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**A Framework for Studying the Perception
of Print-based Poems and Their Trans-medial Adaptations**

**Ietvars dzejas un tās transmediālo adaptāciju
uztveres pētīšanai**

Keywords:	**Atslēgvārdi:**
digital poetry,	digitālā dzeja,
semantics,	semantika,
type and level of immersion,	iedziļināšanās tekstā (veidi un pakāpes),
reader experience questionnaire	lasītāju pieredzes izvērtējuma anketa

Summary   The aim of my research project described in this article was: 1) to create a framework for studying the perception of print-based poems and their trans-medial interpretations; 2) to test its practical application in order to see whether further adjustments are necessary. The first section of the article is a review of the historical context (previous research in sensory and text perception, recent developments in reading patterns and text comprehension). The next section is a contextual analysis of theoretical literature focusing on the **semantics** of print-based versus trans-medial poetry (key authors: Katherine N. Hayles, Espen Aarseth, Mirona Magearu, Gilles Deleuze and Felix Guattari), **level** and **type of immersion** (Marie-Laure Ryan), and **literariness** (David Miall and Don Kuiken), which are the building blocks for my *Reader Experience Questionnaire* (REQ). It is followed by a description of how the REQ was tested by conducting an anonymous online study evaluating respondents' perception of four selected poems and their audiovisual interpretations (each with a specific agenda) in order to: 1) test whether the questionnaire fulfils its purpose; 2) see whether the collected qualitative and quantitative data reflect the author's initial expectations in regard to the level and type of immersion, perception of literariness, and interpretation of meaning(s) of the print-based versus trans-medial poems presented. In conclusion, there are suggestions about possible further applications and adjustments of REQ, and a brief overview of some of the observations on reader's/viewer's perception based on the data collected.

Kopsavilkums   Rakstā aplūkotā pētījuma mērķis: 1) izstrādāt mehānismu, kas ļautu pētīt dzejas un tās transmediālo adaptāciju uztveri; 2) pārbaudīt modeli praksē, lai pārliecinātos, vai tajā nav nepieciešamas korekcijas. Raksta pirmā daļa ir pārskats par sensorās un teksta uztveres pētījumiem un teorētiķu novērojumiem, kas saistīti ar vispārējām lasīšanas prakses un teksta izpratnes tendencēm. Raksta otrā daļa ir teorētiskās literatūras analīze, pievēršoties dzejas un transmediālās dzejas **semantikai** (galvenie teorētiķi: Katrīna N. Heilsa, Espens Arsets, Mirona Magearu, Žils Delēzs un Fēlikss Gvatari); tam, kā lasītājs iedziļinās tekstā – **iedziļināšanās veidiem** un **pakāpēm** (Marija-Laura Raijena); un Deivida Mjalla un Dona Kuikena modelim, kas izstrādāts **literāro darbu analīzei**. Šī teorētiskā bāze izmantota, izstrādājot *lasītāja pieredzes izvērtējuma anketu*. Visbeidzot tiek aprakstīts, kā tika veikta anonīma aptauja tiešsaistē, apkopojot datus par četru izvēlētu dzejoļu un to audiovizuālo interpretāciju uztveri (katram dzejolim un adaptācijai bija iepriekš definēts uzdevums), lai: 1) izvērtētu anketas atbilstību mērķim; 2) pārliecinātos, vai iegūtie kvalitatīvie un kvantitatīvie dati atspoguļo sākotnējos autores pieņēmumus attiecībā uz lasītāju iedziļināšanās veidiem un pakāpēm, izvēlēto drukāto dzejoļu un transmediālo dzejoļu literārajām kvalitātēm un to iespējamajām interpretācijām. Raksta nobeigumā ir ieteikumi lasītāju pieredzes izvērtējuma anketas iespējamajam turpmākajam pielietojumam un korekcijām, kā arī, balstoties uz apkopotajiem datiem, sniegts īss pārskats par vispārīgiem lasītāju/skatītāju uztveres novērojumiem.

Introduction Transportation of text or print-based poems into the digital realm is by no means an innovative or a mainstream movement in the context of digital poetry. The field accommodates endless possibilities for artistic exploration – there is Artificial Intelligence, computer-generated texts, hypertexts, poetry game apps, installations, virtual reality. Nevertheless, a discussion on the subject is important and necessary.

To make a brief theoretical detour, scholars are divided when it comes to defining digital poetry. Some focus on innovation and apparatus, while others look for literary qualities in digital poems, and there are also authors who would draw a connection to the experimental poetry of the 20th century (such as Christopher Funkhouser, Loss Pequeño Glazier, Alvaro Seiça, Scott Rottberg). The arguments are certainly valid, however, they are difficult to reconcile; additionally, there is a threat of 1) falling into technological determinism (Aarseth 1997: 14), and 2) making the concept too inclusive. For example, if a person without any literary "training" has mastered code and can make the letter "a" bump into the letter "b", I doubt whether it could be considered digital literature, as we do not call songs *musical poems*. Likewise, there are poetic documentaries, but we do not call them *cinematographic poems*. In this regard, we could potentially speak of poetic digital art instead. Also, it is unclear as to for how long a certain phenomenon could be looked at as an innovation or experiment.

The literary approach, on the other hand, involves ambiguities when it comes to evaluating the presence or absence of literary qualities in a digital poem. Astrid Ensslin in her article "From Revisi(tati)on to Retro-Intentionalization: Hermeneutics, Multimodality and Corporeality in Hypertext, Hypermedia and Cybertext" concludes that "we can only use the term "digital literature" if and when the reception process is guided if not dominated by "literary" means, i.e., by written or orally narrated language rather than sequences of images – no matter how short and allusive text chunks, or lexias, may be" (Ensslin 2010: 145). Jörgen Schäfer and Peter Gendolla argue that "[i]f we regard literature as a sort of meta-medium, a commentary to the consequences of the exteriorization of imagination and ideas by producing an alternative reality, the specific literariness of texts need to be put at the center of attention of research" (Schäfer, Gendolla 2010: 92). The authors further conclude that the majority of studies including the most substantial works on digital literature, such as Espen Aarseth's "Cybertext" or Christiane Heybach's "*Literatur im elektronischen Raum*" (Literature in Electronic Space), although claiming to have *Sprachkunst* ("art of language") as the main focus of their work, either fail to address the issue altogether or do not arrive to a solid resolution (Schäfer, Gendolla 2010: 92).

Although I do not doubt the existence or even predominance of experimental endeavours within the field of digital poetry, I consider it important to focus on literary qualities and how they "behave" in spaces beyond print. In this regard, the comparison of print-based poems and their trans-medial adaptations is the ultimate data-mine as we can speak of the presence of literariness in print-based poems with much greater ease and certainty.

Moreover, since writing technology is still a major formative instrument in writers' creative process (it can be regarded as a mnemonic device and also as a part of one's thinking process, as we see it in Andy Clark's concept of *extended cognition* where thinking occurs through the act of writing), it may be impossible to arrive to the "same" literariness without the initial text form (Clark 2008: 30–43). In other words, it is not (yet) a common practice among poets to have, for example, code, Unity (virtual reality software), or Photoshop as surfaces for the materialization or manifestation of the initial poetic impulse. The pen-notebook sequence is irreplaceable in my own creative process as well – I do not know what I will write until I actually start writing.

