# Cities of the inhabitants or Megalopolis of the nets
# " Systems Design"
# between
# Sensitive and Intellective

**Prof. Giuseppe Marinelli De Marco**
*Vice Director ISIA Rome, school of design, under the Ministry for the University and Research, professor of Metaproject Design, and  professor of Basic Design Member of Academic Council.*
*marinelligiu@tiscali.it*

**Prof. Mauro Palatucci**
*ISIA Rome, school of design, under the Ministry for the University and Research, professor of Interaction Design*
*mauro.palatucci@gmail.com*

## Hard life for contemporary design without context  or Community

The Rome ISIA started in 1973 as an experimental design school of the state, and for many years has been renewing conceptual design paradigms, recently setting up a graduate course in "Systems Design". The intention was to deepen the sense of a constellation of meanings around the new geography of knowledge, technologies and creativity, in contemporary society. In a particular way design is involved in the relational and systemic aspects of the human landscape, both material and immaterial. Systems Design is drawn to the Sciences of Complexity, to the elaboration of non-linear thinking, and observes with much interest the self-building principle, dealing with features of a system as they emerge. We are committed to making a contribution to these theories which are part of consolidated experience in the area of the product, the morphogenesis and above all, the Metadesign that it has inhabited for many years, making use of the stimulating contribution  of mathematics and systemic courses of high profile. We want to be far away from the actual formative trend, overly close to the market catalogue, and to confirm our experimental research vocation, to better explore the Innovation problems.

A careful reading of modernity, complete or incomplete as it may be, shows how the culture of design came into being within a multifaceted laboratory, around a shared project of possible Community in the industrial era, a philosophy based on metanarrative thought of many sides which differ from each other, but which are united by ultimate desire for community. In spite of the wealth of this diversity, Modernity in the end, has been witness to the emergence of metanarration as the dominant philosophy in interpreting reality of the linear perspective type, using as its emblem modular geometry and the numerical approach to the project.

The relationship between subject and object has lived through many seasons from the Renaissance and the discovery of America, shifting the initial  focus away from the center of the drawing as a fixed, explanatory, cognitive principle of  Renaissance perspective, that is also an explicit metaphor for the figure of Machiavelli's Prince. Therefore it is a principle of absolute objectivity and recognizability that allows construction and representation, and includes the multiplicity of the world into a single vanishing point.

Starting from the Reform with the birth of Capitalism, of scientific and technical development, the subject-object equilibrium has shown much instability, especially during the XX century, until the present post-industrial society, in a globalized, information landscape

that it is rebuilding around the requirements and conditions of its own human time-space experience, and the general energy-matter exchange too. Everything leads us to think that the contemporary subject is shifting from a "perspective society" to an "a-perspective" society, that redesigns the assumptions of social semiotic praxis of knowledge and languages around this new axis of the sense. The contemporary postmodern condition appears therefore like an infinite probability of "relational models" within an Hypertext scheme that, as in the observations of Z. Baumann, [1] is lacking a final design or a complete script. Baumann himself says that the term postmodernity is in part inadequate, in the sense that modernity is an indefinite process, possibly even infinite, and replaces the term with "liquid Modernity" [2].

## Perspective and a-perspective society, imagination as project

The eclipse of perspective after four hundred years of supremacy coincides with emergence of the opposite condition that focuses on subjectivity the more important weight of the new metanarrations, operating a massive critical review of those project categories that, as an example, explained architecture as the phenomenology of urban planning, and design as the phenomenology of architecture. Therefore entire families of signs and meanings, of semiotic praxis and of methodologies, appear and disappear, depending on how the equilibrium of the subject-object relation within historical and social dynamism is interpreted.

