

# EDUCATIONAL INNOVATION IN ARCHITECTURE & ENGINEERING

Advances in final projects and thesis

Carlos Rosa Jiménez & Alberto E. García Moreno [Coords.]

Education is at the center of humanity's fundamental rights, it transforms our lives and it is the culmination of one of the basic aspects of our full exercise as such, contributing to the consolidation of peace, the eradication of poverty and the encouragement of sustainable development. As a fundamental right accessible to all, education must go hand in hand with quality and innovation. The role educators play is crucial in the way they generate innovative experiences that turn learning into a creative, dynamic, enriching and motivating process, producing tools which make possible a responsible and mature education that is committed to society.

In the branch of Architecture and Engineering innovation in higher education acquires even more relevance, since it has a significant impact on the improvement of the autonomy and motivation of students in a collaborative and knowledge transferring working environment.

This publication gathers methodologies, projects and experiences carried out in Architecture and Engineering Schools, showing the optimum results of innovative practices in learning practices. This material aspires to contribute both to the training of students and docents, while it also aims to generate debate and reflection regarding academic and professional practice and therefore introduce the necessary changes to guarantee a comprehensive and innovative education in accordance to the needs of the individual and our advanced society.

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Málaga a 14 de enero de 2019

Estimado Manuel, me es grato enviarte un ejemplar de la publicación que hemos editado en la Escuela. Espero sean de tu agrado, agradeciendo de antemano tu colaboración.

- **Educational Innovation Architecture & Engineering**, recoge los artículos del Congreso EDINNARCH.

Saludos cordiales



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## EDUCATIONAL INNOVATION IN ARCHITECTURE & ENGINEERING

Advances in final projects and thesis

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**CELEBRATING ARCHITECTURE, ENJOYING  
EDUCATION: A MULTI-FORMAT PROJECT  
(BY LAND, AIR AND SEA... AND NETWORKED)**

Manuel Gausa Navarro



I.

During the introduction I have been defined as a someone tirelessly dedicated to innovation. It is true that for more than thirty years I have been involved in the fields of architecture and urban research or the realms of spreading and communication, publishing and education. That is, in one way or another, I have been part of a “propositional culture” understood as a transmitter of knowledge, but also as a generator of knowledge. In this sense, the culture and creativity binomial, taken to the realm of education, leads to the necessary formulation—and reformulation—of the inherited systems and therefore, to a necessary combination of information and innovation: the university is part of culture and, therefore, it has to make room for a creativity that is not always standardized.

*Celebrating architecture, enjoying education: a multi-format project.*

For this contribution, I have felt free to review a career of more than thirty years that has been materialized in several formats, contexts and settings, confident in a kind of guiding line accompanied by teaching experience that was based on an early conviction: the fact that we are witnessing an important moment of change associated with the informational and digital revolution.

This is something we all now accept, but twenty five years ago, at the dawn of the digital revolution, this was hard to understand.

For many of us, the worlds of architectonic culture and concepts, but also of education, had to necessarily be associated with the (re)formulation of a possible spatial logic associated with the comprehension itself of our own, ever more complex environments. Nowadays, we can speak of a new operative logic, one that is more open and complex, which questions many of the old paradigms we had become used to; a logic of thinking that was neither strictly classical nor modern—not even calligraphically postmodern—but “informational” (computational, process-based, digital), closer to (relational) processes than to (objectual) events.

This ongoing “cultural battle” (something that has to do with the subtitle of this contribution) alludes to a (trans) disciplinary field, that of architecture, which has always been one of the most complex, rich and conceptually stimulating. Over the last decades, this change of scale and paradigms has been certified in the way we understand our own living and relational environments: many of us have witnessed the accelerated mutation of our habitats and our cities connected with the increase of mobility, long distance communications and the outsourcing of interchanges.

The explosive growth of large metropolises, with cities that attract and cities that connect, with intermediate cities and intense cities, has become a global process that, in a way, has affected all thinking logics with regards to spatial disciplines.

It is evident that this increasingly widespread and irregular change of scale has been favored by the gradual ability to transform our realities, materially and technologically. But also thanks to the development of long distance communication

and the ability to process—with a growing level of simultaneity—“information” (and to make it interact), thus multiplying the interchanges and, therefore, changes between processes and systems, between dynamics and systematics.

This informational revolution, connected with the digital and computational world, is a revolution associated with the multiple and complex logics of what we could call the *multi-city*. This entity is no longer the former closed and relatively controlled city with a recognizable layout (the city-object)... but a new n-City (a more heterogeneous and promiscuous *multi-environment*) where former stable forms (which for years had simplified spatial theories, urban planning and even geography) have left way for more dynamic and variable, non-linear processes of relationships and interactions—between layers of information and networks of relationships—that are activated and combined at each moment, conforming and transforming our environments in a fluctuating and evolutionary way.

A new reading—a new interpretation, a new perception, a new definition—of our reality appears before us: from fixed and static positions we have gone to dynamic conditions with variable interactions; from closed geometries we have gone to more irregular and open geometries; from linear and determinist models we have gone to non-linear and fluctuating models; from the ancient notion of form as paradigm we have gone to the notion of process as an evolutionary formulation.

The assumption of these “environmental conditions”, which have become increasingly natural to us, has meant, however, a clear challenge for an entire generation that has witnessed this change of paradigm, from architectural space as object or closed to design to architectural space as a fluctuating and reactive environment.

A real “substantive rebelliousness” has appeared over the last years in our understanding of architecture and urban planning: a rebellion associated with that new logic, forcing us to reformulate issues that are linked mainly with all spatial organization. Order, what kind of order?; form, what kind of form?; organization, what kind of organization?; geometry, what kind of geometry?; expression, what kind of expression?

We are referring to a new conception of architectural space, one that is not as closed or pure; one that is more open and process-based.

Notions that for years have been linked to spatial disciplines have begun to show signs of “indiscipline” and, therefore, a certain “rebellion” is making itself manifest in the materials of definition and debate.

