

Preface

OverHolland – *Architectural studies for Dutch cities* is a series published by the Department of Architecture at Delft University of Technology. The editors plan to publish two issues a year. The field of architectural research covered by the series includes both typological and morphological urban studies and the question of architectural interventions in the context of Dutch cities. The first issue explores the problems, and reports on the 'Transformers of the European city' conference, with contributions by architects Jo Coenen, Alberto Ferlenga, Hans Kollhoff and bOb van Reeth.

Randstad Holland, Green Metropolis and Delta Metropolis are concepts that have been used by planners to define Holland as a metropolis. Proposals for the expansion of towns and cities, infrastructural works, ecological corridors, recreation areas and high-value urban hubs have been grafted onto this planning model by landscape and urban designers. At the end of this chain of virtual productions, it is the task of architecture to supply images and devise programmatic means of filling in 'the shapes'. The problem here is the lack of a concrete vision of things: *an archipelago of Dutch cities in a suburban wetland, rather than the fiction of a potential metropolis.*

Dutch cities are unique

in the European context, and study of their development may make a significant contribution to knowledge of the European city. However, OverHolland has opted for a project-based approach, focusing on the role of architectural projects in the transformation of Dutch cities. Currently, the main tasks are restructuring and renewal. This involves large numbers of projects in the most varied situations, in communities with autonomous powers of decision, and hence calls for an approach that takes full account of local settings and potentialities.

The theoretical focus in OverHolland will be on possible links between urban analysis and architectural design. The research conducted over recent decades has yielded a range of conflicting views and insights on the subject, raising all kinds of questions that will be highlighted and examined in depth in OverHolland.

Note for the English speaking reader:

The ring-shaped conurbation of the western Netherlands is known in Dutch as the Randstad (literally 'Rim City'). It is centred on the provinces of North and South Holland, and in Dutch the name 'Holland' normally refers to this part of the country rather than the Netherlands as a whole. The same distinction has been maintained in the English edition of this series – in

other words, 'Holland' and 'the Netherlands' are not synonymous. The adjective 'Dutch' presents more of a problem, since it refers to the whole of the country and English offers no convenient alternative. Here, however, 'Dutch' will normally be used in the same restricted sense as 'Holland'.

Architectural design and urban analysis

Henk Engel

'Die Architektur ist an sich auf den Merzgedanken am meisten von allen Kunstgattungen eingestellt. Merz bedeutet bekanntlich die Verwendung von gegebenen Alten als Material für das neue Kunstwerk. Der Architektur blieb infolge der Schwerfälligkeit des Materials, mit dem man Häuser baut, nichts anderes übrig, als stets wieder das Alte zu verwenden und einzubeziehen in den neuen Entwurf. Dadurch sind unendlich reiche und schöne Bauwerke entstanden; indem für den Architekten nicht der Stil des alten Teiles maßgebend war, sondern die Idee des neuen Gesamtkunstwerkes. In dieser Weise müßten unsere Städte, um ein Beispiel zu nennen, durchgearbeitet werden. Durch vorsichtiges Niederreißen der allerstrendsten Teile, durch Einbeziehen der häßlichen und schönen Häuser in einen übergeordneten Rhythmus, durch richtiges Verteilen der Akzente könnte die Groß-

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stadt in ein gewaltiges Merzkunstwerk verwandelt werden.' Kurt Schwitters, *Schloss und Kathedrale mit Hofbrunnen*, 1922

The field of typological and morphological urban analysis, as we see it today, was defined with perfect clarity in the 1960s and was developed by a group of young Italian architects who in the 1970s became known internationally by the name *Tendenza*.¹ In a retrospective which appeared in *Casabella* in 1985, Massimo Scolari wrote:

'For a whole generation, from the early Venetian research by Saverio Muratori to the studies in the Veneto region carried out by Aldo Rossi, Carlo Aymonino and Constantino Dardi, urban analysis and the concept of typology have provided a point of reference for design and ideology. (...) This position, which Tafuri was to define as "typological criticism", and which found its true expression in Rossi's *Architecture of the city*, featured in the difficult "sixty-eight" period alongside the most progressive ideas of the *Movimento Studentesco*, which recognised the quality of its moral firmness and its critique of the *ancien regime*.²

In the past few decades morphological and typological urban analysis has come to be a normal part of life at many architectural training establishments. To some extent it has grown into an

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independent field of scientific research, as witness the foundation in 1998 of the 'International Seminar on Urban Form'.³ At the same time it is realised that the connection between typomorphological urban analysis and architectural design is less self-evident. In an interview in the same issue of *Casabella*, Aldo Rossi wrote:

'Urban and typological studies have played an important part in my training. More generally I believe that they play an important and fundamental part in the training of every architect. *The architecture of the city* is no longer just the title of a book but a way of studying and understanding architecture anywhere in the world. Obviously nobody ever discovers anything new: what they do is bring to light some aspect of the discipline: architects have always studied the city but the study has, so to speak, got rather dusty. (...) But to claim that typomorphological studies represent the main vehicle for carrying forward architecture could be just another way of restricting the freedom of a young architect's training. (...) Teaching must assist training, or at least not hinder it by continually creating new myths, as functionalism once did and as typomorphological analysis runs the risk of doing.⁴

Clearly what Rossi is doing in this retrospect is putting urban analysis into perspective. He makes clear

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that urban analysis is only important in a more comprehensive programme of architectural training. This more comprehensive programme I have elsewhere referred to as *Tendenza's* scientific and didactic project.⁵ If we review the sum of all activities in the 1960s and 1970s which could be held to share this common denominator, a number of different steps can be distinguished. One is the development of a programme of typological and morphological urban analysis, another the development of a design theory.⁶ It also becomes clear that this latter has not led to any common result, but has remained bogged down in the different approaches of the architects involved. As far back as 1977, in a lecture in Delft, Giorgio Grassi, asked about *Tendenza*, said: '(...) in my opinion we can only use this word to denote the ideological and architectural uniformity of people who display the same interest in architecture, the city, historical analysis and so on. Of course their design research can take very different forms.'⁷

That was at the end of the 1970s, by which time *Tendenza's* scientific and didactic project had in fact broken up in different autobiographical directions. At the same time the Italian work was being overshadowed by a normative, historicising contextualism à la Rob Krier. In about 1980 Rem Koolhaas rightly took

up a contrary position. On the occasion of the 1981 exhibition *OMA drawings at the Architectural Association* in London, he declared: 'oma has been concerned with the preservation and revision of the tradition of so-called functionalism – exemplified by Leonidov, Melnikov, the "Berlin" Mies, the Wright of Broadacre City, the Hood of Rockefeller Center (...) In the "new" historicist and typological architectures, culture will be at the mercy of a cruel Procrustean arsenal that will censor certain "modern" activities with the excuse that there is no room for them, while other programs will be revived artificially, simply because they fit the forms and types that have been resurrected.'⁸

Yet even for oma the urban context is the measure of things to come; not, to be sure, of architectural forms, but of 'the programmatic imagination to make new insertions into an existing lived-in world; insertions that would acknowledge and enhance the context they find, and which at best would provoke subtle mutations, in the tradition of modernity'.⁹

The position adopted by oma touched a sensitive spot, particularly in Delft University of Technology's faculty of architecture. The old ideological struggle between Traditionalism and Modernism was given a new lease of life. This was the situation when the first typological studies and morphological urban analysis

started up in Delft,¹⁰ where the connection between design and urban analysis had always been an open issue. The fact that experimentation has always been highly regarded in the Netherlands would seem to be a great advantage, from a scientific point of view. Yet I believe that this experimentalism testifies more to a preference for pragmatic solutions and the systematic avoidance of theoretical questions which are as vital

to architecture as they are to scientific research.

For this reason I would like to recall a piece dating from 1966 in which Rossi first explicitly raises the subject of the relationship between analysis and design. In *Architettura per i musei* Rossi deals with different aspects of the way in which designing as an individual activity, including the subjective element inherent in such activity, can be thought of in relation to architecture as a collective subject, with its own history deposited in towns and their monuments, but also in unrealised designs, treatises and textbooks.¹¹

According to Rossi, no school of architecture can do without a theory of design. In many cases, however, a design theory is treated as no more than the post-facto rationalisation of particular design activities. Rossi on the other hand says that a design theory must be seen as an instant in the theory of architecture: 'Before we can talk about a theory of design, we have to ask ourselves what we understand by architecture and provide a definition of architecture. Then we need to consider the criteria which an architectural design needs to satisfy and the relationship between design and the history of architecture. In short, we have to concentrate on the things that provide us with a concrete understanding of architecture, namely the city, its history and its monuments.'¹²

These questions need to be kept constantly in mind when discussing possible connections between urban analysis and architectural design. While treating the city as the field within which architecture operates and becomes meaningful, Rossi arrived at the notion of the 'monument' as the key to research into the basic principles of architecture. A monument demonstrates the complex relationship between architectural form

and history and ensures the survival of the architectural form beyond the original occasion for its construction. It is the form that is permanent and lays itself open to changes in function and meaning.

Architecture of the city

Concerning urban analysis in our opinion the conclusions of the Padua research in the 1960s still provide a good starting point for further study. Aymonino, like Rossi, recognised the importance of the work of Saverio Muratori, whose studies of Venice and Rome laid the foundations for a morphological urban analysis that allowed the physical dimension of urban space its own logic, alongside the economic, political and social factors which affect the shape of the city.¹³ A fundamental feature of this approach is the distinction between what might be called the *living city* and the *physical city*. Contemporary research into the processes involved in urbanisation generally considers the physical city to result from the operation of social factors. Muratori on the other hand, and Rossi and Aymonino with him, saw the city as an artefact which forms part of an urban culture and as such is itself a factor in urban development.

Rossi and Aymonino however had objections to any normative connection between urban analysis and design. In the introduction to *La città di Padova* Aymonino observed: 'The problem arises when Muratori advances the theory that in today's urban reality design operations necessarily arise and can be derived from studies of this kind, as a logical continuation of knowing and acting'.¹⁴ As Aymonino saw it, an operational objective of this kind frustrates the possibility of developing a science of urbanism based on typological and morphological analysis.

This criticism gained extra emphasis because Muratori's morphological

urban analysis restricted itself to the formation and the subsequent transformations undergone by the mediaeval city. Muratori's research showed that in the mediaeval city the relationships between topographical form, plot division and building forms were fixed; building forms transformed themselves within these relationships while still retaining their fundamental characteristics. According to Aymonino, however, these relationships between topographical form, plot division and building typology are subject to change as a city develops. Research should therefore not be limited to the mediaeval city, but should be extended to cover the entire history of the development of the city, right up to the present day. This would allow an understanding to be gained not only of the different phases through which a city passes in course of its development, but also of the characteristics of the different elements which combine to make up today's city.¹⁵

Rossi too took the view that the physical structure of a city cannot be reduced to a single principle. The cityscape is not a 'unit', but shows breaks and contrasts, telling of the use and the history of the city:

'By its very nature a city is impossible to trace back to a single basic idea. This is true of the modern metropolis, but equally true of the concept of the city as the sum of many parts, neighbourhoods and districts, all substantially different from one another and distinguished by different formal and sociological characteristics. In fact this very differentiation is one of the typical characteristics of a city. It makes no sense to want to subject these different areas to a single kind of explanation or a single formal law.'¹⁶

When one reviews the complete history of the development of a city, the question arises how that city, despite drastic changes

to the urban fabric, has managed to retain its individual characteristics. This is the most important question raised by *The architecture of the city*. Rossi believed that the answer to what constitutes the individual character of a city lies in the retention and enrichment of the permanent elements in its urban structure, i.e. its topography and its monuments. Rossi's new emphasis on the role of monumental buildings in the formation of urban structure was especially significant in comparison with Muratori's earlier urban studies.