Since properties which, in the world of modernity, were believed to be part of things, have become in fact the properties of the observer, subjectivity has assumed today an enormous value, able to make a difference.
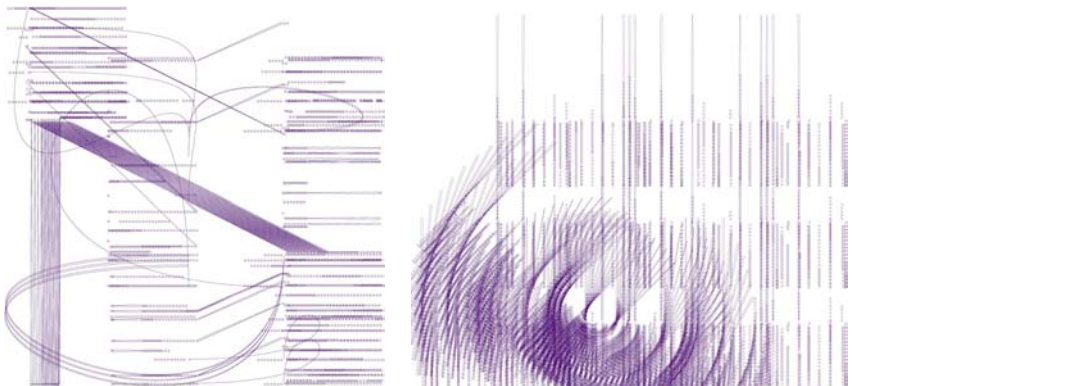


**Figure 1. Fabio Pulsinelli, from matrix to the system**

It is important that the deal of design's culture today embraces an immense kaleidoscope of differences and regards the person in a direct way, deeply attempting to design and to answer to new needs through design. The aspect which may make the difference is for us to understand whether in the end, the person should be perceived as unlinked to a community or collective destiny, as the world of technology and aggressive marketing makes us believe, or not.

*"To celebrate the unfinished in this era of digital ubiquity is to laud process rather than goal - to open up to third thing that is not to resolution, but rather to been of suspension.... The question becomes how to categorize such to fast-moving set of objects and concepts."* [3]

In other words if design is to express a culture able to follow its user-mutant, offering meaning coordinates able to tie the Sensitive to the Intelligible giving indications of a reasonable community, design can have a remarkable impact on history.

*"As relevant not only to the centered human but also to the decentered human as pertinent the human heart, body, and spirit as well as the human mind"*. [4]

If the model of modernity has created "leftovers" at a conceptual level but also at an urban and social level, the model emerging from postmodernity appears quite founded on production discards, in the sense that they trigger continuous chaotic processes, generate continuous physical and mental "peripheries", continuous marginalities and differences, entrusting the ever-present new media with the task of making sense of everything.
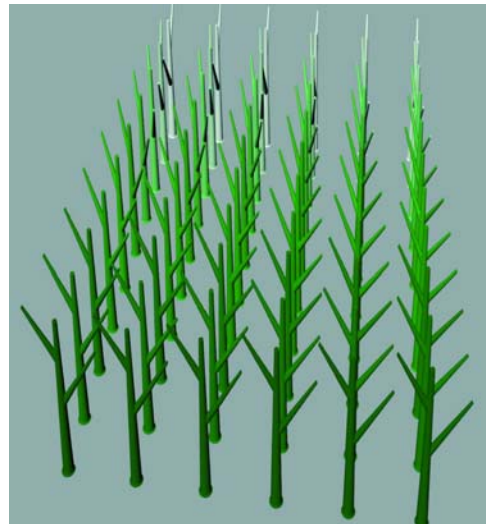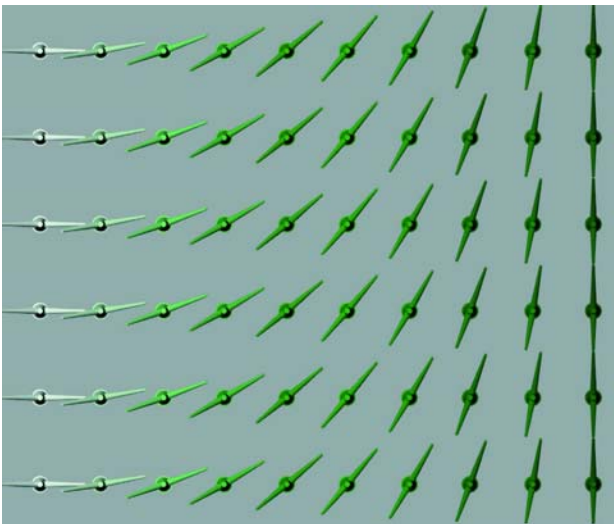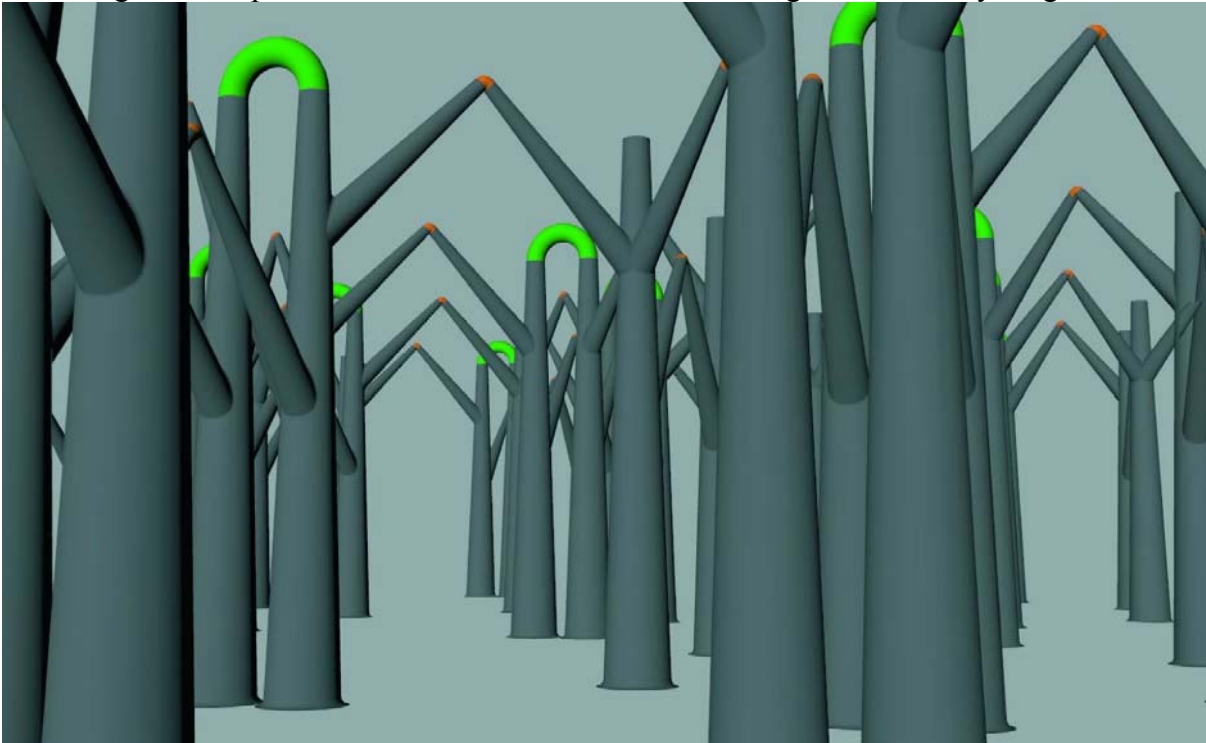


