

Multimodality and Play in Literature Class: Bridging a Gap between School and Life with Education on Screen

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While trending in other fields of culture, multimodal and playful practices are still marginal to literary education. Since it is based on the values of specialist knowledge, authority, and authenticity, formal education struggles to adapt to the new principles of media production and consumption. Literary experience beyond the school walls embraces a wide range of multimodal texts and activities, however, informal literacy practices are often seen as threatening to the integrity of literary texts. Young people get acquainted with original texts via multiple versions and retellings, starting from adaptations in different media and on to memes, comic strips, and posts on social media. This paper presents a theoretical framework intended to establish continuity between different versions of a literary text along with integrating play and multimodality into literary education. The methodology stems from the tradition of semiotics of culture, which allows considering multimodal and playful practices as part of cultural autocommunication, a mechanism of self-description in culture. The theoretical argument is supported by the experience of Education on Screen, a research and development project focused on creation of digital learning platforms. The project aims to conceptualize the process of reading in a digital environment and showcases different tools for learning literature, such as tests, timelines, maps, role-playing and worldbuilding games. A case study presents the results of testing that took place in Estonian schools in 2017-2019. The design and effectiveness of learning activities are analysed using the tools of multimodal analysis.

KEYWORDS literary education, multimodality, play, semiotics of culture,
digital education

1. Introduction

Literary education remains a tower of logocentrism in the world bursting with new forms of media production and consumption. Whereas contemporary communication is becoming more playful, multimodal and diverse, writing is associated with the opposite values of ‘specialist knowledge, authority, and authenticity’ (Jewitt 2006: 323). In classroom settings, an original literary text is usually considered as ultimate and inviolable. Up to the present day, some conservative teachers treat literary adaptations, including films, as poor and profane versions of their originals and are likewise skeptical about creative retellings, such as fan fiction. Indeed, translation of a literary work into another media or discourse inevitably implies a certain degree of unpredictability and loss of meaning, which could be seen as a threat to the integrity of the original text. As a result, multimodal and playful practices are still considered marginal to the traditional literary education, while trending in other fields of culture (Thibault 2016: 218), such as marketing, entertainment, and others.

The number of teens who regularly read books for fun has dropped by almost 30 per cent since the 1980s, and the rate continues to decline (Rideout 2014: 14). According to the 2015 report by Common Sense, reading is less popular than watching videos, listening to music, gaming, social networking or browsing websites (Rideout 2015: 31). A demand for modernized pedagogy has already been acknowledged by educational systems around the world (Milyakina 2018: 577) and, with regard to language and literary education, implies a focus on development of digital and multimodal literacies. Whereas, on the system level, the theory is put into practice rather slowly, most notable examples of its implementation come from the periphery. As was observed by Donald Leu, ‘[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). These grassroots practices challenge the logocentric approach to literary education and explore the pedagogical potential of multimodality and play. We can roughly subdivide them into three groups associated with formal, non-formal, and informal learning (Council of Europe 2019).

Firstly, some of the most innovative practices are developed by enthusiastic teachers within the system of formal education. Collective volumes of teachers’ case studies can offer useful insights into innovation and change: literature teachers already use multimodal and game-like formats, including personality tests, infographics, posters, video clips, animation, book trailers, interactive books, blogs, maps, wiki, trivia games, virtual tours, and role-playing games based on literary classics (Galaktionova et al. 2018; Glazer 2016). All these undertakings share the features rarely present in a logocentric classroom: rather than drawing a line between literary and profane, they make use of everyday pleasures and interests of readers.

Secondly, pedagogy of literary education is influenced by non-formal learning practices advancing beyond the school walls. It is exemplified by educational projects developed

by commercial and non-profit organizations, including universities¹, museums, educational centers or digital content providers².

Lastly, literary education also takes place informally, as an involuntary and inescapable part of daily life (Council of Europe 2019). According to a classic definition, informal learning is 'the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment' (Coombs, Ahmed 1974: 8, as cited in Scolari et al. 2018: 803). Whereas a written text used to be the main source of education for centuries, today, young people are exposed to literature in digital, audio, visual, and transmedia forms. They make their way in a diverse and heterogeneous world of literary retellings and dive into transmedia universes, however, they often realize that 'their expertise is little valued in the academic forum' (Mackey 1999: 30).

According to Binkley et al., new social practices 'create reconceptions of key competencies and skills, not defined from a systems level but from the everyday lives of people in our societies' (2012: 18). Students get used to dealing with fragmented, multimodal and nonlinear texts, which is sometimes associated with their incapacity (or reluctance) to read long and linear literary fiction. Moreover, they are more likely 'to reject a single interpretation and to hold possible multiple readings of a text' (Jewitt 2006: 359), which is not always welcomed by conservative teachers. The students' habits of media consumption and production are formed in a digital multimodal environment, and, as was noted by Kress, 'it is highly unlikely that they [young people] will not carry this habitus into their engagement with any semiotic domain or entity in their world' (Kress 2010: 38-39). According to Scolari et al. (2018: 810), 'the most urgent issue is to activate proposals for reducing the distance between formal educational environments and the extremely active "digital lives" of teens in social media and online environments'. A strongly needed pedagogical shift cannot imply a mere replication of the experiences that students engage in outside school (Walsh 2009: 2). It is crucial to investigate how the meaning is constructed through multimodal texts and to step from the vision of digital practices as 'no more nor less than individual, unassessable chaos' (Hunt 2000: 111).

