

## **Diaries from the Future**

The role of the memory in emergent processes

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With this essay we are reconnecting with the theory we presented to our conference at the GA2008 in which we focused on the relationship between the notion of the future and that of becoming, we will now compare it to the subject of memory, as the centre of identity for objects, places and processes of becoming.

We know that inside a complex system, an event is called 'emerging' when it begins to demonstrate a principle of coherence, in other words, within a chaotic motion of bodies, some of these start to "resonate". As it happens in music or dance, they begin to play or dance together. Out of a chaotic noise a type of melody is born. For those who are familiar with theory of the Complexity and are involved in the design of habitat and environment, it will not be sufficient to observe only the birth of coherence as the scientists do.

The question is how Pattern, Structure and Process identify life, and therefore also the life of a shape: organization and behaviour.

The Theory of the Systems makes us more cautious in the role of the Process, rather than on Pattern and Structure since it starts from the relational and inter-relational factors present in life. In this essay we use the word Pattern, Structure, Process in this way:

Pattern - the organizing scheme of the organisms, a drawing not reducible in parts.

Structure – the structure of a system is the physical embodiment of its pattern of organization.

Process – is the capacity of the structure to manage the large universe of input and output, managing the feedbacks.

This striking property of living systems suggests process as a third criterion for a comprehensive description of the nature of life [1]. The process of life is the activity involved in the continual embodiment of the system's pattern of organization. Thus the process criterion is the link between pattern and structure.

Therefore we can say

*FROM*

what it is, how is it made

*TO*

how it establishes relations, and what does it become when combined with others. It supposed that could be legitime after one century full of such modern experience in art, architecture and design.

In this century we observed how the linear scenario of the Reinassance perspective moved towards a labirinth made by infinite layers of elements and nodes.

There is no need to explain how important it is to identify the Pattern and Structure in order to designate a shape. But if you look at the life of a shape it is better to start our investigation from how the shape establishes relations with other formal lives. It is important to perceive the structures in their capacity of realizing a Pattern.

In our contemporary interconnected society we observe in a new manner the interactions between different Patterns and Structures. In complex systems, overwhelmed of informations and feedbacks, considering the high speed of our real-time dimension, we can read and use the instructions suggested by the Process.

### **A. The theme of identity**

Let's try to connect the previous point with the subject of identity, for example: the identity of a place. The architectonic culture during the seventies worked a lot on the topic of the indefinable identity of place, in latin the *genius loci*, and some ideas still remain very interesting. Today the attention is on how we enter into resonance with all things, e.g. if a couple of dancers execute a dance the spectator understands the two bodies and the relative structures, the aesthetics, beginning from the elegance and the complex movement; we bring all of the information together and at the same time.

Because you cannot completely read a Structure alone automatically we reconsider a non self-referential value of the Pattern and the Structure. We don't only analyse the Structure and Pattern of the identity of a thing; but we focus on the resonance [2] between the changing values which gives us the perception of identity. This value is flexible, open to the possibility of change. On the contrary if we start to analyze a body or a structure it is not possible to understand how they can be resonant, because it is data that starts only from material culture. The ability to change is a principle that we don't find in a single structure but in other parameters.

In the Network Society, the discourse that gives a meaning to data, have various genesis, but are most likely already created with a genetic ability to enter in relation with the complex system, that has the power to call in the elements of the structure, and not the contrary. The foundation of our analysis is that through the morphogenesis it is possible to generate extraordinary spaces but we can't automatically define a "place".

A "place" cannot be defined by only Structure and Pattern, in the expression of it other syntheses in which the morphogenesis has a strong but not exclusive role, must cohabit and share the sense of it with the ability of naming the things, with the discourse of language. It is equally obvious that a life form does not exist if we can't trace and identify Pattern and Structure. But this "dance" has the power to be memorable? We think that it has.

If we have a system whose processes have weak feedback, Structure and Pattern are sufficient to illuminate on its nature, also prefiguring an evolution of the meaning

of its nature, to for example its genetic tendency, but when we enter in a complex reality, we are overwhelmed by a the greater speed of feedback. When on design topics we find ourselves launched with certain speed we don't always have the time to stop and reflect on the Pattern and Structure, and we must trust the process as if it is a vehicle for knowledge of Pattern and Structure. However we know that process is a reliable ambassador, a credible one. The theory of systems helps us to reflect on the coherent mechanism that we are observing.

## **B. Bifurcation and Memory**

If the coherence is linear, we have an obliged bifurcation, but today we find ourselves in front of a coherence that has a systemic nature, reticular bifurcation, that is born from complex relations already at the source. A detail that we think is fundamental is that the Process does not judge the Patterns and the Structures that are put in motion, but it values the behaviors, for this reason we are attracted to the "autopoiesis processes", because we want to entrust that things will build themselves without judging what they take or discard. For the same reason when some forms resonate with each other and other don't, the remaining space doesn't participate in a coherence principle. When this principle obtains a sufficient critical mass, it can become a new system.

The ability to perceive the complexity and to interpret it to the advantage of the future newborn organized form belongs to a philosophy that includes the interdependence principle: The principle of the dialogic illustrated by E. Morin [3] .

Dialogic Principle - which consists of associating notions, ideas, and truths that are both complementary and contradictory in order to grasp a true reality.

