



CITIES IN TRANSFORMATION RESEARCH & DESIGN

Ideas, Methods, Techniques, Tools, Case Studies

edited by Marco Bovati, Michele Caja, Giancarlo Floridi, Martina Landsberger

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VOLUME I

Cities in Transformation Research & Design

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edited by

Marco Bovati, Michele Caja

Giancarlo Floridi, Martina Landsberger

scientific supervision

Adalberto Del Bo, Ilaria Valente

VOLUME I

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RESEARCH & DESIGN

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What is the Role of Architecture in the Contemporary City? Structure and Form of the Design of the City. The Case of Milan

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I. *Space and Time, Context and Model*

It is far from erroneous to say that a significant part of the “culture of architects”, especially that which conforms to international standards, has been ready to accept from so-called postmodernism the renunciation of the critical responsibility of architecture in the processes of urban transformation. A sacrifice amply compensated by the media success of the big names in the field.

The stunning spectacle of the architectural object has taken the place of historical awareness and civil responsibility in the construction of the city. In other words: the apologia of the present (the future is already here!) propagated by the presumed objectivity of the architectural object in which any choice of a general order is banned, claims the right to push aside the art of the *polis*, the *politiké* of the ancient philosophers that formed the basis of occidental culture through the identification of city and politics.

Employing a not dissimilar logic, over the last two decades various disciplines have investigated the city – the big city – as a universe of great complexity, with the aim of describing the multiplicity of actions and effects in processes of transformation. Economists, sociologists, anthropologists, geographers, philosophers, psychologists, as well as architects and urbanists, having agreed on the impossibility of a general model of interpretation, have legitimized the ungovernability of the phenomenon of the metropolis in the age of globalization, on an epistemological plane, while these studies have generally viewed urban space essentially as a cognitive category to be grasped only by means of metaphor (e.g. porosity, imprint, patchwork, puzzle¹) or analogy (the interpretative models of systems of high energy dissipation).

What has been mostly lacking is a focus on the concrete, physical nature of the city, or on its specific contextual structurality. We can observe that the contemporary city outlined in these multidisciplinary surveys appears to lack any historical substrate: every paradigm of places seems to have been erased today.

In what we call the paradigm of places, we can recognize the historical trajectory of at least two cities. First, the preindustrial city, which we might call the ostensive city²: this is the setting of direct transmission of knowledge and exchange of culturalization. Is this city really extinct? Actually it has not fully disappeared, either in the modern city of industry or in today's megalopolis, where it still conserves a sizeable potential for redemption of certain urban conditions. Secondly, the para-

¹ Cf., for all, A. Amin, N. Thrift, *Cities: Reimagining the Urban*. Cambridge: Polity Press, 2001.

² L.S. D'Angiolini, “Saggiare polloni e radici fino a costruircene nuova etnia”. *Hinterland*, 1, 4, 1978, 50-54.

digm of places also covers what we might call the demonstrative city³ of the Modern Movement in 20th century Europe, well differentiated through specific vocations between historical geographies, urban strategies and architectural poetics. Here we can certainly cite the totalizing projections of the modern city from early Futurism (Antonio Sant'Elia, *La Città Nuova*, 1914) to the manifestos of Le Corbusier (*Ville contemporaine de trois million d'habitants*, 1922; *Plan Voisin*, 1925; *Ville Radieuse*, 1933), as well as the epic of the construction of the socialist city in revolutionary Russia; but it is more precisely epitomized by the experience of the Modern Movement, which between the two wars interpreted the paradigm of the industrial city in Central Europe through architectural undertakings that assigned to individual objects or urban portions (for example, the many constructions of housing areas for the working class in Berlin, Frankfurt, Rotterdam, Vienna, Amsterdam) the task of representing a general idea of the city.

Deprived of its anthropological substrates, the contemporary city tends to be identified today as a chaotic set of flows of communication. The electronic paradigm replaces the mechanical paradigm and the real time of information overrules the space of physical relation: architecture would thus have the job of spreading the emblems of technological optimism and economic wellbeing through the media totem of its dematerialization.

