THE SEMIOTICS OF CYBERCULTURE:
THE EXAMPLE OF ARTISTIC DISCOURSE*

The development of digital media and technology has led not to the shift of social life toward the Internet, as is commonly stated, but rather to the creation of its digital representation, substitution, and expansion. Cyberculture is not something foreign to existing culture. It does not locate itself in opposition to culture but rather is its product and progression. It is also to an extent prefigured in textual theory and practice (Eskelinen 2012, Schäfer 2007: 121–160). Cyberculture interacts with existing culture, influencing it and adapting it to its own conditions and requirements, while inscribing itself in the continued development of human civilisation. With access to its own signs and specific means of use, it remedies what is already mediated, transforms existing reality, and becomes reality itself (Bolter, Grusin 2000: 55–62). Through the process of digital remediation, boundaries between discourses are increasingly blurred and the status of reality is increasingly given to that which is created in media. We are also witnessing an increasingly strong fusion between media culture and social culture, which in effect leads to legitimation of the fact that present social culture is dominantly a media culture.

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The semiotic aspect plays an essential role in these processes. The semiotic organisation of digital culture is different from that of existing culture, with the difference primarily pertaining to the signification (on the level of the sign) and textualisation (on the level of the text) of the actions of a participant in culture. The foundation of this difference is rooted in the specific nature and new structure of the digital sign. The digital sign is not tied to a specific material object and is programmable, with such features as openness to change, hybridity, and the possibility of existing in multiple variants¹ (Manowich 2000: 55–62). In the digital space, causative signs are being created whose semantics are manifested through action. Examples of such signs are the link, which is a hybrid combining the meaning-making function with the action function, and the cursor, a causative multi-sign which participates in the production and use of texts.

The structure of the sign varies depending on its different representations, but it is always modeled through technology. The properties of signs manifest themselves in different ways in the case of oral culture, written culture, print, and digital media. This means that the traditional sign theories of Ferdinand de Saussure (the linguistic sign) or Charles Peirce (the iconic sign) are insufficient with respect to describing the digital sign. The clear rise in significance of the layer of expressing the sign and the text in the creation of textual meanings and in the process of communication results in poetics giving way to semiopoetics (Szczęsna 2018). I defined this category to underline the equal status of the role of texture (primarily written text and its meanings as a message based on a system of conventional signs) in the design of the structure and aesthetic meanings of works of art from the realm of digital culture.

Digital culture is predicated upon the new structure of the sign. The digital sign is a dual-level multivariate structure (each sign has a representation on the level of programming code and on the user level). Both levels contain the following aspects: an external manifestation (representations—texture/programming code/markup); meanings (these were already present in pre-digital culture, but have different manifestations in the digital realm), actions and meta (these appear as the constitutive element of the digital sign, the action aspect on the user level, and the meta aspect on the level of programming code). The action aspect, which dominates in the case of mediatonal signs (which refer the user to a different sign or text) and operational signs (which are applied to perform certain actions on the text), determine the specific character of the digital

¹ This results in the variability of the digital object (Manowich 2001: 36–45).
sign on the user level. The action aspect imbues the sign with agency. On the level of programming code, the specific nature of the digital sign is defined by the meta aspect or by defining/interpreting the mode of existence of the text on the user level (organizational, modifier, and semantic signs). The semantics of the sign on the level of programming code manifests itself in its syntactics—the relation it enters into with the user level. The dual-level structure of the digital sign—the fact that information on the sign is present in various places on different levels—results in the sign being a dispersed and complex structure.

The sign, the text, and discourse are analogous, interrelated structures, and therefore changes to one structure will result in the remodeling of the remaining structures as well. Actions undertaken on the level of the sign will also manifest themselves on the level of text and discourse. In effect, changes to the structure and essence of the sign will be mirrored by changes in the structure and mode of existence of the text and discourse themselves. Differences in the representation of this process on the level of the text and discourse are primarily differences of scale—the mode of existence and the scope of emergence of characteristic features.

The non-corporeal nature of the sign results in the non-corporeality of the text and discourse. The same can be said about programmability, multivariability, and hybridity. The aspect of the sign which manifests itself in referring to other signs and acting upon them on the level of text manifests itself in the link structure, which allows the text to refer to other texts and to act upon complete texts, while on the level of discourse it manifests itself in engaging the user in textual and communicative actions, as well as in acting upon social reality itself. The multivariate nature of the sign results in the multivariate character of text and discourse themselves, which in turn leads to, for instance, alternative narration, one of the features of digital prose.

