

Almost half a century ago Umberto Eco wrote a text titled *Poetics of the Open Text*. By introducing a category of "openness" he not only drew attention to works of art the main objective and offered value of which was polysemy but most of all he initiated a discussion about a new communication situation in art from the perspective of changes taking place in culture as widely understood. By indicating features of the communication situation he extracted a phenomenon of the open work of art from a purely aesthetic field of reflection, he perceived relations between our knowledge about reality and the way of representing it, he used psychology and phenomenology to show the polysemy of perception and he suggested the necessity of conducting interdisciplinary studies on "works in progress"<sup>1</sup>, dynamic arrangements which for the purpose of our considerations we will call interactive texts of culture. I refer to Eco's text not only because I am convinced it constitutes a specific founding document of the poetics of interactivity but most of all to take advantage of the definitions and terminology proposed by him, which – despite being much ahead of its time of phenomena defined as interactive – seem surprisingly accurate and useful in studies conducted on such phenomena.

A key and, arguably, the most disputable term is the very notion of poetics. First, it should be quoted from Eco that: "the direction which from Russian formalist follows as far as to modern successors of the Prague structuralists understands 'poetics' as a study on linguistic structures of the literary work of art"<sup>2</sup>. However, the author of the cited observation reviewing the history of poetics and analysing the present cultural stage of the West through open work poetics clearly sympathises with the understanding of the term promoted by Valéry. Applying the term of "poetics" to every kind of art, Valéry spoke of

<sup>1</sup> They constitute a group of "open" works separated by Eco, the main feature of which is "the invitation to create the work together with the author", U. Eco, *Dzieło otwarte. Forma i nieokreśloność w poetykach współczesnych*, transl. J. Gałuszką, Warszawa 1973, p. 53.

<sup>2</sup> Ibidem, p. 8.

creation that came true in the work, about making that created, about modalities of this act of production that aimed at constituting an object keeping the act of consumption as a goal. For me – adds Eco – the sense of poetics is similar to the classic one which means it is not so much a system of constraining rules (*Ars poetica* as an absolute norm) as a program of action arranged by the artist gradually, a project of work production consciously or unconsciously prepared by the artist<sup>3</sup>.

Of course, for any interactive production the status of the artist/addresser has been constantly subject to polemic speculations concerning such proposals, mostly due to the quite obvious fact that the whole spectrum of roles assigned to the addresser has been taken over by a necessary and non-negotiable element of modern communication acts which is not the recipient any longer but the user. Poetics understood as "making that creates" becomes an adequate context for considering such receiving practices that are production acts resulting from the modal nature of the work. Such an understanding of "poetics" is also indicated and justified in a remark by Mayenowa commenting Todorov's *Poetics*:

Only assuming that each expression is mediated by laws inherent in the material of which a given work is constructed, that this material imposes its rights and constitutes a filter transforming the original experience energy and that the very tradition of creative activity contributes additional systems of rules, only then does a discipline such as poetics gain its own importance<sup>4</sup>.

Then it appears that if the term of "poetics" is deprived of a strictly literary context in which it is used most frequently, it becomes a very useful term quite precisely reflecting a goal of the present study, i.e. an attempt to grasp general rules that

<sup>3</sup> Ibidem, p. 8.

<sup>4</sup> M. R. Mayenowa, *O perspektywie poetyki Inaczej*, [In:] T. Todorov, *Poetyka*, Warszawa 1984, p. 108.

characterise dynamic arrangements emerging in the field of modern culture and that are not only a sequence of words.

So, if one assumes that speaking of "poetics of interactivity" seems to be terminologically and historically justifiable, there is still one and probably the most important issue which is an attempt to answer a question of what this "poetics of interactivity" – at least in its assumptions – would be? Two streams can be identified in considerations of phenomena that have emerged in modern culture in the era of digital technologies. The first one (also chronologically) was founded by the early so-called hypertext theorists who used to include such authors as George Landow, Michael Joyce or Stuard Moulthrop. The term is quite accurate as they dealt mainly with theory, i.e. speculations referring to what hypertext is and consequently, what interactivity is in the context of the post structural or postmodernist theory of literature. As a result of accepting such a research attitude it was concluded that the hypertext was, in fact, to be a materialisation of the postmodernist theory of the literary work.

