

# SCIENCE, ART AND PHILOSOPHY: A REFLECTION ON A METHODOLOGICAL APPROACH TO INTERSEMIOTIC ANALYSIS OF INTERACTIVE INSTALLATIONS

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We intend to analyze the construction processes of the Installation “*Um Novo Tempo – A New Time*”, created by the Research Group LABI, from the perspective of Yuri Lotman’s reflections on semiotics. Our approach is guided by reflexive relations that lie at the intersection of the concepts of Biosphere and Semiosphere.

## Introduction

The vast field of reflection that the analysis of the semiotics of culture proposes allows us to think about cultural objects, in terms of both its immanence and transcendence. This means thinking about the relational forms that such objects have with the culture in general and, particularly, with the aspects of our construction or objective discursivity. In other words, we must discuss the relationship suggested by objects linked to cultural elements which constitute the external semiosphere (Lotman, 1999) and engendered by it, in particular with an eye toward its discursivity to understand the perspective of the Other singularized by the observer subject. Such subject will be defined here as a result of the relationship between the virtual and the actual, erasing boundaries that, as well define Peter Anders, places us in a cybrid environment. Cybridism, a socio-anthropomorphic phenomenon, is quite a clarification of the society in which we live.

Therefore, we have on one hand, the discursivity of the object itself conditioned by its internal laws; while on the other hand, we have the same object inserted into the cultural material of the semiosphere. And finally there is the observer, himself subject to contingencies that gave him the status of singular subject. It should be noted that the schema described above is part of another factor that we believe is important to remember: the link established between these three movements or moments, divergent of suggest stability or permanence of an instance to another, in fact, is made by continuous movement. What we found in an observer/reader interrelationship with the object seen, read and updated by him is a continuous maze of back-and-forth of elements distributed transversally, vertically and especially non-horizontally or linearly.

We will list, then, the elements proposed by the installation of the point of view of its physical structure to look more attentively at their construction procedures in terms of the meanings produced.

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## A NEW TIME: CONSTRUCTIVE ELEMENTS OF THE INSTALLATION

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1-Tablet:

Component of the set below, the tablet, whose purpose is to record a message that is sent to the plans listed above.

## 2-Joystick device: spatial projection of deferred time

Past, present and future: the same phenomenon in three different perspectives. The interactor being filmed in three image planes: black and white, and red. The device consists of a webcam and a Joystick with five preset keys. Description of keys: access the recent past, access the longer past, access the present, accesses a possible future, change the angle of vision of the planes; Lever: Controls the time units in the second and third cases.

3-Touch Screen: whose choice of six videos shows a phenomenon in its temporality accelerated or extremely slow: the description of the physical phenomenon that occurs in the time interval of the phenomenon (mechanical, hydrostatic, biology). Videos shown: punch, drums, drumsticks, bladder filled with water, flower opening, etc....

4. Clock: aims to show the irreversibility of time. Advancing the clock clockwise, the interacting agent advances the time and, working it counter-clockwise, time is reversed (hair, egg, building falling and glass breaking).

5. Time Machine: temporality browsing media or historical times: Proposal for historicizing time, more specifically, the time in the media related to historical events.

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## SEMIOTIC SPACES

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If we consider semiotic space as a place where semiosis occurs and, if we take as the object of analysis the interactive 'A New Time' installation built at the intersection and articulation of various languages as intersemiotic construction, or even grounded by the fact that these various media that carry distinct meanings produce various significations in their interrelations, and they are managed by the perspective of an interacting organizer, we could deduce that in an interactive installation such as the one proposed for our analysis there is an ensemble of several elements or sets of semiotic elements. However, in our view, it appears to be methodologically important to separate them for analytical purposes and then turn to the production of meaning that the relationships outlined above produce.

The semiotic space, which we will deal specifically with here, is the installation of 'A New Time'. It is necessary, however, to define that space taken up in its particularity in relation to semiosphere as Lotman defines it in his work 'The Semiosphere' (1999). The semiosphere finds conceptually a parallel in the biosphere, space in which all components are networked, making it impossible thus to isolate a single element without breaking the previous balance. It should be noted also the importance of the conceptual proposal to situate it synchronically and not diachronically.

We believe that all concepts involved in the installation go through two discursive instances: the thematic isotopy (abstract) and the figurated. The thematic precedes the figuration in its conception because it works with deeper levels of discourse. It's important to also note that without the passage to the figurative isotopy, we can't think of art, since it operates with consecutive passages of one to another. There were also switches necessary so that the discourse and its meanings are grasped by the enunciatory which, particularly in the object of our study is also the enunciator. The most globally enunciated built by the articulation of thematic and figuratively thematic isotopies only becomes intelligible when the sum of the meanings or interferences/actions added by the interactor participation becomes a constituent of the enunciation.

