Digital art: when mediacy becomes remediation

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The concept of remediation[1] – understood as the trace of an older medium in a new one – shows a tension between transparency and opacity embodied by the double movement of immediacy and hypermediacy (Bolter and Grusin 1999). Indeed, the strategy of immediacy[2] aims at dismantling the medium and the act of mediation for the benefit of the represented thing. It creates the illusion of reality so that the medium becomes invisible. As for the strategy of hypermediacy[3], it favors a strong presence of the medium at the expense of the objects represented. The medium and particularly its functioning are what matters more. Therefore, if the reorganization of an older medium by remediation aims at providing a more immediate experience, it paradoxically leads to an awareness of the existence of a new medium. And it is underneath this apparent contradiction that these two strategies coexist in digital media and are proving mutually dependent: the immediacy depends on hypermediacy[4], whose quest for transparency is based on the heterogeneity and the fragmentation of the acts of representation.

Opacity, transparency… these two concepts reiterates the proposals of Louis Marin on the relationship between transitive and reflexive dimensions in pictorial representation. "Presentation of the representation", or double image by itself, reflexivity can explicit "an enunciation founder of the representation and its system" (Marin 1989, p. 96). Although the facts of remediation do not fundamentally rely on the concept of representation (as the mimesis of a metaphysical reality), they however invest places of enunciation and demonstration of these enunciative praxis and manifest, in this sense, semiotic issues.

Therefore, we first propose to return to the problematic features raised by the concepts of mediation and remediation before measuring their role and involvement in a theory of enunciation. For this purpose, we will study a corpus of digital works drawn, for some of them, from the artistic practice of *Net Art*. Polymorphic enunciative device, *Net Art* indeed places into abyss the production of the work by the performative act of co-construction of meaning between an author and a "spect-actor" (Fourmentraux 2005). From the artistic concept to the software interface via the programming algorithm, the work outcome of *Net Art* is as an entrenchment of enunciation layers that highlight the crisis enunciative device theorized by Émile Benveniste or as it was adapted by Joseph Courtés. The specific modes of

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[1] "Defined by Paul Levenson as the 'anthropotropic' process by which new media technologies improve upon or remedy prior technologies. We define the term differently, using it to mean the formal logic by which new media refashion prior media forms. Along with immediacy and hypermediacy, remediation is one of the three traits of our genealogy of new media." (Bolter and Grusin 1999, p. 273).

[2] "Immediacy (or transparent immediacy): a style of visual representation whose goal is to make the viewer forget the presence of the medium (canvas, photographic film, cinema and so on) and believe that he is in the presence of the objects of representation. One of the two strategies of remediation, the other is hypermediacy." (*op. cit.*, p. 272).

[3] "A style of visual representation whose goal is to remind the viewer of the medium." (*Id.*)

[4] The more performant is the device of the medium, the more immersive is the image. We can notice that in computer-generated images seen with the Oculus Rift medium. This screen makes the user feels like he is in another reality because of the realism of the images he sees. And this effect is not possible without the medium itself which is prééminent.

production and reception of this kind of statements lead us to question the status of the medium itself and raise the semiotic stakes involved by this remediation device.

1. Problematic features of remediation

The proposals of Bolter and Grusin (1999) on remediation, structured around the double logic of immediacy and hypermediacy, raise several questions and problematic features. Indeed, while the principle of immediacy is not actually specified and do not mean the same thing for all theorists, designers and spectators, the principle of hypermediacy has taken a much expanding meaning. This is due to its different medial forms which work operates their own principles and their own rules[5]. Moreover, the principle of immediacy varies by ages, cultural groups but also on the technical and technological advances which increase the degree of immediacy. Hence, immediacy could be articulated on a gradual scale, polarised by a cultural vector because the various degree of immediacy are only measurable afterwards and result from an acculturation process.

Furthermore, if its basic principle remains representation, immediacy should be understood not as an effective compliance with reality but more as likelihood with what it is supposed to represent (real or not). In this respect, we can recall the observations of Anne Beyaert-Geslin (2005) on the radical epistemological turn introduced by the digital device:

> The picture is no longer a projection of the object interposed between the object and the subject, instituting them as such and keeping them at a distance from one another. The image no longer maintains any physical or energetic connection to the natural world, it is only the expression of a specific language constituted by logic and mathematics which replace the perceptive codes borrowed from analogue photography or painting[6].

