Digital postmodernism: From hypertexts to twitterature and bots

MARIUSZ PISARSKI

"Is non-fiction the new fiction?" asked Houman Barekat, a columnist at *The Times Literary Supplement* (TLS) while summarizing the past literary year and pointing to examples which, startlingly, included not only non-fiction but also "non-literature" (Barekat 2017). It turned out that as best literary piece of the year 2016 the TLS, for the first time in its history, was shortlisting the work of visual artist Olivier Kugler, who managed to capture the refugee crisis in perhaps a more profound and direct way than written-word journalism in his idiosyncratic cartoons, neatly adapted to "a world of limited page space and diminished attention span". Yet Barekat treads cautiously and explains to a rather conservative TLS audience that Kugler's inclusion on the annual shortlist "signals the potential scope of creative non-fiction. Perhaps multimedia art, enabled by digital technology, will someday be categorized as literature" (2017).

On the one hand, the statement above might be mere evidence of literary conservatism. Scholars, writers, programmers and artists associated with the Electronic Literature Organization, which has for over two decades promoted the "born-digital" works of programmable and multimedia creation, working with "multimedia art enabled by digital technology", and has no trouble in calling it literature. On the other hand, however, the decision of the TLS editorial board to include cartoons as ("perhaps-someday") literature, demonstrates how far literary culture has come from the pioneering days of the PC and internet revolution and how much it is able to sacrifice in a world of fierce competition for readers' attention. The point is that today's readers are also players, viewers and users surrounded by self-broadcasting and instant-messaging devices. They spend their time in augmented and virtual worlds delivered by home entertainment, and literature is just a fraction of the available spectrum. In order to survive, literature need strategies attuned to those used by the social media and game industry behemoths, or at least closely observe those niche artistic and literary communities who try to relate to the habits of a contemporary audience and reflect it at the level of form and expression. High-couture modernism and the postmodernisms of literary salons (such as the TLS) and even the digital modernism of experimental e-literature are in fact turning into something that one might call "digital postmodernism" - short in form, high-paced and fast-served. In the process, as literature absorbs new forms from outside, it changes

itself from within. This article presents artistic examples and theoretical context to the transformation in question.

THE BEGINNING AND THE END OF HYPERTEXT

Over twenty-five years before the TLS acknowledged cartoons as an alternative form of storytelling, its American counterpart, the New York Review of Books, was foretelling the future of literature in hypertext: a non-sequential and programmable form of writing on and for the computer screen. Robert Coover, George Landow and Jay David Bolter hailed computers a breakthrough and a revolution similar to the one brought by the invention of movable type and the printing press. Literary hypertext-fiction and poetry utilizing the variable content outcomes, linking choices and "programmatology" (Cayley 1996) of digital media - was the most suitable allegory of the changes to come. In the late 1980s and for most of the 1990s, hypertext entered the world literature discourse as a promise of reading and writing freed from the constraints of print, a mode of literary communication in which writers and readers change places and a platform where readers were able to connect the fragments of represented reality into their individually (and differently) constructed wholes – a cognitive exercise closer to the (post)modern condition of the late 20th century. Seemingly a fulfilment of the Barthesian idea of the endless expanse of text, the realization of the abolishment of the authorial institution (Michel Foucault), and the embodiment of the postulates of high modernisms that gave power to literature as a cognitive tool (T. S. Eliot) hypertext was an ambitious project of literary renewal via computer technology. Robert Coover praised the new form as polyvocal and one that favoured a plurality of discourses over definite utterance. Hypertext, he wrote, was freeing the reader from the domination of the author, making readers and writers "co-learners", "co-writers" and "fellow-travelers" (1991). Travel, as a dominant metaphor of the new way of writing¹ prevails also in some early diagnosis by Carolyn Guyer and Martha Petry - who observed the fractal-like poetic possibilities of the form, which they employed in their electronically distributed Izme Pass:

This is a new kind of fiction, and a new kind of reading. The form of the text is rhythmic, looping on itself in patterns and layers that gradually accrete meaning, just as the passage of time and events does in one's lifetime. Trying the textlinks embedded within the work will bring the narrative together in new configurations, fluid constellations formed by the path of your interest. The difference between reading hyperfiction and reading traditional printed fiction may be the difference between sailing the islands and standing on the dock watching the sea. One is not necessarily better than the other (1992).

