

Performative Consciousness Dialogues

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ABSTRACT

The aim of this paper is to discuss some points of a methodology based on systemic measures of organization and complexity as a way to capture the invisible movements of information and meaning through creative processes—information and meaning that generates both the process and the artwork itself. The intention is to help the ones involved in creative artistic practices (considering contemporary digital arts' panorama) in dealing with emergences, incorporating it as a way to go through processes of perception and consciousness in a continuous dynamic.

KEYWORDS: creative process in digital arts, systemic measures of complexity and organization, information, meaning, storied spaces

First of all we must guide the reader's view to a place where space is immaterial and not dimensional, a *cosa mentale*, generated by complex webs of information and meaning, a place where perception and consciousness are spatially dependent; a place where perception as the process of processing, understanding and incorporating sensory information, is a process of attaining consciousness, a process that is intimately connected to action. Referencing diverse philosophical discussions around the concept of space, Bernard Tschumi in *Questions of Space: The Pyramid and The Labyrinth (or The Architectural Paradox)* argues that, despite the peculiarities of philosophical thoughts, from the Aristotelian point of view to Descartes, Leibniz, Kant, until the mathematical developments on non-Euclidian spaces, “. . . space was generally accepted as a ‘*cosa mentale*’, a mental thing, a sort of all-embracing set with its subset, such as literary space, ideological space and psychoanalytical space.” (Tschumi 1975, 137)

Considering this perspective, the notion of storied spaces explored by Baskin in the article *Storied Spaces: The Human Equivalent of Complex Adaptive Systems* (2008), could be interesting as a way to explore the concept of space from an immaterial perspective, considering space as emergence—in the form of narratives—generated by the actions performed by subjects involved in creative processes. According to Baskin, storied spaces could be described as the collection of stories

constructed from our experience, in the dynamic of interpreting the context in order to act. For Baskin, the dynamic of such storied spaces is the interaction of two very different types of stories which reflect Gell-Mann's (1994) theory of how complex adaptive systems learn. According to Baskin, “the first type of story is the dominant narrative, the fixed accounts of past events, the historically grounded, control-oriented retellings, whose function in storied spaces is to keep our behavior congruent with ways that have always worked, much like complexity's attractors” (Baskin 2008, 5). The second type is the ante-narrative (Boje 2001 cited in Baskin, 2008, 6), that opens up the possibility of creating meaning from an event. According to Denning, “the fact that narratives are not mathematically precise, and in fact are full of fuzzy qualitative relationships, seems to be a key to their success in enabling us to cope with complexity” (Denning 2000, 113).

Being the immaterial structure of the storied spaces, “information” flows and is continuously being combined as a sort of structure in motion in a complex adaptive performance involving the elements, the whole, and the environment. The interactions are the basis of this dynamic or, more appropriately, the basis is formed by the *trans-actions* that occur not only between elements, whole, and environment, but across and beyond them—crossing and blurring the borders and limits. Interactions are inconceivable without disorder, without the

difference, turbulence, disturbance that cause the meetings between the system's elements and enable information exchange. Complex systems, like organisms, ecologies and societies, are considered multi-level structures. However, there is not just one global non-linear organization but a huge number of intertwined sub-organizations and subsystems. An example of this sort of systems is an *autopoietic* system. According to Francisco Varela (Varela, 1979), these systems are characterized by a changing structure (*state*) and an invariant organization (*identity*) that is the result of what he calls "organizational closure", the network of processes that constitutes a system organized in such a way that it produces itself. The structure of the whole system could be considered a superposition of all of the organizational instances or levels. The system's elements respond to messages received by sending out new messages—actions that are dependent on the information received and are the basis of the system's dynamic organization.

A way to structure a methodology to study the collective creative processes/dynamics using the complexity sciences framework is to find a mechanism to map the *messages* by focusing the informational flow itself. In our proposed methodology the specificity will be related to the selection criteria adopted, which is based on the concept of storied spaces as an artifice to build a network of emergent meanings, helping to visualize the system structure itself, its levels or instances of organization, relationships between elements and so on.

