

*THE TIMELINE OF  
SLOVENE ELECTRONIC-LITERATURE*

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*By Jaka Železnikar*

**How anochronistic: 13 yo next to me on bus is examining newly purchased CD!**

@jilltxt (Jill Walker Rettberg)

7:36 AM Jan 4th from Tweetie

<http://twitter.com/jilltxt/status/7370150570>

## The timeline of Slovene electronic-literature

This project establishes the timeline of electronic-literature within the frame of Slovene culture, specifically its literary history. It connects recent new media/electronic literature with (selected national<sup>1</sup>) cultural history, sets up a theoretical frame that enables such an attempt and proposes a specific understanding of electronic literature that distinguishes it from similar digital content.

### *Specifics of Slovene culture and its literature*

Two aspects of the Slovene nation and its history had and (at least partially) still have a significant influence on national literature.

### **The Slovene population is relatively low in numbers**

The question of Slovene identity comes down to speaking the language. According to the data of the Statistical Office of the Republic of Slovenia for mid-2009 Slovenia had a population of 2,042,335<sup>2</sup>. The actual number of Slovene language speakers is slightly higher, approximately 2.5 million<sup>3</sup>. While a small number of Slovene citizens do not speak Slovene there are Slovene minorities in all neighbouring countries (18,000 in Austria, 3,190 in Hungary, 100,000 in Italy<sup>4</sup>) as well as emigrant communities in Germany, United States of America, Canada, Argentina, Australia, etc<sup>5</sup>.

In the academic year 2007/2008 Slovene was taught at 49 universities<sup>6</sup> in 24 countries<sup>7</sup>.

### **Throughout history Slovene literature was burdened by strong political and nation constituting influences**

Slovenia became an independent state on 25 June 1991 (and a member of the EU on May 1, 2004)<sup>8</sup>. Due to the lack of sovereign political institutions through history literature played an important role in the political life and constitution of the nation. While there is no consensus between literary historians as regards the impact of that fact on the formation of the canon of Slovene literature, it is clear that this aspect had an important influence on the reception, reflection and popularity of specific authors up to the time around the independence of the Slovene state.

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<sup>1</sup> As the title suggests the Slovene national history is thought of at this point. The underlying assumption being that regardless of the world wide on-line communication literature still depends on the geo-cultural language and wider cultural heritage.

<sup>2</sup> Statistical Office of the Republic of Slovenia 2009, '*Rapid report št/No. 42*', 14 December, p. 1, viewed 24 December 2009, <http://www.stat.si/doc/statinf/05-si-007-0902.pdf>

<sup>3</sup> Statistical Office of the Republic of Slovenia 2009, '*International mother language day*', 19 February, viewed 24 December 2009, [http://www.stat.si/eng/novica\\_prikazi.aspx?ID=2177](http://www.stat.si/eng/novica_prikazi.aspx?ID=2177)

<sup>4</sup> Ethnologue (n. d.), 'Slovene', viewed 24 December 2009, [http://www.ethnologue.com/show\\_language.asp?code=slv](http://www.ethnologue.com/show_language.asp?code=slv). There is no data on the number of Slovene speakers in Croatia.

<sup>5</sup> Statistical Office of the Republic of Slovenia 2009, '*International mother language day*', 19 February, viewed 24 December 2009, [http://www.stat.si/eng/novica\\_prikazi.aspx?ID=2177](http://www.stat.si/eng/novica_prikazi.aspx?ID=2177)

<sup>6</sup> Statistical Office of the Republic of Slovenia 2008, '*International mother language day*', 19 February, viewed 24 December 2009, [http://www.stat.si/eng/novica\\_prikazi.aspx?id=1465](http://www.stat.si/eng/novica_prikazi.aspx?id=1465)

<sup>7</sup> Argentina, Austria, Belgium, Bulgaria, Czech Republic, France, Croatia, Italy, Japan, Lithuania, Hungary, Macedonia, Germany, the Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Serbia, Sweden, Switzerland, the United Kingdom and the United States of America

<sup>8</sup> Government of the Republic of Slovenia (n. d.), 'History', viewed 24 December 2009

### *The structure of the timeline*

The timeline contains of three parts:

- Constitution of Slovene language and literature
- Works/authors that developed approaches to literature that are significant in electronic literature
- E-literature

The timeline focuses on specific literary works, authors or movements. It doesn't provide a complete overview of Slovene literature (numerous significant works are excluded). Instead it provides the milestones through which a specific path leads from the earliest cultural documents to the most recent e-literature works as one of the many possible ways through the corpus of Slovene literature.

