

ALEXANDRA MILYAKINA

Digitalization of Literary Education  
in the Context of Cultural  
Autocommunication





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## LIST OF ORIGINAL PUBLICATIONS

1. Milyakina, Alexandra (2018). Rethinking literary education in the digital age. *Sign Systems Studies*, 46 (4), 569–589.
2. Milyakina, Alexandra (2019). Digital adaptations and the new culture of reading. In: Kroó, Katalin (Ed.). *The Book Phenomenon In Cultural Space*. Budapest-Tartu: Eötvös Loránd University, 81–89.
3. Ojamaa, Maarja; Milyakina, Alexandra (2019). Teaching cultural literacies with films: Using the online platform Education on Screen in secondary school classrooms. *Film Education Journal*, 2 (2), 118–133.
4. Milyakina, Alexandra (2019). Multimodality and play in literature class: Bridging a gap between school and life with education on screen. *Punctum. International Journal of Semiotics*, 5 (1), 159–179.



## 0. INTRODUCTION

“Sharp decline in children reading for pleasure”, “From bedtime stories to bribes: how to get your child reading more”, “Majority of parents worried about children's digital reading”<sup>1</sup> – these are some typical headlines found on Google by keywords “children” and “reading”. Digital technology has provoked a drastic change in human communication and led to the reconsideration of conventional forms and practices. In the U.S., the percentage of 12th graders who read a book or a magazine every day declined from 60% to 16% since the late 1970s (Twenge et al. 2019: 329). In Estonia, 70% of people under 30 express very little interest in traditional media, such as print, TV and radio, but tend to spend time on social media (Vihalemm and Kõuts 2017: 269). The problem of literary education in the digital age is much deeper than implied by public debate or newspaper controversies. Apart from using technological means for reading, writing and teaching, it also entails a qualitative and quantitative change in the nature of texts, as well as a shift in social relations. In contrast to printed books that are mostly verbal, linear and created by a single author, digital texts are becoming increasingly multimodal, non-linear and collaborative. The roles of the agents participating in the literary process are blurred: producers and consumers merge into prosumers – participatory creators “who create[s] new contents and share[s] them in the digital networks” (Scolari 2018: 14); teachers are becoming “knowledge facilitators” rather than all-knowing others.

Why should we read, after all, especially literary classics? On the one hand, it is possible to consider the decline of literary education as a natural process or evolutionary inevitability. On the other hand, literature remains something that maintains the integrity of culture and forms our identities, even though it may seem outdated in the age of neurotechnology and drones. Although temptations of the digital world sometimes outweigh the simple pleasures of reading, the role of literature is too enormous to neglect and is much greater than just introducing certain plots or developing reading skills. Like a genetic code, literature helps us to preserve crucial knowledge through centuries and adapt to new conditions (Lotman, Uspenskij 1984: 3); it bridges different cultures and influences our language, values, actions, relationships. It serves as cloud storage of wisdom, when we plug into our cultural code and refer (oftentimes unknowingly) to literary works. Finally, it offers a desperately needed consolation and allows us to “escape the anxiety that attacks us when we try to say something true about the world” (Eco 1994: 87). Books – or, rather, what constitutes them – will never go out of date, but will survive as “part of a ‘both/and’ world where they belong to a more general world of texts” (Mackey 2001: 179).

Before we start, it is important to eliminate terminological ambiguity and introduce the key **notions** of the thesis. The main object – the *literary education* – is defined as “the semiotical and communicational projection of secondary literary contexts”, which “mediates information about original texts to provide

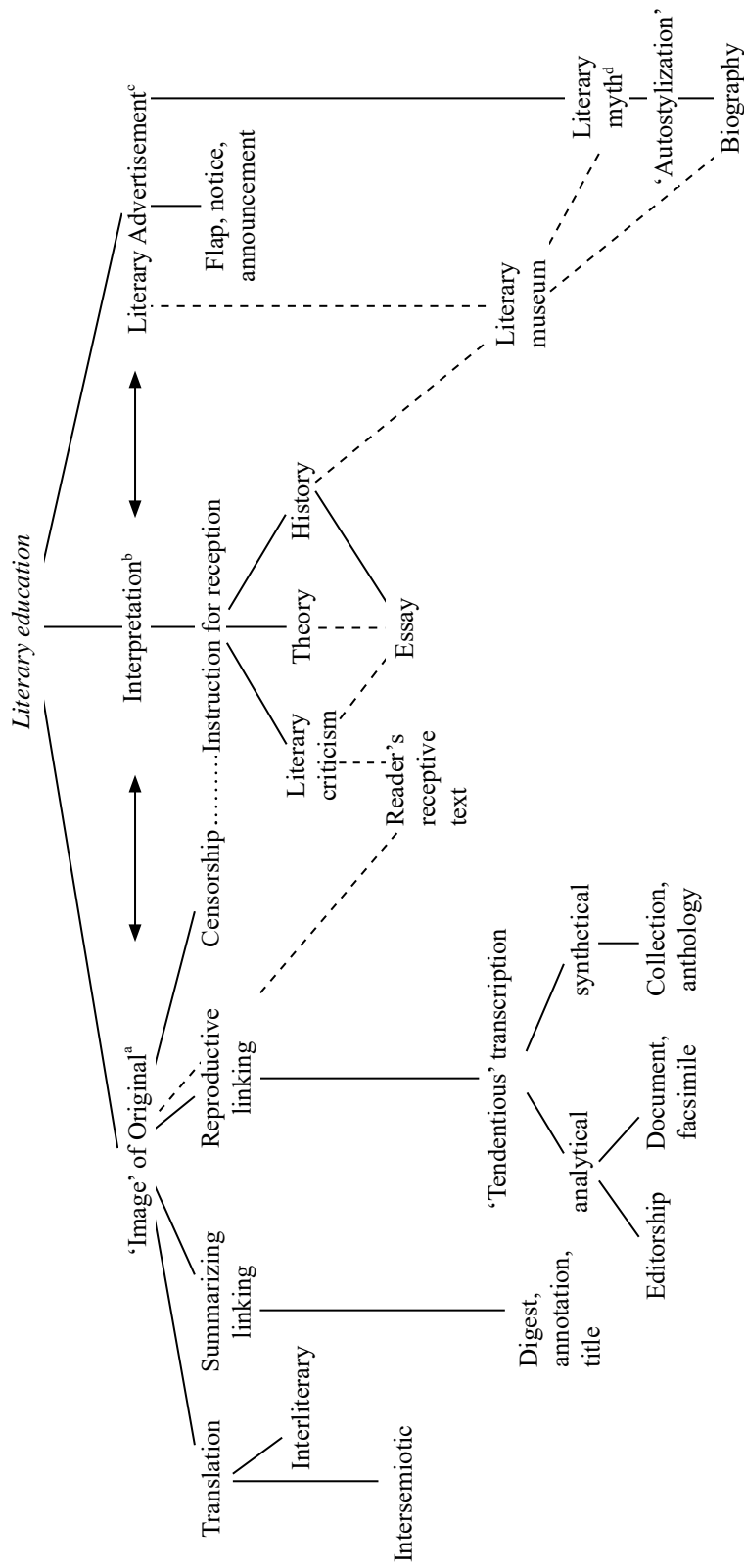
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<sup>1</sup> Headlines in *Guardian* from 9 January 2015, 27 July 2018, 11 February 2016.

contextual information for their reception” (Popovič, Macri 1977: 119). Literary education takes the form of the synthesis (see Figure 1) that includes the “image” of the original, interpretation, and literary advertisement. (Ibid., 120). All types of processing of the original are regarded as examples of meta-communication and embodied in metatexts – translations, adaptations, reviews, etc. (Popovič 1976: 226). The functions of literary education are not contained within the system of formal education, but also are realized in non-formal and informal learning (Council of Europe 2019).

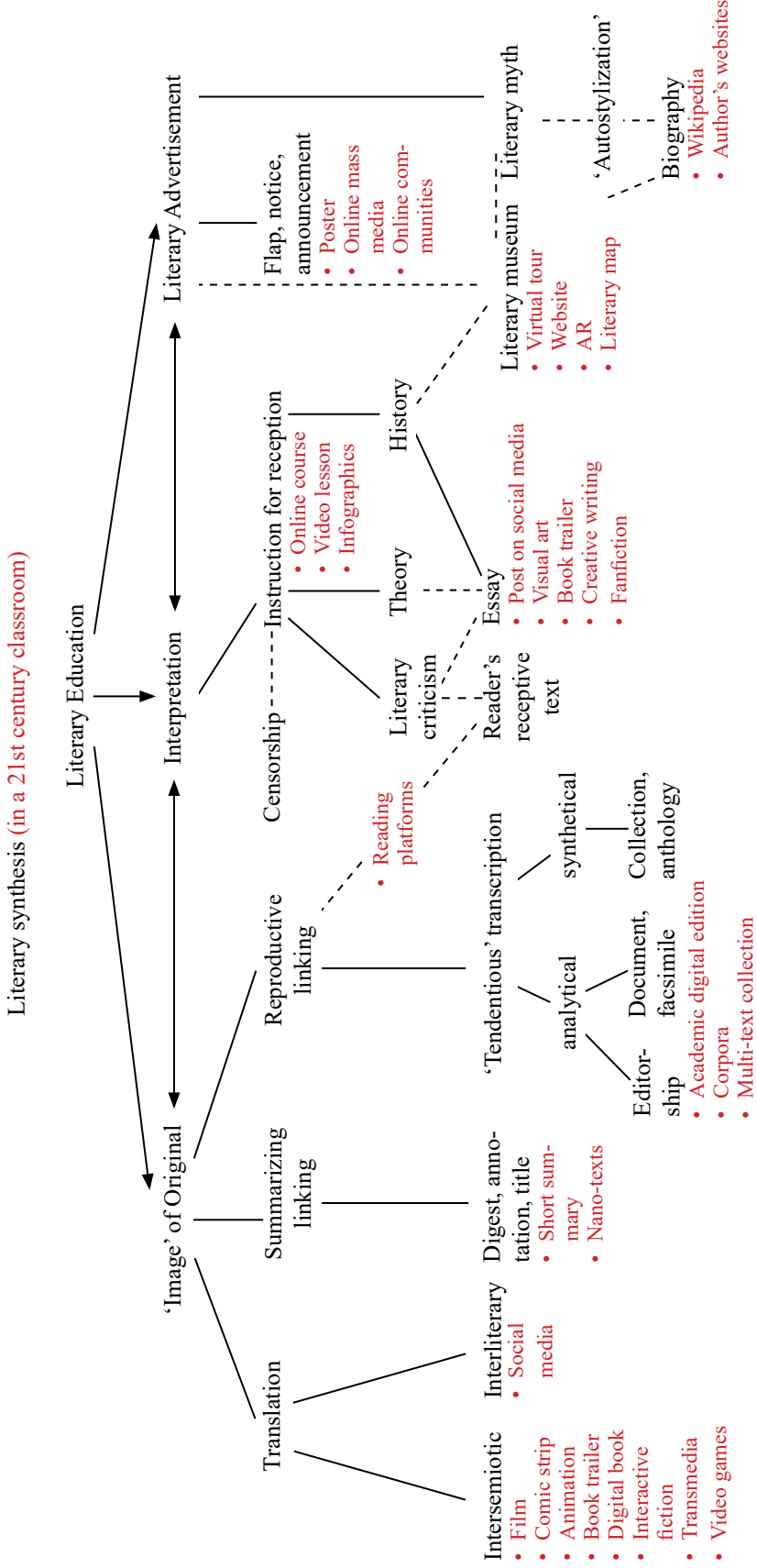
*Digitalization* can be defined as “the way many domains of social life are restructured around digital communication and media infrastructures” and must be distinguished from digitization – “the material process of converting analog streams of information into digital bits” (Brennen, Kreiss 2016: 556). Two processes are interrelated: “digitization not only has an impact on the organizational level, but it also affects all moments in the circuit of media production, distribution, and consumption” (Bolin 2010: 72). While a large body of research has been focused on the use of digital texts in literature education (Unsworth 2006; Simanowski et al. 2010; Churchill 2017), fewer works offer a holistic view that embraces not only texts, but also practices, relations and ethics within the literary education. Keeping in mind both processes, I will concentrate on digitalization as a more general and comprehensive trend (some possible directions are outlined in Figure 2).

