

READING BOOKS DIFFERENTLY

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Starting from the premise that the book is a world in itself, which sometimes invades reality, that the “reality” of the city is “literaturized” in the sense given to it by Bertrand Westphal, and so the city is a book, we present a technology intended to complement electronic reading with contextual information. Automatic language processes working on the original text adorn it with electronic artefacts that highlight mentions of entities and relations between them, thus revealing semantic links within the text and outside it, towards web pages and maps, or helping readers initiate and access communities of people preoccupied with sharing readings. The first instantiation of the “Mapping Books” system allows the reader using a tablet or another mobile device to navigate outside the book, pertaining to the geographical entities that the book contains. “Mapping Books” pushes the interactivity with the book content well beyond the usual hypertext links: a mapped book can contextualise instantaneous positions of the user while reading, as well as her/his personality and cultural preferences. Although rooted in a given, constant text, once associated with a specific reader, the book is personalised to enhance reading satisfaction and maximise guiding. The actual effects of such a technology remain to be studied.

KEYWORDS: *mapping books, reader, enhanced reading experience (hyperreality), geocriticism, the city, literaturization.*

INTRODUCTION

This paper is based on a talk its authors gave at the “Books and Screens and the Reading Brain” conference held in Vilnius in September 2017. Dan Cristea and Dana Bădulescu are members of the E-Read COST Action, which looks into the implications of digitization upon the individuals’ cognitive and emotional life. Starting from the empirical evidence of a negative emotional and cognitive impact of reading on screen, from rather dispiriting findings that less and less time is spent on reading long-form texts, and that due to digitization, reading is becoming a sporadic and fragmented activity, E-Read accounts for the implications that digitization has on reading in order to help individuals (and the whole European society for that matter) to optimally cope with these negative effects. The Action uses multidimensional models of reading, combines paradigms from experimental sciences with perspectives from humanist sciences, thereby developing new research paradigms and metrics for evaluating the impact of digitization on the vital act of reading.

“Mapping Books”¹, a recently finalized project, aimed at building a technology that complements a book’s content with information available from sources outside it. In this project “a mapped book” is defined as “a book connected with locations in the real and virtual world, which, to the discretion of the user, could be sensitive to the instantaneous location of the reader, as seized by her/his mobile, and that signals, at appropriate moments, events in the real or virtual world related to the location of the toponyms and other entity names the book contains.”²

Adopting a post-factum attitude, after finalising the “Mapping Books” project, in this paper we reveal literature evidence of the usability of a mobile application that uncovers new facets of the reading activity. Abstaining as much as possible from technical details (described elsewhere³), our reflections are inspired by a plethora of authors that argue in favour of mixing the reality of the world around us with the one contained in a text. Finally, we overpass the limitations of the technology as it works now and, guided by recent developments, we foresee possible extensions, projecting the act of reading even further.

THE READER’S ESCAPE FROM THE BOOK INTO
THE REAL WORLD AND THE BOOK’S INVASION
OF REALITY

The idea of evading from the book into the real world may sound preposterous to many of us, who would feel more tempted to think of books as offering an escape from a shapeless, grim, and more often than not oppressive

reality. Contemporary writers give that perception a twist, arguing, as John Fowles does for instance in his novel *The French Lieutenant's Woman*, that fiction steps across the line of reality, invading it. The postmodernist turn in literature, illustrated by a diversity of writers such as David Lodge, John Fowles, Haruki Murakami, Orhan Pamuk, Salman Rushdie, etc. is underpinned by the contention that reality is a fabrication and a projection of the human mind. In other words, reality is fiction.

For somebody who likes reading books and travelling, or reading books *while* travelling for an enhanced experience of the journey, the Turkish writer O. Pamuk offers an incredible surprise. The author of *The Museum of Innocence* established an actual "Museum of Innocence", which is described in the novel. The proviso that reality would inform a book of fiction is seriously questioned by the novel's central theme of fetishizing it. Thus, the collection of fetishes in the novel called "The Museum of Innocence" transfigures the harsh reality imagined by O. Pamuk to be the fate of his characters into an artificial haven of artefacts, whose aura obliterates their actual life, and ultimately reality itself. In fact, the objects gathered in the museum are not exactly fetishes. They have a certain magical power by being exhibited and thus visible in reality: readers see them with their eyes, and suddenly the imagination that worked for them during the act of reading is now confronted with the real palpable objects. The effect is devastating: the fictional "reality" that one built through all the pages of the book becomes embodied, and if it were not protected by the glass of the panels, it would be even tangible. What O. Pamuk actually does is to transform both the virtual reality of the novel and our physical reality into a museum, which consecrates its own reality as eerily material: the materiality of its exhibits is girdled by the novel's story.

