. Han var 14 år, og kroppen var blitt for stor for han.

– Tull, sa mor. – Du er ikke syk. Du er bare redd for å gå på ski.

Av stød med deg!

Så mye for statten hjemmefra, tenkte Teodor der han satt på bussen på vei mot stålåmbakken. Nå hadde han to mlk. Han måtte komme hel hjem, noe som stilt ikke var sikkert, og han måtte ikke dumme seg for mye ut, noe som var enda mindre sannsynlig. Men det var én ting som gjorde at han holdt molet opp. Camilla var med. Kanskje han fikk et glimt av henne i løpet av dagen. Derfor var det med en usikker forventning at han med lunte stålåmbak og litt for store stålåmbakstaver stavet seg ut og speldet etter én bestemt.

Dagen hadde ikke gått så verst. Teodor hadde holdt seg langt nede i bakken for å være trygg. Han hadde bare tråkket oppover en lite stykke og kjent forsiktig etter i løp. På utstae bein. Klassekameratene hadde pekt på han og flirt, det så han, men ståt var han vant til. Han var i god behold. Han hadde ikke stilt seg, ikke enda. Men Camilla hadde han knapt sett. Hun raste vei rundt høyt opp i løypa. Sikker sammen med Christian. Typisk!

– Blir du med og tar heisen?

En jente stemte? Teodor snudde hodet. Hvem var det som snakket til han? Camilla! Plutselig var han der og sto og smilte til han! Teodor kjente at han ble red, og han måtte skynde seg og inn på hodet og late som om han rettet på hjelmen. For første gang i historien hadde Camilla snakket til han. Det suste for anene, og hjertet dunket. Han visste ikke helt hvorfor.

– Kom igjen, det er mors!

Og ler han rødt visste hva som skjedde, var han og Camilla på vei oppover. De snakket sammen – som den naturgitte ting i verden. Teodor ville ha klåpet seg i armen hvis han ikke var så redd for å falle av. For så langt hadde all gått gjennom. Teodor hadde bare bømmet to ganger før han fikk fast grep i T-ankeren på skihelmen. Det var innsmått glatt der nede ved påsløtningen. Og hver gang hadde Camilla hjulpet han med å sortere

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Figure 5. The elaboration peritext and the exemplary text of 5.1 partially translated (p. 180-181) in Nye Kontekst 8-10

Elaboration of subject content

The building blocks in a narrative

Examples in italics are from the short story
«To fall for someone» on the next page.

MAIN CHARACTER
- *Teodor*

ACTION
- what happens in the narrative: *Teodor in the slalom slope*

PLOT
- the whole situation with persons, project, milieu, action – and how these affect each other:
A clumsy, but in-love 14-year-old that has to go skiing against his will

INTRIGUE
- the conflict, challenge or problem which is the main issue in a narrative:
the wish to become Camilla's boyfriend, imaginary rivalry with Christian, reluctance to go skiing

[Other 'building blocks' which I have not translated definition and examples for: MINOR CHARACTERS, MILIEU, HELP and THEME]

Exemplary text

Short story

To fall for someone

Dette ville bli en drittidag! Teodor kjente det med det samme han våknet. Han hadde hatt mareritt om natta, og han hadde svettet så han måtte vrenge av seg natthyet. Nå sto han på badet og kjente etter om han ikke egentlig var syk. Det var såkaldig i dag, og sport var ikke det morsomste han visste. Kroppen hans var liksom ikke skapt for å bevege seg. Armene var blitt så lange og slang omkring når han gikk, og beina hadde en tendens til å filtrere seg inn i hverandre selv på flate gulvet, og han hadde balanse som et egg på høykant. Han var 14 år, og kroppen var blitt for stor for han.

– Tull, sa mor. – Du er ikke syk. Du er bare redd for å gå på ski. Av stid med deg!

Så mye for stalten hjemmefra, tenkte Teodor der han satt på bussen på vei mot slalombakkene. Nå hadde han to mål: Han måtte komme hel hjem, noe som stilt ikke var sikkert, og han måtte ikke dumme seg for mye ut, noe som var enda mindre sannsynlig. Men det var én ting som gjorde at han holdt motet oppe. Camilla var med. Kanskje han fikk et glimt av henne i løpet av dagen. Derfor var det med en usikker forventning at han med lærte slalåmski og litt for store slalåmstaver slavret seg ut og spilet etter én beslekt.