Digital technology is powerful yet not the only factor that has triggered the transformation of literary education. Long before the emergence of the Internet, books have been connected via other nets: firstly, intertextually; secondly, on the level of media – by being juxtaposed with other texts under a cover of a paper-based book, as a part of a multimedial whole on a CD-ROM, or dispersed throughout different platforms as a crossmedial or transmedial phenomenon. Digital technology has supported this process in later stages by intensifying various aspects of contemporary media (Hamilton et al. 2015: 19) and offering tools for integrating their means in a conceptual way (Ojamaa et al. 2019: 150). The interrelatedness of various texts in different media can be considered as a feature of *cultural autocommunication* – a mechanism for self-description of culture realized through constant repetition of information across cultural languages (the systems of communication in various forms and modalities including visual art, music or cinema, etc.). The mutual untranslatability of cultural languages makes such attempts inexact, unpredictable and creative, which accounts for the meaning-generating function of cultural autocommunication.



<sup>a</sup>Mode of presentation, <sup>b</sup>Bias of presentation; <sup>c</sup>Public relations of presentation; <sup>d</sup>Academic and public conceptions

**Figure 1.** Literary synthesis (Popovič, Macri 1977: 120).



**Figure 2.** Literary synthesis in the 21<sup>st</sup> century (diagram by the author, 2016)

The **current situation** can be understood as a moment of explosion – “the place where a sharp increase in the informativity of the entire system takes place” (Lotman 2009: 14). According to Lotman, the explosion opens up a completely new, unpredictable and complex path, wherein the future movement is determined by a dominant element coming from the same or different system (Ibid.). Digital technology can be considered such an element that has affected every single life domain, including literary education. As stated by Lotman, “the dynamic processes of culture are constructed as a unique pendulum swing between a state of explosion and a state of organization which is realized in gradual processes” (Ibid., 158). Both the vigorous development of technology and attempts of educational systems to adapt to its effects are parts of “a unified, simultaneously operating mechanism” (Ibid., 12). At one extreme, schools address the challenges of digitalization by reinforcing logocentric approaches; at the other extreme, they try to keep up with it by integrating digital and multimodal texts into the curriculum<sup>2</sup> and/or adopting educational technology<sup>3</sup>. However, even well-grounded attempts do not guarantee success: on the one hand, texts and practices suggested by a teacher might be not as engaging as needed; on the other hand, even the favorites of teens might lose their charm when approached as educational resources. Furthermore, as noted by Potter and McDougall, once too often educators use technology for the sake of technology, believing that it “provides solutions for those with ‘problems’ and generally acts as a neutral force for good” (2017: 2). Such an uncritical attitude puts teachers and students in a vulnerable position, as digital technology can be used “to reinforce and even develop arid and mechanistic practices under the weight of performative pressure” (Ibid., 37). As a result, literature teachers get stuck between inflated requirements of the curricula and ever-growing demands of the technology-centered job market.

The challenge of digitalization should be faced not by merely introducing new texts and practices into formal education, but by reconceptualizing the role of the cultural heritage, its coherency, and the ways of getting into the dialogue with it. We suggest that the digitalization of literary education is supported by grassroots change, rather than by educational policies. As Donald Leu noted on a similar matter, “[o]ur understanding may be informed more often by individuals who use various technologies on a daily basis and less often by traditional forms of research” (2000: 761). Today young people are writing and reading more than ever, which is often overlooked, as we have a limited range of conceptual tools for analyzing meaning-making across modes (Hamilton et al. 2015: 17). New generations are “now developing their transmedia literacy skills outside the classroom (from YouTube to online forums, social media and blogs)”, and “these informal learning spaces are a key component of transmedia literacy research” (Scolari 2018: 15). To understand the whole picture, we need to research “the worlds in which the learners and their teachers actually live, the economic and social circumstances

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<sup>2</sup> For instance, Australian Curriculum in English includes graphic novels, such as Art Spiegelman’s *The Complete Maus* (Beavis 2013: 247), while English literature in the UK is taught on the example of an action-adventure video game *L.A. Noire* (Ibid., 248).

<sup>3</sup> Educational technologies used in literature classroom are numerous and range from *Power Point* presentations to virtual tours, quizzes and quests (Galaktionova et al. 2018).

of those people and the nature of the interaction with and through the many technologies they use” (Potter and McDougall 2017: 2–3). The study of vernacular literacy practices often involves ethnographic methods, such as observation of learning processes and interviews with teachers and students. The examples of smaller case studies include the works by Mackey (2011) and Livingstone and Sefton-Green (2016); large-scale research is exemplified by the Transmedia Literacy project undertaken by an international team of scholars (Scolari 2018).

The main **research question** of this thesis is how can semiotics help to conceptualize and bridge the gap between formal literary education and vernacular digital practices. The problem is approached from both ontological and epistemological perspectives:

- How does digitalization affect the ontology of literary text and literary education?
- How can semiotics help to analyze and handle a cultural shift implied by digitalization?
- What pedagogical and technological solutions can support literary education in the circumstances of digitalization?

The thesis is informed by the works on semiotics of culture produced within the Tartu-Moscow Semiotic School and the tradition of multimodal research. Whereas the former provides tools for considering literary education against the background of cultural autocommunication, the latter addresses it as a set of social relations and practices. The theoretical **background** includes works in multimodality, including those by Gunther Kress (1996, 2005, 2010), Theo van Leeuwen (Kress, van Leeuwen 2006), Carey Jewitt (2005, 2008), Len Unsworth (2006), Denise Newfield (2003) Maureen Walsh (2009) and others. A huge source of inspiration has been the writings of Margaret Mackey (1998, 1999, 2011), who focuses specifically on reading in the context of multimodality. On the practical side, our work has been influenced by stories of enthusiastic teachers from around the world (examples can be found in collective volumes by Williams-Pierce 2016; Galaktionova et al. 2018; Hetland 2017). In the context of the semiotics of culture, the work is built on the ideas of Juri Lotman (1973, 1992a, 1992b, 1992c, 2000, 2009), Peeter Torop and Maarja Ojamaa (2015), and logically succeeds the thesis of the latter (2015). In my work, I aim to broaden the applicability of existing theoretical approaches by applying them to a new subject – the changing nature of literary education. Thus, the **object** of this thesis is not only literary education, but also its transformation in response to digitalization, as well as its role in cultural autocommunication.

The thesis aims to answer research questions by means of experimentation rather than by a theoretical argument. All articles are based on the empirical material gathered through the research and development work. The frame consists of the introduction, three main chapters, the conclusion and the summary of the articles included in the thesis. At first, I introduce the methodology that synthesizes some ideas of semiotics of culture and multimodal approach. Secondly, I give an overview of the work on *Education on Screen* project (EoS), which has served as an empirical background for my research.

# 1. CULTURAL SEMIOTIC PERSPECTIVE

Semiotics of culture offers a holistic perspective on literary education and allows considering it against the background of universal cultural dynamics (Lotman 2000: 417). The emergence of the new forms of texts and practices can be regarded as a result of the mnemonic and meaning-generating functions of cultural auto-communication. Whereas schools might be not ready to accommodate the new forms of texts and practices, eventually they will be included in the curricula, as the state of explosion is inevitably accompanied by the state of organization. The first half of this chapter gives an overview of semiotic concepts employed in the thesis, whereas the second part focuses on educational applications of the semiotics of culture in the circumstances of digitalization.

## 1.1. Literature and cultural autocommunication

The notion of cultural autocommunication may appear sophisticated and even cryptic, yet it refers to one of the most basic cultural processes. Let us decode this notion by taking a look at its compounds. First and foremost, cultural autocommunication is *communication*, which, in the words of Roman Jakobson, can be interpersonal or intrapersonal: “While interpersonal communication bridges space, intrapersonal communication proves to be the chief vehicle for bridging time” (Jakobson 1974: 98). This distinction underlies the two models of communication introduced by Lotman: communication takes place in ‘I–s/he’ system, whereas autocommunication occurs in ‘I–I’ direction (1990: 21). At the same time, every individual act of communication (I–s/he) can be interpreted as an act of auto-communication (collective I–s/he). The prefix *auto-* indicates that the latter is communication with oneself: for instance, the diary record can be made not only to remember certain things, but also “to elucidate the writer’s inner state” (Ibid.) and, hence, to transfer information in time. The distinction between two models can be as well applied to whole *cultures*, which tend “either towards autocommunication or towards the acquisition of truth from without in the form of messages” (Ibid., 35). The cultures of a second type are more mobile and dynamic, yet, are characterized by a sharp division of society into active transmitters and passive receivers, which is a feature of mental consumerism – “a dangerous aspect of the culture which is lopsidedly oriented towards the acquisition of information from outside” (Ibid.). Cultures oriented towards autocommunication, in their turn, require that a receiver transforms “the standard story s/he is acquiring into texts of his/her own consciousness”, which means that they “are capable of great activity, but are often much less dynamic than human society requires” (Ibid.). According to Torop, “[b]eing auto-communicative, culture tries to increase the quantity of information in itself, to raise its quality and to change itself through this” (2008: 394). Lotman concludes that the most viable cultures constantly oscillate between two types of communication (1990: 35).

How can the notion of autocommunication help to understand the complexity of literary experience in the digital age? This problem should be regarded on several levels, starting from the individual consciousness to the text to culture in general, which are defined by Lotman as “semiospheres inserted into one another” (1992b: 18). First of all, any artistic text by its nature initiates the process of auto-communication by being a meaning-generating mechanism. The text facilitates communication between the addresser and addressee; the audience and the cultural tradition; the reader and her/himself; the reader and the text; the text and the cultural context (1992a: 129–132). All these functions simultaneously belong to the general process of cultural autocommunication, as different levels are not only isomorphic to the culture, but also make part of it.

The meaning-generating function of the text is fueled by its heterogeneity – the dynamic relations between various languages, voices, modes, genres and traditions present within one text (1992d: 144). Firstly, the correlation and complementarity between cultural languages imply that any artistic text is implicitly multimodal, which means that even a verbal text can evoke visual, audible, olfactory and tactile mental images. Secondly, any artistic text is involved in dialogic relations with other texts (including its own versions in different media), genres and traditions by means of intertextuality. Thirdly, the dynamism is present on the level of the medium, as the text is juxtaposed with various paratexts (introduction, cover art, front and back matter) and visual elements (illustrations) under a book cover. Thus, reading a book implies decoding all these relations and actively interpreting them. As a result, the artistic text unfolds into a complex and unpredictable world, where multiple understandings are possible. In this way, text can be seen as a formation that “fills a gap between an individual consciousness <...> culture as collective intellect” (Ibid.).

Digital technology has accelerated and amplified the processes of cultural autocommunication. To begin with, it has made explicit the interrelatedness of multiple languages within a single text by juxtaposing the original with its versions in different media (Hamilton et al. 2015: 19). The borders of texts have been blurred as well: on the one hand, texts are now merged with their contexts, which are “just one click away on your laptop” (Bolin 2010: 75); on the other hand, they are linked to their metatexts – advertisements, trailers, and announcements, etc (Ibid., 76). The implicit multimodality of literary text has been fully realized by means of transmedia storytelling, when “transmedia story unfolds across multiple media platforms, with each new text making a distinctive and valuable contribution to the whole” (Jenkins 2006: 97). From the perspective of semiotics of culture, transmedia storytelling can be considered as an example of both transmediality and crossmediality. The former, as an ontological feature of culture, implies spontaneous and unpredicted pulverization of text into new texts in different media, while the latter refers to intentional and target-oriented processes curated by an author or a group of authors (Ojamaa 2015: 11).

