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The Instantiation of Narrative in Picturebook Forms: Semiotic, Material, and Ideological Dimensions

Narratives have been *instantiated* across an array of materials, media, and modalities, including oral storytelling, film, novels, tapestries, comics, theatre, and children's picturebooks for centuries. Narrative picturebooks come in many different forms, contain a variety of modalities, primarily written and oral language, visual images, and design elements, and are produced using an array of material and production technologies. Like the continuing evolution of narratives in general, narrative picturebooks are part of an extended history of visual and multimodal communication and have been instantiated as printed codices, moveable or pop-up books, volvelles, electronic books, and as digital and augmented reality software applications. This article focuses on the semiotic, material, and ideological aspects of the instantiation of narrative in picturebook form and examines how narrative picturebooks are embedded in an array of social, cultural, and literacy practices. Additionally, the article proposes a framework from which to consider the syntactical, modal, compositional, mediational, material, technological, historical, and sociocultural aspects of the instantiation of narrative in picturebook forms.

Keywords: multimodality, picturebooks, instantiation, semiotics, children's literature

Narratives have been *instantiated* across an array of materials, media, and modalities, including oral storytelling, film, novels, tapestries, comics, theatre, and children's picturebooks for centuries (Elleström 2010; Kümmerling-Meibauer 2018). In fact, the production and distribution of narratives have evolved from oral storytelling traditions to the transmedial narratives published in online spaces (Ryan and Thon

2014). The semiotic and material instantiation of a narrative influences how a particular story is experienced and, by definition, does not exist as an abstracted text in isolation but occupies specific physical and imagined spaces (Petrovic 2018). In other words, a narrative does not exist without the medium upon which its reading or reception is based, and no text can be experienced without considering the material form in which readers experience it (Bremer 2020). Essentially, all narratives are instantiated or realised across specific semiotic, material, and ideological dimensions that influence how they are designed, produced, experienced, shared, and interpreted.

Like the continuing evolution of narratives in general, narrative picturebooks are part of an extended history of visual and multimodal communication which has included cave paintings, stained-glass windows, tapestries, hieroglyphics, and illuminated manuscripts. Over the past two centuries, narrative picturebooks have been instantiated as printed codices, moveable or pop-up books, volvelles, electronic books, and as digital and augmented reality software applications which bring with them an expanded range of affordances and interactivity. Commenting on the evolution of narrative picturebooks, Evelyn Arizpe and Emma McGilp (2022) stated "picturebooks emerged from an impulse to tell stories using a range of modes which are amalgamated and moulded by aesthetic forms and technological innovations" (193). Narrative picturebooks, generally designed and produced for young readers, have combined words and images in myriad ways, been instantiated across a range of materials and technologies, are complicit in various social practices and events, and are embedded in specific cultural and historical contexts (Serafini 2010).

In addition to the production of traditional paper-based codices and moveable (pop-up) variants, narrative picturebooks have been designed and produced as **picturebook apps**, a form of software application which often includes video animation, interactive and gaming features, voice-over narration, sound effects, and background music (Stichnothe 2014). Digital technologies have played an important role in the changing nature of how narratives are instantiated in picturebook forms and continue to support the design, production, and distribution of more complex and sophisticated narrative experiences which pervade contemporary educational spaces and social life.

Referring to the creation, design, and production of picturebooks as the **instantiation of narrative in picturebook form** is intended to focus attention on the semiotic and material aspects of the processes of instantiation and how narrative picturebooks are embedded in an array of ideological contexts and sociocultural practices. As research on narrative picturebooks continues to evolve, examining the various ways narratives are instantiated in picturebook form requires an exploration of various theoretical foundations, including semiotics (Chandler 2007), multimodality (Adami 2016), theories of signification and instantiation (Iliopoulos 2016), the materiality of literature (Gutjahr and Benton 2001), mediality (Elleström 2019), the interrelation of matter and meaning (Halliday 2005), and the ways humans make sense of literary and cultural objects (Hall 1997).

Building upon the theoretical conceptualisations of ***matter and meaning*** provided by Michael A.K. Halliday (2005), the ***abstract semiotic strata*** of materiality, mediation, and discourse semantics proposed by John A. Bateman and Janina Wildfeuer (2014), the dimensions of ***semiotic technologies*** developed by Søren V. Poulsen and Gunhild Kvåle (2018), and the four ***modalities of media*** envisioned by Lars Elleström (2010), this article proposes a framework from which to consider the ***semiotic***, ***material***, and ***ideological*** dimensions of the instantiation of narratives in picturebook forms. Although these three dimensions are presented in this article separately, the divisions are theoretical abstractions constructed from the experiences humans have with narrative picturebooks and other multimodal entities to further explore the complexities inherent in the processes of signification and instantiation and provide a more detailed framework for examining and interpreting narrative picturebooks.