The ideological fetishes of postmodernism, now more pervasive than ever, become the ambassadors of a neo-liberism that proposes the market as the peerless instrument of rational allocation of resources, the sole motor of urban transformation. In all cases, even when reality blatantly reveals its shortcomings. Just consider the specular cases of urban reduction and unlimited expansion. The first has to do with the occidental cities of Fordist production whose populations have shrunk due to phenomena of deindustrialization. The most striking example is Detroit, which now has 700,000 inhabitants, two thirds less than the 2,000,000 of forty years ago. Detroit is followed by other cities like Cleveland, Kansas City, Flint: ghost towns that try to bounce back from decay mainly by concentrating on the "green economy", on advanced sectors (biomedicine), cultural facilities (museums), with an avowed awareness that these processes cannot be governed by market forces, because they happen in a "market void"⁴. The second has to do with the boundless proliferation of the megalopolis in the poor and emerging countries of the Third World, a catastrophic "market" consequence caused by the expulsion of poor peasants from the countryside by large corporations⁵.

³ G. Canella, "Introduzione". In *1930-1942. La città dimostrativa del razionalismo europeo*. Catalogue of the exhibition "Architettura moderna: poetica e impegno civile" at the 16th Milan Triennale (Milano, Palazzo dell'Arte, 17 September - 25 October 1981), eds L. Caruzzo, R. Pozzi. Milano: Franco Angeli, 1981.

⁴ F. Rampini, "Aiuto si è ristretta la città. Le piccole metropoli del futuro". *la Repubblica*, 15 April 2011.

⁵ Cf. L. Gallino, *La lotta di classe dopo la lotta di classe*. Interview edited by P. Borgna. Roma-Bari: Laterza, 2012, 29-31: "[...] large corporations specialized in the production of foods or their marketing [...] buy or rent for 99 years enormous areas, tens of millions of hectares, in many African countries, India, the Philippines and Latin America. Then they introduce extensive, usual monocultural crops, with a very strong advance of mechanization and the resulting removal of peasants from the fields they once worked. [The expelled peasants] in most cases are forced to seek another type of employment in

Now we can draw an initial conclusion that also has closely to do with the problems of our country, as we will see in the final argument, particularly regarding strategic infrastructures. We can observe that the theme of the so-called “smart cities” gains increasing appeal precisely as material proof, so to speak, of the dynamic force of growth of the immaterial city. Smart cities, in fact, are said to have success in international competition thanks to their infrastructures of communication, of production of knowledge, of opportunities for social relations: instead of hard infrastructures, the fixed social capital that is an inseparable part of the bodily nature of the city, what is seen as decisive for growth – sustainable growth, of course – in contemporary cities is “light infrastructure”, namely intellectual and social capital that, to be honest, is simply the far-from-new concept of human capital and investment in knowledge. It may seem obvious to point out the fact that without suitable physical infrastructures, smart cities cannot take off, because they can grow only by relying on the basic potential of traditional though perhaps also technologically advanced infrastructures. But this observation is often overlooked.

This is demonstrated, without the need for further evidence, by the huge investments of the Trans-European Transport Network (TNT-N) program, including roads, railways, inland waterway networks, motorways of the sea, seaports and inland waterway ports, airports and other interconnection points between modal networks.

At this point we can set out to address three main issues, before concluding with the illustration of the concrete case of Milan:

1. Architecture of dematerialization: what species of architecture?
2. The world city: physiological antidotes?
3. The European and Italian city: which structurally contextual architecture?

2. *Architecture of Dematerialization: What Species of Architecture?*

Talking about architecture of dematerialization, we cannot but wonder about the species to which it belongs. As an exemplary reference point, we can take one of the recognized progenitors, the Centre National d'Art et Culture Georges Pompidou at the Plateau Beaubourg by Renzo Piano and Richard Rogers, Paris, 1971-1978. We can observe that this work of architecture is rather averse to the so-called “patina del tempo”, which is not just the materic evolution built into the physiological cycle of a building, but rather its capacity to express the historical depth of a figurative paradigm. Aiming to correspond without wrinkles to the idea it projects of itself, this architecture pursues a state of eternal present as eternal youth, something like an amusement park ride or any machine of *loisir* that can exist only outside the sense of time, to infinitely extend the incorruptibility of the recreational imagery. A sort of Dorian Gray syndrome, an obligation to have “permanent fresh paint” that obliges contemporary architecture (as seen by the media) to have the spark of technological novelty and the “commonplace” of the transparency of the

the city, usually in the informal economy; many wind up increasing the population of the slums. [...] To date, more than half of the world's population lives in cities or urban agglomerations: of this half, a bit less than one third live in slums”.