Exemplifying the way described above, in the installation 'A New Time', the isotopy theme — the plan of content, is made up of different approaches that suggest the concept of time, reversibility, irreversibility, literary time, and media time. The figurative isotopy is the result of the passage of thematic isotopy to the plan of expression; in other words, of constructs figuratized by the installation, for example, the videos about different times and the time machine as a metaphor for the temporality of historical time broadcast by the media.

We consider it important to note that on Lotman's trail of thought on a conceptual side of the semiosphere, it would not be possible to isolate cultural systems, since it comprises the whole of cultural production and the fact that its boundaries are constantly invaded, whether it deals with epistemological, linguistic or theoretical frontiers.

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#### FROM THE SENSIBLE TO THE INTELLIGIBLE: OR HOW TO MAKE THE SIMULACRA – THE FIGURATIZATION OF A MEANS OF CONVEYING A SENSIBLE AND INTELLIGIBLE EXPERIENCE

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Can we also consider the installations as simulators of voices that carry meaning? How do we reconcile the aesthesis experience by the induction method of scientific discourse? Or to the so-called scientific knowledge that such facilities are striving to achieve through their own methodology? These are questions to be designed to establish criteria ranging from the strategy of constructing indicative simulations of voices inherent to speech to scientific knowledge itself, narratively established in order to be disclosed to an audience that is not knowledgeable. Easing the transition proposal, that is, one that goes from the sensible to the intelligible is a function of strategy, or a set of strategies that the discursivity of the work proposes.

The installation 'A New Time' suggests the creation of a problem at the representative level interweave in the concept of time. Thus, it proposes a reflection on concepts such as the irreversibility of time, linear time and deferred time. It offers different looks at time or temporalities; thus we can infer from his narrative that the time from the point of view of physics it is different from, but not exclusive to, that which we learn in the more immediate term: we manage to grasp the idea of clock time, manage to place it in daily life but not in that of an action that happened a century ago, for example (unless through history and memory). Bergson (1974, pp. 268) considers that "the science of matter distinguishes a number as large as we would like for the range of moments in time that it considers. As small as intervals that are contained may be, [it] allows us to divide them further if we happened to need to do so." Since natural science always considers virtual time, stopped time is never real time, i.e., the time distinguished (*envisagé*) or as a flow. We would add still some aspects that define the present time in installation, such as literature, the arts and media.

We believe that a short digression fits here to clarify the point of view of the relationship between the three axis of our work located at the interface created by the relationship and links between art, science and philosophy. Therefore, we feel called upon to explain how we approach these forms of knowledge from the perspective of philosophy. To this end, the reflections of Deleuze and Guattari's work 'Qu'est-ce que la philosophie?' (1991) seem extremely important. The dimensions of knowledge, according to the authors, can be seen through the ways in which art, science and philosophy of the approach. The three means or dimensions of knowledge are specific, some as direct as others, and are distinguished by the nature of the plane and what occupies it. To think is therefore to think by concepts, by functions, or by feelings, and none of these thoughts can be considered better or worse than another, or as the au-

thor makes clear, none of them can be supposed to synthesize or express a thought more or less adequately than another. Another factor to consider is that every form of knowledge originates chaos, understood as a virtual space of possibilities. Chaos is not Nothing or absolute disorder, but rather a virtual in that it contains every possibility. Consequently, in the same way that chaos can give rise to forms and concepts, it dissolves them.

Thus, we consider that a see that non-order is processed into a form of knowledge. This form, or systematization of knowledge, provokes your insertion in one of the planes or dimensions mentioned above. Deleuze considers the event as the virtual reality, virtual updated. It is in this sense that the chaos or the virtual event and this allow for updating in the form of an organization of thought. Such an organization will determine the level of knowledge and the binding of the three dimensions that unfold. Basically, the question that pervades the thinking, the 'degree zero' of its birth, is the event [évènement], a phenomenon that gives it form and is processed in the space defined as chaos: virtual space in which the human agent seeks definitions an understanding of the events surrounding it in everyday life.

Therefore, in order to think of time not in linear terms but in its relationship with what was, what is and what will be, the installation proposes, through its enunciates a means of amplifying the concept of time in their simultaneity, i.e. present, past and future in terms of their interrelationships. Such statements seek to address many different readings, such as those quoted above.

