

**Elīna Veira**

**THE EXPANSION OF PRINT-BASED POETRY WITHIN  
THE TRANS-MEDIAL SPACE**

Summary of the Doctoral Thesis



**RIGA TECHNICAL UNIVERSITY**

RTU Liepāja Academy

Centre for Humanities and Arts

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**THE EXPANSION OF PRINT-BASED POETRY  
WITHIN THE TRANS-MEDIAL SPACE**

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Scientific supervisor

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# **DOCTORAL THESIS PROPOSED TO RIGA TECHNICAL UNIVERSITY FOR PROMOTION TO THE SCIENTIFIC DEGREE OF DOCTOR OF SCIENCE**

To be granted the scientific degree of Doctor of Science (Ph. D.), the present Doctoral Thesis has been submitted for defence at the open meeting of the RTU Promotion Council on March 26, 2025, at the Institute of Architecture and Design of Riga Technical University, Kļipsalas iela 6, Room 117.

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## **DECLARATION OF ACADEMIC INTEGRITY**

I hereby declare that the Doctoral Thesis submitted for review to Riga Technical University for promotion to the scientific degree of Doctor of Science (Ph. D.) is my own. I confirm that this Doctoral Thesis has not been submitted to any other university for the promotion to a scientific degree.

Elīna Veira

Date: February 10, 2025

The Doctoral Thesis has been written in English. It consists of an Introduction, 5 chapters, Conclusions, 15 figures, and 2 appendices; the total number of pages is 266, including appendices. The Bibliography contains 115 titles.

## **Abstract**

This Thesis is offered as an original and substantial contribution to the fields of knowledge of poetry and trans-medial or digital poetry. The practice-led research focuses specifically on the initial poetic impulse, its interpretation into a text form (poem), and its further adaptation into the trans-medial space (from the author's perspective). Specifically, it explores how different media tools can be utilized to enhance the conveyance of the initial interpretation of poetic impulse to the reader/viewer. Additionally, the research introduces and tests a new framework (Reader Experience Questionnaire) for studying the audience's perception and changes in perception of printed poems and their audiovisual adaptations. The questionnaire is also tested in practice by conducting an anonymous online survey, and collecting data on the perception of four selected author's poems and their audiovisual interpretations, 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.

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## Introduction

In spite of its recent emergence, especially when compared to the long historical lineage of literary tradition, digital poetry<sup>1</sup> has solidified its position as a well-established genre. This dynamic field is undergoing rapid development, driven by ongoing technological advancements that continually open new opportunities for experiments across diverse media spaces. Concurrently, the evolving spectrum of forms presents perpetual challenges to scholars, who are constantly overlooking new horizons. As a result, there is no unified, widely agreed upon terminology or typology of digital poems – the theoretical framework must be inclusive enough to accommodate all the various forms of digital poetry and specific enough to represent characteristics that would distinguish it from other forms and processes. Scholars exhibit diverse approaches to digital poetry, with some situated within the literary tradition while others emphasize the digital/machine aspects. Nevertheless, both approaches imply limitations as they focus solely on specific aspects of the complex interconnections inherent in trans-medial spaces.

Regarding the literary aspect in digital poetry, Jorgen Schäfer and Peter Gendolla (2010, p. 92) conclude that the majority of studies including the most substantial works on digital literature such as Espen Aarseth's "Cybertext" (1997) or Christiane Heybach's "Literatur im elektronischen Raum" (2003) ("Literature in Electronic Space") although claim 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. The Thesis aims to address this significant gap in theory and research by conducting experiments across various media and text types to gain a deeper understanding of contemporary literary production and its reception by audiences. This endeavour extensively draws on the author's personal experiences as a poet and digital poet in pursuit of this goal.

Poems arise from poetic impulses, and they are not always verbal; the impulses can also be vivid visual images, a mere mood or feeling, or a sudden, strong excitement and an awareness that something is about to emerge without any particular manifestation. The poetic impulse, encompassing the initial, original, creative, and aesthetic drive, is referenced in descriptions of the creative process. Keith Williams (2020, pp. 48–49), for instance, characterizes it as the "initial impulse or experience of resonance," a "gestalt understanding" that poets revisit during the writing process. This study similarly defines the poetic impulse as the catalyst that initiates the creative writing process, emphasizing the importance of capturing it as a gestalt or imprint within the textual material, utilizing semiotic and media resources available to the poet.

Consequently, the greatest achievement of the writer is to succeed in perceiving, interpreting and delivering this materiality to the reader as whole and unchanged as possible, and the poem that is 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**, that what cannot be said – a hardened crust or mold around a

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<sup>1</sup> Digital poetry and trans-medial poetry are used interchangeably, the adaptation of the later is discussed in Chapter 2 of the Thesis.

certain shape-space where it **has been**. The walls of this space consist of web-like relations between the various elements of poetry.

It is important to note that when a poetic impulse arises and the writing is completed, there might be a genuine sense of accomplishment – believing that I have successfully captured its shape-space, only to discover later that there are leaks, cracks and holes, and it is impossible to go back, reconstruct the moment, and start over.

I discovered the space of digital poetry quite accidentally. In 2016, I completed the master's program in "Audiovisual arts: film directing and production", and during the same year, my first poetry collection, "An Elephant An Ocean", was published. The book opening was approaching, and I decided to make a short poetry video for the event. There was already a large collection of videos gathered during my film studies, experimental acoustic and electronic music records, and while recording (whispering, yelling, singing) the poetry texts I discovered that, in privacy, I can find the true voice of each poem, and most importantly – the poems already created, completed had so much potential for rising above the printed sheet. I have defined two main applications of print-based text moving into trans-medial space: 1) it could **enhance the delivery** of the initial poetic impulse; 2) it can be used to **expand the semantic field** of the original poem, creating new meanings. A very obvious example of the application of the former is the author's voice that cannot be heard through the printed version, and there are poems where the overall sonority (tone, rhythm, modality) carries a semantically significant value.

The adaptation of print-based poems into digital media certainly does not represent an innovative or mainstream movement within 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, and more. However, there is also a level of urgency surrounding this particular subject – as research shows, reading skills, text perception, and the ability to sustain deep focus, especially within younger generations, is deteriorating. The number of copies of poetry collections printed and/or sold is another indicator that poetry reader has been slowly drifting away. I do not propose that poetry should hastily transition into the trans-medial domain; rather, it should engage in a critical reevaluation of the communication between an author and a reader, the possibly overlooked possibilities, and these efforts are reflected in the Thesis.

**The main undertaking of the study** is to establish a framework for studying readers'/viewers' perception of a print-based poem versus its trans-medial adaptation, and, from the author's perspective, to explore how media allowances could be used to enhance the delivery of the poetic impulse to the reader. This study endeavors to trace the sequential development and articulation of the poetic impulse – the research trajectory extends from the initial poetic impulse and the author's interpretation (the act of creation) to the textual manifestation (the poem) and further to its trans-medial adaptation. Subsequently, it encompasses the framework for examining audience perception of the print-based poem in contrast to its trans-medial adaptation, which is assessed through an online questionnaire to test the application of the framework.

The first task of the Thesis is to establish the link between the print-based poetry (as we know it today) and its historical oral form – what may have been lost and gained in the transition. In order to transport poetry into the field of digital poetry, one has to define what it is that is being transported:

***1. What is the historical and ontological discourse of print-based poetry: the transition from orality to literacy?***

Once that is established, I proceed to defining digital poetry and contextualising my research:

***2. What is digital poetry, digital poetics, and what theories can be applied to study reader's/viewer's perception of print-based poems versus their trans-medial adaptations?***

The next question focuses on the creative practice from the author's perspective (I reflect on my own practice and interview three contemporary poets):

***3. How does an author arrive from the initial poetic impulse to its manifestation (a poem)?***

Finally, I build a framework for studying the perception of print-based poems and their trans-medial interpretations and test its application by conducting an anonymous online study in order to observe:

***4. How can digital media allowances enhance the delivery of the initial poetic impulse to the reader or viewer?***

The research approach is practice-led (Candy, 2006, p. 3). It encompasses a combination of methods. These include:

- 1) self-reflection on the artistic process to gain insights into the poetic impulse and its expression in poetry;
- 2) conducting semi-structured in-depth interviews to further elaborate on these issues, drawing comparisons with other authors' self-reflections;
- 3) employing questionnaires to gather data on audience reception of selected poems in both print and audiovisual versions.

The first task of the Thesis is to analyse the theoretical literature in order to define poetry through a historical and ontological discourse.

The discussion on oral tradition and the arrival of literacy is built on Walter J. Ong and Marshall McLuhan: primary and secondary orality; the lingering rudiments of orality; repetitions, redundancies, and linearity; writing and abstract thought; changes in perception and reasoning – studies of illiterate communities; social implications; “bicameral brain”, etc. I take this discussion further in order to question the very foundation of poetry – why did the form developed by oral poets echo so far in the future (even nowadays) since the poetic formula used by the earlier oral poets was designed particularly for the oral tradition?

The next subchapter of the theoretical research is devoted to print poetry: a discussion on writing as a technology (extended cognition); constituents of the creative process; definition of poetry; the different elements of poetry (language, sound, rhythm, metre, graphics or the visual representation of poetry), and the possibility of their transportation into the trans-medial space. I also discuss performative poetry, reading practices, text perception and the overall changes that are taking place in the age of

information overload. I discuss the possible gains and losses if poetry were to enter the digital realm. Katherine N. Hayles, Jonathan Culler, and Theo Van Leeuwen are the main theorists on whom this section is built.

*Chapter 2* of the theoretical research is a contextual analysis of digital poetry. I start by defining the broader field it belongs to – digital or electronic literature, or more precisely, the difficulties one faces when trying to define the field. Some of the authors discussed are Noah Wardrip-Fruin, Katherine N. Hayles, Roberto Simanowski, Astrid Ensslin, Espen Aarseth, Jorgen Schafer, and Peter Gendolla. The next subchapter is devoted to digital poetry – the various approaches to defining and categorizing digital poetry, the deficiencies involved when trying to justify the field within a certain historical literary context or, on the contrary – by using the generalized computer-based approach. Mirona Magearu proposes a reconciliation by introducing the concept of “trans-medial spaces” – instead of defining genres based on the way digital poems are produced or the methods used, she is including the context in which digital poems exist.

In conclusion, Giovanna di Rosario's typology of digital poetry builds upon and extends earlier theories, making a meaningful contribution to the field. Nevertheless, upon closer examination, I have identified certain shortcomings within di Rosario's system. As an alternative, I propose a synthesis of the “classical” or more widely accepted system and di Rosario's classification as a potential framework for categorizing digital poetry.

The next undertaking is to establish the theoretical framework for the Reading Experience Questionnaire on **literariness**, **type** and **level of immersion**, and **interpretation** tested in the practical part of the research: Miall and Kuiken's model (the three components of literariness); Maria-Laure Ryan on the type and the level of reader's/viewer's immersion; digital poetics and the semantics of digital poetics – Deleuze and Guattari's concept of rhizome; Maria Mencia's *in-between* space; the discussion on materiality of digital poetry; McLuhan's hot and cold media; Noah Wardrip-Fruin's and Espen Aarseth's triangular models of communication; and a discussion on Roland Barthes and Roman Jakobson's take on poetic language.

*Chapter 3* provides a historical context: review of previous undertakings in the area of this study (self-reference in the field, prior research projects carried out in the field of perception studies); I also place my poetry in a wider literary context and discuss developments within the genre of *sequence based static trans-medial poetry* (also known as kinetic, hypermedia, visual poetry, etc.).

In the practical part of the research (*Chapter 4: Presentation of Research Findings*), to achieve a more authentic account of the creative process where poetic impulse emerges, I use the method of self-reflection (Franks, 2016, p. 50). The approach implemented is *reflection-on-action* as opposed to *reflection-in-action* (Gray & Malins, 2004). Also, in order to compare my personal account on the creative process to those of others, I have conducted structured text-based interviews with three contemporary Latvian poets on their creative practices, attitudes towards trans-medial adaptations of print-based poems, and possible applications of media allowances in the communication process with

readers (Salmons, 2012, pp. 20–21). The interviews carried out from May 23, 2022, to June 1, 2022, were asynchronous (via e-mail) in order to give the respondents a chance to contemplate upon their responses (Hunt & McHale, 2007, pp. 1415–21). As the first participant approached did not want interview responses on intimate creative processes and practices to be publicly available, the decision was made to protect participants' privacy, thus encouraging honest, open responses.

The second part of the chapter focuses on the architecture of the questionnaire (Reading Experience Questionnaire), which consists of 44 open, closed, and category questions (Rowley, 2014, p. 313; Sikora, Kuiken, & Miall, 2011, p. 3). Twelve of the closed questions is an application of five-point Likert scale (Göb, McCollin, & Ramalhoto, 2007, pp. 601–2).

I then discuss the typology of the four selected poems for the study, provide a brief comment on each constituent of their trans-medial interpretations (text, audio, video), and the embedded agenda as to why these particular poems and their trans-medial adaptations were chosen, what is expected to show in the data collected in regards to the reader's/viewer's perception of the works. It is done to 1) examine the accuracy of my assumptions on the poems' potential immersiveness, literariness, and interpretation, and the effects their audiovisual adaptations could have on the viewers and 2) test the questionnaire to see whether any further adjustments are needed. The bulk of the chapter is a phenomenological study of readers'/viewers' responses, the quantitative and qualitative data collected by the test group filling the anonymous online questionnaire on their perception of print-based poems versus their trans-medial interpretations (Lester, 1990, p. 1). As the dataset was relatively small, there was no need to apply advanced statistical analysis tools to identify specific patterns in the responses, nevertheless, descriptive statistics were employed for visualization, alongside the application of hypothesis testing (Dong, 2023). Altogether, 14 respondents representing various age groups, levels of education and fields of study filled in the online questionnaire that was administered during the period from May 29, 2022, to June 3, 2022.

The data collected from the qualitative research are stored in an encrypted format and protected by password access on a hard drive.

The online study followed the following procedure: respondents read the print-based poem and responded to five questions regarding immersion, literariness, and interpretation of meaning. Then, the respondents were instructed to click on a link and to watch the audiovisual interpretation of the poem. After they were done watching it, they were asked to answer the remaining six questions (again, the sections were on immersion, literariness, and interpretation of meaning). This sequence was repeated for each of the four poems.

The work is an original and substantial contribution to the field of knowledge, both the practical work and the contextual dissertation written about it. The research seeks to offer practical guidelines to future poets and new media artists and the means for academics and scholars to further the intellectual discourse around the issues of poetic creation, representation, and perception, as well as a typology or the classification of digital poetry.

The discussion regarding the nuanced distinction between poetic digital art and digital poetry is also revisited from a different perspective: the possibility of achieving a comparable level of literariness a text-based poem can accommodate in a digital poem without the initial reliance on text-based interpretation.

The research can also be applied in teaching practices, making poetic content more accessible to younger generations, and it can be used to enhance the attraction of poetry to audiences. Potentially, it would also encourage cooperation between poets and experts representing various fields (programmers, filmmakers, musicians, multimedia artists).

### **Information on publications, research, and approbation of the creative practice**

The research was carried out from 2018 to 2024.

#### *Publications*

Veira, E. (2023). A Framework for Studying the Perception of Print-based Poems and their Trans-medial Adaptations. *Letonica*, Nr. 53, pp. 136–166. DOI: 10.35539/LTNC.2023.0053.08.