Non-corporeality and programmability result in all texts having the same semiotic digital status—they can be easily combined and altered, taking on features of different texts. As a result of this process, the boundaries between discourses are blurred, as elements of text representing more than one type of discourse may be combined. Consequently, features of specific discourses migrate to others, and are appropriated and altered — used to fulfill different goals. In the case of artistic texts, such uses are commonly figurative in nature. For instance, the introduction of

² Not only does the sign stand in for something (refer to something), it also acts—it has agency.
an element of another discourse into a literary digital text allows us to achieve an effect which Yuri Lotman referred to as the rhetorical effect (Lotman 1990: 49). However, while the researcher used this category to refer to verbal forms of communication, with the example of “the invasion of prose-language onto poetry (...) [or how] oral speech is introduced into a written text” (Lotman 1990: 49–50), in the digital realm it is also possible for this category to encompass iconic, auditory, or mixed phenomena representing different fields of social life. In cyberculture, the rhetorical effect is present on the levels of arts and discourses. Introducing a textual element representing a different discourse to a digital work of art is one form of use: a stylistic and discursive transformation with a view to arriving at a different meaning. A good example is Dan Waber’s *Strings* cycle,³ which pertains to interpersonal relations (primarily those based on feelings and shaped by temperament), or, more broadly speaking, to human personality, as expressed in the work through reference to the tradition of handwriting. The cycle, which was published in the anthology *e-literature collection*, applies metaphoric thinking, and its metaphoric structure makes use of different types of discourses unified by social discourse. For example, clicking the title of the first work, *argument*, results in the on-screen appearance of a line from which, at first, the word “yes” emerges on one side of the screen, and then the word “no” on the opposite side. Both words, which appear one after another, are written in cursive. Set against one another, they create the effect of a conflict, a squabble, or argumentation. They refer to the tradition of rhetoric and eristic, but also to the sports discipline of tug-of-war. In this case, the work applies the argument of strength—that the person is in the right who is capable of forcing the argument. The words “yes” and “no” are representations of human attitudes. They can also be read as such due to the influence of the tradition of animation and cartoons. The combination of the use of handwriting with the enlivening movement of the words, as well as combining the words with human behaviours (squabbling, flirting, laughing, slow or fast movement, etc.) results in the anthropomorphisation or personification of the signs, which become representative of human types.

The same is true of the work *argument2*, in which extreme attitudes represented by “yes” and “no” are supplemented with a more moderate attitude represented by the word “maybe,” which expresses doubt or reflection. Between the words “yes” and “no,” which move on the screen and try to chase one another off, representing what is decisive, stubborn, and

³ http://collection.eliterature.org/1/works/waber_strings.html
often lacking in reflection, “maybe” enters slowly but firmly—referring to thought, distance, and the reduction of the oppositional relation between “yes” and “no” by way of attaching to both. The words shifting on the screen may refer to different human attitudes, but they may also name the conflict that exists within a person when dealing with a certain problem.

The work *youandme* is a tale about different personalities in a relationship, while the work *arms*, which applies the poetics of a riddle, is an expression of a feeling held by the speaking subject toward another person.

Digital works allow textual elements belonging to different discourses to enter into metaphorical and metonymical relations. The digital realm allows for the expansion of rhetorical action—to engage in the creation of figures, textual structures, and elements with any sign organization, representing almost any discourse. This leads to the considerable broadening of the field of textual meaning with connotations tied to different discourses. It is not just the semantic fields of particular texts which enter into relations (denotative and connotative), but also different discursive forms and different media.

The use of movement to transform any sign, including a sign consisting of letters, allows us to turn the semiotic form of the text into the subject of artistic play. Fonts generating various shapes, which already have a given semantic value—associated in the realm of non-artistic communication with specific features (Leeuven van 2005: 147)—are imbued with additional properties in the realm of cybercultural art. For example, they can participate in the modification of the text’s structural elements, its features pertaining to genre, or features pertaining to form. The moving layer of the text’s expression may change the title of the work or change a quote in front of the eyes of the recipient.

The principle of a singular, unchanging title and also the existing mode of existence of intertextuality are challenged by Leszek Onak’s work *Młodość 1861 liter później* [*Youth after 1861 letters*]⁴. The point of departure for this work is a seminal poem by Adam Mickiewicz *Oda do młodości* [*Ode to Youth*] which is given the substitute title *Młodość zero liter później* [*Youth after zero letters*]. Starting the work—clicking on a sign with the text “Press Esc or click here to reach old age”—initiates a process wherein particular letters of the poem begin to disappear. At the same time, with the disappearing letters the corresponding title changes as well—the number of letters in the title corresponds to the number of letters that have thus far

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⁴ [http://techsty.art.pl/m10/mlodosc_1861_liter_pozniej/](http://techsty.art.pl/m10/mlodosc_1861_liter_pozniej/)
disappeared from the poem. When all of the letters are gone, what remains are punctuation marks and the title *Młodość 1861 liter później* [Youth after 1861 letters]. The work shows that a title need not be constant. Each transformation of the text, each interpretation, necessitates changes to the title itself. The fact alone that Mickiewicz’s *Ode to Youth* is presented in the digital realm and supplemented with the words “Press Esc or click here to reach old age” is a change which requires modifying the title of the work. Furthermore, this reference to Mickiewicz is a point of departure in the process of becoming of the work of Leszek Onak, whose name and surname as the author of the work appear on the computer screen. The artistic concept is based on the figure of reduction—the rapid disappearance of letters symbolizing the passage of time and the idea of evanescence. Reaching old age, which is no longer tied to great ideas and which becomes devoid of meaning and is reduced to mere unspoken punctuation marks, is ironic in nature. Furthermore, the fact that this state may be reached in less than a minute may be interpreted as a representation of the fleeting nature of life, but also as a reflection on the young generation, which inhabits the digital world.