Fascinated with new technology – like both Coover and Guyer – Petry springs from similar assumptions that ask us to align these authors with paradigms of modernism rather than postmodernism. Pluralisms of discourse and preference for multiple points of view and the implied belief that new technology might bring literature – as a cognitive tool – closer to the complexity of contemporary life or even to the natural flow "of time" or "of the way we think" (as Vannevar Bush, the early inventor of hypertext, would put it) place early new media theorists and writers closely to the approach to literature promoted and exemplified by high modernism in the Anglo-

Saxon world and *avant-garde* and post-*avant-garde* practices on the continent and in Eastern Europe. Just like radio, telegraphy and cinematography in the 1920s, the computer in the late 1980s finds its way into literature as a recurring theme, means of distribution and source of a new poetics.

The technological affiliation between modernist and new media poetics has been thoroughly proved by Jessica Pressman in her Digital Modernism: Making It New in New Media. In her book Pressman demonstrates how the thematic, stylistic and formal choices of e-literature revoked and remediated the techniques and motifs of Pound, Joyce and their contemporaries. Pressman borrows the term "digital modernism" from Lev Manovich and scrutinizes the tendency in several adaptations and remixes. Yet it is still worth looking at the phenomena from a wider perspective as a broad aesthetic paradigm that comes into view in those times and places where a new medium meets literature. Michael Joyce, the author of afternoon, a story and Twilight, A Symphony – early hypertext fictions – calls himself an "ultra-modernist" for a reason. Technology once again seems to be fulfilling the promise of helping the author and the reader on their epistemological quest, even if the weight of the quest is lighter than, for example, in Doctor Faustus, The Magic Mountain or Heart of Darkness. The work afternoon, a story can be understood as an allegory of its own reading, a quest for self-understanding in a confusing web of alternative possibilities. Twilight, A Symphony tries to come to terms with death, the timeless qualities of art in general and music in particular, while touching also on contemporary discussions on euthanasia and kidnapping. Both works reflect their semantic content on structural and stylistic layers by employing a possible-world structure (in afternoon, a story) and sonata and contrapuntal dynamics in Twilight, A Symphony. Both are at the same time an occasion for the author, who finds himself in a privileged pioneering position, to explore the possibilities of the digital screen. Is hypertext a tool for serious literary investigation or a trickster's toy for the sheer entertainment of the emerging audience? While Michael Joyce might lean towards the first, several of his colleagues who started writing e-literature in the late 1980s tended towards a more ludic approach.

One the best examples of this more playful approach to digital media at the early stages of the computer revolution is *Uncle Buddy's Phantom Funhouse* by John McDaid. It was written and presented exclusively on HyperCard, which was a popular presentation and animation software package of the era. The user-generated content of HyperCard files was structured around the metaphor of stacks of cards that could be linked together, opened in separate Windows and navigated with several pre-programmed buttons. The program allowed for the inclusion of graphic, sounds and simple black-and-white drawings and animations. McDaid makes extensive use of these features as he invites his readers to an imaginative house where they can explore notebooks, emails and a plethora of other written materials left by uncle Buddy Newkirk who has suddenly disappeared. Interface tools and commands, navigation buttons and dialogue boxes are deployed by a fictionalized narrative in which readers explore the exciting life of the missing relative.

