Towards an art of rhetoric in interactive literary works

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Biographical statement
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Abstract
In this contribution, I identify rhetorical figures that are specific to interactive writing: figures of manipulation (meaning gestual manipulation). It's a category on its own, along with figures of diction, construction, meaning and thought. In many computer art works, the artists use the figures of manipulation to introduce a loss of grasp. What is emphasized in such figures is the coupling action/behavior, which could be considered as a basic unit in interactive writing. This coupling can be conceived independently from the medias it relies on. Thus, an a-media approach seems relevant when attempting to define an art of rhetoric in interactive writing.

Keywords
Interactive writing, rhetoric, figure, manipulation, a-media, loss of grasp.
Since Antiquity, the figures have made up a significant part of rhetoric, even though rhetoric should not be reduced to rhetorical figures. Several typologies of figures have been put forward. According to these typologies, figures are generally divided into four main categories:

- diction (e.g. anagram and alliteration),
- construction (e.g. chiasmus and anacoluthon),
- meaning (tropes, e.g. metaphor and metonymy),
- thought (e.g. hyperbole and irony).

Interactive and multimedia writing calls upon certain existing figures, such as the metaphor and the metonymy. For instance, Stuart Moulthrop and Jean Clement highlighted the way in which certain figures could be reinvested in hypertextual writing.

However, I make the assumption here that we can identify rhetorical figures specific to interactive writing: figures of manipulation. It’s a category on its own, along with figures of diction, construction, meaning and thought. Which criteria allow them to be qualified as figures and how do they operate? On the basis of a corpus of interactive computer art works, I wish to examine the meaning produced by these figures. To what extent is the expression "rhetoric of manipulation" adequate to define interactive writing?

1 – A rhetoric of manipulation

One can notice a recurring effect in hypermedia, both in websites and in CD-ROMs: the appearance/disappearance effect. The user rolls over a reactive zone with the cursor of the mouse. A text, an image, a video sequence appears, which disappears when the cursor leaves the reactive zone. The appearance/disappearance effect is here the result of the user’s action. It is very often used for navigation elements: the user rolls over a button, an icon, and another form of this element appears (play on typography, colour, shade…). However this effect can also involve elements of content, not only elements devoted to navigation.

This appearance/disappearance effect is thus exploited in many digital works. But what is the meaning produced by appearance/disappearance? How can it be considered as a figure? The specialist in stylistics Georges Molinié claims that what defines figures is “the absence of correspondence between the expressive system used to convey information and the information itself”, “when the meaning produced exceeds the occurring syntax and vocabulary.”. Let us examine some examples to analyze the meaning produced.

In the work called Alter ego, on the Scriptura et caetera website, this effect applies to the text. By rolling over a word with the cursor of the mouse, this word disappears and is replaced by another word (figure 1). When the cursor quits the reactive zone, this other word disappears and the first word reappears. The author explains the principle: “Alter ego is made up of two independent and complete sentences on top of one another. Each word

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shows and hides its *twin word*\(^6\). In this very simple piece, this “reversible text in which each word shows and hides its double”\(^7\), the appearance/disappearance serves a play on duality.

*Alter ego* proposes two steps: the user *composes* the text by showing one word instead of another (“Zone n°1” in the interface), then he/she can discover the hidden side by showing the two sentences one beside the other (“Zone n°2” in the interface). If the appearance/disappearance is the basis of the combinatorial play between the two sentences, it also allows the author to unveil the writing device. The author shows “the words hidden under the words”.

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\(^7\) Idem.

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Figure 1. *Scriptura et caetera*, by Marie Belisle.

*Days in a day*\(^8\) is another example of a work exploiting the appearance/disappearance effect, but applied to images this time. This work invites us to discover a day in the life of Mr. Brown, in an urban environment. The user has a map of the town which allows him or her to access various places and moments in the day of the character. In several pieces corresponding to different moments, rolling over an image or part of an image unveils the *other side*, a hidden reality. It is the case in the piece called “Miss Purple” (6:30pm in the character’s day, figure 2): the roll over unveils the woman’s naked body.

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7 Idem.