On the museum's webpage there is "A Modest Manifesto for Museums," where O. Pamuk pleads for small and cheap museums which, unlike the monumental buildings, tell the stories of individuals, "much better suited to

1 Details in Acknowledgements.

2 CRISTEA, Dan; PISTOL, Ionuț-Cristian. Mapping Books: Linguistic Support For Geographical Navigation Systems. In COLHON, Mihaela et al. (eds.) *Proceedings of the 10th International Conference „Linguistic Resources And Tools For Processing The Romanian Language, Craiova, 18-19 September 2014”*. Iași, 2014, p. 189–198.

3 For instance: CRISTEA, Dan; PISTOL Ionuț-Cristian. *MappingBooks: Linguistic Support...*, or:

CRISTEA, Dan; PISTOL, Ionuț; GIFU, Daniela; ANECHITEI, Daniel. Networking Readers: Using Semantic and Geographical Links to Enhance e-Books Reading Experience. In *Proceedings of the 2nd Workshop on Social Media and the Web of Linked Data, RUMOUR 2016*, together with the 8th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2016, September 28-30, 2016. Halkidiki, Greece.

displaying the depths of our humanity.”⁴ The manifesto is concluded by a schema in which O. Pamuk contrasts a paradigm of the past with one of the present. According to it, epics are supplanted by novels, representation by expression, monuments by homes, histories by stories, nations by persons, groups and teams by individuals, large and expensive museums by small and cheap ones. To increase the reader’s (visitor’s) sense of this continuum between fiction and reality in the space of the museum, the book contains a ticket printed in its closing pages. The ticket can be stamped at the ticket office in exchange for an invitation to the museum. Thus, the escape is not so much the reader’s as it is the book’s, and it is actually more of an invasion than an escape. What O. Pamuk’s museum does, after all, is not only to give us a sense of at-homeness in this projection of his imagination but also a chance to step across the line separating fiction from reality, and plunge into a universe of blurred perception.

With his “Museum of innocence” replicated in the realm of reality, on a street in the present-day Istanbul, which is actually mentioned in the book (Çukurcuma Caddesi in the neighbourhood of the Beyoğlu district), O. Pamuk does more than assembling and staging the “reality” of fiction, out of a collection of objects; he shows that the reader can actually step into and walk through this fictional reality. Thus, the reader can plunge into the world built by the book as if, by magic, the distinction between the imaginative world and the real one just disappeared.

One of the authors of this paper experienced a strong emotion when entering the Museum. Apart from the fact that, by chance, he had the book in his bag and, in an “innocent” dialogue with the lady cashier at the entrance to the museum (about which he had just found out from a Turkish acquaintance) he discovered that the physical presence of the book itself in his hands offered him the privilege to enter free of charge, the mere materiality of the objects displayed was irrefutable evidence that there is no border between the fictional world and the real one, that the book was all around him and even the characters were somewhere, within reach. This intense experience originated the idea of an application that can help the reader to closely integrate the book content with the reality around. “Mapping Books” fulfils this expectation through quite some features: it offers the reader map displays of the geographical locations that are mentioned in the text either directly or indirectly, as roles in some semantic relations, it connects mentions of entities of type location with their occurrence in the virtual space (Wikipedia in the current implementation), thus fulfilling the reader’s need for supplementary information, and it shows the

reader her/his instantaneous position with respect to points of interest mentioned in the book, thus anchoring him/her within the very geographical descriptions offered by the text.

