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TECHNOLOGY AND THE HUMANITIES:  
EWA SZCZĘSNA'S CONCEPT OF DIGITAL SEMIOPOETICS

The *interdisciplinarity* category was undoubtedly one of the most desirable and widely discussed metavalues of research in the first two decades of the twentieth century (see e.g. Lélé, Norgaard 2005; Jacobs, Frickel 2009; Moran 2010; Bammer 2017). We can describe its most important claim as the social—and political—expectation that scientists should boldly draw from the paradigms of many disciplines and reach for the tools developed in different scientific methods (or as an “intra-academic integration of different types of disciplinary knowledge”—as Frodeman [2017] puts it). By these means, they are to discover new horizons of science and new practical applications of the acquired knowledge, unattainable for monodisciplinary research. In this perspective, the interdisciplinarity category became a highly important keystone, a point of contact between the academia and the non-academic world, especially business.

For humanities scholars, this expectation of an interdisciplinary dimension of research is a particular challenge, especially when it means an interpenetration between the humanities and computer science; a possible administrative obligation to adapt humanities research to such a paradigm would obviously be an example of absurd reductionism. At the same time, we should note that interdisciplinarity provides a unique opportunity for the humanities: an opportunity for its voice and its values to rebuild their

meaning and influence in an increasingly technocratized reality. Finally, we must observe that in some areas of humanistic reflection, interdisciplinarity ceased to be a certain extravagance, and became... a necessity. This is the case for research into digital textuality. In discussions on this cultural sphere, limiting oneself to traditional models and description tools makes it extremely difficult, or maybe rather impossible, to provide a complete diagnosis of phenomena and to effectively communicate research results outside the narrow circle of a scientific discipline. Yet it seems that it is beyond the humanities that their voice should be particularly well heard.

The need to embrace the interdisciplinarity paradigm and to draw from it wisely finds a very concrete justification in today's reality. Nowadays, we see a deep and still progressing digitalization of all areas of culture. We can observe the use of digital technologies and their assumption of the functions that were so far fulfilled by analog solutions in, among other things, culture creation (for television, see e.g. Gripsrud 2010; for theatre, see e.g. Figzał 2015, Wąsik 2015) and the distribution of cultural creation (e.g. in music: 'Spotify Effect,' discussed in Vonderau 2019). Now that digital media are not only an important, but even fundamental, element of the communicative landscape, the humanities, especially textual science, face the momentous task of explicating this dynamically changing reality. Certainly, the mission of the humanities understood in this way is not a new task in itself; what is new, however, is the pace of change, and in particular, the need to account for the extremely broad and complex technological context.

I believe that it is in this context that we should read Ewa Szczęsna's research proposal presented in the book *Cyfrowa semiopoetyka* [*Digital Semi-poetics*]\*, since the author boldly undertakes this mission. In this sense, we cannot reasonably discuss this publication of the Institute of Literary Research without acknowledging the issue of interdisciplinarity. The author assigns herself an ambitious task: the main goal of Szczęsna's book is to create a new theory of digital textuality, with a particular focus on artistic texts. Within the latter, we can see a certain transformation, or evolution, in her method of selection of analytical material. It is true that the author, who devoted her first book to the poetics of advertising (Szczęsna 2001), maintains her interest in all manifestations of textuality; yet in her latest publication, she reaches for examples from artistic pieces much more frequently than in her previous works. To quote Szczęsna

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\* Ewa Szczęsna, *Cyfrowa semiopoetyka*, Instytut Badań Literackich PAN, Warszawa 2018 (numbers of quoted pages in the text).

(p. 427): “the humanities gain a new area of research in digital artistic forms, digital representations of text, especially literary text. The aim of the present research is to determine the specificity of digital textuality. The extraction of features and properties that determine the specificity of digital works is associated with the need to name them: to modernize the existing names or to introduce new ones, as needed. This, in turn, enriches the tools and research methods of the humanities”. Therefore, it is evident that the selection of material is also intended to create conditions for forging new tools to diagnose reality. This approach is not surprising: Szczęsna is a researcher with years-long experience in the paradigm of comparative media analysis, and as Adam F. Kola indicates in his study on non-classical models of comparative analysis:

Comparative analysis allows us to isolate the object and only (as much as?) the object. In this meaning only, it is a method. However, it provides us with no concrete research tools. Every time, the researcher has to find them in the range of existing tools or create new ones as needed (Kola 2008).