Figure 2. Days in a day: Appearance/disappearance by rolling over an image.

In these two examples, the appearance/disappearance effect - responding to a rollover - provides another realm of possibility for a text or an image, giving the impression that there’s depth lying under the digital surface, depth that can be explored. This figure can unveil the other side of things (a hidden reality) or unveil the creation process. It can also suggest a double meaning, a semantic depth whatever the semiotic form which is used (text, image, video).

However, even if the user has an impression of depth, it is merely an illusion, as Yves Jeanneret points out: “In fact, nothing comes forward from the back of the screen. The only thing that changes is the fleeting state of light particles. A material phenomenon undetectable by our senses.” There is no piling up of layers of pixels. Thus there is no real depth in the literal meaning, but merely an illusion of depth. However, this appearance/disappearance conveys an impression of depth and this is why one may speak of a figure. As I have already pointed out, Georges Molinie defines a figure by “the absence of correspondence between the expressive system used to convey information and the information itself”. Even if such a definition may seem narrow, the principle of a “non-correspondence” stands out: with the appearance/disappearance figure, there is no correspondence between the change in the state of light particles and the meaning produced (depth, unveiling of a hidden reality).

As I pointed out in the introduction, the prevailing typology of figures is the one that divides figures into 4 categories: figures of diction, construction, meaning and thought. Along with these categories, the figure of appearance/disappearance – as I defined it – could be qualified as a figure of manipulation. This manipulation is closely related to the materiality of the text and of the interface, thus contributing to an aesthetic of materiality.

Other figures may be related to this rhetoric of manipulation: the figure of substitution (a semiotic form is replaced by another one by rolling over or clicking), the figure of displacement (dragging and dropping a semiotic form). For example, on the anonymes.net website, a cinetic work which relates the story of a couple, the user is encouraged to discover the young woman’s dream of maternity by dragging and dropping the word “hope” on her belly, thus launching a video. The figure of displacement allows a journey, whether a shift in meaning or a stage in a narrative.

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9 Jeanneret Yves, Y a-t-il vraiment des technologies de l'information ?, Editions universitaires du Septentrion, 2000 (translated by the author).
Although figures of manipulation are everywhere to be found in interactive writing, they are not the only ones. There are other common figures of interactive writing, particularly in digital art. Philippe Bootz has shown that “inversion” should be considered as a figure of speech (inversion content / interface)\textsuperscript{12}. This type of figure makes it possible to play on the architecture whereas a figure like appearance/disappearance is more on the surface level. The figures of manipulation refer to the user’s interaction with the interface. Yet, figures related to the architecture or to the network should be studied along with the figures of manipulation. Another category of figures could emerge, based on the introduction of data and not on manipulation. These figures can be found in collaborative works, but their study would exceed the frame of the present paper. However, in interactive works, figures of manipulation are currently the most frequent and this writing may be related to a rhetoric of manipulation.

2 – An a-media approach

As seen previously, the appearance/disappearance figure could apply to a fragment of text as well as to an image or a video sequence. This figure is common to various semiotic forms and can thus be partly approached regardless of the media\textsuperscript{13} it relies on. Thus, an a-media approach may be relevant when attempting to formalize a rhetoric of interactive writing.

This a-media approach, which focuses on process and not on media, is now explored by several researchers. Hervé Zénouda differentiates “multimodal” and “multimedia” : a “multimodal code takes into account the different characteristics of the modalities it involves, while an a-media structure tries to identify the elements common to these various


\textsuperscript{13} The word “media” is here the equivalent of “semiotic form” (text, image, sound, video).
modalities”\textsuperscript{14}.

This a-media approach originates in previous research works, such as the one led by the music and computer science laboratory in Marseille (MIM) on “Temporal Semiotic Units”. The CD-ROM called Temporal Semiotic Units (TSUs)\textsuperscript{15} offers for instance a new tool for musical analysis. It is the result of a research on the unravelling organization of sound material in time, which helped to identify and to characterize temporal situations called Temporal Semiotic Units. These TSUs form a corpus of prototypic units that exist in every type of music. They can be used as a reference to approach the musical analysis through the time variable. According to this approach, a music piece is composed of different sequences (the TSUs) which organize the musical time. The researchers of the MIM have defined these TSUs (twenty in total), named and classified them: fall, stretching, impulse, heaviiness... Developed at first to analyze electroacoustic music, TSUs are also efficient to analyze contemporary as well as classical, medieval or traditional music.