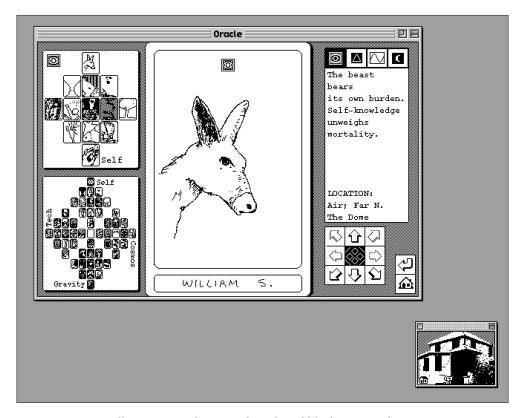


Illustration 1. John McDaid: Uncle Buddy's Phantom Funhouse

The visible fascination with interaction and with the different elements of interface as an unexplored terrain is symptomatic of early adopters of technology in art and literature as exemplified by numerous examples from net.art and e-literature of the 1990s. As a result readers playfully scroll through windows and click arrow keys on keypads knowing that almost anything they do within the text and in the paratext will result in a response that is a part of the story or comment on the ongoing reading, or an interaction that has taken place. Yet underneath the postmodern playfulness, irony and metafictional activity there is still a lot of modernist complexity and most of the screens of *Uncle Buddy's* reveal a strong authorial stamp. Even the very topic of an abandoned house full of unsolved mysteries suggests a reader's lengthy quest for an uncertain range of answers. Obviously, as the work is presented on the small and flickering screen of an early Macintosh computer, one cannot expect lengthy passages of prose going down the window, and the idea of hypertext literature was to present text in small interconnected chunks conveniently read on the screen. If a general assumption can be made – after all the discussion of what is modern and what is postmodern - that the former is a simplicity hidden under complexity and the latter is a complexity hidden under simplicity, then the digital take on the modernist paradigm is by virtue of the medium leaning towards the playful mode on the surface (interaction, animation) and might look like a postmodern artefact. Yet if we compare both Michael Joyce and John McDaid's works with those that were created two decades

later, in the post-digital age of social networks and late Web 2.0, similarities and divisions between digital modernism and digital postmodernism become much clearer.

A TURN TOWARDS A WIDER AUDIENCE

The descriptions of some early e-literature works and reflections on digital modernism with its possible relation to digital postmodernism - both as metaphors of literary communication – was needed to present the background for some of the contemporary practices and tendencies in the field of born-digital literature. As a starting point let me present an example from Poland, where at the beginning of the millennium and further into its first decade e-literature was going through processes of self-identification in relation to the experiments of pre-war and post-war avantgarde in prose and poetry, and quite similar to those described by Pressman. The literary collectives Perfokarta and Rozdzielczość Chleba, publishing house Halart and the online e-literature journal *Techsty* were publishing and promoting works that were trying to accomplish the artistic goals of modernist writers allowed by the affordances of the digital medium. Łukasz Podgórni, Urszula Pawlicka, Leszek Onak and Mariusz Pisarski were remediating or adapting the works of Tytus Czyżewski, Tadeusz Peiper and Bruno Schulz. The artistic manifestos of Perfokarta and Rozdzielczość Chleba resembled those of the Polish futurists. Collage and montage, random content generation and absurdist poetics were frequent traits. In recent years, however, this tendency seems to be receding. In 2016 Łukasz Podgórni published the print book Pamietne statusy – a collection of poems which in length do not exceed a Facebook post and in which the same prevalence was given to graphical and textual poems.

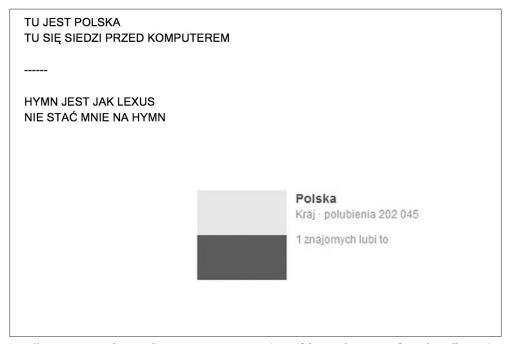


Illustration 2. Łukasz Podgórni: *Pamiętne statusy* (one of the graphic poems from the collection)