enclosure in which all distinctions vanish and, therefore, any relationship between interior and exterior space. We do not agree with explanations that sing the praises of total transparency of the wrapper and the resulting indoor-outdoor leveling as the conquest of a single spatial material, homogeneously spread between the building and urban space, and even indicated as a step towards democratization. Instead, it seems to us that this is simply a way of making the city into a series of shop windows, of showcases displaying a single typological, behavioral and figurative model, that of the shopping center that saturates and depletes the differentiation and variability of relations between the public and private, collective and individual spheres, between the external and the internal, which have always been vital pulsations of the city. In this way the construction of the showcase-city takes on the task of representing the conjunction between space-time of consumption, services, leisure time, and the parallel dissociation from the world of production. It is understandable that this architecture gutted of historical depth, in order to escape the fate of anonymity of non-places, has to force its recognition factor to extremes of media broadcast and formal eccentricity, operations that – like certain kinds of plastic surgery or excessive make-up – transform visages into masks, in the effort to beautify them, with even more devious results when they are translucent.

Stripped of its constituent elements, architecture is left only with the ersatz rhetoric of iconic language borrowed from the creative professionals of mass communication, almost a *topos* of contemporary architecture skewed towards gaining a wider audience. We refer here to the coy simplism of directly deployed metaphorical borrowings, to the point of extreme banality. For example: seaside airports like seagull wings; auditoriums like beetles; convention halls like clouds; museums on the sand like desert roses; clustered spaces like fruit of botanical organisms; marine museums like sails; and so on, in an endless list. More than works of architecture, these are logos that speak the neo-kitsch language of the present, media Esperanto, on a par with useful objects in domestic space: the result is a caricature, stripped of any cognitive intent by its hedonistic drift, of the slogan “from the spoon to the city” cherished by the moral-methodological positions of modernism.

3. *The World City: Physiological Antidotes?*

The theme of the world city is too vast and complex to approach here in a systematic way. We can instead rely on one example I think is very important. The project by Lina Bo Bardi for the SESC Pompéia in São Paulo, 1977–1989, revitalizes an abandoned industrial area on the city outskirts with a range of collective activities – cultural, social, for sports and leisure time – part of the program of the Serviço Social do Comércio (SESC), a non-profit organization which promotes cultural and educational activities all over Brazil, to create new social gathering places in the urban suburbs. While some of the community and social centers have encountered a range of different problems, SESC Pompéia continues to function very well. I think a large part of its success can be attributed to the exceptional quality of its architecture, where the program of activities for a precise social target leads to typological and figurative inventions that have nothing to do with formal indulgence, and are

able to correspond with authentically poetic propositions to the requirements of collective reclamation of the city. The words of Lina Bo Bardi are significant:

My aversion for air conditioning is matched only by my horror of carpeting. This is what led me to create the glassless, featureless prehistoric “caves” which provide constant cross-ventilation. [...] the Pompéia complex is strikingly Expressionist. [...] This is probably a result of my European training, but this does not mean I have forgotten the Surrealism of the Brazilian people, their inventiveness, the pleasure they take in being together, *todos juntos*, in dancing and singing. Therefore my work in Pompéia is dedicated to the young, the children, the elderly: *todos juntos*.⁶

Aware of the different cultural traditions of Europe and Latin America, SESC Pompéia recomposes and reinvents the roots of urban culture outlined above: both that of the ostensive city, the theater of exchange of cultures whose resistant anthropological foundation can still represent a vital resource for the contemporary city; and that of the demonstrative city of the Modern Movement, completely regenerated in the encounter between different cultures and interpreted context by context, case by case.

In this perspective, we can also insert the hopes of Saskia Sassen:

The type of urban order that gave us the open city in Europe, with its magnificent squares and public buildings, is still there, but increasingly as mere visual order, and less so as social order. [...] The gravity of injustice and the lack of economic, political and environmental sustainability represent a potential for reinventing that capacity of cities to transform conflict into openness rather than war. [...] It is in the metropolis that this type of project has a possibility of working. And the more diversified and complex the city, the greater the probability of success. In this sense, the global city is the ideal terrain for this type of work: it has internationalized the economy, and now the time has come for the internationalization of peoples and cultures.⁷