The process of arriving to an externalized text may and does differ from poem to poem. The initial poetic impulse is not necessarily verbal. There are authors who work with predetermined concepts or ideas; it may also be a process of making a word-copy of a certain feeling, mood, an "autonomous" sonic signal, rhythm, a visual image etc. When working with "raw" poetic impulses (i.e., when the author does not have a predetermined agenda), they cannot be reconstructed, recreated or accessed at a later time, and the final poem delivered to the reader is not a road map for a travel through the initial poetic impulse, it is rather a suggestion or a hint of what is **left out** – a hardened crust or mold around a certain shape-space where **it has been**, and the walls of this shape-space imprint consist of web-like relations between the various elements of poetry.

Often these molds have cracks and leaks. Sometimes it is due to the author's ill luck, other times it may reflect the limitations of print or text alone (the intended sonority, tone, modulations of a poem would be the most obvious example). In this regard, there are authors who call upon the oral or auro-oral tradition that poetry has evolved from. For instance, Charles Bernstein argues that poetry recordings (authors reading their own works) could benefit literary criticism, education and the general reader, and he discusses the negligence on behalf of literary criticism which predominantly focuses on written texts, devoting little attention to poetry readings (Bernstein 2006: 277–289).

Thus, from the author's perspective, I find two possible applications for trans-medial adaptations of print-based poems: 1) they could potentially enhance the

delivery of the initial poetic impulse to the reader/viewer; 2) they can be used to expand the semantic field of the original poem and produce new meaning(s).

Jonathan Culler refers to Herman Northrop Frye who has established a two-element system of verbal patterning in poetry, *melos* and *opsis*, in his work "Charms and Riddles". *Melos* stands for the musicality of a poem and *opsis* represents the visual qualities (Frye 2015: 139). Regarding *opsis*, Johanna Drucker further divides the optically perceptible materiality that each work carries into **incidental** (simply bearing some trace of the historical circumstances of production), and those that have a poetic function and are **integral** parts of the work (Drucker 1998: 159–160). She provides a more detailed list of visual means: "[T]ypefaces, format, spatial distribution of the elements on the page or through the book, physical form, or space" (Ibid.: 131). Experimental typography within the historical avant-garde movement (Dadaism, Russian and Italian futurism, cubism etc.) challenged the boundaries between literature and art. In her book "The Visible Word: Experimental Typography and Modern Art, 1909–1923" (1997), Drucker writes that it gave materiality to visual-linguistic signs, "nearly protoelectronic and cybernetic" sensibility (Drucker 1997: 109).

Theo van Leeuwen refers to Jeffrey Bellantoni and Matt Woolman in saying that "the printed word has two levels of meaning, the 'word image', that is the idea represented by the word itself, constructed from a string of letters, and the 'typographic image', the holistic visual impression" (van Leeuwen 2005: 73). The author concludes that, for the most part, "lettering and calligraphy are abstract arts"; however, today "[t]ypographers themselves [..] seek to do away with the boundaries between typography and the other graphic and photographic arts, and recognize the semiotic nature of typography" (Ibid.: 28).

The possibilities for audio and visual representation (*melos* and *opsis*) of a poem in trans-medial space and print are beyond compare. However, although various technologies have become comparatively accessible, they do require a different set of competences, and in order to measure the "success rate" of these trans-spatial transportations, there ought to be some control or feedback mechanism. Therefore, the aim of my research was: 1) to create a framework for studying the perception of print-based poems and their trans-medial interpretations; 2) to test its practical application in order to see whether further adjustments might be necessary.

The first section of this article is a review of the historical context (previous research in sensory and text perception, and recent developments in reading patterns and text comprehension). The next section is a contextual analysis of theoretical literature focusing on the **semantics** of print-based versus trans-medial poetry (Katherine N. Hayles, Espen Aarseth, Mirona Mageanu, Gilles Deleuze and Felix Guattari), **level** and **type of immersion** (Maria-Laure Ryan), and **literariness**

(David Miall and Don Kuiken), which are the building blocks for the Reader Experience Questionnaire (REQ) that I developed and describe in Chapter 3. Finally, I give an account of how REQ was tested by conducting an anonymous online study evaluating respondents' perception of four selected poems and their adaptations (each with a specific agenda) in order to: 1) test whether the questionnaire fulfils its purpose; 2) see whether the collected qualitative and quantitative data reflect the author's initial expectations in regard to the level and type of immersion, perception of literariness, and interpretation of meaning(s) of print-based versus audiovisual poems presented.

Historical context

Regarding previous studies in text perception, "Poetry Beyond Text: Vision, Text and Cognition" was a research project carried out from the year 2009 to 2011, and it studied reading and viewing behaviours by the means of eye-tracking, electroencephalography (EEG), mental chronometry, and subjective rating studies. It focused on creative works that combine poetic text and image. Here are some of the conclusions that the group of researchers arrived to: abstract images are more likely to make the reader/viewer perceive the text as ambiguous, and vice versa; "[p]hotographs featuring human figures were felt to be easier to interpret [..]. These images were seen as helping to disambiguate the poetry"; "[t]he more linearly the words of a visual poem are arranged, the more likely it is that the reading pattern follows a top-to-bottom, left-to-right pattern" and "[w]hen the sign systems are mixed together in a more radical fashion, and when readers are perplexed and uncertain about which of them dominates (i.e. the verbal or the visual element), the confusion as to which perceptual mode they should adopt is visible in their eye movements". Regarding the appreciation of works, "[t]he CRs rated works in which they felt the text and image mutually enhanced one another more highly than works which they felt to be 'fragmented' or disjunctive" (Poetry Beyond Text, no date).

I also considered using EEG in the present research – to monitor changes in brainwave activity when readers/viewers are introduced to print poems and their trans-medial adaptations. However, this method seemed rather ambiguous since a large data set would be required to interpret potential peaks or drops in brainwave activity readings as statistically significant; additionally, the aim of the study was to create a widely applicable framework for the evaluation of reader's perception, avoiding the confinement to laboratory settings.

Katherine N. Hayles provides a review of neurological studies on text perception in her book "How We Think: Digital Media and Contemporary Technogenesis" (2012).

Reading is a comparatively strenuous task – it takes only 0.3 to 0.5 milliseconds for a neuron to fire compared to 80–500 milliseconds it takes for a human brain to register a sensation, and it takes 200–250 milliseconds to recognize a word. (Hayles 2012: 104). When dealing with a text, at first we have to see the linguistic signs (letters, words as visual stimuli) and recognize them, and only then can we start the sense-making process, which does not imply these processes would take place in a linear sequence. Often, Hayles writes, they are happening "simultaneously and at different rates" (Ibid.).

Another neurological study Hayles is referring to is Ap Dijksterhuis, Henk Aarts, and Pamela K. Smith's work "The Power of the Subliminal: On Subliminal Persuasion and Other Potential Applications" (2005). Hayles summarizes their research as follows:

> The senses can handle about 11 million bits per second, with about 10 million bits per second coming from the visual system. Consciousness, by contrast, can handle dramatically fewer bits per second. Silent reading processes take place at about 45 bits per second; reading aloud slows the rate to 30 bits per second. Multiplication proceeds at 12 bits per second. Thus they estimate that "our total capacity is 200,000 times as high as the capacity of consciousness. In other words, consciousness can only deal with a very small percentage of all incoming information. All the rest is processed without awareness (Hayles 2012: 95–96).