### *Research questions*

The subject of the research is a bit of a moving target. The rapid development of information technologies (the home of electronic literature) is constantly introducing new possibilities of interaction with the content (participation, user interfaces, touch screens, augmented reality, etc.), while the constant development of devices (smart phones, readers, etc.) enables permanent and mobile accessibility of the (personalized) rich multimedia content. Many sensors of the physical world offer data over the internet. Production of numerous goods (most notably books) is completely digitalised with only the final product taking the form of a physical object<sup>9</sup> (a book or a 3D printed object). The boundaries between digital and physical are becoming blurred and almost indistinguishable.

All of this is not merely a technological advance. It's also a source of deep cultural transformation that continually influences and redefines the concepts (and their interrelations) that we use to understand and organize our (online) life, information and relationships. Electronic literature – even if not part of the mainstream regarding the number of 'users/participants/fans' – is one of the cultural phenomena at the heart of this transformation.

Still, the described flux is more structural than chaotic. The focus of my research is formed through the following questions:

- What is electronic literature? How can it be defined?
- How does Slovene e-literature fit into the national (literary) cultural history?
- How does the e-literature chosen for the timeline relate to contemporary Slovene literature - especially regarding the digitalization of written heritage, the digital presence of dominant (still print oriented) literary culture and digital-born literature - in an array of platforms such as blogs and social networks?

### **Definition of electronic literature (Slovene theory)**

One of the consequences of the small Slovene cultural space can be found in the missing 'domestic' theory of electronic literature. There are many theoreticians and academics that have reflected upon and researched new media and even though they have sometimes touched the electronic literature grounds none have dedicated serious attention to electronic literature alone. The most notable work on the topic is that of Janez Strehovec<sup>10</sup> (Ph.D.). While his interest lay mainly on the philosophical and sociological aspects of new media and cyber

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<sup>9</sup> Espresso Book Machine – almost a 'symptom' of this state – prints (in minutes), direct from a digital file, a (single) library quality paperback identical to factory made books - at a low cost. <http://www.ondemandbooks.com/>

<sup>10</sup> <http://www2.arnes.si/~ljzpubs1/>

culture in general he extensively explored the new textuality that emerged online. He has pointed out the computational/interface competences of the writer/reader, the ‘techno-suspense’ (expectation of the unknown yet to come when clicking on the link or the suspense in the anticipation as to where on the screen the next part of the kinetic text is about to appear), the ‘techno-surprise’ (an event that breaks the immersive experience in a way that enables the invasion of the Real – referring to psychoanalysis). He also points out the hybrid nature of the literature expression in new media in which the language (semantic) part plays only one of the numerous possible roles of the new media textuality/literature (that would together hold the entire communicated message). The word and text within the new media environment are no longer static entities but multidimensional, spatial, moving, visual, linked, interactive units that is tactile through the cursor or a similar interface. Besides, it might also be the subject or result of sampling and remixing (as part of the copy-paste/mix-cuts-scratches culture). He describes these qualities with the term ‘word-object-body’ (Slovene: *beseda-objekt-telo*). He finds the key point of differentiation between new media and prior textuality in the intrinsic static-dynamic difference between the printed page and the computer screen. He frequently refers to this difference with the ‘as-we-know-it’ construct. Thus, in his theory poetry-as-we-know-it would refer to poetry intended for publication in printed media (and that is, above all, thematically directed towards forming a lyric atmosphere and the use of poetic structures developed in the mid 19<sup>th</sup> century and altogether push off the advances of the literary avant-garde and neo-avant-garde – to summarise Strehovec’s attitude towards mainstream contemporary poetry and his obvious preference to experimental new media approaches).

### **Definition of electronic literature (English theory)**

As an author of electronic literature works (a natural progress from my predominantly language based net art activities that I began with in 1997) I quickly realised that I have to turn to/remain in the English speaking cultural space as there was practically no dedicated space for such works, no dedicated institutions and almost no authors working in this area ‘at home’. (Regardless, electronic literature – together with some other non main stream literature approaches – in Slovenia frequently finds place in investigative art oriented exhibitions and festivals as well as receives attention in certain literary conferences and similar events). Beside that the majority of authors from non English cultures offer their works (also) in English, using it as a mean to engage internationally. I have to stress that these observations are purely intuitive and not research based (as well as outside of the scope of my research), provided here merely as an additional aspect of electronic literature in Slovenia.

There is no clear agreement among theoreticians as regards the nature of electronic literature, but the core of their definitions lies in the medium specific approach: e-literature is defined as digital literature that differs significantly from printed literature (as screen and page provide a significantly different writing ‘surface’ and underlying concepts that seem to be diametrically opposite such as static-dynamic). Different authors differ in their descriptions of the electronic literature scope, characteristics and level of overlapping with the print tradition.