[https://lulfmi.lv/files/letonica/53/Lettonica53\\_08\\_Veira.pdf](https://lulfmi.lv/files/letonica/53/Lettonica53_08_Veira.pdf)

Veira, E. (2022). Digitālās dzejas klasifikācija: Džovannas di Rozārio un “klasiskā” modeļa sintēze. *Scriptus Manet*. Nr. 14, 54.–61. lpp. DOI: <https://doi.org/10.37384/SM.2022.14.054>

#### *Conferences*

21.09.2019 London Centre for Interdisciplinary Research "Poetry Between Creation and Interpretation", Birkbeck, University of London ("Poetry – the Final Cut").

16.11.2018 Conference “Media skills –from media archaeology to techno-ecology” (“Poetics and New Media”), Liepāja University.

#### *Approbation of the creative practice*

“Skaņu dienas” (“Sound poetry in transmedial space”, workshop), Liepāja University/MP Lab (2023).

Poetry and music improvisations with Liepāja Symphony Orchestra (2022).

Poetry collection “Tas ods meklē mani kopš 1981. gada” (2021, Orbita).

Digital poetry performance “Nenorunātās tikšanās” in art gallery “Arsenāls” (2020);

Digital poetry performance “Zinātniskā fantastika”, Latvian Centre for Contemporary Art, LCCA (2020).

Digital poetry album “Hiti un singli 2020” (<https://eweir74.wixsite.com/hitiunsingli>).

Bilingual poetry collection “Jauno latviešu dzejnieku antoloģija” (2019, VAKXIKON.gr MEDIA GROUP).

Art and poetry collection “Daudz labāk! Much Better!” (2017, Popper Publishing).

Digital poetry performance “Process”, The Latvian Writers’ Union (2017).

Poetry CD “Corpus Poesis” (2016, Naba Music/Melo Records);

Experimental music album “Areia”, Portugal (2017, OTA).

POWR workshop, POFF international film festival in Tallinn (2017).

Poetry collection “Zilonis okeāns” (2015, Pētergailis).

Since 2006, poetry publications in “Domuzīme”, “Kultūras Diena”, “Karogs”, “Kultūras Forums”, “Jaunā Gaita”, “Satori”, and “Latvijas Avīze” and participation in poetry readings in Latvia, Turkey, Australia, Portugal, and the USA. Information on the publications is available at [https://www.literatura.lv/darbi#person\\_type=40&person\\_id=880772](https://www.literatura.lv/darbi#person_type=40&person_id=880772)

## ACCOUNT OF CONTENTS OF THE DOCTORAL THESIS

### Chapter 1. Poetry: The Historical and Ontological Discourse

In order to arrive to the main field of my theoretical and practical research in digital poetry, or more precisely – the transition of print-based poetry into the digital realm, the aim of the first chapter is to clarify what it is that is going to be transferred, what does poetry consist of, what tradition has it originated from and how it has evolved over time.

To establish the framework for this chapter, I draw upon Emanuele Coccia’s argument from his work “Sensible Life: A Micro-ontology of the Image” (2016). Coccia asserts that everything we ever create is made of sensible matters, but for something to become sensible, it has to enter an exterior space outside of itself where it becomes a *phainomenon*. Outside objects and minds, Coccia argues, there is something that has an intermediary nature, a medium – exterior to both subjects and objects. An image or a sensate form, Coccia concludes, is “*a form outside of its proper place*”, outside its own place (Coccia, 2016, pp. 14–18).

The processes I am discussing in this chapter can be also looked at from a similar perspective, i.e., poetry or a poem can be regarded as a *phainomenon* that emerges on the exterior, it becomes sensible within the author’s conscience as a signal – sonic, verbal, visual, rhythmical, or as a mere feeling, mood. The “mirror-media” here is the surface on which the poem will emerge. The sensible image of the poem will be the text, usually consisting of short lines that are written one under the other. One of the questions I attempt to answer in this chapter is why the initial signal gets reflected in such a predictable image format (text). In order to arrive at a possible closure, I look at how the introduction of the writing system replaced the oral tradition. Another factor that could have a direct influence on the predictable textual representation of a “poetic signal” is the social context – the historically conceived image of a poet or that of a poem, therefore, one of the sections in this chapter is an attempt to define poetry, look at the creative process, the writing technology, and the various elements poetry consists of. I also turn to the poetry reader or receiver by looking at the latest tendencies in text and poetry perception.

### 1.1. From Oral Tradition to Literacy

Literacy is a very recent development in human history, and poetry too, as we know it today, has originated within the oral or oral-aural culture. Some of the issues addressed in this section include the lingering rudiments of orality; repetitions, redundancies, and linearity; writing and abstract thought; changes in perception and reasoning (studies of illiterate communities); social implications; and “bicameral brain”.

McLuhan defines speech as “*the ‘content’ of phonetic writing*” (McLuhan, 1962, p. 46). Ferdinand de Saussure also sets oral speech as the central axis of all verbal communication; however, Ong concludes, Saussure still saw writing as a supplement to oral speech and neither fully appreciated the thorough change in verbalization it had initiated, nor the major differences between oral and literal cultures (Ong, 2002, p. 5). Ong underscores the hierarchical relationship between written and spoken language, asserting that oral expression can subsist independently of writing, whereas the inverse is not feasible; however, for centuries, scholars had regarded oral creations as secondary to written productions (Ibid., p. 8). Ong distinguishes between **primary orality** and **secondary orality**. Primary orality refers to cultures unaware of writing or print, where thought and expression differ significantly due to the absence of written language. In contrast, secondary orality is aware of writing and print; however, it experiences second orality through technologies such as television and radio. Ong emphasizes that both forms of orality have unique values, but the literate mind cannot fully comprehend the nature of primary orality, and vice versa (Ibid., pp. 10–14).

Another aspect Ong addresses is the formulaic thought patterns both in creating and memorizing text in the oral tradition. The arrival of writing freed the mind; it made abstract thought possible, and as the new media is facing criticism today, writing was also believed to corrupt the human mind. Plato saw it as a threat, the destruction of memory, and an inhuman way of processing knowledge (Ibid., pp. 19–25).

Nevertheless, writing did not free the mind from the formulaic thought process instantly; in the beginning, writing simply imitated the process of speaking, the oral means of expression. Julian Jaynes proposed a theory suggesting that prior to the development of modern consciousness, humans operated under a previous mentality he called the “bicameral mind.” In this state, individuals experienced auditory hallucinations that directed their actions, which were interpreted as the voices of gods. The right hemisphere of the brain produced these uncontrollable “voices”, which the left hemisphere processed into speech. Jaynes believed that the “voices” began to lose their effectiveness between 2000 and 1000 BC, a period neatly bisected by the invention of the alphabet around 1500 BC. Writing provides a visual perception of words as opposed to orality, where sound evaporates in time. (Ibid., pp. 30–32). The author concludes that a linear, analytic thought is an artificial creation, structured by the technology of writing (Ibid., p. 39).

Another aspect related to memory is rhythm – it facilitates the remembering process of an orally based thought. Ong argues that rhythm is the substance of thought itself within oral tradition. He notes that it is not only true about the earlier oral cultures; it can still be observed within the present day oral cultures around the world (Ibid., pp. 34–35). Also, in oral tradition, it is impossible to go a few pages back and remind oneself what was just read; therefore, repetition was common (crucial for both the speaker and the audience), whereas today we appreciate linearity. The reason why we find texts of the Middle Ages and the Renaissance annoyingly redundant is due to their unbroken ties with the oral tradition. Ong sees the uncertain end of this phenomena only in the age of Romanticism or even later (Ibid., p. 40).

Ong refers to Berkley Peaboy's study of South Slavic narrative poets. Peaboy concludes that literacy disables an oral poet, the concept of text paralyzes the process of oral composition. He also observed that Yugoslav bards would never sing the same song the same way twice; they would repeat formulas or themes and make adjustments according to audience reactions and other factors. The bards themselves would strongly insist that they could repeat the material "*word for word and line for line*". In reality, "the same" for them meant "like"; they did not perceive "word" as a value in itself. Another piece of evidence that confirms this "cluster-like" perception is that words in early manuscripts run together; they are not clearly separated (Ibid., pp. 58–60).

## **Discussion**

The first question I address concerns the very foundation of poetry – why did the form developed by oral poets echo so far into the future (even nowadays)? The answer may rest in a combination of various factors. First of all, as it was already mentioned by Ong, writing, at the start, directly mimicked the oral tradition; it was just "placed on a surface" using linguistic signs. It is natural that human mind did not instantly realise the relief writing had granted and continued to think and "speak" through writing as they were used to, however, the fact they fully realised it only around the onset of Romanticism (or even later) may reveal something about the human nature, i.e., if there isn't a great need for the human mind to go through a certain exit, it falls in reproduction, repeating. Secondly, rhythm does have some "mystical effects" – many poets speak of rhythm as the most powerful driving force or initiator of their creative expression; rhythm in music and dance is one of the central elements.

Peter Simons (2019, p. 63), in his article "The Ontology of Rhythm", defines rhythm as a character of a process; it is not a substance, it is a property. According to Simons, rhythm does not exist in isolation; it is the rhythm of something (the sound of machinery, the beating of a drum, etc.) . He also recognizes repetition as the constituent of rhythm (Ibid., pp. 64–65). The author concludes that although we recognize resemblances in certain sound sequences, each occurrence is a new individual sound, and regardless of how complex a rhythm may be, rhythm is only a re-occurrence of these individual events (Ibid., pp. 74–75). Andy Hamilton, in his book *Aesthetics and Music*, offers a different outlook. He does not focus on recurring individual events in time, instead, the author derives his definition of rhythm

from Plato's "Laws", i.e., rhythm is "order-in-movement" or "movement-in-sound" (Hamilton, 2007, p. 129).

I position my understanding of rhythm between the two authors. For example, a heartbeat is an occurrence of individual events; it does not follow a certain "order-in-movement" or "order-in-sound", yet we can perceive a pattern of rhythm. When it comes to music and poetry, I would rather lean towards Hamilton's sequence of sound movements. I find an echo in Gilles Deleuze's work "Difference and Repetition" where he is discussing repetition as opposed to generalization, or generality of the particular and the repetition as universality of the singular (Deleuze, 1994, p. 1). Deleuze places poetry in the field of generality: repetitions, rhythm, and rhyme are not restricted repetitions, instead, they establish their unique identity or change that of their neighboring words (Ibid., pp. 21–22). Deleuze furthers his discussion by turning to Freud's death instinct – the repeating patterns in one's life, the underlying generality, which is above all silent, as opposed to the psychological pleasure principle that is the noisy principle (Ibid., p. 16). This death instinct is the silent driving force behind our repeating affections and actions; it is not destructive or aggressive, it is the phenomena of repetition, which opens a new speculative dimension for the interpretation of rhythm and repetitions that reached through orality far into literacy. We can go even further by applying it to the re-occurring act of writing poetry (the transcendental, silent principle). Or the opposite is feasible as well – that the delight over a discovery of a new (poetic) experience brakes the cycle of repetitions we face in our everyday life – the semantics of everyday language use etc. (the psychological, noisy principle), and, in fact, one does not exclude the other.

Returning to the re-occurring singularities of the heartbeat, we can also observe an interrelation between a psycho-emotional state and its physical manifestations – when one is nervous, both the heart rate increases, we breathe faster, and our thoughts (speech) tend to run faster. It might partially explain why we can perceive rhythm and tempo as a semantic element of a certain work or even intuitively, subconsciously develop an emotional response to it. Rebecca Wallbank (2019, p. 367) discusses the aesthetic experience or appreciation of a literary work focusing on rhythm in particular, and she arrives to a similar conclusion, i.e., that rhythm as a non-conscious sensory-imaginative experience may attribute to our aesthetic appreciation of literature. Until very recently, the author argues, theorists predominantly operated on a presumption that one is consciously aware of the object of their appreciation.

The discussion above allows us to draw a conclusion that rhythm and repetition of oral poetry probably should not be credited to facilitated perception or the mnemonic aspect alone. The "writing machine" gradually led to abstract, linear thought, but various art forms still provide rhythmic shelter (music, dance, poetry). In the context of textual poetry moving into the realm of digital media, it is important to understand why then a film with its diegetic void or space and not necessarily rhythmical manifestation, or a painting, a still life can result in an emotional experience (both experience of the author and that of a spectator)? Is it due to some late developments of the human perception, mind, and

the abstract thinking that, as Ong pointed out, came about through literacy, or is it an escape that a still or an “aesthetically controlled” image has on the otherwise over-irritated perception? I believe the answer rests in various types and levels of immersion, and I am returning to this discussion later in the Thesis.

Another reason why poets cling on to the ancient forms of oral poetry or release themselves so gradually could be a form of social insecurity, i.e., a notion of what one ought to do in order to be a poet. Trans-medial poetry is also facing similar anxieties; it challenges the preconception of what a poet does, what a poem is, what it looks like, and where it exists.

## **1.2. Cargo: Print Poetry**

### **1.2.1. Writing Technology: Extended Cognition**

The early understanding of text manifests itself in the choice of overall “mechanical” terminology. Plato regarded writing as an external, alien technology (Plato, 1981, pp. 531–535). Gradually, writing has become a part of us and our thinking process; however, it is still a technology (Ong, 2002, p. 80). Katherine N. Hayles, in her work “How we think, Digital Media and Contemporary Technogenesis”, retells a discussion between Richard Feynman (the Nobel Prize-winning physicist) and historian Charles Weiner. Weiner assumed the physicist’s notes to be the records of his day-to-day work, but Feynman disagreed; instead, he insisted that he actually **worked** on paper, he didn’t have ideas before writing them down on paper – writing actually **was** a part of his thinking process, and “*the paper and pencil were as much a part of his cognitive system as the neurons firing in his brain*” (Hayles, 2012, p. 93). Andy Clark (2004) arrives at a model of **extended cognition** as opposed to **brainbound cognition** – limited only to the brain (Ibid., p. 94).

The pen-notebook is irreplaceable in my own creative practice, I do not know what I will write until I actually start writing. The poem is formulated somewhere between the hand and the mind. If writing could become a part of the thinking process, so could any other technology yet to come, however, it may also affect the material produced (as writing did).

### **1.2.2. The Creative Process**

This segment is based on Jane Piirto’s study. The author has analyzed 160 accounts of U.S. writers (scholarly biographies, autobiographies, memoirs, and published interviews) – their reflections on the creative process (2018, pp. 6–7). As a result, Piirto has created a system which summons the seven elements of the creative process authors had accounted for most often (Ibid., p. 13). It provides a context for the reflection on my creative practices and the structured in-depth interviews with the contemporary Latvian poets in the practical part of the Thesis.

### 1.2.3. Defining Poetry

This subsection is devoted to defining poetry. At first, I compare the definitions in the Online Merriam-Webster dictionary and the Online Encyclopedia Britannica – while they may seem almost identical at first glance, they actually convey distinct perspectives on poetry, as the scholars discussed in this section: Immanuel Kant (1987); Mir Hussain Mahdavi (2021) (on Martin Heidegger’s estrangement that poetry initiates, Derrida’s “wake”); Herman Northrop Frye’s (1990) two standard system for the verbal patterning: *melos* and *opsis*; Jonathan Culler’s take on the functions of poetry (2015); and Mutlu Konuk Blasing’s (2015) comprehensive definition of poetry. Regarding trans-medial poetry, I conclude that all the aspects of poetry discussed in the chapter could potentially be communicated using the means of digital media.