Dagen hadde ikke gått så verst. Teodor hadde holdt seg langt nede i bakken for å være trygg. Han hadde bare trakkert oppover et lite stykke og kjert forsiktig utor. I plog. På ustøe bein. Klassekameratene hadde pekt på han og flørt, det så han, men slikt var han vant til. Han var i god behold. Han hadde ikke slått seg, ikke enda. Men Camilla hadde han knapt sett. Hun rastet vel rundt høyt oppe i løypa. Sikkert sammen med Christian. Typisk!

– Blir du med og tar heisen?
En jentesermer? Teodor smudde hodet. Hvem var det som snakket til han? Camilla! Plutselig var hun der og sto og smilte til han! Teodor kjente at han ble rød, og han måtte skynde seg og snu på hodet og late som om han rettet på hjelmen. For første gang i historien hadde Camilla snakket til han. Det suste for arene, og hjertet dunket. Han visste ikke helt hvorfor.

– Kom igjen, da! Det er mors!
Og før han viktig visste hva som skjedd, var han og Camilla på vei oppover. De snakket sammen – som den naturlige ting i verden. Teodor ville ha klappet seg i armen hvis han ikke var så redd for å falle av. For så langt hadde alt gått glimrende. Teodor hadde bare kommet to ganger før han fikk fast grep i T-kroken på skihelsen. Det var innmari glatt der nede ved påslingsingen. Og hver gang hadde Camilla hjulpet han med å sortere

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The chapter text has already analyzed the short story by providing a ready-made bullet-point-like list that can be used to answer task 2. Task 2a) reads: “Write as short as possible what happens in the narrative.” (p. 186). To answer this, you will find the following bullet point in the elaboration peritext: “ACTION - what happens in the narrative: *Teodor in the slalom slope*” (p. 180). Further, task 2b) reads: “The main character wants to get back unharmed from the ski trip, but what is his real *project* (the dream, the hope)?” (p. 186). To answer you have the elaboration peritext’s bullet point “PROJECT AND GOAL - what the main character wants to achieve or prevent: *a shot at Camilla, to get home unharmed*” (p. 180). The result is that the implied reader only needs to find and copy text to answer the questions rather than to analyze the short story. The focus is on separate parts of the short story analysis, but without the next step, to put it together, the synthesis.

However, if we investigate what was signaled in the starter peritexts’ aims, we find that two of the goals are to “read and analyze a story” (p. 178). The keyword here is “a story,” not stories in general, and the fulfillment of the signaled from the starter peritexts is maybe fulfilled, although one could ask what is learned in general

concerning the topic with such a focus on separate parts. Nonetheless, the initial signal of analytic-synthetic patterns in this textbook is not fulfilled.

The piece-by-piece discourse lacks a synthesis. It is entirely up to the reader, alternatively the teacher, to connect the various text elements. The predictable and rigid basic chapter structure invites the implied reader to perceive each chapter as a closed whole, not only as a part of an overarching section. The exemplary text is signaled to be integrated with several other peritexts, but the fulfillment does not tie the parts together to a whole. Since the textbook invites the reader to view the textbook as an analytic-synthetic structure, one would expect a synthetic build-up of content across the basic chapters. However, the implied reader's fulfillment is far from such a structure.

4.3.3 *Elaboration peritexts*

Neither the reader's guide in the textbook nor *The teacher's book* says much about the elaboration peritexts beyond that their content elaborates on the course's subject content. Thus, it is signaled that one could expect explanations and specifications that could give the student a more thorough understanding of content already mentioned in the running text, but this is most often not the case. There are 27 such peritexts in the textbook. Of these, 13 are tables or lists that provide overviews of single keywords on a topic, or lists of examples. The example lists are either with or without a short explanation. Another four of the 27 elaboration peritexts consist of bullet-point lists with key information. One of these peritexts provides step-by-step instruction. Only 9 of the 27 peritexts elaborates on the subject content with explanations and specifications. Thus, most of these peritexts do not offer what they are signaled to do. In some cases, these peritexts are the only place where a vocabulary word is mentioned. In some cases, one has to depend on the elaboration peritext to attain the basic chapter's learning goals. It is often presupposed that the material in the elaboration peritexts is learned. Basically, these peritexts' content is fulfilled for the implied reader, not as extra but often as essential information. The ambiguity of these peritexts' pattern creates tension for the implied reader.