For the purpose of building a timeline I needed a definition that would serve as a tool for the inclusion and exclusion of the works. My starting points were the following: the essay by N. Katherine Hayles: *Electronic Literature: What is it?*, the article by Stephanie Strickland: *Born Digital* and the definition found in the Electronic Literature Organization (ELO): “*The term [Electronic Literature] refers to works with important literary aspects that take advantage of the capabilities and contexts provided by the stand-alone or networked computer.*” The greatest strength of ELO’s definition lies in its shortness and the fact that it

includes and describes a wide variety of literary practices that use computational possibilities, be it in the form of hypertext, installation, chatterbot, email, SMS message, blogs, online performance and many other possible digital channels. As such it does not exclude printed books if significant use of computer was required in the process of its creation. The problem with ELO's definition is that it assumes pre-existing knowledge of what constitutes an "important literary aspect" (although electronic literature arrives after five hundred years of print and even longer manuscript and oral traditions that shaped the notion of literary). The true problem lies in the fact that it does not specify the meaning of '*take advantage of the capabilities and contexts provided by the stand-alone or networked computer*' – which capabilities and to which extent?

Strickland's approach (talking about e-poetry and e-literature in a synonymous manner) is much more limiting for it clearly excludes the print medium and states which content does not form the corpus of e-literature even in digital form:

E-poetry relies on code for its creation, preservation, and display: there is no way to experience a work of e-literature unless a computer is running it—reading it and perhaps also generating it. This "rule" is important for what it rules out: e-books, digitized versions of print works, and other word-processed documents, on- or off-screen. Today all communication is computer-mediated, except for face-to-face encounters and handwritten, typewritten, or letterpress sheets. Print books are made from digital files, as are newspapers and films. Print is but one form of digital output. What is meant by e-literature, by works called born-digital, is that computation is required at every stage of their life. If it could possibly be printed out, it isn't e-lit.

Strickland provides 10 more guidelines for determining whether a piece of work belongs amongst electronic literature or not. Still, they all build upon the initial argument, merely fine-tuning it or stating the (resulting) properties.

Hayles provides another description of electronic literature by contrasting it to the print one.

Electronic literature, generally considered to exclude print literature that has been digitized, is by contrast "digital born," a first-generation digital object created on a computer and (usually) meant to be read on a computer.

As this also points towards the contemporary condition of production technologies it makes it hard to differentiate between digital and content forms/carriers:

In the contemporary era, both print and electronic texts are deeply interpenetrated by code. Digital technologies are now so thoroughly integrated with commercial printing processes that print is more properly considered a particular output form of electronic text than an entirely separate medium. Nevertheless, electronic text remains distinct from print in that it literally cannot be accessed until it is performed by properly executed code. The immediacy of code to the text's performance is fundamental to understanding electronic literature, especially to appreciating its specificity as a literary and technical production.

Major genres in the canon of electronic literature emerge not only from different ways in which the user experiences them but also from the structure and specificity of the underlying code. Not surprisingly, then, some genres have come to be known by the software used to create and perform them.

Since e-literature is a recent phenomenon spanning merely over the last three decades it is not common to link it with the past literary canon. For the purpose of constructing the timeline I used the extract of the above mentioned approaches to which I added elements that enable a connection with the history of literature.

Electronic literature forms digital content with important literary aspects that cannot be printed without a significant loss. Elements that refuse to be printed may at least partly be reproduced without a loss outside the computer medium such as television or shadow

puppetry (kinetic text), while some seem to be hard to reproduce in a medium that excludes live human intervention (interaction, ergodic elements – ones that require ‘readers’ interaction rather than the execution of an internal independent algorithm). Thus the elements that play an important role in electronic literature and cannot be found in other digital literature (e-books, digitized versions of printed works, and other word-processed documents – be that by text editing applications or simple interfaces of blogs, social networks, wikis or web site content management systems ) relate to the extended notion of literary (use of the visual and sound properties of language as an extension to the semantic meaning of the language together with kinetic, constructive, spatial, combinatorial, generative, interactive and (other) ergodic elements).

Currently most of those approaches require computational/programming intervention that exceeds the use of the diverse (mostly on-line) simple text editing interfaces. This state is still a subject to change if programming becomes available to a wider user base through the simplification of the interface (even though this might lead to another template based limitation of expressive possibilities).

Rarely does a single piece of electronic literature contain all of the above stated elements, frequently merely one or a few of them, however these properties set e-literature apart from other digital literary content and enable detection of historical predecessors. Such approaches were extensively explored by (international rather than national) historical avant-gardes, early computer poetry (generative, combinatorial) movements of concrete, visual and sound poetry and to some extent also by conceptual art (precedence of the idea over traditional aesthetic and material concerns, the use of a set of instructions, focus placed on the process), OULIPO (constrained writing techniques, use of mathematical problems and permutations).