In 2004, the researcher Xavier Hautbois realized a cinetic visual sequence to experiment a sequence of visual TSUs (conceived from the characteristics of musical TSUs), leading to the conclusion that TSUs allow the description of time characteristics independently from the medias.

A research on the application of the TSUs to the multimedia is currently carried out through the realization of the computer art work Passage 2 (following Passage\textsuperscript{16}) by the artist Philippe Bootz and the composer Marcel Fremiot. Philippe Bootz theorizes his approach in a paper called “Towards compelled and a-media multimedia”\textsuperscript{17}. He suggests a conception of “multimedia as an interaction between autonomous objects endowed with behavior and not only an association of media. Such a definition can apply only if media can be broken up into objects and if the behavior of the various objects obeys a unique grammar which allows to build interactions.” He emphasizes the notion of “behavior” of the different objects: “The visual aspect of a dynamic work is formed by what I call “horizontal editing”: the overlapping of autonomous and basically asynchronous objects. [...] Each object has a behavior, a dynamic.”

However, concerning the figures of manipulation, it seems less relevant to emphasize the interactions of objects between each other than the interactions between these objects and the user.

Although an a-media approach seems adequate when it comes to defining an art of rhetoric in interactive writing, this approach cannot be the only one. Taking into account the semiotic characteristics of the various elements displayed on the screen is necessary. As Yves Jeanneret reminds us, “far from being simple and homogeneous, this semiotic production is extremely complex and heterogeneous”. We must beware of the digital “integration” myth. As Yves Jeanneret puts it: « If the theme of immateriality erases the reality of the screen itself, the theme of integration flattens the complexity of the visual elements. Indeed, in the processing of information, integrating data is equivalent to boiling down the heterogeneity of support to the homogeneity of a binary code. But to associate medias means, in the building of a textual form, reconciling, linking up and combining heterogeneous cultural codes, while

\textsuperscript{14} Zénouda Hervé, « Images et sons dans les hypermédias », in H²P'TM'05, Hermès, Paris, 2005 (translated by the author).
\textsuperscript{15} Les Unités Sémiotiques Temporelles – Nouvelles clés pour l’écoute, MIM, Marseille, 2002.
admitting this heterogeneity: other forms, other traditions, other regimes, other origins, other temporalities, etc.”

Yves Jeanneret underlines that it is necessary “to consider forms and media transformations created thanks to the computer (and often referred to as the “multimedia”) as written forms and transformations of the writing space”.

Insofar as “computerised media are homogeneous technical management systems of culturally heterogeneous signs”, “the writing-reading process is a confrontation between a technical unity and the necessity to rebuild cultural complexity”. This complexity is first of all the complexity of the relationships between the semiotic forms themselves. Rather than integration, one should speak of *intersemiotisation*, which highlights the idea that the medias themselves are signs. Even if the precise analysis of this intersemiotisation cannot be ignored on the reception side, adopting an a-media approach is promising on the conception side.

Let us consider authoring tools. A web page created with the web editor *Dreamweaver* is presented as a collection of objects endowed with their own characteristics and behaviors. The main quality of *Dreamweaver* lies in the management of these behaviors (“Behavior” panel in the interface) which are linked to objects. A similar “Behavior” panel is available in the *Flash* software from the same editor *Adobe*. A behavior is meaningful when related to an action of the user. The coupling action/behavior could as a matter of fact be considered as a basic unit in interactive writing.

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18 Idem, p.117-118.
20 Idem, p.118.
21 Software by *Adobe* company.
The figures of manipulation rely more on the notion of behavior than on the notion of media. For instance, as stated before, the appearance/disappearance behavior – responding to an action by the user – expresses unveiling. Of course, this figure can have a more specific meaning depending on the context, but the general meaning (unveiling) is asserted, regardless of the media. Thus, an a-media approach may be relevant when attempting to define an art of rhetoric in interactive writing.