Traditionally, functions of literary education have implied acquisition of cultural knowledge, development of literary skills, adoption of values, and formation of healthy reading habits. Literary education in the age of the Internet can also be seen as a platform for developing the 21st-century skills, such as creativity, critical thinking, learning to learn, communication, collaboration, information literacy, ICT literacy, local and global citizenship, life and career, personal and social responsibility (Binkley 2012: 18-19). Instead of promoting the traditional book-centered literacy, school needs to develop transmedia skills 'related to digital interactive media production, sharing and consumption' (Scolari et al. 2018: 803). Studies in the field of new skills and literacies set an example for future research. First of all, it is important to acknowledge the seminal work of Gunther Kress, Theo van Leeuwen, Carey Jewitt, and other scholars engaged in multimodal analysis. Multimodal environments of Science class-

rooms have been examined by Kress et al. (2014), while Jewitt (2002; 2008) have explored English classrooms. Some notable interdisciplinary case studies include Newfield et al. (2003) analysing a South-African school experiment and a more recent work by Sakr et al. (2016) on teaching history using mobile technologies. A different type of reading needed for digital and multimodal texts is analysed in works by Len Unsworth (2006) and Margaret Mackey (1998; 2001; 2002).

The current case study presents one more experiment in this field – *Education on Screen* (EoS), a digital learning platform developed by Transmedia research group at the University of Tartu. The project is informed by the previous research and aims to integrate effective practices of formal, non-formal, and informal learning. On the one hand, it is based on teachers' experience; on the other hand, it employs the principles of design inherent to the contemporary educational technology; lastly, it makes use of diverse and heterogeneous media experiences of young people. The following chapter provides a theoretical framework for integrating multimodality and play into literary education. The case study aims to analyse the place of multimodal and playful practices in the literature classroom, to establish their relation to logocentric pedagogical methods, and to explore the skills that such education can promote.

2. Theoretical framework

Multimodal and playful forms of reading can be seen through a perspective of Juri Lotman's semiotics, in which 'the elementary act of thinking is translation' (Lotman 2001: 143). Both processes are tightly interrelated and imply creative transformation of a literary text into new texts in various media and discourses. Since any translation includes an element of untranslatability, such practices inevitably create new meanings and enrich the culture. The following section describes interaction with literature as a process of design and play. In both cases, reading is seen as part of cultural autocommunication, a mechanism of cultural self-description that serves both creative and mnemonic functions (Ojamaa, Torop 2015: 61).

2.1. Reading as a process of design

The multimodal approach highlights the agency of students who are seen 'as authors of knowledge they want and need, authors of the kinds of texts that meet their social, personal and affective needs' (Kress 2010: 145). Being 'socially shaped and culturally given phenomena' (Ibid., 79), modes reflect the values of society. While older pages 'embodied notions of authority and authorship', contemporary pages 'are designed on the basis of a quite different social relation of author, reader and meaning-making' (Ibid., 37-38). Reading in the age of the Internet requires 'finding and creating reading paths through the multimodal, multidirectional

texts' (Jewitt 2008: 259). A notable attempt to analyse multimodal learning was undertaken by Kress et al., who studied how students transformed materials 'through the selection, adaptation of elements presented, and introduction of new elements' (2014: 153). Rather than trying to analyse the cognitive process of students' learning directly, the researchers focused 'on the outcome of this process in the form of signs made, whether as whole texts or parts of texts, though always on the full multimodal ensemble' (Ibid.). The mechanics of multimodal learning is described by Gunther Kress elsewhere: '*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).

The described process seems quite different from the one that takes place in a logocentric classroom. In the latter, all the stages of a literary experience are influenced by educational authorities: students neither go through the process of selecting a book themselves, nor are they expected to interpret it according to their interests. Monomodal learning requires an ultimate reading path: instead of engaging with a text on their own terms, students are often forced to focus on its specific aspects highlighted by the teacher. In order to facilitate reading of old and complicated texts, teachers usually provide ready-made frames, rather than encourage students to fill in the gaps themselves. As a result, students are not engaged enough to read more carefully or to invest energy in interpretation (Guthrie and Knowles 2001: 159). Monomodal learning does not imply that students individually transform or transduce elements of the text whereby forming a new inner sign. On the contrary, in these teacher-centered classrooms, 'ready-made meanings are supplied with the expectation that they be reproduced at a later time as an indication of learning' (Siegel 1995: 464).

Whereas it is easy to see multimodal reading as 'individual, unassessable chaos' (Hunt 2000: 111), its results can nevertheless be observed and assessed. The sign is considered the primary aim of learning and described as 'the result of its maker's interest and is an apt reflection of that interest' (Kress 2010: 179). The evidence of learning as defined by Kress et al. (2014: 212) is formed by:

the apperception of some aspect of the world, its (hypothesized) transformation in the process of apperception and integration into existing sets of inner representations, the rearrangement of that system or those sets of inner representations in that process, and the transformation that happens in the making of the new sign.

