Learning by design in an international Urban planning and Policy design Master Program

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1. Introduction: teaching to international students at polytechnic school

Since 2005, the School of Architecture of the Politecnico of Milano has offered a two-year Master of Science program in Urban Planning and Policy Design open to international students. This program is a challenge and lends itself to experimentation, on account of at least three of the conditions that characterise it: the integration of different disciplines, its international dimension, integration between teaching and research activities.

It is in line with the Politecnico's long-standing tradition in bringing together urban design, planning, regional studies and the social sciences, and its goal is to provide a broad education in planning and policy making. It lasts four semesters and is meant for students in possession of a bachelor's degree in a variety of disciplines: urban planning, architecture, landscape design, geography, economy and territorial engineering.

Five years on since the inauguration of the Master program, the student body is highly heterogeneous, in terms of country of origin and previous studies: more than 25 different nationalities and at least a dozen different educational backgrounds are represented among the approx. 80 students that enrol every year[4]. The courses attract many Erasmus students from architectural degree programs, whose presence contributes even further to the diversification of the student body.

For this reason, first semester courses are designed to set a common frame of reference and provide a common basis in terms of cultural and operative tools, whereas from the second semester on the students may opt for urban design oriented or planning & policy design oriented courses.

The Urban Design and Planning Studio is one of the entry courses of the Master program[5]. Its objective is to get across the basic knowledge and skills for the creation of structural and spatial design schemes in a contemporary urban context, and it constitutes the first, essential design experience offered to the students. The relationship between the polytechnic tradition of Italian schools and the diversification of the classes by skills and by origin is a challenge we have decided to take up by giving the course an experimental and research-oriented character.

For many students who come from different educational backgrounds and especially those who may have accumulated extensive professional and research experience, possibly according to more narrowly defined criteria, even getting an understanding of the goals and the scale of the project and the instruments available might prove difficult. In the minds of many students, in fact, and especially those coming from the Asian countries, urban design has a strictly morphological acceptation, to do with the conformation and the arrangement of

[4] For instance, in academic year 2011-2012, the program is attended by students coming from the following educational backgrounds: planning, urbanism, philosophy & urbanism, architecture & urban planning, architecture, landscape architecture, restoration, management, sociology, environment engineering, architectural engineering, geography.

[5] The course was set up by Patrizia Gabellini together with Matteo Bolocan Goldstein, and Andrea Di Giovanni, and with Bertrando Bonfantini, Antonio Longo, Marco Mareggi who during the last two years have been responsible for the management of the course. Its structure is documented in (Di Giovanni, 2008). Nowadays the Urban Planning and Design Studio encompasses the subjects of Urbanism (Bertrando Bonfantini), Urban Design (Marco Mareggi), and Vision and Rendering Tools (Antonio Longo).

the buildings and the infrastructures. For students who have studied in Europe, the dialectic relationship between planning and urban design, between architecture and the organisation of the functions and the economy of a territory is more elaborate. And there are also quite a few students coming from geography, economics and sociology studies who have no prior familiarity with territorial planning. In some of them this makes for an open, inquisitive mind, and therefore it is not necessarily a problem.

2. Urban Design and Planning at the Milan School of Architecture

Before we proceed with a presentation of the didactic activities of the program, we should take a look at the type of design and planning activities that are proposed to the students. Since a description of the multi-faceted characteristics of the "progetto urbanistico" in its Italian acceptation goes beyond the scope of this report[6], we can only provide a summary of the main points. Three keywords may help gain an understanding of some of the basic concepts that will be developed in the following paragraphs in connection with their educational implications: contemporary city, context, composition.

The first keyword, *contemporary city*, defines the urban field to which the project is applied. The reference space is the contemporaneity of the existing city, the real city in its historical evolution. The urban project for the existing city in Italy, albeit with different acceptations, has always devoted great attention to historic conditions, and has taken into due account both the heritage from the past and the current evolution of a city. Thus, the project develops in the manner of a work in progress, in close correlation with the physical, social and economic aspects of the existing city.