The next section of this article presents two assertions upon which the entire premise of my argument is founded, specifically: 1) ***there is no tale without a telling***; and 2) ***all tellings are multimodal and instantiated across semiotic***, ***material***, ***and ideological dimensions***. Subsequently, I investigate the ways these two assertions are related to the processes of ***signification***, how things become meaningful, and ***instantiation***, how things are materially realised and, by extension, experienced. Building upon this foundation, I provide a description of the semiotic, material, and ideological dimensions of instantiation to illuminate how these dimensions are complicit in the ways humans experience narrative picturebooks.

To demonstrate the potential utility of these three dimensions, I will also present a brief analysis of the narrative *The Fantastic Flying Book of Mr. Morris Lessmore*, by William Joyce (2012). This analysis will examine the differences among the original animated film, the paper-based picturebook, the digital picturebook app, and the augmented reality platform produced by Joyce's Moonbot Studios to reveal how the three dimensions illuminate distinctions across the different instantiations of Joyce's narrative. In conclusion, I share some implications concerning why the process of signification and the dimensions of instantiation matter in picturebook scholarship.

Two foundational assertions

The first assertion, there is no tale without a telling, refers to the idea that narratives, specifically narrative picturebooks, must possess a particular material stratum, like the printed pages of a paper-based picturebook, the sound waves of an oral narrative, or the digital interface of an e-reader or tablet, to be perceived and experienced. Human access to any form of narrative is mediated by a specific semiotic and material instantiation or telling, in the case of picturebooks drawing upon various combinations of written language, sequential visual images, design elements, and layout. In addition, a telling of any narrative is always embedded in specific social, historical, and cultural contexts.

Until a tale is told or instantiated, humans have no way of accessing the narrative itself. To support the theory that ***tellings*** are all humans have access to, N. Katherine

Hayles (2003) has asserted "the ontology card is not worth playing", referring to the impossibility of having any experiences or understandings of a tale before it has been told (270). Even if there could exist a tale before its telling, humans can only access the tale through their embodied sensory channels and the perception of some form of material instantiation. It is in the telling of the tale, more specifically in the semiotic, material, and ideological instantiation of a particular narrative, that a tale is made physically available to be perceived.

Literary theorists associated with the Russian Formalist movement, most notably Vladimir Propp (1968), have posited two concepts which may be useful to consider in this discussion. The terms "fabula" and "syuzhet" have been used to denote the difference between the raw materials or chronological events of a story and the ways the story is organised or told. In addition, Seymour Chatman (1975), drawing on the four-part model of Louis Hjelmslev (Taverniers 2008) has recognised the difference between fabula and syuzhet, or story and discourse, and has added the terms "form" and "substance" to elaborate on these distinctions. As previously asserted, until the tale is told (telling) there is nothing to be realised or experienced, and each telling of a tale may differ in significant ways.

Closely related to the distinction between the fabula and syuzhet and Chatman's form and substance is Anne Gunder's (2001) comparison among the "work", defined as an abstract artistic entity or ideal construction of various editions of a narrative, the "text" defined as the work manifested through various sign systems, and the "document" as a particular physical embodiment or manifestation of the narrative. The definition of document proposed by Gunder (2001) is closely aligned with the instantiation of a narrative in picturebook form, or as the specific materialised telling presented in this article.

The second assertion, that ***all tellings are multimodal and instantiated across semiotic, material, and ideological dimensions***, continues the line of thought initially proposed by Paul Duncum (2004) and William J.T. Mitchell (2005) that there are no longer any exclusively visual, or purely linguistic sites in today's society. All cultural sites, including narratives in picturebook form, involve visual imagery and various ratios of other communicative modes (Duncum 2004). All contemporary forms of representation and communication are multimodal, and all media, from the standpoint of sensory modality, are ***multi*** or ***mixed media*** (Elleström 2010; Mitchell 2005).