Regarding text perception and reading habits and patterns, Hayles concludes that screen-reading is taking over, while the consumption of printed books of all the possible literary genres (novels, plays, poems etc.) is constantly decreasing. The shift from printed text to digital text is not amongst the greatest concerns, it is the change in reading behaviour that draws most attention. Hayles argues that as the amount of web resources increases exponentially, "hyper reading has become a necessity". The reader can easily access all the related subfields, or quickly search and access various relevant information sources. Moreover, research shows that hyper reading may even involve changes in brain function (Ibid.: 63).

Hayles refers to Nicholas Carr's "The Shallows: What the Internet Is Doing to Our Brains" (2010). Carr is concerned that hyper reading decreases the ability to sustain concentration. It has an effect on the working memory necessary for processing information and arriving to more in-depth judgements. These constant distractions increase the cognitive load and degrade comprehension (Hayles 2012: 62–63). Hayles also refers to Mark Bauerlein who has observed that young readers, when faced with a difficult print text, find it "boring" or "not worth the trouble" (Ibid.: 60).

Contextual Analysis

Semantics of Print-based versus Trans-medial Poetry   As established earlier, the semantic aspects of both print-based and trans-medial poems is one of

the focus elements of the REQ, and the textuality of trans-medial space that I will be studying further in the article accommodates linguistic, aural, and visual forms that create networks of semantic and symbolic structures.

When one picks up a poetry book, it has a certain weight; it may have a specific scent; when pages are turned, they may make various sounds. Similarly, when one attends a poetry reading, the space where the event takes place has certain characteristics – the lights may be dim or bright, there could be outside noises interrupting the performance, the room could be crowded, the poet's voice may be soft or loud, etc. These experiences will differ yet they are not entirely different.

This section will focus on theories and concepts attempting to reconcile the semantic elements of print and trans-medial manifestations of poems into a framework that would be adapted in the REQ.

Katherine N. Hayles in her work "Writing Machines" discusses the materialization of a literary text, its inscription. Regardless of whether it is ink on a sheet of paper or images on a screen, "it mobilizes reflexive loops between its imaginative world and the material apparatus embodying that creating as a physical presence" (Hayles 2022: 25), and the author argues that "the physical form of the literary artefact always affects what the words (and other semiotic components) mean" (Ibid.). She continues by introducing the term *technotext*:

> Literary works that strengthen, foreground, and thematize the connections between themselves as material artifacts and the imaginative realm of verbal/semiotic signifiers they instantiate open a window on the larger connections that unite literature as a verbal art to its material forms. To name such works, I propose "technotexts," a term that connects the technology that produces texts to the texts' verbal constructions. Technotexts play a special role in transforming literary criticism into a material practice, for they make vividly clear that the issue at stake is nothing less than a full-bodied understanding of literature (Hayles 2022: 25–26).

Hayles argues that the materiality that scholars tend to focus on when discussing digital literature has been there all along, even if the long lineage of printing press and publishing had made it "invisible" to literary criticism: "With significant exceptions, print literature was widely regarded as not having a body, only a speaking mind" (Ibid.: 32). Thus, Hayles introduces the concept *media-specific analysis*, and the author does so not to isolate the different media, but rather to study the interrelations between form, content and medium; the way one medium is "moulded" within another media, and the way a specific medium can shape the texts (Ibid.: 29–31). Hayles concludes: "Like all literature, technotext has a body (or rather many bodies), and the rich connections between its material properties and its content create it as a literary work in the full sense of the term" (Ibid.: 32).

Brian Lennon also challenges the notion that the rise of new media has allegedly revolutionized the Western mind. Lennon does not define the concept of materiality

as a set of characteristics – instead, these characteristics emerge in the process of interpretation (Lennon 2007: 252–253). For example, we could say a knife is sharp only when we are to use it for slicing a tomato. I have never contemplated upon the bluntness of my toothbrush or the sharpness of my pyjamas.

Espen Aarseth has created a triangular model of communication representing the interrelations between the different "agents" of digital literature. Aarseth uses the term *cybertext*, and the author clarifies the term as being neither a revolutionary invention, nor a break from the "old" textuality. Instead, the Aarseth's intention is to capture any type of text in his model called "The Textual Machine":

> Cybertext, then, is not a "new", "revolutionary" form of text, with capabilities only made possible through the invention of the digital computer. Neither is it a radical break with old-fashioned textuality, although it would be easy to make it appear so. Cybertext is a *perspective* on all forms of textuality, a way to expand the scope of literary studies to include phenomena that today are perceived as outside of, or marginalized by, the field of literature – or even in opposition to it… To be sure, media are far from neutral, inconsequential carriers of "content," but the essentialist idea of "the computer medium" as a singular structure of well-defined properties of communication is just as untenable and can be based on only a very limited under-standing of both computer applications and media theory (Aarseth 1997: 18–19).

Aarseth is thus escaping the technological determinisms. Regarding the act of reading, the author discusses the importance of contexts – even the same text can be perceived differently on different occasions, under different circumstances, and the author concludes that teleological orientation (or textual organization), which guides the reader into certain directions as to how the text should be read, is at the centre of attention when it comes to cybertext, or else he calls them "self-manipulative" devices (Ibid.: 20). Aarseth explains his take on the meaning of text as "closer to philological (or observable) work than to the poststructural (or metaphysical) galaxy of signifiers […]. Instead of defining text as a chain of signifiers, as linguists and semioticians do, I use the word for a whole range of phenomena, from short poems to complex computer programs and databases" (Ibid.: 20–21).

Finally, he describes text as machine and calls upon the materiality discussed above: "[A] mechanical device for the production and consumption of verbal signs. Just as a film is useless without a projector and a screen, so a text must consist of a material medium as well as a collection of words" (Ibid.: 21). Human (operator) is the third party in Aarseth's model "The Textual Machine" (see Figure 1.), and the author describes the boundaries between these three agents as fluid and transgressive (Ibid.).

Mirona Magearu in her PhD dissertation "Digital Poetry: Comparative Textual Performances in Trans-medial Spaces" also argues that the attempts to define the genre as based on the way digital poems are produced or the methods used should

Figure 1. Espen Aarseth's Textual Machine (Aarseth 1997: 21)
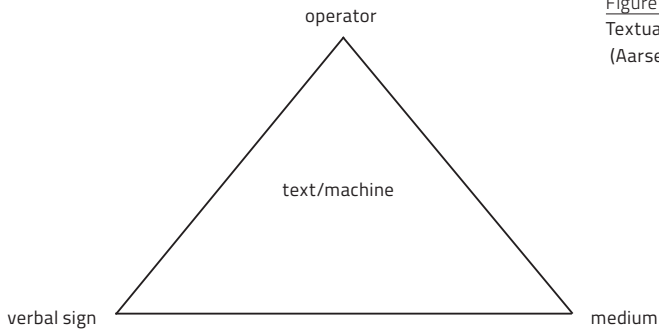
be expanded to incorporate the context in which the digital poems exist (Magearu 2011: 11). She introduces trans-medial space, which is both context and text, and the digital space that is also both context and text:

> As context, the trans-medial space frames the digital poem, structures the text, and enables its reading on the screen. In this way, the meaning of the text is not only produced by the text but also by the trans-medial space of which readers become aware when encountering the script. Furthermore, because the digital poem constructs its own space, space itself becomes the message of the poem (Magearu 2011: 30).

