

## Carlo Franzato

Ph.D. in Design from Politecnico di Milano, he is professor in Design at Unisinos University (Porto Alegre, Brazil). His research focuses on complex codesign networks developed by designers, other professionals, organizations and institutions, users and citizens.

## Architettura tra processo e metaprogetto

## Architecture between process and metadesign

La sfida contemporanea del progetto è quella dell'evoluzione tecnologica di convergenza tra il mondo fisico e il mondo virtuale, da cui derivano concetti come quello di smart city e quello di wikicity.

La sfida può essere affrontata ricorrendo al metaprogetto, inteso come processo di progetto.

Non solo il progetto e la gestione dei fenomeni urbani diventano sempre di più pratiche tecniche, ma tornano ad essere sempre di più pratiche intellettuali. Pertanto, l'architettura deve recuperare il suo ruolo guida nella riflessione sulla città e nella elaborazione di visioni per il suo futuro.

Nella cultura di progetto si possono includere il design, l'architettura e pure l'urbanistica e l'ingegneria.

La prospettiva ecosistemica, che si fonda sulla nozione di sistema aperto, ci permette notevoli evoluzioni del metodo di progetto. The challenge of contemporary architectural design is that of technological convergence between the physical and virtual world, from which concepts such as Smart City and WikiCity derive.

This challenge can be faced by means of meta-project, intended as a design process. Not only the design and management of urban phenomena become increasingly more technical, but they also develop into increasingly more intellectual practices. Therefore, architecture must regain its leading role in thinking of the city and in the formation of a vision for the future. Design culture encompasses architectural design, industrial design, urbanism, landscape architecture and engineering. In this sense, the ecosystemic perspective, which is based on the notion of open system, allows for significant changes in the design process. GG

Parole chiave: Informazione; Smart city; Creatività;

Immanenza; Trasformazione.

Keywords: Information; Smart city; Creativity;

Immanence; Transformation.



What is the most pressing challenge that architecture is asked to resolve today?

1. Castells, M. (2008), La nascita della società in rete, Milano, EGEA

We live in an age of great technological and social change. The possibilities of acquiring, managing, elaborating and exchanging information are growing, that is, the possibilities of knowing and communicating. As Castells¹ states, in this shift towards the information society, the information per se is not so important as its application for the production of new information and the generation of new knowledge, besides their communication.

Therefore, in the information society, the process is more important than the inputs that feed it and even than its outputs.

Since the process becomes central and since architectural design and all other design disciplines have a processual nature, design culture has got a significant opportunity. Designers can assume roles of articulation and direction of processes beyond their

disciplinary field.

The contemporary challenge for design is its integration in the technological evolution, accompanying the convergence of the physical and virtual world, which originates concepts such as the ones of smart city and wikicity. In this way, designers can act in the new modes of social interaction with a leading role, and renovate their work of social transformation and innovation.

The challenge could be faced through metadesign, understood as the design process that has the same architectural design process and other types of design processes as its object, laying on a superior level than the level of such processes. In this direction, metadesign is the process for developing the design method used in disciplinary practices.

In this challenge, metadesign can contribute

to the comprehension and the application of the possibilities that new information and communication technologies offer to the design processes, especially the possibilities of opening the processes to actors without design skills. In fact, new technologies foster interdisciplinary collaboration (between designers and other professionals) and collaboration interfunctional (between designers, other professionals, clients and users) along with the design processes. Moreover, they foster the collaboration during the use of the design results and their continuous evolution.

However, the opening to this diversity of actors and to their collaborative relations is not granted, asking for a radical reorganization of the design processes according to a network logic. Here metadesign becomes necessary.

2. Lyotard, J. F. (2007), *La condizione postmoderna*, Milano, Feltrinelli

With respect to the design of the contemporary city; what is the role of architecture in managing urban phenomena?



We live in an age of great technological and social change and probably in a change of age. In fact, our way of acting and thinking is changing radically.

