There are three general sets of tools that provide the basis for suspending the impulse. The first is really just a simple, single principle: all places are worthy of our attention. To really understand what is going on, we have to remain open minded. If we exercise our preferences first, we close off the opportunity to learn and it is often the places that look the least promising that have the most to offer. We never know what problem we may face in the future and where we might find the most effective solutions.

The second set of tools is the sequence: analysis, comparison, synthesis. Comparison is fundamental to the way the brain works and overcomes the limitations of our isolation behind the veil of our senses. The strength of the methods of urban morphology as originally developed by Johann Wolfgang von Goethe is to make deliberate use of the comparative nature of our cognitive capacities in order to arrive at a richer understanding. That is, analysis on its own is not enough. We need to compare and bring together the results from different points of view.

The third set of tools is the sequence: description, evaluation, design. These represent a continuum between 'looking' and 'making'. Looking is not entirely passive but infused with values. A start, as a designer working with the built environment, is to see the built environment as a 'material' or 'medium' for design with technical characteristics. We should be able to investigate and speak about the characteristics of different places in a non-normative way and then move on to why we think the places do or do not work – for particular purposes in particular circumstances. The question of whether you like a place should not determine your ability to understand how it is put together and works. Even if our interest is prompted initially by a qualitative judgement, however vague, we should be capable of taking a step back to work out what is going on and why the place generates that reaction in us. Once we understand how a place works and why we like it, we are then in a better position to use that knowledge and experience in design, and get better results.

## A morphological contribution to the debate on the Milan Expo area

**Giuseppe Strappa**, Dipartimento di Architettura e Progetto, 'Sapienza' Università di Roma, via A. Gramsci, 53 - 00197 Roma, Italy. E-mail: gstrappa@yahoo.com

The conclusion of the Milan Expo in October 2015 has focused attention on how to develop the 110 ha of land on which the event took place. It presents the kind of problem that the Italian morphological school has rarely faced. The peripheral site is separated from the main urban area by a large transport infrastructure and the challenge it constitutes is not unlike that faced by Italian industrial city expansion more widely.

A proposal for restructuring the area was prepared by the Architectural Reading and Design Laboratory<sup>1</sup> at the invitation of the Politecnico di Milano. It provided an opportunity to test how morphological analysis can constitute not only a reading tool, but also support experimental and radical innovative design. It is based on the assumption that the reuse of the area should not be considered by itself, but in relation to its role within the northwestern outskirts of Milan. Following studies of the suburbs of Rome (Strappa, 2014), the urban

fringes of Milan were also investigated as places of 'historical territory' with their own formative processes and specific shaping characteristics.

By assembling and reworking the mosaic of the first 'post-unitarian' cadastral maps (1897) the apparent disorder of the peripheral urban fabric and the confused overlapping of tracks became evident. These characteristics follow rules stemming from anthropic needs and planning intentions, indicating a close interrelation of land form, ancient Roman planning and needs arising in modern times.

The ground today between the settlements of Bollate, Rho and Settimo Milanese is mostly flat, with streams sometimes lost in industrial and residential sprawl. The Exhibition area between the Autostrada dei Laghi, the Turin-Trieste railway and Highway 33 was once the geometrical hinge between areas of different orientation. These areas, identified as 'Pantanedo'(quagmire), are clearly

166 Viewpoints

recorded in the maps of the pre-unification land registers of the nineteenth century.

It is clear from examining the phases of development of the landscape that new routes have reorganized the area that overlaps the Roman plan. They connect settlements that over time have become small urban centres, redefining the relationships within the territory, but always avoiding the current Expo area. This land development process comprises the 'consumption' of the ancient plan and the formation of more recent communities such as Baranzate, Pero, Novate and Musocco, which are organically related to each other. On this landscape has been superimposed, since the second half of the nineteenth century, a major transport infrastructure network. The infrastructures, linked to external, remote polarizations, are not related to the local territorial type and do not structure any form of urban fabric.

The Pantanedo area, recorded in the Teresian Cadastre as occupied by the stagnant waters of the Rio Nirone, will host the Turin-Vercelli-Novara-Milan railway, which will definitely have a role in the periphery of Milan. The new special structures of the Milan Fair and the provisional structure of Expo 2015 will confirm this character. Recent political and administrative decisions underpin the establishment of this area as the symbol of a new social and economic development in Milan, concentrating a great deal of activity here: a university campus (about 190 000 m²), housing (450 000 m²), offices (150 000 m²) and services (300 000 m²).

It is evident, from the morphological reading, how the redeployment of this area, cut off by the transport infrastructure, risks creating a new, autonomous fragment in the Milan suburb. In contrast, studying the territorial formative process provides the basis for rethinking the Expo area as an opportunity to reconnect incoherent parts of the Milan outer edge through a new axial development where all building will be concentrated, leaving as green space all the remaining areas. The axis, on which a new 'vertical fabric' will be based, will constitute a restructuring route connecting the small urban centres of Baranzate and Pero. This new linear construction will link the two centres.

overcoming the fractures caused by transport infrastructure. This marginal portion of the land-scape will be returned to its green character by the establishment of new parks.

It is assumed that Baranzate and Pero will provide foci within existing routes, and forming new urban spaces and specialized buildings. It is believed that this 'knotting' process will be fundamental. The experience of huge public housing projects has demonstrated that linear structures of the type envisaged, if not strongly connected within the existing urban landscape, will not form any living fabric and will decay in a short time.

The intention of our proposal is to 'metabolize' the modern tradition. It draws attention to the conflicting relationship between contemporary architecture and the urban morphological approach in Italian culture (Marzot, 2014). There have been lessons from the 'big dimension' research, employed as a renovation tool in reading and redesigning territorial discontinuities. And, not least, there has been the Le Corbusier legacy, as in the troublesome example of Corviale, where a massive public housing intervention was isolated in the outskirts of Rome. The second of these was central to the founding conference of ISUF Italia in March 2007.

## Note

Design group: G. Strappa (co-ordinator), P. Carlotti, D. Nencini, P. Posocco, M. Raitano. PhD students: V. Buongiorno, G. Ciotoli , M. Falsetti, V. Mattei, P. Marziano, I. Taci, C. Tartaglia.

## References

Marzot, N. (2014) 'Modernism against history', in Larkham, P. J. and Conzen, M. P. (eds) *Shapers of urban form: explorations in morphological agency* (Routledge, New York).

Strappa, G. (ed.) (2014) Studi sulla periferia est di Roma (Franco Angeli, Milan).