A possible way to assess multimodal learning consists in analysing multimodal artifacts created by learners. Newfield et al. (2003) asked students to suggest themselves criteria for assessment as well as to decide whether the artifacts should be at all assessed. Assessment was considered not as 'something separate or happening in the end, but rather as something that is

registered throughout a process' (Newfield et al. 2003: 68). The criteria were built on the idea of 'resourcefulness' and included the following: recruiting 'apt' resources for making meaning; using these resources generatively and productively with evidence of linkages across modes and genres; understanding and use of multimodality; taking risks, innovating, and transforming existing designs; reflecting on her or his processes of making in different representational forms; engaging with 'messiness', ambiguity, contradiction, difference; being sensitive to and giving voice to the broader context of meaning-making (Ibid., 79). A similar approach to assessment is described in Kress' study of multimodal artifacts created by students as after a visit to the museum (2010: 39). Whereas 'museums tend not to exercise power over their visitors in their engagement with an exhibition' (Ibid., 39), the same cannot be said about a literature classroom. Yet, the understanding of reading as a process of design can potentially help to break free from the logocentrism of literary education and use the benefits of the multimodal approach.

2.2. *Reading as playing*

Reading is similar to playing in many respects – from Barthes' understanding of a text that 'itself plays (like a door, like a machine with 'play') and the reader plays twice over' (1986[1971]: 62) to contemporary video games, chatbots³ or interactive maps⁴ transforming literature into game-like formats. Both playing and reading imply pretending, imagining, performing, engaging with the rules of the game, strategizing, orchestrating, interpreting, fooling around, not working (Mackey 2002: 181). In order to better understand the playful aspects of reading, it is useful to look into the mechanism of play as such.

According to Juri Lotman, play is a crucial tool of learning: when playing a game, an individual 'gets the possibility to freeze the situation in time', 'learns to model the situation in his consciousness' and gets 'the chance of a conditional victory over an unconquerable [...] or a very strong [...] opponent' (2011: 253). Whereas Lotman does not see play as a means of storing information and developing new meaning, Mattia Thibault argues that the play can nevertheless 'enhance the rise of the new meaning' (2016: 314) due to its capacity to model randomness and incomplete determination. In line with Lotman's works, he sees games as 'a sort of translation code between fiction and reality' (Ibid., 316), which 'has always had an important modelling ability' (Ibid.). Playing a game that features a solid system of rules can be considered as an activity of translation from a discrete text (the game, intended as a set of rules, pieces, narratives, algorithms and any other kind of components) into a continuous text (a single play session, which is the result of the interaction between one or more players and the game). (Ibid., 315)

Since translation of discrete texts into continuous ones requires filling a gap in the material with creativity, the play serves as a generator of the new texts (Ibid., 315). Thibault uses the notions of matrix and repertoires to describe the process of play: the matrix 'organizes both

the variable succession of the events and the interface (digital or analogue) that allows the player to interact with the game', while '[t]he repertoires contain all the figures, roles, pieces of narratives and axiologies' (Ibid., 320). In the context of literature, it is possible to associate repertoires with the concept of encyclopedia – 'the whole of our world knowledge' that govern the production and interpretation of signs (Eco 1984: 255).

Playing with and around texts can imply a different level of knowledge of the encyclopedia. Interaction on a higher level – such as creating fan fiction – requires that one is well-acquainted with the encyclopedia and is capable of creating new stories based on it. After Margaret Mackey's work (1999), we call this type of interaction *playing in the phase space*. The phase space includes '[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). An example of such experience is described by Glazer (2016: 45), whose students created a role-playing game based on *Beowulf* after having carried out background research on the geography and history behind the poem. This type of engagement with literature requires involvement of higher order skills, such as application, analysis, evaluation, and creation (Kapp 2012: 87).

Literary experiences that do not necessarily imply good (or any) knowledge of the encyclopedia can be conceptualized as '*text tinkering*'. According to Mackey (2002: 25), tinkering is a playful stage that often precedes more focused work and helps students to get acquainted with the text. Tools may include interactive maps, quizzes and puzzles and are usually associated with lower order skills – remembering and understanding (Kapp 2012: 87). While some teachers may consider that tinkering should be skipped over in order to move forward to more purposeful activities, Mackey identifies tinkering as 'a long-term investment, however fooling it may appear at first glance' (Ibid., 25). Game-like experiences based on a literary text are potentially motivating for 'good-enough readers' – those who choose an interpretation that is sufficiently satisfying to keep going (Mackey 2011: 159).

In the new literary landscape, '[t]he book matters, but no longer represents "the end of the Story"' (Mackey 2001: 179). Semiotics of culture offers a holistic perspective that allows embracing not only the original text but also phenomena deemed as peripheral. Literary texts are seen as 'a series of possible forms and interpretations, none of which is the ultimate or ideal one' (Ojamaa, Torop 2015: 64). Rather than forcing their way through complex and obscure texts, students can start with text tinkering: explore maps, take quizzes, or solve puzzles. Deeper engagement with the text can be facilitated by playing in the phase space – reconstructing fictional universes or inventing new stories. Even though playing with and around text cannot substitute enjoyment of reading, it could offer a different kind of pleasure and spark interest in literature. On the one hand, digital game-like formats can simulate the processes taking place in a literature classroom, such as close reading, highlighting key themes or writing an essay (Ibid., 105). On the other hand, they often imply a simultaneous application of both traditional

(reading, writing, speaking, listening) and new literacies (digital, critical, information, visual, media, tool literacies) (Churchill 2017: 6).

3. Case study: Education on Screen

Education on Screen (haridusekraanil.ee) is an open-access educational platform targeted primarily at secondary school students. The platform includes three projects based on popular Estonian literary texts and their cinematic adaptations: Literature on Screen (2017), History on Screen (2018), and Identity on Screen (2019). Each project provides a methodological framework for understanding the topics as well as materials for practical implementation: excerpts from films and novels, examples of reception on social media, illustrations, analytical tasks and interactive assignments for working in groups or individually. All content is divided into bite-sized modules, which allows building customized lesson plans for different purposes.