The ecology of the thought and the ecology of the action merge together in the already cited convergence of the physical and virtual world and in the convergence of science and technology as well. Nowadays, technology is not a mere effect of science anymore, since it has become indispensable for scientific evolution. This way, we have to speak of technoscience and recognize the political power it has acquired.<sup>2</sup>

Thinking, designing and producing the social constitute a unique action. Thus, the range

of urban design extends itself, as any other design located within the city. And their ethical consequences extend themselves as well.

Not only design and administration of urban phenomena have become even more technical practices, but they have returned to be even more intellectual ones. Therefore, architectural design has to recover its guiding role in the reflection on the city and in the elaboration of visions for its future.



3. Franzato, C. et al. (2015), 'Inovação cultural e social: design estratégico e ecossistemas criativos', in Freire, K. (a cura di), Design estratégico para a inovação social e cultural. San Paolo, Kazuá, pp. 1/17-171

Architecture and design have established an exchange that is both operational and perceptive; buildings are conceived as objects and objects are conceived by those who design buildings. Between architecture and design, is it possible to define boundaries or intersections?



Design culture includes design, architectural design, urban design and even engineering. In fact, design culture is the field in which the different design disciplines meet and interact for evolving their process dimension.

The importance of such interdisciplinary dialogue grows due to the centrality that contemporaneity attributes to the process in respect to its results. Considering the results of design, architectural design, urban design and engineering, it is rather simple to trace their limits. Considering their processes, however, it is more difficult to do so, and it becomes more adequate to stress their common basis.

Here, process is understood as the "creative

process oriented to the development of sociotechnical devices for the transformation of the world", as defined by the research group in design for cultural and social innovation based at UNISINOS University.3

group proceeds defining constituents that allow distinguishing this process from the ones practiced in other areas: a) creativity: the process explores the human ability of creating and imagining. daring, subverting; b) immanence: the process is a mundane practice, immanent to the human existence and it continues to be immanent in the designed sociotechnical devices and in the transformation of the world; c) projectivity: the process is

projected towards the future, seeking for the transformation of the world; understanding and connecting the past through recalling. the present through representing and the future through anticipating; and d) transitivity, the process is fulfilled by sociotechnical devices interposed between the process and the transformation of the world.



4. Morin, E. (2008), *On complexity,* Cresskill (NJ, USA), Hampton Press.

5. Munari, B. (2006), Da cosa nasce cosa, Bari, Laterza.

When giving advice to students, what is the most valuable tool that an architecture or design student ought to acquire during their studies?



More than just tools, designers have to acquire method throughout their education and continue this methodological development in their professional practice. Morin<sup>4</sup> states that the paradigm of simplification – supported by the principles of disjunction, reduction and abstraction - has accompanied the great progress of occidental thought, from Descartes until the twentieth century, when the developments of micro and macrophysics began to demonstrate its limits. At the beginning of the 1900s, in fact, the theories of quantum and relativity came in contradiction with the classical physics, requiring an epistemological effort for solving the scientific impasse.

However, the paradigm of simplification is going on exerting its influence over the comprehension of the design process, and the famous flow chart of Bruno Munari<sup>5</sup> is an

example of this. In the studies on the design method of the second half of the 1900s, the process has been separated in phases and these phases in activities to be performed through specific tools. This way, the process has been reduced to a procedure, an algorithmic sequence of subsequent steps that lead from a problem to its solution. And it has been represented through schematic models as, for example, a flow chart.

This way, the process has been understood as if it was that abstract model, that procedure, those steps, those tools, that line (or circle, spiral, double diamond, etc.), which allow to solve a problem. Hence, the ecosystem of the design process – the designer with his or her identity and the stakeholders with their ones – is forgotten, and so it is for the ecosystem in which the sociotechnical device would become an agent. It is forgotten the future

of the design process, the transformation of the world, and the possibility or, rather, the responsibility of exploring alternative future through design.

For not dismissing the design process, we have to develop the concept of method as a base for strategic action in front of such complexity. We have to go beyond the principles of disjunction, reduction and abstraction, developing new principles that allow practicing the design process with renewed awareness. Principles that affirm our point of view, orient our thinking and govern our action. Afterwards, we have to practice the design process, we have to design.

In this sense, the ecosystem perspective, which lays on the notion of open system, allows significant evolutions of the design method.