Not all of these historical movements had a presence or a representative author in Slovene culture. It is not necessary for such an approach to be used merely in a digital medium. Still, these approaches form a line of development that connects recent e-literature to the roots of Slovene language and the literature written in it - from the very first works onwards.

### *Methodology and sources*

The research method is based on a critical survey of the electronic literature theory and the formation of the criteria for including works into the timeline. The second part of the task was to find works from the beginning of Slovene culture (at first language and later on literary) that respond to the criteria and sort them chronologically.

My main sources (in English and in Slovene – a short overview is provided in the literature survey) were scholarly books, websites ranging from academic, fan culture (especially for text adventure games), project archives, festivals and similar to personal websites. While electronic literature theory and Slovene literary history sources are all but the few quite the opposite is true for the last 25 years of Slovene creative work in which numerous works are important for the timeline. For this period I mainly had to turn to interviews and personal experience (I was involved in/experienced the researched topic in that period, actively for about last twelve years) as there is no available information or archive for certain works. I questioned several people<sup>11</sup>, mostly authors of work done in the post 1990 period, as well as scholars - mainly from the Faculty of Arts in Ljubljana (gathered in ‘Slov-

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<sup>11</sup> It is preferred if some communications stay private.

lit' mailing list<sup>12</sup>) and asked them for advice on Slovene literary history sources. Most communication was conducted through email.

The criterion used to select the works, authors or movements is deliberately formal. The author's intention to create a work of electronic literature (rather than something else) is ignored. In this regard the timeline is a construct established as a view of the past events as seen at the end of 2009 and not a record of deliberate activity leading to a goal through time. Even if this might be self-evident for the historical overview part, contemporary authors might disagree with this classification as they see their work in a different context. As I have previously stated I only wish to provide a personal view of the history that forms one of the many possible paths through the corpus of Slovene literature.

### *The timeline of Slovene electronic literature*

Constitution of Slovene language and literature	
most likely written just before the year 1000	<b>Brižinski spomeniki</b> (The Freising Manuscripts) The earliest document of Slovene culture. They are the earliest preserved writings in Slovene (as well as the earliest Slavic texts, written in the Latin alphabet). <a href="http://nl.ijs.si/e-zrc/bs/index-en.html">http://nl.ijs.si/e-zrc/bs/index-en.html</a> <sup>13</sup>
1550	<b>Primož Trubar</b> , a protestant priest, writer and translator living in Tübingen, Germany, publishes the first books printed in the Slovene language: <b>Abecedarium</b> (Primer) and <b>Catechismus</b> (Catechism), in the Gothic alphabet. <a href="http://www.trubar2008.si/eng/">http://www.trubar2008.si/eng/</a>
1847	<b>France Prešern</b> , Slovenia's national poet and contributor to European Romanticism publishes <b>Poezije dr. Franceta Prešerna</b> (The Poetry of Dr. France Prešeren), a collection of his best work in Slovene (he also wrote in German).
Works/authors developing approaches to literature that are significant for electronic literature	
1925	<b>Anton Podbevšek: Človek z bombami</b> (Man with bombs). His self published book of poetry marks the beginning of the Slovene literary historical avant-garde. (His work is notable also for multimedia – in the terms of his time – performance-like readings of his poetry. He was also the first poet to use the services of a professional poster distribution company.)
second half of 1960s – late 1970s	<b>OHO</b> , an influential Slovene neo avant-garde group. While the group was not directly linked to literature it was important for developing the conceptualist approaches to art. ( <b>Tomaž Šalamun</b> , a member/co-operator of the OHO group is now considered to be one of the most important living poets, with first book of poems published in 1966. Several visual poetry authors – <b>Matjaž Hanžek</b> , <b>Vojin Kovač Chubby</b> , <b>Franci Zagoričnik</b> – were connected to the group as was the internationally known philosopher and critical theorist <b>Slavoj Žižek</b> - among other distinguished authors.)
second half of 1960s – late 1970s	<b>Vizualna in konkretna poezija (visual and concrete poetry)</b> . <b>Franci Zagoričnik</b> and <b>Matjaž Hanžek</b> established themselves as authors with the largest and most diverse corpus of visual/concrete poetry works. Several authors connected to the group OHO were active in this area with a strong conceptualist influence ( <b>Marko Pogačnik</b> , <b>Aleš Kermavner</b> , <b>Vojin Kovač – Chubby</b> , <b>Naško Križnar</b> , <b>Milenko Matanovič</b> , <b>Srečo Dragan</b> and <b>David Nez</b> ). In the post 1970 period several new authors presented their works ( <b>Ivan Volarič – Feo</b> , <b>Blaž Ogorevc</b> , <b>Ifigenija Zagoričnik</b> , <b>Orest Zagoričnik</b> , <b>Egist</b>

