Understanding New Media Art Through Close Reading: Four Remarks on Digital Hermeneutics

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Abstract

With the increasing importance of digital media in all areas of social and cultural life, it is necessary to define a conceptual framework for understanding the social changes it generates. This implies to introduce students and readers to the new methods of critically interacting with media in digital culture. Conference presentations and publications develop the theoretical background and methods needed in scholarship and education to approach the new topics. At various universities, scholars discuss the consequences of such developments under the umbrella terms of digital literacy, digital humanities, or "electracy." Nevertheless, scholars also must concentrate on the aesthetic aspects of digital media, investigating in new artistic genres emerging from or changes in existing genres brought about by digital media. This, however, should not happen on the ground of a metatheoretical discussion or thematic reading, as was common in the 1990s, when the understanding of the technology (such as hypertext) as the embodiment of contemporary critical theory distracted critical attention for the actual work and led to misinterpretations of the theory applied in favor of establishing a link between this theory and technology. It is important not to reduce any specific example of digital art to the status of typical representative of some aspect of digital media or of some genre of digital art. It is time to pay attention to the specificities of particular works. This does not mean that we should abstain from discussing a specific work as an example of a genre, or try to refrain from understand a genre itself as a signifying form in contemporary culture. If close reading aims at critical reading, making generalizations and suggestions concerning certain interdependencies between the particular artifact and the broader cultural situation will be inevitable. The crucial questions are where one starts, how much attention is paid to the work at hand and what, first of all, are the central aspects of a hermeneutic perspective in digital media. The following text proposes a few general ideas towards the development of digital hermeneutics.

1. Understanding New Media Artifacts by Using Traditional Criteria

One could argue that traditional criteria cannot be applied in discussing new media artifacts and that digital arts require a completely new methodological approach. However, a theoretical discussion of digital arts is best grounded in a combination of new and old criteria. Genre theory, for example, is still a valid analytical tool, along with well-established concepts such as story, plot, and character, which apply in computer games, interactive drama, and hyperfiction. Other concepts—allegory, isotopy, rhyme—as deployed in classical rhetoric need to be adapted to describe the stylistic devices of digital literature and art. For example, if in conventional literature allegory is understood as a narrative representation of ideas and principles by characters and events, in digital literature, this representation may be provided by the animation of words. Similarly, in the context of digital literature, the notion of rhyme may be extended beyond the repetition of identical or similar sounds in words to the repetition of identical or similar animation as a new way of creating paradigmatic relationships between the elements of a kinetic text.

With the link—the primary characteristic of hypertext—as a tool to arrange text segments, one must also develop an understanding of the semantics of the link and its contribution to the overall meaning of the text. But even here, the discussion may benefit from criteria established in traditional aesthetic discourse. If, for instance, poet-programmer Loss Pequeño Glazier claims that "writing an 'href' is writing" (2002, 103), one wonders how an Hypertext REFerence coding element ought to be treated in relation to the literary qualities of the generated text. In natural language, the difference between marked and unmarked text language is based on the comparison with the common, natural use of the language; undermining established rules and habits, be it vocabulary or syntax, makes a difference and may constitute "the literary." By analogy to natural language (but in a certain way also to music or painting), the less ordinary, less expected link would most represent the literary. Such approach to literary texts naturally disqualifies linking between identical or similar words or providing an explanation of the word linked, which in nonfictive HREF writing is commonly used and is entirely in accordance with the principles of usability. Against the general grammatical rules of hypermedia discourse, the incongruous, seemingly irrelevant link is likely to be considered inappropriate rather than being identified as a poetic element: our sense of the literary collides and contrasts with media literacy.

Another stylistic aspect of HREF writing is the number and prominence of links that connect a text segment—lexia or node—within the net of a hypertext. A node hardly linked and therefore hardly present functions like the narrative trope of dramatic irony, containing a message not accessible to every reader. Because this message is not hidden in sophisticated allusions, intertextual references, or complicated

reasoning but simply in the labyrinth that a hyperfiction represents, the narrative trope is no longer based on readers' education and sophistication but on their persistence or fortune in clicking through the nodes of a hypertext. Thus, the readers' deeper understanding is an effect of their contact with text on the surface of its mere appearance, which is itself an ironic take on the concept of irony.[1]

