#### **ORIGINAL PAPER**



# Fictionalised Non-fiction Picturebooks for Preschoolers: Children's Responses to Imaginary Constructs in Designed Reading Activities

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#### **Abstract**

Contemporary non-fiction picturebooks for children are often fictionalised in one way or another. Many non-fiction picturebooks for children are thus hybrids between fiction and non-fiction but labelled as non-fiction for children and presented to children as non-fiction. Their purpose is to inform and teach, and at the same time entertain and elicit affective responses. To succeed in achieving this dual purpose, this study assumes that designed teaching can create opportunities to separate combined depictions in fictionalised non-fiction. The purpose of this study is to explore children's responses to imaginary constructs in designed reading activities, and to answer what opens up for children when combined depictions in fictionalised nonfiction are separated and made discernible. This is studied in four reading activities with a teacher and six five-year-olds in a preschool setting, reading and discussing picturebooks about dinosaurs and their extinction. The analysis shows that when combined depictions in fictionalised non-fiction are separated by contrast, and thus made discernible as established knowledge and imaginary constructs, this opens up for the children's interpretation, appreciation, and creation of imaginary constructs.

 $\textbf{Keywords} \ \ Non-fiction \cdot Picture books \cdot Imagination \cdot Humour \cdot Preschool \cdot Variation \ theory$ 

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### Introduction

In recent years, increasing interest in children's literature research has been directed towards non-fiction picturebooks, with the focus on how these books visually and verbally depict their material to readers (Goga et al., 2021; Grilli, 2020; Sanders, 2018). Modern non-fiction picturebooks are described by Giorgia Grilli (2021, p. 25) as "works of art in Umberto Eco's sense: i.e. open works, works calling for interpretation, integration, and co-construction of meaning on the part of the reader". However, there has been less research interest in children as readers of these ambiguous non-fiction picturebooks and what teaching might contribute to children's responses to depictions in them. The study I present here could therefore contribute to new knowledge about children's responses to non-fiction picturebooks in reading activities designed to separate their combined depictions. The teaching idea tested and explored in this study is about separating merged depictions (combinations of fact and fiction) in children's non-fiction picturebooks. The goal is to contribute to the children's literature research field on ambiguous non-fiction picturebooks by focussing on children who are taught about their depictions.

#### Fictionalisation of Children's Non-fiction Picturebooks

Contemporary non-fiction picturebooks for children are often fictionalised in one way or another. Nikola von Merveldt (2018, p. 234) stresses that "one of the most striking trends in recent years has been the playful *hybridisation* of forms (Pappas, 2006), mainly of the factual and fictional on the one hand (...) and of descriptive and narrative on the other". These non-fiction picturebooks have been described in previous research as *hybrids* (Pappas, 2006), but are categorised as *non-fiction* for children by publishers and libraries. Many hybrids are thus labelled as non-fiction for children and presented to children as non-fiction.

As it may seem strange that picturebooks labelled as non-fiction (without fiction) can be as fictional and narrative as fiction, children's literature research has tried to find other, more suitable, terms for them, for example: hybrid texts, informational storybooks, blended or mixed-genre texts, multigenre texts (Bintz and Ciecierski, 2017), dual purpose texts (Donovan and Smolkin, 2002), non-fiction for children (Skyggebjerg, 2020), informational picturebooks (von Merveldt, 2018), descriptive picturebooks (Kümmerling-Meibauer and Meibauer, 2021), artistic nonfiction picturebooks (Grilli, 2021; Sanders, 2018), narrative nonfiction picturebooks (Daly, 2021), nonnarrative non-fiction picturebooks, and non-fiction narrative picturebooks (Narančić Kovač, 2020). Despite this plethora of concepts, my study needs and uses an additional one: fictionalised non-fiction picturebooks.

The concept of *fictionalised non-fiction picturebooks* consists of three carefully selected words: fictionalised, non-fiction, and picturebooks. *Picturebooks* are books

<sup>&</sup>lt;sup>1</sup> The term *depiction* is a key notion in the study and refers to the way a picturebook's material is visually and verbally represented or shown to the reader.



in which text and image interact (Goga et al., 2021; Grilli, 2020; von Merveldt, 2018). Since this study focuses on children's responses to picturebooks commonly referred to as non-fiction in conversations with children (for example in preschools and libraries), the term *non-fiction* is also used in my study of children's responses to them. *Fictionalised* denotes the "borrowing" of characteristics from fiction, inspired by Maria Nikolajeva's way of describing how non-fiction "can be fictionalised through selection of material, narrative perspective and presentation style" (Nikolajeva, 2014, p. 22). Previous research has proposed concepts (see above) describing different kinds of combinations between non-fiction and fiction, focusing on either a borrowing of "fictional" or "narrative" elements from fiction, but usually not both, as the concept of fictionalised non-fiction does.

My choice of the contradictory concept *fictionalised non-fiction* is highly conscious, as these picturebooks are always more or less contradictory, being non-fiction yet still not. This contradiction becomes visible with the support of research on the characteristics of *fiction* and *traditional non-fiction picturebooks*:

- A fiction picturebook is categorised by publishers and libraries as fiction. Its purpose is to entertain and elicit affective responses (Cianciolo, 2000), and it depicts the author's and illustrator's imaginary constructs (Vygotsky, 1930/2004). Its priority is to tell a story (Cianciolo, 2000), and the reading of it is carried out from beginning to end (Price et al., 2012).
- A traditional non-fiction picturebook is categorised by publishers and libraries as non-fiction. Its purpose is to inform and teach (Cianciolo, 2000; Mallett, 2019), and it depicts established knowledge (generally accepted knowledge of how something is or has been). Its priority is to provide knowledge (Cianciolo, 2000), and the reading of it is carried out in any order (Price et al., 2012).
- A fictionalised non-fiction picturebook is categorised by publishers and libraries
  as non-fiction. Its purpose is to inform and teach and/or entertain and elicit affective responses, and it depicts established knowledge and/or the author's and illustrator's imaginary constructs. Its priority is to provide knowledge and/or to tell a
  story, and the reading of it is carried out in any order and/or from beginning to
  end.