THE ENGINE BEHIND THE SCENE

In MappingBooks, all this complex behaviour is made possible by exploiting the semantic processing capabilities of the machine, which is put to work to produce additional content for the book.⁵ The end result is an enriched book, ready to be experienced by the reader through a purposefully built app. A text in electronic format is first converted into an internal format, which is then processed by several semantic processing modules to identify entity mentions (people, locations, organizations), find the relations among them, connect entity mentions to entries in on-line resources (such as Open Linked Data, Wikipedia, geographical information repositories) and associate with them additional pertinent information gathered through information extraction techniques. The result of this research-informed automatic processing step consists in layers of information, anchored into the original text of the book. The text and these layers of information are packaged together into a live book object, formatted as to facilitate its wrapping into a “reading app” that would allow readers to interact with and visualize the enriched content as they please.

DISCOVERING THE PLEASURE OF READING

Those of us who have discovered the pleasure of reading know what our mind and our soul gain from it. Literature is the deepest, most solid and complex way of connecting yourself to your own self, to the other and to the world at the same time. In the nineteenth century, Ralph Waldo Emerson remarked “the character of the pleasure we derive from the best books. They impress us ever with the conviction that one nature wrote and the same reads.”⁶ This means that one of the main reasons why we read is the discovery of the self, and it is literature which captures the most essential aspects of it. Whether we see the text which comes to us in the shape of a book, as Paul Celan saw it,⁷ i.e. a message in

4 See: <<http://en.masumiyetmuzesi.org/page/a-modest-manifesto-for-museums>>.

5 CRISTEA, Dan; PISTOL, Ionuț; GIFU, Daniela; ANECHITEI, Daniel. *Networking Readers...*

6 EMERSON, Ralph Waldo. *The Collected Works of Ralph Waldo Emerson*. Vol. 1: Nature, Ad-

resses, and Lectures. Cambridge, Massachusetts, 1971, p. 57.

7 Paul Celan quoted in HIRSCH, Edward. *How to Read a Poem and Fall in Love with Poetry*. New York, 1999, p. 1.

a bottle faring to find its reader, or whether we see ourselves as embodiments of travellers in search for books, what we ultimately discover is that when we read we get connected with something ancestrally and vitally important.

As we have already argued, reading is a form of escapism. Reality looks chaotic and unshapely – a nebula, while our mind and soul need order and shape to deal with it. Reality and life are a flux with no clear beginning and end, and no fixed outline. Meeting our essential need for order and pattern, books give life and reality a clear shape by extracting and distilling their most significant aspects, and then containing and framing them. Life and reality are imagined in books, but the impact books have on us is due to their pattern, which makes them graspable. Emerson wrote down a dream he once had that he floated in space, and he saw the world floating not far off, “but diminished to the size of an apple.” What happens next in Emerson’s dream can be read as a metaphor of the relation between literature and the world: “Then an angel took it in his hand and brought it to me and said, ‘This must thou eat.’ And I ate the world.”⁸

Therefore, a book is not merely a representation of this world; it is a world *per se*. In the book, the world and reality look and feel shapely, they have the perfect roundness of an apple. No matter how fantastic that world may be, we believe it through what the English poet S. T. Coleridge called “suspension of disbelief.”⁹ Once we suspend our positivistic disbelief in the work of the imagination we find in literature, we are free to experience the magic our mind and soul crave. For many of us, experience came first through books. Before we kiss for the first time, before we fall in love for the first time, before we are disappointed for the first time, before we live great joys or ravaging suffering for the first time, we find them in books, and in some sort of way that prepares us for their reality.

The sense that the universe is a book, that we are the figment of somebody’s imagination, a projection of somebody’s dream may come from our impression that we are living out what we have read. Readers let themselves seduced by books so much that they start to venerate their covers, their leaves, their lines, their shape, their smell, their touch and their spirit, and ultimately they want to live among them. In other words, the readers’ world is a bibliocosmos. In H. Murakami’s novel *Kafka on the Shore*, published in 2002, the main character, an adolescent named Kafka finds refuge in a library in Takamatsu after a series of adventures, and in a rather strange way his life is shaped by the space of the library. Walter Benjamin described the same fascination with the readers’ bibliocosmos, and Alberto Manguel quotes the passage:

The world that revealed itself in the book and the book itself were never, at any price, to be divided. So with each book, its content, too, its world, was palpably there, at hand. But equally, this content and this world transfigured every part of the book. They burned within it, blazed from it; located not merely in its binding or its pictures, they were enshrined in chapter headings and opening letters, paragraphs and columns. You did not read books through; you dwelt, abided between their lines and, reopening them after an interval, surprised yourself at the spot where you had halted.¹⁰