Whereas reading and interpreting books used to be a mostly solitary activity, now the workings of the human mind can be broadcast live on the Internet. New meanings are constructed collaboratively and in an explosive manner, when one



text posted online can trigger the emergence of new texts. Intrapersonal communication, when moved online, instantaneously becomes interpersonal and is included in the general process of cultural autocommunication<sup>4</sup>. Thus, online communication can be regarded as intrapersonal, interpersonal and collective at the same time.

As the number of versions of the same text grows larger, it becomes more likely that one would be introduced to a text via one of its retellings. Whether in the literature classroom or beyond the school walls we are entitled to deal with incomplete and heterogeneous literary knowledge. Instead of reading Shakespeare's plays in the original, most people gain information from elsewhere – by watching film adaptations, looking at memes, strolling through gift shops, laughing at stand-up comedy, chatting in messengers, or reading comments on *Youtube*. The incompleteness of information is compensated with its stereoscopicity – “the possibility of getting a completely different projection of the same reality, its translation into a completely different language” (Lotman 1992c: 45). Stereoscopicity can be seen as a key aspect of cultural autocommunication: the development of non-identical images of the text in the minds of different people makes communication more complex and at the same time enriches culture (Ibid).

## 1.2. Literary education in the digital age

Formal literary education has been traditionally focused on the communication of literary canon and the development of logocentric skills. Reading full-length versions of the original texts is still considered a norm, yet less and less attainable. Studying literature via abridged versions or metatexts is regarded as problematic due to presumable poor quality of such texts: for instance, it is believed that summaries can merely offer a superficial and distorted image of the original (*Kontseptsiya prepodavaniya* 2016: 5<sup>5</sup>). At the same time, the “unmediated” reading of the original is hardly possible, since literary texts are always mediated by meta-communicative agents – editors, copyists, historians or educators: “On its way to a receiver the literary text undergoes various stages of process of literary synthesis, resulting in such syntheses as collections, anthologies, public readings and so on” (Popovič , Macri 1977: 117). In such model, the outcome of learning depends heavily on the expertise of the teacher, who is responsible for

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<sup>4</sup> A good example is a crowdsourced platform *Genius* (<https://genius.com/>) for decoding complex song lyrics.

<sup>5</sup> *Kontseptsiya prepodavaniya russkogo yazyka i literatury v obsheobrazovatel'nykh organizatsiyakh Rossijskoj Federatsii: utverzhdena rasporyazheniem Pravitel'stva Rossijskoj Federatsii ot 09.04.2016. No 637-r.* [Концепция преподавания русского языка и литературы в общеобразовательных организациях Российской Федерации: утверждена распоряжением Правительства Российской Федерации от 09.04.2016. No 637-p]. Retrieved from <http://static.government.ru/media/files/GG2TF4pq6RkGAtAIJKHYKTXDmFIMAAOd.pdf> on 17 September 2020.

motivating the students and supporting them in course of reading. The problem is complicated by the ever-growing demands of the curriculum resulting from the quantitative growth of cultural heritage. The expansion of knowledge comes into conflict “with the capacity of human brain and of human society to process and to keep under control an increasing amount of intellectual works” (Marcus 2015: 72). As a result, the requirements of the curriculum do not match students’ “capacity to assimilate knowledge” and “ignore some basic hygienic requirements and adopt an aggressive attitude towards children” (Ibid.). Ironically, the stage of reading – the most important one – is often omitted from school practice, since the compulsory literature lists become excessively vast.

The above-described model of literary education can be associated with Lotman’s understanding of culture as oriented towards texts and precedents – in contrast to the other type perceived as a sum of norms and rules (2000: 417). A synthesis of the two models presumably results in a more balanced approach, which allows developing a wide range of literacies apart from introducing the canon. In the circumstances of digitalization, the most necessary “norms and rules” seem to relate to “the ability to follow the flow of stories and information across multiple modalities” (Jenkins 2009: xiv). Instead of concentrating on a sole text, readers are expected to “actively seek out content through a hunting and gathering process which leads them across multiple media platforms” (Jenkins 2010). Thus, one of the functions of literary education is to prepare students for navigating the heterogeneous world of texts in different media and integrating them into a coherent whole.

The practical implementation of such approach is a difficult<sup>6</sup>, yet rewarding process. Firstly, it requires the integration of new forms of texts and practices into the curriculum. For instance, such “literature-oriented, inter-media, intertextual learning activities” can be based on e-books, CD-ROMs, authors’ and publishers’ websites, platforms for readers’ collaboration, teachers’ websites and digital games, as has been extensively analyzed by Len Unsworth (2006: 106). These metatexts can serve as “teasers” attracting young readers to the original and thus fulfilling the advertisement function (Ibid., 6). On the one hand, they provide phase space information about the “[t]hings that might have happened in the plot but did not, aspects of characters or incidents that are known to the author or that can be imagined by readers but that are not laid down in the novel itself” (Mackey 1999: 19). On the other hand, engagement with such texts can help students to explore the specificity of different media (Ojamaa 2015: 37), as well as develop their capacity to transmediate, or to translate meaning into another system of signs. According to Siegel, transmediation has the potential to benefit more students in contrast to using a sole sign system, since different students can learn

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<sup>6</sup> The availability of meta-texts based on classic literature is one of the first problems that a teacher may face. Luckily, such versions are abundant, since the creators of the new texts frequently chose the sources that are already deeply rooted in culture: “the more innovative a production is at utilizing the affordances of the medium, the more conservative it needs to be on the level of content in order to help the public make that transition” (Jenkins 2017: 1063).

better in different sign systems (2006: 70–71). Finally, “juxtaposing or remixing elements from pre-existing texts of different media into a new whole” can become “potentially a way of creating texts with both new meanings and new functions in culture” (Ojamaa 2015: 37). By analyzing metatexts, students “project the authors’ own information about what was discarded from the published narrative and ‘re-vision’ the stories to construct versions in which these elements are retained” (Siegel 2006: 32). In this case, such resources can become the raw material for further transmedia production, as “readers become writers, developing new, alternative or modified episodes and story elements within the phase space of the original story” (Ibid., 40).

## 2. MULTIMODAL PERSPECTIVE

Whereas semiotics of culture allows analyzing the ontology of literary education in the digital age, the multimodal approach introduces the social semiotic dimension. The first part of this chapter gives an overview of the approach and discusses the hierarchy of modes preferred in society through the prism of governability. The second part introduces the principles of multimodal pedagogy and suggests some ideas for bridging the gap between formal education and vernacular literacy practices.

### 2.1. Modes and power

*Multimodality* is an interdisciplinary approach that focuses on multiple modes used in communication and expression. Even though human communication has always had multimodal qualities, it was only in the mid-1990s when multimodality became an object of a broad academic discussion thanks to the New London Group (Page 2009: 4). Initially centered on multiliteracies, over the past two decades the approach has been extended to other contexts, including marketing, design and digital education.

According to multimodal perspective, “meanings are made (as well as distributed, interpreted, and remade) through many representational and communicational resources, of which language is but one” (Jewitt 2008: 246). *Mode*<sup>7</sup> is defined as “a socially and culturally shaped resource for making meaning” (Kress 2010: 79), such as image, writing, layout, speech, video, music, voice, dress, gesture, spatial resources, perfume, etc. Each mode plays a discrete role in a communicative act and “provides specific potentials and limitations for communication” (Kress 2005: 5). *Multimodal literacy*<sup>8</sup> implies “processing of more than one mode and the recognition of the interconnections between modes” (Walsh 2009: 16) and involves not only reading, but also “viewing, understanding, responding to, producing and interacting with multimodal texts and multimodal communication” (Ibid.). Since the status of a mode in society is relative and changes over time, the history of education can be seen through the prism of modes.

Whereas the principles of multimodality have already been adopted by international and local educational policies (Herrero 2018: xvii), actual learning processes are still largely “formed around the logics and rationalities of writing”

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<sup>7</sup> *Mode* should be distinguished from the *medium*, since the latter can refer either to physical materials used for communication or to a channel of communication (Page 2009: 6). A mode can appear in different media (like written or spoken language), whereas different modes can be realized in the same medium (for instance, a comic strip simultaneously employs images and words). Also, modes cannot be defined through *sensory channels*: spoken language falls into an auditory category, whereas written language is perceived visually.

<sup>8</sup> Multimodal literacy is close to other terms developed within various academic traditions: “new literacies”, “multiliteracies”, “digital literacy”, “media literacy” or “transmedia literacies” (Ibid.).

(Kress 1996: 193). The written word is preferred by educated elites, as it references “the values of specialist knowledge, authority, and authenticity” (Jewitt 2005: 323). To describe the system of power relations within formal education, we will use Michel Foucault’s neologism *governmentality* – “a set of the organized practices (discourses, rationalities and techniques) through which subjects are produced and controlled” (Hamilton 2015: 4). According to this concept, power does not originate from a single node in a political hierarchy, but is “a dispersed and productive process that circulates through the everyday social practices of institutional life” (Ibid.). The populations are actively invested in their own discipline and can express their agency through either complicity or resistance to the regimes of power. The literacy regime enforced by school can strongly affect the formation of students’ identities: to identify as a member of a socially meaningful group, one needs to master specific modes – socially accepted “ways of using language, of thinking, feeling, believing, valuing, and of acting” (Gee 1990: 143). The regulatory system is generally blind to diverse expressions of literacy acquired by young people beyond the school walls and tends to “shape their efforts towards particular, often pre-determined goals” (Livingstone, Sefton-Green 2016: 57). For instance, popular music techniques such as “sampling” or “mashing” are treated as improper and plagiaristic in school settings (Kress 2010: 134), while being widely accepted in the entertainment industry. The same goes for participatory literary practices, such as writing fan fiction, filming parodies or producing other forms of fan art. Even though some traditional school practices rely on creativity, play and physical exercise – for example, art and music courses or playing tag in school hallways – they are likely to be restricted, if students do poorly at tests (Baines 2008: 146). If mastering the required literacies appear too challenging for students, “it becomes their own fault, and so according to the logic of schooling, they are further marginalized” (Hamilton 2015: 16) and “are likely to be interpellated into a system in which they misrecognise themselves as learners” (Potter, McDougall 2017: 18).

The compliance of students and teachers with the requirements is controlled through different technologies of governance, such as screenings, standardized tests and other forms of data acquisition. The statistics can determine a school’s status, its funding, teachers’ salaries, graduation options of students and implicitly affects the process of learning, since “[m]ost teachers feel an immense pressure to cover precisely the material that is expected to show up on the exam, no more and no less” (Baines 2008: 15).

## 2.2. Multimodal pedagogy

Multimodal pedagogy does not only support learning in multiple modes, but also balances power relations by promoting the agency of students. Learning is approached from the perspective of design, which is considered a “major factor in the shaping of social relations and in their semiotic realization” (Kress 2010:

142). Design is understood as a process – “a sequence of actions, a process motivated by our purposes”, “a form of governance, of taking control in a more widely distributed balance of agency” (Hamilton et al. 2015: 23) – rather than merely as arrangement of materials on a page or screen. The notion of design can be applied to “teachers’ pedagogic designs of learning processes” as well as to “students’ designed constructions of meaning” (Jewitt 2008: 253).

The students express their agency on each step of the learning process: “*interest* shapes *attention*, which produces *engagement* leading to *selection* of elements from the message, leading to a *framing* of these elements, which leads to their *transformation* and *transduction*, which produces a new (‘inner’) *sign*” (Kress 2010: 42). Multimodal approach implies that students learn by transforming given resources in accordance “with the designer’s interests in this occasion of design and in relation to that audience” (Kress 2004: 20). The focus on transformation rather than on acquisition makes the designer agentive and results in “an effect on the world, a transformed meaning and a transformed world” (Ibid.). This is strikingly different to a typical literature classroom, where students are supplied with ready-made meanings and are expected to reproduce them “at a later time as an indication of learning” (Siegel 1995: 464). Rather than being student-centered, such pedagogic design aims to push students towards an imposed goal and leave them no choice but to follow a predetermined learning path (Kress 2010: 142).