For the dual purpose of fictionalised non-fiction picturebooks to appear to children in reading activities, their depictions (*established knowledge* and the author's and illustrator's *imaginary constructs*) need to be interpreted by the children.

### **Creation and Interpretation of Imaginary Constructs**

Previous research shows that different kinds of experiences are important for children's creation of imaginary constructs and for their ability to interpret others' imaginary constructs (such as other children's fantasies, as well as authors' and illustrators' fictional inventions in books) (Nikolajeva, 2014; Vygotsky, 1930/2004). Children who are *novice readers* lack the experiences they need to be able to "realis[e] to the full extent the potential afforded by the text" (Nikolajeva, 2014, p. 17). Nikolajeva



states that, among several limitations, novice readers have *limited real-life experience*, *limited encyclopaedic knowledge* (knowledge obtained by educational pursuit), and *limited experience mediated by fiction*. These limitations in experience may affect how children respond to depictions of fictionalised non-fiction.

Experience is fundamental to imagination: "The creative activity of the imagination depends directly on the richness and variety of a person's previous experience because this experience provides the material from which the products of fantasy are constructed" (Vygotsky, 1930/2004, pp. 14–15). Children's experiences are thus the foundation for children's imagination. This means that only children who have experience with, for example, squirrels can imagine (envision) squirrels and create their own imaginary constructs (fantasies) about them. Children who have never seen or heard of squirrels cannot imagine them, let alone create imaginary constructs about them. When children themselves fantasise (for example about squirrels skiing), they distinguish between what is real (squirrels and skiing exist) and what is made up (skiing squirrels do not exist) (Harris, 2012).

When children are to interpret others' imaginary constructs (such as the fantasies of other children, or the fiction of authors and illustrators), they need to use their experiences (Vygotsky, 1930/2004). This means that only children who have experience with squirrels or something similar will be able to use their experience to interpret others' imaginary constructs about squirrels. Consequently, children's imagination—both the ability to construct their own imaginary constructs and the ability to interpret others' imaginary constructs—is enriched by their experiences.

A lack of experience means difficulties in interpreting the imaginary constructs of others as imaginary constructs (such as squirrels staying in their nest in bad weather to read books about nuts) (Nikolajeva, 2014; Vygotsky, 1930/2004). With limited experience of squirrels, it is difficult to know whether the depictions of them you are offered are fictional or true. The depictions of squirrels in Sarah Sheppard's *Djuren i skogen* [Animals in the Forest] (2014) (Fig. 1) do not show whether or not it is true



Fig. 1 Ekorre [Squirrel] in Djuren i skogen [Animals in the Forest] by Sarah Sheppard (2014)



that squirrels stay in their nests in bad weather, or whether or not it is true that they then read books about nuts. To know whether these depictions are fictional or factual, experience is needed, which children may lack. Children may have *limited real-life experience* of squirrels, which limits their ability "to make life-to-text connections to fiction" (Nikolajeva, 2014, p. 16); *limited encyclopaedic knowledge* of squirrels' living habits, which limits their ability to "compar[e] the information provided by fiction with the general knowledge they possess" (Nikolajeva, 2014, p. 16); and *limited experience mediated by fiction*, which limits their ability "to make intertextual connections, recognise genres, narrative modes, and other artistic conventions" (Nikolajeva, 2014, p. 16). When children lack experiences, they trust what other people tell them (Harris, 2012). This is the reason why children of preschool age can believe in the existence of Santa Claus and the Tooth Fairy. For the same reason, children with limited experience can believe both fictional and factual depictions of the squirrels' way of life in Sheppard's fictionalised non-fiction (2014) to be real (Fig. 1).

Based on Maria Nikolajeva's (2014) and Lev Vygotsky's (1930/2004) reasoning about how limitations in experience affect children's ability to interpret others' imaginary constructs, it appears to be a challenge for children to interpret combined depictions of animals they may know from their immediate environment, such as squirrels. However, they may face even greater challenges when interpreting combined depictions of more abstract scientific content in fictionalised non-fiction, for example extinct prehistoric animals. Still, as mentioned, many non-fiction picture-books for children are fictionalised, even those dealing with more abstract scientific content. Their purpose is to *inform and teach*, and at the same time *entertain and elicit affective responses*. To succeed in achieving this dual purpose, this study assumes that designed teaching can create opportunities *to separate combined depictions in fictionalised non-fiction*.

To study teaching with the intention of creating opportunities to separate combined depictions in fictionalised non-fiction, I designed reading activities for preschoolers. In the reading activities, I used four picturebooks about dinosaurs and their extinction. As dinosaurs have been extinct for millions of years children cannot have first-hand experiences of them, but they can gain knowledge about them through non-fiction. The teaching design in this study focuses on contrasting depictions that are established knowledge ("real") with depictions that are imaginary constructs ("made up") in Sarah Sheppard's (2008, 2009) fictionalised non-fiction picturebooks about dinosaurs and their extinction. *Established knowledge* means generally accepted knowledge of how something is or has been. The concept *imaginary constructs*, inspired by Vygotsky (1930/2004), refers to fantasies of various kinds that are constructed by someone about something based on that person's established knowledge (for example, children's fantasies in play and authors' fantasies presented as fiction).

The purpose of this study is to explore children's responses to imaginary constructs in designed reading activities. The research question is: What opens up<sup>2</sup> for

<sup>&</sup>lt;sup>2</sup> According to VT (Marton, 2015), dimensions of variation can "liberate" (or "open up") new ways of seeing something, in this case imaginary constructs.



children when combined depictions in fictionalised non-fiction are separated and made discernible? This is studied in an analysis, informed by the variation theory (VT) of learning, of four reading activities with a teacher and six five-year-olds in a Swedish preschool setting, reading and discussing picturebooks about dinosaurs and their extinction. The goal of this study is to contribute to the field of children's literature research on fictionalised non-fiction picturebooks for children by including children in teaching about these books ambiguous depictions.