The second keyword, *context*, indicates that the project is not applied to a situation defined *a priori*, through a consequential relationship between analysis and project. On the contrary, the context is an artificial device, arising from the interpretation of the multiplicity of factors that characterise a city. It is made from a set of features that force themselves to the attention of the urban planner, which either emerge or are deliberately sought and picked out, and thus selected. Project activities, in their initial stage, mostly consist of working out the answers to a series of elementary questions: what problems come to the fore, what are the resources of the territory? What transformations are currently underway and, conversely, what elements are static, unchanging? What is the geographic scope of the problems observed? Are the client's requests clear, or do they imply other issues, other undeclared requests? To give an answer to these questions calls for a critical activity, a selective work through which the context is constructed, thereby delineating the urban field to which the project applies. The project is an activity that generates knowledge, a survey conducted through design and imagination, through the ability to orient the information, systematise the data collected. This *modus operandi* means that the correlation between survey, urban analysis and project will not be linear and consequential, but rather will consist of progressive adjustments and will be perfected through clues, trials, errors and iterations,

[6] For a general account of the Italian urban design and planning tradition, see (Palermo, 2006).

reflecting the cyclic nature that is typical of the craftsman's work, as aptly described by Richard Sennet (2008).
The last keyword, *composition*, originating from the previous two, describes a process that is inextricably associated with the making of a plan for the contemporary city. Physical fragmentation, the acceleration/ slowdown of transformation processes, the multiplication of the subjects and the demands that animate the urban scene are recurrent characteristics, together with a scarcity of territorial and financial resources, and the prevalence of existing elements to be reused and improved over new interventions. The urban project addresses these issues by making a combined use of techniques and approaches that pertain both to urban design and to planning, by working on different scales, and through the use of different techniques, that is to say, through an integrated vision of the social, economic and spatial aspects at stake, both in interpreting the phenomena observed and in defining the actions to be undertaken. In urban planning and design, composition is a work of selection and coordination, a form of design which is based on the ability to establish correlations and cause and effects relationships, and to give a new meaning to existing elements, as opposed to bringing in new elements, a form of design which interprets and uses the relationships between the individual parts, instead of introducing new structures (Gabellini, 2008; Bruzzese & Longo 2011).

3. The common area and shared theme of intervention of the Design Studio

Within the framework of the international dimension of the School, it was felt that to underscore the Italian approach to urban planning and design was the best way to satisfy the multifaceted demand for a broad educational program expressed by the students enrolling in the Milan Politecnico in recent years.
As mentioned before, the profiles of the international students are extremely heterogeneous and mature. The students are highly motivated in their choice of a multidisciplinary program, oftentimes they have gained extensive experience doing research and professional work, and have a strong propensity for mobility. These conditions require a taxing preparatory work to bring into alignment and share the language and tools of the urban project. Needless to say, to involve such a rich and diversified student body in a practical and experimental activity, which for many students amounts to exploring a hitherto unknown territorial field, calls for a clear identification of issues and objectives, mated, on the part of the teachers, to a good knowledge of the territory chosen as the planning and design experimentation field.
Accordingly, it was decided on the one hand to focus on a nearby territorial field that was alive and would provide opportunities to come to grips with dynamic phenomena underway, i.e., the Milan Urban Region, that was interpreted as a "city of cities". On the other hand, it was decided to thematise design research on habitability as a quality of the places that the urban project could affect and enhance.
Thus, the attention was focused on sections of the *Milan Urban Region*, the vast urbanised area that surrounds the city of Milan. It is a territory displaying many of the typical characteristics that are observed in Europe's major cities: administrative fragmentation (the Province of Milan includes 134 municipalities with 3 million inhabitants), unbalanced demographic dynamics (Milan, the regional capital, with

1,320,000 residents has been losing inhabitants and the demographic balance is compensated for only the by inflow of immigrants, while the population is on the rise in the other municipalities of the province), impoverishment of the farmlands and the landscape, in a territory that is one of the most fertile in Europe, loss of production activities as major manufacturers move out of the area and the size of companies in general declines, a drastic drop in the number of people employed, atomised decision making and fragmentation of territorial resources, a geography packed with traditional ancient centres increasingly hemmed in by new residential and commercial centres.

Within this framework there is room for the most diverse types of settlement, which cut across the administrative boundaries and that hinge on a combination of factors to do with the economy, the settlement pattern and the history of the area. We are dealing with the so-called "city of cities", the expression coined for the Strategic Plan for the Province of Milan developed between 2005 and 2007 with the support of the Department of Architecture and Planning (DiAP) of the Politecnico of Milan, a strategic project that has into focus the settlement, economic and social geography of the contemporary metropolis of Milan (Balducci, Fedeli & Pasqui, 2011 link 1; link 2).