Rossi believed that the terms 'area' and 'residential area' were inadequate to explain the creation and development of the city, and needed to be supplemented by other accurately defined elements which made up the core of the development. Here Rossi's *The architecture of the city* makes a fundamental distinction between *primary elements* (monumental or topographical) and *residential areas*, giving a new twist to the usual distinction made in classical treatises and reference works between *public buildings* and *private dwellings*. *The architecture of the city* analyses this distinction on the basis of the differing roles played by the two relative to the natural situation and the time factor (the locus).¹⁷

Undoubtedly residential areas are a fixed feature in a town's plan, as indeed are its monuments. Nonetheless, buildings in residential areas undergo dynamic development: houses are demolished and rebuilt, their heights and depths are increased and sometimes plots are combined to allow greater breadth. Sizes can also be reduced, by subdividing plots or by introducing a housing type containing multiple dwellings. But the form of a monument does not change. Despite any changes in use which may occur, the form of a monument is a permanent feature.

These prominent urban features, often constituents of the town which have been present throughout its development, we have termed 'primary elements'. The link these primary elements establish with an area from being erected on a particular spot and from the permanence of the town plan and the building mass, this link between natural and constructed facts, is what forms the physical structure of the town.¹⁸

According to Rossi, the interaction between the topography, the monuments and the area is characteristic not only of the first phase of town forming but also of the further development of the town:

'Certain buildings form the germ cell of a town, now and in its further life; despite a change in or the complete disappearance of their original function, they have become so much a characteristic component of a particular part of the town, that they are seen more as urban features than as architecture. Other buildings mark the dawn of a new age in the town's history; generally they stem from times of revolution or preserve a close relationship with decisive events in the town's history.'¹⁹

In connection with this last class of buildings, Rossi referred in particular to the work of architects from the period of the French Revolution (ca 1800) and the Russian constructivists in the 1920s.²⁰ Amsterdam's city hall, now the palace on the Dam, designed by Jacob van Campen (1648) is a relevant example from a town in Holland. The poet Vondel sang the praises of this building, describing it as the eighth wonder of the world. And the work of Hendrick de Keyser, Amsterdam's city architect, seems even more worthy of further study.

Up to now interest in the work of De Keyser has mainly been concerned with stylistic questions relating to the introduction of classi-

cism into the Netherlands.²¹ A recent study by Jan de Heer on the other hand shows the works of De Keyser as elements in the new Amsterdam that came into being during the first half of the 17th century through the expansion and restructuring of the mediaeval city,²² so turning the spotlight on De Keyser for the first time as city architect. The Haarlemmerpoort [Haarlem city gate], the Zuiderkerk, Westerkerk and Noorderkerk [South, West and North churches] were landmarks for the new areas added to the city. The Beurs [exchange], built over the water on the Rokin, showed Amsterdam as a centre of world trade.

Each of these buildings has a tower. To these must be added the spires which De Keyser erected on fragments of the old defence works: the Montelbaans tower, the Munt tower, the Jan Rodenpoorts tower and the Haringpakkers tower. Around 1600 Amsterdam had three spires, one on the tower of the Oude Kerk [Old Church], one on the town hall and a modest one on the crossing of the Nieuwe Kerk [New Church]. It did not take long for De Keyser to add nine more. These monuments, old and new, together created a powerful silhouette encompassing the whole town.

Post-Tendenza

The development of the type-morphological urban analysis outlined here offers not only a range of specialised instruments for further research, but also a different view of the various approaches to the town that held sway during the early days of modern architecture. This subject is crucial to the consideration of the main representatives of Tendenza, and is always handled with the necessary critical detachment. Around 1980, harking back to the early days of modernism acquired a polemic character as a way of distancing oneself

from the various forms of normative, historicising contextualism. Rem Koolhaas carried out pioneering work in this area with his *Delirious New York* (1978)²³ and the concept of 'hybrid building', which followed the path blazed by him, became all the rage. In *Pamphlet Architecture no. 11* (1985) Steven Holl and Joseph Fenton launched this concept as a challenge to the view that a building 'must show what it is'. The authors believed that this view is characteristic of both *functionalism* and the alternative provided by the *typo-morphologists*.

Steven Holl presented *Hybrid Buildings* as the third publication in a series of studies. The first two studies, *The Alphabetical City* (Pamphlet Architecture no. 5, 1980) and *Rural and Urban House Types in North America* (Pamphlet Architecture no. 9, 1982) explored the possibilities offered by typological and morphological urban analysis to the North American situation. In *Hybrid Buildings*, however, Joseph Fenton came to the conclusion that: 'The determination of program and form advanced by typological models of the urban environment appear mere nostalgia in face of hybrid buildings which defy categorization by building type. (...) Hybrid buildings are a triumph of their designers' ingenuity and daring. The individual input of the architect is evident in the specificity with which each building responds to its program and site. The combinations are limitless. What the hybrid building offers is a professional tool for dealing with the intricacies of the twentieth century city.'²⁴

According to Holl and Fenton, the study of hybrid buildings can make an important contribution to the revitalisation of existing towns. The great hybrid buildings that began to be introduced at the end of the 19th century can certainly be qualified as modern, technologically speaking, but

they derived their right to exist from traditional urban structures. They showed the capacity of existing towns to accommodate new demands, provided that the buildings, the elements from which they are composed, are transformed. Hybrid buildings provide the architectural answer par excellence to new urban developments.

The dialectic of architectural object and urban fabric is the central theme of Fenton's study. His catalogue of American hybrid buildings shows that hybrid buildings do not just accommodate an extraordinarily wide range of functions, but are characterised by their exceptional size. This is how these 'modern' hybrids distinguish themselves from their predecessors, 'the shops and workshops with accommodation over, common at many times and in many cultures and still common today'. Fenton draws a distinction between 'fabric hybrids', 'graft hybrids' and 'monolith hybrids'.

'Graft hybrids', says Fenton, are typical of the functionalist approach, in that they reveal the functional differences between the constituent parts. Frank Lloyd Wright's vertically articulated Price Tower, part flats and part offices, provides a striking example. Fenton also includes in the same category New York's Downtown Athletic Club, Rem Koolhaas' favourite example. 'Graft hybrids' can be distinguished from 'fabric hybrids' and 'monolith hybrids' by the fact that neither of the two latter show on the outside what is going on inside. It can be said of both of the latter categories of building that 'the programmatic elements are subsumed within a continuous building envelope'.

'Fabric hybrids', says Fenton, are characterised by 'the affirmation of a form and its envelope and the subsequent relegation of programme to an inconspicuous appearance in the

building. Reverence to their place in the city has meant that most examples stick firmly to building lines, cornice lines on local buildings, and wall treatments.' As an example of a building in this category with the greatest appeal to the imagination, Fenton mentions Adler and Sullivan's Auditorium Building in Chicago (1887), a building in which 'the role of the auditorium as a cultural monument is subordinated to the urban fabric'.

The category of buildings that Fenton labels 'monolith hybrids' corresponds to what Koolhaas' *Delirious New York* calls 'monoliths', the Hancock Centre in Chicago being a good example. Looked at this way, 'monolith hybrids' can only be distinguished from 'fabric hybrids' by their scale; 'monolith hybrids' are bigger, stand apart from the urban fabric, and so have a monumental aura that 'fabric hybrids' lack.

In principle the distinction between the two categories of building is only a matter of syntax. 'Fabric hybrids' are defined architectonically as elements from which the urban fabric is constructed. 'Monolith hybrids' on the other hand are anomalies within the urban fabric. Yet these monoliths still form part of the urban fabric, by virtue of both their location and their content. The monolith dominates part or all of a block, inflating the typology of the urban fabric from within, at the same time overriding the classic distinction between urban fabric and monuments and between private buildings and public works.

This is the most significant insight for type-morphological urban analysis provided by Koolhaas in *Delirious New York*: 'Beyond a certain critical mass each structure becomes a monument, or at least raises that expectation through its size alone, even if the sum or the nature of the individual activities it accommodates does not

deserve a monumental expression. (...) This monument of the 20th century is the *Automonument*, and its purest manifestation is the Skyscraper.'²⁵

If, like Alvar Aalto in the early 1950s, we link the hybridisation of buildings with the crisis in public building, and in an institutional sense with the blurring of the boundary between public and private domains, then Koolhaas made an important observation when he said that the architectural effect of increasing the dimensions of any kind of building is an autonomous factor in all this.²⁶ The new building dimensions resulting from the new techniques available to real estate developers, whether the buildings in question are to be used for offices, factories, public institutions or residential purposes, have totally upset the classification of buildings into types, though the traditional hierarchy of building types has certainly not been eliminated from the way that buildings are perceived. A large building is still seen as an important building.

Prints of historic towns show quite clearly the architectural problem to which Koolhaas refers. The greater part of the building stock of historic towns consisted of private houses of modest size. Large buildings were reserved for public institutions like the church, the town hall, the weighhouse and the exchange in the old centre of Amsterdam. Their special size makes these buildings stand apart from the mass of houses and add monumental touches to the urban fabric. The large new buildings which began to appear in towns at the end of the 19th century generally constituted commercial developments of private buildings designed to accommodate offices, warehouses or hotels, alone or in combination. The impression of monumentalism given by these buildings was at odds with the trivial functions

which they generally accommodated.

Referring back to the Vitruvian tradition, Koolhaas observes a conflict inherent in the architecture of large modern buildings. Such buildings constantly find themselves required to satisfy inconsistent demands: 'that of being a monument – a condition that suggests permanence, solidity and serenity – and at the same time, that of accommodating, with maximum efficiency, the "change which is life", which is, by definition, anti-monumental.' Koolhaas finds the most advanced solution to the conflict between the functional demands imposed on the interior and the representative role of the exterior to be the radical separation of interior and exterior coupled with the abolition of the 'honest' facade which 'speaks about the activities it conceals'.

The decisive issue here has been what Koolhaas calls 'the annexation of the tower': the exploitation of the wealth of architectural motifs that the tower type had to offer.²⁷ The shapelessness of the programme is harnessed by the building type, an architectural form which demands attention, regardless of the programme: 'In the deliberate discrepancy between the container and contained New York's makers discover an area of unprecedented freedom. They ... [separate] exterior and interior architecture. In this way the Monolith spares the outside world the agonies of the continuous changes raging inside it. It hides everyday life.'²⁸

Absolute urban design

In 1982 Rossi wrote in the introduction to the American edition of *L'architettura della città*: 'Perhaps no urban construct in the world equals that of a city like New York. New York is a city of monuments such as I did not believe could exist. Few Europeans understood this during the years

of the Modern Movement in architecture; but certainly Adolf Loos did in his project for the *Chicago Tribune* competition. That enormous Doric column, which to many Europeans may have seemed only a game, a Viennese *divertissement*, is the synthesis of distorting effects of scale and the application of "style" in an American framework.¹²⁹

Confronted by the American city, and New York in particular, by 1980 even Rossi seems to have begun to suspect the unforeseen flight of events since *L'architettura della città*. The categorical separation of monuments and urban fabric, which Rossi's book associated with the legal and sociological concepts of public and private, had become completely uncertain. The autonomy of architecture had returned to the fore, single-handedly extending the mythical dimension of the city.