In the design of his chaos model, David Raccoon combines ". . . a simple, people-oriented, problem-solving loop with fractals to describe the structure within a project . . ." in the realm of software development (Raccoon, 1995). Beyond describing the fractal life cycle, Raccoon interprets the model to reveal the meaning behind the structure, showing that developers, users and technologies interact in what he calls a "complex dance". The diagrams Raccoon presents to illustrate his model are interesting to help in visualizing the systems connections and its dynamic. Raccoon's model could work as a starting point to help in designing new models to capture emergent meaning and to map storied spaces.

On Systemic Measures

As both an illustration of a methodology's possible application and a way to explain the methodology itself, we propose a study of collective artistic practices as a complex adaptive system. The dynamic of collecting and structuring the network of storied spaces works as way to visualize them as a collection of emergent narratives, emergent spaces that could be re-integrated in the process, re-influencing it. We consider that the state of an artistic project structures naturally into distinct conceptual instances. The bottom instance represents the concept of what the whole work of art should be. The wide instance represents the installation-system as an artwork ready to be exhibited, an emergence from the system dynamic. The

instances in-between represent the collective work, the systems' parts working together, interacting, influenced by the concept of what the whole work of art should be and by the objective of producing an installation-system. Beyond these three instances is the system environment/context that influences all the system's levels: the throughputs. We are here considering this system as simultaneously closed and opened to information exchange with the environment. Hübler highlights that, "complex systems are open systems, where the flow of a medium through the system is large. To make a system complex we increase the throughput until something unexpected occurs: a pattern emerges in the system or the system starts to oscillate" (Hübler 2005, 15). According to Hübler (2005, 15), complex systems have a large throughput and, in contrast to many other physical systems, its emerging behaviour often depends on historical events.

The bottom instance of the artistic collective practice complex can be described as a collection of references—tools, media, technologies, and methodologies, theoretical and artistic references—that converge in a concept of what the whole work of art should be. Despite the fact that this convergence of references could be described as a base of the evolutionary creative process, the bottom instance tends to be outside of the artist's realm of control. For example, programming languages determine how functions are built, but not how artistic applications should be constructed by the artist. Note that the technical resources can change over the course of a project, and new theoretical and artistic references can be discovered by chance. It is in the middle instances that the dynamic of "producing" the artwork allows the artists to update the system-project interfering in the bottom-level structure. It is very important to realize that, as elements of the system, the artists work on all instances of a project. Nevertheless, they spend most of their time working on the middle instances. In order to reach the system objective of producing an installation every instance of the system is interconnected in the network of influences between all the system's elements and the environment, strongly influencing the wider instances of the system in the same way the technical and theoretical resources strongly influence the lower instances.

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In the process of searching for models that could help in describing—beyond the wide instances—the complexity and organization of systems, we found the allegory about the problem of the origin of the ideas structured by Étienne Bonnot Condillac in his *Traité des Sensations* interesting (Condillac, 1930), and mentioned and fantasized in the Jorge Luis Borges' tale *Two Metaphysical Animals*. Condillac's work was an exercise in deeply exploring the initial ideas of Locke (Locke, 1972) using the metaphor of a marble statue. This metaphorical structure could be adapted as a sort of grid to help in visualizing the flow of information and the emergence of the system,