Whereas the principles of multimodal learning have already been adopted in some classrooms (Romero et al. 2018), the precedents are still sporadic and few. At the same time, multimodality is inherent to informal learning that “takes place outside schools and colleges and arises from the learner’s involvement in activities that are not undertaken with a learning purpose in mind” (Council of Europe 2019). Being a life-long process, informal learning is driven by one’s interest rather than by external goal (2010: 42) and is exemplified by vernacular literacy practices undertaken online and offline. Digital technology “has lowered the cost of production” and “opened up new channels of distribution and circulation, creating a space where amateur media content can be engaged with via a larger public” (Jenkins 2017: 1063). Whereas such practices have been generally ignored (if not criticized) by formal educational systems, today they can be regarded as the evidence of media literacy that “can no longer be limited to the critical analysis of media contents or the acquisition of skills inside the formal education system” (Scolari 2018: 14).

How can the experience gained from the analysis of vernacular practices be adapted to school settings? According to Bulfin et al., “schools should be looking to complement and extend students’ digital practices, rather than simply replicating and reinforcing how technologies are being used elsewhere in their lives” (2016: 249). On the one hand, this would require finding more room for creativity and experimentation, which is always lacking in the circumstances of “fast” policy and instant accountability (Hamilton et al. 2015: 216). On the other hand, the curricula need to be changed to accommodate the new forms of texts, practices and social relations. Instead of being the all-knowing other, teacher will become a “knowledge facilitator” or “cultural translator”, who serves as “an

interface between the educational institution (the classroom, the school) and the external media ecology where the students live and create” (Scolari 2018: 15). In terms of semiotics of culture, teachers will be positioned at the periphery of formal education, as they engage in a dialogue with the Other and actualize “the possibility of an unpredictable, innovative and, most importantly, free action, that enables and empowers the individual” (Ibrus, Torop 2015: 5). The role of the teacher is thus to guide students in the world of options before they have mastered “the art of discernment”, become “aware of their own subjectivity” and able to “intervene in and change the world” (Ibid.). An example of good practice has been set by Transmedia Literacy project that did not only offer the analysis of informal learning practices, but also suggested alternatives for “applying and benefitting from teenagers’ transmedia skills – developed outside school – inside the formal educational system” (Scolari 2018: 107).

### 3. FROM THEORY TO PRACTICE

As discussed previously, formal literary education lacks the flexibility required for meeting the demands of digitalization: the proportion of non-logocentric texts and practices in the curricula remains too little, whereas students are deprived of the agency. At the same time, there already exist some grassroots solutions that can form the basis for future change. This chapter presents one of such solutions – a digital learning platform – that supports literary education through the integration of metatexts in various media. The first subchapter discusses the theoretical and technological premises of learning via digital platforms; the second one focuses on the practical application of this framework to the development of *Education on Screen*; the third one analyzes the results of the project development workshops based on the same model.

#### 3.1. Digital learning platform

While the phenomenon of digital platforms has been theorized in different science fields, we will adhere to the perspective of media studies. In a broad sense, a platform can be considered as an interface for accessing different types of media: “[y]ou can view images, videos, text documents and maps inside email, in a browser, on your notebook, a PC, laptop, tablet, mobile phone, internet-enabled TV, or an in-car or in-flight entertainment system” (Manovich 2013: 229). In a narrower sense, platforms can be regarded through the prism of textuality: apart from being used for storing, distributing and manipulating texts, the platforms can themselves initiate the emergence of the new types of texts (Bolin 2010: 74). Drawing on these ideas, we define a digital learning platform as an Internet-based environment that organizes different educational resources and offers tools for engaging with them. The type of a platform exemplified by *Education on Screen* should be distinguished from learning management systems (LMS) or platforms hosting massive open online courses (MOOCs). In contrast to these examples, EoS is mostly a content-based platform, as it does not allow online interaction with peers or students, nor it offers personalized learning.

Firstly, the platform allows juxtaposing interrelated texts – such as prototexts, metatexts and intertexts – and thus revealing the inherent intertextuality of cultural heritage. The platform shares generic features with the format of collection, which, according to Popovič and Macri, “presents original texts in some kind of dialectic arrangement to project or bring out the original in a way otherwise not possible” (1977: 124). While analyzing the constellations of texts in different discourses and media, students can explore the nature of narrativity as well as observe the universal cultural mechanics.

Secondly, the juxtaposition of various texts on one platform allows analyzing the process of cultural autocommunication through the prism of divergence and convergence. The former is defined as “the diversification of media channels and



delivery mechanisms”, while the latter as “the situation in which multiple media systems coexist and where media content flows fluidly across them” (Jenkins 2006: 282–287). Apart from employing multiple modalities, the platform synthesises “old” media with born-digital (and participatory) formats, such as online reviews, trailers on *Youtube*, posts on social media and many more. Whereas such granulated formats are generally excluded from the curriculum, they can serve as a useful material for understanding the nature of cultural autocommunication. Partial reading on a digital platform “serves a holistic purpose, i.e. harnessing the affordances of digital media convergence, textual fragments are presented in a manner that allows for the creation of a holistic understanding of the text”. (Ojamaa et al. 2018: 137). Being isomorphic to culture itself, the platform facilitates the semantisation of content for different aims and therefore can have meaning-generating functions.

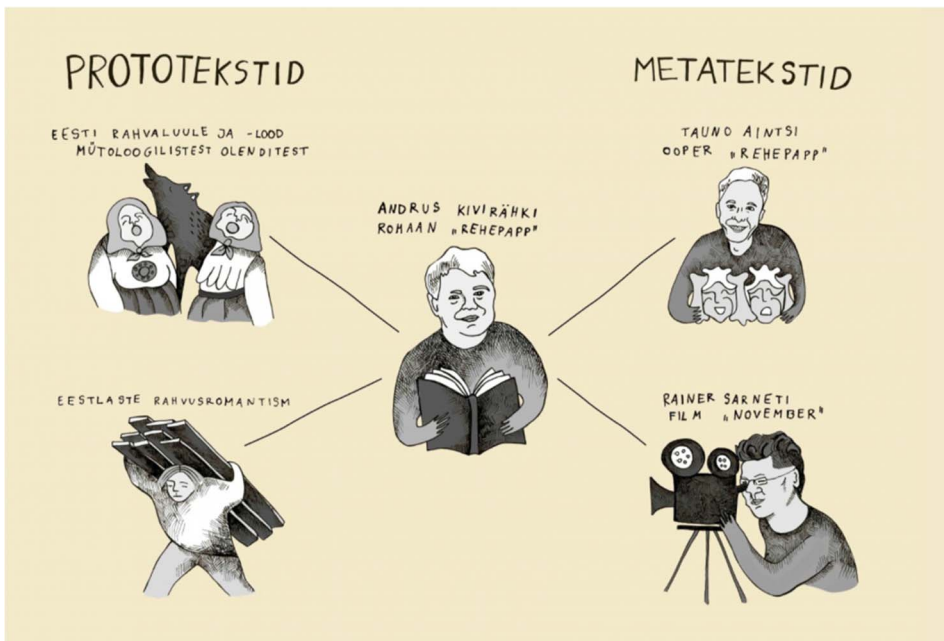
Thirdly, the digital platform takes into account various learning habits by balancing the modalities and discourses: instead of reading a full-length novel, which can be time- and energy-consuming, students may focus on the versions in other media (Baines 2008: 30). Apart from that, the platform allows integrating vernacular learning practices, including those that are peripheral to school education but flourishing in out-of-school settings. In contrast to logocentric education focused on the original version of the text, multimodal approach promotes the ideas of collaboration and shared authorship and therefore supports the generation of different interpretations of the text.

Finally, the platform creates a shared space for facilitating a dialogue between different cultures. According to Juri Lotman (1997: 766), a phenomenon belonging to a foreign culture becomes more understandable when juxtaposed with similar phenomena in one’s own culture. A spatial rather than linear logic of the digital platform helps students to explore cultural phenomena on a larger scale. On the one hand, a platform can have multiple language versions adapted to the needs of different audiences; on the other hand, the potential interests of various cultural groups can be considered in the design of a platform (for instance, a cross-cultural dimension can be introduced in the form of comparisons, examples or illustrations).

### 3.2. Education on Screen

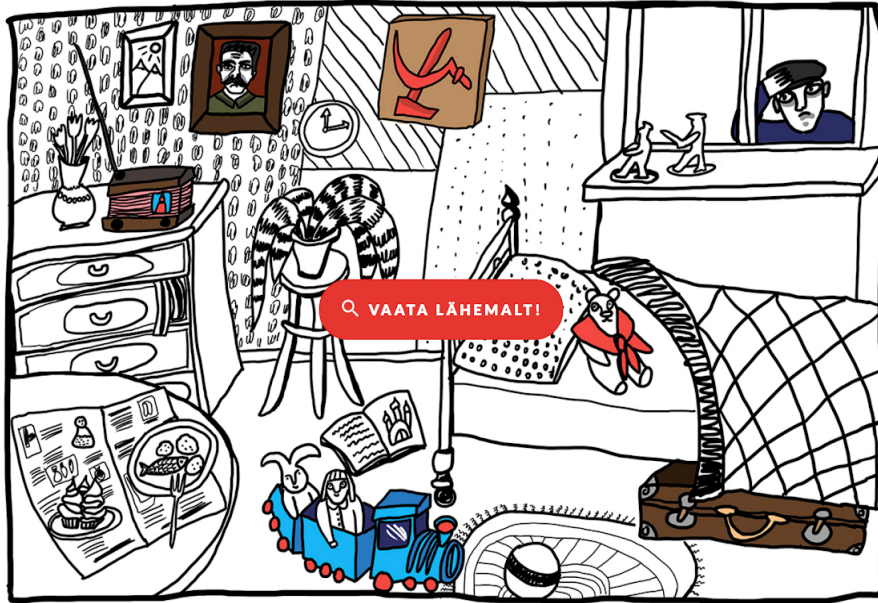
The beginning of *Education on Screen* dates back to the Autumn 2015 when a team of semioticians from the University of Tartu formed the Transmedia Research Group. After a few weeks of reading articles on transmedia and discussing peculiar examples, we started a project of our own – a digital learning platform based on a best-selling Estonian novel *The Old Barny and November* by Andrus Kivirähk (original title in Estonian – *Rehepapp ehk November*). By pure chance we found out that a team of filmmakers headed by Rainer Sarnet was adapting the novel into film, so we got in touch and that was how *Literature on Screen* started. Since then, our group has been applying semiotics of culture to the

development of open access online platforms balancing between a thorough treatment of empirical examples and presentation of a general theoretical framework. From 2016, the work on EoS has continued in the frame of the research project “Culture as Education: Transmediality and Digitality in Cultural Autocommunication” that aims “to develop the principles of intermediary analysis of culture, to explicate the possibilities of such analysis in empirical studies, and create educational materials supporting their application in school education” (Ojamaa et al. 2019: 135). As of the Autumn 2020, the team has released four platforms: *Literature on Screen* (2017), *History on Screen* (2018), *Identity on Screen* (2019), and *Nature on Screen* (2020).



**Figure 3.** *Literature on screen: from novel to film* (illustration by Katariin Mudist)

The development of *Literature on Screen* (<http://kirjandusekraanil.ee/>) (LoS) took a long time, since everything had to be built from scratch, starting from the methodology and tasks to illustrations, translations, web-design, etc. While the course was originally focused on analyzing the lifecycle of adaptations (Figure 3), eventually it was complemented with a new section aimed at the introduction of the cultural context. The interactive map of the storyworld comments on the most problematic topics detected in course of test readings, such as humor, mythology, religion, intertextuality, etc. Another issue revealed during the testing was the dominance of verbal content over the multimodal one, which was addressed in the following projects. At the time of this writing, LoS has been tested by more than 300 secondary school students in Narva and Tartu, as well as by teachers and participants of a special course at the Estonian National Museum.