In Onak’s work, the intertextual game is already occurring on the semiotic level of the text—on the level of the moving texture. The use of the work pertains not only to the text’s semantic but also to its semiotic layer, which is not transparent but becomes iconised: a thing that the user is able to transform. The actions the user performs on the text also include work on the texture in the laboratory of the text (Nycz 2017: 157–182; Latour 2009). When liberated from the physical matter of paper, letter signs come alive. Intertextuality, which is understood here as the presence of other texts on different levels of a given text’s structure (Barthes 1996: 1999), also refers in the digital realm to the semiotic layer, which, by undergoing transformation, shapes the meaning of the whole work. The reference in Onak’s work does not take the form of a quote or a paraphrase. Rather, it is a transformation of texture itself, based on the idea of reduction. It also takes the form of an intertextuality that engages the body of the user.

A model example of engaging the user’s body in the text and of semiotic intertextuality is the installation *Text Rain* by Camille Utterback and Romy Achituv, which has previously been analyzed by multiple scholars (Bolter, Gromala, 2005: 12–15; Simanowski 2007: 36–39, Schäfer 2010: 38–39; Ricardo 2009: 52–68). It consists of falling letters displayed on

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5 https://www.youtube.com/watch?v=f_u3sSffS78
screen, which may be stopped on the boundaries of a shadow created by the user standing in front of the screen. The user is able to create words or phrases on the boundaries of the shadow of their legs, arms, head, and any objects they might be holding. The letters come from the poem *Talk, You* by Evan Zimroth, which explores the idea of communication between people with the use of words and gestures, and the impossibility of understanding one another without full engagement in the conversation. When the user stops the letters from falling, they create excerpts of the text. The essence of *Text Rain* is to allow the user to experience the feeling of engaging with another person completely, as that is the only way to achieve full understanding.

The intertextual nature of *Text Rain* is also realized by referencing *Il pleut* by Guillaume Apollinaire—a poem from the genre of concrete poetry. In the poem, rain drawn with the use of the words “*il pleut*” is an iconic representation of falling rain, repeated on the level of the expressed sense of the words themselves. However, it is still a sign which remains in a symbolic relationship with its object, as the letters remain in place. This is not the case for *Text Rain*—the semiotics of cybertext enables the text to fall like rain. While it is impossible to depict falling text literally in the case of print, depicting the metaphor is made possible in cyberculture, which enables us to show falling text. Of course, such a depiction runs against the essence of a metaphor—the image of *Text Rain* leads to the literalisation of the metaphor, which rids it of its multiple meanings. However, cybercultural semiotics allows us to attempt to depict that which is un-depictable; to include in the literal sphere that which is metaphorical, as well as to semioticise and semanticise the body of the user itself.

Each semiotic form of a text—be it iconic, textual, or auditory—may undergo analogous processes. This in turn leads to the blurring of boundaries between semiospheres and their hybridisation, which is reflected in the transformations occurring in the sign organisation of the discourse of art: literature, the visual arts, and cinema. One particularly vivid example is the iconisation, voicing, and kineticisation of the written word, that is, the voicing, sonorisation, and kineticisation of the image. Furthermore, meaning-making value also derives from the actions of the user with respect to the text, which, as designed, are embedded from a sign-based perspective into the mode of existence of the text and form part of the digital semiosphere. Semiotic transformations of the text result in transforming both its poetics and the structure of the discourse that the text represents. Thus speaking of semiopoetics becomes not only justified but even necessary.
For example, in traditional literature meaning was primarily based on the meaning of the word as an arbitrary sign. In the case of digital literature, meaning is shaped in the interaction between the meaning of the word as an arbitrary sign and the meaning of the word as a moving iconic and auditory sign which transforms itself in front of the recipient. To initiate the process, the user undertakes certain actions, which become part of the text itself, participating in shaping its meanings. In the case of printed text, the actions of the users are purely mental (intellectual) in nature—the meaning of the text is derived in the act of interpretation. In the case of digital works, the participation of the recipient in the shaping of the work is expanded to include actions undertaken on the text itself; the text acts in accordance with the recipient’s expectations.