According to Giulia Ceriani (2008), the logic of presence aims at keeping in contact the medium and what it means incorporating different levels of reality. As for technology, it expands the experiential dimension in a purely artificial meaning, indifferent to the quality of pure representation. Thus, immediacy would be an access to familiarity (it was in that vein that metaphors for interfaces were developed in webdesign). Familiarity would provide a central contact point between the medium and what it represents. While this contact point is physical in photography (light), painting and digital device set, however, a mathematical relationship between objects and their projection on the canvas or screen. With regard to digital media, we notice that the intented goal of the designers is an interface without interface, a seamless interface, which erased so that the user has no longer the impression of being facing a medium but seems to connect immediately with the content it conveys. But the operability of such a device is again based on the anchoring of cultural practices incorporated by these media objects. Thus, it is partly linked to the concept of intuitiveness, particularly significant in the digital field: the un-immediacy arises precisely where intuitiveness is threatened, where there is a break in procedural habits of users in accessing the content of the medium. Obstacles and other constraints to the practice then raise the flaws of ergonomic principles and recall the presence of an uncontrollable medium. Intuitiveness and interactivity become the keys of access to immediacy; interactivity increasing the realism and effectiveness of the graphic interface by the implication or sensory-motor skills of the user.

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[5] The heterogeneity was evoked though specific occurrences without generic features may have been raised for a theorization of this principle in its models and combinatory functioning.

[6] Personal document (Beyaert-Geslin 2005).

And this is particularly noticeable in the case of the digital device that it requires (more than any other medium) the implementation of strategies in the practice that it integrates and the uses it perpetuates. This is what the case of *Net Art* Jodi artists' collective enables us to check.

The question of the user, especially his practices and uses, leads us to a second remark. Bolter and Grusin's proposals concern mediation performed by the transmitter/enunciator: they explain the strategies employed in achieving transparency; mediation strategies that this transmitter/enunciator borrows from other media devices, adapting them to the practice linked to its own media. However, it seems that these proposals do not take into account (or not enough) the different statutes that may adopt the actant subject, instance that not only produces the mediated object but also perceives and interprets this object (knowing that these two entities may be covered by a single actant). But neglecting this feature is denying the semiotic reorganisation of the sensory experience produced by the variation of the intentional relation of a subject interpreting/perceiving towards the mediated object.

Third remark. According to McLuhan (1968), the content of a medium (which falls within the substance of content) always turns out to be another medium (which falls within the substance of expression). Therefore, remediation cannot be considered as a tension between old and New Media, but between two medial forms, through the exchange of functions. This is specially what Giulia Ceriani (2007) has observed in her studies dedicated to the new generation cell phones: visual prevails over sound and the change of phones design goes with a change of priorities. So here again, the principle of mediation/remediation raises the question of practices and customs; the construction of a medium being also based on purpose it generates and which constitute a part of the technology itself. This last remark leads us to issue a warning as to the principle of remediation. Indeed, most of the studies it has generated have given rise to a confusion between medium and content of the medium.

In this respect, Sémir Badir (2007) recalls that when we proceed to the analysis of works, it is important to note that the media objects (not the media) belong to the substance. Indeed, transformations and remediations to observe are not located between the media themselves.

> If it happens we observe a media processing in a work, or between two works, it is just because one will use an example in an analysis which in fact refers to one or more practices. At the level of works, welcoming media remain within the substance of expression, while welcomed media remain within the substance of content: in fact, the former contain the latter, in any way that, according to the current semiotic use (insertion, meaning, representation, etc.), this ability to contain a media occurs. (Badir 2007, p. 185-186)

If Sémir Badir here develops his argument around the concept of intermediality, we note that the same goes for the principle of remediation, where the relationship established between the host medium and the contained medium is hierarchical, connotative or metasemiotic. Similarly, the principle of remediation, including the case of hypermediacy, allows the new medium to hold a meta-discourse on the former medium it contains.

2. Remediation and enunciative device

Let us reflect on another issue here: mediation/remediation in the enunciative device and, especially, in the digital art field.