Magearu uses the term *trans-medial space* to signify the space where digital poem exists, emerges, and is experienced, and this space is both self-transformative and transforming (Ibid.: 13). She prefers the prefix *trans-* over the prefix *inter-* in order to capture the notion of movement across media, transitions of spaces over the notion of a certain location within or among spaces (Ibid.: 34)[1].

Magearu is challenging Marshal McLuhan's statement (McLuhan 2001: 26) that the medium is the message by expanding the concept and asserting that the trans-medial space is the message: "The trans-medial space as context becomes text and the digital poem becomes the context for the framing of the trans-medial space" (Magearu 2011: 34).

The trans-medial space of digital poetry incorporates multiple spaces: the source code, code execution, the computer screen, text as a working script, work, and on-screen performance. Magearu is drawing parallels with the transformative stages in the oral and print tradition; the continuity is the current overlap of the oral, alphabetic, and digital image, and instead of one medium conquering the other, "it fosters a series of overlays" (Magearu 2011: 31). Magearu defines textuality as "the

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1   In theoretical literature, *multimediality* (the prefix meaning 'many') and *intermediality* are often used interchangeably (Brillenburg Wurth 2006: 1).

meaning of the function of space. This means that space has meaning, but it functions as well. As a result, textuality reflects how space functions" (Ibid.: 40).

In reference to the REQ, I will be adapting this fluidity that the authors are referring to, and instead of focusing on the reader's/viewers interpretation of each individual element or process represented in the text-based and trans-medial poems (rhythm, meter, the visual representation, audio output etc.), the REQ will address the overall experience and interpretation of the textual materiality – including, if not guided by, the subjective reader's/viewer's contexts. This approach also echoes Deleuze and Guattari's concept of rhizome discussed in "A Thousand Plateaus: Capitalism and Schizophrenia". The authors challenge the traditional fixed hierarchical tree-like structures by turning to rhizome as a network that connects any point to any other point, without a fixed hierarchical structure: "It is comprised not of units but of dimensions, or rather directions in motion" (Deleuze, Guattari 1987: 21). Its characteristics are not necessarily linked to traits of the same nature, as it encompasses diverse regimes of signs and even non-sign states. This multiplicity is lacking a beginning or end, it has multiple entrance ways and exits (Ibid.).

When a respondent is asked to reflect upon their interpretation of a given work, there is space for combinatorics to take place consisting of (and not limited to) linguistic, mechanical, sensory, social, cultural, and purely accidental contexts, or returning to the discussion at the beginning of this section – neither the sound that a page makes when it is turned will be placed at the centre of attention, nor will a linguistic utterance considered to be superior.

The Type and Level of Immersion   Marie-Laure Ryan in her thorough study "Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media" (2001) is referring to Kendall Walton's mental stimulation through fictional make-believe ("Mimesis as Make-Believe: On the Foundations of the Representational Arts", 1990), and to his argument that it is possible to say "This is a ship" (or "This is not a pipe") when pointing to a painting, while we would not say "This is a ship" when reading "Moby Dick". "The difference resides in the fact that while paintings depict iconically, words signify conventionally" (Ryan 2001: 107). This lead her to the conclusion that fictionality is a verbal category:

> The asymmetry is partially explained by the fact that pictures do not literally make propositions, but Walton's categorization is above all the consequence of the re-interpretation to which the concept of make-believe is subjected as it crosses the boundary from textual to visual media. In visual communication [..] make-believe refers to pretended presence: the spectator apprehends the visual features of the depicted object as if she were standing in front of it. In the case of fictional texts, make-believe refers to pretended truth for propositions (Ryan 2001: 109).

Linguistic signs usually signify absent objects, presence of make-believe is not a part of verbal communication. Thus, in the context of fictionality, the two media cannot be compared. When a text is dealing with only abstract ideas and concepts (when it is non-mimetic), ""make-believe" as mental picturing reaches its zero degree" (Ibid.: 110). This does not imply that all mimetic texts would always ensure immersive experience (Ibid.).

McLuhan distinguishes between hot and cool media – for example, telephone is a cold medium, it has low definition as it exclusively relies on the information that can be perceived by the ear. He also defines speech as cool medium with low definition. Hot media, on the contrary, are filled with data, they do not leave many blanks that could be filled in by one's imagination. "Hot media are, therefore, low in participation and cool media are high in participation or completion by the audience" (McLuhan 2001: 22).

Immersion is sometimes paralleled with entertainment, the "less so" world. Gilles Deleuze also makes the distinction in film in his substantial works "*Cinéma I: L'image-mouvement*" (1983) ("Cinema 1: The Movement-Image" (1986)) and "*Cinéma II: L'image-temps*" (1985) ("Cinema 2: The Time-Image" (1986)). A typical Hollywood film would be an example of a movement-image that pulls its viewers into the story-world by making them identify themselves with the film characters and forget the world around them. The time-image cinematograph, on the contrary, would open a space for contemplation, recognizing, remembering, dreaming, fantasizing etc. **The level of immersion** or absorption, in fact, could be similar; however, **the type of immersion** is quite different in each of these instances, and these are the two additional axes I want to incorporate in the REQ dealing with print-based and trans-medial poetry.

In order to break down the process of immersion, Ryan turns to the system ("folk theory") developed by the psychologist Richard Gerrig in his work "Experiencing Narrative Worlds" (1993):

> 1. Someone (''the traveller'') is transported…
>
> 2. by some means of transportation…
>
> 3. as a result of performing certain actions (reading as performance, and the reader is creating the "reality model" which represents the textual world).
>
> 4. The traveller goes some distance from his or her world of origin (the reader would import their own experience and knowledge into the textual world, but the text lays the set of rules for this reality model)…
>
> 5. which makes some aspects of the world of origin inaccessible (for example, the reader is completely drawn into the textual world and cannot rest upon the real world principles).
>
> 6. The traveller returns to the world of origin, somewhat changed by the journey (Ryan: 93–94).

Immersion does not necessarily imply aesthetic qualities and vice versa – aesthetic qualities do not imply immersion. Ryan singles out poetry as something that may be far more alienated from the "real world" than a narrative. Gerrig also takes a similar stance that immersion does not depend on one's narrative skills, and he gives an example of the word Texas which would create a vivid mental image for most readers regardless of the author's narrative capabilities. However, Ryan argues, immersion can also involve some initial challenges, a degree of mental activity and concentration before the immersive world unfolds (Ryan 2001: 95–97). She distinguishes four levels or degrees of absorption in the act of reading:

> 1. Concentration. The type of attention devoted to difficult, nonimmersive works. In this mode, the textual world – if the text projects any – offers so much resistance that the reader remains highly vulnerable to the distracting stimuli of external reality.

> 2. Imaginative involvement. The ''split subject'' attitude of the reader who transports herself into the textual world but remains able to contemplate it with aesthetic or epistemological detachment. In the case of narrative fiction, the split reader is attentive both to the speech act of the narrator in the textual world and to the quality of the performance of the author in the real world. In the case of nonfiction, the reader engages emotionally and imaginatively in the represented situation but retains a critical attitude toward the accuracy of the report and the rhetorical devices through which the author defends his version of the events.

> 3. Entrancement. The non-reflexive reading pleasure of the reader so completely caught up in the textual world that she loses sight of anything external to it, including the aesthetic quality of the author's performance or the truth value of the textual statements. It is in this mode that language truly disappears. [..] Despite the depth of the immersive experience, however, this reader remains aware in the back of his mind that he has nothing to fear, because the textual world is not reality.