The possibility of making different choices results in the work becoming multivariate in nature, through the creation of alternative narrations and plots, though multivariability in the reception of the work by a single recipient exists merely as a possibility. By making specific choices, the user is able to read the text in a single, chosen order, and end there. However, the user is also able to repeat the reading of the text and to select a different link, return to previous lexias, and make different choices. Whether a work has multiple variants or a single variant is, therefore, the decision of the user, albeit within boundaries set by the author’s intention, as reflected in the work’s structure.

Users’ selection of a link is tied to their designing their own expectations with respect to their reception of the work, for which the semantics of the linked work are an impulse. Uncovering the lexia hidden behind a link leads to a confrontation between the expectations of the user and the revealed part of the plot and to triggering interpretative actions (causative interpretation) whose aim is to establish the relationship between the revealed excerpt, the preceding lexia, and all previous lexias. The narrative interpretation created by the user results in the text becoming a cohesive whole.

It should also be asked whether the alternative, multivariate nature of narration results in each recipient of a given work experiencing a different history? The answer to this question depends on the type of work involved and the mode of reading. In the case of Antyczny relikwiarz [Antique Reliquary] by Artur Marciniak⁶ (a choose-your-own-adventure story), a single reading by different recipients may lead to the recipients experiencing different plots. Marciniak’s hypertext includes several possible

⁶ http://www.antyczny-relikwiarz.cba.pl/
pathways and several endings. The choices made along the way may also determine the length of the plot—the length of the action. At the extremes, the plot may end with the death of the protagonist after the first several lexias, or it may develop into an adventure story with a length of over twenty lexias. In order to become familiar with all the possible pathways, the reader would have to go through the adventure multiple times, or, in other words, read the text philologically, with a view to discovering all the possible developments. This work is an example of a multivariate alternative plot whose variants are not semantically equal. The actions undertaken by the user—the selection of links—influences the whole meaning of the work. They have the value of a sign, which to a significant degree differentiates between the meanings of the whole. The actions of the user determine whether the user will experience a short story about the protagonist—Denis von Kramp—being stabbed to death in a tavern after he abrasively rejects an offer made by a stranger, or whether the reader will experience a long account of how the protagonist takes it upon himself to steal a mysterious reliquary containing an elixir of life from a stranger’s home. It should be stressed that other variants of von Kramp’s history are also available.

In contrast, in the case of Susan Gibb’s hypertext novel *Blueberries*,⁷ the multivariate nature of the plot is not tied to alternative pathways. Rather, by clicking on different links within specific lexias, two different readers of the novel will, after some time, arrive at the same plot developments, though these may appear in a different sequence. In each case, the reader will come to know that the female narrator-protagonist is a painter haunted by a traumatic memory of being sexually victimized during childhood by her grandfather; that as an adult she is incapable of entering into a steady relationship with a man; that she does not have a good relationship with her mother, who blamed her for the death of her father; and that she is organizing an exhibition featuring her own art, which is meant to be a form of self-therapy. The fact that these lexia may appear in a different sequence will influence the process of collecting knowledge about the protagonist, though the global experience of the work should remain similar for all readers. The multivariate nature of the plot is optional, and the actions of the user have the value of a sign differentiating the sequence of events to a larger degree than constructing the sense of the whole itself.

To an unprecedented degree, these new literary or artistic devices engage not just the semantics but also the semiotic aspect of the word:

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⁷ http://susangibb.net/blog2/wp-content/uploads/stories/101blueberries/titlec.html
shapes, colors, and sounds undergo transformations in front of the user. In effect, a graphic textual sign is a kinetic sign, which is further included in an iconic and auditory (e.g., musical) context. The layer of a word’s representations becomes spatial, animated, or even personified, with the actions of the user being a constitutive component of the figures.

Kinetic, trans-semiotic, interactive figures, and, more broadly speaking, textual structures comprising digital literature, demonstrate that the category of the literary also encompasses the semiotic tissue of the text and the actions of the user. New poetic figures take the form of semiotic figures—particularly figures pertaining to movement, such as: omission (the removal of an element), addition (the addition of an element), permutation (switching places), and transformation (the introduction of changes). The fact that the essence of digital poetry is anchored in figures pertaining to movement is visible in Zenon Fajfer’s *Ars poetica.*

Semiotic figures also comprise the organisational basis of Robert Kennall’s poem *Faith,* in which meaning is shaped in the process of transforming the word tissue on screen—in the process of creating new words or phrases by adding letters, shifting words, breaking down words, changing their shape, size, and colour. The semantics of the text is co-modeled by the semantics of words as arbitrary, iconic, and auditory signs. Here, the digital remediation of the word is taken to its fullest degree—the work stands in opposition to the tradition of the printed word, in which over the course of several hundred years the layer of representations generally became transparent. The background attempts to counter this tendency, which is present, for example, in the poetics of riddles, concrete poetry, graphic novels, and posters, gain equal standing in the digital environment. Furthermore, they are not something accompanying the semantics of a word as an arbitrary sign, but rather something that participates in the creation of meaning itself. The kineticised text becomes animated; it is in the process of becoming and transforming in front of the recipient; it reacts to their actions, thus gaining human qualities. Not only does such a text speak of a certain subject, it also speaks itself. Not only is it an account of another individual’s experiences and way of observing reality, it is itself experienced and created in the perception of the user.