# **An Exploration of Designed Reading Activities**

To study what opens up for children when combined depictions in fictionalised non-fiction are separated and made discernible, I designed reading activities. Design experiments (Brown, 1992; Cobb et al., 2003) are useful when teaching ideas are to be tested as a basis for further reflections on learning (Brown, 1992). The study is based on the idea that teaching with VT principles can create opportunities to separate combined depictions in fictionalised non-fiction and make them discernible to children. This is done by *contrasting* depictions of established knowledge ("real") with depictions of imaginary constructs ("made up") in fictionalised non-fiction in designed reading activities. When this teaching idea is tested, children's responses to imaginary constructs in designed reading activities are explored. The results of this exploration may show what opens up for children when combined depictions in fictionalised non-fiction are separated and made discernible.

### Selection of Picturebooks, Children, and Teacher

The selection of picturebooks for the designed reading activities was made on the basis that the books were about a scientific phenomenon that teachers and children might want to use non-fiction to explain. Since children cannot be offered direct experiences of dinosaurs, picturebooks can be a useful resource for learning more about them. Four picturebooks on dinosaurs and their extinction were selected (Fig. 2). Based on my study's interest in children's responses to fictionalised non-fiction, Sarah Sheppard's humorous *Det var en gång... Massor av dinosaurier* [Once upon a time there were... Lots of dinosaurs] (2008) and *Varning för köttgänget* 



Fig. 2 The study's four picturebooks about dinosaurs and their extinction



[Watch out for the Meat Gang] (2009), in which fictional inventions and factual information are frequently combined, were selected. For comparisons between different kinds of picturebooks' ways of depicting dinosaurs and their extinction, the fiction *Dinosaurier älskar underbyxor* [Dinosaurs Love Underpants] (2019) by Claire Freedman and Ben Cort, and the traditional non-fiction *Dinosaurier: Mitt stora bildlexikon* [Dinosaur A to Z] (2018) by Dustin Growick were also selected and read to the children (Fig. 2).

Six five-year-olds at a Swedish preschool participated in the study's designed reading activities about these picturebooks. Children aged five were considered suitable participants as the picturebooks, according to their publishers, are primarily aimed at readers aged three to six.<sup>3</sup> Seven five-year-olds at a preschool were informed and asked if they wanted to take part in the study, and six of them agreed to participate. All children were informed that their participation was voluntary and gave oral consent to participate in the study and, in addition, their guardians gave written consent. The children had mixed economic backgrounds and Swedish as their mother tongue. At this preschool fiction was read with the children daily, while non-fiction was almost never read. In testing the teaching idea that I developed for the study, it was determined that I, since I am both a preschool teacher and a researcher, would be responsible for carrying out the designed reading activities.

# **Reading Activities Designed with Variation Theory of Learning**

To achieve the preschool curriculum goal that children should be provided with the conditions to develop their ability to use, interpret, question, and discuss pictures and texts (Swedish National Agency for Education, 2019), the children in the present study's reading activities were offered teaching with the intentional learning object of creating opportunities to separate combined depictions in fictionalised non-fiction. A learning object corresponds to what children need to learn to achieve a desired learning goal (Lo, 2012). Identifying "what" is to be learned, a learning object, and some of its aspects, is always the starting point for teaching with VT, which also applies in the reading activities in the study.

According to VT, learning takes place through the discernment of different aspects of a learning object. This discernment is made possible through variation (Marton, 2015). Two aspects that children may need to discern in order to separate combined depictions in fictionalised non-fiction (learning object) are imaginary constructs (aspect) and established knowledge (aspect). This assumption is based on VT's most basic idea: "You cannot know what something is, without knowing what it is not" (Lo, 2012, p. 1). In order to experience a depiction as "real" (established knowledge), children also need to experience what is "not real", for example a depiction that is "made up" (an imaginary construct). When VT is used in teaching

<sup>&</sup>lt;sup>3</sup> The study's reading activities required non-fiction picturebooks of two kinds, traditional and fictionalised. When all the non-fiction about dinosaurs and their extinction for three- to six-year-olds in Swedish turned out to be fictionalised in one way or another, a traditional non-fiction for six- to nine-year-olds (*Dinosaurier: Mitt stora bildlexikon*) was selected.



about, for example, depictions in fictionalised non-fiction, *patterns of variation* (Marton, 2015) can be used to make aspects of depictions discernible. *Contrast* is a pattern of variation (Marton, 2015) used in the reading activities of my study. To enable imaginary constructs and established knowledge to be discerned, these two can be compared, *contrasted*, with each other. Hence, the two aspects of imaginary constructs and established knowledge are contrasted with each other in the study's reading activities, with the intention of separating combined depictions in the fictionalised non-fiction picturebooks.

The reading activities in the study were designed for four occasions (in February and March 2020). On three occasions before this (January 2020), I visited the children at their preschool. These visits provided opportunities for me and the children to get to know each other before the study was carried out. During these visits, I read ten picturebooks to the children. The picturebooks consisted of five pairs, each pair containing a fiction and a traditional non-fiction on the same science topic (1. the life cycle of butterflies; 2. planets and space travel; 3. trees and their life cycle; 4. fish and fishing, and 5. dinosaurs and their extinction). The books were read in mixed order. I was careful not to mention that some of the books were fiction while others were non-fiction, because I only wanted the contrasting of the ways different kinds of picturebooks depict the scientific contents to take place in reading activities A-D, which constitute the empirical material of the study. Therefore, no differences between fiction and non-fiction picturebooks were ever mentioned either by me or by the children when reading these books. Nor did we talk about differences between imaginary constructs and established knowledge in them.

Two of the picturebooks I read to the children on these early visits were about dinosaurs and their extinction. These were the fiction *Dinosaurier älskar underbyxor* and the traditional non-fiction *Dinosaurier: Mitt stora bildlexikon*. This ensured that the children had experience of at least one pair of fiction and traditional non-fiction picturebooks about dinosaurs and their extinction, as well as other experiences of different kinds of picturebooks, as a starting point for further discussions about different ways of depicting a topic in different kinds of picturebooks. Subsequently, the following four designed reading activities were carried out:

# Reading Activity A (Reading the First Fictionalised Non-fiction Picturebook)

The fictionalised non-fiction *Det var en gång... Massor av dinosaurier* was read to the children for the first time. The picturebook was read from beginning to end, but the children were given the freedom to talk about its depictions whenever they wanted, without interference from the teacher.<sup>4</sup> The children seemed fascinated by the information presented to them and reasoned about the book's depictions. None of the children said anything about the factual depictions being fictionalised in this non-fiction picturebook. Towards the end of the reading, the teacher therefore asked the children if they thought the depictions in *Det var en gång... Massor av dinosaurier* were "real"

<sup>&</sup>lt;sup>4</sup> From here onwards in the study, I refer to myself, in the role of the teacher in the reading activities, as "the teacher".