> 4. Addiction. This category covers two cases: (a) The attitude of the reader who seeks escape from reality but cannot find a home in the textual world because she traverses it too fast and too compulsively to enjoy the landscape. (b) The loss of the capacity to distinguish textual worlds, especially those of fiction, from the actual world (Ryan 2001: 98).

Ryan concludes that moving pictures, up until the virtual reality would be perfected, can be recognized as the most immersive form of contemporary media. It combines "the spatial extension and fullness of detail of still pictures with the temporality, narrative power, referential mobility (jumping across space and time), and general fluidity of language", and in this regard, immersive literature also stimulates a "cinema in one's head". However, not all readers are preoccupied with the mental visualization, there are readers who just follow the plot. Also, the degree of precision varies, as the reader may create images that capture just some aspects of the character or environment, and leave blank spots. This would depend on the text as well and on whether it focuses on the characters, plot, or settings (Ibid.: 120).

And finally, Ryan distinguishes three forms of immersion: **spatial immersion**, which would be a response to the narrative settings; **temporal immersion**, which is following the plot; and **emotional immersion** – one's identification with one or more characters (Ibid.). Compared to audiovisual media, Ryan argues, language represents spatially and temporally distant objects; they do not have a shape, colour, or sound directly accessible to the senses, and one needs to activate one's imagination. Postmodern literature, on the contrary, introduces space that is conceptualized – and it can be accessed, according to Ryan, by an abstract body subjected to "perpetual movement, blind navigation, a gallery of mirrors, being lost in a not-always-so-funhouse, a self-transforming labyrinth, parallel and embedded universes, [..] all experiences that preclude an intimate relation to a specific location" (Ryan 2001: 123). And the difference between the two is that we cannot inhabit a conceptualized space; the reader can only develop a relation to specific elements within this space, which does not automatically imply that the reader would not be able to acquire a sense of the postmodern space. However, Ryan concludes, a sense of place and a mental model of space that the reader is able to create by following developments in a fictional, linear story world are not the same – the ultimate spatial immersion needs to be supported by a model of this space. At the same time, detailed description and data clusters do not necessarily lead to deeper immersion, as the reader can get exhausted and overwhelmed (Ibid.: 122–124).

The system developed by Ryan is adjusted and adapted in the build of the REQ in Chapter 3.

Literariness The significance of literariness in the context of digital poetry was discussed in the introduction, and it is the third major element in the REQ. David Miall and Don Kuiken in their article "What is literariness? Three components of literary reading" are revisiting the question as to what distinguishes a literary text from any other texts. The concept 'literariness' has been criticized both by the postmodern literary theorists as they do not share the view that a literary text could have any agreed-upon characteristics, and by cognitive psychology, which often approaches it as discourse-processing. Miall and Kuiken also disassociate themselves from Roman Jakobson's concept of literariness ("Linguistics and Poetics", 1960) by saying that it cannot be defined as a set of text properties, and from Rolf Zwaan's set of conventions ("Aspects of Literary Comprehension", 1993). Instead, the authors offer a three-component model which is based on reader's response to literary texts, and all three should be present for a text to be recognized as literary:

1) stylistic or narrative variations;
2) defamiliarization;
3) reinterpretive transformations.

Or, as authors have stated, "literariness is constituted when stylistic or narrative variations strikingly defamiliarize conventionally understood referents and prompt reinterpretive transformations of a conventional concept or feeling" (Miall, Kuiken 1999: 123). They attribute this potential to a specific psychological shift towards literature alone, nevertheless suggesting that other art forms may also lead to a response that would involve comparable processes (film, music, visual art, dance). As the authors conclude, the three-component model has a common ground with British Romantic writers, Russian Formalists, Prague Linguistic Circle, Leech, Fowler, Short, Widdowson, Iser, and others (Ibid.: 123). Miall and Kuiken's contribution is the specific practical application of the model within a local textual level and empirical studies.

The first component refers to stylistic features or striking features due to the narrative – they stand out on the background of everyday usage of language. The authors name a few examples: metaphors, unexpected gaps or blanks in literary narrative, shifts in the point of view, broken linearity.

The second component, defamiliarization, is explained by Miall and Kuiken as something "more" than the conventional understanding of referents. As the readers reflect upon these entities, this reflection transforms their conventional concepts or feelings, and the authors' research shows that feeling is the main driving force behind one's "literary search".

The authors worked with focus groups, and their findings contradicted the viewpoint that a reader's response would depend on their previous literary training. Although interpretations would vary, Miall and Kuiken did not see any correlation between a reader's rating of the strikingness of various text segments and the respondent's background – literature students as opposed to those with no or little interest in literature. Miall and Kuiken also browsed critical literature (articles and book chapters, altogether 166 publications) written in the course of a century (from the year 1900 to 1991) for quotations from Samuel Taylor Coleridge's poem "The Rime of the Ancient Mariner", and they asked 30 students and critics to select five passages that they felt as most striking in the poem. The consistency was astonishing, and Miall and Kuiken concluded that "[p]assages from the poem apparently have the power to attract attention in ways that transcend time (1900–1991), literary experience (student or critic), or critical perspective (psychoanalytic, new historicist, etc.)" (Miall, Kuiken 1999: 126).

These studies clearly conflict with the postmodern literary criticism where text properties are regarded as variables dependant on the reader's interaction with the material.

The third component (reinterpretive transformation) includes individual responses and articulation connected to the self – for example, personal memories,

previous experiences can act as a context for the interpretation of a literary text. The meanings that readers arrive to can be very different (Ibid.: 134).

Regarding defamiliarization, I would agree with Miall and Kuiken only partially – the likelihood that the majority of readers would select the exact same elements in a text as being "out of the ordinary" would certainly depend on the specifics of the text or on one's cultural background at least to some degree. Nevertheless, even if Miall and Kuiken's three principles of literariness cannot be applied equally successfully to all texts, they do provide a framework for the analysis of reader's perception. In regard to REQ, I am not so much concerned with data that inform which particular segments of text one is defamiliarized by and whether the readers select the same or different segments of a text. I rather want to apply this framework in order to register possible changes in the traits of perception when one is introduced to print-based as opposed to trans-medial version of a poem.

The Architecture of REQ

In order to study the perception of print-based and trans-medial poems, I have developed a Reader Experience Questionnaire (REQ) derived from the contextual discussion in the previous chapter. The REQ consists of 14 open, closed, and category questions (which were based on methodology described by Jenny Rowley (2014: 313) and Shelley Sikora et al. (2011: 3)). Twelve of the closed questions consist of five-point Likert scales (for a description see, for instance, Göb et al. 2007: 601–602). I will now briefly introduce the questions included in the REQ.

General background information: 1. age, 2. education, 3. area of study (if applicable).
The first three questions are designed to gather general (yet valuable) information – the age is relevant in the context of the recent perception studies discussed earlier. For example, it is possible that a correlation between one's age and preferences over one or another medium could be observed, or it could reveal a connection between the level and type of education obtained and a possible inclinations towards one or another medium, perception traits etc.