<sup>12</sup> Active from 10 September 1999, the archive is accessible at <http://groups.yahoo.com/group/slovlit/messages/1> and from 2000 on <http://mailman.ijs.si/pipermail/slovlit/> (in Slovene)

<sup>13</sup> All URLs in this table were last accessed on 5 January 2010

	<b>Zagoričnik, Aksinija Kermauner, Polona Hanžek, Ivo Antič, Borut Hlupič, Vladimir Gajšek, Živko Kladnik – Žužu, Nejc Slapar, Tomaž Kralj, Branko Novak</b> and several others).
1967	<b>Srečko Kosovel: Integrali'26</b> Written mostly in 1925 and 1926 it was published long after the death of the author in 1926. The second wave of avant-garde poetry, important especially for its personal approach to constructivism.
<b>E-literature</b>	
1984 – 1986	<b>Text adventures for ZX Spectrum 48K</b> A group of programmers, designers and directors that created 5 games (in various combinations and teams): <b>Igor Bizjak, Samo Fosnarič, Matej Gašperič, Aleš B. Ivanko, Aleš Jaklič, Matevž Kmet, Žiga Turk</b> and <b>Barbara Zeleznik</b> .
1994 onwards	<b>Marko Košnik</b> , a multi-media artist who in several of his works explored electronic literature as such or as a part of a larger project (frequently with different collaborators). <a href="http://web.mac.com/marchegon/">http://web.mac.com/marchegon/</a>
1996 – about 2000	<b>Spletna umetnost (Net art)</b> Electronic literature played a significant role in the net art works of <b>Vuk Ćosić</b> and <b>Jaka Železnikar</b> . <b>Teo Spiller</b> and <b>Igor Štromajer</b> also created several works that can be listed in the electronic literature domain. <a href="http://www.ljudmila.org/~vuk/">http://www.ljudmila.org/~vuk/</a> <a href="http://www.jaka.org/">http://www.jaka.org/</a> <a href="http://www.s-p-i-l-l-e-r.com/">http://www.s-p-i-l-l-e-r.com/</a> <a href="http://www.intima.org/">http://www.intima.org/</a>
2001	<b>Rajko Jerama: Ljubezen je Bog je Ljubezen (Love is God is Love)</b> An interactive poem in the form of an executable programme (written in Visual Basic) <a href="http://users.volja.net/searching/of_love4.htm">http://users.volja.net/searching/of_love4.htm</a>
probably 2004 <sup>14</sup>	<b>Darij Kreuh, Tadej Fius at al: Palčica</b> (Thumbelina, after H. C. Andersen) An interactive virtual puppet performance.
probably after 2004	author that probably wishes to remain anonymous created an IRC bot (nickname Tangica19) with the goal of persuading the human who is in contact with it into thinking that he is engaged in a conversation with another human being for as long as possible
current	several mentioned authors continue to create (or integrate) electronic literature works, notably <b>Vuk Ćosić, Marko Košnik, Teo Spiller</b> and <b>Jaka Železnikar</b>

### *The timeline – some notes*

This timeline is the first such attempt and by no means represents a complete overview, even though as much attention was put into it as the short research time permitted. It was made from scratch with no pre-existing data available for the topic. Some included works might be on the edge of textuality and literature and it is also possible that some works that should be included were overlooked by unintentional mistake or due to the lack of available information.

Additional on-line information about the works or the works themselves is provided in the form of a URL address where applicable. If the on-line information is provided in English as well as Slovene I included the English version.

<sup>14</sup> The information was not provided by authors

## The timeline – works

In order to keep the timeline table short I omitted listing the electronic literature works or selected works in the cases where the author is active also in other expressive domains. Further information is provided in this section<sup>15</sup>. The list of works provides a selection of the author's electronic literature pieces rather than a complete list of his work in this domain (the selection is mainly based on interviews).

### Text adventures for ZX Spectrum 48K

The URLs contain detailed information as well as versions of the games that can be run in an appropriate emulator.

**1984 – Žiga Turk, Matevž Kmet: Kontrabant and Kontrabant 2 (Smuggler)**

<http://www.worldofspectrum.org/infoseekid.cgi?id=0006546>

<http://www.worldofspectrum.org/infoseekid.cgi?id=0021603>

**1985 – Žiga Turk, Matevž Kmet, Barbara Železnik, Igor Bizjak, Samo Fosnarič: Eurorun.**

<http://www.worldofspectrum.org/infoseekid.cgi?id=0021828>

**1985 – Aleš Jaklič, Matej Gašperič, Aleš B. Ivanko: Smrkci (Smurfs)**

<http://www.worldofspectrum.org/infoseekid.cgi?id=0006987>

**1986 – Žiga Turk, Barbara Železnik, Igor Bizjak: Bajke (Tales)**

<http://www.worldofspectrum.org/infoseekid.cgi?id=0005987>

Based on the book by Janez Trdina (1830 – 1905): Bajke in povesti o Gorjancih (first published in 1882, Tales from the Gorjanci Hills).