But 'the American framework' is by no means the same as the European framework. While the study of the architecture of the city received all kinds of new, often confusing, impulses from the us, in Italy at the end of the 1980s the subject seemed to be almost exhausted. Various attempts were made to do something about this,³⁰ one such being *Architettura della metropoli, Sei edifici pubblici per Milano* (1990), a joint initiative by German and Italian architects. The result was an exhibition and a publication of designs for six locations in Milan by Klaus Theo Brenner, Antonio Monestiroli, Franco Purini, Hans Kollhoff, Italo Rota and Christoph Langhof.³¹

In the introduction to the publication, Klaus Theo Brenner appealed to the 'Architektur der klassischen Moderne' to provide a new impulse to the study of urban architecture. What he was looking for was not so much a link with the urban design side of the work of the Moderns, but with archi-

tectural objects realised as singular projects. For Brenner the separation between urban fabric and monument still held good. This made his writing heavy going and 'Darsena Terme', his design contribution to *Architettura della metropoli*, was pervaded by European melancholia and a penchant for religious sentiment.

Nowhere in his treatise did Brenner mention *Delirious New York*. Yet the programme for his design showed remarkable similarities to the Downtown Athletic Club, which for Koolhaas represented just about everything that he had to say in his book. The programme for the club is a prime example of metropolitan hedonism. But for Koolhaas the really sensational thing was that nobody would expect anything of the sort from the appearance of the outside of the building. The peculiar pile-up of functions was hidden from view in the shape of the building.³² In Brenner's design on the other hand the bizarre stacking of the swimming pool immediately on top of the library – any bibliophile would shudder at the sight of the enormous tank of water above the glass ceiling – was what provided the motif for external expression.

According to Brenner, the realisation of an urban architecture expresses itself on two levels, relating to one another as structure and event. The structural level involves the normal proportions of urban life: 'Ihr architektonisches Prinzip ist das der übergreifenden Ordnung, der Regel, die die Teile miteinander verbindet. (...) Dem gegenüber steht die singuläre Rolle architektonischer Objekte im städtischen Kontext. Ganz besonders die öffentlichen Gebäude können ein Ereignis darstellen, das sich heraushebt aus den komplexen Strukturen der Stadt.'

In Brenner's view, the work of the classic Modernists came about in relation to the same two levels:

'Einmal auf der Ebene von neuen, durchsystematisierten Stadt- und Siedlungsmodellen und zum anderen in der Findung primärer Objekte als radikaler Ausdruck *neuer städtischer Funktionen* und *neuer Wahrnehmungstendenzen* im städtischen Szenario.'

Brenner rejected normative contextualism and argued in favour of updating the second, event-based aspect of classic Modernism. The key expression here is *radical object*. The 'radical object' was to once again throw architecture open to the 'Zeitgeist', to 'the complex world of urban perception':

'Kennzeichen dieser "radikalen Objekte" ist ihre spezifische Funktion, die sie als Bauaufgabe der Zeit auszeichnen und ihre Gestalt, die diese Funktion im städtischen Kontext monumentalisiert und ikonografisch vermittelt. (...) Das "radikale Objekt" folgt nicht dem Prinzip der Anpassung an und Unterordnung unter historischen Strukturen, es lebt von der Transformation, von der Überlagerung bestehender formaler Strukturen in der Stadt in ihrer historischen Schichtung.'

Seeking to identify possible relationships between urban analysis and architectural design it is important to go rather more deeply into the two approaches which Brenner distinguishes in the architecture of the Moderns.

The first approach, that of the 'neue, durchsystematisierte Stadt- und Siedlungsmodelle', is primarily associated with the work of Le Corbusier. On the occasion of the exhibition of the drawings of 'Une Ville Contemporaine' in Vienna (1926) Hans Sedlmayr dubbed this form of design on the scale of a whole city *absolute urban design*. According to Sedlmayr, the drawings of 'Une Ville Contemporaine' are not complete in themselves but must be seen in conjunction with the books that Le Corbusier had written prior to that date, partic-

ularly *L'Urbanisme* (1925). Sedlmayr said that it is characteristic of designs of this kind, 'that the quality, nature and position of their "parts" (and what happens within them) are determined by a single principle that structures the whole. (...) It is from this principle alone that the design of both the whole and the details derives its true significance.'³³

Following the lecture on 'La Ville Radieuse' given by Le Corbusier at the ciám meeting in Brussels, Fred Forbat explained why this kind of theoretical design study is important. As Forbat saw it, Le Corbusier's lecture made it abundantly clear that 'wie anders wohnungstechnische Probleme aussehen können, wenn der Weg der Folgerungen, nachdem er in der Richtung vom Einzelnen zum Ganzen einmal durchschritten war, nochmals in der entgegengesetzten Richtung begangen wird'.³⁴ Taking a close look at housing, not as a separate category of building but as one of the elements of the city as a whole, Le Corbusier showed that the choice of building types is an important factor in the further development of cities, both for their future size and building density and for the relationship between the different elements of which the city is composed. Looked at this way, high rise offers completely new possibilities.

'Une Ville Contemporaine' and 'La Ville Radieuse' were experimental models, and so 'fiction', but fiction with a definite aim, precisely formulated in Ludwig Hilberseimer's *Großstadtarchitektur* as follows:

'Dem Chaos der heutigen Großstadt können nur theoretische Demonstrationsversuche gegenübergestellt werden. Ihre Aufgabe ist es rein abstrakt, fundamentale Prinzipien des Städtebaues aus den aktuellen Bedürfnissen heraus zu entwickeln: zur Gewinnung allgemeinen Regeln, die die Lösung bestimmter konkreter Aufga-

ben ermöglichen. Denn die Abstraktion vom besonderen Fall erlaubt es zu zeigen, wie die disparaten Elemente, die eine Großstadt ausmachen, in eine beziehungsreiche Ordnung zu dieser gebracht werden können.'³⁵

From this point of view Hilberseimer subjected both the 'Satellite city model', promoted by the Garden City movement, and Le Corbusier's 'Ville Contemporaine' to a critical examination and on the basis of this examination developed his own model for the 'Vertical City'. Hilberseimer attributed significant experimental value to these model studies, but also emphasised that no more than theoretical value should be attributed to this kind of design: 'Diese Vorschläge sollen weder Stadtentwürfe noch Normierungsversuche einer solchen sein. Beides ist eine Unmöglichkeit, denn es gibt keine Stadt an sich. Städte sind Individualitäten, deren Physiognomie von dem Charakter ihrer Landschaft und ihrer Funktion im Staats- und Wirtschaftsleben abhängig ist. Es ist lediglich die theoretische Untersuchung und eine schematische Anwendung der Elemente, aus denen eine Stadt sich aufbaut. Eine Festlegung ihrer Beziehungen untereinander. Ein Versuch, durch Neuorganisation und Neuerwendung dieser Elemente eine ökonomischere Durchbildung eines Stadtorganismus zu ermöglichen.'³⁶

Modern architecture and urban design are generally seen as breaking with the history and tradition of the profession. A distinction must however be made between the stylistic approach to architectural form which only came into vogue in the 19th century and the typological approach to buildings as elements in the architecture of the city, characteristic of a significant part of the Vitruvian tradition and updated in urban design text books around 1900.

The aim of absolute urban design is to establish rules for a 'rational way of building' for the 'new city'. Typological research starts from the definition and arrangement of the elements from which a city is constructed, and leads on to the construction of an alternative to the existing city as a whole. New forms of building are not developed out of thin air: new forms come into being as the result of criticism of and changes in existing forms of building and are to that extent based on knowledge of the 'historic city'. The methodology of this research matches that of the research into urban design which took shape in German text books around 1900.³⁷

In this approach concrete project proposals always involve a confrontation between a theoretical model and the individual characteristics of a particular city. A famous example of this kind of design is Le Corbusier's 'Plan Voisin' (1925), an application of 'Une Ville Contemporaine' to the centre of Paris, which continues to provoke violent reactions to this very day. Less well known is 'L'ilot insalubre', an application of 'La Ville Radieuse' to an area in the 19th-century part of Paris, a Le Corbusier design dating from 1936.³⁸ The main practical results of this approach are to be found in urban extensions. The 'Niddadal project', realised by Ernst May in Frankfurt am Main between 1925 and 1930, figures amongst the most successful applications of the 'satellite city model'.³⁹

This approach to the existing city, envisaging the introduction of a new regulatory mechanism for the urban corpus, in fact also determined the programme and the deliberations of ciám,⁴⁰ with the result that the second approach on which Brenner focused attention became virtually lost from view. Not one of Mendelsohn's Universum-Kino and Kaufhaus Schock-

en, Gropius' Totaltheater, Peter Behrens' Turbinenhalle, Hans Poelzig's Großes Schauspielhaus und Mies' National Gallery, derived its significance from a theoretical urban model. Each of them was a one-off. Unlike the first approach, the second approach has borne fruit in interventions within the context of existing cities.

Radical objects

The question to be faced is whether the term 'radical object' needs to be treated as anything more than a label for a series of incidents. Brenner, as quoted above,⁴¹ (see note 32), gave a two-part definition: 'Kennzeichen dieser "radikalen Objekte" ist ihre spezifische Funktion, die sie als Bauaufgabe der Zeit auszeichnen und ihre Gestalt, die diese Funktion im städtischen Kontext monumentalisiert und ikonografisch vermittelt' and 'Das "radikale Objekt" folgt nicht dem Prinzip der Anpassung an und Unterordnung unter historischen Strukturen, es lebt von der Transformation, von der Überlagerung bestehender formaler Strukturen in der Stadt in ihrer historischen Schichtung'. The definition of radical objects rests first on a functionalist expressionism that Brenner thought he could derive from the Moderns and then on a concept of formal transformations introduced by typo-morphological urban analysis.

In reference to this kind of analysis, Anthony Vidler spoke of a new paradigm in architecture. Architecture was no longer committed to the abstract nature of the Enlightenment nor to the technological utopia of the Modern Movement, but to the reality of the city: 'The existing city supplies material for classification, and the forms taken by its artefacts over the ages provide a basis for recombination.' Thus design is based on 'the transformation of selected types into totally or partly new units which derive their

communicative force and potential critical power from the concepts underlying the transformation'.⁴²

The real question is what sets off this 'recomposition', and where should such 'transformations' lead? It is not surprising that Brenner looked to the Moderns for help here. What is remarkable is his appeal to the theoretical ideas of Ludwig Hilberseimer and Adolf Behne, two theorists of modern architecture particularly lacking in appreciation for individual creations. Their views on the competition for the *Chicago Tribune* in 1922 leave no room for doubt. In each case their criticism of the results of the competition was directed particularly at the entries submitted by the European Modernists.