Equally important is the identification of a clear-cut thematic focus. The expression "city of cities" recognises a set of factors to do with mobility, access to healthcare, employment, culture, welfare, the environment, factors that, in their rich interrelations, define the concept of *habitability*; this concept refers to the quality of the habitat and establishes a close correlation between the way people live, their needs and the quality and forms of the urban space. The concept of *habitability* makes it possible to correlate the quality of life as experienced by the inhabitants and urban quality in the broadest understanding of the term. To use this concept as a basis for developing a strategic vision makes it possible to steer and guide projects, policies and initiatives. This approach was put into focus within the educational and research framework, during the same time period, by the group headed by Patrizia Gabellini (2006) who defined the purpose and the setup of the Design Studio and produced the thematic reference submitted to the students from the very start of the activity. Using habitability as the term of reference has many interesting ramifications. The theme was conceptualised in research works in relation to different but mutually correlated aspects (moving and breathing, innovating and operating a business, generating culture and enjoying it, producing urban welfare, residing, sharing spaces) that focus the attention on different places and infrastructures, derived and correlated issues, different types of inhabitants and living practices in the city. The habitability of places, seen as a multidimensional condition, enables the actions of a project to be defined as a function of the quality of life of the people.

From a didactic standpoint, choosing a nearby, accessible territory means giving the students a chance to visit, walk through and stop in the area, that is to say, to learn from a first-hand experience of the places. To work from the perspective of habitability has meant providing a clear mission to orient the students' planning and design activities, by focusing their attention precisely on the quality of living in a place on the part of the population, with their human bodies and different needs, and the way those inhabitants relate to the places and the urban policies.

Thus, the heterogeneous student body is provided with a common territory and a shared perspective, so that they may learn to formulate working hypotheses for the

physical transformation of the land. On this common basis, the student may exercise their different outlooks, as determined by the different cultural and educational backgrounds. Possibly, it is thanks to the variety of skills and origins characterising the student body that this approach enables the individual students to assess their skills and verify their background. Thanks to a common territory and a common theme, the difficulties that are encountered at the start appear as a viable alignment and setting modality to get the class started on doing design and planning group work.

4. Didactic organization of the Design Studio

The objective of the Design Studio is to introduce the students to a critical reading of the context, the ability to prioritise the initiatives, the capacity to produce guidelines and schemes for the territorial re-composition of an area.
Design Studio activities simulate a highly complex professional design work and research situation, to be addressed in a didactic setting. Clearly, it is associated with a form of practical knowledge and it is precisely through a guided sequence of concrete, hands-on experiences that the students are introduced to the task.
Work is carried out in the style of an atelier, in a dedicated classroom where it is possible to draw, both on paper and on a computer, with Wi-Fi connections, books and project documents available for consultation, where a large screen may be used to give theoretical and case lectures and show examples. The students are divided into groups responsible for different project areas within the Milan Urban Region, chosen from among five areas suggested by the tutors (Fig. 1).
The five areas are urban sectors situated around the central core of Milan, measuring about 10 km x 30 km, characterised by widely differing geographic features and identified with the expression "in-between" (Milan and Lodi, Milan and the Adda river, …). A deliberately vague identification of the "urban field" assigned to the groups helps to prevent the attention from focusing on preconceived viewpoints.
Teachers and tutors are present in the classroom and discuss with the students sitting at a drawing board or in front of a computer. Meetings between the teachers, the tutors and the students are held on a weekly basis, accounting for a sizeable portion, a day and half, of the five-day week that characterises the students' schedule between October and January. Accordingly, it may be rated as the most demanding activity that students have to engage in during their first year of attendance. Evaluation seminars conclude the two steps of the didactic organization.
The workshop is organized in two steps: a first part, dedicated to describing the territorial field and a habitability profile, is followed by a second part during which the students produce schemes and guidelines for a re-composition of the territory assigned to them.
The hypothesis driving the work is that the project can be addressed only through the description of the urban and territorial field. The description of the context is a process of research and analysis that is not clearly separable from the project of transformation. The project itself represents a form of knowledge of the context and, similarly, the construction of the physical, social, economic conditions of the territorial field is essential to be able to identify the resources and the materials necessary to the composition of the project.