Pamietne statusy wants to demonstrate with the force of a genealogical event – as a book of "Facebook posts", as e-literature in printed form and as avant-garde presented in a ludic fashion - that Instagram, Facebook and Twitter are highly valid, competitive and, in the case of a large proportion of the contemporary reading audience, the only readily available literary platform. For Podgórni himself, and Rozdzielczość Chleba as a collective, the book reinforces a visible shift from the phase when their digital poetics paid tribute to avant-garde techniques and the ideologies of the Futurists and Dadaists (often mixed with new elements of glitch-art, demoscene and vaporware) to a period the collective calls "cyber-żulerstwo" (cyberhoboism) with its principal strategy of reaching a wider audience with large amounts of humour, grotesque and parody and with easily decoded political and cultural references to contemporary life in Poland seen from the point of view not of an abstract experimental artist, but a "smelly", geeky poet who has hardly had any success as a digital prophet but still cannot escape the keyboard, the screen and the internet activity that used to define him. Paulina Chorzewska, in Cybernetic pop – her review of the book - observes:

Noises and glitches from previous analogue texts by Padgórni turn into a mem-like, caps-lock scream. An atomised, glitched form was replaced by a flow of status-related anecdotes and abstract illustrations, the flow of a calming, immersive scrolling [...]. The very act of printing off Facebook is not of highest importance. What is crucial is the cyberhoboic turn towards the clicking crowd and the elevation of a Facebook post to a position reserved for poetry. Podgórni does not radically depart from his cyberpoetry, but his voice is now that of a user of life, not a cyborg-creator. Thanks to *Pamiętne statusy* the Internet is flowing out of the computer screen into the heads of fellow-creatures (2017).

The turn from experimental to ludic approach (and sometimes vice versa) is nothing new to literature. Charles Dickens in London and Bolesław Prus in Warsaw – both highly regarded authors of lengthy realist novels – used to publish their fiction in weekly instalments in popular newspapers. And this was perhaps the moment in their life's work when the distance between the writer and the reader was at its closest and most informal, to a point that Dickens is known for doing the rounds in the local pubs on the evening of the weekly publication to eavesdrop on what common folk were saying about the current state of the plot and in which direction it should go next (Iser 1976, 110). The difference between 19th-century and 21st-century writers is mostly in terms of the medium and scale of "compression" that a literary text undergoes in order to reach its contemporary audiences. In the case of the 21st century the compression is radical.

CHANGING LANDSCAPES OF THE ELECTRONIC LITERATURE COLLECTION

The reviewer of Podgórni's book, herself a digital native born in 1996, contrasts the atomization and glitch aesthetics of his earlier works with the flow and immersion of his latest. The last two terms are today frequently used in computer game studies and in game reviews in the popular press. Interestingly, a decade ago, the same terms were applied in critique of hypertext and the verdict was not favourable. Hypertext

fiction delivered neither immersion nor flow, concluded the classroom case studies of Theresa Dobson and David Miall (2002). According to James Pope, most works were not even able to present a narrative thread that readers could find without "the effort-reward ratio being skewed towards effort" (2006). The main source of the failings of hypertext were concluded to be disorientation caused by idiosyncratic interfaces – each work had a different set of available buttons, arrows and commands – and confusing linking structure.

Ten years later - ten years of YouTube, Twitter and Facebook - and we seem to be in quite a different world. Authorial hyperlink was replaced by collaborative, aggregative hashtag; the author is giving way to algorithms and bots; readers have turned into self-broadcasters with all the multimedia tools of their smartphones in their pockets. Last but not least, the dominant singular chunk of reading is not a stand-alone text but a single tweet, Facebook or Instagram post connected to a living and breathing audience of, potentially, thousands and millions of readers, and their "likes", comments and "shares". The problem of the disorienting interface has been solved: the writing space of choice is the Facebook post with stretchtext, dynamic linking and a few other incorporations of decades-worth of hypertext research available to use by everyone in an unobtrusive fashion (Olesińska - Pisarski 2016). At the same time, short forms with less text and more graphic elements, and with not many links seem to be better received by the audience of digital-born literature. Playfulness, conversationalism and a minimalist economy take priority over lengthy authorial projects. An increasing acceptance of chance as a creative factor and of non-human agents as co-authors is also happening - something that digital pioneers, according to Roberto Simanowski, had overlooked (2007, 90).