What was once architectural composition—with its linear logic, its classical order, where elements appeared linked to one another, stabilized by an absolute form, a whole—has made way for the fractured position of the modern object (objects in relative position) something that is more in accordance with a less cohesive neo-linear logic, that is nevertheless just as fixed and stable in space.

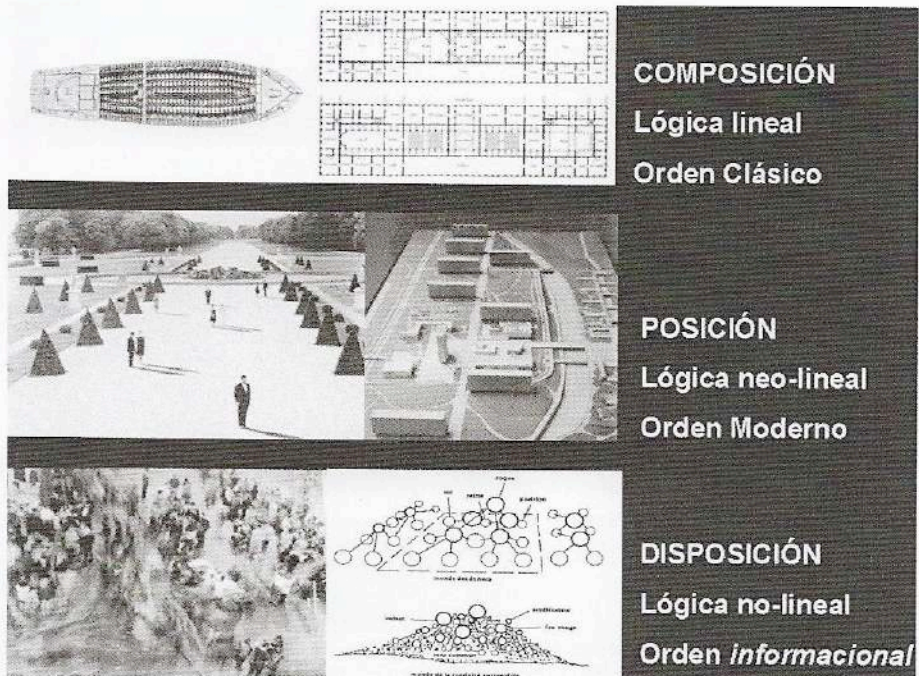


Figure 1. Former static—classical— and fixed—modern—composition leaving way for a new dynamic disposition, associated with a new dispositional—interactive and informational— logic

Nowadays, former static classical— and fixed—modern—composition has made way for a new dynamic disposition, associated with a new dispositional—interactive and informational— logic which is definitely more complex and non-linear, in which architecture processes, synthesizes and combines dynamic phenomena which have to do with evolutionary and variable processes.

Therefore, we are referring to changes: changes produced by the interactive nature itself of this new architecture (the more interaction of information and the more interchange, the more changes). Changes in the way we look, register, interpret, in accordance to a more open logic which some have called “digital”, “complex”, “interactive”, “transversal” or “informational”. A logic that, in any case, is “advanced” and deals with these new “environmental conditions”: *dynamism, evolution, simultaneity, diversity, transversality, connectivity, interaction and reactivity*.

A new logic that needs another kind of approach: one that is prospective, critical and proactive, analytical and synthetic, all at once. A holistic approach, one that is more complex and that far from focusing on a single aspects, combines levels, scales and scenarios simultaneously. We are referring to a new “operational” logic. Nowadays, the aim is to investigate the environments and devices that are capable of synthesizing the transfer from what is stable to what is dynamic, from what is unitary to what is heterogeneous, from what is pure to what is impure, from what is linear to what is non-linear, from what is disciplined to what is undisciplined, from what is additive to what is interactive.

As I have said, I belong to a generation that was educated under other precepts (composition, figurativeness, purism, design, form, from the standpoint, for the most part of "post-modernism") but that has witnessed this change of scale, approaches and paradigms.

The 1990s were the advent of the computational world (digital, informational) and, therefore, the assumption of a new approximation to the examination, analysis and definition of our own spatial and relational environments.

The assumption of this new logic involved the assumption of a certain "disciplinary undisciplinarity" for a generation that wanted to "see", "hear", "listen", and, evidently, "make".

A generation that, through production, communication and the transmission of ideas, wanted to combine the professional practice with the spreading, education, and research of architecture in multiple realms and formats. A "networked" generation, with "restless" careers, that wanted to explore, without dogmas nor pre-established notions, that which in that change of paradigms was disappearing and appearing at the same time.

A "change of logic" that forced trying out "changes in methodologies" in the (un)disciplinary education of architecture: at the university, in cultural explorations and in scientific research: by land, air and sea.

## II.

Therefore, we are referring to a new kind of PRODUCTION.

We have seen how the 1990s meant a pioneering moment. In 1985 Microsoft launched the first personal computer; informational capacity became universal, multiplying access to new tools, open to a new process-based exploration of complexity. The development during the 1990s of the digital phenomenon accelerated the launch of the first laptop computers, which combined mobility and portability to process information. The first *software* programs and *Windows* operating systems launched by Microsoft, accentuated the "multilayer" reading of a multiple reality, one that was urban and territorial, real and virtual.

From the sequential, mono-focused (cinematographic), modern look, towards the mid 20th century we passed on to the ambivalent perspective of television (a view point that allowed us to make the reality of the screen compatible with inhabited environment) and, at the turn of the century, to the multiple look favored by the layers (windows) open on our computers, which provided a more simultaneous and complex interpretation of the world.