3 – The loss of grasp

As seen previously, the figures of manipulation are based on the control of certain elements by the user. In The language of New Media, Lev Manovich analyses the influence on the digital world of pre-existing cultural traditions. According to him, the digital language (and “cultural interfaces”) is constituted by the contribution of three cultural traditions: the printed word, the cinema and the human-computer interface (e.g. the control panel on a car, plane or any other complex machine). If, for Manovich, the most influential tradition on the web is the audiovisual one, the tradition of the control panel is however very strong. While the audiovisual tradition refers to a way of controlling the flux, the control panel refers to the idea of control by the user. In software ergonomics, we can find complementarity between “guidance” and “explicit control”.

Control of the user and control by the user are not only intimately linked, but their crossed relationships seem to be a specific mode of writing in digital works. Their constant co-presence results in a tension that produces interactivity. However, this very idea of tension is an answer to one question only: who/what manipulates? The user or the technical system? This level is that of a classical human-machine interface approach (HCI). In fact, even this question remains within an ergonomic approach while one should also consider an anthropological one. So the question is to know how the world of the user (or the supposed worlds of the user) is or is not taken into account. In Experts and forgers, Francis Chateauraynaud and Christian Bessy suggest a model of “grasp”. Grasp emerges from the meeting between markers - points of reference - (which depend on conventions), and habits (which are localized practices). According to the authors, one summons two kinds of elements to have a grasp on one’s environment:

- elements based on conventions;
- material elements to be found in the immediate environment.

It is these dual elements which characterize the concept of grasp.

Giving control to the user does not necessarily entail giving him grasp in a traditional anthropological meaning: the user doesn’t always have the frame necessary for the grasp. At that point one sees two positions for the user:

- in control / under control;
- with grasp / without grasp.

Conversely, the user can have less control and paradoxically more grasp. Instead of thinking in terms of the user being in or under control, one should think of the user having or not having grasp. Or rather it is a question of identifying the various possible combinations. Indeed, the user can be in control and either with or without grasp, just as the user can be under control and either with or without grasp.

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For instance, on the web, full screen display and disactivation of the browser’s functionalities is an example of control by the system and of loss of grasp for the user. The user loses the points of reference of the browser’s interface.

Now, preselected temporality, which is a form of control by the system is also a possible grasp for the user. Indeed, the user finds himself in a frame which he/she is accustomed to, that of the time flux to be found in audio-visual type works. This is the case in the cinetic works – often developed with the Flash software – which are played without any interaction opportunity for the user.

Just as interactive works rely on this constant play between a controlling and a controlled approach, they also rely on grasp and loss of grasp. The idea is to get the user involved and to destabilize him/her, so that he might possibly enjoy becoming disoriented and playing with the work.

Thus, very often, the loss of grasp is the basis of computer art works. 1997 is the year Ceremony of innocence was created. It is a work made up of a succession of postcards from a painter and one of his admirers, thoses postcards being a series of interactive pictures. Each postcard is an enigma that the user has to solve by doing certain things. When the enigma is solved, the card turns round then and the user gets to read the message which is at the back of the card. The control of the user is obvious in the linear succession of the postcards (58 in total) that the painter and his admirer sent each other. Each card has two stages : an interactive picture (the front) and the text (the back of the card). For each interactive picture, the user is expected to do things in a predefined order. However, the whole CD-ROM is based on a play between grasp and loss of grasp. Let us take the example of the first postcard (figure 8) : after a while, the bird shown on the picture eats the cursor of the mouse. Immediately, the cursor disappears from the screen. At that point, one may think that the user is totally under control, since he/she can not use the mouse in the way he/she is used to. Yet, moving the mouse (whose cursor is invisible on the screen) still has an impact on the elements of the postcard. The functionality of the mouse is in fact not disactivated. One can observe a play with the loss of grasp. By losing the cursor of the mouse, the user has also lost the grasp which is a point of reference for him/her. Yet the user can now achieve the task expected from him/her. The card turns round finally and the text is read by the character who wrote the message. At that point, a slow pace is imposed on the user : that of reading aloud, which cannot be interrupted. Once again, the user is in a position of grasp.