The neologism which appears in the title of *Digital Semiopoetics* provides the most vivid example of this pressing need to seek new tools to describe the changing textual universe, present in the book. When Szczęsna proposes the category of “semiopoetics,” on the one hand she clearly declares which aspects of the digital dimensions of textuality she will consider as most important. On the other hand, she creates a conceptual combination which, as a hybrid, perfectly fits in with the transgressive world of digital poetics and semiospheres, where we should consider hybridity as the norm. Therefore, it is not surprising that hybrid examples are endless in *Digital Semiopoetics*: be it when the author discusses the re-modeling observable in the sphere of discursive forms, or the processes which occur in education by means of a digital platform.

The abovementioned hybrids create an interesting context, in which I find it worthwhile to present a visual quote that seems to me a particularly cognitively prolific illustration of Szczęsna’s arguments. The quote comes from the trailer of the game *Deus Ex: Human Revolution* (Eidos Montreal, 2011). The game itself presents a dystopian, cyberpunk vision of the future. It is set in the near future, where a very far-reaching enhancement of the human body with the use of high-tech implants or nanoprostheses has become possible. This, in turn, leads to a deepening of social stratification and to an intensification of social conflicts, with technology in the background. However, in the context of digital semiopoetics, I am only interested in one particular image from this unique

game: the main character, Adam Jensen, lying on the operating table. As we learn from the trailer of *Human Revolution*, Jensen is severely injured in a terrorist attack. The only thing that can save him from death is an operation and serious body modification, which transforms him into a hybrid: half man, half machine. Noteworthy, this turn of events does not make Jensen happy: after surgery which leads to a deep modification of his body, he regularly repeats the phrase “I never asked for this”. In this way, he clearly distances himself from his hybrid status, yet obviously only deepens it in the process: the character, unable to come to terms with his current state, remains mentally stuck in his previous identity. Therefore, he is both man and machine and the same time.

As we learn shortly after, the abovementioned scene, where we can see Jensen on the operating table, is in fact the protagonist’s dream, which is also his inner interpretation of the presented events. The shot from the scene is a clear reference to the famous picture *The Anatomy Lesson of Dr. Nicolaes Tulp* by the Dutch Baroque master Rembrandt. This fascinating trailer scene, which undoubtedly deserves its own interpretive study, is double-hybrid and double-transgressive in character. It presents the protagonist at the moment of transgression, when, as a result of the use of technology and its unification with his body, he becomes a hybrid, a dual entity, a combination of two different natures: biological and technical. The second dimension of this hybridity lies in the way the animators presented this event: through a reference to seventeenth-century painting, apparent on the levels of composition, light, even the characters’ costumes, and their gestures (at the same time, on the dissecting table, we can clearly see a figure with the protagonist’s face). The use of baroque composition is also hybrid in character: it is an attempt to portray a problem of the future, in this case, the limits of human body modification with its consequences, not only pragmatic, but also ethical or, more broadly, philosophical,<sup>1</sup> through the artistic style of an older culture. Finally, transgression is the subject of both—pictorial and digital—presentations of surgical operation: Dr. Tulp and other anatomists of his time pushed the boundaries of medicine and morality; the same can be said of the vision presented in *Deus Ex*. Moreover, it appears that the authors of the animated trailer tried to make us see the analogy between these two visions; therefore, *intentio operis*, to use the term proposed by Umberto Eco (1990), seems clear: the animation convincingly juxtaposes the transgressive activity of former anatomists and that of surgeons who

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<sup>1</sup> More on this topic see: Harari 2016.

improve the human body with the use of nanoimplants and high-tech prostheses. The persuasive message thus constructed seemed to suggest that, just as the anatomists of the past centuries boldly crossed boundaries, which ultimately enriched human knowledge and had numerous positive consequences, so the efforts of the scientists who work to deeply modify the human body and far improve its capabilities should, by analogy, deserve admiration and respect.



Screenshot from *Deus Ex: Human Revolution* trailer

I believe the above example to be valuable not only due to its deeply hybrid character, but also for one other reason. This digital piece—ultimately “only” a trailer which advertises an upcoming game, and thus a marketing tool—is open to very numerous *interpretations*.<sup>2</sup> Meanwhile, it is the interpretation of digital texts that is one of the most important topics of *Digital Semiopoetics*. Among other things, *Szczęсна* raises a question on the specificity of the interpretation process applied to the digital environment; after all, the answers to such questions are crucial today, in the era of fake news and digital disinformation.