Question 4. How would you describe the poem?
This question is asked after respondents have been introduced to the text-based version of the poem. The question consists of a five-point Likert scale, and the respondent is asked to evaluate it as *immersive; somewhat immersive; neither; rather complex; complex*. The theoretical framework for this open question is an adjusted Ryan's scale for evaluating the degrees of absorption when reading a literary work (concentration; imaginative involvement; entrancement; addiction). As the

questionnaire is built for studying response to one poem at a time, it is highly unlikely that one could reach a level of addiction; however, the nature of reader's involvement will be studied in the questions to follow.

Question 5. Did you have a mental image of the text? If so, did you imagine the place, setting, characters? Please be as specific as possible.

This question is based on Gerrig's "reality model" constructed by the reader and initiated by the textual world that was discussed earlier along with Ryan's types of immersion: spatial immersion (response to narrative setting), temporal immersion (following the plot), and emotional immersion (identification with the character(s)).

Question 6. Did any line(s) or text fragment(s) stand out, catch your attention? If so, which one(s) and why?

Question 7. What reaction did it/they initiate (a feeling, memory, association, idea, contemplation)? Please be as specific as possible.

Both questions are an implementation of Miall and Kuiken's "three components of literariness": 1) stylistic or narrative variations; 2) defamiliarization; 3) reinterpretive transformations.

Question 8. What is your interpretation of the possible meaning(s) of the text?

The aim of this question is to detect possible changes that the audiovisual adaptations may initiate.

Question 9. How would you describe the audiovisual representation of the poem?

After watching the audiovisual material, the respondents are asked to evaluate it either as *immersive, somewhat immersive, neither, rather complex, complex*.

Question 10. Would you agree that the audio-visual representation enriches the print-based poem in any way?

Question 11. Please explain your answer.

The respondent has to formulate their opinion as one of the following options: *strongly agree, agree, neither agree nor disagree, disagree, strongly disagree*, and to explain their answer.

Question 12. Did any video/audio fragment(s) stand out, catch your attention? If so, which one(s) and why?

This question deals with the literariness referred to in the questions 6 and 7.

Question 13. Did the audiovisual representation of the poem facilitate the perception of the textual message of the poem?

This question is designed to evaluate the perception of poems and their trans-medial interpretations where *melos* or the sonority has a significant semantic value.

Question 14. Did the video change your interpretation of the possible meaning(s) of the poem? If so, please be specific.

This question is studied in the context of the type and level of immersion, and interpretation of the print-based poem accounted for earlier.

Online Survey

In order to test the REQ in practice, I selected four poems and their audiovisual interpretations and conducted an anonymous online questionnaire, focusing on the aims defined earlier.

The poems were not chosen for their artistic value, nor were the trans-medial adaptations selected for their innovative or artistic qualities – instead, each had a specific agenda. Also, I chose to work with my own poems (previously published in poetry collections "*Zilonis okeāns*" (2015) and "*Tas ods meklē mani kopš 1981. gada*" (2021)) and my own audiovisual interpretations, as I am aware of all the processes involved – from the arrival of the initial poetic impulse to its interpretation, manifestations, and adaptation.

I will now briefly introduce the four poems and explain why these particular poems and their audiovisual interpretations were selected for the study (for the full texts see Annex 1).

The works studied   *Poem I (Guardiansounds).* I chose this poem mainly for its inner voice and sonority – i.e. for how the way it is read contributes to the delivery of the poem's intrinsic poetic, semantic code. Also, I vividly recall the overall mood and the visual images that emerged while writing the poem, and I can see how audiovisual interpretation could enhance the delivery of the initial poetic impulse to the audience. The semantic structure of the poem is not linear, it consists of inner webs of meanings, and regarding the axis "immersive-complex", I would place the poem towards "rather complex" or "complex". In this case, the goal of the audiovisual interpretation is to increase the poem's immersiveness. Although the visual material does not directly compliment the print-based poem, the semantic complexity of the poem would be dispersed by moving the attention away from the relatively loose interconnections and towards a unifying feeling or mood. The clear contrast between the visual and the verbal semantic fields should not result in new semantic interpretations – instead, it is expected to further emphasize the intrinsic restlessness and tensions of the text. The background music I had recorded consists of stretched, atonal accordion sounds. In a way, the rhythm is soothing; however, the lack of harmony contributes to the overall tone of the poem. The vocalization of the text is one of the main undertakings of the audiovisual interpretation of this poem. In order to

communicate the intense vibration of the initial poetic impulse, I have adapted an exaggerated performance that could lead to emotional uneasiness or restlessness.

Poem II (Muri). Most of the poem consists of repetitions of somebody calling a cat by its name Muris (a typical Latvian cat's name, and *Muri* is the vocative case form of this name). This poem also predominantly inhabits *melos*, the sound-space. However, it could potentially allow the reader to construct a model of reality as discussed earlier – to transport their virtual body into the story-world, as opposed to the first text where the potential for vivid mental images is present but they are fragmented, the inner semantic structures are not linear. The second poem could also accommodate a level of identification with the character. The disadvantage of the text-based poem though is that it is very unlikely that the reader would actually read each word "*muri*" in the poem, most likely one would recognize the fact "a cat is being called" and skim across the lines. Therefore the goal of the audiovisual interpretation is to increase the virtuality already captured within the text form, and to achieve a deeper reader's/viewer's involvement by voicing the act. The visual representation consists of a recording of a shimmering, flickering light shining through a thick green glass. In a way, it could resemble the effect of somebody looking at a source of light through slightly opened watering eyes. Towards the end of the video there is a distorted, disfigured silhouette behind the glass slowly moving away. For the soundtrack, I used a recorder (wooden flute) sound on a loop – the recording might resemble distant bird voices. The assumption was that the audiovisual interpretation of this poem would have a greater potential for immersion compared to the print-based version. The semantic field, most likely, would not shift or expand much.

Poem III (Daugava (16.10.2019 / 16:58)). This poem is a purely onomatopoeic, it was written by the river Daugava mimicking the sounds that the waves were making. The text itself does have a potential for immersion as a musical score does, providing one would be ready to work their way through "*pļ kšķ p p p buļpļ šļ šķ šguļ bļuk šļ pntik*" and imagine or recreate the actual sound that a river may have made. However, I had assumed that only a few devoted readers would actually tackle the text this way; most likely the reader would skim the text, understand the concept and probably find it amusing, irritating, interesting or meaningless, etc. This time, the audiovisual interpretation **did not** attempt to increase the virtual potential of the print version as it did with the Poem II (*Muri*). I used the automatic text-to-speech function, and the voice belongs to a well-known Latvian news reporter Sandra Glāzupa who has a mellow, beautiful, almost singing voice. The text-to-speech adaptation was expected to completely change the semantic field of the poem – the onomatopoeic content is turned into a somewhat comic act (a well-known voice usually reporting on the

current events is suddenly speaking gibberish, nonsense). The rhythm of the poem is also subjected to the set auto-speech tempo. The still shot of the poem that lasts throughout the recital potentially could have had some turbulence and, to an extent, pulled the viewer back to its initial reference, but the amusing audio output was expected to be the dominating element.