The emergence and consolidation of this new digital and informational framework, as well as its new tools, models and architectural approaches, called for the experimentation with other types of formulations and repertoires associated with

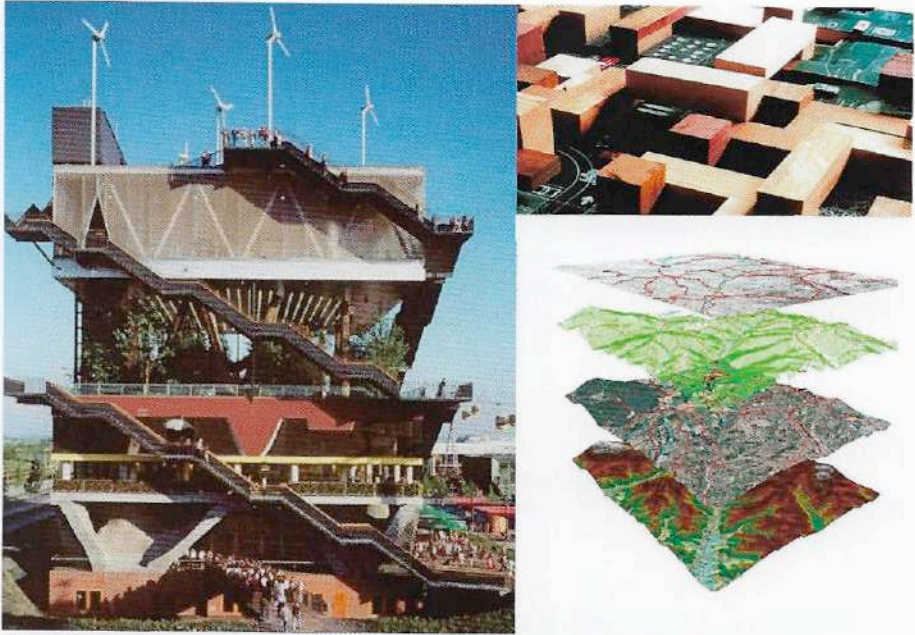


Figure 2. Stacks and folds: these examples show the ability of understanding design from the point of view of the superimposition of layers and programs: landscapes within landscapes, fruitions, crossings, and slidings.  
GIS Introduction 1991 // MVRDV, Kwadrant Housing System, Delft 1996 // MVRDV, Hannover Pavilion 1998

the exploration of this new *software*: explorations related with variable grids, with the first applications of programs such as Rhino 3D, Photoshop (with their ability to deform and fluctuate, or juxtapose layers). Or explorations associated with topological configurations related with a variable geometry and deformations applied to architecture capable of folding floors, juxtaposing topographies, etc.; or a multilayer reality that translated into multi-level approaches to three-dimensional configurations.

In this way, new relationships between architecture, landscape, nature and city were laid out, and the interactions between conditions, solicitations, situations and diverse and simultaneous information were multiplied. Relationships between typologies, programs and variable contexts, were addressed in an experimental and infra-structural way—no longer like it was done in the 1970s, from a super-structural perspective—one that was more directly operative, generating situations that were no longer “alternative” but “on the fringes”, that were previously unheard of but decidedly (and strategically) operative.

Relationships with the city, with the changes of scale of the city, with the city's own processes, all transformed into architecture; compressions and condensations of growth, connectivity and dilation (volumes and twinings, meshes and matrices, surfaces, reliefs and topographies) turned into *epitome-architecture*.

The book *Open. Space-time-information*, tries to gather some of these processes.

Nowadays, we understand our living and relational environments as prolix, profuse and sometimes promiscuous “hyper-places”. They are less pure and coherent



Figure 3. Space, time and architecture (S. Giedion).  
Open. Space-time-information: architecture y and the contemporary city (Manuel Gausa)

settings, more heterogeneous and “indigestible”, but at the same time, more diverse, rich and plural. If we are capable of not being carried away by our fascination for chaos, as architects, we can imagine more flexible logics susceptible of orienting and negotiating complexity, giving it qualitative vectors, organizing it not with the old constraining tools but with ones that are more open and adaptable.

We can simplify this complexity or celebrate it. At an architectural level, and at an urban and territorial level, by understanding the city as a “place of places”; a *multi-place* that is capable of *negotiations* and *intertwining* at the same time, as matrix systems that take into account—simultaneously—the city, landscape and infrastructure, as elements that are articulated into integrated and networked ensembles.

The project *Barcelona Land Grid* (*Actar Arquitectura*, 1998-1999) strived to explore the possibility of imagining a new territorial device, one that was open and weaved at the same time, capable of integrating infrastructures, landscapes, urban densities and *geo-urban* features.

This proposal coincides with a specially important time towards the end of the decade, when, in Spain, there already existed an entire generation which was deeply aware of this change of logic.

In Barcelona, a group of architects got together to create *Metápolis*, with the intention of spreading these new ideas but also to work on a city that was overly “characterized” by a certain formal way of doing things.



Figure 4. Metápolis Festivals and Forums Met 1.0-1998 / Met 2.0, 2000. Publications and manifestos

The emergence of *Metápolis* meant the appearance of another type of approach, one that was more strategic related with the production of “evolutionary scenarios” but, also, of “key issues” laid out as possible research and territorial exploration parameters.

The production of “strategic visions” understood as “designed scenarios” (and no longer as alternative utopias but as visualized operative strategies) translated the will of processing information and synthesizing it into possible reading clues associated with possible vectors of urban transformation: mobility, reactivity, diversity, mixings, hybridizations, nature and artifices.

### III.

Thus, after production, we enter a second approach: the SPREADING of ideas.

During the 1990s, in Spain, we witnessed the emergence and effervescence of publications and reviews, many of which strived to inquire into this new territory. Even though some of these publications continued to favor a more *monumentalizing* view—faithful to the architectural object, form and design—others decidedly constituted themselves as virtual laboratories of ideas and research.

In this context the *Diccionario Metápolis de la Arquitectura Avanzada* appeared, coordinated by Vicente Guallart, Willy Muller, Federico Soriano, Fernando Porras, Pepe Morales and myself. All of us were from different cities (Barcelona, Madrid, Seville), but we all shared the same idea of creating a transversal project to (re)

define the key issues associated with, what at the time, was that emergent change of logic, one that was recognizable both at a national and at an international level.