Literature on Screen (kirjandus.haridusekraanil.ee) (LoS) is based on the Estonian best-selling novel *Old Barney or November* by Andrus Kivirähk (2000) and its cinematic adaptation *November* by Rainer Sarnet (2017). The project includes a map of the storyworld and three theoretical sections: Film in Literature, Literature in Film, Literature and Film in Culture. Students are encouraged not only to compare the source text to its adaptation, but also to embrace the whole lifecycle of an adaptation and to contribute their own interpretations, which includes writing a script, choosing a soundtrack, making a mood board, etc.

History on Screen (ajalugu.haridusekraanil.ee/en/) (HoS) is based on the autobiographical trilogy (*Comrade Child and grownups* 2008, *Velvet and sawdust* 2009, *The touch of a woman's hand* 2018) by the Estonian literary classic Leelo Tungal and its adaptation *The Little Comrade* (2018) by Moonika Siimets. The novels describe the tragic time of Stalinist repressions through the eyes of a small girl whose mother was deported to Siberia. The platform includes three theoretical chapters (Time in Story, Story in Time, Time and Story in Culture) and a map of the storyworld.

Identity on Screen (identiteet.haridusekraanil.ee/en/) (IoS) is based on the novel *Truth and Justice* (1926-1933) by the major Estonian writer Anton Hansen Tammsaare and the eponymous cinematic adaptation by Tanel Toom (2019). Being a key text of Estonian culture, *Truth and Justice* covers various issues related to the problem of identity: interpersonal relations, national belonging, and living environment. The platform features a map of the storyworld with theoretical introductions and interactive tasks.

3.1. Methodology

The projects have been tested in different schools throughout Estonia both in Estonian-speaking and Russian-speaking classrooms. LoS was tested by over 200 students in five

schools in the years 2017-2018; HoS was tested by over 100 students in 2018-2019; IoS is scheduled for testing in 2019-2020. The activities were offered to students of 9-11 grades and included one-time workshops or three-lesson sessions.

The data used in the analysis include observational field notes, feedback surveys, and multimodal artifacts created by the students. The methodology combines different tools, including multimodal analyses of the learning objects, gains and losses, and signs of learning. At first, the learning objects are analysed from the perspective of visual grammar (Kress, van Leeuwen 2006: 177): we take a look at the modes used in the task, their relation to each other, and the dominant one. Secondly, the learning activities are analysed through the prism of gains and losses (Kress 2005): we investigate potentialities and constraints of different modes and compare them to the ones used in a logocentric literature classroom. Thirdly, the multimodal artifacts produced by the students are analysed as the signs of learning (if applicable). The analysis is focused on the following dimensions: the students' selection of elements from the lesson; the students' adaptation of the elements; the students' introduction of elements not made available by the teachers; the students' arrangement of these elements into texts, their 'design'; representational modes used by the students; physical characteristics of the texts – their materiality (Kress et al. 2014: 46-47).

3.2. Analysis

The three projects were designed in accordance with slightly different aims and principles. This corresponds to the specificity of the chosen texts: the first is an example of modernized folklore, the second provides a child's perspective on the Stalin era, while the third is a 19th-century identity-forming novel. Even though the platforms were designed from the very beginning to be multimodal, LoS still bears an impression of the creators' logocentric consciousness: the text outweighs audiovisual content, while the tasks mainly serve to illustrate theoretical concepts. HoS follows a different logic, where theory is used to support the practice. Finally, IoS employs a method of learning-by-doing and features only small portions of theory that are integrated into tasks. The tasks offered by all three platforms can be used both in tinkering or deeper engagement with literature. However, the distinction between the different formats is not strict, and most tasks involve both types of engagement at once. In the following section, the tasks are discussed in the order of increasing complexity; since the first three types do not necessarily imply creation of artifacts, this stage of analysis is omitted.

3.2.1 Tests

HoS is the only part of EoS that features tests with multiple-choice answers and instant feedback; there are four tests in total. The first two tests are built on the idea of drawing together seemingly distant phenomena: the first task ('Cult of Personality') invites students to

compare the cult of personality and pop culture, while the second ('Pioneers') juxtaposes the principles of the Young Pioneers and a modern girl scout organization. The same principle lies behind some recreational quizzes: for instance, a popular test in *Esquire* challenges readers to guess whether a name comes from *The Lord of the Rings* or the catalog of Ikea⁵. The test of the second type ('Fear') also offers multiple-choice answers but it is based on a sole source: the students need to decide which criminal rule corresponds to different violations based on Aleksandr Solzhenitsyn's *The Gulag Archipelago*. The third-type test ('Russian stuff') employs the mechanics of a matching game: students match concepts of the Soviet newspeak with their pictographic depictions.