Volume 3 of the Electronic Literature Collection (ELC) published in 2016 reflects these changes in a significant way. The collection features 114 entries from 16 countries. Although ELC volumes are published every five years, this time - thanks to a new approach by the editorial board of embracing works created in languages other than English - volume 3 included works created as early as the 1960s. Out of all the entries, 44 of them are selected in a "generative" category, 20 grouped as "hypertext" and 12 as "bots". But if we look at works created only within the last five years before publishing, these figures will change - respectively - to 30, 14 and 12. The rising prominence of bots, the decreasing popularity of hypertext (although not as significant as one would predict), and the stable position of text generators is clear. It would be even more interesting if we compared these proportions in five years. As editors of the collection admit, the history of e-literature has witnessed projects that might not be labelled by their authors as part of the literary tradition and some of the most compelling examples are found in animation, videogames, social media and mobile applications, made by authors who would not call themselves writers but rather game creators, programmers or even TV producers (as is the case with Katarzyna Giełżyńska who contributed her animated clips C()nduit). ELC editors also admit that many authors (non-professional) have started using new accessible platforms such as Twitter and Twine, "to reach broad audiences with experimental forms of both human and nonhuman interaction" (Boluk - Flores - Garbe - Salter 2016). What is interesting is that these "amateur" authors who create and disseminate their works via Twitter, Facebook, Twine and other social platforms are then being followed by experienced e-lit writers who have selected the new platforms as their medium of choice. In this context, the preference for Twitter bots and Facebook statuses as a mode of poetic expression is turning out to be a natural course for literary production. In the meantime, our understanding of what literature and literariness are needs to change accordingly.

TWITTERATURE: FROM THE ONE-TO-MANY TO THE MANY-TO-MANY MODEL OF COMMUNICATION

In a recent interview about the state of literature the prominent Polish critic Przemysław Czapliński, asked if he agreed that the literature of today was like a little old lady who is not in a position to express anything unpleasant and at the same time not expected to say anything interesting, responded:

I understand literature as a communication practice – a sphere of activity comprised of anything: from the most refined philosophical and theoretical discourses to the worst possible linguistic rubbish, most vulgar words and utterances. Literature is a rubbish dump functioning as a trial system for things needed in order to establish communication. Yet communication is not a dialogue or an established understanding. It is rather a fortunate misunderstanding, a bond created despite knowing that the contact was somehow lacking (Jakubowiak – Czapliński 2016).

Twenty-five years ago John McDaid tried to achieve a "fortunate misunderstanding" between his work and the readers of *Uncle Buddy's Phantom Funhouse* by spreading his fictional message about the missing uncle Buddy Newkirk onto a hybrid of analogue media and a database, presentation and animation software package for the early Macintosh PC. The box that readers received after ordering the work from Eastgate Systems contained a diskette, audio tapes and a booklet. Inside the program, which intentionally ran against the conventions of HyperCard interaction, readers could find a plethora of digital material: a zoomable earth globe with a map of Newkirk's neighbourhood, animated art gallery, a dictionary of important terms presented as a remediated print volume, detailed reports from fictional scientific conventions, the card game "Oracle", a word puzzle and several other mini-games. This vast and augmented text achieved his communication goals in a standalone, one-to-many approach. Most of the author's effort went into writing the text, scripting the Hyper-Card stacks, recording audio materials, populating the interface commands with unconventional "poetic" messages and submitting the whole work to the publisher. The process was not unlike conventional, traditional literature. In 2016 the same story can be told in a much more participatory way (many-to-many approach) and has had a massive global impact thanks to the distribution possibilities of social networks. At the same time the very body of the text is significantly compressed in order to fit the preferred social media format of short information pockets (a maximum 140 characters in the case of Twitter). The message is truly shaped by the medium. One example can be the e-lit scholar and author Dene Grigar's The 24-Hr. Micro-Elit Project. Grigar decided to share her experience of living in Dallas by writing 24 tweets, publishing