Indeed, as we announced in the introduction, opacity and transparency, which can variably engage the principle of remediation, remind us of the proposals held by Louis Marin in the perspective of a visual enunciation. Thus, explaining that the entire speech and, to a large extent, its speech acts were expressed by signifiers that mean what it is not (signifiers that can

operate at their significance from this place where the speech does not mean but indicates), Louis Marin has transfered the theory (and its formal apparatus) from the language to the image, with his concept of "reflexive opacity". Paradox of the enunciation of images where the reflexive opacity, referring to "non-mimetic aspects of mimetic representation", becomes an act with the particularity to escape transparency so that the representation remains unaffected. The painter and its support must be forgotten so that we could ourselves be driven by the representation effect (the marks of the enunciation act must remain invisible).

This performance act must remain latent so that we could believe in the effect of presence of the work. The painting becomes a place of the enunciation and the demonstration of a meta-representation which reveals the conditions of possibility of the representation itself. Nevertheless, we have seen that the remediation was characterized by a shift of the point of its effectuation since the opacity that can manifest is not so much linked to the trail of a speaking subject as to those of the medium in the access to a relative performance.

Because considering how the enunciative device can be explained by the concept of remediation, let us remind some principles of this device.

Individual language activity, enunciation is the production of a given *semiotic* object in which the speaker uses the *syntactico-semantic* potential of the language, in order to influence his enunciatee. This "conversion of language to speech" (Benveniste 1966, p. 254) is based on a device articulated in different steps which give to enunciation different semiotic modes of existence. Joseph Courtés supports a similar approach: "The act of enunciation [works] like 'actualisation', as it produces a given semiotic object; once this object in circulation (between enunciator and enunciatee), we can say that enunciation is the so-called semiotic stage of 'realisation'" (1998, p. 15).

As a consequence, related to the generative path of meaning, enunciation is like a mediation and conversion body between deep structures and structures of surface, by the passage from the virtualisation of the stock of available forms (grammar) to the realisation of the meaning (operated by the interpretive route of the subject enunciatee), with its actualisation in the discursive structures.
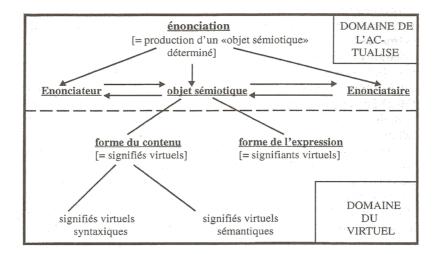

Fig.1. The enunciative device (Courtés 1998, p. 15).

Considering enunciation as the relationship between a subject of enunciation and his purpose (statement), Joseph Courtés also considers the subject of enunciation as the articulation between two actants of the enunciation (enunciator and enunciatee). This allows

the analysis to focus on either one or the other, the object being the instrument of their mediation.

But, according to Bruno Latour (1993), any event of our mediated culture is formed by the combination of subjects, media and object that do not exist in isolation. Therefore, it appears that the device conceptualized by Joseph Courtés manifests a fallibilism related to the lack of consideration of the medium. Precisely because Joseph Courtés, as well as Émile Benveniste, is not interested in the substance. But if, as Denis Bertrand points out, "the entire [generative path of meaning] is as a possible model of enunciation" (Bertrand 2000, p. 53), we believe that the generative path of expression developed by Jacques Fontanille (2007) can shed light on the modelling of mediation. Thus, it would project to the forefront the social and cultural praxis and practices related to the specific situation of enunciation. Considering the facts of enunciation as a whole necessarily entails their coupling with the mediation principles and the consideration of different regimes of immanence they incorporate.
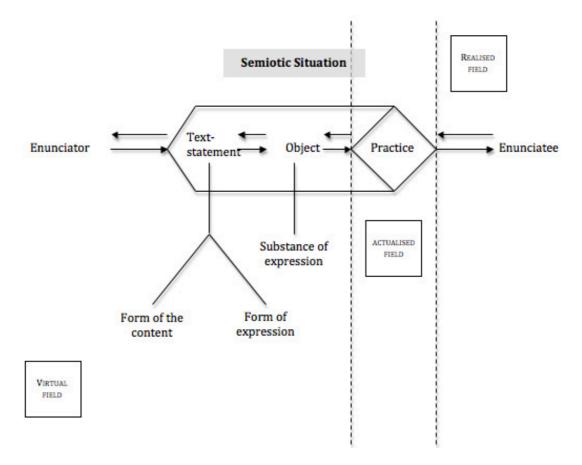

Fig. 2. Enunciative device and regimes of immanence.