(established knowledge) or "made up" (imaginary constructs) and how they knew this. Most of the children said, after some hesitation, that some things in the book were real while others were made up. Lucas, who during the reading activity repeatedly proved to have a lot of prior knowledge about dinosaurs, (judging from his statements, he has gained this knowledge from movies and books), is the first to say that some things were real while other things were made up. After this statement, Henry, Liam, Emma and Isabella agreed with Lucas and filled in what they knew was real and made up. Henry stated that the depictions of what the dinosaurs ate in the book were real, Lucas agreed mentioning that additional depictions were also real. Emma added that the depictions of the colours of the dinosaurs in the book were made up. Henry then shared that he has a dinosaur book at home with depictions of dinosaurs that are "real" (possibly a traditional non-fiction) from which he knows what is real and made up in this fictionalised non-fiction. Based on what Henry had read in the book at home, he told the other children that it was real that carnivores hunted and ate other dinosaurs and confirmed to Emma that the colours of the dinosaurs were made up.

### Reading Activity B (Teaching with Contrast)

To enable the children to discern additional imaginary constructs and established knowledge in the fictionalised non-fiction picturebook *Det var en gång... Massor av dinosaurier*, the teacher used contrasts. The teacher began by contrasting the ten picturebooks they had read before reading activity A. The fiction *Dinosaurier älskar underbyxor* and the traditional non-fiction *Dinosaurier: Mitt stora bildlexikon* were two of these. Next, the teacher contrasted selected depictions from the fiction, the traditional non-fiction and the fictionalised non-fiction picturebook about dinosaurs and their extinction. Here are examples in two steps of how the depiction of the extinction of the dinosaurs were contrasted to the children:

- Step 1: The dinosaurs died when they fought over cavemen's underpants (*imaginary construct* depicted in the fiction picturebook), were contrasted with that most dinosaurs died as a result of environmental changes and a major meteorite impact on the Earth (*established knowledge* depicted in the traditional non-fiction). *Differences* in how the fiction compared to the traditional non-fiction depicts the extinction of dinosaurs were made possible to experience for children.
- Step 2: The idea that the dinosaurs died when they fought over cavemen's underpants (*imaginary construct* depicted in the fiction picturebook), was contrasted with the notion that most dinosaurs died as a result of environmental changes and a major meteorite impact on the Earth (*established knowledge* depicted in the traditional and the fictionalised non-fiction picturebook). *Similarities* and differences in how the fictionalised non-fiction compared to the traditional non-fiction depicts the extinction of dinosaurs

<sup>&</sup>lt;sup>5</sup> In Reading Activity A-D, the teacher and the children use the term "made up" for depictions which in this study are referred to as *imaginary constructs* and "real" for depictions which are referred to as *established knowledge*.



were made possible to experience for the children. An empirical example showing this can be found in the "Results" section of this article (excerpt 1).

Contrasting different kinds of picturebooks' depiction of the same topic may enable the children to discern which depictions in the fictionalised non-fiction are established knowledge similar to the depictions in the traditional non-fiction, and which depictions in the fictionalised non-fiction are imaginary constructs similar to the depictions in the fiction. In a similar way, the teacher also contrasted depictions of dinosaurs and humans living at the same time, and the existence of dinosaurs today, as well as other depictions that spontaneously arose as possible to contrast in the reading activity.

### Reading Activity C (Teaching with Contrast)

To enable children to discern even more imaginary constructs and established knowledge in the fictionalised non-fiction picturebook *Det var en gång... Massor av dinosaurier*, the teacher used additional contrasts. Imaginary constructs in the fictionalised non-fiction picturebook and other imaginary constructs outside the book were contrasted with established knowledge depicted in the fictionalised non-fiction picturebook and other established knowledge outside the book. This is an example of how *the depiction of whether dinosaurs really existed* was contrasted: Dinosaurs look fictional, like something from a fairy tale (*imaginary construct* depicted in the fictionalised non-fiction picturebook), and almost resemble dragons (*imaginary construct* introduced by the teacher), were contrasted with the fact that scientists have found fossils of dinosaurs (*established knowledge* depicted in the fictionalised non-fiction picturebook) but that no fossils of dragons have been found, and that dragons are made up and can be found in fairy tales (*established knowledge* introduced by the teacher) (Fig. 3). *Differences* in how the fictionalised non-fiction picturebook

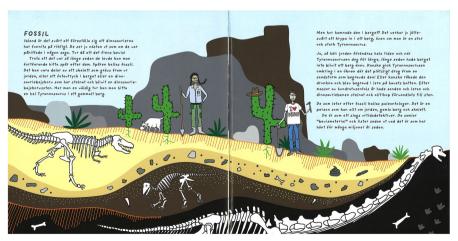


Fig. 3 Fossil [Fossil] in Det var en gång... Massor av dinosaurier by Sarah Sheppard (2008)

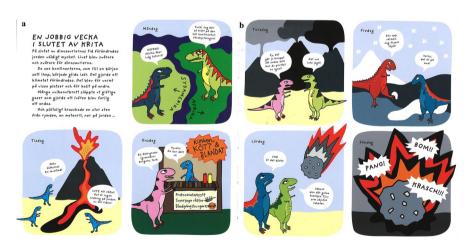


depicted whether dinosaurs really existed, along with the teacher's knowledge, were made possible to experience for the children (Fig. 3).

Contrasting depictions of established knowledge (inside and outside the book), with depictions of imaginary constructs (inside and outside the book), may enable the children to discern which depictions are imaginary constructs in the fictionalised non-fiction picturebook. In a similar way, the teacher also contrasted depictions of whether the dinosaurs "spoke" like humans do and what colours they had, as well as other depictions that spontaneously arose as possible to contrast in the reading activity. An empirical example showing depictions that spontaneously arose as possible to contrast can be found in the "Results" section of this article (excerpt 3).