The Dictionary and the *Metápolis* meetings that followed, favored the emergence of a group of architects (and professionals from other fields such as geography, publicity and the arts) that got together to debate and propose ideas. But also to celebrate new ideas. All with the aim of sharing cultural and creative, as well as teaching and educational, experiences.

A new field became evident then: that of the TRANSFER of ideas, concepts, tools and methodologies; that is, of education and research.

Thanks to certain special circumstances, many of what were then young architects that gathered around *Metápolis* coincided in another adventure: the foundation of a new private architecture school (the first in Barcelona) called the ESAC-UIC (1998), the directorship of which I had the privilege to be part of between 1998 and 2001.

Of all of the key descriptors associated with this new advanced logic, which at the time was at an embryonic stage, we decided to prioritize the parameters of "complexity" and "dynamism", both in the professional profile and in the educational programs, both in the adopted goals and formats, and in the teaching networks that were tried out (many of which crossed over and intersected.)

The new school had to stand out by bringing together rigor and inquisitiveness, understanding the later as open and dynamic curiosity. It also had to be innovative—at times iconoclastic—with the incorporation of new referential voices (and not senior professors of the public university): young people, with a proactive and explorative attitude who could provide a diversity of approaches, perspectives and stimuli. This is how the school came to be: back then it was organized around the figure of an executive director and five co-directors in different fields (logistics, academics, economics, culture and the profession).

The school had to be a place that was open to complexity, with multiple voices that crossed over, but with a sole conducting cultural vector (an oriented and guiding criterion).

Within this framework, the first symposiums and seminars were launched, among which the following must be highlighted: *Another perspective, critical action as reactive: contra chronic positions / Criss crossing: data for a new scenario / Land-Links: operative landscapes / Complex logics / Real, Virtual, Actual*. This variety of gatherings allowed the school to become a kind of meeting-point for ongoing researches (somewhat like what Málaga is doing at the moment). To work in a network involves, at the same time, to be attractors and distributors: to invite and to be invited.

At the time, we decided on our commitment to work on the Mediterranean coast and its coastal cities (as Málaga does now), always working with the phenomena of the global city but with the specificities (particularities and identities) of the local city.



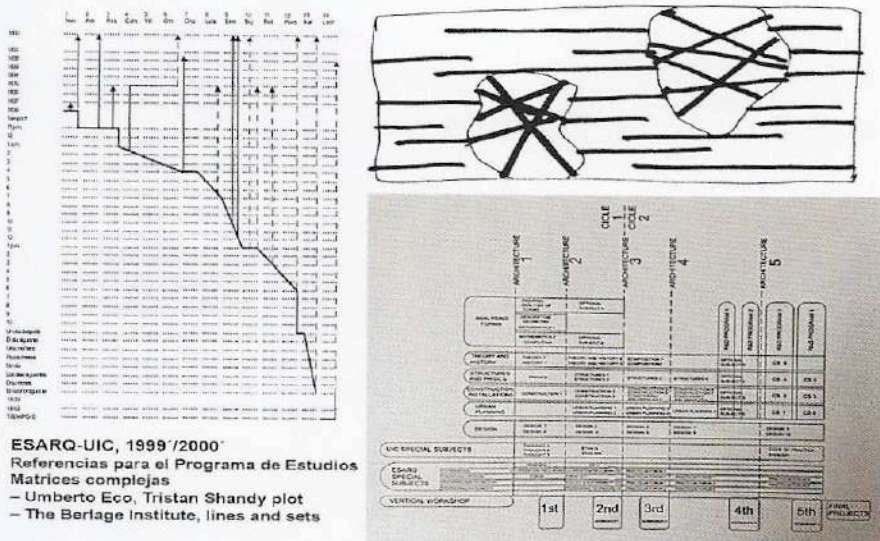


Figure 5. The educational program of the ESARQ-UIC included all of the compulsory courses, but at the same time it had a vertical structure and cross-over courses in which the autonomous teaching lines joined up in laboratories or integrated workshops

The educational program was governed by a set of crossing matrixes which, despite being successfully tried out, we were not able to fully implement. The school continues to work efficiently following this structure, but with a different spirit.

In any case, the use of possible grids and crisscrossing networks came from the *Metápolis* project itself and was once again used in 2003 for a project commissioned by the Catalan Regional Government: a prospective vision of Catalonia for 2050, within a context of a cosmopolitan Catalonia that strived to become part of a globalized world of networked explorations and researches.

In the *HiperCatalunya* project, we crossed “data, phenomena, objectives, strategies and operatives/operations” to lay out future scenarios associated, like the Barcelona *Metápolis* project, with key territorial issues; borderline scenarios that were nevertheless tacked in an operative manner: infrastructure intersections and mobility systems as generators of energy and activity; residential developments turned into relational landscapes; urban re-naturalization and recycling; productive and leisure hybridizations; networked landscapes, etc.

The notion of network is interesting because this was the year 2000, the year the Internet boomed. A tool that—despite existing since the end of the 1970s—became universal during the first decade of the new century, thus fully entering our everyday lives. It is hard to believe that only 18 years have gone by since the advent of this revolutionary advance that has interconnected our lives.

The Internet, which is completely linked with the new informational logic we explained above, was still an incipient phenomenon, but it underlies this new integrated understanding of networked territories, cities and landscapes and likewise marks a more interactive and interconnected conception between data, environments and spaces.



Figure 6. Catalunya- Land-Grid (Actar Arquitectura, 2003). A networked development (HiCat, 2003)



Figure 7. Media-House (2000) during the same year as Hiper Catalunya(2003), both projects at different scales: one territorial and another domestic. The former in collaboration with Media-Lab Boston

#### IV.

Both the *HiperCatalunya* and the *Media-House* projects, carried out practically at the same time (2002-2003), showed our interest in creating a research center of excellence, associated initially with a masters degree in *Advanced architecture and Digital Cities*.