### 1.2.4. *Melos*

The attitude towards *melos* or the sonic aspect of poetry differs. According to Georg Wilhelm Friedrich Hegel, a letter (audible or visible) simply acts as a means of expressing an idea, and it does not have any value or substance in itself. Thus, Hegel concludes: “*the true medium of poetical representation is the poetical imagination and the intellectual presentation itself*” (Hegel, 1920, p. 120). But then it raises the question of how Kurt Schwitter’s Ursonate (UbuWeb: Sound, 1932) or Filippo Tommaso Marinetti’s recordings of war sounds fit into the preceding discussion. Culler references Wallace Stevens, who said that “*above everything else, poetry is words; and that words, above everything else, are, in poetry, sounds*” (2015, p. 173). If one were to exclude the extreme *melos*, regardless of whether a poem is recited or represented in a text form, the reader has an inner voice, and the author as well would hear the sound of the text in the process of writing or while editing a finished work. Susan Stewart (1998) also compares poetry to a musical score. Walter J. Ong discusses the unique aspects of sound perception in comparison to other senses, noting that while sight places the observer at a distance from the object being viewed, sound pours into the hearer (Ong, 2002, p. 70). James Wimsatt distinguishes two systems of sound in poetry: the symbolic system (phonemes and intonation) and the prosodic system (line division, syllable count, stress, rhyme, etc.) (Culler, 2015, pp. 182–183). Charles Bernstein elaborates on the “total” sound of the work, which can only be accessed through the author’s involvement (Bernstein, 1998, p. 4). Trans-medial poetry offers far more possibilities for communicating the sound of a poem to the audiences compared to the printed text format, especially if the sonority of a poem carries a particular semantic value. Bernstein concludes that there has been minimal scholarly exploration of a poet’s performance of a poem, and until very recently, literary critique has been largely confined to the printed text (Ibid. p. 282).

### 1.2.5. *Opsis*

Theo van Leeuwen refers to rhythm that is present in time and of a rhythm for the composition in space, or layout (van Leeuwen, 2005, p. 181). This section is devoted to the visual representation of poetry or *opsis*.

Johanna Drucker establishes the two poles of significance in regards to optically perceptible materiality each work carries: **incidental** and those that have a poetic function and are **integral** parts of the work (Drucker, 1998, pp. 159–160).

Experimental typography within the historical avant-garde movement (Dadaism, Russian and Italian futurism, cubism, etc.) at the beginning of the twentieth century challenged the boundaries between literature and art. Beyond these and other experiments, *opsis* has not been fully exercised. Typically, and that could be credited to the specifics of printing press as we used to know it, a publication will have a set font and letter size, colour, etc. van Leeuwen suggests that typography was historically not considered a semiotic mode in its own right, with typography primarily associated with abstract arts and limited acknowledgement of its potential to express feelings or moods in harmony with the words. However, contemporary typographers are actively seeking to dissolve the boundaries between typography and other graphic and photographic arts, recognizing the semiotic nature of typography (2005, p. 28). The possibilities for visual representation of a poem in trans-medial space and print are beyond compare; however, it is impossible (at least at the moment) to transfer paper surface, its feel, weight, texture, smell, binding, cover, which often would fall into Drucker's incidental category though.

### 1.2.6. Text Perception and Poetry Readers

The last section of the first chapter deals with text and poetry perception. Examining the cognitive load imposed by the text, Catherine N. Hayles provides a concise overview of different neurological studies in the field: the time it takes for a neuron to fire is about 0.3–0.5 milliseconds. The time it takes for a sensation to register in the brain ranges from a low estimate of 80 milliseconds to 500 milliseconds, with the brain taking 200–250 milliseconds to grasp and understand a high-level cognitive facility like recognizing a word. The time it takes the brain to understand a narrative can vary widely, ranging from several minutes to several hours (Hayles, 2012, p. 104). When engaging with a text, the initial step involves perceiving linguistic signs (such as letters and words) through visual stimuli, followed by the process of recognition and subsequently initiating the sense-making endeavor to comprehend the content. These processes do not invariably unfold in a strictly linear sequence, they are often simultaneous (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). They have concluded that senses can process approximately 11 million bits per second, and of those, about 10 million bits per second are coming from the visual system. Consciousness can account for much lower capacity (silent reading takes place at about 45 bits per second; reading aloud 30 bits per

second), and it is 200 000 times lower than the information that is processed unconsciously, without our awareness (Hayles, 2012, pp. 95–96).

Regarding text perception, reading habits and patterns, Hayles concludes that without any doubt, screen reading is taking over and 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 of the attention. Hayles argues that as the amount of web resources increases exponentially, the necessity of hyper reading has become increasingly apparent. Moreover, research shows that hyper reading may even involve changes in brain function (Ibid., p. 63). Nicholas Carr (2010) points out that hyper reading decreases the ability to sustain concentration as it has an effect on the working memory necessary for processing information and arriving to more in-depth judgements. These constant distractions, without any doubt, increase the cognitive load, and the enormous amount of material that needs to be read leads to a desire to skim everything. As a result, hyperlinks and references, instead of enhancing it, degrade comprehension (Ibid., pp. 62–63). Mark Bauerlein argues that "hyper attention" can be viewed as a beneficial adaptation that equips young individuals to thrive in information-intensive environments. Nevertheless, Hayles emphasizes that deep attention is a precious human heritage that we cannot afford to lose (Ibid., p. 99).

Regarding the perception of poetry, Culler offers a critical assessment of the shifts in the pedagogical approach to teaching poetry, specifically noting the contemporary emphasis on generating novel interpretations. This stands in contrast to the historical tradition, wherein students were not tasked with formulating the types of interpretations. Culler compares the appreciation of poems in the past to the appreciation of songs today, and the author concludes that nowadays, the reader of poetry receives training to miss the essence of poetry altogether (Culler, pp. 5–6).

In conclusion, text perception studies highlight concerning trends, such as declining reading proficiency and reduced ability to concentrate and comprehend complex or lengthy texts. These trends are partially attributed to the brain's natural inclination to conserve energy by favoring less demanding cognitive pathways. While trans-medial poetry presents opportunities for wider audience reach and educational use, there are concerns about its long-term impact on abstract and in-depth thinking. Also, from the author's perspective, the more we put "out there", the more we can be held responsible for. An audio or video recording of a poet reading their own work is one thing (undoubtedly it also requires a level of proficiency), but experiments with digital technologies do require a certain set of skills and intuitions. A poet might have mastered the skill of reaching the reader through a written word well, yet may encounter challenges in leveraging colour, sound, music, image, moving images, or even virtual realities and code. The answer could partially lie in cooperation or changes in curriculum, teaching/learning strategies. Consequently, the study of the perception of print-based poems versus trans-medial adaptations is the main focus in the practical part of the research, and it is, in my opinion, of great significance, particularly in regard to the aforementioned concerns. Another aspect is the

reader's feverish search for meaning – I see trans-medial space as a potential cure, where one could reconstruct or remember the notion that poetry can be appreciated as an experience (as Culler wrote, similar to the way we appreciate songs).

## **2. Digital Poetry: Contextual Analysis**

### **2.1. Digital Literature**

Digital poetry belongs to the field of digital or electronic literature. This section is a review of the various approaches to defining electronic literature and the discussions involved.

One of the leading theoreticians, Noah Wardrip-Fruin, defines digital literature as “*a term for work with important literary aspects that requires the use of digital computation*” (2013, p. 163). Katherine N. Hayles, also one of the leading figures in the field of digital literature and digital poetry, criticizes the definition as it is tautological, and the significance of the literary aspects in the context of computational operations is rather ambiguous (Hayles, 2008, p. 3). Moreover, Hayles argues that many works of digital literature do not even have a single word that one could understand (according to Hayles, one-third of the works in Electric Literature Collection lack this fundamental element of literature) (Ibid., pp. 3–4).

Norbert Bachleitner (2005, p. 303) defines digital literature as “*innovative works with specific qualities that cannot be displayed on paper*”. I find this definition: 1) too general; 2) the innovative aspect – does this imply that each work in digital literature would have to have some innovative feature; or, if we compare it to the literary tradition, how long would “innovative” last; 3) computer generated texts can be printed as well, thus displayed on paper.

There are other attempts to define electronic literature. Dene Grigar's (2014., p. 2) approach is also somewhat vague; she writes that it may involve various modalities (visual, sonic, kinetic, etc.) and a varying degree of literariness. Roberto Simanowski's argument is that if letters in digital media are digital units, it does not imply that it is digital literature, but reaching beyond the linguistic digital unit may move the work from literature towards art, and for one to be able to recognize it as one or the other, according to Simanowski, depends whether reading still is the main activity involved. (Simanowski, 2010, p. 17), which contradicts Hayle's previous argument, i.e., one-third of works in digital literature do not have a single word. However, Simanowski's discussion does address another important aspect: what would determine if a certain work belongs to the field of digital literature or digital art. Astrid Ensslin also concludes that the boundaries between literature, art, digital film, photography, animation, and video games are becoming less and less distinct; however, she recognizes that work in digital literature should be guided if not dominated by literary qualities, and they can be both oral or written regardless how fragmented or allusive these texts or lexias would be (Ensslin, 2010, p. 145). There seems to be an agreement among the authors that the interpretation of a certain work depends on the tradition from which it is viewed rather than the intrinsic value of the work displayed.

Espen Aarseth discusses the risks when it comes to analysing digital literature from either the perspective of the traditional literary theory or concentrating on the innovative media use and technology involved. The vocabulary of literary theory may turn into unfocused metaphors, but focusing on the material technology of the medium puts it under the danger of technological determinism, i.e., the new text media might not be radically different from the old (Aarseth, 1997, p. 14). Jorgen Schäfer and Peter Gendolla also question whether there is a significant aesthetic difference between literature transmitted from one's mind to stone, wood, papyrus, or paper using a code (alphabetic script) and literature that is delivered to the reader via more recent media. They assert that the specific literariness needs to be placed at the centre of the scholarly discussion (Shäfer & Gendolla, 2010, p. 92). The authors conclude that the majority of studies, including the most substantial works on digital literature, although they claim to have the "art of language" as the main focus of their work, avoid addressing the issue or giving a clear answer to the question (Ibid.).

## 2.2. Defining Digital Poetry

Jeneen Naji (2021, p. 19) concludes that defining poetry is a complex and ever-changing task due to the fluid and hybridic nature of the digital medium. Talan Memmott has arrived to a similar conclusion a decade earlier in his dissertation, digital poems can exist in various forms (with sound, without sound, with or without images, words etc.), spaces and software, and his assertion is quite extraordinary – a work can be recognized as a poem only by the author or a critical reader. There are other theoreticians (Glazier, Funkhouser, Seiça et al.) who call upon the evolvement of digital poetry from the experimental poetry of the twentieth century. It is true to some extent; however, in my opinion, in doing so, we limit the potential of digital poetry; it disconnects digital literature from "true" literariness. For example, if we were to define cinematography as a continuum of experiments in theatre, we would thus apply the "wrong poetics" to the movement. In fact, then, one could define digital poetry as a continuum of experiments in film.

Brian Kim Stefans (2003, p. 44) offers an interesting solution to defining digital poetry (cyberpoetry)<sup>2</sup>, he concludes that "*cyberpoetry doesn't not exist*". More precisely, since the author cannot find any affirmative characteristics of digital poetry, he defines it based on what it is not (Ibid., pp. 45–46). Álvaro Seiça relies on "may" logic when listing the possible manifestations of digital poetry (Seiça, 2014, pp. 9–10). Kevin Stein defines it based on the differences between printed poetry and digital poetry (Stein, 2010, p. 117). I find several flaws within this system of opposites, and the arguments are presented in the Thesis. Friedrich Block, Christiane Heibach, and Karin Wenz (2004, p. 13), in their work "p0es1s: Aesthetics of Digital Poetry", provide a comprehensive definition that neither built on the negative aspects, nor possibilities; according to the authors digital poetry "*applies to artistic*

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<sup>2</sup> Theoreticians use these terms as synonyms: digital poetry, computer poetry, new media poetry, media poetry, e-poetry, cyberpoetry. An agreement has not been made yet, and even one author may use the terms interchangeably (see Glazier, 2002, p. 181).

*projects that deal with the medial changes in language and language-based communication in computers and digital networks. Digital poetry thus refers to creative, experimental, playful and also critical language art involving programming, multimedia, animation, interactivity, and net communication".* Overall, the reconciliation of the four elements discussed in the previous section (on digital literature) – innovation, apparatus, materiality, and literary lineage – continues within the field of digital poetry as well.

Scott Rottberg suggests that there are two forms of digital poetry: kinetic and interactive poetry and combinatory poetics (Rottberg, 2020, p. 27). The term kinetic is adapted by Álvaro Seiça as well, and he provides a thorough analysis of various forms of representation in his article “Kinetic Poetry” (Seiça, 2021). Simanowski is using the term kinetic concrete poetry, which emphasizes its connection to visual poetry and movement, moving poems. Naji argues that the term kinetic can be applied to digital poetry, but it would be suitable for **the early experiments** with visual media, and that emphasis on the kinetic, moving aspect of digital poetry would make it appear that motion is an essential characteristic of digital poetry, however, not all works in digital literature have the kinetic property. Naji further concludes that the apparatus could then be the unifying element of digital poetry. There are authors supporting this view, and yet uncertainties persist. For instance, if we consider a poem created and experienced through word processing software such as Microsoft Word, it can be interactively edited by both the author and the reader, and it may be linked to a website. According to the computer-based approach, this poem could be categorized as a digital poem, however, this makes the definition overly broad.

The next section is an attempt to reconcile the views through an approach that focuses on the interrelations between the various elements and spaces of digital poetry.

### **2.2.1. Trans-Medial Spaces**

Mirona Magearu (2011, p. 11) argues that the attempts to define the genre based on the way digital poems are produced or the methods used should be expanded to incorporate the context in which they exist. Magearu introduces the term **trans-medial space**, which is both context and text. The digital poem's meaning is shaped not only by the text itself but also by the trans-medial space in which it is presented. This space, created by the poem, becomes a part of the poem's message, influencing how readers engage with it on the screen (Ibid., p. 30). Magearu uses the term trans-medial space to signify the space where a digital poem exists, emerges, and is experienced, and this space is both self-transformative and transforming (Ibid., p. 13). She uses the prefix *trans* over the prefix *inter* in order to capture the notion of movement across mediums, transitions of spaces over the notion of a certain location within or among spaces (Ibid., p. 34).<sup>3</sup> Magearu is also challenging Marshall McLuhan's statement that the medium is the message by expanding the concept and asserting that the trans-medial

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<sup>3</sup> In theoretical literature, ‘multimediality’ (prefix ‘many’) and ‘intermediality’ are often used interchangeably (Brillenburg Wurth, 2006, p. 1).

space is the message (Ibid.). For Magearu, textuality is the meaning of the space's function, it reflects how this space functions (Ibid., p. 40). The trans-medial space of digital poetry accommodates multiple spaces: the source code, code execution, the computer screen, text as a working script, work, and on-screen performance. The author 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 (Ibid., p. 31).