When we read, we are transported into the world of the book, and if we let the magic of reading work, we discover that books also dwell in us. We are shaped and transformed by each book that we read as much as our mind and soul have reshaped it. Any memorable encounter with a book changes our perceptions and puts the world into a new perspective. Reality itself takes the colours of the books we have read. The world comes in archetypal scenarios even for those of us who have not read the books referenced by other books we may have read: Gilgamesh's quest for the meaning of life and for some way of defeating death, Ulysses's adventures and return home, Orpheus pining for Eurydice, Romeo and Juliet – the pair of star-crossed lovers, these age-old archetypes underpin thousands of stories written in various ages and spaces, and they express essential themes that define our human nature.

Harold Bloom, who is also known to be a reader seduced by books, which turned him into one of the best critics of our times, argues that we read Shakespeare, Dante, Chaucer, Cervantes, Dickens, Proust, or any other writers we may cherish “because they more than enlarge life.”¹¹ Ultimately, Bloom speaks about “the reader's quest” and “a reader's Sublime”¹² to be reached *en route* because “we read, frequently if unknowingly, in quest of a mind more original than our own.”¹³ Of course, we find the mind original because it stirs our interest and meets our most intimate thoughts and desires.

So, the aim of our project is to bring forward “interesting” additional information, where the notion of interestingness, used in the fields of knowledge discovery and text summarization, contrasts that of importance. Important things may

8 That dream is recounted by Edward Hirsh in his book *How to Read a Poem and Fall in Love with Poetry*. Hirsch uses Emerson's dream as a motto of his book.

9 COLERIDGE, Samuel Taylor. *Essay on Poetic Theory*: from *Biographia Literaria*, Chapter XIV. See: <<http://www.poetryfoundation.org/arti->

[cles/69385/from-biographia-literaria-chapter-xiv](http://www.poetryfoundation.org/articles/69385/from-biographia-literaria-chapter-xiv)>.

10 MANGUEL, Alberto. *A History of Reading*. London, 1997, p. 12.

11 BLOOM, Harold. *How to Read and Why*. New York, 2000, p. 28.

12 Ibidem, p. 29.

13 Ibidem, p. 25.

be common knowledge, while something interesting is idiosyncratic – unexpected and previously unknown to the actual reader. A whole universe is hidden under the eyes of a reader. While there is no technology to uncover this universe, supplementary sources of knowledge may add missing details to reveal parts of this universe that could be exploited in the context of the book under the eyes.

A LITERARY MAP OF... VILNIUS

Looking for connections between our project and Vilnius, the place of the conference, we explored the literary representations and mappings of the city. Our research was rewarded by a discovery which could be one more step in our undertaking. We came across the Vilnius' literature mapping project, which is being developed by several Vilnius University literature scholars and cartographers. Thus, we found out that what the Vilnius team does is to

<...> re-imagine the physical – actual – space of Vilnius by filling it with fictionalized routes in the hope of finding local sites of narrative crossings and representational diversions extracted from an assortment of literary traditions. Essentially, by placing literature on a cartographical (scientific) terrain, we want to read the city in all its linguistic profusion without losing much of its imaginary possibilities to translation.¹⁴

Therefore, the stake of this project is the weaving together of a literary geography of Vilnius, a city whose configuration has undergone changes in time. Like in the case of many other (capital) cities, the history of Vilnius used to be that of a multifarious and polyglot city, which Lithuanians, Poles, Jews, Belarussians, Russians, Ukrainians, Germans and Tatars made their home. As the members of the project argue, Vilnius lost its multifariousness in the mid 20th century, when it started to become a predominantly Lithuanian city. What this history suggests is that Vilnius tells a story that is engraved not only on the stones of its streets, squares and buildings, but also in the words of texts written in several languages by people who knew its face before it changed. Many of the stories of those who left Vilnius before and after World War II are still unknown, and they may shed light on a face of the city which, although changed, could still account for its present looks.

To the minds of the members of the project team, these stories may contribute to the configurations of one spot and how that spot becomes a hub of the city's imaginative potential and energy. They may also suggest how the imaginative mapping of the whole city shapes the readers' perceptions or they may converge into some sort of palimpsest mapping of Vilnius.