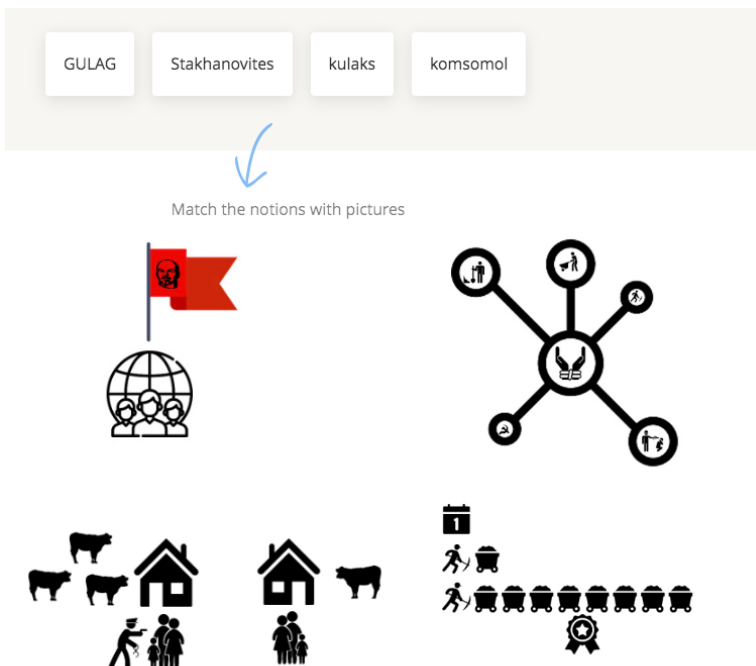


Figure 1. Task: Russian stuff. History on Screen. <https://ajalugu.haridusekraanil.ee/en/>

The tests of the first and second types are mostly monomodal: a brief verbal introduction is followed by questions and multiple-choice answers. Although these tasks follow the mechanics of a memory game or a trivia game, they do not require recalling of any text-based facts (in this case, Leelo Tungal's *The Comrade Child* trilogy). Rather, they encourage the students to deduce the answers by using intuition or general knowledge. While the first two tests only provide feedback for correct/incorrect answers, the 'Fear' task based on *The Gulag Archipelago* also offers explanatory quotes from Solzhenitsyn's text. 'Russian stuff' task is based on a visual mode: the students need to analyse pictograms representing kulaks, Komsomol, Gulag, and Stakhanovites and to match them with corresponding notions. Afterwards, they are asked

to create their own visual definitions for NKVD, communal apartment, kolkhoz and enemy of the people.

All tests on HoS aim to introduce the encyclopedia of the text by explaining the realia in the form of a game. Instead of reading a paragraph about Soviet politics and culture, the students can derive this knowledge from analysing real-life examples and solving practical tasks. For instance, they can notice some connections between the mechanisms of pop-culture and the cult of personality by trying to guess who was depicted in a 63-meter-high golden statue (Saparmurat Niyazov) or in a diamond-covered portrait (Mickey Mouse). While reflecting on the striking similarities between distant phenomena, the students also learn to understand the differences. Whereas Kapp (2012: 69) associates tests with the lower order skills, such as mere memorization and recalling of facts, the tasks on HoS are designed to be thought-provoking and even provocative. To complete the tasks, learners need to crack the cruel and often counterintuitive code of the Soviet culture. For instance, they have to decide whether selling radishes to a German officer would have been qualified as espionage, aiding an enemy country, or willful neglect of citizen responsibilities ('Fear' task). While trying to find a logic behind Soviet domestic policies, the students would probably be frustrated by the lack of the latter, which adds an emotional level to the task. Whereas gamification and interactivity can arguably make learning more dynamic and engaging, the test format has many drawbacks. As with most multiple-choice tests, the tasks on HoS can be completed by randomly and mindlessly clicking on various answers. Without a teacher's support, solving tests on HoS would hardly be an effective learning activity. According to testing in schools, the most beneficial option is to ask students to complete tests in a classroom (individually or in groups) and then discuss the results with the teacher. However, since the development of tests appeared to be very time-consuming, and the results were not especially rewarding, this format was abandoned in other projects.

3.2.2. *Timelines*

Timelines allow putting events in a chronological order and juxtaposing different levels, starting from global history to private life. This format is used twice on HoS: in the first task (Part 2.1), the students are asked to match events of the Soviet history with the stages of Leelo Tungal's life; in the second task (Part 3.2 of HoS), the students link periods of the Soviet history to artistic texts created at that time.

Events on the timelines are represented by images: paintings, drawings, photographs, book covers, and shots from films. In both examples, the visual mode is dominant: the students can complete the tasks by dragging images to the timeline and consulting the verbal descriptions only where necessary. In Part 2.1, short descriptions are given below the images, while in Part 3.2 they appear in a pop-up window and sometimes include additional videos. In the ideal scenario, the students would make their decisions based both on analysing the images and

verbal texts. In both tasks, the students receive instant feedback for correct/incorrect answers and can try different options until each element is in its right place.