All elaboration peritexts that focus on listing keywords—with or without short explanations—give the impression of being an additional type of vocabulary peritext, cf., the starter-vocabulary peritext. As an example, the elaboration peritext already mentioned with connection to an exemplary text above, the peritext "Building blocks of a narrative" ["Byggesteinene i en fortelling"] in 5.1 (see Figure 4 and Figure 5), provides key subject terms accompanied by an example from the exemplary text that follows. Two-thirds of the 12 key terms in this peritext also contain a short explanation, while the others do not. There are only four listed key terms from the elaboration peritext that are applied in the running text ("action" ["handling"], "risk" ["risiko"], "hinders" ["hindringer"], and "main character" ["hovedperson"]). It could be added that two of these four are only found in a bullet-point box in the running text (p. 179). In the vocabulary peritext, 6 of 8 listed words are taken from the

elaboration peritext, and only one of these words is also used in the running text (“action”). Of the remaining two words in the vocabulary peritext, one is used in the running text (“fiction” [“skjønnlitteratur”]), and the second is only used in an explanation text to an illustration for another type of peritext, namely the exemplary text (“tension curve” [“spenningskurve”]). The lack of consistency regarding what type of content is to be found where, and the confusion concerning what function the elaboration peritext is supposed to have in relation to the running text and other peritext types, creates a tension gap for the implied reader. The implied reader’s fulfillment is that many words are mentioned, and are seemingly important, but without sufficient application, they need to be memorized.

5. DISCUSSION

This study’s main finding is that enriching a textbook with peritext types containing essential content to invite the implied reader to use deep-comprehension cognitive strategies runs the risk of achieving the opposite. There is an inherent fallacy in creating many peritext types with essential chapter content and with different functions to fulfill, in that it seems to be impossible to avoid a conflict between what is signaled and what is fulfilled. The peritexts are there to clarify the content by inviting the usage of cognitive strategies, but since they also reduce the share of running text and contain many fragmenting bullet-point or bullet-point-like lists or tables (Djonov & Van Leeuwen, 2014; Kress, 2003; Ledin, 2015), the fulfillment of the implied reader is to mend many gaps. Tension arises from how signaled intentions of the peritexts and running text are not fulfilled and from gaps between these text types—gaps resulting from the lack of textual synthesis that a running text carrying the functional load (Kress, 2003) could have produced. Here, the running text appears dead, and these tension-filled gaps are not exemplary for learning from text. Instead, they invite the implied reader to memorize the text without what reading research would call deep comprehension (Allen & McNamara, 2020; Kintsch, 1998; Samuelstuen & Bråten, 2005; Weinstein & Mayer, 1986).

This analysis highlights text-compositional issues that cause trouble for the implied reader of a textbook. The patchwork of peritexts and lack of clarity in functional load create confusion regarding what content is essential and leaves the implied reader with the alternative to memorize content. The textual pattern is from part-to-part instead of whole-to-part-to-whole, which would have provided a synthesis of the content. That the implied reader should be able to design the text as a whole in the reading-process (cf., Kress, 2003) is not likely; the peritext patchwork in a basic chapter contains too many details that are not synthesized. There is too much fragmentation. When there is no whole to provide context for the parts, it is hard to make sense of the content (Bruner, 1960). Thus, the implied reader that is new to the content, which we should presume a textbook student reader to be (Selander & Skjelbred, 2004, p. 36), will need to memorize to grasp it.

5.1 *Application and integration of peritexts*

Even though the running text is signaled to carry the functional load, the textbook's peritexts contain equally important information, making peritexts not an extra but an essential. The vocabulary peritexts in this textbook, meant to foreground the use of disciplinary language and prepare the reader for the importance of these chosen words, give the impression of name-dropping key terms since they are not adequately applied in text.

In contrast to this, the exemplary text referred to above seems to be well integrated into and applied in the rest of the basic chapter. It is used both in an elaboration peritext and in the questions peritext. However, the text's bullet-point-like structure and the emphasis on vocabulary divert the implied reader from building a synthesis and understanding something essential and disciplinary about the short story. The problem with integrating exemplary texts is that it is hard to analyze it in-text via bullet-point-like keywords and at the same time benefit from applying the exemplary texts in questions. Such integration will lead to find-and-copy-text answers, inviting memorization rather than deep comprehension. Thus, integration does not necessarily mean coherence (Van Leeuwen, 2005) but can instead mean pieced-up content and lack of an analytic-synthetic approach.