### Marko Košnik

**Brzinski**

**spomeniki**

**(1994**

<http://web.mac.com/marchegon/radioArchive/brzinskiSpomeniki.html> (1994, **live radio broadcast on Radio Študent, 33 minutes)**)

<http://web.mac.com/marchegon/radioArchive/brzinskiSpomeniki.html>

The essay that was read and improvised live (with collaborators) includes elaborate prior text manipulation using printing, fax and OCR software that distorted the text through a repetitive process. The live manipulation included the manipulation of the author's reading overlaid by a loop of analogue tapes by Borut Savski and the re-mix by Miran Kajin. The manipulated source essay and audio archive of the broadcast is available.

**operabilVienna (2005, multimedia performance)**

<http://web.mac.com/marchegon/movies/operabilVienna.html>

and

**the missing engine of laputa (2006, performance lecture)**

<http://web.mac.com/marchegon/movies/laputaEngine.html>

A video archive of the performance with the text, reading, kinetic text projection and video manipulation (in English).

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<sup>15</sup> All URLs in this section were last accessed on 5 January 2010

### **Spletna umetnost (Net art) – Vuk Ćosić**

The majority of his work is influenced by mediaeval textual visuals of the Arabic, Jewish and western tradition, literary avant-gardes and related traditions. His entire ASCII art corpus (1998-99, continued to present, but less intensively) might be considered as electronic literature: <http://www.ljudmila.org/~vuk/>. His work 'Nacija-kultura' (nation-culture, 2000) is also notable. This project (in a brief outline) consisted of a projection of real time search queries from the main Slovene search engine (at the time) formed in the shape of a sonnet with rich and multilayered references to the Slovene national poet and icon France Prešern and related questions of national identity seen through the crash of a myth of the nation (represented by Prešern) and the nations on-line search reality.

### **Spletna umetnost (Net art) – Teo Spiller**

In SP\_ ^ \_M s.o.n.n.e.t (2004, <http://www.s-p-i-l-l-e-r.com/spamsonnets/>, in 2008/09 extended with the VRML and slideshow components in Spam Sonnets 2) the author combines texts from spam e-mail messages into personalised sonnet alike poems. In 2010 he developed a new approach with the News Sonnet that combines different news sources producing unexpected semantic/news collocations.

### **Spletna umetnost (Net art) – Igor Štromajer**

In accordance with his constant exploration of intimacy and emotions *gsm.art* (1999, <http://www.intima.org/gsm>) explores the SMS/on-line communication with a distinct combination of visual and text elements in relation to technology mediated communication .

In *wap.sonnet - microbe.4 / wap.art* (2000, <http://www.intima.org/sonnet.html>) he uses a codework type of poetry intended for mobile phones (wap).

### **Spletna umetnost (Net art) – Jaka Źeleznikar**

The author's electronic literature (1997 – present, [http://www.jaka.org/projects.php?tag=e\\_poetry](http://www.jaka.org/projects.php?tag=e_poetry)) is predominantly focused on computational/e- poetry through which he explores a wide variety of approaches from interactive, participatory, generative, kinetic to program based poetic web interventions. His preferred media are web pages and Firefox add-ons. Recently he has focused on exploring the expressive possibilities of Twitter (and its API) with works such as <http://twitter.com/jakaorg/status/1411842446>, <http://twitter.com/jakaorg/status/1695974796> and <http://www.jaka.org/2009/sara/> (all 2009).

### **Darij Kreuh, Tadej Fius at al: Palčica (2004?, Thumbelina)**

Thumbelina – the first Slovenian virtual puppet performance – (in Slovene) combines computer game elements with puppet theatre placed within a virtual environment. Assisted by the animator the characters from fairy-tales come to life on screen.. The audience (intended for children aged between 3 and 9) influences the development of the tales, trying to save the heroine from her troubles.

Authors: concept: Darij Kreuh, Tadej Fius, direction, animation: Robert Waltl, dramaturgy: Ivica Buljan, visuals: Ana Košir, music: Špela Avsenak, music production: Miloš Radosavljevič, Špela Avsenak, production: Forum Ljubljana.

In 2008, 1,554 different periodicals were published<sup>16</sup>, 6,358 book titles and brochures, out of which 1,274 were fiction. Of all fiction titles, 709 were Slovene original titles while 565 were translations. As regards the type of fiction, most fiction books were novels (37.1% of all fiction), followed by short stories (25.7%), poetry (22.3%) and other types of fiction (14.9%). Electronic literature works were not included in this count but it is highly unlikely that their production exceeded 10 titles. Electronic literature completely bypassed the production and distribution of the publishing houses and bookstores/libraries chains (In 2006, 61 public libraries had 539,000 registered users<sup>17</sup>. On average, every library member borrowed 46 books as all users together borrowed close to 25 million units.). The electronic literature works are mostly self-published on the internet or available to the public in exhibitions and festivals (it is not rare that a new work is commissioned for an exhibition).