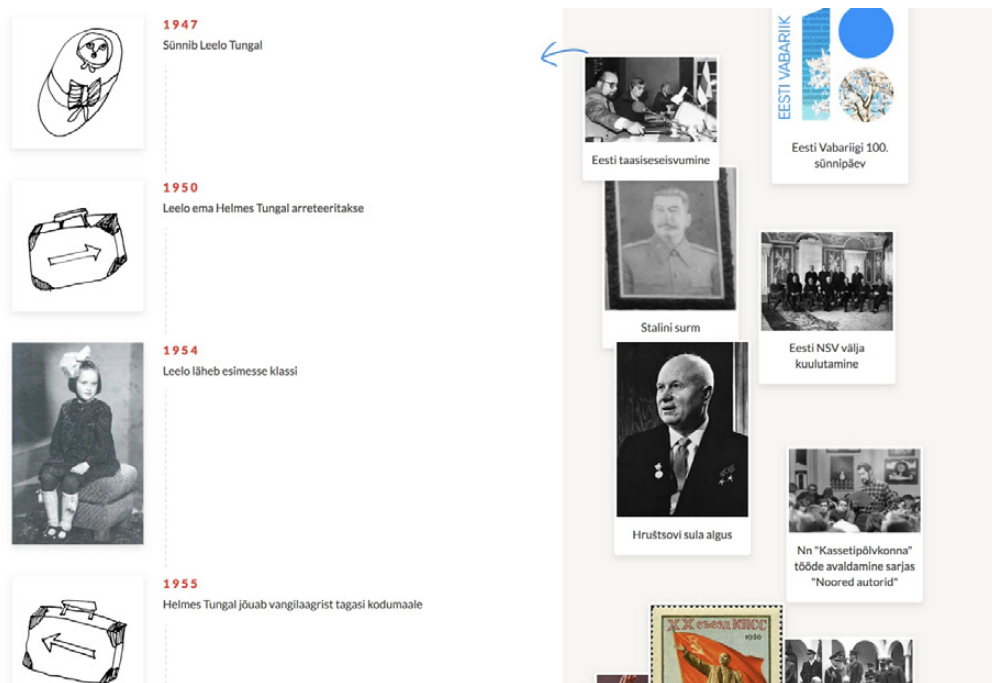


Figure 2. Task 2.1: Leelo Tungal's life in the context of Soviet history. History on Screen. <https://ajalugu.haridusekraanil.ee/en/>

Timelines help to understand the role of art in remembering the past. The students are encouraged to reflect on the place of different texts in culture and to consider them as imprints of certain historical periods. In contrast to a lecture or a textbook chapter, a timeline offers a multimodal and spatial approach to the presentation of content. Timelines can be used in a preliminary stage of work with *The Comrade Child*, so that the students get an instant overview of the Soviet era as a whole. While the tasks may be completed by searching for correct dates in Google (or merely clicking on random objects), the students can also try to derive the answers from the information they already have on this topic. However, the testing showed that the task may be too difficult for those who are not very familiar with the Soviet history. As with the tests, it is recommended that students complete the task in class and discuss it afterwards. If the situation permits, the teacher can ask students to create their own timelines featuring artistic texts about the Soviet era. This type of activity was used in testing and proved to be especially intriguing in multicultural groups, when Estonian- and Russian-speaking students worked on the timelines together.

3.2.3. Maps

Each of the three platforms includes an interactive map that helps to navigate culturally and historically specific aspects of the storyworld. The maps are detailed illustrations representing a fictional Estonian village from *The Old Barny*, a room of a Soviet Estonian girl from *The Comrade Child*, and Vargamäe village from *Truth and Justice*.



Figure 3. Map of the storyworld. Literature on Screen. <https://kirjandus.haridusekraanil.ee/>

The map presents important elements of a storyworld in a spatial way and allows the students to explore the topic in a preferred order. Learners can locate active objects, click on them to open popup-windows and get access to additional information and tasks. All three maps feature an introduction that provides an overview of the content and suggests tips for navigating the map. The maps present content mostly in a visual mode, except for short verbal captions on LoS and IoS maps. This adds an element of play to exploration: the students are required to guess which topics are represented by different objects – for instance, a toy train, a goat or a suitcase. In order to develop such maps, the team has to define problematic topics (by conducting test readings and interviewing students), to perform a detailed study of the context, and then to translate the information from the verbal into a visual form. The importance of a map as a learning object has risen since the team's work on the first project:

this element was added only retrospectively to LoS, became an important part of HoS and remained the only part of IoS providing access to all content on the platform. Whereas pop-up-windows on LoS include only verbal comments and few illustrations, the topics of HoS and IoS are introduced with the help of words, images, music, videos, and interactive tasks.

Since any artistic world to some extent overlaps with the physical reality, exploration of the maps on EoS results into gaining knowledge about the history, culture or nature. Each map creatively integrates historical facts (for instance, a layout of an Estonian village or appearances of household items) with fictional elements. Rather than presenting the physical dimension of the storyworld, the maps introduce an encyclopedia of a certain time and space. Similarly to medieval *mappaemundi*, they present the world as a 'projection of local experiences of knowledge, divine presence, climate and custom' (Barrows 2016: 151-152). Students who are not familiar with the depicted culture can acquire missing frames by exploring the map: LoS explains the specificity of Estonian folklore and history; HoS introduces some concepts of Soviet life; IoS deals with the aspects of material culture, social life and environment in a 19th-century village. When used in a preliminary stage of a literature lesson, the map can become a gateway to the text and make the material less provocative and more graspable for students. In contrast to a linear commentary in a textbook or a teacher's lecture, the maps offer an alternative way of presenting contextual information. However, the map format still does not guarantee that the commentary would be comprehensive and unbiased. Indeed, selection and interpretation of elements is inevitably influenced by the creators' worldviews and ideologies. To avoid restrictive interpretations, teachers can encourage students to continue the background research on their own by looking up information on the Internet or following hyperlinks given on the maps.

3.2.4 Role-playing tasks

All three platforms feature several tasks that include elements of a role play. They do not provide instant feedback, but imply that the result is discussed with peers and teachers. In Kapp's taxonomy (2012: 87), role-playing games correspond to the level of application: the player has to assume someone's role and perform according to the rules. One task on LoS allows writing a film script based on an excerpt from *The Old Barny*: students can choose a different genre and tell the story from the perspective of a different character (for instance, a cow). In a similar task on HoS, students are asked to rewrite a fragment of the novel from the perspective of different characters. For a task on IoS, students need to assume the roles of main characters and create a pyramid of values for each of them.