In general, a social semiotic perspective on multimodality asserts multiple modes are complicit in all forms of representation and communication (van Leeuwen 2005). Narrative picturebooks, like other multimodal ensembles, include a variety of modalities and are designed, created, and distributed to perform certain functions embedded in social and educational practices (Aiello 2006). The elements of narrative picturebooks, including written language, visual images, and design features are connected to specific social, cultural, and historical contexts, and reflect and constitute definitions of childhood and children's literature (Serafini 2023).

Matter and meaning

A semiotic system is made of meaning; but to be realised, it must be materially instantiated, to become matter (Halliday 2005)**.** In an oft-cited article focusing on human experience, Halliday (2005) described two phenomenal realms that human beings inhabit: the "world of matter" and the "world of meaning" and that all realms of experience or signifying systems depend on material processes to come into being. "Human history is the unfolding of a constant interplay, and a constant tension, between these two [realms]" (Halliday 2005: 61). Halliday further asserted (2005: 66):

> […] neither the material condition alone nor the semiotic conditions alone are determining; it is the interplay between these two which defines the human situation – whether for the individual, the social unit, the state, or for the human race as a whole.

In their "multimodal discourse theory of visual narrative", Bateman and Wildfeuer (2014) recognised the need to consider the basic notion of materiality and how it is connected to the processes of making meaning with multimodal texts. In their view, materials must be sufficiently ***malleable*** to "show the traces necessary for revealing 'choices' between semiotically-charged alternatives" (182). Their work posits three ***abstract semiotic strata*** that bring together materiality, form, and discourse semantics, or essentially matter, composition or layout, and meaning, to provide an extensive description of the ways that various materials mediate human cognition in multimodal environments (Bateman and Wildfeuer 2014).

Georgia Aiello (2006) has defined ideology as a set of socially constructed meanings or norms that are embedded and naturalised in the cultural fabric to the extent that they become invisible or are viewed as commonsensical. All processes of signification and instantiation draw upon cultural conventions, various systems of meaning, past histories of sign use, and the material and mediational affordances of a variety of semiotic resources. The processes of signification and instantiation also occur in specific social, cultural, political, and historical contexts. Ideology is embedded "all the way down". The ideological dimension was added to the realms of matter and meaning in the presented framework to emphasise the sociocultural embeddedness of the processes of signification and instantiation.

Semiotics, signification, and instantiation

Before introducing the three dimensions of instantiation, it is important to briefly define the terms "semiotic", "signification", and "instantiation". Although they are frequently used terms across a range of disciplines and theoretical orientations, it is important to delineate how these terms are used in the specific context of this article.

Although a full presentation of semiotic theory is beyond the scope of this paper (see Chandler 2007; Noth 1990), an early definition by Ferdinand de Saussure (1910) positioned semiotics (his term was "semiology") as a field of inquiry interested in the "life of signs in society" (15). ***Semiotic***, in the context of this article, refers to a signifying process wherein objects and ideas become meaningful across various relations of

signifiers and signifieds. Essentially, a semiotic perspective focuses on how meanings are made and the processes by which phenomena become meaningful (Jappy 2013).

A primary focus of semiotic theories is on **how** phenomena become meaningful across contexts, not necessarily **what** meanings are constructed. The interconnected processes of **signification** and **instantiation** outline the various ways phenomena are made meaningful across a range of social, cultural, historical, and ideological contexts, whereas the processes of **interpretation** are concerned with the types of meanings that are constructed in transaction with these phenomena (Scholes 1982). In addition, various "signifying strategies" (Hayles 2003) or meaning-making processes are "grounded in a cultural context such that what things refer to is not fixed and objective, but relative to an intentional process and the framework of meaning that guides it" (Cousins 2012: 150).

Before objects, events, and other phenomena can be interpreted, they must be perceived as meaningful entities, or as **signs**. It is this perception of something as potentially meaningful that initiates a **process of signification** and underlies Charles S. Peirce's (1998) definition of a sign as "something that stands for something, to somebody in some particular capacity" (26). This definition provides the foundation for Peircean semiotic theories.

Signification is a process of construing meaning through choices of semiotic resources and modalities that offer possibilities which align with the intentions of the people involved. Lambros Malafouris (2016) has suggested the process of signification requires an "embodied engagement with the material world" bringing together meaning and matter and suggesting matter has a direct bearing on the semiotic processes of making meaning (94). Supporting the material aspects of signification, Bateman (2021) asserted "signification always occurs against a physical background which imposes limitations and opens up possibilities for signifying practices to develop" (180).