Poem IV (The flies are crawling over the walls). This poem has a strong potential for immersion and constructing a model of reality. However, the goal of the audiovisual interpretation was to distract the viewer both by the audio representation and the video, and to check whether it would be reflected in the respondents' responses. The audio recording of the poem consists of repetitions: 1) a line is spoken with a hand covering the mouth (no clear verbal signals can be interpreted); 2) the line is repeated clearly articulating the text. It distorts the message of the poem, and distracts the linearity of the narrative that is present in this poem. The visual material also consists of two different themes: 1) dancing shadows of two people on a dirt road; 2) shots of two pigs and two piglets in a fenced area next to a lake and a small pond. The montage constantly shifts back and forth between the dancing shadows and the pigs. The third shot is added as the poem already ends – a girl sitting inside a boat and feeding breadcrumbs to ducks swimming in the city canal. The third shot is suddenly black and white, deepening the contrast between the seemingly unrelated videos. There is a recording of atonal accordion sounds: long and stretched, fast staccatos. The intention of the audiovisual interpretation was to **destroy** the immersive potential of the original print-based content by "divorcing" the viewer from it, and to test whether and how it would be reflected in the data collected. I had assumed that respondents could have arrived to new interpretations of the poem. However, considering the fact that the assemblage of the audiovisual material was so random and bizarre, I had also expected them to detect the hidden agenda and to consciously avoid the challenge of constructing a new, complex web of meanings.

The procedure of the online study   In total, 14 respondents representing various age groups, levels of education and fields of study filled in the online questionnaire: three were 18–24 years old; six were 25–34 years old, and five were 35–44 years old. Six of the respondents had graduated from high-school, two had a bachelor's degree; five had a master's degree. Their fields of study were: art, music, social anthropology, chemistry, biology, IT, translation/interpretation.

This was the procedure of the online study: after filling in general information, respondents would read the print-based poem and answer to questions 4–8 regarding the level and type of immersion, literariness, and interpretation of meaning(s). Then the respondents were instructed to click on a link and to watch the audiovisual

interpretation of the poem; after they had watched it, they were asked to answer to the remaining six questions (9–14). This sequence was repeated for each of the four poems.

Conclusions

Based on the theories discussed in Chapter 2, I have developed a REQ consisting of 14 questions that focuses on three main aspects of readers'/viewer's perception of print-based poems and their trans-medial adaptations.

The interpretation of meaning: I have adapted the approach that allows respondents to focus on a given work as a whole – its inner web-like, rhizomatic connections, and its contexts. I have incorporated Hayles' take on the materiality of technotext which, along with the content, constitutes a literary work. Namely, the respondents are not required to comment on individual elements, utterances, technology or processes of either text-based or trans-medial poems. They are asked to contemplate on the possible interpretation of the print-version, and later – on whether the trans-medial interpretation has changed their interpretation of the possible meaning(s). The respondents are also asked whether they feel that the audio-visual representation has enriched the print-version in any way.

The type and level of immersion: by adjusting and rephrasing Ryan's levels of immersion (concentration, imaginative involvement, entrancement, and addiction), I developed a question consisting of a five-point Likert scale ranging from complex to immersive. It was done mainly to observe potential shifts in the perception of text-based and trans-medial interpretations. For more detailed account, I used Gerrig's "reality model" constructed by the reader and initiated by the textual world discussed, and Ryan's types of immersion. However, in order to avoid unnecessary confusion over the terms *spatial*, *temporal*, and *emotional immersion*, I asked respondents whether they had been able to create a mental image of the places, settings, characters, and if yes, to provide a more detailed account which then, on the basis of their answers, can be recognized as one of the three Ryan's types of immersion.

Literariness: in order to study the readers' perception of literariness of both print-based and trans-medial works, I used Miall and Kuiken's three-component model: 1) stylistic or narrative variations; 2) defamiliarization; 3) reinterpretive transformations. The respondents were asked whether any fragment stood out and caught their attention, and if yes, which one(s) and why. Then they were asked whether these particular fragments initiated any feeling, memory, association, idea etc.

Additionally, respondents were required to fill in information on their age, education and area of study – which (when working with larger data sets) may reflect some correlations between one's age and preferences over one or the other

medium, or possible perception traits depending on the level and type of education obtained, etc.

Overall, the anonymous online questionnaire conducted in order to test the REQ in practice and the data collected suggested a few interesting questions for further studies and discussion. I will now share some of the general conclusions.

On the build of the questionnaire:

1) As it was anticipated (see Chapter 2.3.), Miall and Kuiken's concept of the three components of literariness does not function as authors had claimed it would when a reader is introduced to poems consisting of complex, rhizomic interrelations. For example, for the first poem "*Guardiansounds*" which lacks linearity and is rather fragmentary, no consistency or repeated patterns could be observed in the data collected. Almost all text fragments (except for one line) were singled out by respondents with various, often contradictory interpretations as to why these particular fragments had stood out. Nevertheless, it did serve the purpose well in regard to the REQ since the goal was not to establish a set of fragments that could be recognized as carrying the value of literariness, but rather to observe whether and how the trans-medial material would change it, and whether these observations coincided with the author's initial assumptions.

2) REQ certainly proved to be a valid tool for studying and comparing the perception of print poems versus their trans-medial adaptations (their literariness, the level and type of immersion, and interpretation). It also proved to be a valid feedback tool for the author – allowing to test the accuracy of the initial assumptions regarding the original text form, and the potential effects that the trans-medial adaptation could have on the audience as stated earlier. I will provide some examples below. However, the REQ both confirmed some of the expectations and proved others to be false, which is exactly what one should be able to detect. I do not expect authors (or myself) to follow up their readers with regular REQs – nevertheless, in the context of this practice-led research it did justify its purpose.

3) There is one deficiency I noticed regarding the responses collected. The question: "*Did the audiovisual representation of the poem facilitate the perception of the textual message of the poem?*" was designed in order to study the sound poems in particular. However, some respondents started to elaborate on the possible interpretations or meaning(s). Thus the question needs a clarification that it addresses text alone (its written form over the oral) by slightly adjusting the wording, for example: *Did the oral representation of the text facilitate the perception of the textual message of the poem?*

4) It is possible to further adjust the REQ: to change the order in which the respondents are introduced to the variants. Namely, a part of the respondents could

be introduced to the trans-medial form first and only then to the print-based version of the poem; consequently, the order of the questions would change as well. It would be interesting to observe whether there is any significant change in the way either of the two is perceived following this reversed sequence, and if there is – what changes and correlations could be detected. Furthermore, the REQ can also be easily adjusted for studying the perception of just print-based poems or just digital poems (any form of digital poetry).

On respondent's perception of print-based versus trans-medial poems and the accuracy of the initial presumptions

1) In case the original text version of a poem has a potential for creating spatial, temporal, and emotional immersion, there were instances I had not fully appreciated it (the poem that had repetitions of the word *muri* or the pure onomatopoeia in the "*Daugava*" poem in particular) – I had assumed that the readers would recognize the construct and skim over the text. However, there is convincing evidence in the data collected that they had actually read the text version, built vivid models of reality, and even imagined themselves in the virtual worlds created. Nevertheless, the respondents were aware that they were taking part in a study, and it could have influenced their reading strategies.

2) The title of the poem including the word *Daugava* (a river known to every Latvian), could have acted as Gerrig's *Texas* discussed in Chapter 2.2 – i.e., the word itself has an immersive potential.