The play implies translation of discrete texts into continuous ones (Thibault 2016: 315). At first, the students follow verbal rules to create continuous mental images: they imagine the scenes, analyse motivation of the characters or act out given events. At the next stage, they

translate their experience back into discrete texts, such as essays or oral narratives. Whereas the rules are presented mostly verbally, they still include some multimodal elements: for instance, the task on LoS has a tool for shuffling topics; the task on HoS features a gallery of characters; the task on IoS includes an interactive chart that allows dragging elements. These additions aim to make the learning experience more engaging by introducing a visual dimension or an element of unpredictability. In all cases, the students can complete their tasks in a digital form, print out the results, share them with peers, and discuss in class.

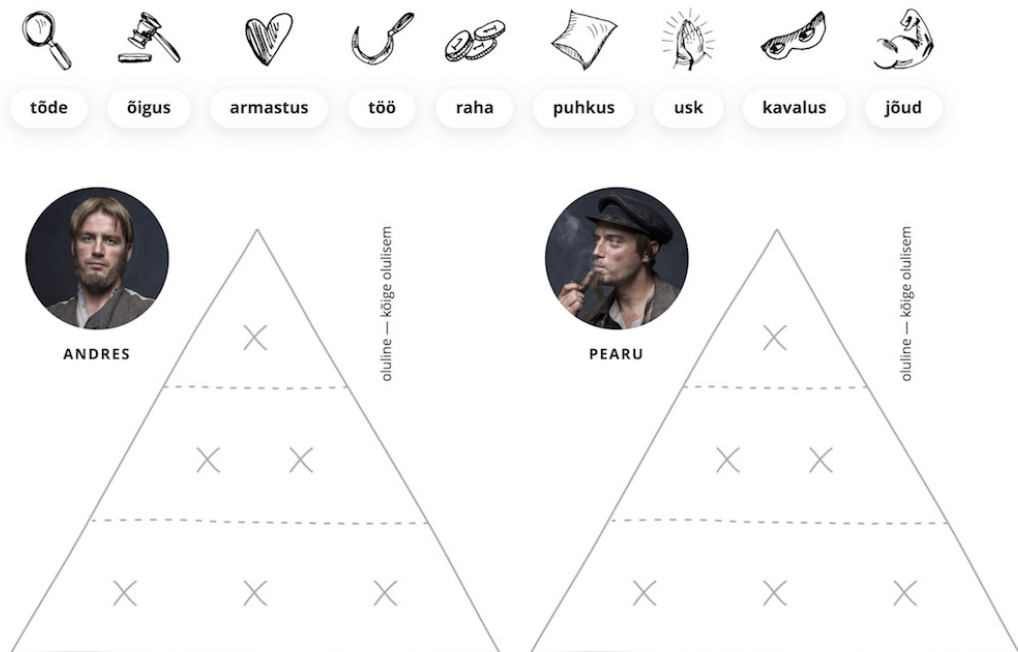


Figure 4. Task: create the pyramid of the characters' values. Identity on Screen. <https://identiteet.haridusekraanil.ee/en/>

Changing a perspective is a useful exercise for analysing the rules lying behind an artistic text. Role-playing is a more complex activity than remembering and understanding, since it requires that the students are already acquainted with the encyclopedia of the text and can build their own interpretations based on it. The same principle lies at the core of fan fiction writing and playing in the phase space in general. Role-playing helps to acquire a deeper feeling of the story and a storyworld, which is not always possible with monomodal methods of literary instruction, such as answering text-based questions or writing essays. At the same time, the testing showed that this type of task demands a lot of time and energy from students as well as from teachers. Also, learners may find it challenging to establish a balance between creative reworking of the text and being faithful to it.

All role-playing tasks on EoS imply creation of artifacts: the tasks on LoS and HoS are completed in the form of essays, while the result of the task on IoS is a printable scheme. Whereas these tasks on HoS and IoS have not yet been tested in classrooms, the testing of LoS task demonstrated that students are willing to make creative choices, if they have enough motivation and energy. Since the students had to work under harsh deadlines, their engagement with the original text appeared to be superficial: many participants merely rewrote the excerpts by replacing the names and pronouns. However, some of them managed to transform the scenes creatively and employed additional modes: for instance, suggested soundtrack for a scene or provided tips on visual appearance of characters. During the testing the students completed the task individually at home, which might have impacted their motivation. Arguably, the activity would be more engaging if it took place in a classroom and implied teamwork.

3.2.5 Worldbuilding tasks

The most complex tasks on EoS combine the mechanics of several games at once including strategy and worldbuilding games. According to Kapp (2012: 74), these games are associated with the highest cognitive levels, such as analyzing, evaluating and creating. For the task on LoS, students analyse the cultural depictions of *kratt*, an Estonian mythological treasure-bearer, and come up with their own versions. A similar idea lies behind the task on HoS, where the students visualize a scene based on a script of *The Little Comrade*: the teams collect materials and produce collages depicting a Soviet hairdressing salon, school, living room or kitchen. The task on IoS follows the principles of a strategy game and helps to understand the value of different skills and resources in a 19th-century Estonian village. All tasks are completed in groups in the classroom or at home.