Shifts also occur in the mode of existence of thought figures—particularly in the case of analogies, epithets, and metaphors engaging the written word, movement, sound, image, and action (the corporeality of the user).

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8 [http://www.techsty.art.pl/magazyn3/fajfer/Ars_poetica_polish.html](http://www.techsty.art.pl/magazyn3/fajfer/Ars_poetica_polish.html)
9 [http://collection.eliterature.org/1/works/kendall__faith.html](http://collection.eliterature.org/1/works/kendall__faith.html)
Inversion is problematic, however, as hypertext does not have a singular, predetermined sequence of reading. Another figure which makes an appearance is cumulation—its essence is the combination of different functions of a textual element (representation, being a vehicle for meaning, action). The moving, sonorised layer of textual representations participates in the creation of literary meaning, shaping the style of the work and changing the mode of existence of textual structures, for instance, rhyme, allegory, and metathesis (Saemmer 2010: 163–182).

One of the more crucial modifications in the realm of the reception of digitally generated artistic text (here, e.g., literature) is the shift of focus from an attitude of corporeal distance towards corporeal engagement in the work. Intellectual reception becomes strengthened by the corporeal experience of the meaning of the text. Here, a good example is the work Read more+ by Piotr Puldzian Płucienniczak.¹⁰ The theme of the work is evanescence. Upon opening the work, the user is presented with a blank page on the screen, below which in the bottom-right corner there is a sign stating read more+. It is a link which invites the user to click not just with the semantics of the sign itself, but also its semiotic aspect. It is located in a place where the culture of printed books places page numbers, near the corner of the page, which is usually where the user turns the page. This placement of the link is a semiotic representation of the act of turning pages. Readers, who are shaped by print culture, almost automatically turn their eyes and navigate their mouse towards the sign in order to “turn” the virtual page. A factor facilitating this journey is the blank, unwritten surface of the virtual page, which provokes the reader to search for text. However, upon clicking the link the recipient is presented with another blank page with the same read more+ sign in the corner. Upon clicking on the sign several times, both the signs and the blank pages themselves begin to fade, until they disappear entirely. Then, an icon of an almost burnt-out candle is presented on screen.

Death and the passage of time are themes which appeared numerous times and in numerous ways in literature. In traditional literature, it is the text itself which is the vehicle of each approach thereto—the written word, which, as an intermediary, distances the reader from the event itself. Literary descriptions, diverse forms of presentation of the experience of the protagonists, allow the reader to familiarise themselves with someone else’s emotions and experiences. The decision to avoid written text in Read more+ removes the intermediary and allows the user to exper-

¹⁰http://puldzian.net/2014/readmoreplus/
ience evanescence in the act of corporeal and intellectual reception. The metaphor of a fading image and the conventionalised symbolism (or even allegory) of the burning candle combined with the repeated act of clicking situates the whole work in the framework of the passage of time, creating some sort of tale about passing away. The words “read more” play an important role to this end, as they are used as a figure of cumulation—they are a link which combines the encouragement to click/read (the communicative aspect) with a metaphorical statement on the inevitability of the end of each existence (the semantic aspect). The + sign accompanying the link may suggest inevitability, or the continuity of the process — the repeatable character of the everyday actions leading us closer to death. It may also invite us to reflect upon the fact that the more actions we undertake and the faster we undertake them, the more we lose time to reflect and the faster life slips through our fingers.

The appropriation of movement in order to depict the passage of time is also present in Katarzyna Giełżyńska’s Klikam [I’m Clicking].¹¹ The rapid procession of words on the computer screen, the accelerated movement of the clock hands, and the sound of hurried writing on the keyboard, which portray the inevitable passage of time, stand in stark contrast to the meaning of the protagonist’s words, which also appear on screen: “I have time, I am prepared for everything.” The semantics of the semiotic layer in connection with the semantics of the verbal layer create a statement which is ironic in nature.