The term "text of culture" enables us to encompass a verbal as well as iconic and accompanying sound information organised according to a particular strategy in a dynamic arrangement but still giving the opportunity to identify all the elements as distinct parts. Although a definition of the very term "text" has become broader and broader (including linguistic communications as well as those that do not use any recognisable semiotic systems), we use the word regardless of the medium through which a given text is being received. The necessity for using such a capacious and slightly enigmatic phrase as the "text of culture" obviously results from the fact that in the case of new media we are dealing with a numeric representation which means that all the objects existing thanks to them have been created with the use of a numeric code and can take any form, regardless of the medium. In the case of print, photography or film the very technologies of recording referred directly to the specificity of the medium. Contact with a particular type of information – a written text, a motionless picture, a motion picture or a sound revealed the specific nature of a given medium. Since, in my opinion, an attempt to formulate poetics i.e. to indicate, understand and describe general characteristics and the action program followed by dynamic texts of culture constitutes an effort to create a particular theoretical model, both explaining and justifying their presence in culture, I have proposed such categories of description that make it possible to take into consideration various media owing to which they can function. However, it should be added that in the case of electronic texts these specific characteristics of "medial" poetics, combining naturally the text and the medium in all the other cases, here play the role of what Lev

Manovich called a "cultural layer" composed of information identified by the individual and not by the computer.

The language of cultural interfaces – writes Manovich – is largely made up from the elements of other, already familiar cultural forms [...]. Cinema, the printed word, and HCI: each of these traditions has developed its own unique ways of how information is organized, how it is presented to the user, how space and time are correlated with each other [...] they are the three main reservoirs of metaphors and strategies for organising information which feed cultural interfaces<sup>5</sup>.

In contrast to the aforementioned "cultural layer", in the other layer called by Manovich a "computer" one uses completely different categories. They include: processing and capacity, searching, selecting, functions and variables, etc. The both layers contribute to a double identification system; one of them is developed by the individual on the cultural level and the other one by the computer.

The studies on interactivity range from precise, mathematical communication theory to narrative theory including in the scope of the search such disciplines as sociology, cognitive science or phenomenology while at the same time interactivity is considered to be an important factor in designing interfaces of the user in HCI (*Human Computer Interaction*). All the contexts make it possible to realise a variety of both social and cultural phenomena that may be contained in this term. For the purpose of the present consideration I propose to regard interactivity as a quality of such a communication situation in which we experience informational feedback, assuming at the same time that it requires three elements for its existence – a text, a medium and a user. As we can see in the following considerations, the dynamic arrangement which a dynamic text, is no longer subject to description in categories of form or structure, and has no inherent qualities that make it recognisable – it is more adequate to regard it as a process of transformation. Considering even only two or three possible types of the user's activity, the user's perceptive relation towards the text and the shape of it, it is possible to see the nature of changes by which the text and the scope of its poetics have been affected.

### Interactivity and participation

If one assumes that interactivity is connected with the existence of a modal text that undergoes transformations in

<sup>5</sup> L. Manovich, *The Language of New Media*, Cambridge 2001, p. 83.

the process of "reading", the question should be posed as to what range and type of changes occurring in this process are defined as interactivity. Does the very fact of taking any action by the user is sufficient for constituting this characteristic? Or does only action having a causative impact on the environment in which the text is presented allow us to speak of interactivity? A system to be defined as interactive must react to the actions of the user; however action does not mean participation. Actions taken by the user to set a dynamic text in motion include various types of activity bringing different effects.

Obviously it can be assumed that each system is interactive if it operates on the basis of feedback: it reacts to a given type of action. The category of interactivity can be also used for more complex arrangements and can be measured depending on what type of action is taken by the user:

- activity (its measure is the frequency of using the interface),
- causativeness (taking actions preceded by taking a definite decision and making a choice from a relatively large number of possibilities that significantly determine the progress of a situation),
- participation (the user plays a role assigned by the system and the user's actions take place on a symbolic or a fictional level).