**Figure 4.** *History on Screen*: the map of the storyworld (illustration by Alexandra Milyakina)

*History on Screen*<sup>9</sup> ([ajalugu.haridusekraanil.ee/en/](http://ajalugu.haridusekraanil.ee/en/)) (HoS) is based on Leelo Tungal's autobiographical trilogy (*Comrade Child and grownups* 2008, *Velvet and sawdust* 2009, *The touch of a woman's hand* 2018) and its film adaptation *The Little Comrade* (2018) by Moonika Siimets. The story depicts the life of a young Estonian girl whose mother was deported to Siberia during the Stalinism era. Guided by previous experience, we concentrated on the cultural context (Figure 4) and structured the course around collaborative and practice-oriented tasks. The platform features much more audiovisual materials and interactive elements, such as drag-and-drop tasks and tests with instant feedback. The map is a central part of the platform and includes not only verbal comments, but also expert opinions in video format and interactive tasks. On the content side, we expanded the range of subjects covered by the course and introduced the elements of historical and political science, as well as integrated up-to-date cases based on news pieces or phenomena of pop culture. From this time onwards, our platforms have also included guidelines<sup>10</sup> for teachers. The platform has been tested by more than 150 students in Tallinn, Tartu and Narva, including 30 participants of an elective course "Artistic text as a mediator of historical memory" carried out in Tallinn.

<sup>9</sup> Starting from HoS, we have outsourced web-design and programming to design agency, which allowed us to adopt more daring technological solutions. Tartu-based design agency *RedWall* has provided the design and technical support for HoS, IoS and NoS.

<sup>10</sup> Guidelines for HoS were developed in collaboration with startup accelerator programme *Õpiveski* organized by the Institute of Education at the University of Tartu.



**Figure 5.** *Identity on Screen*: the map of the storyworld (illustration by Mehmet Emir Uslu).

The growth areas became more explicit during the work on our third project, *Identity on Screen* ([identiteet.haridusekraanil.ee/en/](http://identiteet.haridusekraanil.ee/en/)) (IoS), based on *Truth and Justice* (1926–1933) by Anton Hansen Tammsaare and the eponymous cinematic adaptation by Tanel Toom (2019). The platform focuses on the problems of identity, such as the elation of oneself to other people, material culture, and natural environment. The range of subjects has been expanded further to accommodate nature science topics in addition to history, psychology, culture studies and literary analysis. All the content is contained within an interactive map (Figure 5) and is oriented towards project-based learning and learning-by-doing, which helps to link the study material to the everyday environment of students. For instance, students get to analyze multimodal materials to define the role of bogs in Estonian culture, shoot a film from the perspective of a cow, or create a strategic development plan for an imaginary farm. To connect an almost century-old novel to contemporary agenda, we made use of digital resources, such as Estonian archives of texts, images, videos and sounds, webpages of national parks, a visual database of the Estonian National Museum and many more. The platform has been presented to school teachers during the screenings and tested in 2020.

*Nature on Screen* ([loodus.haridusekraanil.ee/en/](http://loodus.haridusekraanil.ee/en/)) (NoS) is focused on the legacy of Estonian biologist and nature photographer Fred Jüssi, whose unique perceptions of nature are mediated in Jaan Tootsen's film *The Beauty of Being* (2020). The course explores the representation of the natural environment in film, word, sound and image. Unlike previous platforms, NoS concentrates specifically on

the objects of life science and employs the concepts of ecosemiotics and ecology. The project synthesizes the elements of humanities and natural sciences in order to help students to notice and conceptualize the interpretative relations between the culture and nature. The learning is project-based: for instance, students are asked to shoot short films based on Fred Jüssi quotes, analyze posts about nature on social media, or record a soundscape. The platform has presented to teachers and students on numerous occasions in 2020, including the workshops at Tartuff festival in Tartu and the conference “Film Education – Framework to impact” in Tallinn.



**Figure 6.** *Estonian Film Classics: metatexts of Spring in Estonian culture (a prototype).*

The latest project of the Transmedia Research Group is focused on the classics of Estonian cinema: *Spring* (original title *Kevade*, 1969, dir. Arvo Kruusement), *The Last Relic* (original title *Viimne reliikvia*, 1969, dir. Grigori Kromanov), *Dead Mountaineer's Hotel* (original title “*Hukkunud Alpinisti*” hotell, 1979, dir. Grigori Kromanov). In partnership with the Estonian Film Institute, the team is developing a semiotically-driven framework for analyzing and teaching Estonian films at secondary schools. In line with our approach, we aim to highlight the topicality of classic texts by linking them to the contemporary context: for instance, *Spring* is presented against the background of its metatexts in popular culture (Figure 6), *The Last Relic* is analyzed from the perspective of the political background, and *Dead Mountaineer's Hotel* is explored in terms of the soundtrack and visual identity.

Besides that, the group actively engages in academic conferences and public speaking, as well as organizes workshops and courses for the students, teachers and general audience (see the Part 3.3). Apart from carrying out stand-alone events, we have tested our approach in a semester-long course “Applications of Semiotics of Culture” at the University of Tartu. During the academic year 2018–2019, master students in Semiotics participated in the development of the content for *Dead Mountaineer’s Hotel* project, while the course of 2019–2020 developed individual projects based on different artistic texts (Figure 7).



**Figure 7.** “The world of Toomas Nipernaadi” (a fragment of the final presentation by Lii Ranniku for the course FLSE.00.285 Applications of Semiotics of Culture, 2020)

### 3.3. Project development workshops<sup>11</sup>

A meaningful dialogue with the cultural heritage requires the mastering of trans-media skills including “the creation, production, sharing and critical consumption of narrative content” in various forms (Scolari et al. 2018, p. 803). To support the development of such skills, Transmedia Research Group offers a possibility to gain hands-on experience by designing the prototypes of educational projects.

<sup>11</sup> The Part 3.3. is based on the paper presented at the Transmedia and Language Pedagogy Conference in Manchester, England (27–28.07.19) and accepted for the volume *New Approaches to Transmedia and Language Education* (to be published in 2021).

The four workshops discussed in the subchapter took place in the year 2018 and lasted from 45 to 120 minutes. The participants had different socio-demographic background: Workshops 1 and 2 were organized for high school students (Russian- and Estonian-speaking groups) as a part of Doors Open Days at the University of Tartu; Workshop 3 took place the frame of the masters-level course in the Semiotics of Literature at the University of Tartu; Workshop 4 was organized for a mixed audience at *Dare to Learn* festival in Helsinki, Finland. In all cases the participants were asked to develop educational projects for promoting a mythological/literary text or a group of texts by one author; the steps included choosing a topic, mapping a problem, developing a proposal for a project and presenting it to the rest of the audience. One of the requirements was to make the project entertaining at the same time. Participants worked in teams of 3–5 people, while a facilitator – a member of the research group – kept track of time and moderated discussions. In total 13 project proposals were created.

The data used in the analysis include observational field notes, feedback surveys and multimodal artifacts created by students. The methodology is based on the multimodal approach (Kress, van Leeuwen 2006; Kress 2010; Kress et al. 2014) implying that the cognitive process of students' learning can be analyzed in the form of the signs they've made (see Part 2.2.). The analysis focuses on the following dimensions: students' selection and adaptation of elements from the lesson; introduction of elements not made available by the teachers; arrangement of these elements into texts and their 'design'; the representational modes used by students; the physical characteristics of the texts – their materiality (Ibid., 46–47). The last parameter is omitted, since all works share the same physical form (drawings and texts produced with felt-tip pens on paper).

**Workshop 1** was organized for Russian-speaking high school students and was preceded by a brief theoretical introduction to semiotics. Despite the limited time frame (45 minutes) and lack of experience, the participants managed to develop two proposals.

- **Selection and adaptation of elements.** Since the participants were not very motivated in the beginning and struggled to make their choices, the facilitator had to actively engage in the process and offer the object herself – the life and work of the major Russian author Alexander Pushkin. The first group created a proposal for a video game starring Pushkin and his adversary Georges-Charles d'Anthès, while the second one came up with a list of features for an educational platform (a collection of memes about Pushkin, a digital tool for designing characters, a tool for creating new songs based on Pushkin's lyrics, etc.).
- **New elements.** The workshop took an unexpected turn, as the first group chose to create an educational video game in the genre of a shooter, which was quite an unusual medium for teaching literary history. The new elements were derived from a typical interface of video games, such as the composition of a screen or a heart icon indicating the number of lives. Both groups included

some facts about Pushkin's life and work, which were not brought up by the facilitator.

- **Design and modes.** The first group sketched out an interface of a video game on paper, while the second one only listed some features. The sketch is divided into two parts: the top one includes the title “d’Anthès vs. Pushkin”, a heart icon and elaborated drawings of the characters; the bottom one offers rather superficial facts in a verbal form. According to the grammar of visual design (Kress, van Leeuwen 2006: 180–186), the top of the page is usually reserved for the idealized and generalized essence of information, while the bottom presents more specific and practical information. This allows us to think that the visual part was treated by the group as dominant, while the verbal one – as supplementary. Unfortunately, neither of the elements has a distinctive educational function, since most of the time the team was busy remediating a single screen on paper.

The first testing of the model revealed several problems that were to be addressed in the following sessions: thus, an unprepared audience was likely to rely on the resources suggested by the facilitator rather than develop independent solutions; if the latter did happen, the students struggled with balancing the entertaining and educational features of the project. Other problems were related to poor group dynamics, as the participants were mostly unfamiliar to each other, as well as the lack of knowledge about the chosen subject. Anyhow, the workshop can be still considered as successful, since the students (at least the first group) managed to adapt given resources, introduce the new elements and design the new whole in accordance with their interests.

**Workshop 2** organized for Estonian-speaking secondary school students had a similar structure, except that the topic – *Truth and Justice* by A. H. Tammsaare – was offered by the facilitator in the beginning. In total, 5 proposals were presented.

- **Selection and adaptation of elements.** The facilitator provided a list of educational formats – an interactive map, a video game and a wiki – and gave hints on their implementation. All groups made use of these suggestions and adapted the features of the above-mentioned formats for educational purposes.
- **New elements.** The students independently developed the content by using their knowledge of the text and connected their proposals to the plot and storyworld of the novel. They also came up with their own design ideas by adding elements not mentioned by the facilitator, such as simulation games or character profiles.
- **Design and modes.** Three of five groups chose the format of the interactive map: the first one featured a visual depiction of the storyworld without any verbal text; the second one presented not only the exterior, but also the interior of houses, so that users could ‘look inside the building’, ‘view the village during different seasons’, or ‘learn more about daily life’); the third one included elements of simulation game, which allowed to take control of the characters.



Two remaining projects mostly employed verbal mode complemented with visual elements: the first proposal depicted family networks of *Truth and Justice*, while the second covered the contextual information (traditions, agriculture, family and language) in the form of the wiki.

As well as in the first case, the second workshop followed only some steps of the learning process brought out by Kress (2010: 42): the students did not have a chance to choose their own topic, as this step was omitted to save time. However, this seemed to be the right decision, since the students demonstrated a good knowledge of the source text and could work out their ideas independently. All the teams managed to adapt given resources and complement them with the new elements: while some focused on the storyworld, others paid attention to the plot and characters. Yet, the concept of edutainment appeared too complex for the students: whereas all projects were clearly educational, not all of them could be easily recognized as entertaining. Even though some of the proposals were too sketchy and only gave a glimpse of the features, all of them could be potentially developed into actual educational products.

**Workshop 3** was the only one held for the master students in Semiotics. The participants were advised to select an object related to Estonian folk culture and were provided with a list of possible formats. As a result, 3 proposals were presented.

- **Selection and adaptation of elements.** All three teams made use of the ideas proposed by the facilitator and adapted them for educational purposes: two groups chose a format of TV series, while the third one created a video game.
- **New elements.** Master students were in a more favorable starting position than the participants of the previous workshops, as they already had some background in semiotics and established group dynamics. This allowed them to develop more complex and elaborated proposals that featured characters of the Estonian folklore (Old Devil, Clever Hans, *kratt* and werewolf) and at the same time were tightly connected to contemporary political and cultural agenda. For instance, a TV show *Hell* tells the story of undercover detective Hans who solves crimes of Old Devil (cases are related to drugs, tax fraud and real-estate racket); TV show *Kratt* depicts corrupt public officers who use *kratts* to steal money from citizens; a family video game *The World of Werewolf* inspired by August Kitzberg's tragedy *Werewolf* (original title *Libahunt*) is set in Vao village, the place of the largest refugee center in Estonia.
- **Design and modes.** The proposals created by the participants employed both the verbal and visual modes and were supported by skillful oral presentations. The students referred to the conventions of the respective formats, such as visual composition or verbal expressions ('perfect for 5 persons', 'a family game', '16+', etc.). The posters of TV shows combined visual representation of the plot with a brief verbal description.