### 2.2.2. Critical Analysis of di Rosario's Categories of Digital Poetry

Returning to the challenges the scholars are facing when dealing with the classification of digital poetry, Naji provides a list of terms used by researchers in relation to digital poetry (text generators, generators, video text, kinetic concrete poetry, video, auto, digital videopoems, animated poems, generative computer poems, digital poems, digital videopoems, hypertext poetry, automatic poems, visual poems, interactive kinetic poetry) (Naji, 2021, p. 17). Chris T. Funkhouser (2007, p. 22–23) refers to Jorge Luiz Antonio's work "The Digital Poetry Genre", and he had listed nearly 40 different terms. However, there are classification systems of digital poetry that are rather similar. Astrid Ensslin uses the following categorization: hypertext poetry, hypermedia poetry, and cybertext. According to the author, **hypertext** is an interactive computer-based literature consisting of hyperlinks that offers vast possibilities for text representation and reading. **Hypermedia** literature is based on multimodality, combining various semiotic modes (typography, pictographic images, digitized speech, sound, music, animation, film, etc.). **Cybertexts** are computer-based, moreover, computer-generated texts that are "writing themselves" (Ensslin, 2010, pp. 146–149). Loss Pequeño Glazier uses three categories of digital poetry: hypertext, visual/kinetic poetry, and works in programmable media (Glazier, 2002, pp. 84–96). Ensslin's and Glazier's categories are essentially the same, only the wording is slightly different. Funkhouser (2007) resolves the dispute over kinetic/visual poetry discussed earlier in the chapter by simply adding another category to the triad, which then represents this historical form: text generators, visual and kinetic digital poetry, hypertext, and hypermedia poetry.

Still, di Rosario argues that these categories are too general and that they fail to incorporate more recent forms of digital poetry. Also, the author identifies several flaws in these models: 1) they lack the modes and nature of interaction; 2) visual poetry does not exclude the possibility of hypertext or hypermedia; 3) computer-generated poetry can be static or kinetic, which doesn't justify its separation from "kinetic poetry" in the Glazier's system (2011, pp. 104–105). di Rosario is highlighting two aspects of digital poetry, i.e., **time**, as print literature compared to electronic literature cannot control the time spent reading, it brings the latter closer to cinematograph, and the mode of **reader's interaction**. The author is referring to Aarseth's "transient text", which means that the user is controlling the reading time, and "intransient text" where the reading time is determined by or implied into the text (Aarseth's typology has 576 possible combinations, and although it is very precise when applied to specific works of digital literature, it is too scrupulous for the purpose of a general categorization). Another important

factor in the typology offered by di Rosario is **the kinetic aspect** – is it present, and if so, is it automatic or is it activated by the reader. Finally, the author arrives to the following categorization of digital poetry:

- a) **segments-based e-poetry**: built on morphological elements without an inner clock, they can be either *static* or *dynamic*; if dynamic, the motion requires the reader's action;
- b) **sequence-based e-poetry**: built on morphological elements with an inner clock, they are always kinetic texts; because of this inner clock, they exert control over reading time.
- c) **hypertextual e-poetry**: built on links, this kind of e-poetry is derived from the hypertext genre;
- d) **hybrid e-poetry**: this category exhibits the characteristics of more than one type of e-poetry (di Rosario, 2011, p. 105–107).

### 2.2.3. Suggested Synthesis of the “Classical” Categorization and di Rosario’s Typology of Digital Poetry

In this subsection, I argue that there are shortcomings in di Rosario’s typology. First of all, it is lacking the authorship, i.e., is a poem generated by a programmable media or a human being. This element is included in the “classical” typology of digital poetry. Computer-generated poetry can be static or dynamic (the variable of reader’s interaction), and it can be sequence or segment based (the inner time variable). Also, the assertion that sequence-based e-poetry would always be kinetic is not accurate as a static digital poem can have a pre-set time that the viewer cannot control. While I acknowledge the valuable dimensions introduced by di Rosario's model, I find it advantageous to incorporate the categories of the “classical” system. Consequently, I propose the following categorization of digital poetry:

1. **Hypertext poetry.**
2. **Segments-based trans-medial poetry** (without temporal axes):
  - a) *static* (doesn't require reader's action);
  - b) *dynamic* (requires reader's action).
3. **Sequence-based trans-medial poetry** (within temporal axes):
  - a) *static*;
  - b) *dynamic*.
4. **Segments-based cyberpoetry** (author – programmable media):
  - a) *static* (doesn't require reader's action);
  - b) *dynamic* (requires reader's action).
5. **Sequence-based cyberpoetry** (author – programmable media):
  - a) *static* (doesn't require reader's action);
  - b) *dynamic* (requires reader's action).
6. **Hybrid trans-medial poetry** (exhibits the characteristics of more than one type of digital poetry).

This system would combine the four most important aspects of both systems (“the classical” and di Rosario’s categories): 1) **the author** (human or machine); 2) **interactivity**; 3) **time** – if, as di Rosario puts it, the work has its inner clock; 4) the triad from the “classical” system – **hypertext**; **cybertext** and **hypermedia/visual/kinetic poetry** (I have adapted Magearu’s term “**trans-medial**” **poetry** for the reasons discussed earlier in the work). For example, an installation of an audiovisual poem in gallery settings, according to this system, belongs to static sequence-based trans-medial poetry (the viewer’s/reader’s interaction is not required, the work has its inner clock, the work is not generated by a programmable media, and it has an author). A print-out of a poem generated by a computer belongs to static segments-based cyberpoetry (the author is a programmable media, the reader’s/viewer’s interaction is not required, the work does not have an inner clock), but a poem in the virtual reality where the user has to move through spaces and complete certain tasks would be dynamic segments-based trans-medial poetry.

### 2.3. Miall and Kuiken: Three Components of Literariness

One of the main undertakings of the practical part of the research is to analyse the possible changes in the traits of the reader’s perception – the type and the level of immersion, literariness and interpretation being the focus of the study. Earlier in the chapter, the significance of literary qualities represented in a digital poem were discussed (majority of theoreticians recognize literariness as the central axes of digital literature), however, as pointed out before – most of the works that claim to have literariness at the “heart” of their research, either fail to address it at all or do not provide a clear answer.

For the Reading Experience Questionnaire (REQ) designed and tested in the practical part of the Thesis, I adapt David Miall and Don Kuiken’s three-component model of literariness, which is based on a 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) reinterpetive transformations.

Or, as authors have stated, “*literariness is constituted when stylistic or narrative variations strikingly defamiliarize conventionally understood referents and prompt reinterpetive transformations of a conventional concept or feeling*” (Miall & Kuiken, 1999, p. 123). They attribute this potential for a specific psychological shift to literature alone; however, Miall and Kuiken suggest that other art forms may also lead to a response that would involve comparable processes (film, music, visual art, dance).

The authors worked with focus groups, and their findings contradict the view that a reader’s response would depend on previous literary training. Miall and Kuiken reviewed critical literature (articles and book chapters) over a century (from the year 1900 to 1991) for quotations from Coleridge’s

poem "The Rime of the Ancient Mariner", overall 166 publications. They also asked 30 students and critics to select five passages that they felt as most striking. The consistency was astonishing to them (Ibid., p. 126). This study clearly conflicts with the postmodern literary criticism where text properties are regarded as variables dependant on the reader's interaction with the material. I can agree with the authors only partially – the likelihood that the majority of readers would select the exact same elements in the text would certainly depend on the specifics of the text. I draw conclusions from my own experience and the readers' reaction to a singular poem or even a poetry collection, and it is quite the contrary. Nevertheless, even if the Miall's and Kuiken's three principles of literariness cannot be applied equally successfully to all texts, it does provide a framework for the analysis of reader's perception, as in the practical part of the research, it is not significant which particular segments the readers would single out or if all readers would select the same or different fragments; instead, I apply this framework to register possible changes in the traits of perception when one is introduced to the printed and then to the trans-medial version of a poem.

#### **2.4. Immersion, Reality, and Virtuality**

Historically, the semiotic modes of *signification* and *simulation* represent different potentials for immersion and illusion in art and literature, for example, the ultimate illusion during the Baroque age as opposed to cubist multiple perspectives or the comeback of the hyperrealistic images of surrealism (Ryan, 2001, pp. 2–7). Jean Baudrillard, in his work "Simulacra and Simulation", also distinguishes four levels of relation between an image and its reflection of reality (Baudrillard, 1994, p. 6). Ryan questions whether moving towards the virtual means parting from the reality or if it has dissected the illusionary real and reached a pure wisdom, the "*true nature of the image*" (Ryan, 2001, p. 29). Baudrillard is inclined towards the former – a transparent media would lead to an ultimate virtualisation of human beings (Ibid., p. 31). As an opposition, there is Pierre Levy's argument that the virtual is not simply the opposite of the real; it has little to do with the false, illusory or imaginary (Levy, 1998, p. 35); instead, it is a potent mode of existence that enhances the creative process, shapes the future, and adds depth beneath the surface of immediate physical presence (Levy, 1998, p. 35). Levy creates a distinction between the possible and the virtual: the possible is already formulated and exists as a phantom reality; it is as a reality only lacking an actuality, being existence. For it to come into existence, it doesn't require the act of creation, which Levy defines as an "*innovative production of an idea or form*" (Ibid., p. 24). He uses the analogy of a seed, it does not know exactly what the tree would look like. Actualization, however, requires an act of creation; it is more than just bringing into existence a possibility, it requires innovation, new qualities, form, and transformation of ideas (Ibid., p. 25). From here, the author defines virtualization as a reversed actualization; it takes place when the actual transitions into virtual, and it is not the same as derealization, i.e., it does not transform reality into a collection of possibles (Ibid., p. 26). Ryan concludes that if thought is perceived as a model making process of the world (virtual double), a way for the mind to bring about changes in the world, without this virtuality, one could only record

facts, thus Levy does not resist the virtual and does not see it as a process of losing its grip on reality as Baudrillard has suggested. Furthermore, Ryan attributes this principle to language, naming as well, which is a virtualization, generalization, and conceptualization; it transcends the particular (Ryan, pp. 37–38). The author also speaks about the paradox involved in the process of creating a text as a virtual object: it starts as an actualization of thought. In the act of writing, various resources (ideas, memories, metaphors, infinite possibilities of text) are formed through selection, association and linearization (Ibid, pp. 44–45).

As to text interpretation, Ryan suggests that it has to undergo a greater transformation compared to the interpretation of sensory data or visual works that have colour and form. This process does not involve “filling in the blanks” only; it requires one to imagine characters and events and spatialize the text, and in this respect, the text is a virtual object (Ibid., p. 46). To break down the process of immersion (a reader captured by the text), Ryan turns to the system developed by the psychologist Richard Gerrig (1993). He sees a reader as a traveller who is transported by some means of transportation; in the act of reading the reader is creating the “reality model”, which represents the textual world; and after going some distance from his or her world of origin, the reader would import their experience into the textual world, which would make some aspects and principles inaccessible; when the traveller returns, the journey has changed them in some way (Ibid., pp. 93–94). Immersion does not necessarily imply aesthetic qualities, and vice versa – aesthetic qualities do not imply immersion. Gerrig also takes the stance that immersion does not depend on one’s narrative skills; for example, the word Texas, can create vivid mental images for most readers regardless of the author’s narrative capabilities (Ibid., pp. 95–97). Ryan distinguishes four levels of absorption: **concentration** (attention devoted to difficult, nonimmersive works, the reader remains highly vulnerable to distractions of external reality); **imaginative involvement** (the reader engages emotionally and imaginatively but retains a critical attitude); **entrancement** (the reader is completely caught up in the textual world, is shut to anything external to it, however, this reader remains aware that the textual world is not reality); **addiction** (either the reader is looking for an escape from reality but consumes the text too fast and compulsively to fully appreciate it or the reader has lost the ability to distinguish between fiction and the actual world) (Ibid., p. 98). These axes, slightly adjusted, are used in the practical part of the Thesis to evaluate the readers’ level of immersion. Ryan also distinguishes three forms of immersion: **spatial immersion**, which would be a response to the narrative settings; **temporal immersion**, which is following the plot; **emotional immersion**, which is one’s identification with the character(s) (Ibid.). Compared to audiovisual media, Ryan argues, language represents spatially and temporarily distant objects; they do not have a shape, colour, or sound directly accessible to the senses, and it needs to initiate one’s imagination. Regarding the postmodern literature, we cannot inhabit a conceptualized space; the reader can only develop relations to specific elements within this space, which does not automatically imply the reader would not be able to acquire a sense of the postmodern space. However, a sense of place and a mental model of space 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., pp. 122–124). In the practical part of the research, there are both the poems accommodated within the postmodern space and poems that have a potential for constructing a mental model.

## **2.5. Digital Poetics: Semantic Codes**

Digital poetics deals with complex systems, and it can be discussed from various perspectives (author, work, viewer/reader, apparatus, space where the work is exhibited/experienced, and interaction between these agents, spaces); it inhabits numerous fields of study or interpretation – literature, linguistics, sound/music, art, film, technology, philosophy, etc.; and it is constantly subjected to change. Thus, the meanings produced and perceived dwell within this multiplicity and complexity, and it cannot be fully appreciated by applying mechanisms of hierarchical structures, binary logic – neither linguistic signs, text (written or spoken), nor any other element represented in a digital poem (means of expression), nor the space and/or “surface” where it is being displayed have “top-down” interrelations. This applies to both creation and interpretation, as from the author’s perspective as well, the postmodern writer is not adopting the “top-down” method where the initial idea would dominate or guide the creative process. As Ryan summarizes the process, the meaning emerges through linking, fitting together reasonably autonomous fragments (Ryan, 2001, p. 7). This echoes Deleuze and Guattari’s “mechanic assemblage”, Levi-Strauss’ concept of bricolage, where the author is free to follow the inner path of inspiration and imagination. Stephanie Strickland, similar to Magearu’s argument discussed earlier, concludes that in new media, authors create less with places” and more with “transitions”, and “we do not see these spaces full so much as feel them fill (Strickland, 2007, p. 42). William Curtis Seaman, in his PhD thesis, also studies relations existing between the various elements, referring to it as a techno-poetic mechanism, which illuminates the evolving nature of media-elements within an advanced technological environment, where meaning is ambiguous and constantly changing (Seaman, 1999, pp. 28–29). Espen J. Aarseth concludes that both Piercean and the structural semiotics of Saussurean traditions, although necessary, are insufficient when applied to the constantly changing field of electronic literature (Ibid., p. 24).

In this chapter, in order to capture this fluidity most theoreticians of digital poetry are referring to within a certain theoretical framework, I am discussing Deleuze and Guattari’s concept of rhizome, Maria Mencia’s *in-between* space, materiality of digital poetry, McLuhan’s hot and cold media, and provide a brief commentary on Roland Barthes’ take on language, and Roman Jakobson’s functions of language.

### **2.5.1. Deleuze and Guattari’s Rhizome**

Deleuze and Guattari introduces the concept “rhizome”. The rhizome is a network that connects diverse elements, not adhering to traditional structures of unity or multiplicity. It is characterized by dimensions and directions in motion, lacking a fixed beginning or end (Deleuze & Guattari, 1987, p. 21).