Where is the Anthropos, the meaning that transforms the space in place? What links the people to the spaces, the spaces to the things, the things to the matter, the matter to the feelings, does this not create the richer sense of place? Between this triad: Pattern Structure Process, it's interesting to understand which one, and above all in which way, articulates the becoming from "space" to "place" and also the modalities of shaping "memory" as a story for the others.

How do we remember a picture or a film? Is it the same type of mnemonic process? It probably is with different mechanisms. For this we talk about the discourse of the attractors: the dialectic that we are interested in is the one that exists between a group of attractors that operates like a diary of structural stability, and the emergent phenomenon that opts for a new type of diary of that same movement. Various diaries, but between them there could not be a banal connection. We ask ourselves if in the complex systems the attractor can be seen like a frame and the process like a film, although in our vision both of them are carrying out an important task. The concept of attractor carried in the world of the memory can characterize structural stable nodes in the reconstruction of identity, qualities are not only morphologic but are also of place.

We know also from the contemporary anthropology that the identity is a phenomenon in motion, since the Anthropology explains that an identity is not static but is a process, Zygmunt Bauman [4] has written a lot on this subject. It is – is a science interest, and it becoming – is a language interest. The identity is like

process, it renegotiates its own foundations continuously.

### **C. Behaviour of Signs**

On the basis that behavior foresees the creation of events, the memory must renegotiate, open a dialogue between itself/identity/scope budgeting not for the disappearance of one of the terms, but for the re-positioning of the terms. Here is where the function of the “substitutive term strategy” is born. In most circumstances it is opposed to the “problem solving” attitude. A conglomeration of attractors could be one of the pillars of the dialogue, between the pre-existent memory of a form and the behaviors that are being born; unpredicted but coherent behaviors.

In the renegotiation of the memory an anguishing feeling could become an acceptable feeling, or also perhaps pleasant, because it is scattered in the system, it has been nourished by the system, and because it is not only self-referring.

The Design of the Systems, which is our subject in the ISIA of Rome, is deeply multidisciplinary because continuously has on the table a constant renegotiation of methodology, of proxemics, of narrative, and accepts the other as a part to be included, at the end a coherence principle is always an inclusive principle. Now it seems relevant to mention the relation with the memory referring to the text of Nietzsche [5], with his help we can identify an epic attractor, an antiquarian one, and an autobiographical one. With this a memory that is only mine leads to a memory that is a social one. Nietzsche does not mention them in antagonist way but in a convergent sense on the formation of the subject in which they all go to create a solo and lone “diary”. A diary that according to the specific situations is de-constructible and reconstructible. “Diary” could be defined as the representation of the continuity of the memory.

The interaction between biological phenomena has rhythms and time-space dimensions that human beings do not perceive with their senses and not even with instruments, except at a point of catastrophe, that is when something is noticed. In other words for us the attention to the phenomena on the latent state is important when the event generally does not appear to be “the final state” like solid, but when it is at “the starting state”, like plastic. At the start of the process studies, observations, but also many interpretations are born. An important point is what happens in the moment of the not linear bifurcation. The point of bifurcation or catastrophe however is not exactly “the catastrophe itself”, but is only the point of bifurcation of the possible courses of things and is not mechanically predetermined but is uncertain.

### **D. Wizard's Apprentice**

Future today means a credible period for our forecasts, it is a period of relatively reliable time because it is sufficiently short, or sufficiently homogenous in order to elaborate credible forecasts. For example it is quite different to foretell the fashion trends throughout 10 years or to foretell the movement of agriculture in the same lapse of time.

The word ‘trend’ has been created in order to spot the strong structural tendencies of the development of some elements. The flow of the tides can be established for

centuries with a strong approximation. We know from trend world-wide that between 30 years 70% of the world-wide population will live in megalopolis or in big city centres with a large concentration of people, since this is the trend confirmed from the economic observations and statistics, but we cannot say what will happen in 100 years because it's too long for complex phenomena of sociological nature to be forecast. In the last two centuries the industrial and technological development has made us accustomed to deep changes of paradigm and social behavior, also in quite a short time.

Certainly we are not predicting the future and honestly we are not so interested in knowing how the world will be in 100 years time, and also there would not be much sense in knowing that because we can only resolve the problems that we live in the present moment, not those which we cannot see yet.

However today we have a perception of the reality and a conscience of the event as a non-linear motion, born from complex mechanics, equipped of an inner instability effect of complexities of process that weaken the idea of forecasts; predictability of the behaviors and suggests a commencement to cohabit with uncertainty.

The “becoming” could arrive “before the future” and this today “works” in the mind of those who design, and is becoming a way to be.

Globalization has determined the creation of environmental conditions close to the natural processes, contiguous and retroactive, similar to a world-wide iperp attern of the events which are interacting more and more. An example of a concern to the complex societies is to have ten friends agreeing on a choice of a film for the evening , today - and the final choice is observable in the light of the theory of catastrophes – it leads a designer’s mind in various ways. The fact of knowing that the human perception does not correspond to the truth/space/time of the planet is not a sufficient excuse. Climate change is a controversial scientific concept, it is arguable that climate change ecology is not a true science, or perhaps has not offered scientific information, or perhaps it does not have real scientific experiences on its side, however we know well that it creates “true images“, or “images of truth“. Therefore to interact in the process through “imagination” is not wrong, since it is already an intuition of becoming of a determined process, an inquired field from metaphysics and not from science, but the world of planning, that we can say unifies both of them, even though becoming “religious”, cannot prefigure? In the end hasn't it always been like this?

## References

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