4. *The European and Italian City: Which Structurally Contextual Architecture?*

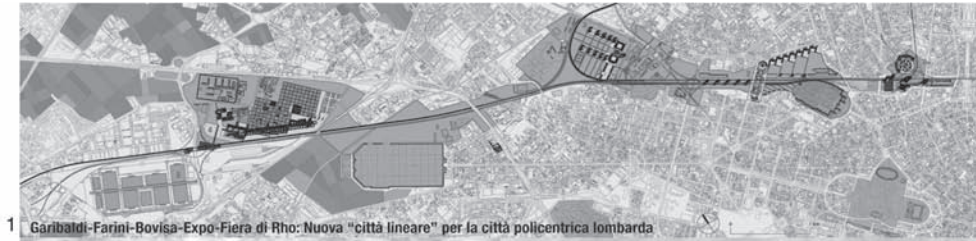
We know that Europe, with the exceptions of London and Paris, does not have big cities comparable to those of the Americas and Asia. In fact, the European settlement system is composed for the most part of polycentric urban frameworks, substantially balanced and characterized by mutual multipolar relations. Just consider the settlement systems of Flanders, Holland, the Rhine Valley, the Ruhr region, the Hanseatic cities, where markets, fairs, universities, ports and productive activities have represented the driving forces of a long-term historical formation that contributes to the character of the European landscape and continues to present the established factors of measure and urban metrics as unavoidable themes of architectural design.

These characteristics are even more marked in the Italian landscape and city. Carlo Cattaneo, in the “order of the *municipia*” starting in the Roman era, could already glimpse the unique character of the Italian landscape:

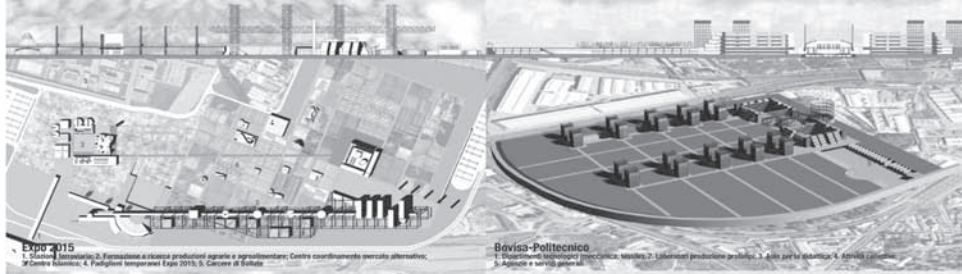
⁶ L. Bo Bardi, “SESC Leisure Centre “Fábrica da Pompéia”, São Paulo, Brazil”. *Zodiac*, 8, 1992, 225.

⁷ S. Sassen, “La città aperta e i suoi nemici. Il mondo salvato dalle metropoli del futuro”. *la Repubblica*, 4 April 2011.

PART ONE. NEW SCENARIOS OF THE CITY AND DWELLING



1 Garibaldi-Farini-Bovisa-Expo-Fiera di Rho: Nuova "città lineare" per la città policentrica lombarda



Expo 2015

1. Scenari alternativi, 2. Formazioni e risorse produttive agrarie e agroalimentari, Centro riordino servizi alternativi, 3. Centro storico, 4. Padiglioni temporanei Expo 2015, 5. Cercare il Giallo

Bovisa-Politecnico

1. Equipaggiamento per l'edilizia, 2. Laboratori produttivi per il cibo, 3. Area per la didattica, 4. Attività culturali, 5. Edificio e servizi generali