**Figure 2. Fabio Pulsinelli, hypotheses on a-perspective evolutive landscape**

We assume the travel of the contemporary subject in the urban drifting of metropolis and in computer networks, as a basic condition in which it lives, as the starting point of our research, but we ask what can be, the praxis of creation of a "self" that is an hostage of a such extreme subjectivity, intentional, tried or found. In the post-modern fragmented imagination, the expression of a "self" speaking "about himself" into the mirror, activating a labyrinthic circuit of pure images. On the contrary, the effort to produce an "imaginary" lies the expression of a "self" who has the mission to give himself an address, or destiny or addressee, and therefore renders its message accessible to reason that route which tranforms the inner world, his own memory, into a "system". This map of reconstruction of the "self", becomes "storytelling",

and the intelligible aspect becomes the other pole of the inner dialectic, that removes the subject from the a-prospective dimension as chaos, and puts it in the a-prospective dimension as a plan. In other word: accept to "live the chaos" looking for don't live "within the chaos".

## From form to process, from object to the nets, the metaphors we need

It is undeniable that for centuries the perspective condition has focused on the "Figure" as the core of its own metanarrations. This figure, in the fast and dynamic circuit of industry, began as early as the XIX century to fragment. As this process reached its height an excessively unifying and standardising praxis emerged guided as it was by the rationalist movement.

The rationalist movement accepted courageously the challenge of industrial mass production, creating practically from zero a new dictionary through the linguistic synthesis of the abstractism, also because it included a principle of universal abstraction, an integral part of the conceptual geography of human culture.