them every hour with a request for her Twitter followers to comment and write their own tweets related to living in large cities in the 21st century. In the same 24-hour time span that Grigar set for herself, over 85 additional micro stories by other Twitter users were written and included in the project. Made in 2008, Grigar's "storytelling extravaganza" is an example of early twitterature, which successfully challenged the one-to-many paradigm of traditional literary production. The 24-Hr. Micro-Elit Project managed to break the pattern into a "many-to-one" or even "many-to-many" model, where the writing of the stories is initiated by a single author whose 24 tweets form the backbone of an open conglomerate of similar stories published by other users and Grigar's readers. The "fortunate misunderstanding" is potentially present in every second of the 24-hour experiment in quite a literal form. The invited audience might have not entirely understood the project's objectives; some hostile outsiders might have spammed or "flamed" the storytelling platform with irrelevant, disruptive or even abusive input. This did not happen. The experiment went well and in humane fashion due to Dene Grigar's focused group of followers and her acting in the role of curator, moderator and main contributor to the literary exercise. Today, when Twitter feeds are not only manmade but can be generated by small computer programs - bots - the comfortable settings of *The 24-Hr. Micro-Elit Project* are not so easily achieved. The response of the e-literary world to this machine-made, often malicious, textual activity was to start writing bots that would generate not spam or advertisements but fortunate misunderstandings of poetry.

BOTS ON THE HORIZON

If any of the contemporary textual forms made possible by new technologies deserve the title of post-literature (something that the TLS might not include on their best-of-the-year list for a long time) it would most likely be a bot. Bots are small computer programs (algorithms) that perform live on social networks by publishing tweets in set time intervals and in accordance with pre-programmed rules of content generation. The followers of the account that a bot is broadcasting from are able to reply, retweet, favourite and create entire conversations around a single tweet or even a single word, as in the case of Alison Parish's pioneering everyword (2007) a bot that tweeted every word from an English dictionary in alphabetical order every 30 minutes from 2007 to 2014, gathering an audience of followers and commentators numbering over 100,000. Many literary bots created in recent years use the techniques of big data search to generate their content based on the input of millions of Twitter users. Ranjit Bathanagar's Pentametron Bot filters through 10 % of the global Twitter stream (6,000 tweets per second on average) checking with an online dictionary to discover tweets written, accidentally, in iambic pentameter. The program holds the tweet in a database until it detects another iambic pentameter tweet that rhymes with it and then retweets both, creating a rhyming couplet (Bathanagar 2016). The resulting couplets can then be brought together, curated and published or exhibited - all of which Bathanagar has achieved. A resulting poem, taken from a Tumblr site curated by the author, appears as follows [original spelling]:

Happy birthday, Shakespeare

Boys gotta study for the Shakespeare test
It's Shakespeare's birthday... happy birthday bro
Moms makin me a Birthday Dinner... #Blessed
I think her birthday is in April tho
I'm singing happy birthday with a dog...
I share a birthday with Vanilla Ice.
breasts looking like a Shakespeare monologue
My brother is the shakespeare of advice
Can you imagine being Shakespeare's dad?
IM CRYING HAPPY BIRTHDAY GRANDPA SOCKS
I have a summer birthday... good and bad
GUYS!!!! I'm the Shakespeare of enormous cocks
It's William Shakespeare's birthday. Much respect!
The birthday countdown is in full effect.

The implications of bots for literary theory, especially established notions of authorship, are enormous. The sonnet above was pieced together from 12 different Twitter users, unknown to each other and with no knowledge of their tweets being re-used for poetic purposes. The couplets are delivered by a non-human agent (algorithm) whose process has been programmed by a real human author and programmer. None of these semi-authorial agents can be pointed out as the author. Even more complicated in this regard is Station 51000 by Mark Sample: a bot which gathered oceanic and atmospheric data from an unmoored and set-adrift buoy belonging to the NOAA (National Oceanic and Atmospheric Administration) and mixed oceanic data with text from Herman Melville's *Moby Dick*. The time-related nature of the bot's performance added some additional depth and meaning to the marine-themed broadcast. The bot stopped tweeting when the oceanic agency located its buoy and took it in for servicing.

"Surf this bot's poetic wanderings to explore real and imagined seas" – Mark Sample encouraged his audience. The light, fun, ludic approach to the bot's literary production is evident in many examples. Bathanagar's sonnets represented a second-order creation aimed at an art-savvy crowd (be it a Tumblr community or visitors of the Boston Cyberarts Festival). But the largest impact of generative tweets is in their original environment of Twitter and among its users where short pockets of information (couplets not sonnets) are quickly digestible, easily shareable and likable, and the number of followers can grow at an unpredictable pace. When the author manages to capture thousands of readers and engage them with his (algorithm- and user-generated content) then the goal of digital postmodernism – to hide complexity under simplicity – is realized to its full potential.