The same attention needs to be paid to the digital image, the visual symbolism of which every bit is as important for its deeper meaning as the specific effect the code or user interaction has on the surface. Moreover, if an interactive installation applies textual or visual metaphors and symbols that are established in contemporary culture—such as the shadow in Scott Snibbes' *Deep Walls* (2003) and the light show in *Vectorial Elevation* (1999/2000) by Rafael Lozano-Hemmer—one ought also to investigate how their connotations influence the meaning of the work. Because the trademark of such an installation is interaction, it is necessary to physically enter the interaction with the result of a complex interplay of physiological and psychological functions during the receptive process. This does not, as some scholars would have us believe, invalidate the Cartesian paradigm that focuses on cognition and neglects sensual aspects in experiencing reality. New media theory is right to stress the central role of the users' physical engagement in interactive art, in contrast to the mere cognitive engagement in perceiving a painting, sculpture, or text. However, besides the physical engagement, it is still possible, even crucial, to approach the work from a hermeneutic perspective. It is mandatory not only to understand the operational rules of the piece or the "grammar of interaction"—that is, the modus of interaction the artist made possible within the interactive environment—but also to reflect on its specific symbolic (Fujihata 2001). In this sense, the physical interaction should not overwrite the cognitive interaction with the work but rather become part of it.

2. Hermeneutic of Invisible Text

The hermeneutic to be developed is one of the hidden text in a literal and metaphorical sense. The text is literally hidden as code behind the interface. There are, of course, more or less easy ways to access the code source. However, it is normally not a factor of the experience of the artifact itself and often not accessible at all. "The Code Is Not the Text (Unless it Is the Text)," reads the title of a 2004 essay by John Cayley, meaning that code is only text insofar as it appears as text but not if it generates text and its behavior.[2]

Here, Cayley applies a narrower concept of text to point out the essential differences between writing code and writing literature. In the discourse of semiotic code, the

use of the broader concepts of text and writing includes text even when it is not the text on the screen.

This hidden text can affect the text that is seen: it can substitute words with others, create different links between words, or turn the text from an object to an event through animation and temporalization. This impact demands that we read not only the words, but also what happens to them. If we use the broader semiotic concept of text, the same is true for the substitution, linking, and "eventilization" (Hayles 2006, 182) of visual objects or sculptures and its grammar of interaction. The text metaphorically hidden in these manifestations is the text between the "lines," the connotation of a linguistic, visual, sonic, or performative element. Thus, the hermeneutic to be developed is located at the intersection between formal analysis and interpretation. One has to examine the formal structure of a given artifact—its elements, interface, and grammar of interaction. One also has to discuss what the components and factors represent, or rather how they may be perceived by the audience.

It should become clear that the interpretation to be undertaken is located at the intersection between the different semiotic languages applied. Whereas linguistic signs are divisible into distinct units, each meaningful on its own, a visual sign only gains meaning by shaping with other visual segments to a representative whole. However, although visual signs often have established specific meaning—the red color of a dress is connoted as much as the specific place of a person on a canvas—the various actions and interactions triggered by code are by and large unconnoted.

A work by Ken Feingold might serve as an example: *JCJ-Junkman* (1995/96), an interactive work is programmed in a way that the interactor is unable to click on a sequence of images to trigger certain reactions. Most likely, this work could be interpreted as telling us that "we have no way of controlling the flow of datatrash" (Huhtamo 1996, 50). More open to various interpretations is Bill Seaman's interactive video-sound installation *Exchange Fields* (2000), in which interactors have to immobilize a specific part of their body to trigger prerecorded video clips of a dance focusing on that particular body part. The necessary immobilization can be read as a symbolic substitution of the user's body by the projection of a foreign body on the screen, which may be linked to a criticism of the representation of the body in mass media society. The delay with which the program presents the corresponding video clips seems to underline the fact of replacement, although, as Seaman explains, it was actually not intended.