The semioticisation and textualisation of the actions of the user are also the foundation for an interactive movie in which the viewer not only decides on the heroes’ faces and the sequence of events but is perceived by the movie protagonists themselves. David Slade’s Netflix feature Black Mirror: Bandersnatch, which takes place in the United States in the 1980s, tells the story of a young programmer who is hired by a game developer company. The protagonist begins work on a choose-your-own-adventure game, in which the gamer is invited to decide on the sequence of events in the world of the game. At the same time, he himself becomes the protagonist of a game, as the viewer is invited to choose the sequence of events of the movie itself. In selected parts of the plot the movie stops and underneath the screen viewers are presented with two options, from which they are supposed to select one in a given amount of time. While at first innocent (e.g., the choice of cereal for the protagonist to eat), the choices gradually become more crucial and influential with respect to the prot-

¹¹https://vimeo.com/156577793
agonist’s fate. As the protagonist working on the computer game accepts a more successful co-worker’s offer to smoke marijuana in order to—as he is convinced—push the limits of his own brain and experience something amazing which will inspire him in his work, the viewer is asked to make a choice of which of the two programmers will jump out of the window.

The interactive nature of the movie transforms the viewer into a user; the structure of a motion picture is supplemented with the structural elements of a video game. Pausing the sequence of events and asking the viewer to make a choice introduces the notion of alternative narration—the sequence of events may be different with each viewing of the movie (though the length of the movie remains the same). However, the most important aspect is the artistic appropriation of the actions of the users—their inclusion in the plot of the movie and the experiences of the main protagonist, who is increasingly made aware of the fact that someone from outside is influencing his decisions, that he himself is not the master of his fate. As the recipients of the movie we witness the protagonist fighting with his own body, attempting to stop the actions we have selected as the users (e.g., attempt not to spill coffee on the keyboard) and to resist making the actions forced upon him, though he will inevitably fail in this regard. Cognizant of the existence of an exterior force which governs his actions, he asks questions of the user with the use of his computer. Who are we? How we are we communicating? The answer we provide—that we are governing his actions through the Netflix service from the beginning of the twenty-first century—confirms the protagonist’s suspicions that he is being steered by beings from the future. The influence of the recipient becomes a crucial plot thread of the movie.

Furthermore, the game offers a third level—pertaining to us, the viewers, who become a tool in the hands of the communication system itself, obligating us to fulfill a new role, transforming us into users of the movie world.

Black Mirror: Bandersnatch is a movie which at first glance seems to abandon medial and generic integrity, which is being destroyed by the introduction of elements from the structure of a video game. However, in truth it quickly reveals the domination of its movie-centered nature, which adopts interactivity as an artistic trick, incorporating the actions of the user into the plot of the movie itself. The act of use is revealed in the way the movie uses time. The movie has a certain duration—almost the same regardless of the choices made by the viewer. The unchanging duration of the plot is guaranteed, first of all, by the same duration of the alternative fragments, and, second, the specific, unchanging time amount-
ing to seconds, which is given to the recipient to make a choice between the two options provided. The lack of a choice does not pause the sequence of actions. Instead, the choice is made automatically for the user in accordance with a predetermined algorithm—the plot follows as in a traditional movie, allowing the user to remain a passive viewer. This in turn allows for the work of art to constantly balance between being a transformation of the movie genre, a suggested hybrid form combining a movie with a video game, and an artistic use of the latter.

David Slade’s movie is an example of an intrusion of the digital into the ontic nature of the discursive form—into that which defines the specific nature of different art genres. In Black Mirror: Bandersnatch, where the viewer becomes a gamer, relations pertaining to communication, which define the specific character of cinema, are modified. The recipient of the work—the viewer interpreting the sequence of events from the world of the movie—is replaced with a user—an agent of change who locates himself/herself in the position of an individual responsible for the sequence of events, despite the fact that the user is unaware of how the events will unfold at the moment of making specific choices. The world of fiction is no longer presented—provided to users for their perceptual and intellectual interpretation. Rather, it is co-presented by the user, who, presented with the function of an acting protagonist, becomes part of the text itself. The work interiorises the recipients, transforming them into textual signs.

In addition to literature and cinema, sculpture is another example of the reinterpretation of the discourse of art in digital culture. Adam Martinakis’s designs of digital sculptures simultaneously depart from and refer to the tradition of sculpture. First and foremost, in this context we cannot speak of materiality and its single-time shaping in the real world, as the work is based in the immaterial, multivariate, and programmable digital sign. Further, the three-dimensional aspect of composition is discarded in favor of its virtual representation. At the same time, the fact that the projects are named digital sculptures and the relationship between the tradition of sculpture and specific works is underlined leads us to include these works in this artistic realm.

In effect, Martinakis’ The inevitability of time / Pietà (2013) \(^{12}\) references the tradition of the pietà and sculpture, and is also a manifestation of overcoming their boundaries; its theme is the moment of rupture (the rupture of the tradition of the pietà, the departure from dogma towards universality, the rupture of traditional sculpture). What is impossible to represent

\(^{12}\) http://adamakis.blogspot.com/2013/02/the-inevitability-of-time-pieta.html
in the material form of a sculpture—the immobilised dynamism of rupture—achieves its fullest realisation here. It is somewhat of a paradox that the essentially immaterial and easily malleable digital sculpture preserves and maintains the cohesion of the act of matter’s rupture by creating its semiotic representation.