In achieving this transition to post-industrial society, the conceptual exodus from the world of the figures towards the digital world is evident. This means that design becomes aware of the scale leap of its coordinates and that the digital era launches a probabilistic scheme of generative possibilities which helps understand and reposition the "world of the shapes" which comes from consolidated morphogenesis. This phenomenon occurs as the complexity in which we live is grasped and as a result of the speed at which complexity is manifest. It is both a challenge and a remarkable opportunity to understand something which is essential, yet fleeting - that is, where the level of the coherence of sense or speech has shifted - where the point of equilibrium that allows a link from sensitive to intelligible data is located. Therefore not only a datum that can be grasped by the senses but also a hypothetical datum: in other words trying, and producing, traces of meaning in an unstable and complex geography.

## Disappearing time, remodelling space

"To the time-matter of the hard geophysical truth of the Places modification succeeds the Time then Light of a virtual truth that even the truth of every duration, causing therefore, with the Incident of the time, the acceleration of every truth of the things of the beings of the social cultural phenomena" [5] The difficult cohabitation of the material and immaterial world produces a kind of permanent pre-semiotic chaos between those who must "guide" the narrations in the human landscape, between the material languages and the immaterial processes of new communication and the new media. Peter Lunenfeld for example, is very clear in emphasizing the most frequent misunderstandings in the dominant culture of communication which tends to equate data with information. The culture of the project aims, in our opinion, at something more authentic, in underlining such "misunderstandings", at the very moment in which software protocols are unable to read the "World of the signs" or "The signs in the World" that they themselves produce and distribute, but that the world of marketing succeeds in imposing as the new collective lexus, available in the immaterial catalogue.

It appears just because it redistributes them downgraded from sign to marks. It is also a paradox because essentially computer science has transferred one language into another.

This limited availability or structural accessibility appears today as rather spectacular; since the modern linear world, the so-called "universe of precision" still can be managed to a

certain extent effectively even within non-linear systems or visions, since no process in history is complete because it says so itself, but because it proceeds in an interdependent way, "chaotic" way, as described by the theory of catastrophes.
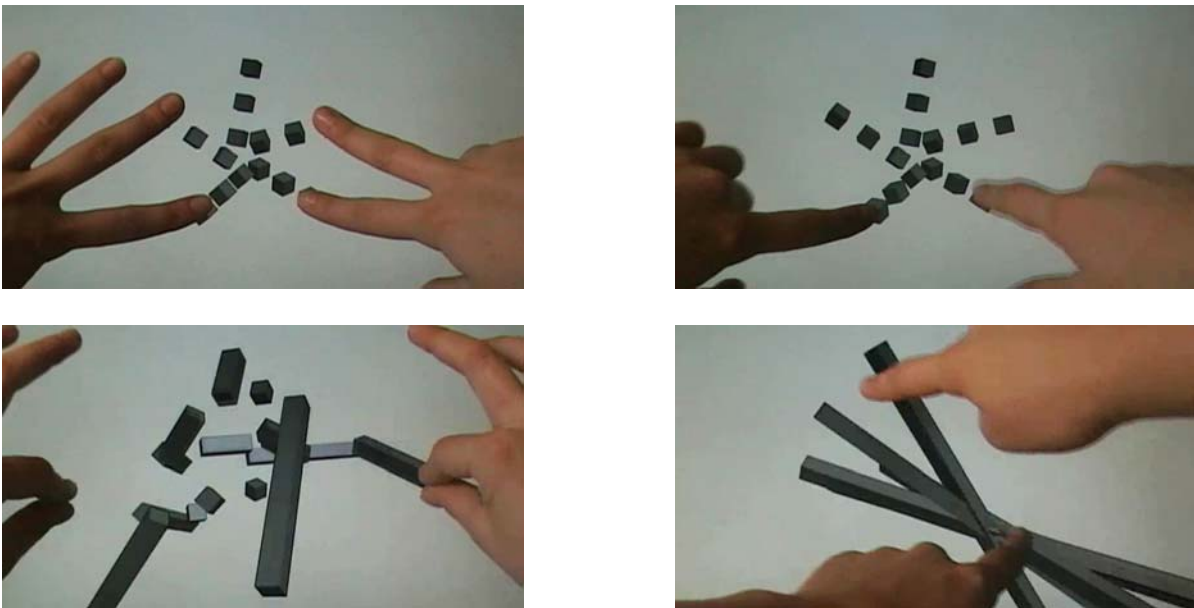


**Figure3. Valeria Fuso, Cubic, gesture based 3d modeler**

In the interactive development of a project, the cognitive dynamics always define a code that contains rules and behavior that in turn, provide the guidelines not so much for a project with a specific purpose but for different possible outcomes. At this point we are no longer dealing with a controlled event, but an idea of "possible" creativity where a process of direct interaction is replaced by another process central point of which is to avoid control. The act of designing outlines the transformation and not the shape because every shape, from this point of view, is only one of the possible parallel results of the idea. In this process the ideas are transformed via software into systems of rules. Today, considering the evolution of computing possibilities, we know how very simple rules can generate much more complex results. So, the real meaning of delinearization appears to be a process that produces ideas, and not un-idealized procedures.