3. Signs Without Meaning

In digital art, the demands or constraints of technology may give rise to unintended situations and signals with no connection to the work's significance. A specific feature may actually be a bug the artist was not able to fix, or it may be there for other nonaesthetic reasons. In his work *Body Movies* (2001), Rafael Lozano-Hemmer, for example, reports of a brief blackout of the images as slides change in his piece *Body Movies* (2001). Although at first he did not like this disruption, he is now pleased with the "silence" this rupture introduces and considers this technological limitation "a fundamental feature of the piece" (Lozano-Hemmer 2002, 154). To give another example, in computer games the scenery is sometimes submerged in fog. In a movie, painting, or book, this would be appropriately understood as the expression of a certain atmosphere or mode of perception. This is principally also true in 3-D graphics, where *fog* is a technical term defined as a rendering technique used to simulate atmospheric effects such as haze, fog, and smog by fading object colors to a background color on the basis of distance from the viewer. However, in computer games, fog—that is, allowing the presentation of objects in a blurry way—may also simply serve the function of saving memory capacity to speed up the game. Fog need not be a metaphor; it can also be a technical requirement. It's meaning differs depending on the medium.

The same is true for the design of text in an interactive drama such as *Façade* (2005), a text generator that reacts to the text input of the user, who thus influences how the marriage crisis of her longtime "friends" Grace and Trip, the two cartoon characters on the screen, develops. Michael Mateas and Andrew Stern (2007, 197), the authors of this piece, describe various ways to reduce the number of variations to be written for different player inputs and game developments:

> Previously, we set the design goal that each beat goal will be written with dialogue variations for each combination of tension level (low or medium) and each player affinity value (neutral, siding-with-Grace, siding-with-Trip), for a total of 2x3 = 6 variations. However, some of these contexts are similar enough that they can be collapsed together. Specifically, in the case of a beat about Trip suggesting drinks to the player, as authors we could imagine that Trip would act with similar levels of braggadocio if he has affinity with the player, or if the affinity is neutral, while acting differently if Grace has affinity with the player […]. Each of these simplifications removes a context from the list, reducing the total to four, thereby reducing the burden for FightOverFixing Drinks by 33%.[3]

Mateas and Stern are certainly right with their pragmatism, although they say "similar" when they actually have Trip using the *same* dialogue variation in both cases. The difference may be negligible. However, it is a loss of subtlety resulting

from an interest in limiting the text variations. Another example is the design of the dialogue sequences (ibid.):

> As described previously, each beat goal should have dialogue variation used, in case the beat goal was interrupted by a mix-in and needs to be repeated. However, we can eliminate the need for repeat dialogue for a beat goal if we write the beat goal's dialogue to quickly communicate the gist of its meaning in its first few seconds and annotate those first few seconds as *uninterruptible*. That is, if the player speaks during the first few seconds of such a beat goal, Grace and Trip's response is delayed until the beat goal's gist point is reached—a delay in reaction of a few seconds, which is just barely acceptable for believability. If the gist of the beat goal's meaning is communicated in those few seconds, we can interrupt the beat goal in order to perform a mix-in response to the interruption, and not bother repeating the interrupted beat goal later. This requires writing dialogue such that the minimum amount of content required for the beat's narrative progression to make sense is communicated close to the beginning of the beat goal, with the rest of the dialogue within the beat goal adding richness, color, and additional detail to the basic content.[4]

The personalities of the characters—reacting to the player only after a long delay; giving the gist right away instead of working toward it—are not necessarily a choice of the authors; they are a requirement to keep the interaction plausible despite the technological challenge. As Mateas and Stern (2007, 207) note, "By design, Trip and Grace are *self-absorbed,* allowing them to occasionally believably ignore unrecognized or unhandleable player actions". What in a traditional text would reveal something about the characters in the story in this context instead points to certain characteristics of the underlying technology. Here, digital hermeneutics has to take into account the possibility of such technological determinism.

4. The End or Beginning of the Work

In the culture of remix and appropriation, it is also sometimes unclear what constitutes the artwork. In the installation *Text Rain* (1999) by Camille Utterback and Romy Achituv, viewers interact through their silhouettes, with letters falling downward on a screen landing on anything darker than a certain threshold. Does one need to read the poem from which the falling letters are taken before or after engaging with them? To what extent is Kafka's story "Great Wall of China" part of Simon Biggs's text generator *Great Wall of China* (1996), which creates nonsensical sentences out of the Kafka text? Does the knowledge of the story help understand the generator? As regards *Text Rain*, one can argue that people are able to engage

with the falling letters regardless of the poem used: James Joyce's *Ulysses* has its own autonomous life even without allusion to Homer's *Odyssey*. However, I hold that a major part of the meaning of an installation, generator, or novel is lost if its textual reference is neglected.