In the context of digital poems consisting of multiple semantic fields (text, sound, kinetic or still image, etc.), according to Deleuze and Guattari’s rhizome, we cannot break down these elements as singularities and create a certain hierarchy. The “inside”<sup>4</sup> of a digital poem consists of multiple dimensions, networks, and the interrelations/interconnections emerging/recognized/created between any of the elements and “employed” by an author in the creative process or by the reader/viewer of a digital poem is the transformation of these singularities, multiplicities. Text, sound and image do not exist as “points” in a digital poem, they only exist as lines between/in/through them (moreover, there are networks of multiplicities (lines) within each of them), and the authors are clear we should not confuse these lines with simple linkages between points or positions, the multiplicities neither cease to exist, nor they become the other, nor they are subjects or objects, they are transformed within the lines (directions in motion) within rhizome, which again can always change, and it always has multiple points of exits and entrances. In other words, if an author were to add sound to a digital poem, it is not another layer; it changes the entirety including the material added, and it opens another dimension for a network of possible relations and interpretations. Brian Lennon also concludes that a digital visual poetics, instead of forging entirely new territory, can exist within the unexplored zone of a network field that is never fully known, confirmed, or definitively limited (Lennon, 2007, p. 254).

### 2.5.2. Maria Mencia’s Space In-between

Maria Mencia offers a different outlook on digital poetry, and it does not contradict Deleuze and Guattari’s rhizome. She introduces the concept of *in-between* – it is simultaneously “outside” and “within” language. Mencia is referring to Julia Kristeva’s concept of the child’s development from the *chora* (*semiotic*) through the *thetic* (the subject’s liberation from the semiotic) into the symbolic – the trap of language (from “Revolution in Poetic Language” published in 1984). Kristeva’s *second thetic* is when the semiotic aspects (impulses, moods, feelings) enter the symbolic and vice-versa. Kristeva argues that the speaking subject is always both semiotic and symbolic; thus, the signifying system they develop cannot be purely semiotic or symbolic. Maria Mencia sees this *in-between* space as a place where the two aspects (symbolic and semiotic) are becoming one while still keeping their own identity (Mencia, 2003, p. 31).

Another transformative *in-between* space Mencia is referring to is derived from McCaffery’s work “North of Intention” (1986) where the author speaks about the liberation of libidinal intensities that

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<sup>4</sup> As rhizome, according to Deleuze and Guattari, does not have an outside, rhizome cannot be planted, shoot roots as trees do, it cannot have an inside, here “inside” is used as a figure of speech.

are trapped within linguistic structures (such as grammar, orthography, reading order) through a semantic attack on these rules (Ibid., pp. 30–33).

If I apply these principles to the practical part of my research, there are few conclusions to draw:

1. In the process of writing the print or text based poems, I operate within the *second thetic*, i.e., I interpret inner impulses, moods, feelings (the semantic aspects) into the symbolic, and I also work with the symbolic which then becomes the building blocks in the construction process of the semiotic. McCaffery's notion of liberation of libidal intensities can certainly be detected, and they overlay or complement Kristeva's *second thetic* sequences: a) from the symbolic to the semantic (deconstruction of a certain confinement through breaking linguistic rules and arriving into a new semantic field); and b) from the semantic to the symbolic (through the assemblage of linguistic symbols arriving to a liberation of an intrinsic feeling).

2. When I transport a print or text-based poems into the audiovisual form of representation, theoretically I may overcome a certain confinement of text thus release some libidal tension (if it existed), and I can exercise both the symbolic and the semiotic potential of a poem in order to arrive to new symbolic or semantic fields. Regarding the libidal tension, it may grow over time with each successful/satisfactory transportation of a print-based poem into the digital realm, just as some teenagers might experience similar tensions if they are unable to post a *selfie* on social media for a few consecutive days.

The textuality of the trans-medial space I am using in my practical research accommodates linguistic, aural and visual forms that create networks of semantic and symbolic structures. Mencia concludes that the sign – this binary form of two functional elements, signifier and signified – becomes a signifier of multiple signifieds, of multiple relationships, inter-relations of multiple meaning, which Mencia recognizes as a potential reflection of contemporary society (Ibid., p. 46). The author also refers to sight and sound as the primary modes of human perception. The trans-medial space enables the merging of text, image, and sound, creating a new integrated communication system, which, according to the author, resembles the way the human brain works and how it operates (Ibid., p. 63).

### **2.5.3. Materiality**

Katherine N. Hayles discusses materialization of a literary text and she argues that the materiality that scholars tend to focus on when discussing digital literature has been there all along, only the long lineage of printing press, publishing had made it “invisible” to literary criticism (Hayles, 2022., p. 32). Thus, Hayles introduces the concept “media-specific analysis” (MSA), and the author does so not to isolate the different media, instead – to study the interrelations between form, content and medium (Ibid., pp. 29–31).

Brian Lennon (2007, p. 252) also challenges the notion that the rise of new media would have revolutionized the Western mind. Lennon settles the concept of materiality not as a set of characteristics;

instead – these characteristics emerge in the process of interpretation (Ibid., p. 253). For example, we could say a knife is sharp only if we were to use it for slicing a tomato. It can only be sharp or not sharp in the process/intention of cutting. I have never contemplated upon the bluntness of my toothbrush or the sharpness of my pyjamas.

Lennon is referring to William Dickey, who describes a computer as a tool that is being used to create something it is not intended for (Ibid., p. 255). In this regard, it would be strange if one went to great lengths in order to agree or disagree upon qualities, characteristics or functionality of an object, and use it for entirely different purpose, or if applying the same example – to arrive to an agreement that the pyjamas is just the perfect cut and length, but then use it to mop the floor.

This notion compliments Deleuze and Guattari's rhizome, Mencia's space *in-between*, and Magearu's trans-medial spaces. Although the practical works analysed in the second part of the Thesis do consist of various multiplicities, it seems unnecessary to discuss each separate element (audio, image, text, apparatus, screen, etc.) without the context of the particular work.

#### **2.5.4. Aarseth's and Wardrip-Fruin's Triangles of Communication**

Espen Aarseth and Noah Wardrip-Fruin both have created triangular models representing the communication or interrelations between the different "agents" of digital literature (for Aarseth, beyond digital literature), and each of them has adapted a different approach.

Aarseth uses the term "cybertext", and it does not represent a new, revolutionary form of text exclusive to digital technology, nor does it signify a radical departure from traditional textuality, instead – the Aarseth's intention is to capture any type of text (from short poems to advanced computer programs) in his model called "The Textual Machine" (Aareth, 1997, pp. 18–21).

Aareseth's argument echoes the conclusion I draw in the previous section, the author recognizes that media are not neutral carriers of content, he challenges technological determinism by highlighting the unique properties of different media, noting that certain forms of computer-based textuality share more similarities with paper media than with each other (Ibid., p. 19).

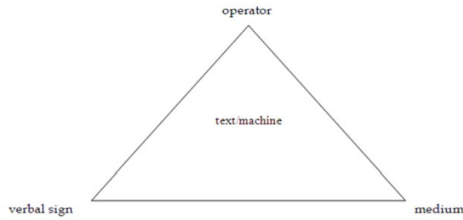


Fig 2.1. Espen Aarseth's text machine (Aarseth, 1997, p. 21).

Noah Wardrip-Fruin has drawn his reversed triangular model of communication/interaction by using the following agents: 1) media (text, sound, image); 2) processes (and their logic); 3) audience (interaction/context) (see Fig. 2.2).

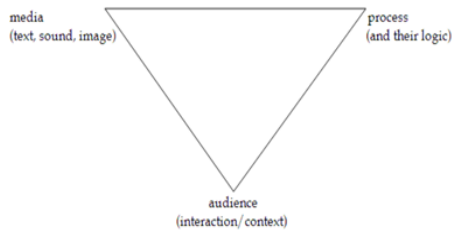


Fig. 2.2. Noah Wardrip-Fruin's communication model (Wardrip-Fruin, 2005).

The elements of digital literature included in the model are: **data** (text, image, sound, information about fictional worlds, instructions (including those on the processes the reader would carry out)); **processes** (that are part of “working” the work, which, according to the author are optional); **interaction** (changing the work from the outside, for example, information input, reconfigurations by a reader, and this is also optional); **surface** (the output of the processes experienced by audience); **context** (the context for interpreting a work) (Ibid., pp. 24–48). Aarseth's and Wardrip-Fruin's models do not contradict each other; the latter has introduced the interaction into the “triangle”, which then calls for “processes”. Giovanna di Rosario is referring to another model created by Wardrip-Fruin (see Fig. 2.3), It reflects that the means for audience interaction with the work are considered part of the work, termed as the "surface," encompassing the site of presentation and potential interaction (di Rosario, 2012).

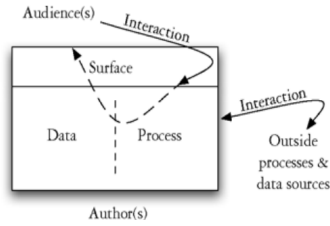


Fig. 2.3. Model of digital literature (di Rosario, 2012).

The communication models expounded upon for the conceptualization of digital literature, with a specific focus on poetry, serve as the foundation for the conceptual framework employed in this Thesis to map the processes under investigation. To construct this framework, two crucial elements relevant to the analyses in this project have been integrated into Wardrip–Fruin's concise model – namely, the poetic impulse and the printed text as the primary text in the cases examined and elucidated later in this study (see Fig. 2.4).

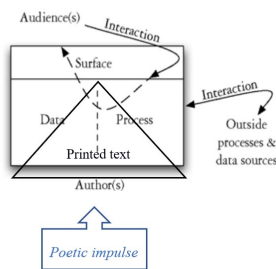


Fig. 2.4. Model of communication of the poetic impulse in trans-media poetry.

### 2.5.5. Hot and Cold Medium, Possible Worlds and Fictional Truths

This subsection explores how textual elements are perceived and interpreted, and it adds to the earlier discussion of the levels and types of immersion.

Ryan (2001, p. 107) is referring to Kendall Walton's mental stimulation through fictional make-believe and his observation that it is possible to say "This is a ship" when pointing to a painting; however, we would not say "This is a ship" when reading "Moby-Dick". This leads to the conclusion that fictionality is a verbal category. When a text is dealing with abstract ideas, concepts (it is nonmimetic), "make-believe" as mental picturing reaches its zero degree. This does not imply that all mimetic texts would always ensure an immersive experience (Ibid., p. 110).

McLuhan distinguishes between hot and cool media. Hot media is filled with data, and he uses a photo and a cartoon as a comparison – the photo will have "high definition" and the cartoon – "low definition" as it has little visual information. Another example is the telephone; it is a cold media and it

has low definition as it exclusively relies on the information that can be perceived by the ear. He also defines speech as a cool medium with low definition. Hot media do not leave many blanks that could be filled in by one's imagination (Ibid., pp. 347–348). In the practical part of the research, I am dealing with both hot and cool media and different types of texts (with their inner cold-to-hot temperatures).

### 2.5.6. Poetic Language

In this subsection, I provide a short commentary on Jakobson's, Barthes, and Coccia's take on language as it deals with the overall motivation behind the creation of "substance" – poem.

Jakobson (1964, pp. 354–357) defines six functions of language; the last function in the list is the poetic function, which deals with the message itself. The poetic function of language does not necessarily have to result in poetry, it is present in everyday communication as well. And vice versa, poetry does not always use language as a poetic function. In essence, Jakobson's take can be linked to the "game" described by Roland Barthes (1986, p. 14). According to Barthes, I will learn a set of words signifying a set of consciously recognised units, and then I will be able to start both – to communicate and to initiate my own game of communication. I think this uncovers the very essence of poetry, i.e., it can, of course, be the playground for a game or a stack of socially accepted linguistic units, but for the most part, I believe, poetry is located in the gaps where this social contract never really took place. I argue that, first of all, I was issued a set of signifiers (words) that I had no consciously recognised units to pair up with, and secondly, I had plenty of (sensually) recognised units that I was not issued a signifier to pair up with. For a contract to be a contract (using Barthes' terminology), the parties have to agree on some value on either end. The shortcomings of this contract are directly reflected in the poetry, i.e., I cannot express myself through the social contract; therefore, I make my own contract with the sensory units recognised. A game probably would not even start if the "real thing" was possible: in poetry – a thoroughly unified and satisfactory communication through the collectively accepted signifiers; in the case of a wooden horse – a real four-legged horse; in the case of leaf-money – a real shop with real money, real candies, etc. I find an echo in Mahdavi's contemplation on dream and poetry in the context of Freud's psychoanalysis: "*Psychoanalysis seeks to reinstate the lost relations between a patient and his world, and poetry is the rediscovery of the lost relations between words and their worlds. Words without relations are empty, anxious, and meaningless*" (Mahdavi, 2021, p. 135). Nevertheless, I believe the game Barthes is referring to is possible, but it does not account for the processes discussed above.

Coccia (2016, p. 53) asserts that our lives are tied to the sensible, not to language. One could conclude that Coccia could easily cast aside a poetic quest, or using the Platonic cave analogy – for Coccia, the poets' concerns over a linguistic experience would be like playing with shadows rather than the objects casting the shadows. However, Coccia continues by saying that language is "*one of the highest forms of the existence of the sensible*" since it has a faculty for the acquisition of immaterial things. Coccia writes that it is "*a kind of transcendental medium*", i.e., it is "*bringing things into*

*existence as images*” and that “*it is also a transmitter*” (Ibid., p. 73), or using Plato’s cave analogy again – words create shadows.

### **Chapter 3. Historical Context: Poetry in Trans-Medial Space**

This chapter provides a comprehensive overview of the scholarly accomplishments and advancements within the field of study. It includes a dedicated section that acknowledges self-reference in the field (Section 3.1. Self-Reference in Digital Poetry: Theoreticians-Practitioners). In a study on self-reflective practice within the context of digital poetry, Alvaro Seiça (2016) explores the impact of self-reference on the knowledge produced by practitioner-theorists compared to non-practitioner theorists. The study examines references to creative works in monographs and PhD dissertations on digital poetry from 1995 to 2015, revealing that the majority of theoretical studies led by practitioners focus on personal artistic contributions, with very few creative works being canonized. Section 3.2, Perception Studies of Print-Based Versus Digital Poetry, encompasses a review of previous research endeavours conducted in the realm of perception studies. I also place my poetry in a wider literary context (Section 3.3. The literary Context) and discuss developments within the genre of sequence-based static trans-medial poetry (Section 3.4), which is also known as kinetic, hypermedia, visual poetry, etc. The last section of this chapter (Section 3.5) is a short introduction to the text group *Orbita*, the most recognizable and active representatives of digital poetry in Latvia.

### **Chapter 4. Presentation of Research Findings**

#### **4.1. Methodological Approach and Conceptual Design of the Research**

The overall methodological approach of this research project can be characterized as practice-led (Candy, 2006, p. 3). *Practice-based* research focuses on the means and the outcome of the practice (images, music, design, models, digital media, performance, exhibitions), and its contribution to the field of research is through an original creative work, its contextualization. *Practice-led* research is leading to new knowledge about or within practice (Ibid.). Although the practical part of my research does include original poems and their audiovisual adaptations, the main focus of the study is not the uniqueness of the works created within the context of poetry or digital poetry, instead, I concentrate on the creative process involved in the interpretation of the initial poetic impulse into its text form; trans-medial applications as a tool for potentially improving the communication of these poetic values to the reader/viewer; creating a framework for studying the audience’s perception of the two forms; and testing the framework to see if it requires further adjustments. This places the Thesis in the field of practice-led research.

A combination of methods was used to reach the overall aim and answer the research questions, and these include 1) self-reflection on artistic process; 2) semi-structured in-depth interviews; and 3) questionnaire gathering data on audience reception. The self-reflection as a method is used to create an account of the contexts, conditions, author’s feelings and processes laying behind poetry writing in

different media environments in order to understand the way a poetic impulse is expressed in a particular form of a poem. Interviews are employed to expound upon these findings regarding the poetic impulse and the processes involved in poetry writing, thereby cross-referencing them within the broader context of the contemporary literary community. Additionally, a Reading Experience Questionnaire was developed and tested to document the audience's reading experience as they engaged with the selected poems in both printed and audiovisual formats during the reading probe.