The digital world means that a single language is available for representing information of different kinds, leading to an integration of codes and languages - considered distant - more closely and totally than ever imagined. In this perception of distance, the methodologies to eliminate or to resuscitate according to the situations comes into play. One of the contradictions of modernity also consists in the inability of successive technologies to resolve the problems of the previous ones, giving rise to a theatre of technological, social, aesthetic, political events which today, in the digital era, can be better defined in a temporal scale need often a morphology structure based on a "rewording". Perhaps today it would be right to speak not about the "past" but about the "past-past" and consequently, the "future-future". The simultaneous presence of the nanotechnologies and the lack of water for millions of human beings on the planet is in some ways an image that clarifies the idea.

It is here, in these scenarios made up of the "past-past" and the "future-future", that the project of industrial design - but architecture has a very similar role - tries to blaze its paths, since paradoxically the immaterial civilization creates continuously around its edges, an amount of waste, which in turn demands another environmental plan to the scale of the problems arising from unsustainable daily activity and requires the reconstruction of limits, not necessarily in the Euclidean sense, indeed often and more readily in topological sense.

## The role of Metaproject design

Metaproject design plays in this scene an important role because it reopens, reactivating the world of the imaginary, exactly what the linear numerical dimension of the modern had closed, but at same time joining what the postmodern deregulated dimension of the chaos leaves free at the molecular state; into a perennial state of transformations without shape, information without contents, contents without meanings. Losing the interest to the metaphors we lose an important instrument to give hypotheses, even fragmentary, of collectivity and community.

Metaproject design, working on the world of the metafunctions, opens an important creative space to the world of the "word", to the complex "dictionary" of meaning non reductables to the biunivoc interpretations, taking with himself the implicit diagonality existent inside the concepts. The philosophical backstage reaches comes opportunely, from the reflections on the strategies of the knowledge and the narrations of the decostructionist philosophy of french philosophers Derrida and Deleuze, and in Isia they are inquired from many years, and that we would want to combine to the sistemic thinking about which we spoke to the beginning.

Regarding the well structured praxis observed in the present of the neo-Moebius morphology, as example in the Theory of the Catastrophes, the conceptual approach, including the opening fields launched by free and symbolic links created by the poetry or the literacy or the painting, indicates a real issue to re-joint, and heating, the affective tie between the figure, and the net, the abstraction and the materic world, the concept and the sign, the technology and the problem to resolve.
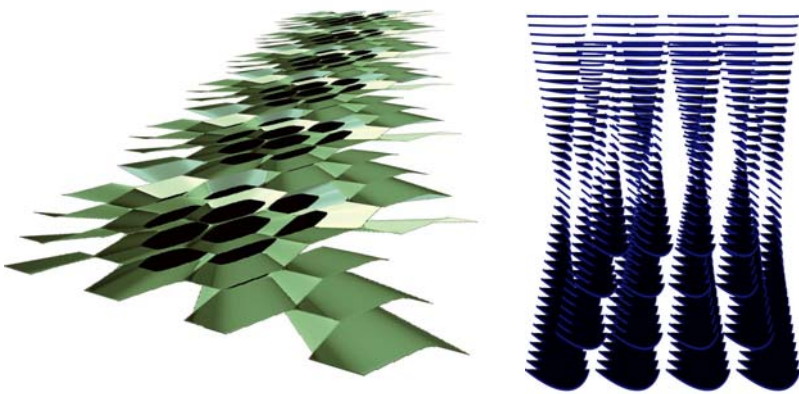


**Figure4. Barbara Garzia, network structure development**

The metaproject strategy adopted in Isia of Rome since many years tries to include in its transdiscilinary laboratory something speaking about the "story of the sites and the things".