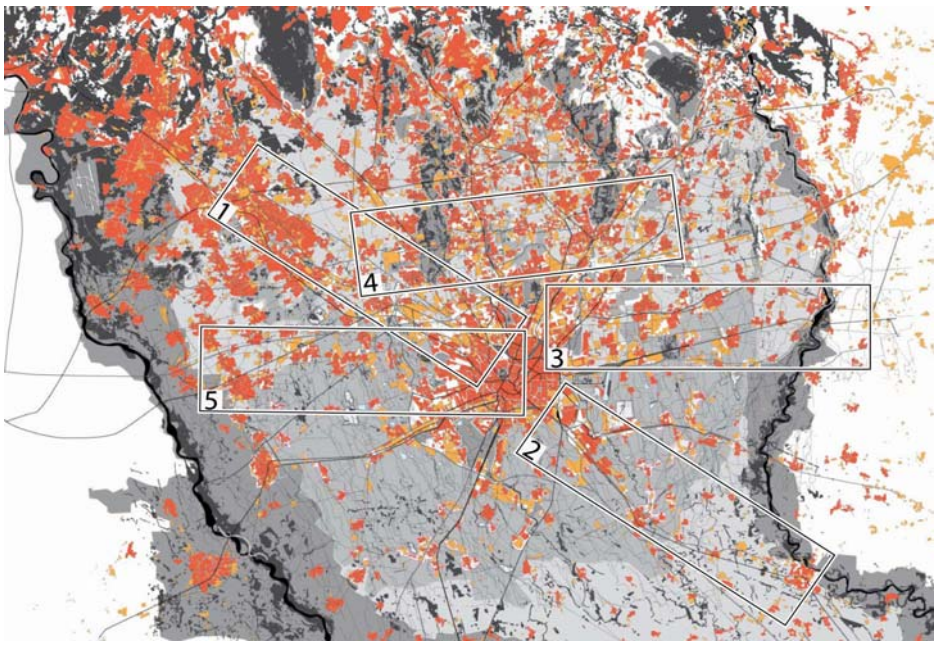

Figure 1. Project areas. Between: 1 Gallarate-Milano; 2 Lodi-Milano; 3 Treviglio-Milano; 4 Fiera/Expo Rho-Agrate; 5 Magenta-Milano

4.1 Describing the territorial field and a habitability profile

The goals of the first step of the learning process of the Design Studio are: the identification of the "territorial field" as the area of intervention, and the description of its profile, as necessary in order to define the transformative interventions to be undertaken. The definition of the territory and its description/interpretation is addressed from the standpoint of habitability.

A *territorial field* is a chain of spaces in which social practices establish urban-like relations in the use of open and built-up spaces, and which is perceived by its inhabitants (whether permanent or transitory) as a significant set. This portion of territory is not given beforehand and it has no clear-cut boundaries. It is defined through its description and interpretation. The territorial field shows a number of shared physical characteristics, some of the transformation phenomena underway, the mobility patterns affecting the daily life of the population. That is to say, it displays chains of spaces that may be viewed as "cities in the making" (Calafati 2009), to which the project is applied, and which the project can enhance, through replacement, addition, and rehabilitation interventions (Gabellini 2008).

The activity starts with a virtual exploration of the territory (using aerial photos and satellite photos from Google Earth and similar tools) with the aim to identify different urban patterns at an intermediate scale. In the «contemporary territory like milestones … we can observe settlements with distinguishable features and settlements: … historical centres, planned districts, … citadels, … clusters (homogeneous nuclei) of what is referred to in Europe as "Diffused City" or "Dispersed City"» (Gabellini 2008). The survey is applied to the physical form and composition of the settlements and territorial infrastructures. Because of having to explore vast areas in a short time, teachers «suggest to use a … "by samples" survey … to explore an unknown territorial situation, catching and focusing its

basic elements (materials), and also verifying and improving some starting hypotheses about its composition. The sampling operation is generative, and it is open to original running and interpretations by the different groups… The creation of a catalogue of patterns, is the first required "move" to draft an image of the considered territorial field» (Bonfantini 2011).
Starting from the catalogue of patterns recognized, through four operations the students are invited to consolidate the boundaries of their territorial field and to identify its salient features, by focusing on the characteristic relationships between space and society in order to recognize problems and opportunities. The surveys are conducted according to four different themes deemed useful in interpreting the habitability profile of a territory, and namely:

- urban material *facilities* (i.e., the physical equipment, features of buildings and open spaces) and their *performances* (the way in which territorial materials work, their usability, efficiency and effectiveness, their qualities);
- ways *of use*, the social practices in the space of different populations with different rhythms;
- *perceptions and memories*, how an urban settlement is perceived at present and how its past history persists in the memory;
- *construction sites and projects*, and disused and rundown areas, as opportunities for territorial transformation and their implications.

In the study of the four operations each group may decide which and how many surveys to do and to this end must define suitable boundaries and choose appropriate scales. In any case, institutional and technical standards are references for evaluating performances; data, inspections and chronographic research are ordinary tools for practices of use; interviews and historical documents can help understand perceptions and memories; journals, magazines, books, websites are references for construction sites and projects… The teachers give lessons on the specific tools and show examples.
The tight schedule suggests a selective strategy, to be defined by each individual group. The product of the first step is a report. The effectiveness of the report, i.e., the development of an impressive outline, is the core of the first step. With this operation the various portions of the Milan Urban Region are redefined and specified too, in preparation for the project to be developed during the second step of the Studio.
These operations may concern specific patterns/landscapes or territories, and may also suggest the presence of spaces where social and economic relationships are vibrant and able to compose urban settlements as new "cities in the making".