The new IAACA (Institute of Advanced Architecture of Catalonia) prioritized a new key binomial in its definition: interactivity and reactivity. From the beginning, it included the idea of applied experimentation and scale 1-to-1 fabrication, but also a *multi-scale* approach associated with innovation and the optimization of resources that the new technologies offered, as well as the generation of new models and prototypes associated with the creating in 2006 of the Fab-Lab and its instrumental and academic applications.

*To make and to educate making* became the slogan of a center where, what began as a strategic approach to the city-territory, made way for digital explorations associated with new registers, new scenarios and new habits in continuous evolution, adapted to the passing of time and the passing of generations, instead of traditional design courses.

What is now the *City and Technoliges Masters Degree* connects with current experimentations such as Carlos Rati's *Sense cities*. The city has been present in the IAAC since the beginning, but, in a way, the center prioritizes the field of digital fabrication. Now, my interest in the urban future has led me to become involved in another project: the program *Intelligent Coast*.

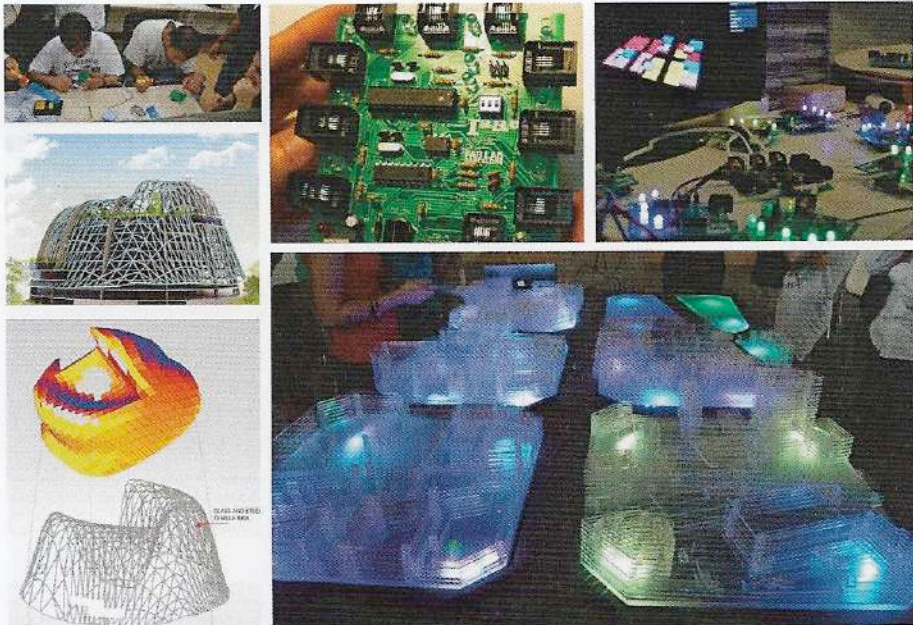


Figure 8. Spatial experimentation and reactivity at the laac Fab-Lab, 2010

This interest in themes related with the coast and tourism came from far back and it appeared in an embryonic state in the *HiperCatalunya* project, where the message “concentrate buildings and/to maintain the landscape” was put forward. That is, the prioritization of strategies that led to compacting construction and recycling tissues in areas that had already been densified, all in order to maintain the empty spaces that still existed along the coast while avoiding low density sprawl.

*Med coast*, *Medi-polis* and *Meta-polis* are neologisms that point to a new *megapolitan* dimension, that of a Mediterranean multi-city that reached all the from Andalusia to Sicily, along the Latin arch.

*Intelligent coast*, a research unit at the FPC and a masters degree, was a short-lived project (2007-2010) that nevertheless became very prestigious in scientific circles and in the Administration. It was oriented towards the analysis of strategies and creation of urban strategies, in an attempt to apply disciplinary innovation to the concept of Mediterranean *multi-city*. Proposals such as *Maresme 2.0* (an urban territorial line-guide for the northern coast of Barcelona) or *Multi-Rambles* (an analysis of urban tourism and the possibilities of urban re-articulation between Barcelona and the Sea), defined future scenarios that reflected the conflicts and potentials gathered by the administration.

At the 2005 Rotterdam Biennale, *Intelligent Coast* curated the Spanish Pavilion, inviting different research groups that worked along the same lines, specially the concept of Mediterranean “city of cities”.



Figure 9. Touristic strategies of architectural compactness. NL Architects, HICAT 2003

The management of the *HiperCatalunya* and *Intelligent Coast* projects caught the attention of the Genoa Architecture School. In 2008, the UNIGE, *Università degli Studi di Genova*, invited me to join its faculty as a “prestigious professor”, an right now I am a senior professor of urban planning. Genoa is an important city-port with a great influence in the Mediterranean. Some years back, it set out to renew its university educational offer at an international level (the UNIGE is one of the economic engines of the city). The school of Genoa is nationally renowned in the fields of restoration, construction techniques and landscape, all within traditional disciplinary frameworks.

The connection to projects such as the networked PhD program *Villard d’Honnecourt*, carried out by different cultural centers in Italy, or the foundation and directorship of the GIC-Lab laboratory (2008), a research group focusing on urban diversity and transversality, allows following research lines and projects around the phenomenon of this complex coast. This holistic approach to the territory and architecture prioritizes the conception of integrated geo-urban systems and urban recycling. It also researches procedures capable of strategically linking spatial, environmental and structural representation (mapping), vectorization (diagram making) and formulation (configuration).