Martinakis’s work is a synthesis of life and art—of that which is biological (colour and the expression of the female form) and non-biological (the fragmented material of the sculpture of the man). Furthermore, the work as a whole may be interpreted as a polemic with the tradition of the pietà, which derives from the beginning of the fourteenth century. The inevitability of time referred to in the title, which out of necessity dooms us to evanescence, may also metaphorically refer to the forms and artistic themes addressed by art (such as the pietà itself), and to the art of sculpture itself, whose materials, techniques, and themes change with the passage of time, falling to pieces like the body of the man held by the woman. The category of rupture may also refer to the history of religious dogma, to which the pietà refers, particularly the most famous one, Michelangelo’s, which refers both to the birth of Jesus (in the youthful representation of Mary) and his death through suffering (in the representation of Jesus taken off the cross). In effect, the recipient of the work is faced with a hybrid—a single representation of symbolic thinking, which refers to different discourses.

Nest of Time—a digital work by Martinakis (2017)¹³ is a project which transforms the essence of sculpture as an art form. It is no longer something material, motionless, finite, but a non-material process: something which is in the process of becoming, changing, perpetually transforming. The object of art comes to be replaced with an event and the process-centered nature of the sculpture’s becoming provides grounds for the process-centered nature of interpretation itself. To the rhythm of transcendental music, subsequent cycles of images emerge circularly, as if on a ring, intermeshing and growing from one to another, as in Maurits Cornelis Escher’s images (e.g., *Metamorphosis* I, II, III). Martinakis replaces the transformations between shapes frozen in time in Escher’s images with the movement of representations in three-dimensional space. The shapes emerging from one another become increasingly complex. Thus interlocking hands, which form a peculiar ornament, turn into the female form, which then turns into interlocking male and female bodies in acrobatic shapes, to give way to intermeshing, deformed bodies. The trajectory of

¹³ https://www.martinakis.com/videos
the movement itself becomes more complicated—the circular movement turns into the movement of multiple subjects with multiple orbits rotating around a single axis, as if the subjects were transforming into planet Earth.

The whole work may be interpreted as a reflection upon the evolution of the act of creation—the cause of creation and the effect thereof, though cause and effect are intertwining, indistinguishable. This is why the hands and the eye turn into a human subject, why we see an image of a man and a woman on the cross, and why the work references Salvador Dali’s images of interlocking humanity, suffering, and the absolute, which inspire and become its subject. This is why the cross has a symbol of the Alpha and the Omega, in reference to the tradition of Christian art, where Alpha and Omega symbolise the power and perfection of Christ as God and human alike (combining existence and time, beginning and end).

The work invites reflection on the essence of sculpture as an artistic form, whose matter, stylistic form, subjects and their various transformations—which all change with the passage of time—reflect its depth and capacity. It is a tale about sculpture as an art capable of representing the act of creation itself but also about the forms and themes adopted by art. It becomes a synthesis but also goes outside the boundaries of art by overcoming the resistance of matter. In the digital semiosphere, sculpture is a process presented in the act of becoming: a non-material event in the space-time continuum, imprisoned in digital space with no access to actual space. Its spatiotemporal nature is not—as in Katarzyna Kobro and Władysław Strzemiński’s theory (Kobro, Strzemiński 1993: 53)—the result of the act of seeing a material sculpture from several sides, but of changes to its iconic, digital representation on the computer screen.

Digitality transforms the essential features of the arts, particularly with respect to their material and semiotic existence. Literature remains an art of the word, but all of its aspects are used with artistic merit to the utmost degree. Here what matters is not just the semantics of the word as an arbitrary sign but also the word as an auditory, iconic, and interactive sign capable of changing colour, shape, and size, and of appearing and disappearing. Literary meaning is shaped in the interaction of all aspects of the textual layer. The written text is not limited to being a medium of meanings but is also a tool of textual actions, which make the user of the work a part of the text itself. Such reinterpretations also pertain to other arts. The possibility of integrating the user into the plot of a movie, al-

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¹⁴ See: Salvador Dali, Christ of Saint John of the Cross (1951, Glasgow Art. Gallery) and The Christ of Gala (1978, private ownership).
lowing the user to decide on the fate of the protagonists, to operate with interface signs on the ergodic reality, introduce the discourse of a game into the feature film. The instance of the film viewer is replaced with the instance of a narrator designed and appointed by the author of the work: a narrator who performs the function of the acting subject. Such changes also pertain to sculpture, which is as programmable as works from other fields. In the digital space, sculpture is rid of its material aspect, no longer existing in actual space. In other words, it is rid of the possibility of tactile reception—being able to experience its texture by touch. In exchange, it becomes capable of dismissing the laws of gravity, of creating shapes which change in front of the viewer—narrationalised shapes.