4.2 A territorial re-composition scheme to outline the project

The aim of the second step of the Design Studio is the development of a re-composition project for the territorial field in question, based on the outcome of the first one. The re-composition project consists of the definition of schemes and guidelines for the same area, developing the profile outlined, geared towards formulating the project of a new city.
Each group needs to work to define an overall vision for the territorial field and, at the same time, to identify ad hoc strategies to modify individual and different parts and situations.

Some suggestions for a work of re-composition can be: proposing a *concept*, a vision for a perceivable aim, which means suggesting some *figures* able to support the urban practices of specific populations; specific *rules* and, sometimes, *models* for improving synergies and avoiding conflicts between different uses of the space; selecting suitable *infrastructures* to support efficient and effective relationships between different materials, and creating connections and opportunities for use. Open spaces, as a chain of different materials for leisure time activities as well as work (parks of various kinds, agricultural fields, natural reserves and oases, environmental corridors, urban green spaces, forests…), may become an uninterrupted sequence of built-up areas, acting as an infrastructure[7].
In the project, the infrastructural space, considered in a broader sense as the reframing element of the territorial composition, will be an essential element to redefine the relationships between the different parts identified in the first step and recognized in their qualifying themes: to connect them, re-link, integrate, separate them as the case may be. The spaces in-between the different settlement patterns are the "infrastructure" to be designed, for example: mobility spaces, formation and texture of the open spaces, water system, ecological network, minor routes network (secondary roads, footpaths, rural tracks), collective spaces and centralities, service systems (public, private and semi-public spaces).
To develop the project, the students must combine two different learning activities. The first is to look for, and learn about, past and present experiences and international good practices in the area of composition/re-composition projects. Professors and tutors, and also each group of students, give public lectures on this topic to create a large shared *repertory of cases*. The second learning activity is the nature itself of the traditional Architectural Studio as described by Donald A. Schön (1983; 1987), in which a project is constructed through an ongoing process of *reflection-in-action with the people* involved (in the school, students as architects and teachers as personal trainers) *and with the situation*. The design discussion process is a sequence of moves involving the students and the teachers, as well as the project drawings. No situation is like any other and it is not just the individual moves and the sequence or the scale of the moves that differ. The whole approach is open. During the group discussions in the classroom, teachers, students and tutors practice the design research to formulate intervention proposals.
The outcome of the second step is an A0 poster with a short report summarising the purpose and the features of the proposal. A proposal usually contains: main goals, general strategies of intervention (and sometimes the policies of intervention), territorial schemes on different scales, sketches of local and spatial

[7] «The term infrastructure should not be construed in a reductive sense, should not be limited to technical artifacts, whether a canal, a road or a railway line, but rather should be conceived in a broad acceptation, as a support to the fast evolving processes of social reproduction currently underway» (Secchi, 2010, p. 13). «Equipment, roads, collective spaces and centralities, ecological networks, water system and sewage networks: for the term "infrastructure" we must go back to the original meaning, it is what allows and facilitates the continuance of social reproduction, i.e. the pursuit and development of production activities and social practices. So in this sense the concept of infrastructures is much wider than what is normally understood by the term. The infrastructure of a territory is made up of environment elements as well as roads, communal or provincial technical offices, professional organizations, the hospitals, schools, universities, railway and roads systems» (Viganò & Secchi, 2001, p. 119).

solutions, basic rules or ways of intervention (Figure 2, 3, 4 and 5). The outcome of the second step looks like a policy design output with a spatial dimension; it encompasses both action guidelines and a territorial scheme.

Figure 2. Final project group 5: "Waterability". Students: C. Fontana, J.L. Faccini, N. Minto, A. Oladeji, S. Mohannadhassan. Politecnico di Milano, UPDS 2011-12 (Professors: G.B. Bonfantini, A. Longo, M. Mareggi, with L. Domenichini, T. Medina, B. Piga)