Starting from traces and leaving traces, starting from the semantically closed art-work of modernity, and to proceede in to defragmentate, something able to let us to wander on, using the literature, poetry, architecture, anthropology, film. The aim is just to put us in a situation of hearing and dialogue with these praxis, and not to leave alone the morphologic searches on one side and conceptual expression from the other, to manage an enormous problem, projectual and logic or estetic, in which they are absolutely not equipped to answer.
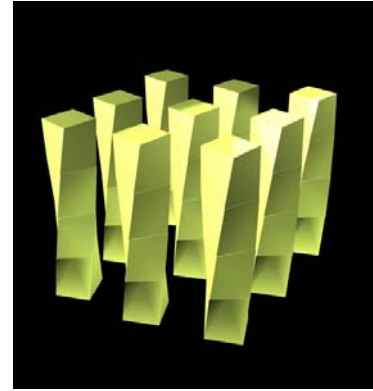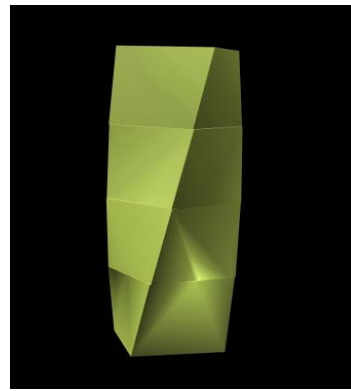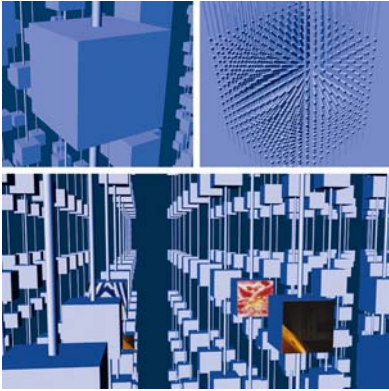
**Figure 5. Giuseppe Marinelli, Alto Foti coll. Infinitive space**
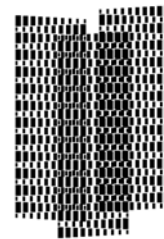**Figure 6. Ana Carolina Luciow Frossard, Deformation of the modular landscape**
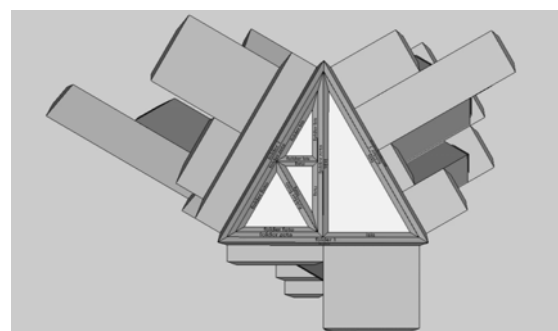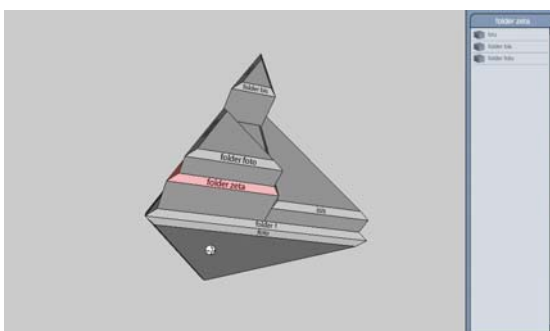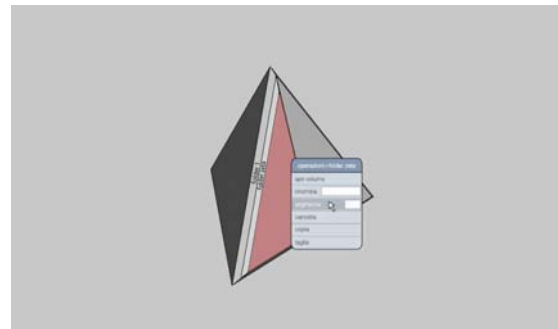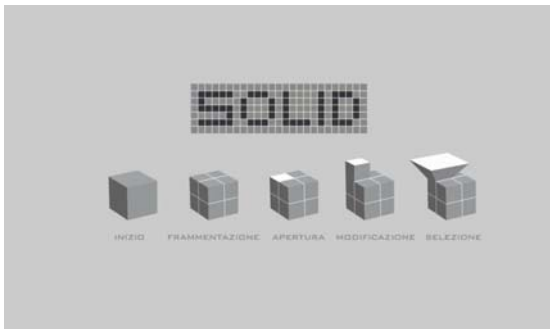