In systemic functional theories, **instantiation** refers to the relation between an instance and the system that lies behind it, or the difference between the **potential** and the **actual** (Martin 2007). The difference between system and instance is not the difference between "*langue*" and "*parole*" (Saussure 1910), rather it refers to the same concept from different perspectives. Halliday's oft-used analogy is the difference between climate (system) and today's weather (instance). For a more detailed discussion, see Martin's (2007) instantiation hierarchy.

From a phenomenological perspective, the world is a totality of **significabilities** or possibilities of meaning, whereas instantiations are the actual, material instances that can be experienced (Nancy 2010). From these possibilities of meaning, an **instance** (what has been instantiated) is what is immediate and experienced as a material phenomenon, in the context of this article, a narrative picturebook. From a systemic functional perspective, instantiation is a process of drawing from a "generalized meaning potential" or a set of options concerning what can be meant and the creation of a specific material instance, whether it is an oral conversation, an essay, a drawing, a piece of music, or in this case a narrative picturebook (Tang 2013). Signification and

instantiation are processes in which something is realised as a specific material entity, made available to humans through their sensory apparatus, and emerges as meaningful across a range of social, cultural, historical, and ideological contexts.

Narrative picturebooks

Since the publication of what is considered the first picturebook intended primarily for young readers, the *Orbis Sensualium Pictus* by John Amos Comenius in 1658, the narrative picturebook has served a variety of cultural and literary purposes in both educational and sociocultural contexts. The compound word "picturebook" has been used by various researchers and literary theorists to connote the unified nature of written text and visual images in a multimodal narrative form (Sipe 1998). Additionally, the picturebook is a unique literary experience, where written language, visual images, design elements, and layout transact and transform one another during the reading experience, forcing readers to oscillate back and forth between the textual and visual elements during their transactions (Sipe 1998).

David Lewis (1990), examining the word-image relations in postmodern picturebooks, has asserted picturebooks "always require a command of two different forms of signification: the verbal or textual and the pictorial or iconic" (141). Narrative picturebooks are a form of multimodal ensemble, instantiated across analogue and digital technologies, that utilise more than one mode to represent and communicate meaning potentials, where mode is defined as a socio-culturally and materially shaped resource for meaning making (Kress 2010; Serafini 2014). Accordingly, narrative picturebooks: 1) draw upon a range of semiotic resources to offer a unified experience for the reader; 2) are created by one or more authors, artists, and designers that use written language, visual images, and design elements to render the narrative; 3) include various storyworlds populated with specific characters, actions, settings, and objects; and 4) are reflective and constitutive of the discourses in which they are embedded.

By defining narrative picturebooks as a type of multimodal ensemble, picturebook researchers call attention not only to the relations among words and images, but extend their analyses to include design, materiality, layout and composition, orientation, shape, and paratextual elements. Extending one's understanding of how narrative picturebooks are instantiated beyond material and semiotic considerations to analyse the modal, medial, compositional, material, syntactical, technical, and ideological aspects of instantiation may provide a deeper foundation upon which to understand the potential meanings made available and the experiences and interpretive repertoires of young readers during the act of reading.

The dimensions of instantiation

The three overarching dimensions of instantiation proposed in this article, the semiotic, material, and ideological, call attention to the distinctive, yet interconnected, processes under which narrative picturebooks are realised or instantiated as meaningful,

material, and cultural phenomena. The semiotic dimension of instantiation focuses on the ways that narratives in picturebook forms are experienced as meaningful entities and the "signifying strategies" that are drawn upon in the process of signification (Hayles 2003). The proposed semiotic dimension includes syntactical, modal, and compositional aspects of instantiation. The material dimension of instantiation focuses on the ways narratives in picturebook forms are physically and materially realised to be experienced, and address the physical, technological, and mediational aspects of instantiation. The ideological dimension is concerned with the literary, historical, and sociocultural aspects of instantiation and focuses on the social, cultural, and historical contexts in which narratives are embedded across a range of sociocultural practices. Narrative picturebooks are instantiated in specific semiotic and material forms and the specific dimensions of a particular form of instantiation mediates the experiences of the reader and is affected by the cultural, historical, and social contexts in which it is experienced.

Semiotic dimensions of instantiation

Within the semiotic dimension of instantiation, syntactical, modal, and compositional aspects of instantiation are considered. Each of these components exist as concepts that must be realised or manifested in particular material configurations before they can be experienced. For instance, the concept of visual image as a semiotic mode only exists when it has been instantiated in a specific material reality, for example as an illustration in a picturebook. The term visual image is a generalisation of a particular semiotic mode that only exists as specific materialised examples. The same holds true for syntactical and compositional instantiation. The semiotic dimensions of instantiation provide a framework in which narratives are realised in a range of logics and structures that work across particular material instantiations.