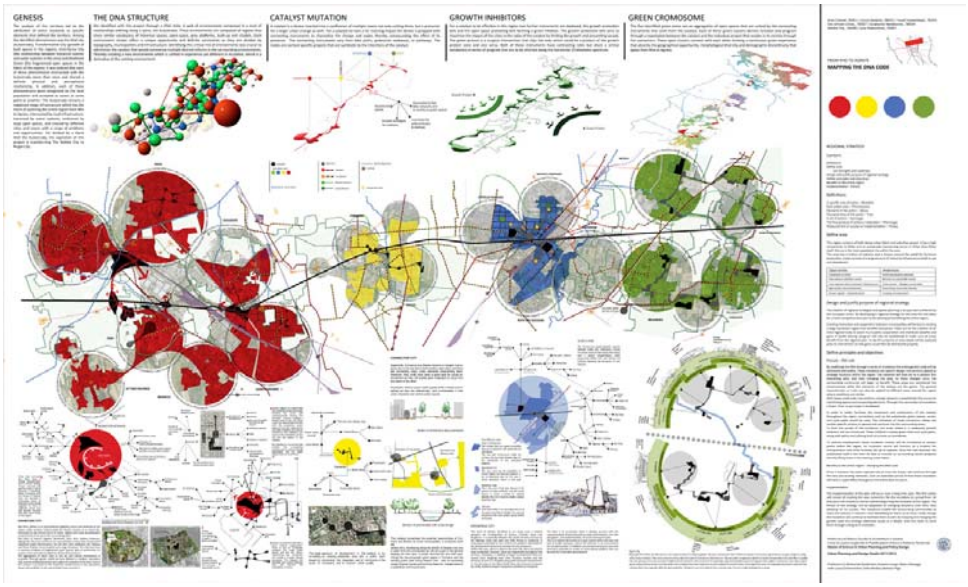

Figure 3. Final project group 1: "Mapping the DNA code". Students: B. Channel, A. Gonzalez, Y. Hossein Nejad, D.J. Lontoc, S. Nandakumar, S. Pilia, L. Polakovičová. Politecnico di Milano. UPDS 2011-12 (Professors: G.B. Bonfantini, A. Longo, M. Mareggi, with L. Domenichini, T. Medina, B. Piga).