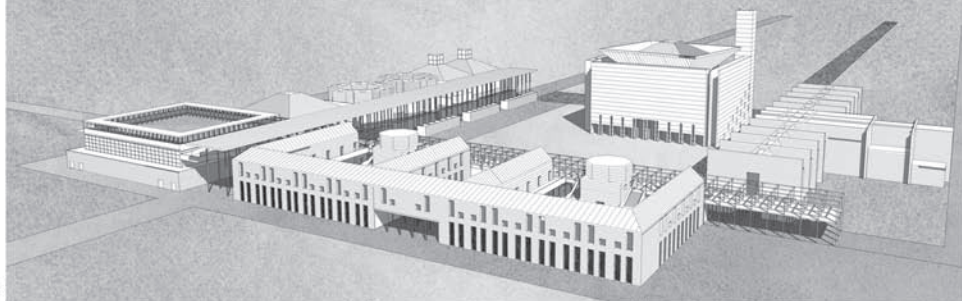


2 Stadio Farini

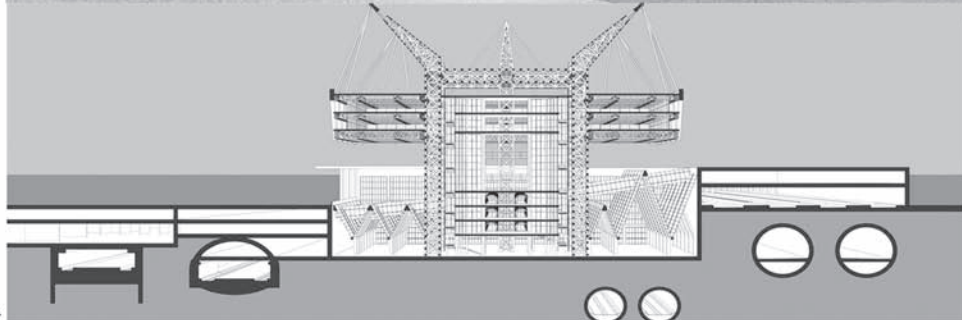
1. Scenari alternativi, 2. Formazioni e risorse produttive agrarie e agroalimentari, 3. Centro riordino servizi alternativi, 4. Centro storico, 5. Padiglioni temporanei Expo 2015, 6. Cercare il Giallo

Centro internazionale - Stazione Garibaldi

1. Equipaggiamento per l'edilizia, 2. Laboratori produttivi per il cibo, 3. Area per la didattica, 4. Attività culturali, 5. Edificio e servizi generali



3



4

1-2. Garibaldi-Farini-Bovisa-Expo 2015-Rho Fair. The new "linear city" for the Lombard Polycentric City.

Workshop "Rail yards" (School of Civil Architecture of Milan Polytechnic, 21 September - 9 October 2009)

Teachers (continuation of the workshop of G. Canella): P. Bonaretti, M. Canesi (urban planning), D. Chizzoniti, L. Monica, E. Manganaro, C. Pavesi

Students: L. Brambilla, F. Della Bosca, A. Gobbo, G. Leo, M. Mezzetti, S. Malavasi, M. Prada, N. Ramirez, A. Sardone

1. Garibaldi - Administrative Center: strategic management offices (agencies of business development and coordination, contracting centers, engineering, logistics)

2. Farini Rail Yard: urban park, temporary housing (students, economic operators); subsidized housing; community activities; expansion of the Monumental Cemetery

3. Bovisa-Politecnico: technological center on machine tools; technological center on new materials (mechanical, textiles); production of prototypes

4. Expo 2015: center of coordination of relations between developed and developing countries (nutrition, earthquake risk prevention, safeguarding of land and water resources); Islamic Cultural Center; temporary pavilions Expo 2015

5. Existing Rho trade fair facility

3. Architecture for coexistence. The Islamic Cultural Center in the new Garibaldi-Farini-Bovisa-Expo-Rho Fair linear city. Degree project by M. Mezzetti; advisors P. Bonaretti, M. Canesi (urban planning); co-advisors D. Chizzoniti, L. Monica, C. Pavesi, A. Migliacci (structures), School of Civil Architecture of the Milan Polytechnic, 2010

View of the Islamic Cultural Center in the area of Expo 2015

4. Garibaldi-Administrative center: in the Lombard Polycentric City new roles for Milan on the northwest axis.

Degree project by A. Gobbo, N. Ramirez, A. Sardone; advisor P. Bonaretti; co-advisors C. Pavesi, A. Migliacci (structures), School of Civil Architecture of Milan Polytechnic, 2011

Perspective section of the new rail station (high speed rail, rail bypass, regional and district lines, Milan urban subway)

From the earliest times the city in Italy has been something different than the city in the Orient, or in the North. [...] [In Italy] the city formed an inseparable unit with its territory. Traditionally the people of the countryside [...] still take the name of their city, as far as the borderline with another populace that takes the name of another city. [...] This adhesion of the peasantry to the city, where dwell those of greater authority, wealth and industry, constitutes a political persona, an elementary status, permanent and indissoluble.⁸

The historian of the Middle Ages Vito Fumagalli expands on this:

The Italian city, crowded by the middle classes but also by nobles, is profoundly different from the urban centers located to the north of the Alps [...] in Italy there is never a drastic separation between city and countryside; they were never, not even in the High Middle Ages, two different landscapes: that of the cities inhabited by the burghers, that of the countryside, realm of the fortresses of nobles, great abbeys, villages built in their shadow. In our country, more often men and landscapes intersected, mixing in hybrids, to the point that villages took on almost urban characteristics and cities maintained markedly rural features, even at the height of the Middle Ages, except in the deep heart of the Po Valley plains and in the mountains, where the nobles continued to rule almost unchallenged.⁹

In the fleeting, transitory contemporary condition, should we still consider as obsolete the foundations of measure and urban metrics, primary constituents of the landscape of the European city and, in particular, of the Italian city? In the Italian city, what should be done with that long-term character specific to the city, its lack of complete opposition between city and countryside, in a situation of osmosis, as documented by historians?