Like any other city, Vilnius is not just a place on the map with various representations in the collective mind of its communities but also a sum of its ages. The name of the city has its origins in the Vilnia River, which may suggest a fluid space at any given time. In Mikhail Bakhtin’s terms, Vilnius may read as a chronotope, i.e. a fusion of spatial and temporal signs.¹⁵ The chronotope is a whole of many parts and levels. When you take in the city as a concrete entity by walking along its streets and avenues, dining in its overground and underground eating places, you are just scratching the surface. To get into the depth of its ages, you need to start with the legend of its foundation, according to which the Grand Duke Gediminas, tired after the unsuccessful chase of a bison, fell asleep and had a dream in which an iron wolf stood on top of a hill and howled as if it were a pack of one hundred wolves. Asking the “krivis,” i.e. the pagan priest, to interpret the dream for him, Gediminas was told that the iron wolf stood for a castle and a city which the duke would establish on that site. Without the narrative of the legend, the meaning behind the statue of Gediminas and the iron wolf governing the central square of Vilnius would be lost. What we argue is that all the stories of the city to be found in its legends, novels and short stories, and all the lyrical evocations of its spirit of place in poetry add new layers of meaning to give further depth to the place itself.

For the late 20th century Lithuanian writers, Vilnius was a place redolent of a sad communist past. In Ričardas Gavelis’s *Vilnius Poker*, the old history of the city and the legend of Gediminas are empty signs, and Vilnius looks and feels like a paralysed body, a corpse.¹⁶ In the confessional prose of Jurgis Kunčinas’s *Tūla*, all the streets of Vilnius and the bridge over the Vilnelė river lead to the bohemian district of Užupis,¹⁷ and so Užupis reads like the centre of the world. The troubling question is: how does the reader relate to that centre?

UŽUPIS AND TŪLA

In Kunčinas’s novel, Vilnius is described in a lyrical prose of such emotional intensity that the reader is transported to a world which looks familiar and unfamiliar at the same time. The tone is sad, coloured by melancholy

14 *Vilnius literature*: project. See: <http://www.vilniusliterature.ffv.vu.lt/en/?page_id=18>.

15 BAKHTIN, Mikhail. *The Dialogic Imagination: Four Essays* by M. M. Translated by Caryl Emerson & Michael Holquist. Texas: University

of Texas Press, 1981.

16 GAVELIS, Ričardas. *Vilnius Poker*. Translated by Elizabeth Novickas. Flossmoor, 2009.

17 KUNČINAS, Jurgis. *Tūla*. Translated by Elizabeth Novickas. Flossmoor, 2016.

and grief, the season winter, the atmosphere bleak. What we recognise is the essentially human nature of the feelings, the outline of the city, which can be any city dominated by agony and pain in any of its ages. At the same time, the city is unmistakably Vilnius, and the heart of Vilnius in the novel is Užupis, which acquires a transcendental dimension. The protagonist's journey through the city to reach his lover's place echoes Orpheus' archetypal descent to Hades, where the Vilnelė is the Styx:

With my footsteps in the slushy snow seemingly drafting a topographic map of this quarter, past the dog market, the pharmacy, the fish and shoe stores, I descend to you, I descend and emerge on the icy shore of the Vilnelė, and the entire old part of the city, lit up by moonlight, really does look like an old city plan, meticulously drawn and colored by some sort of higher being...¹⁸

Kunčinas's Vilnius is and is not Vilnius. In a strange way, which only fiction and dreams can give a sense of, this description of Vilnius in the novel essentialises its spirit, transcending any mundane representation of it and supplanting it with the author's perception. In this perception, the topography of the whole city echoes ancient archetypes and is contained in the hypertrophied topography of Užupis, which in its turn is the topography of Tūla's body. Tūla is the protagonist's physically absent and spiritually present lover, whose body is charted as if it were the city itself. While journeying through the book with Kunčinas's protagonist, who often visits his lover (or rather his own fantastic projections of her) in the guise of a bat, the reader will see Vilnius in another light. Coloured by this reading, Vilnius becomes essentially Užupis, and Užupis becomes essentially Tūla, which may be an ethereal embodiment of the city's gloom:

I clamber up to your shore, Tūla, and it seems to me that a huge lilac bush gleams blue above my head—I pick them, and in each hand hold a lavender bouquet as fluffy as spotless white clouds—intoxicating, curly, overflowing with life, dripping in silver streams—and, swaying from exhaustion, I go in the white two-hinged door, on which hangs a modest, worm-eaten, blue mail box, and now I am, Tūla, just a few steps away from you, from your husky voice, your body's fibers, your most secret little corners...¹⁹

With these lines echoing in our heads, we go to Užupis. The season is early autumn, weather still pleasantly warm, the place as bohemian as its spirit has made it. Instead of gloomy shadows, we see large groups of people visiting the place, and we take pictures of statues, an artsy barrel and a fluffy friendly

cat. We have a beer at a bar on the river bank, and we take more pictures, this time of the paintings lining the wall and the statue of a mermaid on the other bank, and of a young woman crossing the river to sway in a swing. In the guise of the woman paddling in the river, in the guise of the mermaid, in the guise of the statues, Tūla is there, and if we squinted our eyes, we would catch a glimpse of her bat lover, too!

THE CITY AS “A METAPHOR OF THE BOOK”

Geocriticism is an approach to literature that tackles it in relation to the study of geographic space, which in its turn has a plethora of philosophical and sociological implications. Therefore, the emergence of this approach is connected to a new turn focusing on spatiality in the humanities and social sciences. Arguably, its roots are in the theoretical interest Charles Baudelaire took in the configurations of the modern city in the innovative arts of the latter half of the 19th century, its representations in literature and the figure of the *flâneur*, followed by the theories of Walter Benjamin, Mikhail Bakhtin, Michel Foucault, Gilles Deleuze, Henri Lefebvre, and more recently Edward Soja, Frederic Jameson, David Harvey, Nigel Thrift, Bertrand Westphal and Robert T. Tally. The emergence of this turn is often associated with Foucault’s seminal idea, originally defended in 1967 but published in 1984, that:

The present epoch will perhaps be above all the epoch of space. We are in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed. We are at a moment, I believe, when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein.²⁰

Geocriticism focuses on a literary referentiality between the world and text, whose implications may be the existence of possible or alternative worlds or even realities. An argument lying at the core of this approach is that the city itself is a text or a book. B. Westphal argues that since the early 1960s the perception of space, and especially human space, has tended to become a complicated issue.²¹ Building his argument around the idea that the city is a book,

18 Ibidem, p. 9.

19 Ibidem.

20 FOUCAULT, Michel. Of Other Spaces: Utopias and Heterotopias. *Architecture / Mouvement / Continuité*. October, 1984. See: <<http://web.mit.edu/allanmc/www/foucault1.pdf>>.

edu/allanmc/www/foucault1.pdf>.

21 WESTPHAL, Bertrand. *Geocriticism: Real and Fictional Spaces*. Translated by Robert T. Tally Jr. Palgrave: Macmillan, 2011. See more: <<http://www.vox-poetica.net/sflgc/biblio/gcr.html>>.

B. Westphal takes us to the origins of the perception of the city as a projection of the human mind for other human minds to decode, decipher, interpret, and then re-encode. According to B. Westphal, those origins are in Louis-Sébastien Mercier's 18th century tackling of Paris as a *city-painting* ("ville-tableau"),²² followed by that of the *city-sculpture* ("ville-sculpture"), and finally that of the *city-book* ("ville-livre"). For certain authors, especially from the 1950s onwards, B. Westphal contends, the city has become a book as much as the book has become a city. This leads B. Westphal to the fantastic idea, which gives so much weight to our project, that the urban space has become a metaphor of the book, and especially of the novel. This turns us into citizen-readers of citizen-authors, who pace the streets on the lookout for literary echoes and mirroring effects, actually reading those streets as we would read the lines of a book.