When *Szczęсна* discusses the specificity of interpreting digital texts, she indicates that apart from classic, permanent elements of the interpretation process (which include “personal characteristics of the subject as

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<sup>2</sup> We can find many more interpretive layers in the trailer, especially since I only mentioned its first part above. I did not account for the later scenes, where we also find references to classical hypotexts, such as the myth of Icarus, which is very meaningful in this context.

a participant in culture, his or her knowledge, intellectual activity, world-view, gender, individual textual and nontextual experience, community experience: cultural, historical, social; communicative situation”—p. 78), a digital text has one more structurally permanent element, namely the recipient’s action. Szczęsna places this seemingly obvious fact in a broader perspective and proves that the “sign-text-discourse” triad (these three categories are the focal point of the digital semiopoetics project, and it is around them that the author constructs her narrative) is a network of inseparable connections. “Any change to any element of the structure will affect its other components. This codependence means that the changes which digital technologies introduce in the structure of the sign reinterpret the text’s structure and the discourse’s mode of existence” (p. 79); among such changes Szczęsna counts the possibility, or necessity, of the recipient’s/user’s action. I believe this is also where the most ambitious aspect of Szczęsna’s project lies: she suggests an insufficient anchoring of “the essence of textual, discursive changes in the digital sign” (p. 92) and points to the necessity of studying “the direct relationship between the new structure of the sign, with its specificity, and the mode of existence of the text and the digital discourse” (p. 79).

Here, I should provide a note of a terminological nature, which is missing from Szczęsna’s book: when she discusses interactivity as a feature of the digital text, in fact she refers only to some digital texts, namely those of an ergodic character (where “nontrivial effort is required to allow the reader to traverse the text,” as Espen Aarseth [1997] defines it). Yet not every digital text must have an ergodic character—one example would be the CGI trailer, paratext of the game *Deus Ex*, which I briefly analyzed earlier. Doubtlessly, the techniques used in its production allow us to consider it as digital; digital platforms are also the means of its distribution (services such as YouTube or Vimeo). However, the trailer itself does not enforce any specific action on the user’s part. Following the suggestion of Aarseth, quoted earlier, I will not treat the user searching for the trailer or pressing play as a sign of ergodity, as such actions do not meet the requirement of non-triviality. Although Szczęsna is aware of this distinction, and quotes Aarseth’s iconic publication herself, some of the generalizations she makes are mental shortcuts.<sup>3</sup>

Returning to the issue of interpretation, Szczęsna indicates that what binds the triad of sign-text-discourse into a structure is the very act of in-

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<sup>3</sup> For a distinction between different types of *new media* and for categories of interactivity, see: Kluszczyński 2010.

terpretation. She proves that interpretation is “the necessary component and condition for the existence of a sign, text, and discourse” (p. 83). On the one hand, her evidence of the impossibility to escape interpretation is universal in nature and refers to the whole, also analog, *semiopoetic universe*, and on the other hand, it opens the way to a reflection on how “multisemioticity and interactivity of digital culture” (p. 84) influence the process of meaning-making in an interactive environment. The author focuses her attention on the following problem areas:

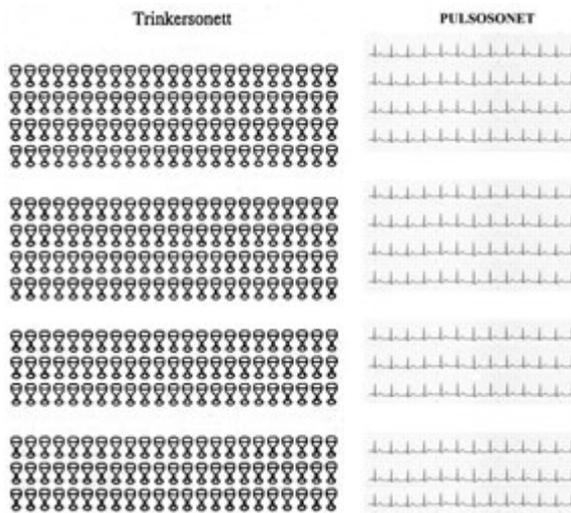
— indication of the role of convention and “automatic models for the recognition and epistemological classification of the surface layer of a message” (p. 86);

— recognition of an interpretive act in the actions of a user, which—unlike in a traditional text—are no longer purely mental in character, but leave a more or less permanent mark on the texture (p. 88, 100);

— most interestingly, demonstration that the above interactions also determine the global meaning of the text.