"Material structures, with a morphology, a feature and an identifiable external form, which together are 'destined' to a use or a practice more or less specialised" (Fontanille 2007), objects constitute the second level of the generative path of the expression. This definition which gives the subject material and sensitive properties, considers it in its formal and material dimensions, in other words as a support, necessary to the integration of texts-statements in practices. Texts and images can thus occur in situations, as embodied enunciative instances and thus may be subject to a specific social practice. As for mediation, it precisely consists in this movement of integration of texts-statements in the media-objects.

By selecting its medium, mediation concerns the coming practice in which the object will be handled: it determines the specific roles and predicative scenes related to the intented practice.

Therefore, to be efficient, the enunciation device must consider the double articulation of the generative paths of expression and content in which text-statements are embodied in media-objects under the action of mediation. Protensively focusing on practices, mediation virtualizes predicative scenes that will be updated, and then realized on the media handling and the interpretation of the texts-statements. Such is the case of digital art, particularly *Net Art*, where the manipulation of the media is also coupled by the conversion of material and sensitive properties associated to the medium to an enunciation device at the next level of practice. Thus, the web allows us to measure the importance of "the governing strength of the use" (Bertrand 2000, p. 54) where the predictability of generic expectations of praxis determines the behaviour and the habits of Internet users. We can observe such an importance in *Structural semantics* of Greimas (1966) where "the idiolectal aspect of individual texts does not allow us to forget the eminently social aspect of human communication" (Greimas 1966, p. 93). Although it fits within a social communication context, this idiolectal aspect allows us to recuse the proposal of Émile Benveniste that the theory of enunciation is linked to the theory of individuality: remember that it defines enunciation as an "implementation of the language by an individual act of use" (Benveniste 1970, p. 12). We return to this issue later.

Furthermore, as Denis Bertrand recalls it, the use refers to sedimented practices that determine a closing of the event compared to the possibilities allowed by the structure (depending on the habits of linguistic and cultural communities). So the use builds canonical elementary configurations which operate as primitives in the language system. This closure operates from two kinds of constraints: the limits imposed by the morpho-syntactic categories and socio-cultural limitations imposed by the habit, the rituals, genres, etc.; all model the predictability and expectations of the meaning. It is precisely a break in the predictability and in the standard narrative patterns that are created by the artistic dynamics of the collective of *Net Art* artists Jodi.

The artistic works of this collective are based on the practice of hacking: it generates gugs and a highly constrained navigation. By altering the HTML code[7] and tags for graphical and multimedia configuration of the screen-page (CSS[8] or Javascript[9]), the work creates a scrambled and inconsistent navigation path. In this case, the site oss.jodi.org invades the surface of the screen-page with navigation windows that open and close at a frenetic pace without the user being able to control them. The only solution is to leave the browser via a special keyboard shortcut, all sorts of manipulations remaining vain. The enunciative device of this work is based on a breach of the products of the use in order to propose a meta-discourse on the medium itself. Therefore, the individual enunciation of the artist is based on a denunciation and puts the collective enunciations into crisis. That is all the enunciative device of digital media which is in crisis, creating a meaning that is no longer about the content form but on substance (the medium of the Internet). We note that these statements, such as the collective Jodi proposed, were supported by the collective praxis related to *Net Art*. Then they were variably convened by use before being settled in it.