As in the case of the role-playing tasks, the descriptions themselves are mostly textual, while the learning activities are multimodal. Each task offers access to repertoires, which overlap with the actual history, geography or art of Estonia. The repertoires can be accessed either directly on the website (a gallery of *kratt*'s depictions on LoS), or via links (digital archives and libraries in case of HoS and a website of Estonian protected areas in case of IoS). Each task is completed in several stages that include analysis of the resources, making judgments through checking and critiquing, and putting the selected elements together to form a coherent whole. While interacting with the material and each other, the students construct their own multimodal narratives and artifacts. For the task on LoS, learners explore the representations of *kratt*; define the traits that are common to all of them; create their own versions by integrating features they found important. The result of their work is a drawing of a creature on paper or in a digital form. To provide an authentic image of the 1950s interiors in Soviet Estonia (task on HoS), the students search for the images of furniture, household items, and clothing in digital archives; choose the historically correct images; integrate the elements into a coherent collage

that would reflect the mood of the scene. For the task on IoS, the teams develop a strategy for building a farm: they analyse the resources (according to the rules, each team gets a plot of land belonging to an actual nature park); decide which works need to be done; present their plan to other teams.



Figure 5. Visualization of the scene from *The Comrade Child*. Student's work created for the workshop "Artistic text as a mediator of historical memory" (30.11.2017).

In the context of a literature classroom, worldbuilding tasks can serve as final projects showcasing skills and knowledge acquired by the students. In contrast to traditional text analysis, the task of this type puts a literary work into a context of the whole culture and helps to develop transdisciplinary skills. By engaging with the encyclopedia of the text, the students simultaneously dig into folklore, history or geography of their country. Successful completion of the task requires teamwork, critical thinking and creativity. At the same time, the task fosters development of digital literacies, as the students get to work with digital archives and databases. Like role-playing games, worldbuilding tasks appeared to be very complicated both in terms of technological solutions and students' work. Judged by the results of testing, completion of the task could take up to one academic hour or even more if it is done at home. Assessment of the results is also time-consuming and requires thorough and individual analysis of each case.

The testing of the LoS and HoS has shown that worldbuilding tasks appear to be the most memorable and enjoyable for students. The analysis of the new versions of *kratt* created by Estonian- and Russian-speaking students revealed differences between the two types of cultural memory. Whereas most creations of Estonian students resembled the traditional image of *kratt* (anthropomorphic creature consisting of household items), Russian students made peculiar connections to artificial intelligence, anime cartoons, and Russian folklore. In this way, they compensated their lack of familiarity with the foreign phenomenon of *kratt*. The task of HoS was tested in bilingual groups and proved to be successful. Collages created by the students included not only objects mentioned in *The Little Comrade*, but also additional elements that helped to convey the atmosphere: portraits of Soviet leaders, propagandistic posters, and even links to music clips on *Youtube*. Even though the images selected by the students were mostly historically correct, the background research was not always thorough, which led to ambiguous and often amusing results: for instance, a photo of SS militant was mistaken for an image of a KGB officer. In general, the students made use of the digital resources offered in the task but also employed some additional websites and archives.

4. Conclusion

While literary instruction is largely based on conveying the predetermined meanings through monomodal, literary experience beyond the school walls embraces a wide range of multimodal texts and activities. *Education on Screen* aims to reimagine literary education by bridging a gap between the literary and profane, school and everyday life. The project developed by the University of Tartu can be considered both as a theoretical and a practical experiment. On the one hand, it aims to conceptualize the processes of reading and learning in digital environment. On the other hand, it showcases the formats and activities that can be adapted by literary education. The project is based on the theoretical premises, according to which any version of the text is meaningful regardless of its form. The multimodal and playful tasks offered on EoS combine the effective practices developed within formal, non-formal, and informal education. While tests, timelines and maps help to get acquainted with the encyclopedia of the text, role-playing and world-building games offer a possibility to apply the acquired knowledge and play in the phase space.

The testing of the platforms demonstrated that multimodal and playful tasks help to engage students and expand the range of discussed problems. On the one hand, someone may find controversial the very idea of playing with literary plots or developing games on such serious topics as repressions or deportation. Yet, the play should not be associated with profanity and superficiality. According to Lotman (2011), the play can be an extremely powerful learning tool, as it helps to model situations and master behaviours. The game-like tasks of EoS are

built on the idea that the fictional world of a literary text overlaps with the real one. While exploring the encyclopedia of different storyworlds, the students can simultaneously build connections to the actual history, culture and geography. Engagement with different types of tools and resources allow them not only to deepen their knowledge of the topic, but also to support the development of digital, critical, information, visual, media and tool literacies. Also, games can provide a deeper feeling of the problem and may become a good starting point for discussing controversial topics. Whereas without a strong methodological framework playing with literature can lead to superficiality and profanity, it can indeed be an effective tool in good hands of a motivated teacher.

NOTES

1 For instance, *Live Pages* by Higher School of Economics in Moscow offers interactive editions of Russian literary classics. <https://play.google.com/store/apps/details?id=com.samsung.livepagesapp&hl=ru>

2 An example of a platform offering literary quests, quizzes, and courses is Russian *Arzamas academy* focused on teaching literature, history, and art. The tasks range from filling in gaps in Pasternak's poetry with emoji to generating Shakespearean insults. <https://arzamas.academy/themes/game>

3 For instance, *Author Bot* is a service that allows authors and publishers to create an interactive chatbot that helps readers to find out about the plot, characters, backstory through messaging. Website: <http://www.fastbot.io/author-bot>

4 One example is *Wildwood Storymap*, a mobile app based on Colin Meloy's adventure series, which includes a map of the storyworld and allows users to follow adventures of the characters.

5 A quiz was published in a Russian edition of *Esquire* magazine in April 2009 (43). Available online at <https://esquire.ru/archive/2141-test/>

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