# Reading Activity D (Reading the Second Fictionalised Non-fiction Picturebook)

Selected pages from *Varning för köttgänget* were read to the children for the first time. The children, who were taught about the differences between established knowledge and imaginary constructs in reading activities B and C, were now encouraged by the teacher to identify 'real' and 'made up' depictions in this fictionalised non-fiction picturebook, a book they had never read together before. The teacher read a picture spread entitled *En jobbig vecka i slutet av Krita* (Fig. 4), from which they discussed, among other things, depictions of how the dinosaurs became extinct and carnivorous dinosaurs' way of getting food. Two empirical examples showing how the teacher and the children talked about these depictions can be found in the "Results" section (excerpt 2 and 4) (Fig. 4).



**Fig. 4** En jobbig vecka i slutet av Krita [A difficult week at the end of the Cretaceous period] in Varning för köttgänget [Watch out for the Meat Gang] by Sarah Sheppard (2009)

### Reading Activities Analysed with Variation Theory of Learning

The four reading activities (A-D) were video-recorded, and constitute the empirical material analysed in the study. In total, the material consists of 184 min (65+29+56+34 min) of video-recorded material from the reading activities. All video material was transcribed afterwards. To answer what is opened up to children when combined depictions in fictionalised non-fiction are separated and made discernible, a VT analysis of the empirical material generated in the study's reading activities was conducted.

According to VT, the discernment of one aspect (such as *established knowledge*) cannot occur without the discernment of another aspect (in this case *imaginary constructs*) (Marton, 2015). This means that statements in the empirical material that show children's discernment of depictions as "made up" (*imaginary constructs*) were sought in relation to statements showing their discernment of depictions as "real" (*established knowledge*). For example, children's discernment of dinosaurs speaking like humans as "made up", an imaginary construct, is linked to children also discerning what is "real", in this case an established knowledge of how dinosaurs "spoke" or how now living animals "speak". It is not possible to discern what is "made up", without also discerning what "is real".

Within VT, language plays a central role in the construal of experience. Language not only represents experience but also constitutes it (Marton et al., 2004). This is important for how the children's statements are analysed in the study's empirical material. What they say and do shows not only their discernment of depictions as imaginary constructs, but also how they *interpret*, *appreciate*, and *create* imaginary constructs. For example, when the children say that depictions are "made up" they *interpret* them as imaginary constructs, and when they laugh at depictions that they express are "made up" they *appreciate* them as imaginary constructs.

In addition to the children's interpretation and appreciation of depictions as imaginary constructs, the empirical material also contains statements in which they *create* their own imaginary constructs (their own inventions). To determine what these statements are based on, the empirical material is carefully examined with the intention of obtaining how the children who create their own imaginary constructs have expressed the separation and discernment of depictions as imaginary constructs and established knowledge on the same topic earlier in the reading activities.

#### Results

The analysis shows that when combined depictions in fictionalised non-fiction are separated by contrast, and thus made discernible as "real" (established knowledge) and as "made up" (imaginary constructs), this opens up for: (1.) the children's interpretation and appreciation of the depictions in the fictionalised non-fiction as imaginary constructs, as well as (2.) the children's creation of their own imaginary constructs from the fictionalised non-fiction.

Empirical examples follow to illustrate these results. In the empirical material, what the children say and do is shown in normal text, and when something is read



from the picturebooks it is shown in italics. Actions are shown in parentheses. The material also contains pictures from the picturebooks to which the children's attention in the reading activities is directed. The children's names have been changed.

# The Children's Interpretation and Appreciation of Imaginary Constructs

Contrasting different kinds of picturebooks' depiction of the same topic may enable the children to discern which depictions in the fictionalised non-fiction are established knowledge similar to the depictions in the traditional non-fiction, and which depictions in the fictionalised non-fiction are imaginary constructs similar to the depictions in the fiction. This opens up for the children's interpretation of the depictions in the fictionalised non-fiction as imaginary constructs (Excerpt 1):

#### Excerpt 1

In Reading Activity B, the teacher has just contrasted the depictions in the fiction and the traditional non-fiction' of the extinction of dinosaurs when she takes out the fictionalised non-fiction *Det var en gång... Massor av Dinosaurier*, the picturebook that was read in the previous reading activity. Some of the children immediately say that it is "made up" like the fiction picturebook, while the teacher tries to make them understand that it is a non-fiction book, although some of its depictions are made up. The teacher presents the fiction and traditional non-fiction picturebooks about dinosaurs and their extinction together with the fictionalised non-fiction one, to contrast how the different books depict the extinction of dinosaurs (Fig. 5).



Fig. 5 Excerpt 1

**Teacher:** Here it said that they died in a war over underpants (points to the depiction in the fiction picturebook, placed on the chair to the left), and here it said that many dinosaurs died when a meteorite struck (points to the depiction in the traditional non-fiction picturebook, placed on the chair to the right), but what does it say here (points to the depiction in the fictionalised non-fiction picturebook, placed midway between the two chairs)? ...that many dinosaurs died when a meteorite crashed into the Earth. So this was at least true, right?

Emma: (nods)
Liam: That was real.

**Lucas:** Yes, some things in this book are real (pointing to the fictionalised non-fiction picturebook) and everything in that one is real (pointing to the traditional non-fiction one).

Emma: But the colours aren't real.

Teacher: You don't think the colours are real?

Lucas and Liam: Yes.

**Teacher:** They (pointing to the colours in the fictionalised non-fiction picture-book) actually resemble the colours in the book you said was made up (pointing to the colours in the fiction one).

When the three picturebooks' depictions of the extinction of dinosaurs are compared, differences and similarities are made visible. Similarities between the depiction in the traditional non-fiction and the fictionalised non-fiction books that a meteorite struck the Earth open up for the children to discern the depiction in the fictionalised non-fiction one as established knowledge. Differences between the picturebooks' depiction of colours open up for the children to discern it as an imaginary construct.