This feature leads us to review a second principle of the enunciative device of Émile Benveniste: the hierarchy language/speech. In his Semiotics of the speech, Jacques Fontanille

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[7] Hypertext Markup Language (HTML): data format used in order to create web pages.
[8] Cascading Style Sheets (CSS): computer language which describes the presentation of the HTML documents.
[9] Script programming language in the interactive web pages.

reverses this hierarchy and review the individual act of use of the language by raising the interactive feature of enunciation, understood as a praxis:

> The notion of "individual appropriation of the language", advanced by Émile Benveniste when he defines enunciation, is not entirely adequate, he says, because it hides the fact that the system (language) is, in reverse, the schematised product of uses and, consequently, of the build-up of the praxis. (Fontanille 2000, p. 286)

Enunciation does not consist in a mere exploitation of the language potential but allows, through the speech it articulates, to reshape it constantly:

> We must admit in all, to understand the operation of enunciation, that it is not content to exploit the system in stock, but it also helps to remodel it and put it in the making. Such considerations imply of course that we exceed a strictly individual and personal conception of enunciation, since speeches can contribute to the future of the system only if we do not separate individual and collective enunciation and if we consider them as part of the same set in the making. (Fontanille 2000, p. 286)

This is what remediation allows, and especially *Net Art*: based on the collective enunciation articulated through the medium of the Internet, it offers a remodeling in the medium itself.

Here we come to the last stage of our reflection path; it focuses on the various enunciative schemes involved by certain works of *Net Art* and on the types of remediation they can offer.

For this, let us return to the definition of *Net Art* itself. According to Antoine Hennion, *Net Art* can be defined

> as a first approach as the set of artistic **practices** using the Internet actively, at the heart of their **production** work (that is to say, other than as a mere instrument of diffusion, the work being set). Or, in the different meaning, as the various **uses** of the Internet claiming an artistic **status**. (Hennion in Fourmentraux 2005, p. 11)

In this way, the Internet is not just the medium but it also turns out to be the artistic production tool and the situation (in the fontanillian meaning) articulated by its dual dimension (strategic and predicative[10]). Indeed, from the mere interaction with the text, via hardware support, and organized by the different predicative scenes of a practice, the Internet becomes through *Net Art*, the place of a strategic fit between predicative scenes and their environment.

By making a remodelling in the same medium (the Internet), remediation offers a logic of mediation as mediation of mediation: every acts of mediation depend on the mediation acts initially enabled by the Internet and hence offer a thinking deeply rooted in the nature, but above all, in the practice linked to this specific medium. This is what Trace Noizer shows: its artistic project is based on the diversion of uses of search engines and the tracing tools of network links on the net. This project developed by the collective LAN deals with the sensitive subject of personal data which remain on the Internet in the form of traces related to the digital activities of the subjects (mail, registration forms, declarations of use of software...).

By combining the functions of search engines and their indexation tools (robots), this installation generates false personal pages on the net that spreads over the network to confuse

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[10] Fourmentraux talks about media, tool and environnement.

the identity of the subjects. Thus, it creates a kind of "databody" constituted by the information returned by the search engines about these identities. By increasing and translating this information into different contexts, this work creates fragmented identities where real content and false content are mixed. Moreover, the feature of *Net Art*, and the digital art in general, is precisely to offer a "work in a work situation". In other words, and contrary to what Joseph Courtés says, there are enunciation devices where the flow of the object does not guarantee the realization of the enunciation as such. The latter then remains only the state of a potentiation allowed by the code sequences that program its deployment. Indeed, the effective realisation of the enunciation and, as a consequence, of the work, then is based on the enunciative program initiated by the viewer in the handling of the object on which he operates. The spectator-enunciatee then becomes an enunciator of an enunciative scene programmed by the previous enunciation of the artist. Therefore, the digital art offers a syncopated enunciative device, even an enunciative device by settings, where the artist conserves an enunciative space for the spectator who becomes an actor of the image as a delegate enunciator. So the experimentation of the work is also the practice which allows its completion. Therefore, the semiotic object is not an end in itself but is more to be a condition of possibility, an opening on the field of possibilities. The existence plan of the work is virtual because it depends on the public's potential takings. The visible image is like a space that mediates the program hidden deep within the "backstage" of the machine and the process of its implementation by the public. This is the case of *Communimage* (communimage.ch) alteraction device, where collaboration with real-time Internet allows the emergence of a collective work.