The third workshop went according to the plan and provided enough room for students to make independent and creative choices. The participants demonstrated a deep knowledge of Estonian mythology and not only managed to connect the folklore to the contemporary context, but also employed the conventions of modern media. Their proposals highlighted the agelessness of the ancient stories and demonstrated their applicability to modern problems.

The audience of the **Workshop 4** mostly included adult participants with the background in education. The participants were advised to choose famous plots of the European literature and mythology and developed 3 proposals in total.

- **Selection and adaptation of elements.** In contrast to previous workshops, the teams had enough time to choose plots, compile lists of their retellings and indicate key topics. The teams did not limit themselves to the formats suggested by facilitators and proposed their own solutions.
- **New elements.** The first team presented a proposal for an educational platform based on F.S. Fitzgerald's *The Great Gatsby*, which featured a vlog from the perspective of characters, an interactive game for teaching symbolism in art, and a widget for mapping the literary geography on *Google Maps*. The second team made a prototype of a news portal *News from the Balcony* that included interviews, expert analyses and multimedia content inspired by W. Shakespeare's *Romeo and Juliet*. The third group unexpectedly proposed an offline project based on *The Little Mermaid* – an educator in a mermaid costume swimming in a pool and lecturing children about women rights and ecology.
- **Design and modes.** All teams integrated verbal and visual modes in their proposals: two first groups presented the layouts of their websites (including illustrations, icons, arrows and text blocks), whereas the third group sketched a mermaid teacher in a pool and a student standing nearby.

The teams made use of the suggestions given by the facilitators, but at the same time developed independent solutions based on their own teaching experience. Apart from reflecting on the presence of different plots in culture, the participants tested the applicability of different media formats and tools to teaching literature. The solutions offered by the participants were bold and experimental (especially the third one), yet, they could benefit from a more elaborate educational component.

As the workshops have demonstrated, even in a less than an hour the untrained participants can come up with the proposals that make meaningful additions to transmedia universes of chosen stories and help to actualize cultural heritage. Apart from thoroughly exploring the topics and following the traces of different plots in culture, the students could acquire an outward perspective on education and critically analyze their own learning experience. However, project-based learning appeared to be very energy-consuming and dependent on multiple factors, such as group dynamics (participants working in teams with familiar people were more active and determined); clear communication (each stage should be

explained very thoroughly and described in writing); and experience of the facilitator. Two types of activities – solving tasks on digital platforms and gaining hands-on experience in developing such platforms – supplement one another and provide a holistic understanding of cultural processes. The problems that occurred during the testing were later considered in course of the development of a semester-long course “Applications of Semiotics of Culture” (but this is another story that will be hopefully told someday).

## 4. CONCLUSION

A single PhD thesis cannot solve a problem so huge as bridging the gap between formal literary education and the digital lives of students. Yet, it can pull together what has been done before and pave the way for future research. Below we will summarize the main ideas of the thesis regarding the research problems: how does digitalization affect literary education, how can we analyze this process by means of semiotics and support it with the help of pedagogy and technology.

While the current state of literary education is often regarded as that of crisis, from the perspective of semiotics of culture it can be seen as a moment of explosion. No matter what, the states of explosion are always accompanied by the states of gradual change, and this change is already happening in literary education. Whereas formal educational systems are still in search for effective tools for dealing with digitalization, enthusiastic teachers and developers are testing out their own grassroots solutions. To accommodate the changes brought by digitalization, literary education must embrace a wider range of texts and practices, as well as support the agency of learners. Digital technology does not render literature useless; on the contrary, it emphasizes the relevance of good old books, as “they resist being saturated even by the most intelligent and sophisticated interpretations, while endlessly invoking and provoking them” (Locatelli 2004: 182). Each metatext highlights a different aspect of the original and may trigger the emergence of new interpretations. Literary experience in the 21<sup>st</sup> century implies much more than just following the story: it gets us to think about the specificity of various media and to meditate on the persistence of certain plots in culture. Why do we keep retelling these stories in countless ways? What does it tell about us, about the authors, and about those who have kept these texts alive through centuries?

Semiotics of culture allows observing the transformation of literary education against the background of universal cultural dynamics. The process of cultural autocommunication is fueled by the tension between different languages of culture and manifests itself in endless repetition and transformation of texts. The resulting metatexts exist in a reciprocal relationship with the original: on the one hand, they derive from a source-text; on the other hand, they influence its image in culture. Whereas each new translation is inexact by definition, the stereoscopicity of culture allows compensating the incompleteness of information by juxtaposing versions in various media and discourses. A similar dynamic is also reflected in the interplay of the divergence and convergence (Jenkins 2006: 282–287). The cultural semiotic framework justifies the use of metatexts in literary education and suggests tools for integrating them in a coherent whole. The transformation of the curriculum goes hand in hand with the shift in social relations. Multimodal approach facilitates the integration of the new forms of texts and practices into literary education by supporting non-logocentric, collaborative and student-oriented learning. Instead of being subject to the technologies governance, students use design to express their agency in varied modes and take control of the learning process (Hamilton et al. 2015: 23). Literary education in the digital

age requires navigating the heterogeneous world of versions in different media and integrating them into a coherent whole based on a selected dominant. Such system synthesizes two models of cultural education outlined by Lotman (2000: 417): it simultaneously communicates the knowledge about core texts and facilitates the development of necessary literacies.

Digital learning platform is presented as a pedagogical and technological solution for supporting literary education in the circumstances of digitalization. Apart from integrating and juxtaposing metatexts in various media and discourses, it supplies students with tools for expressing their creativity in various modes and thus participating in the process of cultural autocommunication. Even deeper engagement with the text can be established by gaining hands-on experience in designing the prototypes of educational projects.

To conclude, we will indicate some directions in which this research can grow in the future. Apparently, one of the serious drawbacks has so far been the lack of engagement with the formal educational system. While most materials developed for *Education on Screen* have been tested with students and teachers in classroom settings, our workshops and courses have had extracurricular nature and have not been yet integrated into the general learning process. To obtain a full picture, we would need to collect existing practices for teaching literature and analyze how exactly teachers and students interact with EoS. Another problem is the lack of precise methods for measuring the effectiveness of educational materials: such tools can be derived from the methodology of educational studies, sociology and user experience design. From the practical side, the future work on EoS can imply expanding the disciplinary scope of the projects as well as coming up with more scalable technological solutions.

## 5. OVERVIEW OF THE ARTICLES INCLUDED IN THE THESIS

1. Milyakina, Alexandra (2018). Rethinking literary education in the digital age. *Sign Systems Studies* 46 (4), 569–589

The paper serves as a theoretical introduction to the topic and discusses the impact of digitalization on literary education. Whereas everyday semiotic practices are becoming increasingly digital and multimodal, formal education is still focused on mediating original literary texts and their established interpretations. Less conventional sources of literary information – brief retellings, comic strips, memes, social media posts – are usually dismissed by school education as inaccurate and irrelevant. The theoretical framework synthesizes the ideas of semiotics of culture and multimodal approach and allows considering pulverized versions of texts as a part of a natural educational system – the culture itself. By zooming in to the nature of artistic text, reading, and learning, we attempt to establish a continuity between traditional and innovative forms of literary education. While drawing upon the ideas of Lotman (2001, 1992, 1998, 2000) and Kress (2005, 2010), we claim that multimodality, transmediality and playfulness did not emerge with digital technology, but are inherent to literary experience. A brief overview of educational practices in the post-Soviet space is followed by the analysis of three aspects: multimodality of literary experience; the role of a medium; reading as a creative building of a whole from different fragments. The theoretical survey is supported by real-life examples from formal, informal and non-formal learning. In conclusion, the major function of literary education in the digital age is defined as navigating students in the world of versions and retellings.

2. Milyakina, Alexandra (2019). Digital adaptations and the new culture of reading. In: Kroó, Katalin (Ed.). *The Book Phenomenon In Cultural Space* (81–89). Budapest-Tartu: Eötvös Loránd University.

Deriving from our MA thesis “Digital books in literary education: a semiotic approach to analysis”, this work is one of the first steps in the research. The paper focuses on digital adaptations as a central element of literary synthesis – the “image of the original” (Popovič, Macri 1977). The notion “digital adaptation” is applied to adaptations of literary texts in the new media: interactive books, trans-media environments, literary video games, etc. Even though the history of digital adaptations dates back several decades, they are rarely used in formal education. At the same time, the ideas on the pedagogical application of such formats are not purely speculative, but can be derived from their developers’ vision and examples of informal use. The paper aims to provide a semiotic framework for analyzing digital adaptations in the wider context of cultural autocommunication and adapting them to the system of literary education. Drawing on the typology

of Bolter and Grusin (2000), we identify three ways<sup>12</sup> in which digital adaptations remediate their predecessors: enhanced books, refashioned books and absorbed books. The theoretical framework allows classifying and exploring the “literariness” of diverse phenomena – from digital storybooks to video games and social media retellings. Whereas the typology is far from being complete, it helps to define main trends and gaps in the landscape of digital adaptations. The study is based on the analysis of 60 objects in total.

3. Ojamaa, Maarja, Milyakina, Alexandra (2019) Teaching culture with films: The Education on Screen platform. *Film Education Journal*.

Using film adaptations in literary class is considered one of the most common forms of multimodal education. However, films have been historically treated as mere illustrations to literary texts rather than self-contained works of art. The paper offers an alternative methodology that focuses on the medium-specificity of film as well as on the convergence of film with other media in cultural mediation. On the one hand, film is genealogically connected to literature, theatre, photography and gaming; on the other hand, it has influenced the development of digital media. Digital learning platform *Education on Screen* puts film adaptation at the heart of a multimodal approach to teaching culture. The projects *Literature on Screen* and *History on Screen* combine two methods of cultural education as defined by Lotman (1971): firstly, they help to mediate the canonical texts and, secondly, facilitate the development of cultural literacies. The projects balance between a thorough treatment of a single film and a universal framework for analyzing cultural dynamics. Instead of merely juxtaposing films and novels they are based on, the projects focus on texts that are often excluded from school education, but play a major role in cultural autocommunication: digital texts, participatory texts, etc. The process of learning is multimodal and project-based: students get to create mood boards, design characters, make timelines and visualize scenes. The artifacts produced by students are analyzed as signs of learning, with special attention paid to the degree of innovation and preservation. The paper includes some conclusions drawn from testing the platform with 230 students during 2017–2018. Maarja Ojamaa contributed to this paper by writing the introduction, methodological section and conclusion (around 30% of the text), while Alexandra Milyakina prepared the case studies (around 70%).

4. Milyakina, Alexandra (2019) Multimodality and play in literature class: bridging the gap between school and life with Education on Screen. *Punctum*.

A game-based approach to learning mirrors a general cultural trend towards gamification. Whereas multimodal and playful practices are proliferating in many fields of culture, such as marketing or business training, they are still marginal to literary education. Playful approach to literary text is often considered as threatening to the integrity of its meaning and structure. The paper presents a

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<sup>12</sup> The first type of remediation defined by Bolter and Grusin – duplication – is omitted from the analysis, since such examples are too numerous and very similar to the original versions.

theoretical framework for establishing continuity between different versions of a literary text and integrating play and multimodality into literary curriculum. The first chapter discusses the current state of literary education and defines some ways of its development in the frame of formal, informal and non-formal education (Council of Europe 2019). The theoretical framework merges the principles of multimodal pedagogy (Kress 2010; Newfield et al. 2003) with the cultural semiotic understanding of play (Lotman 2011; Thibault 2016). After Mackey (1999, 2002), game-like experiences in the realm of literature are classified as playing in the phase space or text tinkering. Theoretical argument is supported by the examples of *Literature on Screen*, *History on Screen* and *Identity on Screen*. The platforms showcase game-based tools for learning literature, such as tests, timelines, maps, role-playing and world-building games. The data used in the analysis include observational field notes, feedback surveys, and multimodal artifacts created by the students during the testing in 2017–2019. The design and effectiveness of learning activities is from the perspective of multimodality: visual grammar, gains and losses, students' artifacts as signs of learning (Kress, van Leeuwen 2006; Kress 2005).