According to Mark Meadows, successful and full interaction must be preceded by certain processes and must result in a reciprocal influence of both parties taking part in the process. The first step in the communication act understood in such a way is observation – recognising the system and action possibilities (becoming acquainted with the interface) to acquire a skill of functioning in a given environment. The second stage in the process allowing interaction with the system involves exploration – functioning in the environment. The user acquires knowledge concerning rules forming a basis for interaction, i.e. what can and cannot be achieved in a given system. As Meadows writes, it is a "process of unintentional discovery, not conscious change"<sup>6</sup>. It is only the next step that involves what is most frequently understood as the essence of interaction: the user makes a conscious change in the system. This means that the user takes a certain specific action on the basis of a certain context. The awareness of the user refers both to possibilities of taking an action, i.e. combining an action in real time and space with its effects on a symbolic or fictional level and refers to the knowledge of the context in which the situation takes place.

In order to make the user effect such a change, the system must not only allow it but it must also motivate the user

<sup>6</sup> M. S. Meadows, *Pause&Effect. The Art of Interactive Narrative*, Indianapolis 2002, p. 45.

accordingly. The three stages of the process making interaction possible result in another attempt to change but this time it is the system that undertakes to influence a decision and action of the user. Though the last stage may seem controversial, interactivity perceived in such a way forms an exchange of symbolic meanings on the "response-to-response" basis. Each interaction – irrespective of what or who it refers to – is based on the knowledge of certain rules and the ability to adjust to them. However, it is still only one of conditions for its existence. The feeling of participation in the process develops together with the growing familiarity with the context of actions taken in a symbolic dimension and with unpredictability concerning the results of the action taken. The latter feature of interactive systems makes it possible to divide them into the closed ones (fully predictable) and the open ones (hardly predictable or predictable to some extent).

### Interactivity and text

First, one should consider the way in which the very term "text" should be understood in the context of interactivity. The process can be facilitated by categories proposed by Philippe Bootz. He distinguished three types of texts: a written text, a text seen by the reader and a text construed by the reader in a mental process of interpretation<sup>7</sup>. An interactive written text is just a hypertext, i.e. non-sequentially written text fragments the reading of which takes place in an undetermined way<sup>8</sup>. In the case of non-interactive texts, the distinction between the text written and seen by the reader does not make too much sense or in other words, it is hardly useful. If a text is written as a determined series of fragments, having a form of a coherent sequence then it is read exactly in such a way. It is completely different in the case of a text that gives a chance to read optionally selected fragments or to arrange the order of reading them. The distinction between the written text and the read text makes it possible to understand the latter not so much as a collection of all possible penetrations provided by an interactive work but only – or maybe as much – as what is scanned by the recipient's eye as a result of contact with it. In regard to mental operations that take place in the reader's mind being in contact with a given text only one fact can be stated with no doubt: this type of activity is common to absolutely all readers in contact to

<sup>7</sup> Cf.: M. L. Ryan, *Narrative as Virtual Reality*, London 2001.

<sup>8</sup> This does not mean "Completely optional". The degree of determination obviously depends on a degree of relations with other text parts; the more related the text is to other fragments, the less determination. And the other way round.

absolutely every text. This happens no matter whether the text is a determined sequence of words/images or it gives a chance of reading it in two or more possible ways – it will always be subject to the process of interpretation. In the case of a text in which what is written is at the same time exactly and inevitably what is read, one may ponder over a dilemma as to whether the text's meaning is inherent in its integrity or whether the process of its reconstruction and meaning depends on individual characteristics typical of each reader. However, if one considers this aspect with reference to the interactive text, it is difficult to verify the interpretation on the basis of the unstable arrangement. Simply speaking, there are too many invariables to propose any interpretation model.