The *syntactical* dimension refers to the way all forms of representation and communication must be instantiated in temporal (across time), spatial (across space), static (unmoving), dynamic (moving), existential (permanent or temporary), or blended forms of logic. For instance, G. Thomas Tanselle (1990) differentiates between "sequential" and "stationary" arts, where sequential arts work across time and stationary arts work across space. Modes of representation and communication are instantiated in a particular syntactical logic, and it is this logic that plays a primary role in how various multimodal entities are experienced. In narrative picturebooks, readers are presented with a blend of temporal syntax (written language) which evolves over time and moves the story forward, and spatial syntax (visual images) which allows the reader to consider the images simultaneously as part of a double page spread in paper-based variants. Both modal and syntactical elements are organised in a specific compositional layout.

The modal dimension focuses on the types of modalities used to instantiate a particular phenomenon, including visual images, language, and sound effects as examples. Picturebooks are multimodal narratives, where modes are considered

culturally and historically organised semiotic resources shaped by histories of use, cultural conventions, and material means of instantiation (Kress 2010). The modes of written language, visual image, and layout are the most common modes used in the production of paper-based narrative picturebooks. Digitally based picturebook apps often include additional modalities, for instance background music, sound effects, and voice-over narration. Whether based in paper or digital technologies, various modes have played a vital role in the instantiation of narrative in picturebook forms and are deeply embedded in the social practices that have emerged in their use.

Design elements, including the size and shape of a picturebook, horizontal or vertical orientations, design borders, and choices in printing techniques also serve as semiotic resources and are considered part of the ***compositional*** aspects of the semiotic dimension of instantiation. Compositional aspects include the various ways design elements, written language, and visual images are organised and the potential meanings that are made possible by the sequencing, physical proximity, framing, highlighting, and backgrounding of various picturebook elements. Many of the concepts of this dimension have been taken up and described in greater detail in the theories of "visual grammar" put forth by Gunther Kress and Theo van Leeuwen (1996) in their groundbreaking book *Reading Images: The Grammar of Visual Design*.

Material dimensions of instantiation

Within the material dimensions of instantiation, physical, mediational, and technological aspects of instantiation are considered. Essentially, narrative picturebooks are experienced as particular material or physical manifestations of a narrative, and it is the materially realised narrative, whether it is a paper-based picturebook, an electronic version on a digital tablet, or a software application on a computer screen, that is made available to readers.

From a literary perspective, the concept of the materiality of a text has been supported by Roger Chartier (1992), asserting "the historical expression of a reading experience cannot be independent from the material form of the text" (350). Chartier further states "a text does not exist without the medium on which its reading is based, and no document can be understood without considering the form in which it reaches its readers" (12). Additionally, Bateman and Wildfeuer (2014) have asserted "semiotic modes require, and only operate in terms of ***perceptible*** distinctions" (181). From their perspective, perceptible distinctions require a return to the notion of materiality, where "any semiotic mode will ***reach into*** a particular material substrate to leave traces for interpretation" (182). Like the semiotic dimensions, the material instantiation of a narrative in picturebook form mediates the readers' experiences and provides the grounds upon which the processes of reception and interpretation of narratives takes place.

In addition to their material or physical qualities, narrative picturebooks are also instantiated across specific mediational and technological interfaces and platforms.

The physical material may be either a paper-based codex or a digital version on a touchscreen, but the medium or delivery mechanism may vary from a paper-based picturebook physically displayed in a commercial bookstore, an animated television programme with a person reading aloud from the printed picturebook, an electronically scanned picturebook accessed on a tablet or smartphone, or as an interactive software application opened on a computer screen. The materiality of a picturebook does not necessarily determine the medium used but works across medial variants and technologies in providing access to the narrative form.

In addition to the material differences between paper-based and digital media, there are differences in the media used to experience a digitally based narrative and how a paper-based picturebook narrative can be accessed, distributed, and experienced. Narrative picturebooks are mediated by the materials used in production, for example the paper-based materials of a printed codex or the digital touchscreen of an electronic tablet, and the embodied sensory channels used to perceive and experience these narratives. It is a combination of the materials and structures used in producing a specific narrative picturebook and the embodied senses humans use to experiences these narrative phenomena that makes up the mediational aspects of instantiation. The tactile differences between turning the page of a paper-based picturebook and swiping one's finger across the touch screen of a digital version of the picturebook to move forward in the story needs to be considered as part of the mediational dimension as well (Kucirkova 2019).