There is a big difference between a bullet-point list with keywords summarized from the running text and foregrounded as an extra-help peritext and a bullet-point list with keywords that do not exist within the running text at all. There is a big difference between a peritext that elaborates the necessary subject content and a peritext that sometimes is the most important information and other times is simply a clump of keywords or examples of something without an explanation.

The elaboration peritexts' ambiguity resulting from variation in what kind of information they present—sometimes essential, other times a large group of overview-keywords—shows that particularly bullet-point or bullet-point-like peritexts in this textbook cause comprehension problems if they are not commented on in the running text. This may be the core of the problem. The reader is left with a much larger task of integrating text elements when there is a large share of independent peritexts in a textbook. The reader must always mend gaps in a text, but this kind of tension-gap caused by the discrepancy between signaled intention and fulfillment seems unnecessary in an informational text where students' objective is to try to learn from the text.

5.2 *The teacher and the textbook genre*

As other research (Kress & Van Leeuwen, 2006; Skjelbred & Aamotsbakken, 2010a, 2010b; Tønnesson, 2010; Veum, 2013) has shown, a highly multimodal structure and extended use of bullet-points (Djonov & Van Leeuwen, 2014; Ledin, 2015) makes the text and comprehension more complex. A specific potential pitfall of nonlinear textual composition might be that if the type of content various peritexts are to contain

is left ambiguous, then tension-filled gaps appear in the associated peritext-patchwork pattern.

It might be that this textual composition pattern is a symptom of genre confusion. Were it a language arts website, one would expect multiple short texts, bullet points, and less textual coherence between peritexts and running text. It might be that this textbook is an example of how digital texts influence modern textbooks in that the authority lies with the reader, who is to design his or her reading path in a nonlinear, modular text (Domingo et al., 2015; Kress & Van Leeuwen, 2006, p. 205). Nevertheless, is giving up the author's authority in this way advisable when the audience consists of novice disciplinary readers? In an academic research paper, one would not put any illustrations, figures, or tables as contrastive comparisons unless these are mentioned and commented on in the main text. Moreover, where would a reader acquire an understanding of the concept of a linear text and the 'whole' of a text if the reader has not met many such texts before? This question applies to online texts where the reader has to construct a meaning that is not there in the same sense as in a traditional, linear book, and it applies to a patchwork-patterned textbook. If students do not experience the reading of linear nonfiction texts with a 'whole' via the many school textbooks they meet, chances are they will not gain enough practice, and reading fragmented texts—both online texts and patchwork-patterned textbooks—might become even more difficult in general.

Although *reading as design* (Kress, 2003) is something we now are met with regularly, e.g., online, it could very well be that novice disciplinary readers are better served with textbooks that offer the opportunity to experience a coherent expository text with an analytic-synthetic pattern. To have a clear running text guide you through the content would serve as a scaffolding, model text in preparation for exposure to digital multiple text sources where the gaps, both visible and invisible, are many. An analytic-synthetic pattern would expose the implied reader to a strategy for making sense of a topic in a text: First, attaining an overview of the topic, after that, analyzing the parts, and finally putting the pieces together as an act of an understanding of the topic. Such a running text would take advantage of how the reader seeks understanding (Alvesson & Sköldbberg, 2009; Bruner, 1960; Gadamer, 2004 [1975/1989]).

When considering the implied reader of textbooks, we might say that the reader's role has increased in modern textbooks. The reader must actively link elements of the text based on how they are composed, and the larger the number of elements to sort and link, the more significant this task becomes—since the number of blanks increases with a higher number of segments (Iser, 1978, p. 209). The gaps between the elements that need to be linked include gaps within the verbal text, between non-verbal elements in the same peritext, and between peritexts. Learning from the text or achieving deep comprehension (Allen & McNamara, 2020; Kintsch, 1998) becomes a larger and more difficult task. It may mean that high-skill and high-knowledge students might perform well because they are stimulated to take an active reader's role and can make the inferences between peritexts (Allen &

McNamara, 2020; Cervetti & Wright, 2020; Kintsch, 1998; McNamara et al., 1996; McNamara & Kintsch, 1996). Although such students may learn from a textbook with tension-filled gaps, the textbook genre needs to presuppose a whole variety of student readers, in particular those with low-skill and low-knowledge. Moreover, if the text actively invites the implied reader to memorize content—as is the case with the textbook in this study—it seems that one needs the knowledge level of a teacher rather in order to go beyond the memorization invitation and employ what Samuelsen and Bråten (2005) call deeper-level strategies.