In *Berliner Architektur der 20er Jahre* Hilberseimer wrote: 'The *Chicago Tribune* wanted "the most beautiful and distinctive building in the world". This declaration was naturally taken as a licence for excessively individual expression (...) Architects who preferred to be involved in the expression of new ideas, found it only too easy to forget that they were supposed to be designing an office building, and most important that a building of that kind is not totally independent of its surroundings. What happens to a city or street when it turns into a succession of individualistic buildings? The answer can be seen all around us. The puritanism of my own design, though not submitted, (...) can be read as a protest against the formal excesses of the Expressionists.'⁴³

Adolf Behne's reaction took much the same line.⁴⁴ Both Hilberseimer and Behne wondered what would happen if the proposed building were repeated several times over. Behne considered whether the design might possibly form the 'basis for a type', i.e. a prototype for a building block which could form part

of the urban fabric. All these criticisms totally ignored the exceptional one-off nature that the client had in mind. Remarkably, the intelligent explanation which accompanied Adolf Loos' *Chicago Tribune* entry foresaw the content of the entries that would be submitted by the European Modernists. The conclusion drawn by Loos was completely different from that of Behne and Hilberseimer.

First he made a radical deduction from the nature of the task set. The client's ambitions could only be realised if the *Tribune* building were capable of becoming the main symbol of the city of Chicago, a logo 'that once seen, pictorially or in reality, would never be forgotten (...), that would for ever be inseparably linked with the city of Chicago, like the dome of St. Peter's with Rome and the leaning tower with Pisa'. He then asked himself how this goal might be achieved. He worked out what was architecturally possible and estimated the strength of his competitors. Of his 'modern' German, Austrian and French colleagues, who would certainly choose new forms, he said: 'Ah well, objections will be raised to these untraditional forms soon enough. The owner will soon realise that his house is "unmodern", because such forms are as short lived as those of ladies' hats.'

The rejection of what was the latest strategy at the time bears witness above all to an understanding of the laws of communication: anything that is new today will be old-fashioned tomorrow. 'There therefore remains no alternative to producing a typical American skyscraper. At the beginning of their development specimens were still easy to distinguish, but today a layman seeing a picture of a skyscraper would find it difficult to recognise whether it came from San Francisco or Detroit. The author therefore decided to

base his design on the column. The free-standing column is a traditional motif: the Trajan column served as the motif for Napoleon's column in Place Vendôme.'

Eureka! Yet a doubt remained: 'This idea immediately raises architectural and aesthetic questions: is it permissible to build a habitable column?' Had he (Loos) not himself written twelve years earlier: 'Nur ein ganz kleiner Teil der Architektur gehört der Kunst an: das Grabmal und das Denkmal. Alles Andere, alles, was einen Zweck dient, ist aus dem Reiche der Kunst auszuschließen?'⁴⁵ Yet Loos stuck to his decision. For, as he said: 'Even the most beautiful motifs for a skyscraper, against which no objection has ever been made on these grounds, are derived from empty monuments, as demonstrated by the classic example of the mausoleum in front of the Metropolitan Building and the example of the Gothic steeples in front of the Woolworth Building.'⁴⁶

For the average European modernist the skyscraper was a new building type, still lacking formal definition. Mies van der Rohe's designs for an office building on Berlin's Friedrichstrasse (1921) and the Glass Tower (1922) showed that the essence of this building type lay hidden beneath the historicising garb in which the American skyscraper was clothed. In 1925 Van Eesteren accompanied an article in *Het Bouwbedrijf* on 'American tower blocks' with photos of a skyscraper under construction and remarked: 'The splendidly open character of the steel construction is totally destroyed by the artificial cloak draped round it, to create the impression of a solid stone building.'⁴⁷

Loos on the other hand saw the levelling effect produced in the American city by the commercial battle for public attention. In direct confrontation with its fellows a skyscraper can only attain

the ultimate status of monument by driving home the contrast between the 'external' and the 'internal', between 'outward form' and 'core form'.⁴⁸ At least as important, Loos' design for the *Chicago Tribune* demonstrated the crucial importance of the particular urban context to any architectural intervention. Like Hilberseimer, he explained: 'Es gibt keine Stadt an sich. Städte sind Individualitäten.'

With this in mind, we can finally turn to the design for El Lissitzky's 'Wolkenbügel', a building that, like Loos' 'Chicago Tribune', can properly be called a 'radical object'. The design was first shown in 1925 at the Novembergruppe exhibition in Berlin and subsequently at the international architectural exhibition in Mannheim. Le Corbusier presented the Plan Voisin at the exhibition of L'art décoratif in Paris in the same year. As Lissitzky wrote:

'Aus den Gegebenheiten des alten Moskauer Stadtsystems einen Bürobau für die Forderungen der neuen Zeit zu schaffen, war die Grundgedanke des Wolkenbügels. (...) Wir haben Städte geerbt, angefangen in Moskau bis Samarkand und von Nowosibirsk bis Alma-Ata, die ganz verschiedenen Kulturstufen angehören. In diesen Städten mußten die Bauten, die einer feudalen Kultur entsprechen, ganz neuen Zwecken dienen. Straßen und Plätze dieser Städte mußten ein ganz anderes Verkehrstempo des Wochentages bewältigen und für den Feiertag neue Möglichkeiten schaffen.'⁴⁹

But, he went on, 'Wir können [die alte Städte] nicht von heute auf morgen wegrasieren und "richtig" wieder aufbauen.'⁵⁰ According to Lissitzky the introduction of the skyscraper in the context of Moscow would create the same anarchy which he thought characteristic of the development of the American city. 'Der Typ des Hochhauses wurde in Amerika geschaf-

fen, man verwandelte hier den horizontalen Korridor, wie er in Europa vorkommt, in den vertikalen Fahrstuhlschacht, um den sich die Stockwerke gruppieren. Dieser Typ breitete sich vollkommen anarchisch aus, ohne daß man sich um die Organisation der Stadt als ganzes gekümmert hätte. Das einzige Bestreben war, in Höhe und Pracht der Hochhäuser den Nachbarn zu übertrumpfen.'⁵¹

Lissitzky presented the Wolkenbügel as an alternative to the American skyscraper, tailored to the context of Moscow. For the purpose he dissected the American type of tower block: 'Im Vergleich mit dem bisherigen amerikanischen Hochhaussystem liegt die Neuerung hierin, daß die Waagerechte (das Nützliche) von der Senkrechten (von der Stütze, von dem Notwendigen) eindeutig getrennt ist.'⁵² Freeing the vertical access systems and the horizontal floors from one another's stranglehold also had the effect of freeing the high-rise from the limitations imposed by the urban site:

'Wenn wir auf einem bestimmten Grundstück für eine horizontale Planung auf der Erde keinen Platz haben, [stellen wir] die erforderliche Nutzfläche auf Stützen, die als Verbindung zwischen dem horizontalen Gehsteig und der Straße, und dem horizontalen Korridor des Bauwerkes dienen.'⁵³

The high-rise proposed by Lissitzky was no longer bound by the limitations of the plot division of the urban block and the private ownership of land on which it was based. Yet the proposal was in no sense Utopian. The Wolkenbügel was not to be involved in the private ownership of land. The place for the Wolkenbügel was the public domain:

'Moskau gehört, nach seinem Stadtplan, zum mittelalterlichen konzentrischen Typ (wie Paris, Wien). Seine Struktur ist folgende: Das Zentrum bildet der Krenl,

danach folgen Ring A, Ring B und die radialen Straßen. Kritische Punkte sind die Schnittpunkte der großen radialen Straßen (Twerskaja, Mjasnizkaja, usw.) mit dem Ringsystem (den Boulevards). Hier entstanden Plätze, die eine Nutzung erfordern, ohne eine Stauung des Verkehrs hervorzurufen, der an diesen Stellen besonders dicht ist. Hier müssen zentrale Einrichtungen ihren Platz finden. So entstand die Idee des vorgeschlagenen Bauwerks.'

If monuments can be thought of as the punctuation marks of a city, then what Lissitzky discovered was the most elegant of such marks. Cities are not infrequently compared to ongoing texts, a comparison which increases the contrast between the two approaches to the city which Brenner distinguished in Modern Architecture. The Absolute Urban Designer adds new chapters, or replaces existing sections by new pieces of text. The Radical Urban Architect reviews the text, looking for breaks, lines of communication, boundaries and critical points, then fills the openings with a comma here, an exclamation mark or full stop there. He adds new touches, changes the rhythm and so restores life to functions and meanings.

Notes

1. See in this issue: Nicola Marzot, 'The study of urban form in Italy'; originally in: *Urban Morphology*, vol. 6, no. 2, 2002, pp. 59-73.
2. Massimo Scolari, 'L'impegno tipologico' (The Typological Commitment), in: *Casabella*, no. 509-510, 1985 (special issue *I terreni della tipologia*) pp. 42-45. Scolari refers here to: Manfredo Tafuri, *Teorie e storia dell'architettura*. Rome/Bari (1968) 1973, pp.190-197.
3. See for the foundation of ISUF (International Seminar on Urban Form): A. Vernez-Moudon, 'Urban morphology as an emerging interdisciplinary field', in: *Urban Morphology*, no. 1, 1997, pp. 3-10.

4. *Casabella*, no. 509-510, 1985, p. 104.

5. Henk Engel, 'Aldo Rossi, The Architecture of the City', in: *The Architecture Annual 2001-2002*, Delft University of Technology. Rotterdam 2003, pp. 18-22.

6. Aldo Rossi, *De architectuur van de stad*, Nijmegen (SUN) 2002, pp.129-137. English edition: *The Architecture of the City*, Cambridge, Mass. and London (The MIT Press) 1982.

7. Giorgio Grassi, 'Lezing Delft 1977', in: Max Risselada, Jurgen van Staaden, Harm Tilman (eds.), *Aktie onder architectuur. Het ontwerp van 4 architecten*. Delft 1977, p. 142.

8. Rem Koolhaas, 'Our New Sobriety', in: *OMA, projects 1978-1981*, catalogue accompanying the exhibition *OMA drawings at the Architectural Association*. London 1981.

9. Elia Zenghelis, 'Drawings as technique and architecture', in: *OMA, projects 1978-1981* (see note 8).

10. Two studies have appeared in book form: Casper van der Hoeven, Jos Louwe, *Amsterdam als stedelijk bouwwerk*.

(Nijmegen 1985) Amsterdam 2003; and Frits Palmboom, *Rotterdam, verstedelijkt landschap*, Rotterdam (1987, 1990) 1995. In 'Recensie *Amsterdam als stedelijk bouwwerk*. Analyse van een methode', in: *Oase*, no. 10-11, pp. 5-13, Maurits de Hoog and Rudy Stroink give a good overview of the first typo-morphological urban studies undertaken in Delft.

11. Aldo Rossi, 'Architettura per i musei', in: Aldo Rossi, *Scritti scelti sull'architettura e la città 1956-1972*. Milan 1975, pp. 323-339 (originally in: *Teoria della progettazione architettonica*, Bari 1968).

12. *Ibidem*, p. 323.

13. In 1950 Muratori was appointed to the chair of *Caratteri distributivi degli edifici* in Venice and subsequently, in 1954, to the chair of *Composizione architettonica*. His most important publications were: *Studi per una operante storia urbana*

di Venezia (1959) and *Studi per una operante storia urbana di Roma* (1963). See: Jean Castex, Philippe Panerai, 'Typologieën', in: *O 1*, 1981 (originally 1979).