**Figure 7. Barbara Garzia, virtual rotation of solids**



**Figure 8. Andrea Della Vecchia, solid,software for tridimensional visualzzation of virtual data**

| | |
|---|---|
| Metafunctions | to offer, to see, to carry, to contain, to distribute |
| Concepts | measure, density, speed, transparency, crowd, solitude |
| Situations | eges, folds, regions, borders, center, periphery, margins |
| Relations | within, outside, under, over, throught |
| Sintax | study of morphogenetic materials, morphologic strategies |
| Typologies | tunnel, passage, door, room, square, corridor |
| Geographies | nets, frames, structures, trees, gulfs, bays |
| Maps | levels of communication between signs and situations spaces |
| Interaction | cognitive behaviors, patterns, usability models, control, technology |

We would to signal like the definition of non-site, [6] by now famous in the sociology and anthropology literacy, unfortunately today is stretching to a more large landscape of situations, and giving to this one more extensive and genuine interpretation. The non-sites lack of spatial meaning or typologic, therefore they felt of storytell, the "work of the sign" is absent. It doesn't regard only the great centers trades them since the landscapes without identity of the postmodernity, and they are much more numerous than what we believe.

Also the kitch entrance hall of the luxury five stars hotel is a non-site, the Eiffel Tower is non-site, even if in this case we have an is intelligent non-site, also many stations, airports, suburbs. The dress of Smith, the program rival the elect Neo, also Smith is non-site, while the proto-industrial engine of the city basement of Zaion is a site, dramatically suffering, but site.


## Folders, edges, elements and nodes

Without shape there is  no information, useless to remove this topic, the future will be the era of the shape, but it will not be the perfect shape coming from the history of the shapes, as well as from the morphogenesis that we well know. The ability to figurative abstraction will have to focus on flows, processes and contaminations in intellectually and morphologically cultured way. Even media are in continuous evolution, comparate to the human abilities, the redefinition of the meaning giving value in the space, are based exclusively on our human characteristic to understand the complex relations between "objects" and ideas.

The contemporary cities are not simply an immense agglomerate of spaces waiting for solutions, but above all an immense superposition of nets and systems, a mix of material and immaterial relations, such a variety of bounden bifurcations into the massive social economic processes taking today the name, by now mythical, of Globalization.

On one hand the city combines, decomposes and recomposes, the new multitudes that "deliver" impressive building configurations, from the other hand, cause the speed with which the digital economy moves, the human environment creates continuous systemic emergencies (as described in the book "emergence" of Steven Johnson [7], generating at its edges. Considering this permanent critical mass which the Media reset in real time, dissolving the center concept.

New geography of the knowledge is taking care today about the urban "drift" under the topologic profile, in other words under the profile of the sustainables relational qualities into the its inner one. The conceptual passages through topologic regions, borders, reveal a very interesting field of acting, because they express those scale leaps and those cross of edges so important in the processes of urban liveability.

A deeper vision of the complexity and the speed with which the borders constitute the space, make appear to their inner one folds and corrugations, in which it's possible to backtrack the peculiar work of the sign due also to the any aleatory praxis, subjective and temporary, as a telephone booth or graffiti, but all participate to the drawing up, moment by moment, the Hypertext, as it we spoken at the begin.

**Figure 9. Giorgia Lorenzi, Valentina Pirritano, File Not Found**

The interaction project, as an example. studies how acting within this instability without to interfere with the deep inner messages, but also without too much kindlyness or goodwill towards the instinctive and not communicative treatment dragged behind, and that now becomes residual. Making oneself as promoter of a expressive and logical continuum, the design that interests to us can activate just this "incomplete script" on which we can pursue to write again.

Notes
[1] Zigmunt Baumann "Interview on the identity"
[2] Zigmunt Baumann "Liquid Modernity"
[3] Peter Lunenfeld "The digital Dialectic" The Mit Press, 2000 page.8
[4] Robert Jacobson "Information Design" The Mit Press 1999 page 43
[5] Paul Virilio "the computer science bomb" Raffaello Curtain and. 2000 page 110
[6] Marc Augé "Non-sites" Laterza publisher 2003
[7] Steven Johnson "Emergence: the connected lives of ants, brains, cities and software" Scribner N.Y 2001

**Figure 10. Eleonora di Nolfo, T-shirt Experience, interactive dress**