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## SUMMARY

Digital technology has provoked a drastic change in human communication and led to the reconsideration of conventional forms and practices. Apart from using technological means for reading, writing and teaching, the digitalization of literary education entails a qualitative and quantitative change in the nature of texts, as well as a shift in social relations. In contrast to printed books that are mostly verbal, linear and created by a single author, digital texts are becoming increasingly multimodal, non-linear and collaborative. The roles of the agents participating in the literary process are blurred: producers and consumers merge into prosumers, while teachers are becoming knowledge facilitators rather than all-knowing others. The current situation can be understood as a moment of explosion – “the place where a sharp increase in the informativity of the entire system takes place” (Lotman 2009: 14). Both the vigorous development of technology and gradual attempts of educational systems to adapt to its effects are parts of “a unified, simultaneously operating mechanism” (Ibid., 12).

The thesis aims to analyze digitalization of literary education from ontological and epistemological perspectives. On the one hand, it describes new types of texts and practices that have evolved as a result of digitalization and situates them within a general cultural context. On the other hand, it poses a question of analyzability of such texts and offers methodological solutions for integrating them in the system of literary education. The main research question of this thesis is how can semiotics help to analyze and bridge the gap between formal literary education and vernacular digital practices. The problem is approached from different angles:

- How does digitalization affect the ontology of literary text and literary education?
- How can semiotics help to analyze and handle a cultural shift implied by digitalization?
- What pedagogical and technological solutions can support literary education in the circumstances of digitalization?

The thesis is informed by the works on semiotics of culture produced within the Tartu-Moscow Semiotic School and the tradition of multimodal research. Whereas the former provides tools for considering literary education against the background of cultural autocommunication, the latter addresses it as a set of social relations and practices. The theoretical background includes works in multimodality, including those by Gunther Kress (2010), Theo van Leeuwen, Carey Jewitt (2005, 2008), Len Unsworth (2006), Denise Newfield (2003) Maureen Walsh (2009) and Margaret Mackey (1998, 1999, 2011). On the practical side, our work has been influenced by stories of enthusiastic teachers from around the world. In the context of the semiotics of culture, the work is built on the ideas of Juri Lotman (1973, 1992a, 1992b, 1992c, 1992d, 2000, 2009), Peeter Torop and Maarja Ojamaa (2015), and logically succeeds the thesis of the latter (2015). In

my work, I aim to broaden the applicability of existing theoretical approaches by applying them to a new subject – the changing nature of literary education.

Semiotics of culture allows observing the transformation of literary education against the background of universal cultural dynamics. The process of cultural autocommunication is fuelled by the tension between different languages of culture and manifests itself in endless repetition and transformation of texts. The resulting metatexts exist in reciprocal relation with the original: on the one hand, they derive from a source-text; on the other hand, they influence its image in culture. Whereas each new translation is inexact by definition, the stereoscopicity of culture allows compensating the incompleteness of information by juxtaposing versions in various media and discourses. The cultural semiotic framework justifies the use of metatexts in literary education and suggests tools for integrating them in the coherent whole. The transformation of the curriculum goes hand in hand with the shift in social relations. Multimodal approach facilitates the integration of the new forms of texts and practices into literary education by supporting non-logocentric, collaborative and student-oriented learning. Instead of being subject to the technologies governance, students use design to express their agency in varied modes and take control of the learning process (Hamilton et al. 2015: 23). Literary education in the digital age requires navigating the heterogeneous world of versions in different media and integrating them into a coherent whole. Such system synthesizes two models of cultural education outlined by Lotman (2000: 417): it simultaneously communicates the knowledge about core texts and facilitates the development of necessary literacies.

Digital learning platform is presented as a pedagogical and technological solution for supporting literary education in the circumstances of digitalization. Apart from integrating and juxtaposing metatexts in various media and discourses, it supplies students with tools for expressing their creativity in various modes and thus participating in the process of cultural autocommunication. Even deeper engagement with the text can be established by gaining hands-on experience in designing the prototypes of educational projects.

The thesis aims to answer research questions by means of experimentation rather than by a theoretical argument. All articles are based on the empirical material gathered through the research and development work. The frame consists of the introduction, three main chapters, the conclusion and the summary of the articles included in the thesis. The first two chapters describe the theoretical framework based on the ideas of semiotics of culture and multimodal approach as well as suggest some directions for its implementation. The third chapter gives an overview of the work on *Education on Screen* project (EoS), which has served as an empirical background for the research.

# EESTIKEELNE KOKKUVÕTE

## Kirjandushariduse digitaliseerumine kultuurilise autokommunikatsiooni kontekstis

Digitaalse tehnoloogia areng on märgatavalt muutnud inimestevahelist kommunikatsiooni ning viinud suhtlusvormide ja -praktikate ümbermõtestamiseni. See puudutab ka kirjandusharidust. Lisaks sellele, et koolitöös kasutatakse üha rohkem tehnoloogilisi vahendeid lugemiseks, kirjutamiseks ja õpetamiseks, on digipöörde tulemusel võimalik märgata nii kvalitatiivset kui kvantitatiivset muutust ka kirjanduslikes tekstides. Kui trükiraamatud on valdavalt sõnalised, lineaarsed ja loodud ühe autori poolt, siis digitaalsete tekste iseloomustavad üha enam multimodaalsus, mittelineaarne info esitus ja (erinevate autorite) ühisloomelisus. Samuti on hägustunud kirjandusprotsessis osalejate rollid: loojate ja lugejate vahel ei ole enam selget piiri, ka kirjanduse õpetaja ja õpilase eristus ei ole enam nii üheselt määratletav, sest üha enam nähakse õpetajas abistajat ja õpilase kaasteelist õppeprotsessis, mitte kõiketeadjat. Praegust momenti haridusmaastikul võib vaadata kui plahvatushetke, kus leiab aset “kogu süsteemi informatiivsuse järsk suurenemine” (Lotman 2005: 25). Nii tehnoloogia jõuline areng kui ka haridussüsteemi järkjärgulised katsed nende muutustega kohaneda: “eksisteerivad ühes, samaaegselt toimivas mehhanismis” (*ibid*: 23).

Antud doktoritöö eesmärk on analüüsida kirjandusõppe digitaliseerumist nii ontoloogilisest kui ka epistemoloogilisest vaatepunktist. Ühelt poolt tulevad vaatluse alla uut tüüpi tekstid ja praktikad, mis on välja kujunenud digitaliseerumisprotsessi tulemusel. Teiselt poolt esitab väitekiri küsimuse nende uute tekstitüüpide analüüsitavuse kohta ja pakub välja metodoloogilisi lahendusi, kuidas neid tänapäeva haridussüsteemi lülitada. Selle töö peamine uurimisküsimus on: Kuidas aitab semiootika ületada formaalse kirjandushariduse ja digitaalsete argipraktikate vahelist lõhet? Seda küsimust käsitletakse antud uurimuses erinevatest vaatepunktidest:

- Kuidas mõjutab digitaliseerumine kirjandusteksti ontoloogiat ja kirjanduse õpetamist?
- Kuidas saab semiootika abil analüüsida ja paremini toime tulla digitaliseerumisest tingitud muutustega kultuuris?
- Millised pedagoogilised ja tehnilised lahendused toetavad kirjandusharidust digiajastul?

Väitekiri toetub Tartu-Moskva koolkonna kultuurisemiootika alastele teadustekstidele ja multimodaalse uurimistöõ traditsioonile. Esimene neist võimaldab vaadelda kirjandusharidust kultuurilise autokommunikatsiooni kontekstis. Teise lähenemisenurga kaudu on aga võimalik käsitleda seda sotsiaalsete seoste ja praktikate vaatepunktist. Töö teoreetilises raamistikus on tähtsal kohal multimodaalsust käsitlevad teadustööd, nende hulgas Gunther Kress (2010), Theo van Leeuwen (Kress, van Leeuwen 2006), Carey Jewitt (2005, 2008), Len Unsworth (2006), Denise Newfield (2003) Maureen Walsh (2009) and Margaret Mackey

(1998, 1999, 2011). Praktilise poole pealt on antud doktoritööd mõjutanud entusiastlike õpetajate kogemused maailma eri paigust. Kultuurisemiootika kontekstis ehitub käesolev uurimus suuresti Juri Lotmani ideedele (1973, 1992a, 1992b, 1992c, 1992d, 2000, 2009), Peeter Toropi ja Maarja Ojamaa teadustööle (2015) ning jätkab paljuski Ojamaa väitekirjas (2015) tõstatatud teemade käsitlemist. Siinne uurimistöö püüab avardada eelnimetatud teoreetilisi lähenemisi, rakendades neid uudse uurimisobjekti analüüsis ning mõtestades nende abil kirjandusõppes toimuvaid muutusi.

Kultuurisemiootika pakub võimalust uurida kirjandushariduse muutumist laiemas kultuuridünaamika kontekstis. Kultuuri autokommunikatsiooni käivitavaks jõuks on erinevate kultuurikeelte vaheline pingestatus, mis toob kaasa tekstide pideva kordamise, tõlkimise ning transformatsiooni. Selles protsessis välja töötatud metatekstid on originaaltekstidega vastastikmõjulises suhtes: ühest küljest on need loodud allikteksti baasil, kuid samal ajal hakkavad omakorda mõjutama ja muutma allikteksti tähendust kultuuris. Kuigi iga tõlge on alati mingis ulatuses ebatäpne, võimaldab kultuuri stereoskoopilisus kompenseerida informatsioonilisi puudujääke, kõrvutades erinevates meediumites ja diskursustes esitatud versioone omavahel. Kultuurisemiootika kontekstis on metatekstide kaasamine ilukirjandusteose õpetamisel igati põhjendatud ning annab ka sobiva raamistu selleks, et integreerida erinevad versioonid üheks mõtteliseks tervikuks.

Muutused kirjanduse õppekavades käivad käsikäes muutustega sotsiaalsetes suhetes. Multimodaalne lähenemine hõlbustab uute tekstivormide ja praktikate integreerimist kirjandusharidusse selle kaudu, et toetab mitte-logotsentrilist, koostööl põhinevat ja õpilasekeskset õppimist (Hamilton et al. 2015: 23). Kirjandusõpe digiajastul eeldab oskust orienteeruda erinevates meediumites esitatud ümberjutustuste mitmekesisel maailmas ning võimet näha nende versioonide koosluses ka tervikut. Selline lähenemine ühendab endas kaks erinevat kultuurihariduse mudelit (vt Lotman 2000: 417), vahendades üheaegselt nii teadmisi kultuuri tüvitekstide kohta kui ka õpetades vajalikke kultuurilisi kirjaoskusi.

Digitaalset õpiplatvormi esitatakse väitekirjas pedagoogilise ja tehnilise lahendusena kirjandusõppe toetamiseks digiajastul. See lubab integreerida ja kõrvutada erinevates meediumites ja diskursustes vahendatud metatekste. Samuti pakub see õpilastele mitmekülgseid tööriistu oma loominguilisuse väljendamiseks ning annab neile võimaluse osaleda kultuurilise autokommunikatsiooni protsessis.

Käesolev doktoritöö proovib vastata esitatud uurimisküsimustele mitte niivõrd teoreetilise argumentatsiooni kui eksperimentaalse lähenemise kaudu. Kõik väitekirja artiklid põhinevad empiirilisel materjalil, mis on kogutud uurimis- ja arendustegevuse käigus. Doktoritöö raam koosneb sissejuhatausest, kolmest põhipeatükist, kokkuvõttest ja nelja artikli ülevaatest. Esimesed kaks peatükki kirjeldavad töö teoreetilist raamistikku, mis põhineb kultuurisemiootikal ja multimodaalsel lähenemisel. Ühtlasi tulevad neis osades vaatluse alla mõningad arengusuunad teoreetiliste ideede rakendamiseks õppetöös. Kolmas peatükk annab ülevaate digitaalse õpiplatvormi Haridus Ekraanil projektidest, mis on selle uurimuse empiiriliseks materjaliks.