Nikolaus Kuhnert, *Soziale Elemente der Architektur: Typus und Typusbegriffe im Kontext der Rationalen Architektur*. Diss. Aachen 1979; Anne Vernez Moudon, 'Getting to know the built landscape: typomorphology', in: Karen A. Frank and Lynda H. Schneekloth, *Ordering Space*. New York 1994, pp. 289-311.

14. C. Aymonino, 'Lo studio dei fenomeni urbani', in: C. Aymonino, M. Brusatin, G. Fabri, M. Lena, P. Loverro, S. Lucianetti and A. Rossi, *La città di Padova, saggio di analisi urbana*. Rome 1970.

15. C. Aymonino, 'Lo studio dei fenomeni urbani' (see note 14). According to

Aymonino, an important first step towards a broader approach to research into urban morphology was taken by a study carried out by Rossi of a metropolitan area in Milan: Aldo Rossi, *Contributo al problema dei rapporti tra tipologia edilizia e morfologia urbana*. ILSSES IV.4, Milan 1964. In the lectures given in Venice in support of the study of *La città di Padova*, Rossi developed various methodological aspects in more detail: Aldo Rossi, 'Considerazioni sulla morfologia urbana e tipologia edilizia' and 'I problemi tipologici e la residenza', both in the reader: *Aspetti e problemi della tipologia edilizia*. Documenti del corso di 'Caratteri distributivi degli edifici'. Anno accademico 1963/64. Venice 1964; Aldo Rossi, 'I problemi metodologici della ricerca urbana', in the reader: *La formazione del concetto di tipologia edilizia*. Atti del corso di 'Caratteri distributivi degli edifici'. Anno accademico 1964/65. Venice 1965; Aldo Rossi, 'Tipologia, manufattistica e architettura' and 'La città come fondamento dello studio dei caratteri degli edifici', both in the reader: *Rapporti tra morfologia*

urbana e tipologia edilizia. Atti del corso di 'Caratteri distributivi degli edifici'. Anno accademico 1965/66. Venice 1966. The lectures provided the raw material for the general theoretical treatment of the city which in fact makes up *The Architecture of the City* (1966). The Padua study was only published later, in 1970.

In it Rossi, along with many others, provides his own contribution: 'Caratteri urbani delle città venete'. The pieces by Aldo Rossi mentioned here have all been republished in: Aldo Rossi, *Scritti scelti sull'architettura e la città 1956-1972*, Milan 1975.

16. Aldo Rossi, *De architectuur van de stad*, Nijmegen (SUN) 2002, p. 62.

17. The first step on the way to this approach can be found in a contribution by Rossi to the debate at the beginning of the 1960s on city and territory, which made clear Rossi's intentions in respect to architectural design. In *Nuovi problemi* Rossi outlines a theory of urban dynamics to the effect that the distinction between the architecture of public institutions and of residential building is an objective fact that must be taken into account when considering the development of a city: 'We are referring to the new dimensions of the metropolitan area, to the existence of the city region as an objective fact which must be taken into account if one is not to work abstractly on a city which is more or less traditional, more or less capable of redevelopment, but in any case no longer definable within traditional, geographical, economic and physical limits. (...) For the moment the plan for the city-region requires that we act on the development and

form of the city by strengthening the infrastructures binding the city to its territory. In this sense, a few elements such as road networks, transport and commercial centres, i.e. all the elements through which

it is possible to carry on a precise policy for a city, are becoming more and more important. Once these major factors have been dealt with, residential, recreational, and cultural structures can be arranged in an original way.

The residential problem – which is more determined by the general solution adopted for the city – must be taken into consideration as it stands today, as a dynamic element doomed to a short life and rapid consumption, economically, technologically and psychologically. The bond between man and his home, considered as a bond between man and his environment, is less and less real; but the awareness of the bond between man and the society in which he lives needs to be constantly reinforced. This is why commercial centres, universities, cultural centres, and public buildings, will once more take on formal importance as monuments in a vaster metropolitan territory criss-crossed by huge public transport networks capable of increasing and multiplying the number of movements and contacts, and the level of participation in the spirit of the new city. The architect presently humiliated by the action of speculators, will once more be able to test his mettle against the great civil themes, and trace the progress of civilization with a boldness inspired by constant advances in technology.' Aldo Rossi, 'Nuovi problemi', in: *Casabella continuata*, no. 264, 1962, included in: Aldo Rossi, *Scritti scelti sull'architettura e città, 1956-1972*. Milan 1978, pp. 175-192, partial English translation in: *Ekistics*, no. 87, Cambridge, Mass. 1963.

18. Aldo Rossi, *De architectuur van de stad*, Nijmegen (SUN) 2002, pp. 91 and 115.

19. *Ibidem*, p.134.

20. *Ibidem*, p.132.

21. W. Kuyper, *Dutch Classicist Architecture*. Delft 1980; E. Taverne, 'Salomon de Bray's *Architectura moderna*:

biography and manifesto', in: *Architectura moderna ofte Bouwing van onsen tyt*, (Amsterdam 1631). Soest 1971, pp. 1-13. The only monograph on De Keyser dates from 1930: E. Neudenburg, *Hendrick de Keyser, Beeldhouwer en Bouwmeester van Amsterdam*. Amsterdam 1930.

22. Jan de Heer, *Het architectuurloze tijdperk, de torens van Hendrick de Keyser en de horizon van Amsterdam*. Amsterdam 2000.

23. Rem Koolhaas, *Delirious New York*. New York 1978; J. Castex, J.C. Depaule, P. Panerai, *Formes urbaines: de l'ilot à la barre*, Paris 1977 (Dutch edition: *De rationele stad, van bouwblok tot wooneenheid*, Nijmegen 1984; Amsterdam 2003) appeared a year earlier.

24. *Pamphlet Architecture no. 11* (1985), p. 41. For a comprehensive treatment of this subject, see: Leen van Duijn, Henk Engel, Iskander Pané (eds.), *Hybride gebouwen en architectuur van de stad*, Delft 2001.

25. See note 5.

26. Alvar Aalto, 'The decade of public buildings', in: *Arkkitehti-Arkitekten*, no. 9-10, 1953, p. 148; Göran Schildt, *Alvar Aalto, the early years*. New York 1984, particularly chapter 7, 'The multi-purpose building', pp. 231-241.

27. In *Delirious New York* Koolhaas mentions three architectural mutations which underlay the development of large American buildings: '1. the reproduction of the world, 2. the annexation of the tower, 3. the block alone.' Rem Koolhaas, *Delirious New York*. Rotterdam 1994, p. 82 (originally New York 1978).

28. See note 5.

29. Aldo Rossi, *The Architecture of the City*. Cambridge, Mass. and London (The MIT Press) 1982, p. 15.

30. Marco De Michelis, 'Alla fine di un ciclo/At the End of a Cycle', in: *Lotus 81*, 1994.

31. Klaus Theo Brenner, *Architettura della metropoli, Sechs öffentliche Gebäude*

biography and manifesto', in: *Architectura moderna ofte Bouwing van onsen tyt*, (Amsterdam 1631). Soest 1971, pp. 1-13. The only monograph on De Keyser dates from 1930: E. Neudenburg, *Hendrick de Keyser, Beeldhouwer en Bouwmeester van Amsterdam*. Amsterdam 1930.

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23. Rem Koolhaas, *Delirious New York*. New York 1978; J. Castex, J.C. Depaule, P. Panerai, *Formes urbaines: de l'ilot à la barre*, Paris 1977 (Dutch edition: *De rationele stad, van bouwblok tot wooneenheid*, Nijmegen 1984; Amsterdam 2003) appeared a year earlier.

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25. See note 5.

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28. See note 5.

29. Aldo Rossi, *The Architecture of the City*. Cambridge, Mass. and London (The MIT Press) 1982, p. 15.

30. Marco De Michelis, 'Alla fine di un ciclo/At the End of a Cycle', in: *Lotus 81*, 1994.

für Mailand/Sei edifici pubblici per Milano. Milan 1930.

The project was an initiative of the Goethe Institute in Milan in cooperation with the city administration.

32. This is why the classification of the Downtown Athletic Club as a 'graft hybrid' does not seem to me to be very enlightening.

33. Hans Sedlmayr, 'Der absolute Städtebau I, Stadtbaupläne von Le Corbusier', in: *Die Baupolitik*, vol.1, no.1, Vienna 1926, pp. 16-21. The following issue contained the other parts of the discussion: Dr. Karl Brunner, 'Der absolute Städtebau', in: *Die Baupolitik*, vol.1, no.2, Vienna 1926, pp. 40-53.

34. Fred Forbat, 'Flach-, Mittel- oder Hochbau? Der III. Internationale Kongress für Neues Bauen in Brüssel', in: *Wohnungswirtschaft* 1930, pp. 489-492. Quoted in: Martin Steinmann, *CIAM, Dokumente 1928-1939*.

Basel/Stuttgart 1979, p. 98.

35. Ludwig Hilberseimer, *Großstadtarchitektur*.

Stuttgart 1927, p. 13.

36. Ibidem, p. 20.

37. Looking at the programme for the first four CIAM meetings one is immediately struck by the fact that the subjects of these conferences exactly followed the blueprint for the rational composition of a city as described by Stübben: 'The basic unit of urban design is the building site for a single house. The combination of building sites creates a block, the combination and grouping of built blocks by a network of streets that takes careful account of traffic and artistic considerations and the necessary provision of green space, creates the city. Yet urban design has to be carried out in the reverse order. First come the routes to be followed by the main streets and the major areas of green space, then the block division and the smaller areas of green space, and finally the allocation of plots for building sites'. J. Stübben, 'Über den Zusammenhang zwischen Bebauungsplan

und Bauordnung', in: *Städtebauliche Vorträge*, 1909. The first conference in La Sarraz, where CIAM was founded in 1928, was followed by one in Frankfurt am Main in 1929 on 'dwellings for the Existenzminimum'; in Brussels in 1930 on 'a rational way of building' and in Athens in 1933 on 'the functional city'. See: Martin Steinman (ed.), *CIAM, Dokumente 1928-1939*. Basel 1979.

A dissertation by François Claessens on the subject of German urban design around 1900 is currently in preparation. Meanwhile the reader is referred to: Giorgio Piccinato, *La costruzione dell'urbanistica, Germania 1871-1914*. Rome 1977. German translation: *Städtebau in Deutschland 1871-1914: Genese einer wissenschaftlichen Disziplin*. Braunschweig/Wiesbaden 1983. See also: Giorgio Piccinato, 'Theorie und Praxis, Ideologie und technisches Instrumentarium in der Stadtplanung 1820-1914', in: *Stadtbauwelt*, no. 66, 1980, pp. 181-188. Further research in this field was carried out by the Lehrstuhl für Planungstheorie RWTH Aachen: Juan Rodriguez-Lores, 'Die Grundfrage der Grundrente. Stadtplanung von Ildefonso Cerdà für Barcelona und James Hobrecht für Berlin', *Stadtbauwelt*, no. 65, 1980, pp. 29-36; Gerhard Fehl, 'Stadtbaukunst contra Stadtplanung. Zur Auseinandersetzung Camillo Sittes mit Reinhard Baumeister', in: *Stadtbauwelt*, no. 65, 1980, pp. 37-47; Gerhard Fehl, 'Englischer Arbeiter-Wohnungsbaue und Berliner Baublockreform um 1890 – Theodor Goeckes Beitrag zur Wohnungsbaue und Städtebaureform', in: *Berlin; von der Residenzstadt zur Industriemetropole*, (Cat. dl.1). Technische Universität Berlin (Hrsg.), Berlin 1981, pp. 278-303; Gerhard Fehl and Juan Rodriguez-Lores, 'Die "Gemischte Bauweise". Zur Reform von Bebauungsplan und Bodenaufteilung zwischen 1892 und 1914', in:

Stadtbauwelt, no. 71, September 1981, pp. 273-284; Gerhard Fehl, 'Vom Berliner Baublock zur Frankfurter Reihe und zurück: Ein um 50 Jahre verspäteter Versuch, Ernst Mays städtebauliche Geschichtsschreibung auf die Spuren zu kommen', in: *UM BAU*, Vienna December 1981, pp. 37-56.