As for *Text Rain,* the authors point out in their description of the piece that participants who accumulate enough letters can sometimes catch an entire word, or even a phrase: "The falling letters are not random, but form lines of a poem about bodies and language. 'Reading' the phrases in the *Text Rain* installation becomes a physical as well as a cerebral endeavor." The poem ends with the lines: "turn to nothing: *It's just talk.*" This is understood as a celebration of the aimless conversation, which does not turn into a linguistic message as a practical result. Such aimless talk is exactly what users do in their interaction with the letters in the installation. The letters are liberated from their representational function and present themselves as artifacts within a dialogue with the users, independent and innocent: "For the letter, if it is alone, is innocent: the Fall begins when we align letters to make them into words" (Barthes 1991, 119). The letters have left language and turned into a sculpture or perhaps music. Just as Evan Zimroth's poem "Talk, You" from the book *Dead, Dinner, or Naked* (1993) reflects on the communication of two people going beyond the pettiness of mere concrete information, the installation allows the text to become pure self-sufficient presence. And it is Utterback and Achituv's work with Zimroth's poem that elevates it above the concrete message.

Text Rain is an example of a work where the text leads a double life and thus may be considered both digital literature and digital art, depending on the role the audience allows the text to play. The communication of interactors with *Text Rain* is one of joyful play with letters rather than a serious attempt to decipher the text to distill the poetic message. Thus, the work is primarily not perceived as a work of literature. However, audience members, made be aware of the poem behind the installation, may want to read it after interacting with the installation. Such a peek backstage results in demystification because it reveals the words one could hardly decipher before. It also allows us to understand that the inclination to play with the cascading letters, as opposed to deciphering the overall text, is actually appropriate to the poem's message. This is the more subtle message underlying this installation: the extralinguistic layer of meaning cannot be revealed before the linguistic layer has been grasped.

However, this message will be lost if the used text is ignored. One should not, of course, overestimate the audience's readiness to go and get the text after engaging with the installation. If even people who are experts in the field of digital aesthetics and who have become familiar with *Text Rain* fail to initially realize that there is a poem in the falling letters, and if even academics who know about the poem do not make the effort to access the text and include it in their interpretations, the approach to understanding digital artworks needs to be addressed.

If an installation features text, this text cannot be ignored, even if it remains clandestine within the installation itself. Any serious observer should be expected to take the text into account by familiarizing herself with it and incorporating its meaning in a reading of the overall piece. Yet it is true that James Joyce's *Ulysses* can be understood without knowledge of Homer's *Odyssey.* The story may be equally enjoyable if one does not see Leopold Bloom as Ulysses and Molly Bloom as Penelope and if one does not recognize the vast number of literary allusions. However, only against the backdrop of this essential epic from the origin of Western culture is one able to grasp the connotations opened up by Joyce's novel nearly three millennia later. The text written by Joyce loses complexity without reference to Homer. And so does an installation without taking into account the text employed, especially if the text is culturally charged as much as in the case of Biggs's *Great Wall of China*.[5]

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Notes

1. For a systematic discussion and illustration of classical rhetoric terms with respect to digital literature (i.e., kinetic allegory, kinaesthetic rhymes) as well as various forms of the poetic link, see Saemmer (2009). For a discussion of the dramatic irony of an almost isolated node as well as the visual trope of a mise-en-abyme by reopening the same frame in the right-hand side of the frame (and further in the right-hand side of the frame embedded in the frame, ad infinitum), see the discussion of Caitlin Fisher's hypertext fiction These Waves of Girls

(2001) in Koskimaa (2009); for a close reading of this hyperfiction and the discussion of the nature of a link as utterance of the author or the author's characters, see Simanowski (2002, chap. 3).

2. For an extended discussion of code as a sublinguistic structure and the five ways to write code, see Cayley (2006). Cayley's approach implicitly reacts to Florian Cramer's (2004) understanding of code as text.

3. "FightOverFixingDrinks" is one of the twenty-seven beats (basic plot elements) in Façade. A beat consist of a canonical sequence of narrative goals (beat goals)."FightOverFixingDrinks" is one of the twenty-seven beats (basic plot elements) in Façade. A beat consist of a canonical sequence of narrative goals (beat goals).

4. Mix-ins are "beat-specific reactions used to respond to player actions and connect the interaction back to the canonical sequence" (Mateas and Stern 2007, 192).

5. For a close reading of *Text Rain* see Simanowski 2007, for a close reading of *Great Wall of China* see Simanowski (2011) chapt. 3.