According to Hayles (2004), it is important to reconceptualise materiality as "the *interplay between a text's physical characteristics and its signifying strategies*" [italics in original], and as "a dynamic quality that emerges from the interplay of text as a physical artifact, its conceptual content, and the interpretive activities of readers and writers" (72). This aligns with the perspective of narrative picturebooks as a material entity that becomes meaningful through a signifying process that involves the sensory channels of the reader, the picturebook itself, and the context of a reading experience. To fully conceptualise the material and mediational aspects of the instantiation of a narrative in picturebook form, it has been suggested that literary scholars develop a type of ***media-specific analysis*** that acknowledges the material, technological, medial, and sensorial affordances of narrative entities (Hayles 2004).

Elleström (2010) has expanded the concept of mediality to distinguish among material, sensorial, spatiotemporal and semiotic "modalities of media". From his perspective, nothing exists outside of perception and all media are realised across the aforementioned modalities. Elleström's (2010) concept of "mediality" and the structures inherent in a range of media play important roles in how multimodal entities, specifically narrative picturebooks, are accessed, distributed, experienced, and interpreted.

The physical, medial, and technological aspects of the material dimensions of instantiation, although closely interrelated, are different dimensions and offer different analytical perspectives. Paper-based picturebooks draw upon the modes of written language and visual image and are constructed across a variety of physical materials,

which can be mediated by digital video, embodied presence, or audio-based recordings which utilise a mixture of analogue and digital technologies. The semiotic and material instantiation of a narrative in picturebook form is irreducibly complex and may draw upon technologies ranging from analogue printing presses using woodcuts for reproducing visual images to digital technologies used to create and distribute the interactive features of digitally based picturebooks.

Ideological dimensions of instantiation

There are two primary historical perspectives concerning the concept of *ideology*. The first perspective, aligned with basic Marxian principles (Voloshinov 1973), involves a system of symbolic representations that reflect a historical situation of domination, and a second perspective that sees ideology as the basic structure of values and interests that informs any type of representation or communication (Mitchell 1986). From the first perspective, "…ideologies are systems of false ideas representing the consciousness of the ruling class and used to promote and legitimize its power" (Noth 2004: 12), while the second perspective represents an ahistorical, value neutral perspective which is associated with Talcott Parsons' (1951) definition of ideology as simply a system of beliefs held in common by the members of a collective.

Because of these assertions, it is important to consider the ways semiotic and material resources are utilised to instantiate specific multimodal ensembles themselves, *and* the social, cultural, and historical trajectories, practices, and contexts associated with these ensembles to better understand the ways humans represent, communicate, mediate, and interpret the multimodal world in which we live. The processes of instantiation and signification, like the processes of interpretation, are embedded in specific ideological contexts which shape, and are shaped by, these processes (Scholes 1982).

Webb Keane (2018) stated "[…] semiotic ideology is meant to draw attention to the dynamic interconnections among different modes of signification at play within a particular historical and social formation" (67). From this perspective, it is vital to understand how ideology as a system of power relations plays a constitutive role throughout the processes of signification and instantiation. Semiotic ideology functions within a representational economy and refers to the totality of technologies, media, institutions, and practices available in any given social, cultural historical, and economic context (Keane 2018). Control over forms, structures, and avenues of distribution for various types of representation and communication is in one sense a way to access dominant ideologies or in another sense a way to marginalise certain groups from social, cultural, and economic forms of power or capital (Bourdieu 1993).

Within the ideological dimension of instantiation, literary, historical, and sociocultural aspects are proposed. The first area is based in narratology, or the field of inquiry focused on how narratives have been historically constructed, used, and represented (Abbott 2008). The second aspect focuses on the uses, trajectories, contexts,

conventions, and practices associated with various forms of instantiation across historical contexts, while the third aspect of the ideological dimension focuses on a wide range of ideological constructs and the social and cultural contexts in which they are manifested. Each of these aspects of the ideological dimension assumes a critical perspective towards forms of representation and communication and are grounded in the principle that the power to signify is not a neutral force (Hall 1997).