38. In *The Architecture of the City* Aldo Rossi considers the Garden City and the Ville Radieuse to be the two most important architectural models of modern urban design. Aldo Rossi, *De architectuur van de stad*. Nijmegen (SUN) 2002, p.132. See also: Henk Engel, 'Veertig jaar Unité d'habitation, een nieuwe formule van stedelijk wonen', in: *Oase*, no. 37-38, 1994, pp. 32-67.

39. Giorgio Grassi, 'Das neue Frankfurt e l'architettura della nuova Frankforte', in: *Das neue Frankfurt 1926-1931*, Bari 1975. See also: Henk Engel, Endry van Velzen (eds.), *Architectuur van de stadsrand, Frankfurt am Main 1925-1930*. Delft 1987.

40. See note 37.

41. See note 31.

42. Anthony Vidler, 'The third typology', in: *Oppositions*, no. 7, 1976, pp. 1-4. Dutch translation in: Leen van Duin, Henk Engel (eds.), *Architectuurfragmenten*, Delft 1991, pp. 71-79. See also: Anthony Vidler, 'The production of types' and 'The idea of type: the transformation of the academic ideal, 1750-1830', in: *Oppositions*, no. 8, 1977, pp. 93-113.

43. Ludwig Hilberseimer, *Berliner Architektur der 20er Jahre*. Mainz 1967, p. 51. The same general line is taken by Adolf Behne's comments on Hans Scharoun and Bruno Taut's designs for the Tribune building.

44. 'It is true that Scharoun's design takes account of the surroundings, but the relationship remains one-sided. The building feeds on its surroundings and processes them in such a way that particular characteristics are included in the functional calculation, but the result

remains completely individualistic, even where the design connects with large collective structures. Despite the relationship with the street etc. it was a one-off, specially created freak; perhaps even this approach reinforced its emphatically individual character by the way the few elements taken from the location were processed. This can easily be proved: could Scharoun's solution serve as the basis of a type? Scharoun's design for the Tribune building certainly could not, any more than Bruno Taut's design, which might be quite flawless structurally and functionally, but if used as a type – and every modern building must be able to satisfy this criterion – the city of Chicago would change into a kraal'. Adolf Behne, *Der moderne Zweckbau*, (1923, Munich 1926) Frankfurt 1964, pp. 46-47.

45. Adolf Loos, 'Architektur' (1910), in: *Sämtliche Schriften 1*. Vienna/Munich 1962, p. 315.

46. Adolf Loos, 'Toelichting Chicago Tribune', originally in English, German translation in: Burkhard Rukschio, Roland Schachel, *Adolf Loos, Leben und Werk*. Salzburg/Vienna 1982, pp. 562-564. An enlightening dissertation on Loos' thinking on monuments and history is to be found in: Benedetto Gravagnolo, *Adolf Loos, theory and works*. Milan 1982, pp. 34-41 and 173-175.

47. C. Van Eesteren, 'Amerikaanse torenhuizen', in: *Het Bouwbedrijf*, 1925, no. 12, p. 444.

48. Carl Bötticher, *Die Tektonik der Hellenen*, vol. 1.

49. El Lissitzky, 'Alte Stadt – neue Baukörper', in: El Lissitzky, *Rußland: Architektur für eine Weltrevolution*. Berlin/Frankfurt am Main/Vienna (1929) 1965, p. 38.

50. El Lissitzky, 'Eine Serie von Hochhäusern für Moskau', in: El Lissitzky, *Proun und Wolkenbügel. Schriften, Briefe, Documente*, Dresden 1977, pp. 80-83.

51. Ibidem.

52. El Lissitzky, 'Alte Stadt – neue Baukörper' (see note 49).

53. El Lissitzky, 'Eine Serie von Hochhäusern für Moskau' (see note 50).

On redesigning a Dutch city

Case study: City Hall extension, Gouda

Henk Engel and Otto Diesfeldt

The last two years, the city of Gouda has been working on a plan to re-house the city's political and administrative centre. A re-housing plan has been drawn up and a general programme of requirements for a total of 15,000 to 20,000 m² floor space. Ten possible locations for the new city hall have been examined. In June 2004, the city council expressed an initial preference for the 'Station' site, to the north of the railway line.

It is remarkable that the possibility of expanding near the existing City Hall on the market square was not considered in the study of potential locations. To be sure, there were several objections, relating to such issues as access for cars and availability of land, but the main one seems to have been its situation in the heart of the historic city centre. Such an extensive programme at this location would doubtless lead to fierce arguments over the 'protected cityscape'.

The city council has expressed its belief that the new city hall should be a 'House for the city'. In that case, of course, the most obvious location is in the heart of the city, where the City Hall now stands.

Gouda's City Hall was built around 1450, in late Gothic style. The free-standing position of the building, in the middle of the fan-shaped market square, makes it a unique monument. In the seventeenth century – 1668 to be precise – a new Weigh-house designed by Pieter Post (in

Dutch classical style) was inserted into the line of buildings on the market square, behind the City Hall. This profoundly altered the cityscape, and this is one reason why the Weigh-house is also an outstanding monument.

Earlier, in 1603, a new flight of steps (by Cools, again in Dutch classical style) had been added to the front side of the City Hall. Later on, in 1697, a scaffold was erected at the rear (in classical style). The construction of the new weigh-house also extended the civic axis in terms of urban design. The old weigh-house, which was an integral part of the line of buildings on the north side of the market square, was demolished along with two houses immediately west of it, including the buildings on the land behind. Following Pieter Post's advice, the authorities clearly also wanted to create a new urban configuration in which the new weigh-house would be a free-standing structure. To the rear of the weigh-house space was also made for a smaller square that extends as far as the water by the Zeugstraat. From then on, agricultural produce could be delivered directly by water and, after being weighed in the weigh-house (and taxed), was sold on the market square.

The City Hall and Weigh-house, together with the market square and the square behind the Weigh-house, form a unique monumental group. During the seventeenth century, the interior of the City Hall was also reconstructed. The various alterations and additions indicate that it was possible to update the monumental heart of Gouda in a striking manner. Whether that achievement can be repeated today is an interesting question. The protection of monuments and preservation of the historic cityscape does not, in our opinion, necessarily mean that the historic inner city should be

mummified and reduced to the status of a museum and tourist attraction. In an updated administrative centre, the historic City Hall and Weigh-house – as well as two other monuments, the Agnietenkapel church and Hotel de Zalm – could once again perform a present-day function, if the risk were taken of adding a few new buildings to this group. The result might well be an even more attractive city centre.

This study explores a possible way of achieving this. It adds two large-scale elements to the existing group of buildings: the 'Kwadrant' (Quadrant), an office building on four supports that floats above the rooftops of the existing structures – this would house the administrative apparatus – and the 'Rotonde' (Rotunda), the central public entrance area with information and service counters, located below ground between the weigh-house and the city hall. The main entrance to the 'Rotonde' is situated in the weigh-house. The Cheese Museum on the first floor of this building can be retained. The Agnietenkapel will become the entrance hall to the 'Kwadrant' and will also retain its present function as an exhibition area and auditorium.

In the old City Hall, the meeting rooms on the upper floors will be removed, making space for the new council chamber. The existing staircase will be replaced by a lift and a new staircase created. Sanitary blocks will be constructed in the cellar. The existing wedding chamber will be retained and the mayor's chamber will become a second wedding chamber. Hotel de Zalm will become a café-restaurant and debating centre. The upper floors will be converted into political party offices and meeting rooms. A new element, the 'Trommel' (Drum), will be built to the rear of Hotel de Zalm, accommodating the chambers of the mayor and coun-

cillors. The 'Trommel' will be directly linked to the 'Kwadrant' via lifts.

For the people who work in the enlarged city hall there will be parking space in the 'Schijf' (Disc), a fully mechanised car park for 165 cars situated in the block between the Zeugstraat and Wilhelminastraat. On the other side of the 'Kwadrant' will be a parking facility for 600 bicycles. To speed up car traffic, a new bridge is projected across the Blekerssingel, opposite the Lem Dulstraat. The bridge will also make it possible to reverse the traffic flow for the Nieuwmarkt car park, which will improve traffic safety.

An initial study of the structural and, in particular, engineering aspects of the foundations for the 'Kwadrant' indicates that realisation of this structure will not present any insurmountable problems. Further studies will be carried out by final-year students from the Faculty of Building Technology at the Delft University of Technology. The realistic content of this proposal is, however, not merely a technical issue. The issues that arise with this project will be related, first and foremost, to rights of ownership, which will certainly soon get mixed up with the issue of whether such a building is even acceptable within Gouda's protected cityscape.

In our view, realisation of the 'Kwadrant' offers a genuine chance to keep the most important municipal institution, the city hall, in the historic centre. The 'Kwadrant' is not only a worthy addition to the City Hall/Weigh-house group, but also an important correction to the somewhat chaotic situation that has developed around the Agnietenkapel over the course of time. Since the uprising in 1573 and the subsequent confiscation of church possessions, the development of these former monastery grounds has been highly dynamic. Over recent

decades the shopping area has expanded greatly, and the focus of economic activity has shifted to this northern section of the city centre. The 'Kwadrant' marks the link between the new shopping area and the old commercial centre, the market square.

Despite all this, a nagging doubt may remain as to whether future generations will share our views and will not accuse us of seriously damaging the city's cultural heritage. However, unlike the buildings that have been constructed in the city centre over recent decades, realisation of the 'Kwadrant' would not be an irrevocable step. Since it will be erected on just four supports above the existing architecture, the latter will remain fully intact. Fifty years from now, when the building has depreciated in value, the authorities may decide to dismantle it. But it will probably not come to this. There is a considerable chance that as this date approaches, despite changing views, the 'Kwadrant' will be considered an irreplaceable jewel in Gouda's crown and will itself feature proudly on the city's list of monuments.