CONCLUSIONS

My reflections on the past and future of literature in the post-digital age conclude with bots not only because they constitute a relatively new arrival onto the literary scene of electronic literature. On the one hand, as data-driven literature (Rodley – Burrell 2014) or a form of "distant writing", they introduce novel aspects in drawing

from a proliferation of data in the modern world and in using methods of data processing. On the other hand, as I tried to highlight in this paper, they can be considered a continuation of the artistic strategies and ideologies of early e-literature. Employing affordances of networked and programmable writing spaces, authors of both generations (pioneers and their successors; hypertext *writers* and bot *makers*) are, in general, pursuing similar goals. Both have been aiming at freeing the text, opening it up to variations and opportunities, and at empowering readers. The emergence of Web 2.0 and social media marked an important demarcation line for strategies perused to fulfil these goals. The lessons of social media and the poetics of their digital discourses – as demonstrated by Podgórni's *Pamiętne statusy* – are worth learning, even as the role of the author changes dramatically.

Interestingly, bots are neither purely conceptual nor ludic, nor postmodern nor modern in the sense highlighted here. These data-driven forms, collaborative yet orchestrated by visible authorial force, generated and yet carefully curated, undisputedly mark a major direction for electronic literature to take. Should we already consider it post-literature, a status which memes and Facebook-like posts perhaps deserve? Perhaps not. Owing to an inherited balance that springs from their design and execution – between code and text, individual and collective, crafted and contingent – they transcend "postmodern", ludic forms and at the same time significantly enrich the palette of artistic strategies of more "modern" forms (for example, "serious hypertexts", as Eastgate Systems likes to market them). As such, data-driven literature has a good chance to become a signpost of literary experiment in years to come.

NOTES

¹ Today, although random travel form one source of content to another is a common trait of web browsing and smartphone usage, users seem to be grounded once again thanks to the account-based social network services of Web 2.0. Information is travelling most of the time to the user and not vice versa, be it in a Facebook news post, Instagram's opening page with a selection of photos from known users or from Twitter's list of latest feeds from people users are following.

LITERATURE

Barekat, Houman. 2017. "Is non-fiction the new fiction?" *The Times Literary Supplement*, January 26. Accessed May 10, 2017. https://www.the-tls.co.uk/articles/public/non-fiction-new-fiction/.

Bathanagar, Ranjit. 2016. "Pentametron Bot." *Electronic Literature Collection* 3. Accessed May 10, 2017. http://collection.eliterature.org/3/work.html?work=pentametronhttp://collection.eliterature.org/3/work.html?work=pentametron.

Boluk, Stephanie – Leonardo Flores – Jacob Garbe – Anastasia Salter, eds. 2016. *Electronic Literature Collection* 3. Accessed May 10, 2017. http://collection.eliterature.org/3/index.html.

Bruner, Jon – Mike Barlow. 2016. What Are Conversational Bots? An Introduction to and Overview of AI-Driven Chatbots. Boston: O'Reilly Media.

Cayley, John. 1996. *Hypertext/Cybertext/Poetext*. Online essay. Accessed June 7, 2017. http://programmatology.shadoof.net/works/hypercyberpoetext/hcp000.html.