Drawing on Jacques Derrida's now famous "there is no text outside the text" and extrapolating it to the French *nouveau roman*, parody and hyperrealism, B. Westphal argues that the last decade of the 20th century was a landmark in terms of what he calls "postmodern derealization", by which he means "the conquest of the real by the literary, and thus also a certain fictionalization of the real."²³

READING AND TRAVELLING

What we read changes our perception of reality irrevocably. It often happens to those of us who have a mind for novels or memoirs or travelogues or poems to wish to go to a place just because their descriptions in books impressed us. When we step into the reality of the places described, as one of us did when visiting O. Pamuk's *Museum of Innocence*, we recognise the size, the shape, the light, the smell, the taste of the objects described, and reality takes on the colours of our readings. This is most obvious when we read the descriptions of cities, districts, parks, streets, alleys, avenues or buildings. When speaking about the spatiotemporality of any city, B. Westphal tackles it in terms of a fuzzy zone where the "*literaturized real*" is separated from "the somewhat realistic literary."²⁴ Nevertheless, the fuzziness suggests a fusion rather than a separation, and at the same time it renders the polemic of the death of the novel versus the fictionalization of the real redundant. There is no death and no birth, only a series of protean shifts and new angles of perception.

Arguing that it is not only real-life people who walk the streets of cities like Paris, London, Buenos Ayres, New York, Amsterdam, Milan, or Dublin, but also characters in books who walk them, B. Westphal raises the question:

What is the difference between the Milan that the potential reader on the street describes with varying degrees of enthusiasm to his or her usual interlocutors and the Milan that the reader knows through Manzoni's *The Betrothed* or through the latest mystery novel by Pinkett?²⁵

If tempted to answer that Alessandro Manzoni's idiosyncratic description of the city is one, while the walker's real-life perception of it is another, then maybe one should take into account precisely that intersection of the fictional and the real in the reader's mind, which results in the "literaturized real." As already argued, the Vilnius of Gavelis is and is not Vilnius, the Dublin of Joyce is and is not Dublin, the London of Woolf is and is not London. Each writer turns the city into the blue print of his or her imagination. To support this hypothesis, one may compare the London depicted by Dickens with that of Woolf and with that of Rushdie. The obvious differences are not there only due to the different ages in the spatiotemporal existence of London but also due to each of the three writers' own perception, imagination and disposition. Likewise, walking the streets of Vilnius with the descriptions of the city in Gavelis's *Vilnius Poker* and in Kunčinas's *Tūla* in mind, the reader's perception of it is mosaicked and incomparably more nuanced than that of a tourist whose eyes see only the visible surface layers of Vilnius. A reader's perception of Vilnius is richer, deeper, a lot more colourful and significantly enhanced than that of a visitor who carries no literary "luggage."

Travelling goes well with reading. In fact, *reading is travelling*, and both open us to the world and show us that reality and the world are coloured by our perceptions. In their turn, our perceptions are changed by the perceptions we encounter in the texts that we read. The technology envisaged in our project is shaped around this idea.

BEYOND THE MAPPING BOOKS TECHNOLOGY

One side effect of this technology, triggered by its spectacular behaviour, should be a glue that brings the book back in the hands of youngsters, who are too much corrupted by the internet or the IT's fancy gadgets. Thus, the technology could be thought to achieve even more than it does now, for instance serving a daring method of stimulating the pleasure taken by children,

²² MERCIER, Louis- Sébastien. *Le tableau de Paris*. La Découverte, 2006.

²³ WESTPHAL, Bertrand. *Geocriticism*, p. 91.

²⁴ Ibidem.

²⁵ Ibidem, p. 91–92.

adolescents and young adults in using their electronic gadgets and devices. We may consider developing strong stimuli that would divert the interest they take in playing electronic games, for instance, towards reading instead. In such a scenario, the mobile phone becomes an auxiliary, a bridge that takes them into imaginary realms rooted in literature, in a different way it is doing it now, i.e. mainly through images transposed in games. A generous and intellectually-oriented aim would be to initiate the young generations into imaginary worlds triggered by linguistic constructs. Nowadays, it is feasible to monitor what the eyes focus upon, and the method is called *eye tracking*. This means that a programme can know exactly what you are instantly reading. Let us imagine an application which, when you read certain passages, certain word sequences, will generate links between those words and whatever you want to be connected to them. In other words, the text is lifeless and inert as long as nobody reads it. However, when somebody starts reading it, the text comes to life. It is as if one's eyes were able to bring the lifeless book to life, to breathe life onto it. To this, we may add some knowledge of the reader, which the programme can receive from the reader's own acknowledged preferences on the social websites, and a host of possibilities will crop up.