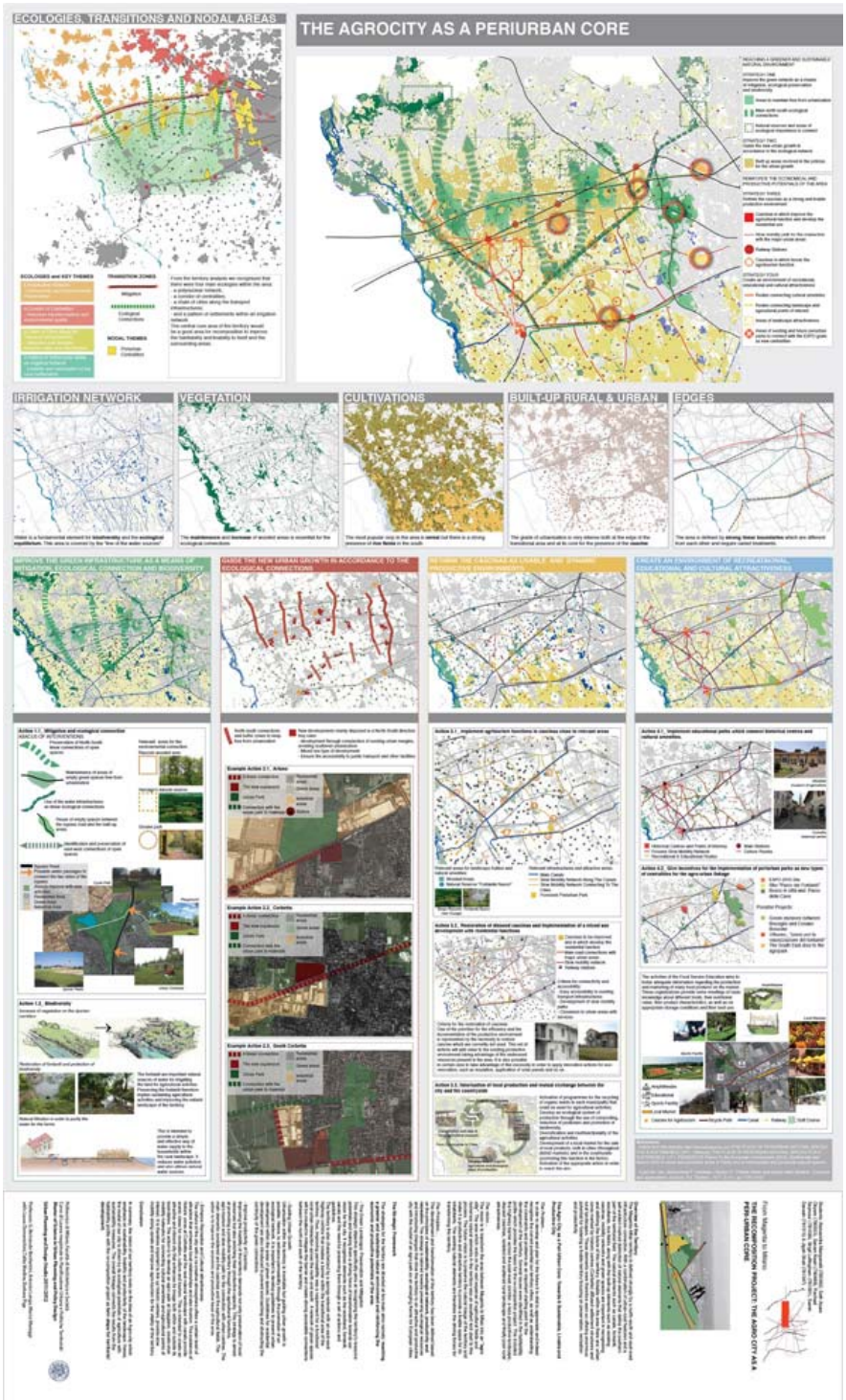

Figure 4. Final project group 8: "The agrocity as a urban core". Students: A. Manganelli, S.A. Okyere, S. Nasiri, R. Seymour, B. Luffingham, S. Danesh, J. Shah. Politecnico di Milano, UPDS 2011-12 (Professors: G.B. Bonfantini, A. Longo, M. Mareggi, with L. Domenichini T. Medina, B. Piga).

Figure 5. Final project group 3: "Creating sequences throgh urban holes". Students: X. Abramovich, T. Ashkenazi, P. Busquier, M. Vidaver, I. Kramer, L. Ulcelli. Politecnico di Milano, UPDS 2011-12 (Professors: G.B. Bonfantini, A. Longo, M. Mareggi, with L. Domenichini T. Medina, B. Piga)

5. Results

What are the educational results obtained in three years of experimentation with the Design Studio having the characteristics described so far?

It should be kept in mind that the objective of *Urban Planning and Design Studio* is to introduce the student to a critical reading of the context, the identification of intervention priorities, the production of guidelines and territorial re-composition schemes.

In the course of the semester, the students have learned to:

- Identify, name and classify urban materials according to a physical-morphological approach. Being the entry activity of the Design Studio, this becomes a way to accustom the students to observe the physical aspects of the territory, an activity that is able to promote the definition of viable large-scale initiatives and policies during the proposal stage;
- Conduct structured surveys. Walking, passing through and stopping in the area, and talking with the inhabitants, i.e., learning from the naked eye observation of the places and from listening with one's own ears (Secchi 1995; Scalvi 2000), enables the designer to acquire a sensitivity for and a knowledge of the real-world;
- Produce good descriptions of the allotted territory. The descriptions formulated by the students identify viable modalities to illustrate the transformations taking place in the territories, by taking into account a multiplicity of physical and social factors, some of them also tied with the

economy and the history of the areas. In particular, great value is ascribed to the capacity to acquire skills and innovative modalities for the identification and representation of the population, and, in some cases, the capacity to analyse the rhythms that characterise specific places (Mareggi 2012). It is a description that can return a good selection of data and interpretations in relation to the short time available for its formulation;

- Collaborate with peers coming from different cultures and backgrounds. This result stems from the composition of the class on the one hand and from the explicit intention of the faculty to form groups composed of students of diversified geographic and professional origins;
- Identify the project not on the basis of a predetermined form and style (e.g., a planovolumetric masterplan, a spatial concept, an open space landscape project, an environmental network, an infrastructural scheme, a hierarchy of places and centralities), but rather by indentifying, case-by-case, what form is best suited to address a set of themes and problems. During the course of its five years of activity, the Design Studio has proposed the same territorial fields to the students and has obtained extremely different results, sometimes fairly elementary, sometimes highly advanced, but invariably original in generating project forms and action scales carefully calibrated as a function of the problems identified;
- Present the project through a complex logical organisation, communicated with the aid of posters that include maps, short descriptive texts, charts, and all sorts of graphic representation modalities as may be necessary. The poster format eliminates the possibility of using a close, linear narrative form, and encourages the students to produce open texts, veritable theme maps, that may serve as a support to the discussion, when talking with the teachers and in the final presentations;
- Acquire a capacity for dialogue through the project, and dialogue as tool to enable a project to evolve: within the groups, in their dealings with the teachers and discussants, and, in future, in their relations with organisations, offices and citizens.

It should be noted that in the first step the studies may be heterogeneous and differ to a considerable extent in terms of depth; while, at the proposal and intervention stage (second step), the design solutions leave unanswered questions to do with the definition of the interventions and, only in rare instances, formulate detailed proposals of standards for the implementation of urban plans.

6. Conclusions

In concluding this report on a didactic experience, we deem it useful to set forth a few considerations that bear out the notion that the Design Studio is a place and a moment of learning by design.