- Coover, Robert. 1991. "The End of Books." *New York Times*. Accessed May 10, 2017. http://www.nytimes.com/books/98/09/27/specials/coover-end.html.
- Deegan, Marilyn Kathryn Sutherland. 2009. *Transferred Illusions: Digital Technology and the Forms of Print*. London: Routledge.
- Emerson, Lori. 2014. *Reading Writing Interfaces. From the Digital to the Bookbound.* Minneapolis: University of Minnesota Press.
- Górska-Olesińska, Monika Mariusz Pisarski. 2016. *The Return of StretchText: From Obscurity to Omnipresence: a Short History of Hypertext's Unsung Cousin.* PRY by Samantha Gorman and Danny Cannizzaro. Olomouc: Literární a knižní kultura v digitálním věku.
- Grigar, Dene. 2016. *The 24–Hr. Micro–Elit Project. Social Media Narrative: Issues in Contemporary Practice.*Online symposium hosted by The Rutgers Camden Digital Studies Center. Facebook, November 16–21.
- Guyer, Carolyn Martha Petry. 1991. "Izme Pass", Hypertest for Macintosh Computers. *Writing On the Edge* 2, 2. Electronic format on CD-ROM. In The New Media Reader, Nick Montfort Noah-Wardrip Fruin, eds. Cambridge (MA): The M.I.T. Press.
- Hayles, Katherine N. Jessica Pressman. 2013. *Comparative Textual Media: Transforming the Humanities in the Postprint Era*. Minneapolis: University of Minnesota Press.
- Chorzewska, Paulina. 2017. "Cybernetyczny pop." Mały Format. Accessed June 7, 2017. http://malyformat.com/2017/05/cybernetyczny-pop/.
- Iser, Wolfgang. 1976. "Apelatywna struktura tekstów." Translated by Maria Kłańska. In Współczesna teoria badań literackich za granicą. Antologia 4, 1, ed. Henryk Markiewicz, 98–125. Kraków: Wydawnictwo Literackie.
- Jakubowiak, Maciej Przemysław Czapliński. 2016. "Pokłóćmy się o literaturę." *Dwutygodnik*. Accessed May 17, 2017. http://www.dwutygodnik.com/artykul/6458–poklocmy-sie-o-literature.html.
- Joyce, Michael. 1990. afternoon, a story. Watertown (MA): Eastgate Systems.
- Joyce, Michael. 1996. Twilight, A Symphony. Watertown (MA): Eastgate Systems.
- McDaid, John. 1993. Uncle Buddy's Phantom Funhouse. Watertown (MA): Eastgate Systems.
- Miall, David S. Teresa Dobson. 2001. "Reading Hypertext and the Experience of Literature." *Journal of Digital Information*. Accessed June 7, 2017. http://jodi.ecs.soton.ac.uk/Articles/v02/i01/Miall.
- Parish, Alison. 2016. "Everyword." *Electronic Literature Collection* 3. Accessed May 17, 2017. http://collection.eliterature.org/3/work.html?work=everyword.
- Pope, James. 2006. "A Future for Hypertext Fiction." *Convergence* 12, 4. Accessed May 19, 2017. http://journals.sagepub.com/doi/abs/10.1177/1354856506068368.
- Podgórni, Łukasz. 2016. Pamiętne statusy. Accessed May 17, 2017. https://archive.org/details/Lukasz_ Podgorni_-_PAMIETNE_STATUSY.
- Pressman, Jessica. 2014. *Digital Modernism: Making It New in New Media*. Oxford New York: Oxford University Press.
- Simanowski, Roberto. 2007. Digital Art and Meaning. Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations. Minneapolis: University of Minnesota Press.

Digital postmodernism: From hypertexts to twitterature and bots

Electronic literature. Hypertext. Twitterature. Bots.

The article attempts to highlight a major aesthetic shift that is taking place in electronic literature: born-digital literary production written and read on computers and smartphones. A large proportion of recent e-literature is not only disseminated via social networks but its form and content is increasingly being shaped by Facebook, Twitter and their preferred communication formats (tweets, posts, statuses). The experimental phase of electronic literature when contemporary writers were establishing their identity by relating their poetics and ideologies to those of the modernist avant-gardes of the 20th century (a trend labelled by Jessica Pressman as "digital modernism") is giving way to a more ludic approach where e-literature is seeking out a larger audience via social media and in the language of social media (a tendency I call "digital postmodernism"). In the process, the scale and scope of a single work is being further compressed and the human author is being accompanied by non-human agents (network algorithms, bots). Is literature still literature, or perhaps – in this context and point of view – should we treat it as post-literature?

Mariusz Pisarski, PhD.
Laboratory of Intersemiotic and Intermedia Research
University of Warsaw
Krakowskie Przedmieście 26/28
00-927 Warsaw
Poland
mariusz.pisarski@techsty.art.pl