### Interactivity and change

In the above considerations, interactivity was treated as an exchange of actions and symbolic gestures. It was also stated that the interactive text was a dynamic one. If one accepts it, the following question should be posed: what actually undergoes change in the process of reading the text? In my opinion the interactive text is dynamic in a way similar to that in which reality is dynamic. And more specifically speaking, in a way the dynamics of reality and cyberspace in general was described by Pierre Lévy in his book *Becoming Virtual*<sup>9</sup>. A key to understanding the dynamic process in question is the philosophical meaning of the term "virtual" as "potential". According to Lévy, the "virtual" only functions as the "false" or the "imaginary" in ordinary consciousness. In the philosophical sense, virtuality is a dimension of reality, one of two possible states it can take. The virtual is not the opposite of the real but of the actual. Virtuality and actuality are two interchangeable modes of the same reality – an oak tree is present in an acorn in a completely real way although not in an actual one yet. The "virtual/actual" pair of terms seems surprisingly adequate to describe transformations experienced by the interactive text, especially in the context of its characteristics proposed by the philosopher. It is described with the following features:

- the relation of the virtual to the actual is one-to-many;
- the passage from the virtual to the actual involves transformation and is thus irreversible; actualisation is an event in the strongest sense of the term;
- the virtual is not anchored in space and time; actualisation is the passage from a state of timelessness and deterritorialisation to an existence rooted in both time and space;

<sup>9</sup> P. Lévy, *Becoming Virtual: Reality in the Digital Age*, trans. R. Bonono, New York 1998.

— the virtual is an inexhaustible resource; using it does not lead to its depletion.

In Lévy's opinion actualisation corresponds to creation, invention of the form on the basis of dynamic configuration of actions and purposefulness. It is something more than a choice made out of existing possibilities. It is rather connected with creating new qualities and transforming ideas. The interactive text dynamics does not consist only in a single act of actualisation and it is not only an act of anchoring in space and time of a virtual aspect. The dynamics of this process assumes also a return to virtuality. The real "becoming" – according to Lévy – does not exist without a context of its potential existence. In other words, if actualisation consists in the presentation of a particular solution to a problem, then virtualization is a return to the very problem. This pair of terms also makes it possible to define quite precisely the non-interactive text as an actualisation that has already been made, as extraction of particular qualities from a given paradigm. An inevitable feature of the dynamic text would then be an actualisation of its potential; however, a number of potential solutions cannot be infinite because there are as many of them as the system assumes.

### Interactivity and poetics

The text understood in such a way certainly constitutes a whole but at the same time it is a fragment of a bigger structure from which it was extracted. This paradox typical of the interactive text may be considered to be its most important quality. The unquestionable rule for the functioning of the interactive text of culture involves making a particular choice but also not making another one. Since if one decides to take specific actions then, in the same way, one resigns from taking all other actions that are offered, made possible or made available by the interactive text.

The acceptance of such a situation in a communication act which is a contact with the interactive text of culture may be facilitated in my opinion by three terms that form a program of this text's functioning, i.e. its poetics.

Firstly, I would suggest accepting non-linearity as not so much a negation of linearity that is typical of texts of traditional poetics but as a strategy inherent in the interactive text that makes it possible to transform it. However, it should be made clear that the transformation does not result in its destruction or loss of identity. It means that when considering interactivity as a text quality, one can identify its parts with the text itself. While reading a hypertextual fiction, e.g. *My Body* by Shilley Jackson or playing a computer game, it is

possible to easily identify parts of the text as fragments of a greater whole entity, regardless of transformations which they undergo under the influence of our actions. The interactive text is not wholeness in the Aristotle's sense – its identity is not determined by a sum of precisely placed parts. It is recognisable wholeness in contrast to action itself based on a dynamic mechanism, e.g. searching websites. In this context, similarly to the view presented by Espen Aarseth in her book on the text as ergodic arrangement<sup>10</sup>, non-linearity should be perceived as a stylistic figure being a characteristic of such poetics or such a program of functioning that assumes more than one actualisation of the text.