**I artikkel “Rethinking literary education in the digital age”** (“Kirjandushariduse ümbermõtestamine digiajastul”) käsitleb digitaliseerumise mõju kirjandusharidusele laiemalt ning on doktoritöö teoreetiliseks sissejuhatuseks. Kuigi igapäevased semiootilised praktikad on muutumas üha digitaalsemaks ja multimodaalsemaks, keskendub kooliharidus ikka veel suures osas originaaltekstide ning nende väljakujunenud tõlgenduste vahendamisele. Vähem-konventsionaalsed kirjandusteabe allikad – lühikesed ümberjutustused, koomiksid, meemid, sotsiaalmeediapostitused – jäetakse tavaliselt kooliprogrammist välja kui sobimatud või ebaolulised. Artikli teoreetiline raamistik ühendab kultuuri-semiootilise käsitluse ja multimodaalse lähenemise, võimaldades seeläbi näha pihustunud tekstiversioone osana loomulikust haridussüsteemist – kultuurist enesest. Keskendudes kunstiteksti olemusele, selle lugemisele ja õppimisele, proovime luua sidusust traditsiooniliste ja uuenduslike kirjandusõppe vormide vahel. Toetudes Lotmani (2001, 1992, 1998, 2000) ja Kressi (2005, 2010) ideedele, väidame me, et multimodaalsus, transmeedialisus ja mängulisus ei ole seotud vaid kirjandusprotsessi digitaliseerumisega, vaid on olemuslikud igale kirjanduskogemusele. Artiklis keskendume kolmele kirjandushariduse aspektile, milleks on kirjanduskogemuse multimodaalsus, meediumi roll ja lugemine kui erinevatest fragmentidest loomuliku terviku ehitamine. Teoreetilist ülevaadet toetavad elulised näited koolipraktikast ja meelelahutuslikust lugemisest. Artiklis järeldame, et kirjandushariduse tähtsaks eesmärgiks digiajastul on aidata õpilastel orienteeruda ümberjutustuste ja variatsioonide maailmas.

Doktoritöö **II artikkel “Digital adaptations and the new culture of reading”** (“Digitaalsed adaptatsioonid ja uus lugemiskultuur”) on 2016. aastal kaitstud magistritöö “Digitaalsed raamatud kirjandusõpetuses: semiootiline analüüs” edasiarendus. Artikli keskmeks on digitaalsed adaptatsioonid kui kirjandusliku sünteesi keskne element – “originaali kujutis” (Popovič, Macri 1977). Digitaalsete adaptatsioonidena käsitleme uue meedia vahenditega loodud kirjandustekstide ümberjutustusi, sh interaktiivsed raamatud, transmeedialised keskkonnad, kirjanduslikud videomängud jmt. Kuigi digitaalsed adaptatsioonid on juba aastakümneid kultuuri argikogemuse osa, ei ole need ametlikus kooliprogrammis suurt tähelepanu pälvinud. Artikli eesmärk on pakkuda välja semiootiline raamistik digitaalsete adaptatsioonide analüüsimiseks kultuurilise autokommunikatsiooni kontekstis ning vaadelda mõningaid võimalusi nende integreerimiseks haridussüsteemi. Toetudes Bolteri ja Grusini (2000) poolt välja pakutud tüpoloogiale, esitame kolm<sup>13</sup> remediatsiooni tüüpi digitaalsete adaptatsioonide liigitamiseks: võimendatud (*enhanced*) raamatud, ümberkujundatud (*refashioned*) raamatud ja neelatud (*absorbed*) books. Artikli teoreetiline raamistik võimaldab uurida ja klassifitseerida väga erinevat tüüpi teoste “kirjanduslikkust” – alates digitaalsetest juturaamatutest kuni videomängudeni ja ümberjutustusteni sotsiaalmeedias. Kindlasti ei ole esitatud tüpoloogia täielik, kuid võimaldab siiski määratleda peamised

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<sup>13</sup> Esimene Bolteri ja Grusini poolt esitatud remediatsiooni tüüp – duplikatsioon – on analüüsist välja jäetud, kuna selliseid näiteid on liiga palju ning need on originaalile väga sarnased.

trendid digitaalsete adaptatsioonide maastikul. Uurimistöö põhineb 60 erineva adaptatsiooni analüüsil.

Väitekirja **III artikkel “Teaching culture with films: The Education on Screen platform”** (“Kultuuri õpetamine filmide vahendusel: Haridus Ekraanil platvorm”), mis on kirjutatud koos Maarja Ojamaaga, uurib filmi rolli kirjandustunnis. Kuigi filmid on multimodaalse hariduse enamlevinud õppematerjaliks, nähakse neid kirjandustunni kontekstis sageli pigem illustreeriva materjalina ja mitte eraldiseisva kunstiteosena. Käesolev teadustöö pakub välja alternatiivse metodoloogia, mis keskendub filmi kui meediumi eripäradele ja ühisosadele teiste meediumitega kultuuri vahendamise vaatepunktis. Ühelt poolt on film kujunemisel seotud nii kirjanduse, teatri, fotograafia kui ka mängudega. Teisalt on film ise suuresti mõjutanud digitaalse meedia arengut. Digitaalne õpiplatvorm Haridus Ekraanil seab ekraniseeringu multimodaalse kultuuriõppe keskpunkti. Lotmani (1971) ideedest lähtuvalt ühendavad haridusprojektid “Kirjandus ekraanil” ja “Ajalugu ekraanil” kahte erinevat lähenemist kultuuri õpetamisele: esiteks vahendavad nad kanoonilisi tekste, teiseks aga arendavad kultuurilist kirjaoskust. Mõlemad projektid keskenduvad ühe filmi põhjalikule analüüsile, käsitledes seda sealjuures laiemas kultuuridünaamika raamistikus. Lisaks filmile ja romaanile on õppematerjalidesse kaasatud ka sellised tekstid, mis tavaliselt koolitundidesse ei satu, kuid mis ometi mängivad tähtsat rolli kultuuri autokommunikatsioonis: digitaalsed nanotekstid, osaluskultuuri tekstid jm. Õppeprotsess neis projektides on multimodaalne ja projektipõhine: õpilased kujundavad teematahvlaid, loovad tegelaste profiile ja ajajooni ning visualiseerivad erinevaid stseene. Õpilaste poolt loodud artefakte oleme analüüsinud kui õppimise märke, pöörates enim tähelepanu uue loomise ja vana kordamise vahelisele tasakaalule. Artiklis esitatud uurimistöö põhineb õppematerjalide testimisel 230 õpilasega ajavahemikus 2017–2018. Maarja Ojamaa kirjutas artikli sissejuhatare, metodoloogia osa ja kokkuvõtte (umbes 30%), kuna Alexandra Milyakina on koostanud juhtumianalüüsi (umbes 70%).

**IV artikkel “Multimodality and play in literature class: bridging the gap between school and life with Education on Screen”** (“Multimodaalsus ja mäng kirjandustunnis: Haridus Ekraanil kui sild kooli ja õpilase argielu vahel”) vaatlleb mängupõhiseid lähenemisi õppetöös laiema mängustumise trendi kontekstis kultuuris. Vaatamata sellele, et mängust on saanud oluline osa paljudes kultuuri valdkondades, on tema tähtsus ametlikus kirjandusõppes veel võrdlemisi marginaalne. Põhjus võib peituda hirmus, et mänguline lähenemine kirjandustekstile võib panna ohtu tema tähendusvälja terviklikkuse. Artiklis esitatud teoreetiline raamistik pakub lähtepunkti kirjandusteksti erinevate versioonide sidusaks käsitlemiseks ning mängu ja multimodaalse lähenemise integreerimiseks kirjanduse õppekavadesse. Esimeses osas tuleb vaatluse alla kirjandushariduse hetke seis ja võimalikud arengusuunad formaalses, mitte-formaalses ja informaalses õppes (Council of Europe 2019). Artikli teoreetiline osa ühendab multimodaalse pedagoogika põhimõtted (Kress 2010, Newfield et al. 2003) kultuurisemiootilise

arusaamaga mängust (Lotman 2011; Thibault 2016). Mackey (1999, 2002) järgi võib mängulaadseid kogemusi kirjandushariduses käsitleda faasiruumis mängimise või teksti kallal nokitsemisena.

Teoreetilise argumendi toetamiseks on artiklis toodud näiteid “Kirjandus ekraanil”, “Ajalugu ekraanil” ja “Identiteet ekraanil” platvormidest, kus on kasutatud mängulisi õpivahendeid nagu testid, ajajooned, kaardid, rollimängud ja maailmaloo me mängud. Uurimistöös kasutatud andmed on kogutud ajavahemikus 2017–2019 ning hõlmavad nii välitöödel tehtud märkmeid, tagasisideküsitlusi kui ka õpilaste poolt loodud multimodaalseid artefakte. Õppeprotsessi disaini ja efektiivsust on hinnatud multimodaalsuse vaatepunktist, lähtudes visuaalsest grammatikast, “kasudest ja kahjudest” ning õpilaste poolt loodud artefaktidest kui õppimise märkidest (Kress, van Leeuwen 2006; Kress 2005).

## **PUBLICATIONS**

## CURRICULUM VITAE

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### Education

2016–2020 University of Tartu, doctoral studies, Semiotics and Culture Studies  
2014–2016 University of Tartu, master's studies, Semiotics, MA  
2013 autumn University of Tartu, student exchange  
2012–2014 Higher School of Economics – National Research University, master's studies, Comparative Literature, MA  
2002–2003 Higher School of Economics – National Research University, bachelor's studies, Journalism, BA

### Work experience

2019–2020 Tallinn University, Baltic Film and Media School; lecturer  
2020– University of Tartu, Faculty of Arts and Humanities, Institute of Philosophy and Semiotics, Department of Semiotics; junior research fellow in semiotics  
2016– Education on Screen, University of Tartu; content creator and researcher  
2016– VisitEstonia, Enterprise Estonia; content creator  
2012–2017 Edutainme (Russian media on educational research), Russia; content creator and researcher

### Research topics

digitalization, transmediality, cultural autocommunication, literary education, intersemiotic translation

### Selected publications

Milyakina, Alexandra; Ojamaa, Maarja; Pilipovec, Tatjana; Rickberg, Merit (2020). Literature on Screen: Teaching Adaptations with a Multimodal Course. *Media Practice and Education*, 21 (3), 229–239.  
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### Hariduskäik

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2013 sügis Tartu Ülikool, vahetusprogramm  
2012–2014 Rahvuslik Uurimisülikool “Kõrgem Majanduskool”, magistriõpe, võrdlev kirjandusteadus, MA  
2002–2003 Rahvuslik Uurimisülikool “Kõrgem Majanduskool”, bakalaureuseõpe, ajakirjandus, BA

### Töökogemus

2020– Tartu Ülikool, Humanitaarteaduste ja kunstide valdkond, Filosoofia ja semiootika instituut, semiootika osakond; nooremteadur  
2019–2020 Tallinna Ülikool, Balti Filmi- ja Meediakool; lepinguline õppejõud  
2016– Haridus Ekraanil, Tartu Ülikool; sisulooja, uurija  
2016– VisitEstonia, Ettevõtluse Arendamise Sihtasutuse; sisulooja  
2012–2017 Edutainme (haridustehnoloogiale keskenduv ajakiri), Venemaa; sisulooja, uurija

### Peamised uurimisvaldkonnad

digitaliseerimine, transmedialisus, kultuuri autokommunikatsioon, kirjandusõpetus, intersemiootiline tõlge

### Olulisemad publikatsioonid

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## DISSERTATIONES SEMIOTICAE UNIVERSITATIS TARTUENSIS

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