One factor that is closely related to changes in the field of cultural semiotics is the reorganisation of social communicative behaviours. Such behaviours gain new variants and modes of existence that foreground agency and action. Other functions of the message, such as informational or aesthetic functions, are often subjugated to and modeled by the social aspect. Communicative behaviours gain a semiotic aspect—they are visualised and digitally registered. Tied both to art and social reality, interpersonal relations, and social life, they are signs—tools which are not only inscribed in this space but which also offer the possibility of generating new signs, textual worlds, and discourses built upon what already exists, and themselves influencing the social reality and its signs. This two-way nature of digital culture is in turn tied to the unending creation of new areas of research on the semiotics and semiopoetics of text and discourses undergoing digital remediation.

REFERENCES

Barthes Roland. 1996. “Teoria tekstu.” Transl. Aleksander Milecki. In: Współczesna teoria badań literackich za granicą. Antologia, vol. 4, part. 2, Henryk Markiewicz (ed.), Kraków: Wydawnictwo Literackie.

Bolter Jay David. Grusin Richard. 2000. Remediation: Understanding New Media. Cambridge–London: The MIT Press.

Bolter Jay David. Gromala Diane. 2005. Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency. Cambridge–London: The MIT Press.

Eskelinen Markku. 2012. Cybertext Poetics: The Critical Landscape of New Media Literary Theory. London–New York: Continuum.

Kobro Katarzyna, Władysław Strzemiński. 1993. Kompozycja przestrzeni. Obliczenia rytmu czasoprzestrzennego. Łódź: Muzeum Sztuki.

Latour Bruno. 2009. “Dajcie mi laboratorium, a poruszę świat.” Transl. K. Abriszewski. Teksty Drugie No. 1–2.

Leeuwen Theo van. 2005. Introducing Social Semiotics. London–New York: Routledge.
Lotman Yuri M. 1990. *Universe of the Mind: A Semiotic Theory of Culture*. Transl. Ann Shukman. Bloomington–Indianapolis: Indiana University Press.

Manovich Lev. 2001. *The Language of New Media*. Cambridge–London: The MIT Press.

Nycz Ryszard. 2017. “W stronę innowacyjnej humanistyki polonistycznej: tekst jako laboratorium. Tradycje, hipotezy, propozycje.” In: *Kultura jako czasownik. Sondowanie nowej humanistyki*. Warszawa: Wydawnictwo IBL PAN.

Ricardo Francisco J. 2009. “Reading discursive spaces of text rain, transmodally.” In: Francisco J. Ricardo (ed.). *Literary Art in Digital Performance: Case Studies and New Media Art and Criticism*, New York: Continuum, 52–68.

Saemmer Alexandra. 2010. “Digital Literature—A Question of Style.” In: Roberto Simanowski, Jörgen Schäfer, Peter Gendolla (eds.). *Reading Moving Letters: Digital Literature in Research and Teaching*. Bielefeld: Transcript Verlag.

Schäfer Jörgen. 2007. “Gutenberg Galaxy Revist(it)ed. A Brief History of Combinatory, Hypertextual and Collaborative Literature from the Baroque Period to the Present.” In: Peter Gendolla, Jörgen Schäfer (eds.). *The Esthetics of Net Literature: Writing, Reading and Playing in Programmable Media*. Bielefeld: transcript Verlag.

Schäfer Jörgen. 2010. “Reassembling the literary: toward a theoretical framework for literary communication in computer-based media.” In: Jörgen Schäfer, Peter Gendolla (eds.). *Beyond the Screen: Transformations of Literary Structures, Interfaces and Genres*. Bielefeld: transcript Verlag.

Szczęsna Ewa. 2018. *Cyfrowa semiopoetyka*. Warszawa: Wydawnictwo IBL PAN.

Simanowski Roberto. 2007. *Digital Art. And Meaning. Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations*, Minneapolis–London.

**Abstract**

In this text the author reflects on the semiotic existence of culture discourses in connection with the rapid development of digital technology. The author analyzes selected texts of digital art as examples of the transformation in how works of literature, sculpture, or film exist. The article covers how movable font, which changes in shape and color, participates in shaping literary meanings; the creation of semiotic and interactive figures; the textualization of the user’s actions and body; dematerialization; processuality; narrativization; the temporalizing of sculpture which changes before the eyes of the recipient; the presence of alternative narratives in literature and film; multi-variant plots co-created by the recipient; and the artistic use of other discourses. The author proves that the structure and specificity of the digital sign lies at the base of the changes. The digital sign is immaterial, programmable, and hybrid, and combines aspects of expression, meaning, and action, which makes it efficient.

**Key words / słowa kluczowe**

semiotics / semiotyka, semiopoetics / semiopoetyka, cyberculture / cyberkultura, digital art / sztuka cyfrowa, hypertext / hipertekst