I selected four poems and their adaptations, each with a different agenda, in order to observe whether 1) my expectations regarding the readers' are reflected in the qualitative and quantitative data collected (which would inform on the level of accuracy when predicting the possible effect on the audience, "the success of intention"); 2) the questionnaire needs further adjustments. The questionnaire focuses on the level and type of immersion, literariness, and the semantic interpretations.

The second part of the subchapter focuses on the architecture of the Reading Experience Questionnaire, typology of the four selected poems for the study, a brief discussion on each constituent of their trans-medial interpretations and the embedded agenda. The bulk of the chapter is an analysis of the quantitative and qualitative data collected by conducting an anonymous online study. As the dataset was relatively small, there was no need to apply advanced statistical analysis tools to identify specific patterns in the responses, nevertheless, descriptive statistics were employed for visualization, alongside the application of hypothesis testing (Dong, 2023).

## **4.2. Presentation of Results**

### **4.2.1. Self-Reflection on the Creative Processes**

Carole Gray and Julian Malins discuss the importance of reflective practice that unites research and practice (Gray & Malins, 2004, p. 22). Donald Schön distinguishes between two types of reflection: *reflection-in-action* and *reflection-on-action*. Reflection-in-action indicates a process in which practitioners encounter an unusual situation and have to take a different course of action from that which they usually do or have originally planned (Schön, 1991, pp. 128–136). *Reflection-on-action* includes an analytical process in which practitioners reflect on their thinking, actions, and feelings in connection to particular events in their professional practice (Ibid., pp. 275–283). I am particularly interested in the latter – reflection-on-action: 1) the arrival of a poetic impulse, inspiration and its interpretation into a print-based poem; 2) the delivery of poetry to the reader – print-based versus trans-medial interpretation.

This section includes a brief introduction to my previous work in literature (publications, awards), film (studies of film directing, filmography, awards), and music (musical education, experimental albums released, performances), and how I arrived at the field of digital poetry.

There is a part dedicated to the emergence and interpretation of the poetic impulse/inspiration. I confirm that the principle of *extended cognition* is irreplaceable in my creative practice. I cannot arrive at a poem unless I get a hold of a pen and a paper, i.e., the act of writing is part of the thinking process or the interpretation of the poetic impulse. It seems the act of writing has a formative force, it functions

as a filter, agent of purification allowing to arrive to a certain linearity – poetic linearity, as my poems usually lack a linear narrative, and at this point, I would **not** be able to arrive to the same or similar literariness using any technology other than writing technology.

In this regard, originally coming from the literary tradition, and based on my personal experience, I doubt whether it is possible to arrive to “pure” literariness (derived from an “outside inspiration, impulse” rather than an execution of pre-existing concept or idea) without the initial text version (whether it is hand written notes, Word document, audio, video files, memorized material, etc.). Another kind of literariness arises through a pre-existing concept; however, predominantly, it should be accommodated within or coming from the literary tradition. Without one or a combination of the both, I would argue, a digital work should be regarded rather as **poetic digital art**. We do not call a song *a musical poem* (and its lyrics may be “true” poems). There are poetic documentaries, but we do not call them *cinematographic poems*. Consequently, it is clear why some theoreticians would like to emphasize the link between digital poetry and the experiments in literature in the twentieth century (using the term kinetic poetry, or kinetic visual poetry) – this would justify digital poetry as a continuum of these experiments. However, as discussed earlier, it would be odd to build a genre on the assumption that it is *always innovative or experimental, or kinetic, in that respect, or visual. For how long does an innovation last?* It should, at some point, lose its innovative quality by definition.

Of course, poetry does accommodate various experimental forms; however, if a person has mastered code and can make the letter “a” bump into the letter “b”, but they have no previous “literary training”, I doubt whether this can be considered literature even if the concept is stretched to its limits.

#### **4.2.2. Semi-Structured In-depth Interviews with Poets on the Creative Process and the Representation of the Initial Poetic Impulse**

In order to compare my account to those of my fellow colleagues, I interviewed three established contemporary Latvian poets on the initial poetic impulse, the process of arriving at a poem, the representation of their poetry, and possible applications of various media tools. These were structured text-based interviews via email, allowing the respondents time to contemplate upon their answers. I chose the poets based on the assumption that they write poems (or at least the majority of their poems) as a result of interpreting “raw” poetic impulses, inspiration instead of having a set “agenda” for their poetry – a clear concept or a goal before starting to write a poem; in this regard, their act of writing is time-sensitive and cannot be recreated or postponed. These assumptions were made based on a critical analysis of the published works of many contemporary poets over the years I have been following literary developments in Latvian literature. As the first participant approached did not want interview responses on intimate creative processes and practices to be publicly available, the decision was made to protect participants’ privacy, thus encouraging honest, open responses. The interviews were carried out from May 23, 2022, to June 1, 2022. The data collected are stored in an encrypted format and protected by password access on a hard drive.

Based on the answers received, it was possible to draw several conclusions. If the initial poetic signal is purely verbal, the act of writing becomes only the technicality of recording the inner voice; however, if the signal includes other variables, the act of writing becomes a part of the “thinking process” (extended cognition). Two interviewees, including myself, referred to the inner drive to record the manifestation of the inspiration (the initial poetic impulse) as a “perfect copy”, as perfect as possible. We all (except for the third respondent who did not contemplate on the possibility) seem to agree that it would **not** be possible to arrive at the same literariness without the text-based poem. This confirms the above argument on the distinction between digital poetry and poetic digital art.

### **4.3. Audience Perception Research**

#### **4.3.1. The Architecture of the Reading Experience Questionnaire**

For the purpose of studying readers’/viewers’ perception of print-based poems and their trans-medial adaptation, I have developed a Reading Experience Questionnaire (REQ). It consists of the following questions.

#### **General background information**

##### **Age, Education, The Area of Study (if applicable)**

The first three questions are designed to gather general (yet valuable) information about the respondents. Age is relevant in the context of perception studies discussed in the first chapter of the Thesis, which show that the ability to comprehend complex, lengthy texts and sustain deep focus is decreasing especially among younger generations. This question, above all, would have to be looked at in the context of Questions 5 and 6 (Q5 is an evaluation of a print-based poem, Q6 – of the audiovisual adaptation using five-point Likert scale ranging from immersive to complex). It is possible that a correlation between one’s age and preferences over one or the other medium could be observed. The same applies to the other two questions, but they would reveal a potential connection between the level and type of training, education obtained and the possible inclinations towards one or the other medium.

##### **Question 1. How would you describe the poem?**

This question is asked after respondents have been introduced to the text-based version of the poem. As mentioned, the five-point Likert scale is used for the question, and the respondent is asked to evaluate it as immersive; somewhat immersive; neither; rather complex; complex. Apart from the contexts of age and education, this is particularly important to 1) determine whether the author’s initial appreciation of the poem is accurate; 2) analyze the responses in comparison to the answer to Question 6 (the appreciation of the poem’s trans-medial adaptation) – this is an indicator of a possible success or shortcomings according to the goals set. The theoretical context for this question is an adjusted Ryan’s scale for evaluating degrees of absorption when reading a literary work.

##### **Question 2. Did you have a mental image of the text? If so, did you imagine the place, settings, and characters?**

**Please be as specific as possible.**

This question is based on Gerrig's "reality model" along with Ryan's forms of immersion: spatial immersion (response to narrative settings), temporal immersion (following plot), and emotional immersion (identification with the character(s)).

**Question 3. Did any line(s) or text fragment(s) stand out and catch your attention? If so, which one(s) and why? and Question 4. 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" discussed in Section 2.3: 1) stylistic or narrative variations; 2) defamiliarization; 3) reinterpetive transformations.

**Question 5. What is your interpretation of the possible meaning(s) of the text?**

This question will also be studied in the context of the answers the respondents provide to Question 11 – the possible semantic changes the audiovisual form introduces.

**Question 6. How would you describe the audiovisual representation of the poem?**

After watching the audiovisual material, the respondents will be asked to evaluate it as either immersive, somewhat immersive, neither, rather complex, or complex. These results, as mentioned above, will be compared with the responses on text-based poems to evaluate the level of success of the initial intention described later in the chapter.

**Question 7. Would you agree that the audio-visual representation enriches the print-based poem in any way?**

The respondent will have to formulate their opinion as one of the following options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. If Question 6 is compared to Question 7, one can conclude whether the potential enhancement (or the opposite) is a result of new semantic meanings (the trans-medial adaptation is simply either more or less immersive compared to the text version) or it is perceived as a continuum of the initial poetic content captured within the text form. Overall, it will inform on the trans-medial potential of enhancing the delivery of certain poetic values in general, or, in the case of the implemented disturbances, study respondents' reaction – if they are detected and met with a certain level of resentment.

**Question 8. Please explain your answer**

The respondents are invited to elaborate on the subject discussed above.

**Question 9. Did any video/audio fragment(s) stand out and catch your attention? If so, which one(s) and why?**

This question, again, deals with the literariness referred to in Questions 3 and 4, only now, in regards to the trans-medial interpretation of the text.

**Question 10. Did the audiovisual representation of the poem facilitate the perception of the text message, poem?**

This question is designed particularly for studying the sound poems ("Muri Muri" and "Daugava") – the perception of text version versus the spoken word.

**Question 11. Did the video change your interpretation of the possible meaning(s) of the poem? If so, please be specific.**

These questions are designed to establish the interrelations between the semantics of a text-based poem versus its adaptation possibly detected by the respondents and to analyze the probable changes of interpretation when compared to the answers to Question 5 (the interpretation of text-based version).

#### 4.3.2. Typology of the Selected Poems

In order to test the REQ application in practice – how well it captures qualitative and quantitative data for further studies of the perception of print-based poems and their adaptations in the trans-medial space – I selected four poems that differ on various levels; also, the audiovisual representations are designed to fulfill a specific purpose.

##### Poem No. 1

The poems in REQ are in Latvian; however, I have included their English translations.

*English translation:*

\* \* \*

Guardiansounds  
A bluetrembling inhaled  
I am within touching you through a pole

Two cats dispersing expanding

Sagadogs Guardiansounds:

“What is your name?”

A couple of holes are floating across the wall  
A flock of cats is flying past the window

*The original in Latvian:*

\* \* \*

Sargskaņas  
Ieelpota ziltīce  
Es tevī esmu un pieskaros caur stabu

Retinādamies plezdamies divi kaķi

Sāgsuņi Sargskaņas:

“Kāds ir tavš vārds?”

Peld pāris caurumi sienā  
Aiz loga kaķu kāsis lido

The reason I chose this poem is mainly due to its inner voice, sonority, i.e., the way it is read contributes to the delivery of the poem’s intrinsic poetic, semantic code. “Sagadogs”, “guardiansounds”, to me, emerged in a dramatic howling voice, which I was not able to capture in the text version. I also vividly recall the overall mood and the visual images that emerged while writing the poem; thus, I believe an audiovisual interpretation could contribute to the overall communication of the initial poetic impulse.

Regarding the axis “immersive-complex”, I would place the poem towards “rather complex” or “complex”. In this case, the goal of the audiovisual interpretation, from the audience’s perspective, is to increase the immersiveness by creating a certain atmosphere, mood, and context for the linguistic semantic utterances. The semantic structure of the poem is not linear; rather, it consists of inner webs of meanings.

**Verbal:** The vocalisation of the text is one of the main undertakings of the audiovisual interpretation of this poem. Especially the words “sagadogs”, “guardiansounds”, I have recorded them in a howling tone. To increase the original intrinsic tension of the poetic impulse, in the trans-medial adaptation, I use loud, strict verbalization, elsewhere – stretched words, sounds. In order to communicate the intense vibration

of the initial poetic impulse, I have adapted an overall exaggerated performance, to an extent that could even cause a certain uneasiness, restlessness.

**Visual:** The visual representation of the poem consists of two elements. There is a shot of hair fluttering in a strong wind with the sea and large waves in the background coinciding with the second line: “Blue trembling inhaled”, and there is a montage of numerous shots (jump-cuts) of the beach, also close-ups of seagulls (accompanied with their loud cries), small reads, feathers and other debris rolling and flying in the strong wind, and the movement of sand. It is done to further emphasize the intrinsic restlessness and tensions of the text.

**Soundtrack:** The background music is stretched, atonal accordion sounds. In a way, the rhythm is soothing; however, the lack of a tonal centre and harmony contributes to the overall tone of the poem.

**Immersiveness:** My assumption when creating the audiovisual material was that, 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 towards a unifying feeling, an experience where these complexities could be perceived as manifestations (immersions) within themselves. The verbal, audio representation of the text was created to increase the poem’s potential immersiveness.

**Interpretation of meaning:** The clear contrast between the visual and the verbal semantic fields were not expected to result in new semantic interpretations, the visual material, in this case, serves as a background for the overall tone of the text; however, the verbal expression compared to its print-based representation – I would expect it to lead to an expansion of the semantic field compared to the “flatness” of the written word.

Here is a link to the audiovisual interpretation: <https://www.youtube.com/watch?v=l8AWsjgd89M>

## Poem No. 2

### *English translation*

*“Muri” is a popular cat’s name in Latvian; “Muri” is its vocative case*

\*

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

### *The original in Latvian*

\*

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 they call us all  
Not quite by the name  
Not quite home

\* \*

Tā mūs visus sauc  
Ne gluži vārdā  
Ne gluži mājās

This poem also predominantly inhabits *melos*, the sound-space; it has an intrinsic vocality – somebody calling a cat by its name. However, this poem, compared to Poem No. 1, could potentially allow the reader to construct a model of reality as discussed in the Chapter 2 of the Thesis – 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 also could accommodate a level of identification with the character. The disadvantage of the text-based poem, though, is that it is very unlikely the reader would 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 involve the reader/viewer by voicing the act.

**Verbal:** The first part of the vocal interpretation of the poem is recorded as if I was calling a cat named Muri. The second part of the poem is recorded in a rather indifferent voice – as a logical conclusion. As it was mentioned, the act of a relentless calling, in a way, is already captured within the written form of the poem, but by giving a voice to the act, I assume, the text would expand within another dimension without losing any aspect of the initial semantic field.

**Visual:** The visual representation consists of a recording of a shimmering, flickering light shining through a thick light green glass. There seems to be an eye or a glass bubble in the centre of the screen. In a way, it could resemble a view when one is looking at a source of light through slightly opened watering eyes – the playful light between the eyelashes. Towards the end of the video, there is a distorted, disfigured silhouette behind the glass slowly moving away.

**Soundtrack:** For the soundtrack, I used a recorder (wooden flute) sound on a loop with the effects of an echo. The recording might resemble distant bird voices.

**Immersiveness:** The assumption is that the audiovisual interpretation of this poem has a greater potential for immersion compared to the print-based version. The verbal message is not complex, and the audio and visual layers are created to enrich (not override) the initial poetic code. As stated above, it seems both the print-based version and the audiovisual representation have the potential for a reality model one could create and experience.