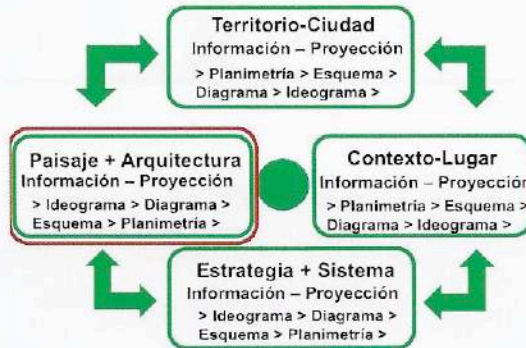


Figure 10. This diagram shows how territory, city, landscape and architecture are related in strategic approaches rather than through design. These approaches appeal to context and place as specific situations and conditions

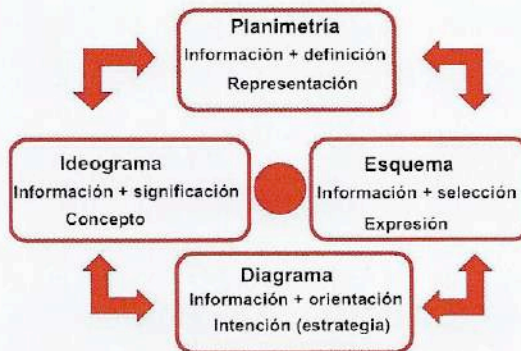


Figure 11. This kind of circular relationship has to do with going from the plan to the sketch, from the sketch to the diagram, from the diagram to the ideogram or logo-gram, and then back to the plan

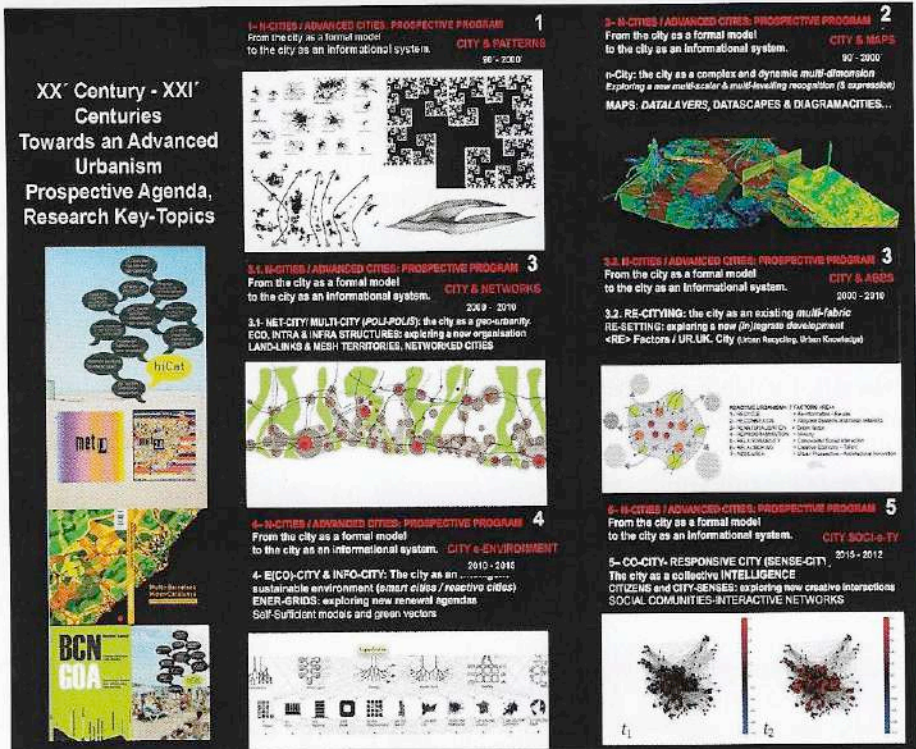


Figure 12. City and Urbanism, Prospective Agenda 1990-2015

We work in intense and simultaneous times, where research projects overlaps with academic design, and the latter with the exploration of diverse scales and formats (from the systemic territory to the contingent installation, from urban planning to artistic performance).

## V.

It is incredible to see how, in the approach to urban studies, over the course of twenty five years we have gone from an interest—at the beginning of the 1990s—in new geometries and urban patterns (because of their open configuration, their substantive irregularity and the fractal matrix) to a multi-layer approach, made of more topologically complex geometries, open to a simultaneity of relationships and information. And from this, after the year 2000, to the implementation of networks and the connection between physical and environmental systems (also virtual and real) as well as the notion of working with eco-systemic articulations and urban recycling. More recently (after 2010) and with the rise of apps, to the development of algorithmic programs that have favored even more complex approaches, allowing us to work with an increasingly parametric optimization of big-data. And, finally, the emergence of real-time co-generation networks associated with new bottom-up phenomena and a new collective intelligence.

The IAAC has travelled this long path with an important change of guard of those responsible for leading the institution, a younger generation with ideas and concerns more adequate to the times, a laboratory-space in which some of us (promoters or co-founders) help providing our experience as well as possible theoretical and practical backgrounds.

In Genoa, research (directed from GIC-Lab) has concentrated more on methodologies for the environmental and strategic approach to the city, especially in the entropic context, with important resilient demands (each year major floods and landslides occur). In this sense, the promotion of the international *Med.Net Research* network, a cluster of research groups in the Mediterranean context oriented towards aspects such as the coastal multi-city, tourism, agriculture and urban resilience, has allowed spreading knowledge regarding these issues at a national and international level.

One of the diverse formats used to approach the city has been *TOTAL GOA(LS) an approach to the coastal multi-city of the Liguria*, a project that, from the territorial dimension of the city of Genoa and the *(ideo)gramatization* of its several structures and potentials, evidenced the possibility of formulating new interconnected ensembles (from the need to rethink the urban tissue by implementing a new network of public spaces to the reformulation of its facade towards the sea or the study of the city's bridges and their connections).