3) It was interesting to observe that if a respondent had constructed a **pleasant** model of reality based on the text version of the poem, they were unwilling to part from this virtual world when introduced to the audiovisual interpretation. And on the contrary – the fourth poem was very graphic, and its text version had a great potential for immersion (the data collected only confirmed this: the readers did use this potential to its full extent). There were detailed accounts on spatial, temporal, and emotional immersion (even the color of wallpapers, the clothing the characters were wearing, the facial expressions they had, the setup of the room, furniture etc.). However, instead of the pleasant scenery created by, say, the "*Daugava*" poem, here the readers described an overall feeling of **disgust, confusion; impression that something bad is about to happen; disturbing nightmare; conflicting beauty and terror; shock, restlessness, uncomfortable feeling, hopelessness** etc. And, even though the models of reality they had created were very vivid, once they were introduced to the audiovisual layer (which was created as an intentional distraction, and it had nothing in common with the original notion of the poem or the initial poetic impulse), they were more willing to give up their reality model and to exchange it for

something relatively happier and less disturbing. Some viewers constructed a new interpretation including the new trans-medial variables into this assemblage, some even concluded that the audiovisual representation holds the key to unlocking the poem.

4) When respondents evaluated a poem as complex or rather complex (its meaning consisting of fluid or puzzle-like pieces that are hard or impossible to fit together (the first "*Guardiansounds*" poem in particular), the trans-medial adaptation did enhance the delivery of the initial poetic impulse, since the majority of respondents had concluded that the audiovisual adaptation had created a space for experiencing the text as a whole. There was also a significant shift in the level and type of immersion compared to the original print-based version of the poem (while 11 respondents found the poem rather complex or complex, none of the respondents found the audiovisual version complex, and only two found it rather complex). Furthermore, after reading the text version alone, there were reports of calmness and tranquility (which clearly contradicts the initial poetic impulse I had tried to capture within the text-based poem), and the trans-medial adaptation certainly cleared that away. The majority seemed to agree that the audiovisual version complimented the text form, it informed about the author's intention, tone, sound and rhythm; created an aura, changed the atmosphere of the poem etc. Thus the initial assumptions about the poem and the potential effects of the audiovisual material were rather accurate.

Nevertheless, there were a few respondents who had even managed to build a detailed virtual model of this complex and fragmented poem as well, and it was interesting to note that they had also developed a certain attachment to the text version or its personal interpretation – once introduced to the audiovisual material that differed from their construct, they would either refuse the author's interpretation, express regret over the lost notion they had developed, or claim the two interpretations to be two separate works.

The aim of the research was to establish a framework for studying readers'/viewers' perception of a print-based poem versus its trans-medial adaptation and, at the same time, to create a mechanism for testing how poetic values behave beyond print from the author's perspective in order to explore how media allowances could be used to enhance the delivery of the initial poetic impulse to the reader or to create new semantic layers and potential interpretations. This goal has been achieved, additionally the REQ has been tested in practice, and it is open to further discussion.

I am a strong believer in print poetry, I know that black letters on a white surface can do great things, and although digital allowances can potentially benefit the fields of literature, education, literary criticism, or help to reach an audience that has not

developed a habit of picking up a poetry collection, they also involve certain risks. Literacy – the ability to see the word-image (language from the outside) – has brought along major shifts in how our brain works and how we structure our thoughts and memories, and by facilitating the text perception process today we may end up without any writers tomorrow.

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ANNEX 1

The four poems selected for the anonymous online survey (the author of both the texts and the trans-medial adaptations is Elīna Veira)

Poem I

English translation:

The original in Latvian:

* * *

* * *

Guardiansounds

Sargskaņas

A bluetrembling inhaled

Ieelpota ziltrīce

I am within touching you through a pole

Es tevī esmu un pieskaros caur stabu

Two cats dispersing expanding

Retinādamies plezdamies divi kaķi

Sagadogs Guardiansounds:

Sāgsuņi Sargskaņas:

"What is your name?"

"Kāds ir tavs vārds?

There are a couple of holes floating across the wall

Peld pāris caurumi sienā

There is a flock of cats flying past the window

Aiz loga kaķu kāsis lido

Trans-medial adaptation: https://www.youtube.com/watch?v=l8AWsjgd89M

Poem II

*(*Muris *is a typical Latvian cat's name, and* Muri
is the vocative case form of this name)

*	*
muri muri muri	muri muri muri
muri muri muri	muri muri muri
muri muri muri	muri muri muri
muri muri muri	muri muri muri
Muri	Muri
Muri	Muri
muri muri muri	muri muri muri
muri muri muri	muri muri muri
muri muri muri	muri muri muri
muri muri muri	muri muri muri
* *	* *
This is how we all are called	Tā mūs visus sauc
Not quite by the name	Ne gluži vārdā
Not quite home	Ne gluži mājās

Trans-medial adaptation: https://www.youtube.com/watch?v=c634t4zuWD0

Poem III

Daugava (16.10.2019 / 16:58)

pḷ kšḳ p p p buḷpḷ

šḷ šḳ šguḷ bḷuk šḷ pntik

pkp t ḷ pu tiḳib šūktuḷ pḷ

šlumpa pa pa pā šḷ pḷu

ti ti ti kḷo ti po bḷi kt jo pḷ

jo pḷ top ci ci ci jē pi pi pi pi

ḷ ḷub ḷut ḷu pu pu

si si si pḷ tp si bḷ pḷ pu

tibu tabu pu pi pa ḷš tišu

bu pu čḷ puš bl bḷ

pu tšḷ pḷu t č b p b š tūb

pḷ pḷ ūk ouk ščḷ bḷ o p p p š

bḷt jo up kčš bḷip

tu tu šḷup

špu ḳe it ču ču ču!

Pt pt pt ḳḷi pḷon topš šš čš st

sōp tḷo p ḳ ḷ p ḷ p ti

bḷ ḳ ī bš ut pḷ ū i bḷkḷ

puḷ bḷ pḷ pḷ īḷ kḷ bḷ pḷ

šu šu šḷ bḷpi puḷ ti pi

bḷun tḷ tḷ tḷup ūbḷ slup

šḷ šḷ oupšḷ pḷ pḷ šḷu tuḷ pḷu kš

i kḷi puḷ bi ti šlup šḷub šḷ

pḷu k k š šlui pḷu šū ččkt č č kt

šū šū ti ti ti š š ūp

ķit ķit ti š piš ščup

ūd ru šļup t šķil ūūb

ūp čs ti put puk puļ šķ op

šsi ti pu či či ļšļup pļa?

bup pļgļup ikt tļ u tļ u

tļu pļuō pļuč tļī up

pļ e š k ķ ķ ķiļ sļi p

p ķlip glūoīp pļ pļ ušķi it

bļ u i p pļ šļūtp pļub šļ šļ

ū tup puļ šlip ipt šļu bļut

pļikšštip šl pļit pļut ķi šļut

jšļ jšeeiktupo šļšl ķi p šļ u p

Trans:medial interpretation: https://www.youtube.com/watch?v=GyYrt39JmTc&feature=youtu.be

Poem IV

English translation   *The original in Latvian*

***   ***

The flies are crawling over the wallpapers   Pa tapetēm rāpo mušas

My bust is sitting at the table   Pie galda sēž mana biste

I am looking straight ahead   Es skatos taisni uz priekšu

And there is water dripping from my mouth   Man no mutes pil ūdens

You are standing there eating a pomegranate   Tu stāvi blakus ēd granātābolu

And stammering seed by seed   Un rausti valodu

Trans-medial interpretation: https://www.youtube.com/watch?v=iq1RD0o_fIY&feature=youtu.be