**Interpretation of meaning:** It was not expected that the semantic field would shift or expand much. It is possible the soundtrack could deliver a new meaning – the sound that resembles distant bird voices could lead to a notion of a rural area, nature. The departing image of the distorted silhouette could highlight the somewhat rejective or alienated aspect of the second part of the poem. In this case, I believe, it would be possible to refer to the concept of media transparency discussed in Chapter 2 of the Thesis,

or the *in-between* space where the various medial spaces are merged together in order to arrive to a poetic experience where none of the variables are overshadowing the others, instead, they are creating a unified space.

Here is a link to the audiovisual interpretation: <https://www.youtube.com/watch?v=c634t4zuWD0>

### Poem No. 3

**Daugava (16.10.2019 / 16:58)**

pļ kšķ p p p buļpļ  
šļ šķ šguļ bļuk šļ pntik  
pkp t l pu tīķib šūktuļ pļ  
šlumpa pa pa pā šļ pļu

ti ti ti kļo ti po bļi kt jo pļ  
jo pļ top ci ci ci jē pi pi pi pi  
ļ ļub ļut ļu pu pu  
si si si pļ tp si bļ pļ pu

tibu tabu pu pi pa ļš tišu  
bu pu čļ puš bl bļ  
pu tšļ pļu t č b p b š tūb  
pļ pļ ūk ouk ščļ bļ o p p p š

bļt jo up kčš bļip  
tu tu šļup  
špu ķe it ču ču ču!  
Pt pt pt kļi pļon topš šš čš st

sōp tļo p ķ l p l p ti  
bļ ķ ī bš ut pļ ū i bļkļ  
puļ bļ pļ pļ ī kļ bļ pļ  
šu šu šļ bļpi puļ ti pi

bļun tļ tļup ūbļ slup  
šļ šļ oupšļ pļ pļ šļu tuļ pļu kš  
i kļi puļ bi ti šļup šļub šļ  
pļu k k š šlui pļu 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 kļip glūoīp pļ pļ ušķi it  
bļ u i p pļ šļūt pļub šļ šļ  
ū tup puļ šlip ipt šļu bļut  
pļikšštip šļ pļit pļut ķi šļut

jšļ jšeeiktupo šļšļ ķi p šļ u p

This poem is purely onomatopoeic; it was written while sitting on the coast of the river Daugava and mimicking the sounds that the water waves were making. It may be possible to imagine and recreate the actual sound by reading the poem; however, I would assume only a few devoted readers would actually tackle the text. The aim of the trans-medial interpretation of this poem is to create a new meaning, semantic field, and this will be discussed below.

**Verbal:** I have used the text-to-speech function. The voice belongs to a well-known Latvian news reporter, Sandra Glāzupa, who has a mellow, beautiful, almost singing voice.

**Visual:** The visual consists of a still shot of the print-based poem that lasts throughout the recital of the poem.

**Immersiveness:** The text itself does have a potential for immersion as a musical score does, providing one would be ready to work their way through “p| kšķ p p p bu|p| š| šķ šgu| b|uk š| pntik”. Most likely, the reader would skim the text, understand the concept and probably find it amusing, irritating, interesting or meaningless, etc. The audio adaptation offers a different level of immersion, its own obscure rhythm, and the peculiar aesthetic of auto-speech.

**Interpretation of meaning:** The text-to-speech adaptation completely changes 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, 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 might have some turbulence and, to an extent, pull the viewer back to its initial reference, but most likely, the amusing audio output would be the dominating element.

Here is a link to the audiovisual interpretation:

<https://www.youtube.com/watch?v=GyYrt39JmTc&feature=youtu.be>

#### Poem No. 4

##### *English translation*

\*\*\*

Flies are crawling on the wallpaper  
My bust is sitting at the table

I am looking straight ahead  
And water is dripping from my mouth

You are standing there eating pomegranate  
And stammering seed by seed

##### *The original in Latvian*

\*\*\*

Pa tapetēm rāpo mušas  
Pie galda sēž mana biste

Es skatos taisni uz priekšu  
Man no mutes pil ūdens

Tu stāvi blakus ēd granātābolu  
Un rausti valodu

This poem has a strong potential for immersion and construction of a model of reality; however, the goal of the audiovisual interpretation was to intentionally distract the viewer both by the audio representation and the video, and to check whether it would be reflected in the respondents' responses.

**Verbal:** 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.

**Visual:** 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.

**Sountrack:** There is a recording of atonal accordion sounds: long and stretched, fast staccatos. Once the video transitions to the black and white shots of the ducks in a city canal, the sound of someone knocking is added.

**Immersiveness:** The intention of the audiovisual interpretation is to **destroy** the immersive potential of the original print-based poem and to test whether and how it is reflected in the data collected from the questionnaires on audience perception. The repetitions of the verbal utterances with and without the hand covering the mouth, the unrelated video content, and the sudden montage of the dancing shadows, pigs, and ducks should be divorcing the viewer from the initial print-based content.

**Interpretation of meaning:** It is possible the respondents could arrive to new interpretations of the poem; however, considering the fact the assemblage of the audiovisual material is so random and bizarre, they might be able to detect the hidden agenda and consciously avoid the challenge of constructing a new, complex web of meanings.

Here is a link to the audiovisual interpretation:

[https://www.youtube.com/watch?v=iq1RD0o\\_fIY&feature=youtu.be](https://www.youtube.com/watch?v=iq1RD0o_fIY&feature=youtu.be)

#### 4.3.3. Audience Research Data (REQ)

**NOTE:** *Where percentages are used, it is not to imply that the data collected have a statistical significance, instead, it is done exclusively for the purpose of making the data reviewing smoother.*

In total, there were 14 respondents. 21.4 % were 18–24 years old, 42.9 % were 25–34 years old, and 35.7 % were 35–44 years old. 42.9 % had finished high school, 21.4 % had a bachelor’s degree, and 35.7 % had a master’s degree. They represent various fields of study: art, music, social anthropology, chemistry, biology, IT, and translation/interpretation. The questionnaire was administered during the period from May 29, 2022, to June 3, 2022. The data collected are stored in an encrypted format and protected by password access on a hard drive.

#### **Data Collected: Poem No. 1**

The quantitative and qualitative data collected reflect significant shifts in audience perception when comparing responses to the print-based versus the audiovisual interpretation of the poem.

Regarding the immersiveness of the print-based poem, as predicted, the majority of the respondents found it either complex or rather complex, 78.6 % in total. The goal of the audiovisual interpretation was to increase the immersiveness by creating a certain atmosphere, mood, or context for the utterances. Overall, none of the respondents found the audiovisual interpretation complex, and only 14.3 % found the audiovisual trans-medial adaptation rather complex.

Regarding the type of immersion of the print-based poem, the data collected accounted for mostly spacial immersion; however, there were accounts of temporal and, surprisingly, even emotional immersion (personal memories, associations, and two accounts of complete mental models constructed). One person imagined being a part of the poem, and one had no mental image at all as the respondent was preoccupied with the complexity of the poem – the unfamiliar words. The majority of respondents were able to create various mental images of certain text fragments while reading the print-based poem.

The audiovisual interpretation, according to the data collected, did create a space for experiencing the text as a whole (as it was intended); there were six accounts that the adaptation gave a completely new outlook on the poem, and five – that it allowed to better understand the author's intention. It was interesting to note a trait that those who had built a virtual model of the poem, attributed a mood or feeling to it, for example, calmness, sadness, they had also developed a certain attachment to the text version or its personal interpretation, and once introduced to the audiovisual material that differed, they would either refuse the author's interpretation, express a regret over the lost notion they had developed, or claim the two interpretations to be valid, however, two separate works. Three respondents also commented that the print-based version allows more space for interpretation and imagination.

I had selected this poem mainly for its inner voice, vocality, i.e., the way it is read contributes to the delivery of the poem's intrinsic or initial poetic code (the howling "sagadogs", "guardiansounds") and the assertive manifestation; the other aspect was the intense vibration, restlessness. Some respondents were able to report the latter by just reading the print-based version; however, I could conclude that my text interpretation (final poem) of the initial poetic impulse could have been more successful and more precise as there were even accounts of tranquility and calmness after reading it.

Regarding literariness of the print-based poem, it was interesting that almost all fragments of the text were singled out by the respondents, and each line of the poem was mentioned at least once except for "There are a couple of holes floating across the wall". Some of the reasons listed were: unclear meaning of unfamiliar words; break in the rhythm, contrasting notion; a concept hard to grasp; emotional response (feelings, associations, both positive and negative, personal memories, ideas, contemplation, amusing/funny scenes); one account of unusual sequence of sounds. The data on literariness of the trans-medial adaptation show that the voice and the manner of reading is what stood out the most, which was the overall goal – to communicate the sound of the poem to the audience.

The majority of the respondents, when asked to elaborate on the possible meaning(s), concluded that the poem consists of fluid or puzzle-like pieces and that they do not really fit together. Generally, it

did not (and probably could not) change when the respondents were introduced to the audiovisual version, except for the change of the mood, feeling, and atmosphere. There was one account, though, where it seems the respondent had created a strong semantic link between the print poem and the interpretation; he or she even considered a possibility that the audiovisual material could have been created before the text version, and all the elements have semantic interconnections.

Regarding the vocalization of the print poem, the majority seemed to agree that it has been helpful (it informed author's intention, tone, sound, rhythm, created an aura, changed the atmosphere of the poem, etc.). Only four respondents concluded that it did not; however, two of them had misunderstood the questions and had answered them from a semantic perspective.

Finally, the data collected suggest that the aim of this particular study of Poem No. 1 has been reached quite successfully, and the initial framework or appreciation of the different variables has turned out to be rather accurate. The goal was not to facilitate the interpretation of its meaning(s), instead – to emphasize its mood-like qualities, the potential for experiencing the poem as a whole, and to communicate the original emotional tension of the poetic intention, which could (and data collected confirms it) be missed by reading the text version alone.

#### **Data Collected: Poem No. 2**

Compared to Poem No. 1, I had assumed that this poem has a greater potential for the construction of a model of reality (rather than solely comprising a compilation of vivid mental images), and that the reader/viewer would be able to transport their virtual body into the story world. The narrative is comparatively linear, and I predicted that personalization would also be possible. The goal was to increase the virtuality even further by mimicking the act of a cat being called in the audiovisual interpretation (instead of verses containing just text representation of “muri”, which readers could skip over), and by setting a certain tone, feeling that would embrace the viewer (background music, the visual material).

64.3 % of the respondents agreed that the print-based poem is immersive or somewhat immersive. 71.4 % found the audiovisual interpretation as immersive or somewhat immersive. The difference is only 7.1 %, and it reflects the attitude change of one of the respondents who found the print-based poem complex. When asked if the audiovisual interpretation enriched the print-based poem in any way, 64.3 % agreed that it had.

The conclusion I can draw from this data is that I had slightly underestimated the immersive potential the print-based poem has. I had assumed that most of the respondents would quickly skim over the repetitions of “muri”. Instead, the absolute majority of respondents created mental images, models of reality, and some imagined themselves in the poem's settings; in some, it initiated personal memories, associations, and chains of associations.

When asked if the audiovisual material facilitated the perception of the text-based poem, less than half of the respondents agreed. There were two references made about the effect of the visual material. I had anticipated that there would be more positive replies to the question above. And this is,

again, due to the fact that I had underestimated the immersive potential the print-based version of the poem had. The audiovisual material did indeed offer a new mode of experiencing the text, however, the poem could have stood strong as it was. This aligns with the theory expounded in Chapter 2, namely, that text possesses a heightened capacity for virtuality and imagination; however, this propensity is contingent upon the nature of the text, and it transpires that the author (I) cannot consistently rely on appreciating this potential accurately.

Regarding the interpretation of meaning(s), as predicted, there were no great shifts recorded. The absolute majority reported that there had only been a minor change in the overall mood and feeling of the poem.

Regarding literariness, it also does not lead to new interpretations of certain fragments, there are references to nostalgia, melancholy, sadness, longing, trains of associations, etc., however, there are a few mentions of audio or visual elements (flute, the green glass, the parting figure at the end of the video, etc.) complementing the overall mood, and also perceived as distractions (voice, poor audio quality, music overshadowing the verbal message). Only one person expressed surprise and found the text version to be entirely different from the audiovisual interpretation.

### **Data Collected: Poem No. 3**

When setting up the framework for the study of this poem and its audiovisual interpretation, I had assumed that there would not be many of those dedicated to actually reading the poem carefully and trying to recreate the sounds the river Daugava could have made although the poem does have a potential for immersion as a musical score does. My assumption was that the reader would not read the text; they would simply understand the concept and find it either amusing, irritating, interesting or meaningless. I turned out to be wrong as the majority of the respondents created a vivid mental image or a reality model based on the text alone. There were respondents who admitted they had not read the poem. Also, based on the answers received, two respondents may have skipped the title of the poem, which includes the only reference to the river Daugava, and that could have made the text meaningless, irritating to them – one of these respondents had associations with epileptic seizures, the other tried to read the text from right to left hoping that it would reveal some hidden meaning, and when it did not that made them think that a trick is being played on them.

On the other hand, the fact that respondents knew they were taking part in a research project could have made them more prone to studying the text, actually reading it. Based on the quantitative and qualitative data acquired, most of them did actually read the print-based version of the poem.

Also, when setting up the framework for the study, I expected the semantic field to shift once the respondent is introduced to the new text-to-speech interpretation of the poem – the onomatopoeic content would be turned into a comic act. However, the majority of respondents did notice this nuance – they reported that the meaning had stayed unchanged, but the interpretation offered a new perspective and outlook. It is possible to arrive at this conclusion only if the person has read the text (as a musical score) and imagined the sounds the river makes, the overall atmosphere, and the feeling.

I assume the data would differ if the respondents were not aware their responses would be analysed, however, 42.9 % did find the print-based poem immersive or somewhat immersive (which is much higher than I expected); 35.7 % found it neither immersive nor complex; only a very small portion of the respondents described the poem as rather complex, confusing or “are you making fun of me?”. No one found it to be complex.

The audiovisual interpretation: 50 % of the respondents rated it as either immersive or somewhat immersive. The number is only slightly higher (1 respondent) compared to the print-based version of the poem. The number of respondents that found the poem neither immersive nor complex did not change – 35.7 %, rather complex, also remained the same – 7.1 %:

Based on the qualitative data acquired, the respondents experienced spacial, temporal and emotional immersion – some respondents described the river, and some included the location, surroundings, season, and the overall atmosphere in the description. Some imagined themselves being present in the moment.

It is possible the title, which included the name of the river, Daugava, works similar to that of Texas, the concept discussed in Chapter 2 of the Thesis, i.e., it stimulates one’s imagination regardless if the text itself has a potential for immersion. In this case, the title definitely did facilitate the process, however, other responses provide enough data to conclude that most of the responders did, in fact, read the poem as a musical score, recreating the sounds a river makes.

The accounts of the text fragments that stood out were very specific: the date, question and exclamation marks, some syllables, letters, and formulated words. The account of "jšeiktupo" being a word hard to read, or a question where the “jo” (as “yodel” in English) sound could have come from, how is it possible water would have made it – these observations would not be possible if one did not read the text, at least a part of it.

The different reactions respondents mentioned included a feeling, mood, associations, and personal memories; it seems at least a few of the respondents had created a model of reality, virtuality for themselves.

The understanding of the possible meaning(s) did not change much, as discussed above. Most of the respondents only referred to the audiovisual version as a different interpretation or approach.

#### **Data Collected: Poem No. 4**

This poem was selected due to its implied potential for immersion – it is very graphic, and the intention was to distort and disturb this potential in order to test if and how it would be reflected in the data collected.