A proposal like BCN-GOA (2012), considers a double approach to two comparable local situations, the Barcelona *ensanche* and Genoa and its high density, their different urban grids (from the same period) and the possibility of restructuring traffic and suggesting urban and landscape recycling dynamics for both. The



Figure 13. GIC-Lab. Genoa. Llobregat Parc, Agro- Interventional area (2015-2017)

concept of Superblocks proposed by Salvador Rueda and the Agencia de Ecología Urbana de Barcelona is reinterpreted, reaching a new distribution/reconsideration of the main arteries of the city, turning these streets into new pedestrian streets or linear landscapes, with the emergence of a possible discontinuous (multi-string) park in both cases.

At the GIC-Lab in Genoa we have also researched the notion of urban (or metropolitan) agriculture, through the project *AC+: Agri-culture, Agro-cities* (FRA Funds 2012). The importance of reformulating the agri-urban spaces in the Mediterranean context (an agriculture often associated with the voids between cities that is important to maintain biodiversity and the landscape), is based on the consideration of set of cities along the Mediterranean arch in which agriculture, heritage and tourism can lead to new integrated models. The research project also included other areas of study, such as land use and planning, second level materials, KM 0 cuisine, agro-tourism and its relationship with conventional tourism, etc.

The study focuses on two large urban-territorial agricultural areas, the Llobregat in Catalonia (a large park articulated as a “park of parks”) and the Albenga in Liguria (a large productive expanse with greenhouses that allows working with complex production cycles enabling the conversion of former structures, recycling them into new public spaces and agro-leisure itineraries). Of late, this interest in landscape and in an (artificial) architecture associated with environmental (natural) processes has lead to an interest in the study of hydrological systems and their impact as well as their resilient potential.

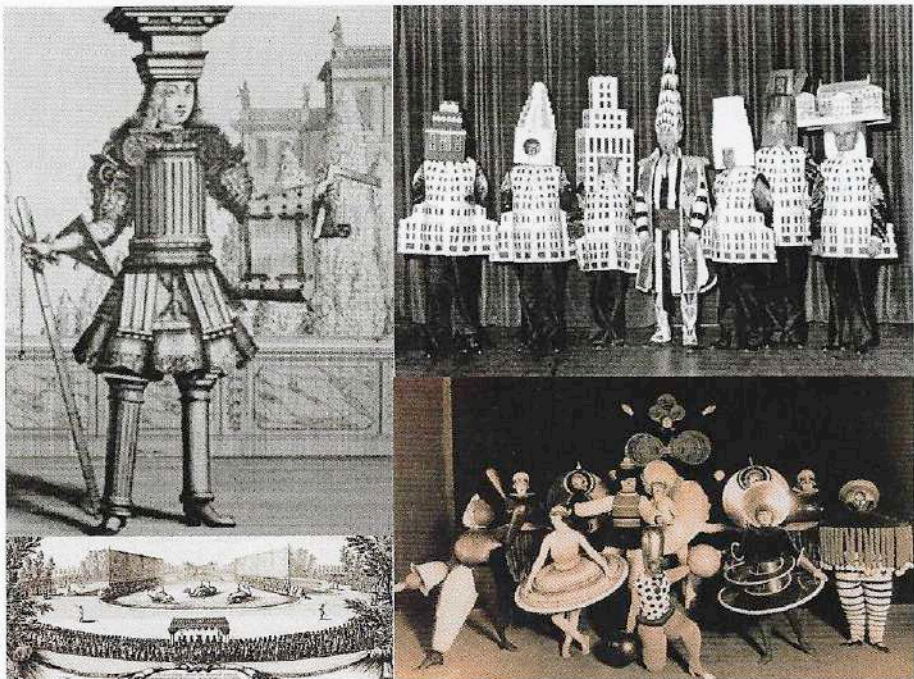


Figure 14. From the baroque period to modernity, celebration has served not only to relax and have fun, but also to communicate and bring culture closer to the citizen (and among citizens)



## VI.

I think that it is important, especially in the field of education, not to forget a last component, one that takes place after production, spreading and the transfer of knowledge: the CELEBRATION of shared ideas.

It is not only important to complete the design (and creative) processes with a celebration of the finished work. Throughout history, whenever there has been a change of paradigm, rigor, thought, science, critical analyses and propositional syntheses have gone hand in hand with a "party" (we can call it spectacle or show) as a possible format to spread, disseminate and co-participate in the work.

From the baroque period to modernity, celebration has served not only to relax and have fun, but also to communicate and bring culture closer to the citizen (and among citizens).

In this sense, from GIC-Lab we have promoted intensive workshops in which students experimented with other performative formats (theater, cinema, comics, happenings, banquets or temporary installations) to communicate, in alternative ways and with different tools, their course work.

Celebrate architecture and enjoy education.

It is true that education must be rigorous and didactic, but it should also have a large celebratory component (beyond the closed academic world and the old intellectual shells), to dialogue with a society with which it is important to share ideas and dreams.

We live in complex times that require taking risks and venturing out (sometimes hazardously) and not being afraid to experiment (nor of making mistakes or seeming ridiculous), despite the need to be reasonably cautious and.... timid.

Neither must we fear talent, nor critical confrontations or differences, all in the context of intellectual respect and exchange. That is diversity (universality): a set of experiences that are bound to build, debate and share stimuli, methods and ideas. Trade has become research: students are no longer "disciples" or "apprentices", they have become "accomplices" in this shared search.

The school—as it has always been understood, that is, as a "center of knowledge"—has turned into something that looks more like a large laboratory (an interchange of experiences). I have always admired colleagues with the ability to instruct (sometimes almost military-like); I have always valued that didactic-educational ability. However, personally I consider myself closer to being a guide-explorer, or at the very most, a "trainer" that lays out strategies and creates stimulating environments for the game to flow in the correct direction.