In 2008, 2,119 permanent and temporary exhibitions<sup>18</sup> with almost 2.5 million visitors were reported by 180 institutions (out of which 63 were galleries, i.e. 28.9% of all participating institutions and organizations: museums, galleries and exhibition organizations). It is not known how many of the included electronic literature in their exhibitions, however most likely only a few of them did.

In most cases literature venues are not equipped with the necessary technology. Literary magazines exclude digital carriers such as DVDs and even if they maintain an on-line presence they tend to republish the magazine content or focus on works that could be published. Readings typically consist of the author reading from his book. Spoken word events, slam poetry, multimedia readings or similar approaches are rare. However, technical equipment is not the reason why electronic literature lives in the world of art rather than in the world of literature. Digital technology has penetrated the entire publishing process, e-books and e-book readers are on the rise. The way we relate to the content and the book, its carrier is undergoing a change. Not only is the symbolical world shaken, but the financial existence of the editors and authors is also endangered, thus the denial of the value of all things digital seems to be the chosen defence for most of the involved. On the blog of parliamentary party Zares' website the writer Janja Vidmar wrote the following: "*Language and with it books are by all means the privilege of mankind, thus we are constantly facing the following issue: can we, today - in a world of distorted communication and electronic media - in a genuine way feel the holiness of the word, the language, book, and express ourselves through them?*"<sup>19</sup>.

The world of art is not only more open to digital technologies, but it also relies on a completely different financial base. Even though the state finances a small part of the published titles, the main source of income derives from the market. The art world is mostly financed from public funds in care of the Ministry of Culture and other municipal departments. The art market is underdeveloped and focused on historical rather than contemporary art works (and even within these works the focus lies more on objects such as paintings rather than on digital projects). Authors of electronic literature mainly fund their projects from public funds, occasionally by commissions and in many cases by keeping a day job.

<sup>16</sup> Statistical Office of the Republic of Slovenia 2009, 'Publishing, Slovenia, 2008', 15 September, viewed on 3 January 2010, [http://www.stat.si/eng/novica\\_prikazi.aspx?id=2605](http://www.stat.si/eng/novica_prikazi.aspx?id=2605)

<sup>17</sup> Statistical Office of the Republic of Slovenia 2008, 'A day dedicated to books', 18 April, viewed on 5 January 2010, [http://www.stat.si/eng/novica\\_prikazi.aspx?id=1582](http://www.stat.si/eng/novica_prikazi.aspx?id=1582)

<sup>18</sup> Statistical Office of the Republic of Slovenia 2009, 'Activity of museums, galleries or exhibition grounds, Slovenia, 2008', 24 September, viewed on 5 January 2010, [http://www.stat.si/eng/novica\\_prikazi.aspx?id=2630](http://www.stat.si/eng/novica_prikazi.aspx?id=2630)

<sup>19</sup> Originally in Slovene: »Jezik in z njim knjige so vsekakor privilegij človeka, zato se nam nenehno poraja vprašanje, ali lahko danes v svetu popačene komunikacije in elektronskih medijev sploh še na pristen način občutimo svetost besede, svetost jezika, knjige in skozi njih izrazimo sebe?« Vidmar, J. 2009, Knjiga, kdo bo tebe ljubil?, blog post, accessed on 5 January 2010, < <http://www.zares.si/knjiga-kdo-bo-tebe-ljubil/> >.

## Conclusions

A timeline of Slovene electronic literature has been established for the very first time. Current literature explorations are connected to the past through the detection of the key writing methods that point to literary avant-gardes and ergodic textuality (themselves – not discussed in this paper – with many predecessors throughout history). A brief overview of the context of Slovene electronic literature is provided. The question of future developments still remains open.

In the current interplay between the dominant print based literary culture, related digital content and electronic literature, the print based culture feels threatened by digital technologies, even if there is no clear indication that the printed book will even in the distant future become obsolete as a way of organising, distributing and enjoying the content. Heritage digitalisation which also includes the digitalisation of printed literature is on the rise, centred in The Digital Library of Slovenia<sup>20</sup> (enabling such finds as is one of the earliest articles<sup>21</sup> on visual poems by Anton Debeljak published in 1922 and referring to poems from the 4<sup>th</sup> century BC as probably the earliest example). Abundance of digital-born content created daily contains an array of literary works in numerous platforms from the still existing personal web pages, blogs to social networks and mobile phone enabled communication (not necessary private – in Ljubljana anybody can send an SMS message that is displayed on the screens in the public city buses).