Liam, Emma, and Lucas's discernment that the depiction in the fictionalised non-fiction picturebook is established knowledge becomes visible in their answer when the teacher asks if the extinction of the dinosaurs was true. Emma nods in agreement, Liam says "That was real", and Lucas agrees and clarifies that "some" is for real in the fictionalised non-fiction book while "everything" is for real in the traditional non-fiction one. However, Emma seems to perceive differences in the traditional and fictionalised non-fiction picturebooks' depictions of colours. Emma expresses that the colours in the fictionalised non-fiction one "aren't real", in that they are not established knowledge. Excerpt 1 thus exemplifies that when combined depictions in the fictionalised non-fiction picturebook are separated by contrast, and thus made discernible as "real" (established knowledge) and as "made up" (imaginary constructs), this opens up for the children's interpretation of the depictions in the fictionalised non-fiction as imaginary constructs.

Contrasting a topic that the children have experienced as established knowledge in previous reading activities with how the same topic is depicted in an additional fictionalised non-fiction picturebook may enable the children to discern which depictions are imaginary constructs. This opens up the children's interpretation and appreciation of the depictions in the fictionalised non-fiction as imaginary constructs (Excerpt 2):





Fig. 6 Excerpt 2

### Excerpt 2

In Reading Activity D, the teacher reads *Varning för köttgänget!*, another fictionalised non-fiction picturebook about dinosaurs and their extinction by Sarah Sheppard. Here, the teacher reads a picture spread with the headline *En jobbig vecka i slutet av Krita* (Fig. 6).

**Teacher:** (points to the dinosaurs in the picture)... and on Saturday they say like this: WHAT is that? Probably that crazy Thief family firing fireworks.

Lucas, Emma, and Liam: (laugh out loud)

**Emma:** That's not fireworks (laughs)

Lucas: (laughs out loud and doubles over with laughter)

**Teacher:** No, it's not fireworks. **Liam:** No, it's a meteorite.

When the children's previous experiences regarding a large meteorite having struck the Earth during the time of the dinosaurs (Excerpt 1) are compared with the humorous depiction of the same incident in the fictionalised non-fiction picturebook, differences are made visible. Differences between the children's experiences and the depiction that the dinosaurs believe it is another dinosaur family firing fireworks open up for them to discern that the depiction is an amusing imaginary construct.

Lucas, Emma, and Liam's discernment that the depiction in the fictionalised non-fiction picturebook is an imaginary construct becomes evident in their laughter at the dinosaurs' belief that the meteorite is fireworks. Drawing on experiences from reading activity B (excerpt 1), Emma also says that 'it's not fireworks', and Liam adds 'it's a meteorite', as all three laugh. Excerpt 2 thus exemplifies that when combined depictions in the fictionalised non-fiction picturebook are separated by contrast, and thus made discernible as "real" (established knowledge) and as "made up" (imaginary constructs), this opens up for the children's interpretation and appreciation of the depictions in the fictionalised non-fiction as imaginary constructs.



# The Children's Creation of Their Own Imaginary Constructs

Contrasting a topic that the children have experienced as established knowledge with how the same topic is depicted in the fictionalised non-fiction picturebook may enable the children to discern which depictions in this book are imaginary constructs. This opens up for *the children's creation of their own imaginary constructs from the fictionalised non-fiction* (Excerpt 3):

# Excerpt 3

In Reading Activity C, the teacher reminds the children which picturebooks they have read together in the recent weeks. The picturebooks are placed in front of the children, and the teacher explains that some are fiction and others are non-fiction. Now the focus is on the fictionalised non-fiction *Det var en gång... Massor av Dinosaurier* (Fig. 7).

**Liam:** This was the sausage seller (pointing at a blue carnivore on the front of the book)

[...]

Henry: But that sausage seller sold sausages and then it said "I want to eat

children" but there were no children then.

**Teacher:** No, there were no children in the time of the dinosaurs.

**Henry:** (shakes his head)

**Teacher:** Was it real or was it made up, then?

Lucas: Real (smiles). Henry: Made up. Emma: Made up. Isabella: Made up.

Lucas: Real (looks and smiles playfully at the teacher)

**Teacher:** (laughs)

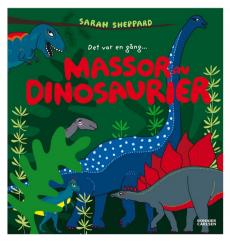




Fig. 7 Excerpt 3



When the children's experiences regarding humans not existing at the same time as dinosaurs and carnivores eating other dinosaurs that they hunted and killed (Reading Activity A) are compared with the depiction of what a sausage-selling carnivore intends to eat, differences are made visible. The differences between the children's experiences and the depiction of a sausage-selling carnivore who is thinking of eating children allows them to discern the depiction as an imaginary construct. One of the children begins to playfully speak in opposites<sup>6</sup> as to which depictions are imaginary constructs in the fictionalised non-fiction picturebook.

Henry, Emma, Isabella, and Lucas's discernment that the depiction in the fictionalised non-fiction picturebook is an imaginary construct becomes visible in their answer when the teacher asks if the sausage-selling dinosaur who wanted to eat children was real or made up. Henry, Emma, and Isabella say it was "made up", while Lucas, who previously expressed that he has knowledge of how dinosaurs ate (Reading Activity A), looks and smiles playfully at the teacher and consciously says the opposite of made up: "real". Lucas' established knowledge of what the carnivores really ate makes it possible for him to create his own imaginary constructs about the picturebook's depictions, such as playfully answering with opposites. Excerpt 3 thus exemplifies that when combined depictions in the fictionalised non-fiction picturebook are separated by contrast, and thus made discernible as "real" (established knowledge) and as "made up" (imaginary constructs), this opens up for the children's creation of their own imaginary constructs from the fictionalised non-fiction.

Contrasting a topic that the children have experienced as established knowledge with how the same topic is depicted in the fictionalised non-fiction makes it possible for them to discern which depictions in the fictionalised non-fiction picturebook are imaginary constructs. This allows for *the children's creation of their own imaginary constructs from the fictionalised non-fiction* (Excerpt 4):

### Excerpt 4

In Reading Activity D with *Varning för köttgänget*, the children's focus is directed towards the picture spread *En jobbig vecka i slutet av Krita*. The teacher asks how the children can know what is real and what is made up in the book, whereupon Lucas starts joking that he knows this because he was there in the time of the dinosaurs. Liam and Emma include themselves in this playful joke and begin to talk about what they did when they were in the time of the dinosaurs (Fig. 8).