Jo Coenen, Alberto Ferlenga, Hans Kollhoff and bOb van Reeth: Transformers of the European City

Roberto Cavallo, François Claessens, Filip Geerts, Willemijn Wilms Floet

'We cannot so easily entrust the values of today's cities to the natural succession of artefacts. Nothing guarantees an effective continuity. It is important to know the mechanism of transformation and above all to establish how we can act in this situation – not through the total control of this process of change in urban artefacts, but through the control of the principal artefacts emerging in a certain period (...) Questions about values

cannot be resolved in terms of abstract architectural and typological formulations – such questions can only be resolved at the concrete level of urban architecture.' Aldo Rossi, *L'architettura della città*¹

Over the years the expression 'urban transformation' has taken on a wide range of connotations. It is an unceasing story of bulldozers, inner city refurbishment, urban renewal, reallocation and so on. The question is how the city, and above all the constantly changing significance of the European city project, can be grasped in present-day practice. The four protagonists presented as 'transformers of the European city', Coenen, Van Reeth, Kollhoff and Ferlenga, have all had an opportunity to play a role within this framework with their architecture, and the significance of their architectural interventions is examined below.²

The four architects – all of whom in their capacities as professors are engaged in research and education bearing on this issue – carry out their activities in accordance with so-called 'master plans'. Master plans turn up in various shapes and sizes, covering various levels of scale and detail and containing statements about matters ranging all the way from the layout of public space, greenery and the properties of a built-up area – streets, squares, public gardens, soft landscaping, blocks, building height, building typology and structural dimensions – to the type of architecture. They therefore provide good material for testing definitions of urban architecture and for obtaining an understanding of the various attitudes adopted by architects towards town planning and the urban context.³ Although all four architects work in accordance with master plans, each of them operates at a different frequency in the bandwidth mentioned above.

Alberto Ferlenga (Italy), architect, professor of architectural design at the University Institute of Architecture of Venice and above all critic, uses the history of the Novoli grounds, on the site of the former Fiat factory near Florence, as an example of a planning process that became so entangled in the conflict between political interests and professional beliefs that the young architects who ultimately had to put the plans into practice were left with hardly a clue. The result was a collection of more or less fashionable residential buildings. Jo Coenen (Netherlands) acts as a director of urban development, in which capacity his main aim is to achieve coherence between town planning and architecture, something he also monitors personally. Strikingly, the architecture of the buildings designed by him – the jewels in the plan – is extracted from the traditional vocabulary expressed in his urban designs. bOb van Reeth (Belgium) often works on a scale somewhere between an individual building and a neighbourhood, small-scale interventions in which he acts simultaneously as town planner and architect. He shares with Coenen the need to use architecture to establish the character of a place. His personal style embodies a highly developed search for simplicity. Hans Kollhoff (Germany) is the most conventional and traditional architect of the four. For him the emphasis is on tectonics, the relationship between architectural construction and the logic of materials and detailing. At the Delft symposium he stated explicitly that ever since his student days he had been involved, with the help of these elements, in building up a consistent body of work in which the connection between the building and the ground is as crucial as the joins in the cladding.

Jo Coenen – fifteen years at work in Maastricht

A review of Jo Coenen's work clearly shows that he has been at work in Maastricht almost without interruption. From 1986 onwards he worked on plans for housing the University of Maastricht in old properties scattered over the old city centre and on transforming the site of the Sphinx-Céramique factory into an urban estate providing facilities for living, working and cultural activities. This operation began with a plan to establish the medical faculty as a new centre on the periphery, but finally, through strategic projects for the University, involved the city centre itself. The belief in the ability of the city to adapt to repeated redesign, rooted in a few historic elements, finds expression in a number of different 'formal' and 'informal' strategies and culminated in the supervision of the *design-by-committee* for the Céramique site. Thus this large-scale urban infilling at the point of transition between centre and periphery formed part of a hybrid approach to the city as a whole made up of different ingredients, including reuse, master planning and intervention in the existing city.

Coenen (1949-) is involved everywhere, like a spider in a web, a kind of Berlage. He heads a firm that has at various times had branches where buildings were designed and urban design work carried out, in Eindhoven, Maastricht, Amsterdam and Berlin. He is also Chief Government Architect, which means that he has an important say in the development of building projects for central government (including the choice of architects and the line to be followed by the plan). In this capacity he also gives guidance to the 'Government Architect's studio', a group of talented young architects and students of architecture. On top of all this he is (or was) associated with the

faculties of architecture at the universities of technology in Eindhoven, Delft, Karlsruhe, Archen and Lausanne.

Coenen has turned out to be a team player, combining an engaging personality with a degree of tenacity. He attempts to reconcile economics and culture, two areas which tend to find themselves at odds with one another, in the way that will achieve the best result. The market, the project developer and the contractor all want an operation to be profitable, which implies, for example, that costs must be kept as low as possible. This is the economic side of the business. Society's interests are served by the architectural quality of the new building in relation to its urban context. This is the cultural and political side. Coenen's formula for drumming up the necessary support from the market, politicians and designers, involves networking, the maintenance of personal contacts and personal guidance, all supported by 'workshops'.

His most important professional contribution is as designer and supervisor of master plans, closely monitoring the interpretation and implementation of his urban design work. Coenen has collected around himself a permanent group of European celebrity architects, who work on the same projects at different places in the Netherlands: Bruno Albert, Jo Crepain and bOb van Reeth from Belgium, Hans Kollhof from Germany, Wiel Arets from the Netherlands, the Krier brothers from Luxembourg, Mario Botta and Luigi Snozzi (whom he considers his guru) from Switzerland, Antonio Cruz & Antonio Ortiz and Oriol Bohigas from Spain, and Alvaro Siza from Portugal. Local firms are often brought in to support them.

As the designer of master plans Coenen acts as a director of urban development, constantly searching for a suitable strategy to

deal with the urban design task presented. In the case of the Vaillantlaan, a monumental 19th-century thoroughfare in The Hague, the cityscape was threatened with fragmentation by small-scale urban renewal. Coenen designed a package of facade components and an accompanying 'rule book', which were used by different architects to compose facades. In the case of the KNSM island in Amsterdam, Coenen put forward the idea of restoring a number of characteristics of the former docklands. The result was a quay lined with detached buildings. The north quay consists of smaller residential buildings, together forming a closed facade. Large monumental buildings on the south side and at the tip of the peninsula are comparable in scale to the harbour's former warehouses. Coenen's work for the University of Maastricht consisted of a strategic plan for the removal and a very modest new addition in the form of an underground lecture room and a promenade across a historic site.

For the new 57-acre estate on the site of the former Sphinx-C ramique factory Coenen looked for ways to make it part of the inner city. To do this he examined the existing context to find strengths and possible points of contact. The bank of the Maas was developed into a park-like promenade complementing the existing pedestrian area along the river. Space to be used for urban and cultural purposes was planned at both ends of the plan area: the Bonnefanten museum is located at the foot of the existing Kennedy bridge (the *zuidknoop*) and for the side nearest the city centre a square was proposed (the *noordknoop*) containing a library-cum-public hall, a theatre, shops, hotel and catering facilities and a bridge for cyclists and pedestrians leading to the old city centre. The area itself is characterised by the

Avenue C ramique, a wide tree-lined avenue forming a central axis running straight through the new estate. The link between the C ramique premises and the 'Wyck' quarter, its mirror image in the old part of Maastricht and the site of the city's railway station, is achieved by means of a kind of bayonet connection between the new Avenue C ramique and the old through route, i.e. the town ramparts or Wilhelmina Boulevard. Rounding the corner leading away from Wyck one gets a head-on view of the new public hall-cum-library before the road swings left towards the Avenue. The Avenue itself is lined by offices and residential blocks, with shops and other urban facilities.

The drawings for the design were prepared in three dimensions, showing the greenery and the shadows cast by the blocks of buildings and revealing the character of the public space. In this way the drawings conjure up a clear picture of what is expected of the architecture. The pictures express the formal logic of the design, in which the coherence between the arrangement of public spaces and the buildings is presented as a natural part of a hierarchical system: the monumental Avenue C ramique, the main axis, is crowned by a tall block of flats (designed by Siza), axes at right angles to the main axis are terminated by archways and raised roofs in the long residential building along the Maas, symmetry is used to create logical cohesion, three small towers on the bank of the Maas find their echo along Heugemeweg, the road bordering the west side of the planning area, and so on.

The public spaces are primarily bounded by urban elevations. A typical Coenen touch, and a deviation from the traditional form of this kind of urban design, is the definition of the spaces inside the blocks as semi-public, so giving the plan

more the character of an ensemble. Coenen's urban designs often propose building shapes which deviate from the norm. One example is provided by the double-sized enclosed blocks on the KNSM island with round internal courtyards, a motif whose form was derived from the monumental circular building at the tip of the island. The doubled size of the block creates a volume suggestive of the scale and silhouette of the old warehouses. Two such blocks occur in the plan. One, developed by the Belgian architect Bruno Albert, literally follows the form of the urban design plan, using a traditional urban vocabulary: a restful brick exterior, expressive alternating stone bands and a colonnade in front of the facades facing the courtyard, with decorative railings. The other, worked out by Hans Kollhoff, is a development of Coenen's proposal, based on an abstract variation on the theme of the former industrial building, combined with another incidental theme, Amsterdam's *Grofstadtachitektur*. Recollecting the rhythmic facades of Wijdeveld and the Amsterdam School, Kollhoff decided not to retain the circular courtyard, but shaped the volume round a small building preserved as a monument, so reproducing – in an abstract fashion – directions concealed in the structure of the islands.

On the Sphinx-C ramique premises successive blocks are open at the sides facing the Avenue. The courtyards resemble gardens; Coenen refers to these courtyards as 'circuses', because of their semicircular ends. He had previously applied the same shape, rather like a hippodrome, in a structuralist housing design for the Weena in Rotterdam that evokes associations with Botta. The dimensions of the blocks on the two sides of the Avenue vary in depth and so also in scale and character, so creating a

natural diversity. The blocks by the river are not very deep and are treated in different ways: Cruz & Ortiz see their blocks as 'cut loose'; bOb van Reeth, on the other hand, used the same amount of space to erect R sidence Sonnevile, a single large complex providing facilities for assisted living, more appropriate to the idea of an ensemble.

The side streets have been given a relatively narrow profile to evoke a feeling of urbanity, while the generously furnished courtyards of the 'circuses' are filled with 'ornamental greenery'. It might be asked whether this idea of Coenen's works in practice: the cheap execution of the facades make the streets look a bit shabby. A favourable exception is once again R sidence Sonnevile. In contrast to the monumental courtyard the composition of the side elevations has an informal character: the elevation is subdivided into smaller units and has a greater diversity and plasticity. Setback surfaces in brick and zinc and variations in the width of the balconies and the shape of the roofs add refinement to the design of the side elevations.

Like the block designed by bOb van Reeth, the biggest 'circus', designed by Bruno Albert, is designed as a monumental ensemble, built of repeating units of different size. The rhythm of the roofs suggests a semi-detached style, whereas the elevations take four dwellings as a unit. Variation is incorporated into the detailing of the corner balconies. Maisonettes are located on the ground floor, where the frontage is set back behind an arcade, contributing to the monumental character of the whole and helping to solve the problem, inherent in a public courtyard, of creating privacy for ground floor flats.

The circus designed by Matorell, Bohigas and Mackay has more the character of a 'superblock' or Viennese

Mietskaserne, because the elevation consists of staggered horizontal strips of continuous parapet walls and windows. Individual dwellings are not recognisable in the whole. The gateways are given an individual character by the remarkable use of brickwork arches.

The office building on the Avenue, designed by Hubert Jan Henket for the Dutch government, contains an atrium which though covered is otherwise comparable with the courtyards in the neighbouring housing.