In the future will electronic literature (as understood in this paper) simply fuse with other literary digital content in a seamless continuum or will it become/remain a unique entity? Did the former already happen? Will electronic literature soon become a term used to describe a specific state of literary, technological and cultural affairs as is already the case with the term hypertext literature? Or will we enjoy a Sunday morning lazily reading a book (printed or on an e-book reader) in bed – in the best of all possible worlds - while sipping a cup of great tea and having a healthy and tasty breakfast. Later blog on it or discuss it over the social network and in the evening finally get that so hard to get invite to the brand new highly computational and immersive electronic literature work of a hot new author or authoress we were all waiting for?

I don't know. Let's see.

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<sup>20</sup> [http://www.dlib.si/dlib\\_eng.asp](http://www.dlib.si/dlib_eng.asp) (last accessed 10. 1. 2010)

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## *Literature Survey*

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For the purpose of my research I had to turn to many resources from books, online information to interviews. I was querying the theory of electronic literature, Slovene cultural (literary) history and information on works in that realm. The survey reflects on works of theory.

My sources were in English and (the majority) in Slovene.

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## *Slovene sources*

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I started my survey with the history of Slovene culture (that I belong to, including all of my schooling years) by querying academics interested in the literary part of affairs. With gathered information I decided for two main sources for this part of the research. First consist of three elaborate books on history of Slovene literature: Pogačnik, J. (1998): *Slovenska književnost I*. (Slovene Literature), Zadavec, F. (1999): *Slovenska književnost II* and Pogačnik, J. et. al. (2001): *Slovenska književnost III*. This work provides overview of development and states main authors and works (while the contemporary literature is included there is no mention of electronic literature whatsoever). Kmecl, M. (2004). *Tisoč let slovenske literature* (Thousand Years of Slovene Literature) provides additional view on the overall development of Slovene literary canon especially in regards to significance of included authors when the burden of nation constituting elements (a long lasting role of Slovene literature) is removed and internal literary qualities take leading role in evaluation.

Since literary avant-gards and later relating development plays a minor role in dominant discourse of Slovene literary history (with exception of works by Srečko Kosovel which received lot of attention) I consulted several additional sources dedicated to such works. Dovič, M. ed. (2000): *Antona Podbevška 100 nadnaravnih let* (100 Supernatural Years of Anton Podbevšek) provides several essays of life and work of Anton Podbevšek, first representative of Slovene literary avant-garde. Kosovel, S. (1998): *Integrals* provides English translation of Srečko Kosovel constructivist poetry.

Poniž, D. (1984): *Konkretna poezija* (Concrete Poetry) provides theory of concrete and visual poetry as well as information and reflection of international and Slovene authors.

Kovač, M. (2009): *Od katedrale do palačinke: tisk, branje in znanje v digitalni družbi*. (From Cathedral to Pancake: Print, Reading and Knowledge in Digital Society) examines the role of the printed book in contemporary societies and its relation to the other media. Author also examines the reasons why e-books did not substitute the printed book, as was predicted in mid-nineties.

Zgonik, N. ed. (2009): *Pojmovnik slovenske umetnosti* (Glossary of Slovene art) provides short theoretical overview, development and key authors and works of Slovene art organised by movements from 1945 to today (including OHO, conceptual art, visual poetry and net art among others).

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### *English sources*

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Vaupotič, A. (2009): *The Sonnet in the New Media* (General Issues and Slovene Examples) provides theoretical frame and states Slovene examples of approaches to sonnet in new media environment. (One of the few sources that examined works and topic closely related to electronic literature written by Slovene author.)

Other English sources contain theoretical examinations of electronic literature and new media. Among them I would point out to Hayles, N. K. (2007): *Electronic Literature: What is it?*, ELO, (n. d.) and Strickland, S. (2009) *Born Digital* for definition of electronic literature. The rest of the works were used for understanding of wider frame of electronic literature: new media and digital technologies. Manovich, L. (2000): *The Language of New Media* provides "five principles of new media" that – even if the emphasis of the book is on cinema – helped to define the distinctiveness of new media forms in contrast to print and other electronic media or digital content.

Aarseth, E. J. (1997) in *Cybertext: Perspectives on Ergodic Literature* introduces the term "ergodic literature", texts in which – as stated by the author - "*nontrivial effort is required to allow the reader to traverse the text*". Another important aspect of this work is that it separated content organization from its carrier/medium.

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### *Additional sources of information*

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While all sources are too many to mention them all (they are referenced in footnotes) I would like to stress the valuable information provided by interviews I conducted with Vuk Ćosić, Marko Košnik, Teo Spiller, Igor Štromajer (and several others) about their work and on wider topic of (electronic) literature. Some of the information gathered this way was otherwise literally unavailable.