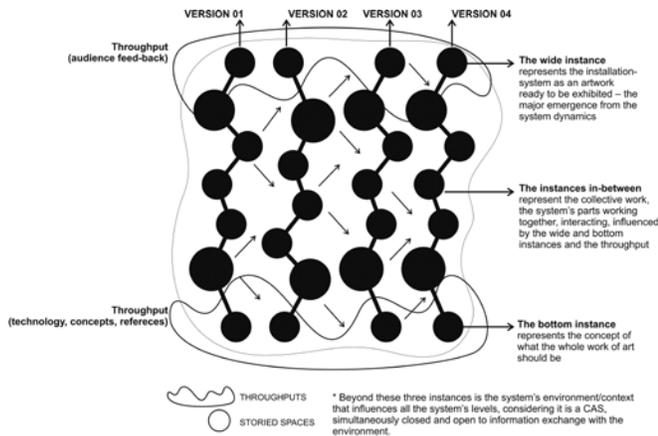


Figure 1: Diagram of the complex structuring the levels of organization

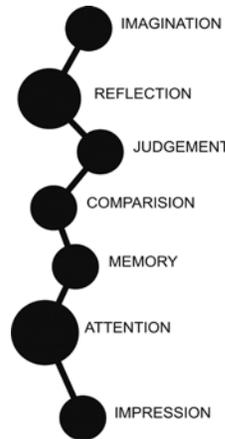


Figure 2: The 7 storied-space bubbles

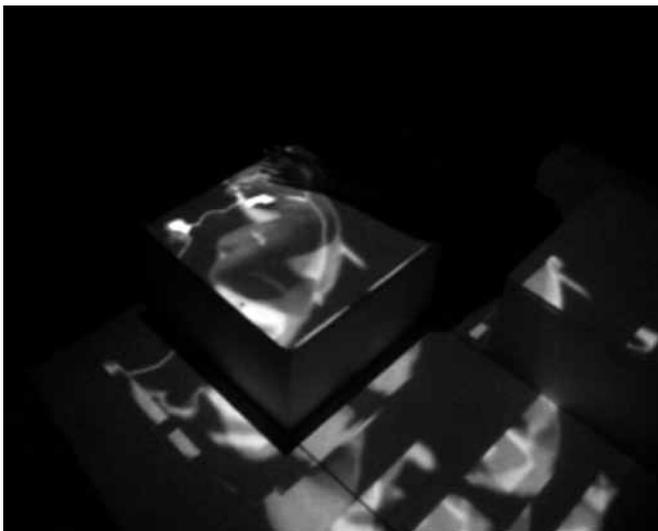


Figure 3: Instants of metamorphosis 1: volumetric sculpture and projections



Figure 4: Instants of metamorphosis 2: video performance

connecting it with the acquisition of consciousness through perception of and dialogue between systems elements. Emergent drawing and writing are the basis of this dynamic process of delineating storied spaces. To map this emergence is not an easy task if we consider that we are in creative processes that both generate and consume “reality”. We consider seven instances of organization and meaning, or, seven storied-space bubbles that can be expressed in the following dynamic based on emergent writing and drawing exercises:

- 1) Impression (emergent drawing produced immediately after the experience)
- 2) Attention (emergent writing produced one hour after the experience)
- 3) Memory (emergent writing and drawing produced one day after the experience)
- 4) Comparison (emergent writing produced one week after the experience combined with the production of a semantic panel)
- 5) Judgment (emergent writing produced one month after the experience)
- 6) Reflection (emergent writing produced two months after the experience)
- 7) Imagination (emergent writing and drawing produced three months after the experience)

The next step is to use systemic measures of complexity and organization to map: the *elements* and the connections (what are the storied spaces and the number of connections between them); the *interrelations* (how one storied space is related to another, how they are grouped); and the *trans-actions* (how the storied spaces influence one another).

Conclusions

Integrated with the process of elaborating this methodology—and also as a case study—the artistic practice presented here involves the production of a series of performative, interactive video installations in a collective arrangement, which is continually being influenced by the reading of selected texts on fantastic literature and emergent writing related to consciousness processes and perception that can be considered system throughputs. The first versions/emergences in the process are two interactive video installation that combines references taken from selected tales in Jorge Luis Borges' *The Book of Imaginary Beings* (Borges 2005), such as the A Bao A Qu and animals that live in the mirror, with the perspective brought by Clarice Lispector in her emergent writing book *The Stream of Life* (Lispector, 1995), a chaotic consciousness process of a being without gender, a being in instants of metamorphosis. We expect that the “methodology-like perspective” we are proposing contribute to the study and operation of complex collective creative practices, and we re-call the *complexity sciences* scientific concepts in a more humanized way, centering the approach on the subject by considering the diverse levels of reality we simultaneously integrate and produce, playing with the immaterial and chaotic realm of creativity.

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