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## DISCOURSE AND DE-COURSE

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In accordance with Greimas and Landowski (1984), our approach is based on three forms of speech as typified in the social sciences and, in our case, we a hybrid discursive field, because its structure posits two distinct understandings, the first related to the creation, specifically for the electronic arts, and the second related to the scientific knowledge as stated in more general enunciation: speeches in search of scientific certainty; questions about the very meaning of research and interpretation of speech.

In the case of our subject, the second module seems more appropriate since the goal is closer to the discourse on the relationship between art, science and general statement, discourse of the unfolding of the installation itself: scientific dissemination through interactive installations. In other words, it would deal with interrogation of scientific and epistemological junction, located here as a discursive element of enunciates subjacent to the enunciation.

Defined in this way, the playing field of discourse as a question about the search itself, namely, a methodological reflection that brings together aesthetic and science, we aim to define in the same way the field of semiotics that would fit within an analysis of this type of discourse: the interactive installation driven by the 'mean to say', your 'to make', [vouloir-dire, faire] the intention of disseminating scientific knowledge. Thus, every object as constructed by cultural signs (paradigms) in relation to a context by discursivity as defined by the enunciation, the underlying enunciates are so articulated (syntagmatic relation) that they define, so to speak, the emphasis employed in this relationship as explained below.

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## PARADIGM, SYNTAGMA AND SYMBOL

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Resorting to the idea that the concept of time found in our installation can be articulated and addressed in accordance with certain relationships around the concepts of paradigm, syntagma and symbol. Consider, broadly, that paradigm is the set of signs that we hold to prepare a syntagmatic relation or an utterance: an established relationship within the paradigmatic set of signs. As an example of this process, proffer as a possible schematization of the sign 'time' as part of a set of singular and different times. The result of that provision in a speech, taken here in the broadest sense, is what will determine our choice among the possible forms of syntagmatic relation. This process can be extended to any set of signs, such as pictorial, sonic, filmic, or in the relationships established between them, such as in the case of films, performances in which there are a relationship between sound and image, among others.

Thus, if we consider the settings of the discourse in the form of modules, namely, the symbolic, the paradigmatic and syntagmatic, we see that the latter focuses on semiotics, i.e. the relationship between signs and their semiosis. This does not, of course, exclude the constituent elements or the base to be used for the construction of the sentence, or, a little more explicitly, the isolated signs, taken alone under their paradigmatic form. That said; between the paradigmatic element used for the installation and its unfolding narrative, we can observe the paradigm 'time' distributed in at least four contextual relationships: the temporality media, the literary, cinematic, and that primary concept of the work, the temporality from the point of view of physics. Such enunciates within the enunciation define the meaning [vouloir-dire] of the work and lead the interactor to interlace his own narrative that will be added to the initial proposal and the enunciatory can to produce their own speech.

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#### METHODOLOGICAL STRATEGIES IN THE INSTALLATION A NEW TIME

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One way to divide semiotic groups themselves to the installation which we analyzed, was to separate them by blocks and start our analysis by clipping of the proposals suggested by the installation and defined by the five devices already listed. With respect to the plane of the utterance, there is an important variable which we have to mention: Although the object we analyze seeks through sensorial perception an analysis of scientific concepts, their proposed goal is an artistic product, and thus on the one hand, travels the field of the domains (scientific, artistic or philosophical) for the field of reflection on art, and on the other hand, the reflection is proposed specifically about electronic art, and further a field delimited, one which comes to electronic art designed as an interactive installation, i.e., a scenario that is requested from the enunciate a physical and cultural participation that the existence and work may have meaning.

Another reflexive field is that of scientific concepts proposed by the course of the installation. The poetry of images, sound setting, the language of the texts of writers, poets and scientists, serves as an anchor and metaphor and thus these productions collaborate in driving the manipulation of the enunciatory. Not being able to predict a pattern like the enunciatory advertising campaigns (target models, such as youth, children, classes), a way was conceived to fill the void of knowledge (potential space) intended to be attained (update) in the form of monitors (discursive simulacra of scientific knowledge) that amplify the voice of poetic speech and scientific understanding that are proposed aimed at the installation.

As a result, the concepts of irreversibility, reversibility, relativity and simultaneity are treated by the specificity of their constructs and by the means that the interacting might handle.

## References and Notes:

[1] This research received support from FAPESP

[2]<http://www.labi.ufscar.br/> <http://youtu.be/oqTjsULO550>

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