The digital technologies can be used to map various descriptions of cities, to connect readers to one another, thus creating reading communities in the digital space.²⁶ The product of the digital technologies is the live book, which gives the reader a sense of augmented reality. Despite downsides (the haptically impoverished experience of reading on screens, the reader's problematic sense of orientation, etc.), there are considerable upsides of e-reading, which thus becomes a highly interactive activity.

In an even more daring scenario, a "companion", in the sense argued by professor Yorik Wilks²⁷, could be trained to assist totally technologized humans in everything they do. A kind of sophisticated Planchet, the shield bearer of Dumas' romantic hero d'Artagnan, would be in our company all day long, hidden in our mobile, which, connected to the world, as it can be, with all its sensors open (accelerometer, compass, GPS, sound and video channels, light and temperature detector, etc.), would recognise the situation we are in and the needs we have at any given moment, trying to give a hand where it can. Supposing the communication would be secured to the point that no unwanted information leaks, this friend in need, always by our side, could be knowledgeable about all we know and about everything we have acquired during our whole life through education, readings, conversations, etc. It would know what we like and dislike, it would take our limits into account, and it would prefigure our desires.

This *alter ego* of ourselves could even replace us in many of our interactions with the surroundings. Reading in this context may become a very sophisticated activity, assisted by our companion, because by seeing what we see (by watching our eyes moving on the screen), it would also decipher what real-life entity mentioned in the text is known to us, what was known in the past and may be forgotten already, and what is not known because we have never met it in any text or real-life interaction so far. Then, at our express desire, additional information could be brought to our eyes (or ears), facilitated by a kind of friendlier interface.

Instead of conclusion

To many of us such scenarios could seem copied from a world of robo-cops, half humans – half machines. However, the human-machine interaction, whether we want it or not, will become more and more part of our lives. It is therefore important to control it in the good sense and imagine those developments that would bring us joy and happiness, and filter out those which are potentially harmful or dangerous. In this case, the joy we are envisaging is that of coupling reading with travelling in designing a friendly “artificial companion.”

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KNYGŲ SKAITYMAS KITAIP

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Santrauka

Vadovaudamiesi prielaida, kad knyga yra atskiras pasaulis, kuris kartais įsiveržia į tikrovę, ir kad miesto „realybė“ yra „literatūrizuota“ ta prasme, kurią jai suteikia Bertrandas Westfalas, todėl miestas yra knyga, mes pristatome technologiją, skirtą skaitmeninių knygų skaitymui papildyti kontekstine informacija. Automatiniai kalbos procesai, apdorojantys originalų tekstą, papildo jį skaitmeniniais artefaktais, kurie išryškina paminėtus objektus ir ryšius tarp jų, tokiu būdu atskleidžiant semantinius ryšius tekste ir už jo ribų, teikiant nuorodas į tinklalapius ir žemėlapius arba padedant skaitytojams steigti ir susisiekti su bendruomenėmis, kurias domina dalijimasis skaitymu. Pirmasis „Mapping Books“ sistemos aktyvinimas (objekto atitikmens sukūrimas, angl. *instantiation*) leidžia skaitytuvui, naudojant planšetinį kompiuterį ar kitą mobilųjį įrenginį, naršyti už knygos ribų, ieškant informacijos apie geografinius objektus, kurie minimi knygoje. „Mapping Books“ technologija pagilina sąveiką su knygos turiniu, gerokai išplėsdama ją už įprastų hiperteksto nuorodų: aktyvinus šią technologiją, knyga gali kontekstualizuoti momentines vartotojo pozicijas skaitant, taip pat jo / jos asmenybę ir kultūrinę nuostatą. Nors išsiskynusi tam tikrame nuolatiniame tekste, susijusiame su konkrečiu jį skaitančiu asmeniu, knyga tokiu būdu pritaikyta skaitymo pasitenkinimui didinti ir maksimaliam skaitytojo vadovavimui gerinti. Tikrasis šios technologijos poveikis dar nėra iki galo atskleistas.

REIKŠMINIAI ŽODŽIAI: knygų žemėlapiavimas, skaitytojas, patobulinta skaitymo patirtis (hiperrealybė), geokriticizmas, miestas, literatūrizavimas.

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