**Lucas:** I went to one of those kiosks and bought an herbivore burger (pointing to the hamburger kiosk in the picture).

**Liam:** Do you know what I bought when I was in the time of the dinosaurs? I bought some rotten rats.

Lucas: I also bought a rotten rat, but I didn't think they were that good.

Liam: Nope.

<sup>&</sup>lt;sup>6</sup> Speaking in opposites is a way of joking and playing with language among children. Among Swedish children, the term "tvärtomspråk" (contrary language) is often used for this play with antonyms.





Fig. 8 Excerpt 4

**Teacher:** (Laughs) But carnivores in the time of the dinosaurs, if this was a carnivore (pointing to the dinosaur at the hamburger kiosk) did it go and buy its meat at a hamburger kiosk?

Lucas and Liam: Yes! (nod)

Lucas: Yes, they certainly did, for sure! (nods)

**Liam:** They actually did because we were in the time of the dinosaurs.

Emma: Me too.

When the children's experiences regarding carnivores eating other dinosaurs that they hunted and killed (Reading Activity A) are compared with the fictional invention in the fictionalised non-fiction picturebook of how dinosaurs ate, differences are made visible. Differences between the children's experiences and the depiction that the dinosaurs ate burgers from a hamburger kiosk open up for them to discern that the depiction is an imaginary construct. They then begin to make playful jokes about what is established knowledge in the fictionalised non-fiction picturebook.

Lucas, Emma, and Liam's discernment that the depiction in the fictionalised non-fiction picturebook is an imaginary construct becomes visible in their playful jokes that the depiction of dinosaurs eating burgers is for real. Lucas jokes ironically, saying that dinosaurs really ate burgers: "Yes, they certainly did, for sure!". Liam says they have proof of this because they were "in the time of the dinosaurs". Emma also claims this. The children's established knowledge of what carnivores really ate (Reading Activity A), and of the fact that children did not exist in the time of the dinosaurs (Excerpt 3), seems to make it possible for them to create their own imaginary constructs about the depictions in the fictionalised non-fiction picture-book, such as playfully joking that they were in the time of the dinosaurs and therefore know that dinosaurs really ate burgers from a hamburger kiosk. Excerpt 4 thus exemplifies that when combined depictions in the fictionalised non-fiction book are separated by contrast, and thus made discernible as "real" (established knowledge)



and as "made up" (imaginary constructs), this opens up for the children's creation of their own imaginary constructs from the fictionalised non-fiction.

### Discussion

The purpose of this study has been to explore children's responses to imaginary constructs in designed reading activities. The analysis shows that when combined depictions in fictionalised non-fiction are separated by contrast, and thus made discernible as established knowledge and imaginary constructs, this opens up for the children's *interpretation*, *appreciation*, and *creation* of imaginary constructs. The results indicate that teaching with systematic contrast with the learning object *of separating combined depictions in fictionalised non-fiction* generates notable opportunities for children to respond to "works calling for interpretation, integration, and co-construction of meaning on the part of the reader" (Grilli, 2021, p. 25). By contrasting depictions that are imaginary constructs and established knowledge, the children's *encyclopaedic knowledge* and their *experience mediated by fiction* (Nikolajeva, 2014) are expanded, which opens up for the following responses:

Firstly, when the children's established knowledge of dinosaurs and their extinction expands, so do their opportunities to interpret and appreciate fictional depictions (imaginary constructs) of dinosaurs and their extinction in fictionalised non-fiction. This is in line with previous research by Vygotsky (1930/2004) and Nikolajeva (2014) emphasising different kinds of experiences as important for children's ability to interpret others' imaginary constructs, such as authors' and illustrators' fictional inventions. The children's discernment of, for example, what colours the dinosaurs were and how they became extinct makes them less novice readers, as their encyclopaedic knowledge (Nikolajeva, 2014) offers them opportunities to compare the fictional inventions of what colours the dinosaurs were or how they became extinct with their own established knowledge about these things (Excerpts 1 and 2). Nikolajeva (2014, p. 25) writes that "even when we know a certain work of fiction to be "false", we can still appreciate its artistic qualities". This is clearly noticeable in Excerpt 2, in which the children laugh wildly at the hilarious imaginary constructs in the fictionalised non-fiction picturebook. The more established knowledge the children express that they have the more fun the imaginary constructs seem to be, judging from their responses.

Secondly, as the children's established knowledge of dinosaurs and their extinction expands, so does their creation of their own imaginary constructs based on the fictionalised non-fiction. This is in line with Vygotsky's (1930/2004) assertion that children's experiences are the basis for their ability to create imaginary constructs about something, for example dinosaurs. With experience of encyclopaedic knowledge of dinosaurs and of different kinds of picturebooks and more, they are invited to "co-[construct] meaning" (Grilli, 2021, p. 25). The children as co-constructors are seen in Excerpts 3 and 4, where they use depictions they discern as imaginary constructs in the fictionalised non-fiction picturebook to playfully create their own



imaginary constructs. In these excerpts, we find children who speak in opposites (Excerpt 3) and claim that they have evidence of what it was like in the time of the dinosaurs because they were there (Excerpt 4), aware that their imaginary constructs are "made up". The children's awareness that their imaginary constructs are made up is consistent with Paul Harris's studies (2012) showing that children can distinguish between "real" and "made up" in their own fantasies.

Fictionalised non-fiction is an increasingly common kind of non-fiction (von Merveldt, 2018). However, for preschoolers with limited real-life experience, limited encyclopaedic knowledge, and limited experience mediated by fiction, it might be difficult to distinguish between "made up" and "real" in non-fiction that contains fictional elements. These children might benefit from teaching with contrast to separate combined depictions in fictionalised non-fiction. Based on the results of this study, such teaching can open up for children's *interpretation, appreciation*, and *creation of imaginary constructs* in reading activities involving fictionalised non-fiction picturebooks.

The goal of this study has been to contribute to the field of children's literature research on fictionalised non-fiction picturebooks for children by including children in designed teaching about their ambiguous depictions. Previous research (e.g. Goga et al., 2021; Grilli 2020; Sanders, 2018) on non-fiction picturebooks containing fictional elements has focused on what these might offer potential readers to respond to, but not how children as readers actually respond to them. Nor has previous research, as this study does, directed its interest towards what opens up for children when combined depictions in fictionalised non-fiction are separated and made discernible for children. Perhaps this study's design and results can spark interest in the children's literature research field to conduct more studies including children in designed reading activities.