By committing "multiple participants spread in the simultaneous design of discrete entities, by the linkage from which a global independent work emerges" (Fourmentraux 2005, p. 103), *Communimage* offers a remediation of the praxis which becomes the substance of expression of the work. Here the artistic principle of collage is remediated by the medium of Internet: "Indeed the device is based on the collage of different computer and graphic elements taken from the network in order to be processed and assembled to serve the plastic project" (Fourmentraux 2005, p. 103).

The specificity of such a device is based on a setting in abyss that offers to the testing the process itself of its production. Indeed, the enunciation of the work embodies a mereological tension which gives it a fragmented nature:

> The device [...] indeed underlies both the artistic act and performance, in the sense that it adapts different takings towards a public that now can (according to some reservations and conditions) become an actor of several fragments of the work previously identified. (Fourmentraux 2005, p. 31)

Indeed, this is due to the collision between the work and its media. So the work is not what to see (here, the final result doesn't matter); this is the device that makes it exist. The work is the structures and the rules that underlie it. In other words, the template combinations provide the content of the work and give it its true artistic status.

We note that the various degrees of interactivity provided by the program allow the public to carry out the different sequences of the work and in function of these actions, the work can variably respond and provide answers from which the public will react differently. In other words, the enunciation device is based on the principle of interactivity, a new interaction is created between a enunciatee (viewer) and a computer matrix device which is capable of responding independently and becomes the representative of the artist. Then, *Sniper*, a Samuel Bianchini's work, proposes an image fragmented into twenty-five handy parts that

break down a video of a woman shot by a sniper. The overview of a part activates the time t_2 of the next corresponding action. Since, several temporalities are projected on the same plan. Through the manipulation of the image, the viewer gradually takes the place of the sniper and becomes responsible for the action. Indeed, every gesture allows him to measure their impact on the diegetic progression. In addition to remediation as mediation of mediation, *Sniper* offers a remediation of the real world by a decomposition of the death sequence. This scansion dramatizes this gradual loss of life, loss of which he is himself the originator through his interaction with the image; by making the viewer feel these moments when life leaves the body of the victim, the work emphasizes his passion states more intensely than the medium of television (yet also moving) or the photographic medium do this. The media device disappears in favour of the dipping of a spect-actor engaged in the statement (he even becomes the actor/author of the statement: the murder).

Finally, as Fourmentraux recalls it, the expository device of *Net Art* includes several polymorphic enunciative scenes where two logics of action and two forms of writing are fighting: the writing of the idea, or concept art, and the writing of the programming algorithm. Since, we can ask several questions: who is the true prime-enunciator? is it the artist or both the artist and the developer? Because if the artist shows his intention to communicate something, this "thing" cannot be told without the exercise of the specific syntax of the computer language understood by the developers. Indeed, the computer program performs an ambivalent function when it remains underlying the work and can make it clear once translated or decoded. Moreover, it is not specifically tied to the artistic statement when it constitutes an intermediary autonomous software able to animate other projects. What started as a communication between the developer and the user becomes a communication between the user and the program. In this way, programming is a principle of erasure (erasing of the developer in order to give greater autonomy to the program). This is a second face of remediation permitted by the digital art that offers a remediation of the computing device itself (transparency) by remediating the mediation or the real world.

In conclusion

If the emergence of *Net Art* has brought new ways of cooperation and new aesthetic codes that seem to destabilise some foundation (statutes of the work and its characterisation, status of the author and the viewer), it has also proposed different modes of remediation not only linked to the medium of the Internet but also to the enunciative praxis or the enunciative scene itself.

In some cases, it is a reflection on our society that carries the work by integrating the relevance level of the life forms (*All over*[11], 2009-2014, Samuel Bianchini).

Thus, we agree with the artist David Rokeby that in *Net Art*, the difference between transparency and opacity lies in the distinction between the attitude of the designers and the attitude of the artists: "while the engineers aim at maintaining the illusion of transparency in the design and the development of digital technologies, the artists explore the meaning of the the interface itself" (Fourmentraux 2005, p. 42) playing sometimes on hypermediacy, sometimes on the erasure of an enunciator-delegate, the developer.

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[11] All Over est une œuvre du Net Art qui propose, à la manière de l'"Ascii Art", de transformer des images fixes, composée de symboles, selon les variations, en temps réel, des flux boursiers mondiaux.

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