I. The scientific rationality of the survey "by sample" is typical of design and planning disciplines and perfectly suited to architecture and city planning, two fields that find it hard to achieve a "neat" accumulation of knowledge and know-how. In 1989, architect and urban planner Giancarlo De Carlo acknowledged the difficulties encountered in «reading a large city in depth. But even this may be

accomplished by considering that a large city is always made up of many different layers: it is not a monolithic city, but rather a blend of situations that are homogenous in themselves and more or less inhomogeneous with respect to one another. … Having identified the parts that, within an overall framework of non homogeneity, display a measure of homogeneity, it becomes possible to consider them in isolation, but only for the time it takes to study them and get to know them, and after that they must be returned to the whole as quickly as possible. I claim that this process is scientific... in as much as this is the way scientists proceed when they isolate a part to examine it more thoroughly, knowing full well that what they are looking at is not reality, but merely a provisional schematisation, which, nevertheless, is meaningful, in that it supplies information that is helpful in gaining an understanding of the whole of which the individual element is part » (De Carlo, 1989, p. 17).

II. The Design Studio is at once an equipped space for design review activities and the design review itself. It is at once the venue and the time both for a discussion of the territorial interpretations suggested and for the graphic formalisation of the proposed interventions; moreover, it is the place that, through gradual moves, identifies persuasive words to advocate the solutions that emerge during the course of the design process. The Design Studio is organised around groups composed of students acting professionals and teachers acting as personal trainers. In some instances, the skills of the international students with longstanding professional experience will reverse the roles of the participants, whereby, temporarily, the students will take on the role of trainers. It is a didactic approach that enables the students to learn from guided experiences, where the teacher behaves like a trainer, an approach that Donald A. Schön referred to as «educating the reflective practitioner» (Schön 1983). Thus the Design Studio is at once a teaching and a learning context.

III. Although the exercise performed by the students identifies two development steps, there is no clear-cut separation between the analytical-descriptive part and the part that puts forth the transformation proposal. In fact «describing means selecting according to some specific criteria which correspond to the reason of the description … [and] the description does not follow the change, but it helps to produce it» (Dematteis 1999, pp. 117-118) and to orient it towards specific direction. This approach does away with any conflict between urban design and planning and the need to reformulate the paradigms of the project for the city. Moreover, with this working method the unnecessary distinction between "planning to achieve" and "planning to avoid" is circumvented.

References

Balducci A., Fedeli V., Pasqui G. (2011), *Strategic Planning for contemporary urban regions. City of Cities: a project for Milan*, Farnham, Ashgate.

Bonfantini G.B., (2011), *Urban Design and Planning Studio* 2011-2012. General Programme. [online] Available at: <http://www.laboratoriorapu.it/UPDS11/> [Accessed 5 May 2012].

Bruzzese, A., Longo, A., (2011). Conversation on composition. Interdisciplinary reflection on contemporary urban planning project, Planum, www.planum.net - the Journal of Urbanism, II semester 2011.

Calafati, A.G., 2009. *Economie in cerca di città. La questione urbana in Itali*a. Rome: Donzelli.

De Carlo, G., 1989. L'interesse per la città fisica. Urbanistica, 95, pp. 15-18.

Dematteis, G., 1999. Sul crocevia della territorialità urbana. In G. Dematteis et al.. I futuri della città. Tesi a confronto. Milan: Angeli, pp. 117–128.

Di Giovanni, A., ed., 2008. Progettazione urbanistica - Urban planning and design. Rimini: Maggioli.

Gabellini, P., 2006. Interpreting the breakdown of the urban model: three Italian case studies. In Z. Enlil, P. La Greca, eds. Cities between Integration and Disintegration. Opportunities and Challenges. Sitges: IsoCaRP Review 02, pp. 72-86.

Gabellini, P., 2008. The echoes of the "Berkeley School": some Italian experiences of urban and regional planning. Journal of Urban Design, 16(2).

Mareggi, M., 2012. Urban rhythms. In D. Henkel et al., eds., Space Time Design of the Public City. London: Springer.

Palermo, P.C., 2006. Innovation in Planning. Italian Experiences. Barcelona: Actar.

Schön, D.A., 1983. The Reflective Practitioner. New York: Basic Book.

Schön, D.A., 1987. Educating the Reflective Practitioner. San Francisco: Jossey-Bass.

Sclavi, M., 2000. Arte di ascoltare e mondi possibili. Milan: Le Vespe.

Secchi, B., 1995. La stanca analisi. Urbanistica, 105, pp. 38-41.

Secchi, B., ed., 2010. On Mobility. Infrastrutture per la mobilità e costruzione del territorio metropolitano: linee guida per un progetto integrato. Venice: Marsilio.

Sennet, R., 2008. The craftsman. Yale: University Press.

Viganò, P., ed., 2001. Territories of a new modernity. Rome-Bari: Laterza.

Article's credits

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