Overall, the potential for immersion in the print-based poem was appreciated rather accurately: 64.3 % found the poem immersive or somewhat immersive.

All of the respondents reported that they had created a mental image, a model of reality based on the reading. The level of detail in the descriptions they had provided was surprising, even the colour of walls in the room, characters, what they were wearing, the exact time when it would have taken place

(at 4 p.m. or 5 p.m. in late May). One respondent even shared a link to a photo of an apartment that reminded him or her of the one (not) mentioned in the poem, i.e., there is no direct reference to the room or house, except that there is a wallpaper on the walls.

As to the text fragments that stood out, three segments were mentioned: where water is dripping from the character's mouth, the bust that is sat at the table, and the bystander eating a pomegranate.

Most of the respondents had an uneasy feeling about the poem: a feeling that something bad is about to happen; disgust, confusion; disturbing nightmare; conflicting beauty and terror; shock, restlessness, uncomfortable feeling, hopelessness, etc.

When asked about the audiovisual interpretation, only 7.1 % found it immersive (35.7 % found the text version immersive), 35.7 % found it somewhat immersive, 42.8 % in total.

Asked if the audiovisual representation enriched the print-based poem in any way, 7.1 % strongly agreed, 29.6 % agreed, 7.1 % neither agreed nor disagreed, 50 % disagreed, and 7.1 % strongly disagreed.

It was rather surprising that one respondent concluded that the audiovisual material "*gave the same feeling as the text*", and, for example, one person wrote that it seemed to make the text clearer, but the feeling was similar to when someone is explaining a joke that the person already has understood. Also, when asked if the audiovisual version facilitated the perception of the poem, four respondents agreed.

Even if a poem is very graphic, and even if a person has created a vivid mental image of the print-based content, furthermore – the mental image is created *before* watching the audiovisual interpretation, and the video adaptation has almost no reference to the poem, still, it is possible some viewers will construct a new meaning adding the new variables to the equation or even conclude that the audiovisual representation holds the key to unlocking the poem.

We did see instances in the studies of the previous poems that respondents were unwilling to part from the mental images and reality models created when introduced to the audiovisual material. It is possible it is much harder to part from a pleasant, calm virtual reality, however, in this case, as I mentioned, the poem's print-based version led to negative associations (disgust, confusion; disturbing nightmare; hopelessness, etc.), and this could be part of the reason, as many respondents reflected, that the audiovisual material was happier, more fun, etc. It would be interesting to investigate this further, i.e., is there some correlation between the level of pleasure/stress a mental image is associated with and the willingness to exchange/adjust/give it up for an interpretation that would offer either a comparatively increased or a decreased potential for satisfaction or distress.

Nevertheless, the majority of respondents concluded that the print-based version and the audiovisual interpretation are two different realities and that the latter was another interpretation of the poem.

The results differed when the respondents were asked if the audiovisual material changed their interpretation of the meaning. If nine of them had recognized it as just another interpretation, the

meaning should not have changed; however, only five of the respondents replied that it did not. Six respondents concluded that it did, they mentioned the rather positive spirit of the video, which slightly changed their outlook on the print-based poem as well, or that it could be “*interpreted a bit less literally*”; one person replied that the contrasts in the video helped him or her to perceive the contrast between the persons in the poem – it revealed a similarity.

### **The Overall Conclusions on REQ**

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’/viewers’ 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 type and level of immersion:** By adjusting and rephrasing Ryan’s levels of immersion (concentration, imaginative involvement, entrancement, and addiction), I developed a question for which I used 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 a 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 place, 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.

**On the build of the questionnaire:** 1) As it was anticipated (see Section 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, in Poem No. 1, "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. REQ both confirmed some of the expectations and proved others to be false, which is exactly what one should be able to detect, and 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 text message of the poem?*" was designed in order to study sound poems in particular. However, some respondents started to elaborate on the possible interpretations or meaning(s). Thus, the question needs 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 respondents' 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 this 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 Section 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. On the contrary, Poem No. 4 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 colour of wallpaper, 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, an 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 recognized a poem as complex or rather complex (its meaning consisting of fluid or puzzle-like pieces that are hard or impossible to fit together (Poem No. 1, "Guardiansound", 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 mastered 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.

## **Conclusions**

Discussion in Chapter 5 leads to the following conclusions:

- Poetry is deeply rooted in the oral tradition. The sonic elements such as rhythm and repetitions, initially perceived as tailored exclusively for the oral tradition as fundamental mnemonic devices to aid memory and facilitate the comprehension of lengthy texts, lingered long after the invention of writing, and they reach into the present day. Partially, it can be credited to the reproduction of a certain poet-image. It can also be partially linked to the accusation that literate societies would have been slow in fully appreciating the relief that writing had brought about (Ong, 2002). However, it appears that rhythm and repetitions are tied to the very essence of a human being. Otherwise, why would rhythm and redundancies facilitate the remembering or perception in the first place? Our very essence is rhythmical, from our mother’s womb to the natural processes around us. There is also an interrelation between psycho-emotional states and their physical manifestations (heartbeat, breathing), and this could account for our ability to perceive rhythm and tempo as semantic elements within a particular piece, leading to the development of emotional responses at an intuitive, subconscious level. This notion finds support in Wallbank’s (2019) findings on the involvement of non-conscious sensory-imaginative experiences in shaping our aesthetic judgments.
- Rhythm can be perceived as a re-occurrence of individual events (Simons, 2019) or a pattern, order-in-movement (Hamilton, 2007), and I conclude that there is a certain allowance to both. For example, a heartbeat would consist of re-occurring singularities; however, if we speak of poetry or music, we could apply Hamilton’s notion of a pattern. Deleuze (1994) similarly defines the principles of repetition (universality of the singular) that would stand for repeating cycles in nature, heartbeat, etc., and generalization (instead of the singular, it is the particular), which would apply to poetry. Deleuze further draws upon the driving force of Freud’s death instinct in recognizing generalization as the transcendental and silent principle manifesting itself

in repetitions. The application reaches beyond the specific elements of poetry, it can also have a potential application in the repetitious practice of writing poetry.

- Furthering Ong's discussion, literacy leads to almost instant changes in the thinking process and perception (these observations are made in illiterate communities), "seeing-the-word" is the major fuel source for conceptualising the world. There are risks involved in print-poetry transitioning into the trans-medial space, i.e., that by enriching and/or facilitating the perception process for the reader today, we may potentially lose the writer and reader tomorrow, especially in the context of recent studies that show that text perception deteriorates, particularly among the younger generation.
- Another aspect of writing technology is that it can become a part of our thinking process (the principle of extended cognition), i.e., instead of recording our ideas, they actually emerge through or in the act of writing. I can apply this to my own creative process, and also the poets I interviewed on the creative process accounted for writing being an integral (sometimes even autonomous) part of the act of composing a poem. In the context of digital poetry, this reopens the discussion of whether a trans-medial poem **without** an initial textual interpretation (regardless if these are handwritten notes, documents in a word processing software, audio recordings, etc.) can be regarded as a trans-medial poem or it is rather a poetic trans-medial art, as we all seem to agree that it would not be possible to arrive to the same level of literariness without the initial text-based interpretation of the poetic impulse (and according to majority of scholars in electronic literature, literariness must be the centre of gravity). The composition of a poem requires a high level of concentration, even absorption; therefore, there are not many poets today (if any) who could use, for example, *Unity* (software for creating models in virtual reality) as a surface for a poem to emerge. Of course, writing also was an alien technology once (criticized by Plato as well), and if it could become part of our thinking process, so could any other technology with time and practice, but, again, this potential change can also directly affect that "what is written" just as the invention of writing once did. As a part of this study, I also did an experiment in which I attempted to compose new poems using an audio recording device instead of writing, and I found that I was unable to arrive to the same poetic continuity, I easily got sidetracked; and not being able to quickly skim over the lines already "written" made the different poetic pathways recorded seem more like fallen, disconnected branches.
- Poetry consists of sonic elements (*melos*) and visual properties (*opsis*). I arrive to conclusion that most of the elements of print-based poetry can be easily transported into the trans-medial space; furthermore, the trans-medial space offers far more possibilities for communicating the author's intended sonority of a poem compared to the textual version; the same applies to the allowances for visual solutions available in the digital realm, however, the material properties of printed poetry (scent, texture, weight of the pages, etc.) cannot be replicated in the digital format, at least not yet. Drucker (1998) establishes the two poles of significance in regards to

the optically perceptible materiality each work carries: incidental and those that have a poetic function and are integral parts of the work. Therefore, not all material properties of print poetry collections should be regarded as equally significant, and, in fact, only a few are, as the potential of visually communicated semantic units has not been fully recognized within the printing practice.

- From the authors' perspective, working in the trans-medial field does require certain skills and intuitions. A poet may have succeeded in mastering the written word, yet they may encounter challenges in leveraging colour, sound, music, imagery, moving images, or virtual realities and coding. Addressing this disparity may entail collaborative efforts or adjustments to educational curricula and teaching/learning methodologies in the field of humanities. Consequently, this is a part of the motivation behind the development of the Reader Experience Questionnaire (REQ) in the practical part of the research – to build a framework for receiving a feedback that would inform on the possible successes and imperfections of both print-based poems (how well they communicate the initial poetic intentions) and their trans-medial adaptations – are the author's assumptions on their potential perception confirmed by the data collected.
- For the build of the REQ that would allow to study the perception of print-based poems and their trans-medial adaptations I incorporated specific variables, and these encompass the type of immersion (spatial, temporal, emotional) and level of immersion (concentration, imaginative involvement, entrancement, addiction) as adapted from the research of Ryan's (2001) and Gerrig's (1993) reality model; literariness, drawing from the framework proposed by Miall and Kuiken (2011); and the semantic interpretations in the transition from print to audiovisual mediums. Furthermore, participants were required to provide information on their age, level of education, and field of study. This data, particularly when analyzed within larger datasets, may reveal correlations between age and potential preferences for either medium or potential perceptual tendencies based on the level and type of education attained.
- To test the REQ in practice, I conducted an anonymous online survey. For the study, I selected four text-based poems and their trans-medial adaptations; each poem and its adaptation had a specific agenda. The first poem was selected as its text form seemingly did not capture the mood of the initial poetic impulse; it could be potentially "misread". It also had web-like inner connections, and it would have to be approached rather as an overall experience than a linear development, and I expected the audiovisual representation to increase the level of immersion and change the participants' interpretation of the poem as well. I also selected a poem that was very graphic, its original textual form had a very high potential for immersion, however, the trans-medial adaptation was included in the study as an intentional distraction (totally unrelated sequences of visual material, strange audio interpretations) to see how it would reflect in the data on audience perception. Two other poems were sound poems: one was a pure onomatopoeia (sounds of water, the river Daugava), and the other was a poem where someone is calling a cat

by its name; again, each had a specific agenda. The first was to account for major semantic shifts after the reader/viewer would be introduced to its trans-medial interpretation; the interpretation of the second poem was expected to increase the potential for immersion as I did not expect the reader would read each line in the poem where the cat is being repeatedly called.

- The REQ design proved to be a valid tool for studying and comparing the perception of print poems versus their trans-medial adaptations. It also served as a valid feedback system for the author to test the accuracy of the initial assumptions regarding the original text form and the effects that the trans-medial adaptation could have on the audience. The REQ confirmed some expectations and disproved others, fulfilling its intended purpose within the realm of this practice-led research. As it was already suspected, Miall and Kuiken's framework on literariness does not function as authors had claimed it would when their system is applied to non-linear poems characterized by complex, rhizomic, or web-like interconnections. For example, in the first poem, which had a fragmented structure, REQ participants highlighted nearly all textual fragments individually (except for one single line in the poem), accompanied by varying and often conflicting interpretations regarding their significance, whereas the data that Miall and Kuiken had shared showed that regardless of readers' cultural background, they would always recognize the same text fragments as literary. It would certainly work with only a limited set or type of texts. Nevertheless, the framework effectively served the research inquiry by observing the potential impact of trans-medial material and determining whether these observations aligned with the author's initial assumptions. The goal of the research was not to recognize certain fragments as literary but to observe the shifts in perception that the trans-medial adaptation brought about and compare them to the data on the perception of the initial textual form.

The overall goal of the online study was to test the REQ in practice and see if further adjustments would be necessary; and although I did not gather large data sets that would allow to make general conclusions about audience perception, the data collected do suggest some interesting observations regarding my appreciation of works and their inherent potential, and tendencies in the audience perception of print-based poems and their trans-medial adaptations:

- 1) I had not accurately appreciated the immersive potential of the print-based poems, particularly of the two sound poems (the poem that had repetitions of the word "muri" or the pure onomatopoeia in the *Daugava* poem). I had presumed that readers would recognize the construct and swiftly skim over the text. However, the data collected compellingly indicates that they engaged with the text version, constructing vivid mental representations of reality and even immersing themselves in the virtual realms. Nevertheless, it is important to acknowledge that the respondents were cognizant of their participation in a study, which could have influenced their reading strategies. Additionally, the inclusion of the title *Daugava*, the largest river in Latvia, could have functioned

similarly to Gerrig's concept of 'Texas', signifying an immersive potential. Without the title and with the poem consisting solely of onomatopoeic utterances representing the sounds of water, the observed high potential for immersion in the text version, as indicated in the collected data, might have been significantly different.

- 2) Respondents who formed pleasant mental representations based on the poem's text version were hesitant to detach themselves from this virtual realm when introduced to the audiovisual interpretation. In contrast, the fourth poem, with its high immersive potential, prompted thorough exploration by readers, who detailed spatial, temporal, and emotional immersion; however, this time, they accounted for negative emotional connotation. Despite the vividness of their constructed reality models, when introduced to the intentional distraction of the audiovisual layer, respondents displayed much greater willingness to replace their reality model with a relatively more uplifting alternative regardless of the audiovisual interpretation being absolutely (and intentionally) contradictory to the original textual form, with some formulating the new interpretation even as superior to the initial textual form, holding the key for unlocking the print-based poem.
- 3) Most of the respondents recognized the textual version of the *Guardiansound* poem as complex or rather complex. Also, as I had anticipated, the print-based version did not communicate the emotional tension of the initial poetic impulse well enough, or more precisely, there were participants who misread the overall atmosphere. For example, some respondents even accounted for tranquility and calmness, which the trans-medial adaptation successfully cleared away. Additionally, the trans-medial adaptation enhanced the delivery of the initial poetic impulse by creating a space for experiencing the text as a whole, which significantly increased the level of immersion accounted for in the data collected.
- 4) Regarding McLuhan's concept of hot and cold media, it is impossible to assign a set temperature to print-based poetry as each poem carries a different level of definition; however, McLuhan would likely place the print poems somewhere between cold or cool media as he did with telephone and speech; however, the audiovisual interpretation has a higher definition, thus it would be placed among the hot media. It echoes with Walton's fictional make-believe – it is possible to say “this is a ship” when pointing at a painting, however, one could not point at a ship while reading *Moby-Dick*. In reference to trans-medial poetry, I would conclude that it is possible to “see low definition in high definition”, that is, we can look at the same image as a Deleuze's *T*
- 5) *time-image* or *movement-image*: or we can see a ship in a picture, but the ship may lead us into a construction of our own reality model. For example, one of the respondents shared a link in the REQ, it contained an image of the interior of an apartment that looked exactly

as they had imagined the settings of the fourth graphic poem while reading its text version. In this case, their imagination is so high in definition that they can guide me towards a picture and say: “This is the poem”.

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