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#### References

Bintz, William P., and Ciecierski, Lisa M. (2017). Hybrid Text: An Engaging Genre to Teach Content Area Material Across the Curriculum. *The Reading Teacher*, 71(1), 61–69.

Brown, Ann L. (1992). Design Experiments: Theoretical and Methodological Challenges in Creating Complex Interventions in Classroom Settings. The Journal of the Learning Sciences, 2(2), 141–178.



- Cianciolo, Patricia J. (2000). Informational Picture Books for Children. Chicago: American Library Association.
- Cobb, Paul, Confrey, Jere, DiSessa, Andrea, Lehrer, Richard, and Schauble, Leona (2003). Design Experiments in Educational Research. *Educational Researcher*, 32(1), 9–13.
- Daly, Nicola. (2021). Indications of Implied Reader and Audience Through Layout in Two New Zealand Informational Picturebooks. In Nina Goga, Sarah Hoem Iversen and Anne-Stefi Teigland (Eds), Verbal and Visual Strategies in Nonfiction Picturebooks: Theoretical and Analytical Approaches (pp. 95–109). Oslo: Scandinavian University Press.
- Donovan, Carol A., and Smolkin, Laura B. (2002). Children's Genre Knowledge: An Examination of K-5 Students' Performance on Multiple Tasks Providing Differing Levels of Scaffolding. *Reading Research Quarterly*, 37(4), 428–465.
- Freedman, Claire, and Cort, Ben. (2019). Dinosaurier älskar underbyxor. Stockholm: Modernista.
- Goga, Nina, Iversen, Sarah H., and Anne-Stefi, Teigland (Eds.). (2021). Verbal and Visual Strategies in Nonfiction Picturebooks: Theoretical and Analytical Approaches. Oslo: Scandinavian University Press
- Grilli, Giorgia. (2021). The Artistic Nonfiction Picturebook. In Nina Goga, Sarah Hoem Iversen and Anne-Stefi Teigland (Eds.), *Verbal and Visual Strategies in Nonfiction Picturebooks: Theoretical and Analytical Approaches* (pp. 22–36). Oslo: Scandinavian University Press.
- Grilli, Giorgia (Ed.). (2020). Non-Fiction Picturebooks: Sharing Knowledge as an Aesthetic Experience. Pisa: ETS.
- Growick, Dustin. (2018). Dinosaurier: Mitt stora bildlexikon. Västra Frölunda: Tukan förlag.
- Harris, Paul L. (2012). *Trusting What You're Told: How Children Learn from Others*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Kümmerling-Meibauer, Bettina and Meibauer, Jörg. (2021). How Descriptive Picturebooks Engaged Children in Knowledge About Coal, Oil, and Gas. In Nina Goga, Sarah Hoem Iversen and Anne-Stefi Teigland (Eds.), *Verbal and Visual Strategies in Nonfiction Picturebooks: Theoretical and Analytical Approaches* (pp. 189–200): Oslo: Scandinavian University Press.
- Lo, Mun Ling. (2012). Variation Theory and the Improvement of Teaching and learning (Gothenburg Studies in Educational Sciences, 323).
- Marton, Ference. (2015). Necessary Conditions of Learning. London: Routledge.
- Marton, Ference, Runesson, Ulla, and Tsui, Amy BM. (2004). The Space of Learning. In Ference Marton and Amy BM. Tsui (Eds.), *Classroom Discourse and the Space of Learning*, (pp. 3–42). New York: Routledge.
- Mallett, Margaret, Goodwin, Prue, and Mallett, David. (2019). Choosing and Using Fiction and Non-fiction 3–11: A Comprehensive Guide for Teachers and Student Teachers, 2nd ed. New York: Routledge.
- Nikolajeva, Maria. (2014). Reading for Learning: Cognitive Approaches to Children's Literature (Children's Literature, Culture, and Cognition, 3). Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Narančić Kovač, Smiljana (2020). A Semiotic Model of the Nonnarrative Picturebook. In Giorgia Grilli (Ed.), Non-Fiction Picturebooks: Sharing Knowledge as an Aesthetic Experience, (pp. 69–89). Pisa: FTS
- Pappas, Christine C. (2006). The Information Book Genre: Its Role in Integrated Science Literacy Research and Practice. Reading Research Quarterly, 41(2), 226–250.
- Price, Lisa Hammett, Bradley, Barbara A., and Smith, Jana Michele (2012). A Comparison of Preschool Teachers' Talk During Storybook and Information Book Read-Alouds. *Early Childhood Research Quarterly*, 27(3), 426–440.
- Sanders, Joe Sutliff. (2018). A Literature of Questions: Nonfiction for the Critical Child, (p. 2018). Minneapolis, MN: University of Minnesota Press.
- Skyggebjerg, Anna Karlskov (2020). Non-fiction Picturebooks About Evolution A Basis for Aesthetic Experience? In Giorgia Grilli (Ed.), *Non-Fiction Picturebooks: Sharing Knowledge as an Aesthetic Experience*, (pp. 127–146). Pisa: ETS.
- Sheppard, Sarah. (2008). Det var en gång... Massor av dinosaurier. Stockholm: Bonnier Carlsen Bokförlag.
- Sheppard, Sarah. (2009). Varning för köttgänget. Stockholm: Bonnier Carlsen Bokförlag.
- Sheppard, Sarah. (2014). Djuren i Skogen. Stockholm: Rabén & Sjögren.
- Swedish National Agency for Education. (2019). Curriculum for the Preschool Lpfo 18. Stockholm: Swedish National Agency for Education.



von Merveldt, Nikola (2018). Informational Picturebooks. In Bettina Kümmerling-Meibauer (Ed.), *The Routledge Companion to Picturebooks*, (pp. 231–245). Oxon: Routledge.

Vygotsky, Lev Semenovich. (1930/2004). Imagination and Creativity in Childhood. *Journal of Russian and East European Psychology*, 42(1), 7–97.

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