5. *“Another Milan is Possible” (G. Canella)*

Rejecting any abstract application of models, it is worth reconsidering the concrete specificity of every settlement culture. The case of Milan can demonstrate the possibility of an alternative to the model of the world city as a hypertrophic, congested, fatally uncontrollable aggregation. This different perspective of development is the result of research conducted in recent years and also developed in educational activities with students at the School of Civil Architecture of Milan Polytecnic, in the Architectural Design Workshops taught by a group of professors guided by G. Canella and composed of P. Bonaretti, E. Bordogna, M. Canesi (urban planning), Ge. Canella, D. Chizzoniti, L. Monica, collaborators M. Biagi, C. Bischeri, E. Manganaro, C. Pavesi.

As opposed to the idea of the “Grande Milano” of two million inhabitants (as opposed to the present 1.3 million) proposed by the local government (City, Province, Region) with the goal of finally inserting the Lombardy capital among the world cities, in keeping with the model of the architecture of globalization, Milan and Lombardy, due to their particular historical settlement framework and

⁸ C. Cattaneo, *La città considerata come principio ideale delle istorie italiane*, ed. G.A. Belloni. Firenze 1931, now in Id., *La città come principio*, ed. M. Brusatin. Padova: Marsilio, 1972, 7-9.

⁹ V. Fumagalli, *La pietra viva. Città e natura nel Medioevo*. Bologna: il Mulino, 1988, 26-27.

differentiated urban identities, can constitute a city of 7 million inhabitants in a polycentric metropolitan system with accessibility from and to any place in the regional territory (through regional rail service) in urban transport timespans (under 60 minutes). The possible range of use of this “Lombard Polycentric City” would promise a role as a world city, starting with consolidation of crucial productive sectors (machine tools, textiles) and promotion of new economic relations, first of all in the Mediterranean area. Therefore, to sum things up in an aphorism, we might say of Milan: *Magna sed apta mihi*¹⁰.

In particular, along the historic northwest axis between the Garibaldi Station and Expo 2015, strategic roles can be found for different areas, connected in a new “linear city”:

1. Garibaldi-Administrative Center: though almost saturated at this point by an indiscriminate accumulation of generic office space and residences, the area conserves its indispensable strategic role to guarantee maximum access between Milan and its territory. In the New Garibaldi Station all levels of rail service would be available (continental, regional, district, urban), creating the conditions to locate strategic management activities, selected to reinforce the Lombard productive fabric and relationships on a Mediterranean scale;
2. Farini Rail Yard: as opposed to the institutional proposals of real estate development, the recently abandoned area of the former rail yard (about 1 million sqm) should combine the primary function of a large urban park with appropriate supply of temporary and subsidized housing (for students, economic operators, particular population categories) and structures for culture, sports and leisure time;
3. Bovisa-Politecnico: marked for over one decade by the now established presence of the Polytechnic, this area is particularly suited to host a technological center for machine tools, with research structures and production of prototypes, to support Lombard manufacturing in connection with university training and research;
4. Expo 2015: in a structural interpretation of the official themes of Expo 2015, “Energy for Life” and “Feeding the Planet”, a pole of coordination of relationships between advanced and developing countries should be located here, concentrating on specific issues like nutrition, earthquake risk prevention, safeguarding of land and water resources, as well as the Islamic Cultural Center of Milan. The temporary pavilions of the Expo, after the event, could all or in part be converted to contain facilities of representation of the countries of the South and the North of the world.

Due to the responsibilities assigned to it in this development strategy, architectural design – rather than being an ornamental image exercise – would play a decisive role in the structural transformations of the city, to produce a landscape of modernity rooted in the metropolitan legacy of architecture in Lombardy.

¹⁰ Inversion of the famous Latin phrase *Parva sed apta mihi*, written over the entrance to the home of Ludovico Ariosto in Ferrara.