The above observations constitute a valuable insight, which we can describe as a preliminary outline of the problem area. With such an introduction, the reader has the right to expect more detailed conclusions, which seems all the more reasonable to a reader familiar with Szczęsna’s previous books, where she frequently addressed hermeneutical issues, especially in *Poetyka mediów [Media Poetics]*—Szczęsna 2007). This is the strategy Szczęsna pursues: she refers to specific works while conducting a detailed discussion. The selection of works is noteworthy. Apart from classical works, which the reader may be familiar with from other publications (and above all the *Electronic Literature Collection*,<sup>4</sup> which Szczęsna frequently draws from), the author also reaches for entirely unconventional material. When she refers to the re-modeling present in the sphere of educational discourse, she cites not only particular statements from the participants of her Internet courses, which she has conducted for many years, but also specific effects of their work. For instance, she mentions a task whose aim was to “understand the concept of semiotic and structural calque in contemporary cultural texts.” The task was for the students to create a piece “which would have an analogical interpretive relationship with the idea of Karl Riha’s *Trinkersonnett* as the one that the latter has with the structure of the classical sonnet” (p. 401).

<sup>4</sup> (collection.eliterature.org) particularly: Dan. Waber, *Strings*; Zenon Fajfer, *Ars Poetica*; Robert Kendall, *Faith*.



*Trinkersonett* by Karl Riha and *Pulsosonet* (Pulse-sonet) by one of the students—  
example discussed by Szczęśna

Undoubtedly, such examples are the most interesting and the most original analytical material in the book: firstly, due to their unique character, and secondly, due to them being the results of the author's practical experience. In this case, they serve to illustrate how digital tools can change the way we think about learning, with a particular focus on the greater emphasis that we can place on the pursuit of knowledge, or rather its creation, in the educational process, instead of absorbing ready-made knowledge. The author provides the following conclusion:

On the Internet (and more broadly, in digital discourse) as a textual environment and a means of communication, above all else, educational discourse gains a source of new tools and educational methods, which leads to considerable changes in the way we think about education and its social and cultural functioning. Moreover, it also gains a new teaching subject, which belongs to the areas of both technology and the humanities (textual science, sociology, media studies) (p. 402).

As I mentioned at the beginning of this essay, Szczęśna uses the quoted texts of digital culture to develop tools to describe this digital textual reality on their example. Among the important terminological proposals, we should mention *sign texture*, by which the author means “the network of relations between the external manifestation (semiotic code) of the sign, its materiality, and perceptual interpretation” (p. 96): she also notes that in the case of a digital sign, digital matter is the factor which most strongly

determines the form of this texture. Szczęsna draws attention to an insufficiently considered fact, which is absolutely fundamental from the point of view of semiotics: the dual character of a digital sign. A digital sign looks and operates differently from a programmer's perspective (in programming discourse) and from a user's perspective (in the discourse of social communication). "On the level of programming code, unlike on the user level, signs are unambiguous and strictly dependent on the functions of defining and creating the text displayed in a browser." As Szczęsna indicates, the level of programming code leaves no room for interpretation other than automatic transposition. Only after this phase, when the sign and the text begin to emerge on the user level, ambiguity and interpretive freedom arise (p. 98). This semiosis process, with its two phases, is vastly different from the one we know from analog texts. Therefore, a question on the result of this comparison and the consequences of this inevitable difference appears important. Clearly, this difference is not visible in the final effect of semiosis: in essence, from the recipient's or the user's perspective, the way *the discourse of computer science* operates is completely irrelevant. Obviously, this irrelevance results from the fact that the user directly participates only in *the discourse of social communication*. It appears that the truly significant consequences arise in the relationship between technology and the humanities, although Szczęsna makes no explicit mention of this issue. Digital culture, especially the sign-text-discourse triad, reveals the inseparable, inextricable nature of this relationship. This leads us to an inevitable conclusion concerning education, both in the humanities and in technology. Again, the author only briefly mentions this issue, leaving it to the reader's reflection. From this perspective, the proposals of interdisciplinarity appear very much justified. *Digital Semiopoetics* clearly suggests that only a reflection based on a conscious combination of *the discourse of computer science* and *the discourse of social communication*—resulting from a deep understanding of the rules that govern these discourses, the methods of their production, and their mutual relations—enables both a more conscious participation in contemporary culture and a critical appraisal of this culture with its governing mechanisms.

Therefore, firstly, *Digital Semiopoetics* is a guide for changes in curricula, both at universities and in earlier educational stages. It clearly shows where the two discussed discourses merge and form an inextricable relationship. Secondly, it is also a concrete tool to describe the reality of the digital universe of signs, texts, and discourses. If there is anything to reproach, it is the publication's insufficient openness to a non-academic audience. This is unfortunate, because Szczęsna's book is an important

attempt to address one of the key questions of modernity: how we should perceive the relationship between the humanities and technology. The relevance of this question reaches far beyond the academia.

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