Thus, this is a typical modern textbook in Norway in that it is not a self-instructing textbook (Skjeltred et al., 2017). As previous research shows, such a textbook demands help from the teacher for students to be able to learn from the text (Skjeltred & Aamotsbakken, 2010a; Skjeltred et al., 2017)

One could argue that successful learning of the textbook material may be possible if both an active reader and an active teacher are involved. But in that case, the students will not in general be working on developing reading skills related to disciplinary content. It will from the beginning not be intended that a novice disciplinary reader can read and make sense of the text independently.

5.3 *The implied reader*

Unlike a reader-response study, where you explore how student readers comprehend the text, this study analyzes features of a structure, namely how the text's structure is facilitated for lower secondary school students. That structure becomes available via analysis of the implied reader. How particular lower secondary school students respond to the text may be related to those students' prior knowledge and several other factors. In contrast to this, a text analysis of the kind found in this study explores in depth how and why tension-filled gaps in textbooks can cause comprehension trouble for the implied reader.

The concept of the implied reader is not used in the same way in this paper and in Weinberg and Wiesner's study (2011). Whereas the goal of this study is to both disclose the gaps in the text and to explore how the text can enable and invite students to close these gaps, the focus of Weinberg and Wiesner (2011) is not on the potential shortcomings of the textbook, but rather on investigating what competence a student must possess in order to match the implied reader. The present study investigates how the implied reader can be structurally inscribed in the text in a way that is ambiguous, and so opens up the need for a better understanding of the textbook genre, and in particular, the need for a better understanding of the consequences of fragmentizing the running text by a large amount of various bullet-pointed peritexts.

5.4 Implications

One might argue that this is only one poorly constructed textbook, but as such, it still represents an instrumental case (Stake, 2005). The textbook has been very popular in Norway, and the potential pitfalls of such peritext-rich and bullet-point-rich text with little running text are apparently not obvious without an in-depth analysis. The signaled intentions in the text are the facilitation of learning from text by means of inviting the usage of reading comprehension strategies. However, as I argue in this analysis, the fulfillment of the implied reader is in conflict with these intentions. Instead of deeper-level strategies, the memorization strategy is invited. Thus, this textbook study provides a clear case of what to watch out for when constructing textbooks guided by knowledge of reading comprehension strategies. The study illustrates that reading comprehension of textbooks is not a straight-forward comprehension task, as Iser (1978) describes it compared to reading fiction. Instead, textbook reading is different but perhaps comparably complex.

Further, the study provides a case of what a practitioner needs to do with learning materials that have gaps. While planning lessons, teachers can apply the conceptual tools the *implied reader*, *signals/fulfillment*, and *analytic/synthetic patterns* to figure out where the tension-filled gaps in the textbook are. If e.g., an analytic-synthetic composition pattern is signaled, but a parts-focused pattern is fulfilled, the teacher can emphasize the perspective of the whole before and after reading to compensate for the lack of analysis and synthesis. Similarly, on the production side, publishers and authors can ensure fewer discrepancies between signaled and fulfilled, and they can give more attention to how peritext types and bullet-point lists are used.

In this paper, I have studied how textual composition influences the prospect of learning from textbooks. The conceptual tools used in the analysis need to be tried out in new cases in order to find out whether similar results can be seen in other language arts textbooks and other school subjects' textbooks. To find out more about the consequences for the type of structure seen in this case textbook, one could investigate what measures teachers apply in their teaching to compensate for the tension-filled gaps and lack of deeper-level-strategy invitations in the textbook structure. Additionally, it would be interesting to investigate whether teachers facilitate only learning the content or also learning from the text. It would also be of interest to further compare the implied reader of fiction and the implied reader of textbooks in order to investigate the complexities of the textbook reader position.

AUTHOR'S NOTE

Figures 2-5 have been taken from the textbook *Nye Kontekst 8-10: Basisbok* © Gyldendal Norsk Forlag. **Translations and visualization/textboxes are made by the author of the article, with permission from Gyldendal, only for this publication of the article.**

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