The instantiation of narrative as literary phenomena has been referred to as a "fictionalizing act" (Iser 1978), involving the structuring and organising of events into the temporal and causal structures associated with narratives. Jerome Bruner (2010) suggests narrative is an all-purpose vehicle that shapes the ways humans communicate and experience the world, giving form to their conceptions of the past and present. Literary aspects of instantiation focus on how narratives are realised in specific narrative forms where sense is made of certain events from a particular point of view and are shaped into a particular genre or structure, for example as a narrative picturebook.

Historical aspects of ideological instantiation call attention to the situatedness of the process of instantiation that takes place in specific times, places, and situations, and how various contexts affect the forms, structures, contents, and purposes of various narratives. For instance, it is important to understand how picturebooks created in the 1800s are vastly different from the picturebooks created in the new millennium. The conventions, codes, contents, and structures of narrative picturebooks are part of a historical trajectory that considers the evolving nature of modes and narrative conventions and conditions or constitutes what is included in and omitted from narrative picturebooks during a specific era (Moebius 1986).

The sociocultural aspect of ideological instantiation is an amalgamated category that includes all manner of economic, cultural, and social contexts and influences. Inseparable from the literary and historical dimensions in practice, a sociocultural perspective considers the instantiation of narrative picturebooks as a commercial product, as a reflection of society, as a product of the evolving definition of childhood, as a pedagogical instrument, or as a cultural phenomenon that is embedded in various literacy events and practices (Kümmerling-Meibauer 2018). Together, the three aspects of the ideological dimension posited focus on the sociocultural contexts in which narrative picturebooks are instantiated as much as the material, modal, and technological aspects of narrative picturebooks themselves.

Analysing narrative picturebook instantiations

A brief analysis is presented to provide an example of the utility of the three dimensions of instantiation outlined in this article. Comparing the paper-based picturebook, the animated film, and the digital picturebook application provides a framework for how these dimensions may support the work of picturebook researchers and children's literature scholars.

The animated film and the picturebook, *The Fantastic Flying Books of Mr. Morris Lessmore* (Joyce 2012), and its associated software applications, or "apps", have been

celebrated, critiqued, and analysed from a wide range of perspectives (Aguilera et al. 2016; Hateley 2013; Sargeant 2015; Schwebs 2014). The animated film version of the story won the Academy Award for Best Animated Short Film in 2012 and was subsequently produced as a hard cover picturebook, a picturebook app, and as an augmented reality app requiring an electronic tablet and the paper version of the book to initiate the augmentation. Described as an allegory about the curative power of story, the book was inspired by several factors, including Joyce's relationship with William Morris, a publisher and mentor at Harper Collins publishing house, the aftermath of Hurricane Katrina, and the classic movie *The Wizard of Oz*.

While the animated film and the analogue picturebook are still accessible and available for purchase, the software application and augmented reality application are no longer working due to the evolution of computer operating systems and the producers' inability or unwillingness to financially support continued updates to the picturebook app. The film, picturebook, and associated apps have served as important milestones in the evolution of narrative picturebooks and have been previously analysed across a range of publications which support the inclusion of these variants in this article. The fact that the picturebook app no longer works is also an important aspect of the ideological and commercial dimensions associated with the challenges and expense of publishing picturebook narratives across a variety of digital forms.

The picturebook features the semiotic resources included in traditional paper-based publications, namely written language drawing upon selected typographical features, visual images produced in a range of media, design elements, peritextual features, horizontal orientation, and pages printed using digital and analogue technologies. The digital picturebook app, the film, and the augmented reality app were created with digital technologies and afford a variety of semiotic resources beyond those of the paper-based codex. Background music, animation, voice-over narration, hyperlinks, and other interactive features are all included in the picturebook app.

While the narrative aspects of the story are foregrounded in the film and picturebook, the picturebook app and augmented reality apps add interactive features including playing a song on a virtual piano, moving flying books around on the screen with one's finger, and controlling aspects of the narrative that are not available in the film or paper-based instantiations. These additional interactive and navigational features have been analysed and it has been suggested they may distract readers from focusing on the written narrative (Schwebs 2014). It is important to note, as of the writing of this article, all the digital variants were no longer available due to the costs of upgraded computer systems.