The fact that the interactive text functions as a whole though it also appears as a fragment to the reader results in the reader's search for wholeness even when there is no proof that those fragments used to form the entirety. This kind of impasse is, so to speak, the main stylistic figure of the mechanism for the functioning of the interactive text of culture. This is an *aporia* in the most literal sense of the word, i.e. a certain difficulty in understanding, apparently impossible to be resolved but still having a sound basis for its existence. An *aporia* is also a quality of the process of understanding or interpreting a text, regardless of whether it is a static or a dynamic text. In the first case, as Aarseth explains: "we are not able to make sense of a particular part even though we have access to the whole text, the hypertext *aporia* prevents us from making sense of the whole because we may not have access to a particular part"<sup>11</sup>. Of course, an *aporia* cannot exist without an epiphany. If the first corresponds to a quest then the other is a recovery, a sudden revelation that replaces the *aporia*. This pair of stylistic figures that are interchangeable in the creation of the interactive text of culture constitutes, similarly to the virtual/actual pair, the dynamics of the hypertext discourse.

### Interactivity and rhetoric

Going back to the term "polysemy" mentioned above, one may pose the question of whether there is any way to become familiar with the polysemy of the dynamic arrangement that is the interactive text of culture. It should be made clear here that non-interactive texts, i.e. those that cannot be changed, use the rhetoric of persuasion. They offer a certain point of view and attempt to convince the recipient to it. The interpretation of static texts usually tends to extract

their rhetorical aspect and consists in, if not accepting, then at least examining a presented problem solution or a proposed view ("how it is in the real world?"). Does it mean then that the interactive text of culture has no rhetorical aspects? Not really. Next to different poetics being a different program of action, with different stylistic devices serving its production, a different type of persuasion also emerges. Both the first and the second types of rhetoric were described by Seymour Chatman who ascribed a different function to the latter. If the first rhetoric tends to convince the recipient of certain truths concerning the philosophy of life, then the other according to Chatman is „concerned to suade me to accept the form of the work"<sup>12</sup>.

Although the latter type of rhetoric validates thinking about interactive texts also in a persuasive aspect, one may ponder whether it actually exhausts the subject in a satisfactory way. Certainly the interactive text may be perceived as a variation concerning formal solutions or as exploration of potentials offered by the medium. It may also hide a slightly deeper reflection on the very act of persuasion. In the case of a dynamic text, one can encounter a situation in which nobody attempts to convince anybody to accept any truth concerning the world or any other issue. The rhetoric of the interactive text of culture consists in making the recipient accept the work's form together with its dynamic discourse and polysemy originating from it.

### Interactivity and art

When considering issues relating to art in the context of interactivity one must inevitably face a dilemma unfamiliar to the traditional aesthetics. The most frequently posed questions can be reduced to three, not necessarily mutually exclusive, problems. As Manovich indicates, the first question is: "Is it necessary for the concept of aesthetics to assume representation?". If one wants to confirm the aesthetic status of a work of art one should verify a traditional notion of representation, broadening it with the dimension of actual actions taken by the user in real time which means one should answer the question negatively and propose a new category of representation. Another important issue raised by the theorist is: "Does art necessary involve a finite object?". Similarly to the previous question, it is worth considering changing the paradigm and making an attempt to define a work of art not as a finite object but rather as an object existing through

<sup>10</sup> E. J. Aarseth, *Cybertext. Perspectives on Ergodic Literature*, London 1997.

<sup>11</sup> *Ibidem*, s. 91.

<sup>12</sup> S. Chatman, *Coming to Terms. The Rhetoric of Narrative in Fiction and Film*, London 1990, p. 203.

actualisation, i.e. extracted from a certain number of virtual states. There is no longer a single object but rather images of the object and the number of them equals the potential actualisations. The last question posed by Manovich is: "Can the user's search for information be understood aesthetically?"<sup>13</sup>

<sup>13</sup> L. Manovich, *op.cit.*, p. 152.

As a matter of fact, only if one answers it positively, is the discussion about art and interactivity possible. In this study I made an attempt to present some of the solutions proposed in this regard. Certainly one can expect further interesting search examples, hopefully producing more satisfying answers.