The *ADD. Dottorato in Architettura e Design* at the UNIGE, the doctoral program I direct in Genoa, is based on the diverse complexity of voices and on the transversal

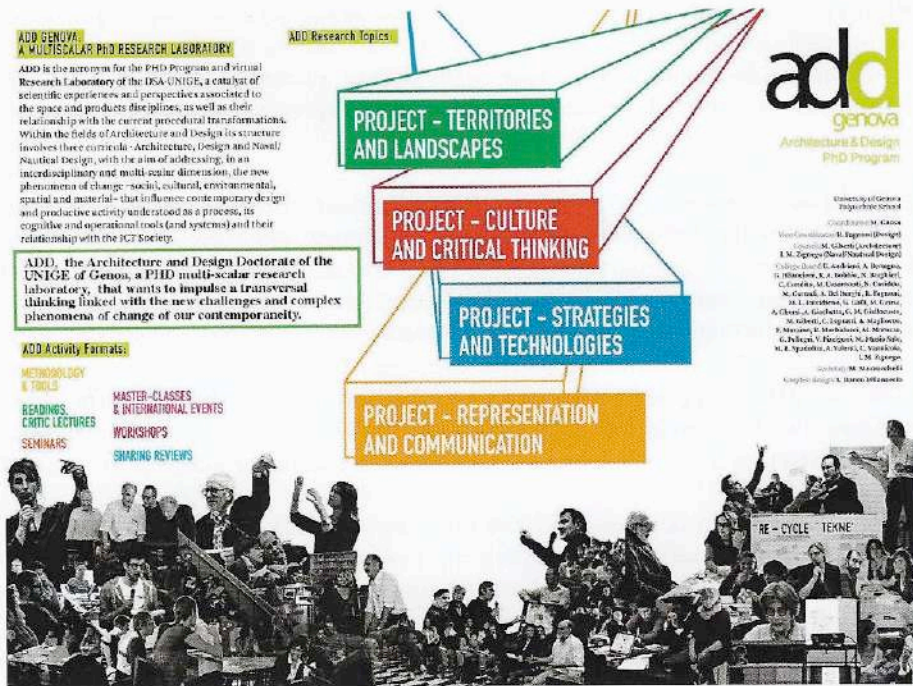


Figure 15. ADD. Dottorato in Architettura e Design de la UNIGE, 2015-2018

meeting of the different areas of design research that are part of it (territory and landscape, culture and critique, technology and systems, representation and communication). The double network between the four research areas that structure it and the transversal lines of research that configure the program favor a multi-scalar approach in an ample meeting and exchange space between docents, PhD holders and students, with intense weekly educational and cultural activities.

I am convinced that architecture must reaffirm, once again, its cultural and collective condition, beyond the mere register of accomplishments or the ritualistic attention to individual careers and personas.

At the turn of the century, we have witnessed the last stand of a postmodernity based on the calligraphy of design authorship and individualistic glamour. The rejection of these clichés and the research into new paradigms has marked the rhythm of our times. I do not believe that the blossoming of big brands, or of important names understood as marketing strategies has been good: it has not created culture, it has created fads and consumption.

It has not created systems, it has created episodes.

The only way of recovering the cultural force of architecture is to work on the basis of shared research and approaches to the great spatial, urban and social challenges that we are faced with at present.

This is the idea I would like to put forward lastly: the celebration of a possible, grand, collective adventure, that of a city, an architecture, a society (and a university) that are diverse and, nevertheless, agent-like at the same time.

Interconnected (and not isolated) individuals in which the game is both for oneself and as part of the whole at the same time (sharing but not necessarily supporting or following orders).

I would like to finish with this picture taken by my father that has fascinated me since I was a child. Perhaps now I know why. It shows a group of children along a wooden fence, all of the move on it, between and along it. To the left, a reckless boy jumps and balances and will probably fall sooner than later. Near him, another boy holds on tight and does not move, and will probably remain like that for quite a while. There is also a boy in the middle, in an ambivalent posture between risk and caution. There are others that are grouped together, just for the sake of enjoying each other's company. While others stand at a distance.

We know that the image depicts an instant, that it will change, little by little. But we also know that this is a picture of a dynamic, open and shared game (a group?, an architecture?, a city?) in a rich, diverse (and interlinked) space; one that is differentiated and (multi) relational at the same time.

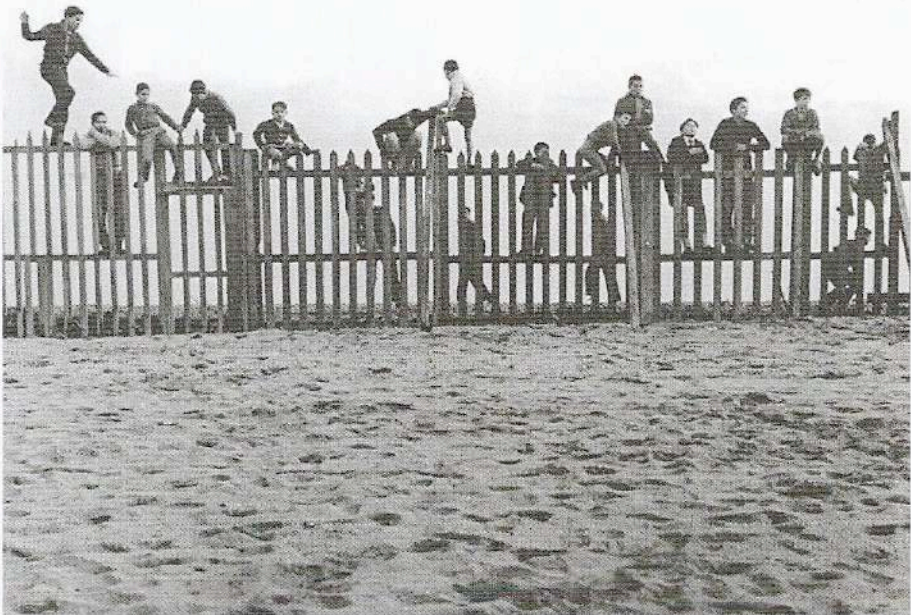


Figure 16. Manuel Gausa de Mas, *Niños en una Vallo* (Somorrostro Barcelona, 1963)