26 Let us compare the various ways of playing the time according to the media. The audiovisual media are very controlling : the duration of a film coincides with the viewer’s flow of consciousness. On the contrary, the printed text is far less controlling : readers read texts at their own pace. With the digital medium, no preset pace is imposed to the user : the pace depends on the degree of interactivity present in the work. The user is alternatively controlling or controlled.
As in *Ceremony of innocence*, numerous works exploit this strategy of the loss of grasp. *Don’t touch me*\(^{28}\), by Annie Abrahams, displays the photograph of a woman lying on a bed, as a voice starts telling a story\(^ {29}\). But if the user rolls the cursor of the mouse over the picture, a text immediately appears on the screen, expressing the woman’s refusal (« don’t touch me ») and she changes positions. The vocal tale stops immediately and restarts from the beginning. On the fourth attempt of caress with the mouse, the window closes up. This way, the user is made to reflect upon what an interactive gesture is and to think twice before interacting with the work (whether by clicking or rolling over). Interacting is thus staged and shown. Annie Abrahams forces us to be passive to become aware of the nature of the interactive gesture. In this work, interacting stops the narrative : narrativity and interactivity are here incompatible. The loss of grasp is characterized by the impossibility of acting.

In *Shredder*\(^ {30}\), by Mark Napier, the internet user enters a website address : elements of the webpage (such as texts, pictures, links) appear on the screen in complete disorder mixed with the HTML source code. Along with the spatial deconstruction of the code, there is a play between the *form of recording* (the code) and the *form of restitution*. In a book, the *form of recording* (the printed text) and the *form of restitution* are identical, whereas they are distinct on a digital medium. On this medium, the source code is not what the user sees on the screen : for one form of recording, several forms of restitution are

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\(^{29}\) This is the narrative of a dream that the artist had when she was a teenager.

possible because of the mediation of calculation. In Shredder, the form of recording and the form of restitution are mixed, and the result is different each time the user reloads the page. The links which appear are clickable. However, although the links allow the user to navigate from page to page, the pages are unreadable. Links are covered one by the other. The user has the impression to be in control, but the accumulation of links leads in fact to a loss of grasp. There is thus definitely a play between grasp and loss of grasp. The gestural manipulation turns into manipulation of the user by the artist.

Figures of manipulation could be expected to give more control to the user, but in many interactive works, the artists use these very figures to introduce a loss of grasp. This play on the loss of grasp invites the user to have a reflexive attitude towards his/her interactive practice. The rhetoric of interactive writing is an invitation to interact differently, to have another apprehension of interactivity.

**Conclusion**

Figures can be identified that are specific to interactive writing: the figures of manipulation. It's a category on its own, along with figures of diction, construction, meaning and thought. The figure of appearance/disappearance (responding to an action by the user) is a key figure of the rhetoric of manipulation.

The figures of manipulation lay the emphasis on the notion of behavior (the coupling action/behavior could as a matter of fact be considered as a basic unit in interactive writing), more than the notion of media (such as text, image, sound and video). A figure of manipulation can indeed apply to a fragment of text as well as to an image or a video sequence. This figure is common to various semiotic forms and can thus be partly approached regardless of the media it relies on. Thus, an a-media approach may be relevant when attempting to formalize a rhetoric of interactive writing.

One could think that the figures of manipulation would offer more control to the user. In many interactive literary works, the artists use these figures to introduce a loss of grasp. When manipulating, the user finds himself/herself being manipulated by the author. From an ergonomic point of view, the interactive computer art works rely on a play on the tension between controlling and being controlled. From an anthropological point of view, they rely on a play on the tension between grasp and loss of grasp.

But even if the rhetoric of interactive writing is first and foremost a rhetoric of manipulation, this rhetoric is closely related to an aesthetics of materiality (materiality of text and interface). Thus, beyond a treaty of rhetorical figures, what is needed is a theory of the materiality of the figures in interactive writing. The present contribution lies within the scope of this research project.

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