Bateman et al. (2017) presented several dimensions for distinguishing among the semiotic and material properties of specific multimodal texts. These include: 1) static or dynamic presentations; 2) two or three dimensions (2D & 3D); 3) permanent or fleeting issues of transience; and 4) the internal or external positioning of the reader as observer or participant. From this perspective, the layout of the paper-based instantiation is static, meaning it does not change except for the turning of the pages during use, and

is presented across a two-dimensional space on the surface of the paper-based pages. The animated film is two dimensional, but the visual images are dynamic and involve a series of scenes and moving images and events. Although the film can be paused and fast-forwarded which is similar to, yet distinctly different from, turning the page of a picturebook, they are both permanent and the reader or viewer is positioned in the role of observer.

In contrast, the digital apps have dynamic, interactive features and hyperlinks that allow the reader to navigate within and outside the apps in different ways. Compositionally, the digital app has navigation buttons and "hotspots" that can be initiated to move the story along or take the reader into other aspects of the app away from the original narrative. The apps also have hyperlinks that can be challenging to navigate and take readers away from the featured narrative at times. In the digital instantiations, the text is dynamic and two-dimensional, but the interactive features of the app may change the narrative while it is being read and when the interactive features are being used, positioning the reader as both observer and participant.

It should be obvious at this point that the material and technological aspects of these narrative instantiations are quite distinct. Where the paper-based codex is fashioned out of printed text and visual images and bound at the spine providing for page turning and self-paced timings, the film has an embedded time component, originally released with a fifteen minute, seven second running time. The digital app can be used in a self-paced mode or progress automatically with voice-over and page-turning options revealing the narrative with minimal reader interaction. The automated voice-over narration positions the reader as an observer, while the digital app provides additional opportunities for readers to act as participants, navigating the app in various directions and making decisions as to additional content.

Analysing the picturebook and digital app from an ideological perspective must consider the economic aspects of narrative picturebook publishing since several of the presented instantiations currently exist as commercial products. The paper-based picturebook was sold both online and in physical bookstores and was printed and assembled in American factories, while the digital app was originally sold in the Apple app store. While the costs of producing the paper-based picturebook have remained constant, the costs to update the digital apps every time Apple or Microsoft updated its operating systems became prohibitive and eventually caused the abandonment and removal of the app from the Apple store around 2017.

This brief analysis demonstrates the utility of the three dimensions and the nine aspects outlined in this article. A more thorough analysis of any picturebook or picturebook app is certainly possible but space does not allow for both an introduction to the three dimensions and a detailed analysis of a specific narrative picturebook. However, the analysis provided here offers a window into the possibilities of the semiotic, material, and ideological dimensions discussed and demonstrates the possibilities this framework may provide.

Concluding remarks

Considering the chameleon in the jungle of children's publishing (Lewis 2001), narrative picturebooks, like narratives in general, are conditioned by their medium of realisation. Attention to the ways that narratives are instantiated across various picturebook forms provides a foundation for researchers and teachers to examine how various dimensions of instantiation affect the types of meaning potential available for young and emerging readers. As the world told becomes the world shown (Kress 2010), more research is necessary for understanding the ways narratives are instantiated and how they are experienced and interpreted in different contexts and across various literacy practices.

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Ostvarenje pripovijedi u slikovnici: semiotičke, materijalne i ideološke dimenzije

Pripovijedi već stoljećima nastaju putem različitih materijala, medija i oblika, uključujući usmeno pripovijedanje, film, romane, tapiserije, stripove, kazalište i slikovnice za djecu. Pripovjedne slikovnice dolaze u različitim oblicima, sadrže razna izražajna sredstva, ponajprije pisani i usmeni jezik, vizualne slike i elemente dizajna, te se proizvode uporabom niza materijalnih i proizvodnih tehnologija. Kao i neprestana evolucija pripovijedi općenito, pripovjedne slikovnice dio su duge povijesti vizualne i višemodalne komunikacije i nastajale su kao tiskani kodeksi, pokretne ili skočne knjige, volvele, elektroničke knjige te kao digitalne aplikacije i aplikacije proširene stvarnosti. Članak je usredotočen na semiotičke, materijalne i ideološke aspekte nastajanja pripovijedi u obliku slikovnice i ispituje kako su pripovjedne slikovnice ukorijenjene u niz društvenih, kulturnih i pisanih uzusa. U članku se također predlaže okvir iz kojega se mogu razmotriti sintaktički, modalni, kompozicijski, medijacijski, materijalni, tehnološki, povijesni i društvenokulturni aspekti nastajanja pripovijedi u slikovnici.

Ključne riječi: višemodalnost, slikovnica, ostvarenje, semiotika, dječja književnost