The master plan took only a few months to conceive, though after ten years the execution is still not complete.⁴ The most important change made to the plan during this period was the *zuidknoop* containing the Bonnefanten museum and commercial buildings. The plan emphasised the perimeter lines of the blocks along the Avenue, whereas the character was eventually determined by detached buildings. This area is now designed as an entrance to the district: the Avenue has been provided with a spacious forecourt incorporating a roundabout. The catalyst for this change was Aldo Rossi's Bonnefanten museum, which in Coenen's plan provided a screen between the boulevard and the long residential building along the bank of the Maas and provided one component in the series of blocks along the Avenue. Wiebenga's old factory building was completely integrated into this same series. Rossi however chose to use the connection with the Maas as the *Leitmotif* for the museum, and therefore turned the tripod through 90°, so allowing the Wiebengahal to stand on a square, marking the entrance to the museum and providing an introduction to the Avenue. The white cylinder, with its zinc dome, leans out towards the Maas and functions as a prominent landmark on the boulevard and as a beacon for the other side of the river.

Regrettably the relationship between the district and the river has been completely lost in Luigi Snozzi's development of the long residential building along the Maas. While this substantial building with its charming rhythm and impressively long pergola facing the park still has the gateways proposed by Coenen, the semi-underground car park means that these gateways no longer have any connection with the ground level. They are not accessible to the public, and no longer correspond with the side streets. The drawing showing the design situation as realised suggests a degree of openness which is not present in reality.

The range of instruments used in Coenen's urban design work is both traditional and formal. He makes use of public spaces formed by modest red brick blocks with stone plinths set along perimeter lines, axes of symmetry and monumental accents in obvious places. The best bits Coenen reserved for himself: the public hall-cum-library, a block of very luxurious flats and the conversion of an old factory building into a theatre. It is striking that the vocabulary he chose for himself is very different from the one used in his urban designs: once freed from that, he indulged himself in a modernistic idiom, with colonnades and asymmetric compositions of telescoped boxes in concrete, plaster, metal and glass, in joyous remembrance of Le Corbusier, the great 20th-century master, the architect who first awoke his interest in architecture.

bOb Van Reeth – designing in the border area between urban design and architecture

bOb Van Reeth, Coenen's Flemish opposite number, speaks with the authority of his double function as architect and Flemish government architect (since 1999), about the simultaneity of the

city, in which connection he repeats his mantra of cultural sustainability. As he sees it, it is not always necessary to choose a single representative idea for a city. A building must after all last at least four hundred years. If his own work is set in this context, what emerges is a completely individual attitude which makes a virtue of the European city's permanent state of crisis. In Antwerp the strategic infilling of sites which have remained undeveloped for years, ranging from craters left by V-bombs to informal parking places, provides a modest springboard to the gradual infilling of the city. Van Reeth believes the architect is responsible for the shell (which, as has already been mentioned, must last 400 years) and public space. Interiors are fun to do. His aim is to bring about the greatest possible change with the least possible, but unconventional intervention. A single building can change an entire city: his Van Roosmalen (alias Josephine Baker) house on the Scheldekaaien is credited with having launched the gentrification of the waterfront.

Van Reeth is the head of Architecten Werkgroep (AWG). By now this Antwerp-based firm, which like many self-respecting Belgian firms of architects does most of its building in the Netherlands, has more than 300 designs to its name and has an order book ranging from country residences to hospitals and from filling gaps in the old city to preparing master plans for abandoned industrial sites. In recent years the firm has expanded its sphere of activity and moved its activities from Belgium to the Netherlands.

Apart from having his own architectural practice, Van Reeth is the first ever Flemish government architect, in which capacity he is responsible for promoting the cultural and political climate for architecture in Bel-

gium and advising on the building of government buildings and the maintenance of the stock of listed buildings. He also holds a chair in the department of architectural design in Delft University of Technology. His hobby horse in all these functions is the concept of 'cultural sustainability', which implies that government buildings must be capable of lasting 400 years and becoming tomorrow's monuments, must deal economically with raw materials and public space and must respect the city's 'footprint', the morphological permanence of the street plan.⁵ Most recently he has been working for cultural sustainability by devoting himself to a careful and well-considered planning process, with good clients and architects.

Van Reeth claims that he does not know what architecture is, but is trying to find out. He is particularly concerned not to tie himself down to a particular form or personal style. Closer examination of his work shows its constant features and suggests that he does in fact try to stick to one language. Indeed this continuity means that his work carries on a dialogue with itself, is easier to explain and becomes more valuable. Van Reeth's approach can be compared with that of Italian rationalists like Grassi, who are constantly combining the same shapes in a different way, redefining a site and giving it new meaning in a dialogue with its context. Grassi and Rossi often choose an archetypal cultural reference, say a Roman triumphal arch, a Dutch warehouse or, yet more abstract, a long narrow plot (Grassi in Groningen), a lighthouse, a chimney or a dome (Rossi). But the references in Van Reeth's designs are to collections of the site itself. Thus the Mariaplaats in Utrecht is given the structure of a clerical immunity, the Riedijkshaven in Dordrecht is given a reference to its industrial past by

incorporating the silhouette of an old warehouse in the composition of the elevation of the tower block, and in Courtrai a link was sought between the Leieboorden and the character of the 19th-century properties lining the river. Van Reeth has a masterly way of finding solutions for difficult gaps; his projects are often less successful when the context is uncomplicated (cf. the projects for the Java island and the Vinkhoek, both in Amsterdam). His urban architecture is characterised by simplicity, abstraction, lack of pretension and undistinguished unobtrusiveness; its aim is to allow public space to acquire significance. This minimalism relates to all levels of scale within a project, ranging from the urban design, the shape of the building mass and the composition of the elevations through to the detailing and the colour. These aspects are given particular attention in the detailed examination and comparison of the following housing projects: Lombardia (Antwerp), Mariaplaats (Utrecht), Résidence Sonnevile (Maastricht) and Leieboorden (Courtrai).

In his urban design work Van Reeth prefers the informal diversity of small squares and routes with a semi-public character. In the Lombardia project (a combination of shops and dwellings) small squares follow the existing typology of forecourts originally intended for the stabling of horses; today most of the area is occupied by haute-couture business. For a long time Lombardia was a 'gap', commonly known as 'the wild sea'; what was once a parking place is now part of Antwerp city centre's 'core shopping area'. The small squares are used by hotel and catering establishments and by a vegetable market. In Utrecht, the squares adjoining the Mariaplaats provide peaceful communal outdoor areas for residents of the garden flats. The Son-

nevile old people's home on the Céramique site in Maastricht is grouped round a grand forecourt, complete with pergola, trees, shrubs, ponds, lamp posts, small benches and a large fence. In Leieboorden, the two squares fit in with the parklike character of the neighbourhood. The special thing about this project is that Van Reeth has treated the outside space belonging to the flats as additions to the city, as if it were public space: there are indeed small front gardens, but they seem instinctively to form part of public space, and serve as no more than buffers to create privacy for the ground floor flats. On the bank of the Leie stands a block whose shape follows the slight curve in the river. The river bank and the green space provided by the internal courtyard are linked through gateways in the block.

The building mass often consists of closed volumes with bland gable or saddleback roofs. In Lombardia they match the scale and dimensions of the surrounding buildings; the volumes are repeated as individual properties, in black and white. Sonnevile has a stretched saddleback roof, enlarged to fit the whole width of the complex, serving as the project's centre (or centre of gravity), an alienating abstract version of monumentality. Because the complex was detailed as a single brick-built volume with a single roof, it was built as a single building. Mariaplaats also has a saddleback roof, but set back, literally, behind the facades, the raised end elevations and the set-back sea; the application of a zinc-clad saddleback roof occurs mainly in combination with views over the old city.

In AWG's work, elevations consist of uncluttered areas with repeated gaps. The ratio between open and closed varies. The breaks in regularity and the detailing are intended to provide sub-

tle accents, inspired by the floor plan of the dwelling behind, but also by the building's position in the city: as an urban elevation, a corner property, a gable end and so on. The gaps are filled with a standard assortment of glass parapets acting as French windows or ordinary windows, or even loggias or bay windows. Windows and fences are 'thinly' and 'lightly' detailed, in contrast with the severe surfaces of the facade. Lightness is achieved not only by slim dimensions and taut details, but also by the positioning of the windows in the surface and the reflective properties of the glass. This effect is also strengthened by variation in the depth of the balconies (from the depth of a drip rail to a full balcony) and the positioning of the balustrades. AWG attempts to find a continuing theme for each project that will allow a simple and restful exterior to be created using minimum resources, while at the same time avoiding monotony. In Lombardia the 'gaps' in the elevation are the same everywhere; if the windows behind are higher, the difference in size is taken up by the height of the balustrade which protects people from falling. The houses and residential buildings on the Mariaplaats all have virtually the same windows. In this case variation is achieved mainly with the aid of colour. The buildings have been given a black plinth of varying height which is also applied to the retaining walls around raised areas in the courtyards, the paving and the fencing. This plinth ties the buildings together into a single whole. Unity and identity are further reinforced simply by having both the elevations and the paving finished in orange brick. The largest inner courtyard is distinguished from lesser courtyards by being given a white elevation.

Exteriors in the Leieboorden project are more varied: windows and loggias differ in

width and balconies vary in depth. The windows are all the same single-storey height. The picture is enlivened not only by windows and loggias but also by bay windows and extra roof features. It may be that this solution has something to do with the fact that this project, unlike the other projects discussed here, did not involve a peaceful spot in a busy city but what was already a quiet little neighbourhood on the edge of Courtrai's old centre. As with Mariaplaats, a feeling of unity and diversity was achieved by the use of colour: the elevation facing the river is white, while other elevations are in garish orange brick, with mortar in the same colour. The white elevation facing the Leie is reminiscent of 19th-century properties, not just because of the ratio between open and closed and the variety of bays, windows and balconies, but also because of the details: the combination of the car park's basement windows and the grating stairs leading to the gardens are references to the traditional basement. The projection of the continuous eaves reinforces a sense of unity reminiscent of Bruno Taut's *Siedlung architecture* in Berlin.

Alberto Ferlenga – redevelopment of the former Fiat site in Novoli

The fact that the phenomenon of the 'master plan' does not operate in the same way everywhere in Europe is apparent from the story that Alberto Ferlenga tells about the former Fiat site in Novoli, near Florence. His firm designed one of the blocks included in the final plan. The project in Novoli is an example of urban transformation in which a new use is found for a city's industrial areas. Industrial relocation left an empty site of about 79 acres, surrounded by post-war urban expansion and, as in Maastricht, brought about the disappearance of every reference

to the area's earlier industrial history.

The relatively complicated history of this master plan began in the mid-1980s, when the last department of the Fiat factory moved away and the Italian architectural historian Bruno Zevi was made responsible for directing the preparation of a master plan. In cooperation with the local authority it was decided that the project should contain a municipal park of approximately 37 acres. At the same time Leonardo Ricci was commissioned to prepare a design for a new courthouse for Florence to go in the north-west corner of the site. Zevi and the landscape architect Lawrence Halprin, whom he had invited over from the US, realised that the plan needed a strongly coherent concept because the ratio of building to green space was approximately 1:1. Following a workshop, they, together with the other designers involved who included Richard Rogers and Gabetti & Isola, presented the first version of the master plan, in which the heart of the scheme was a central square, partly covered by a ring of green space. All the buildings, including Ricci's courthouse, were to be arranged along a system of axes radiating from this square.

The interesting thing about the subsequent development was the disciplinary debate that broke out on the margin of the project. In one of his writings Zevi said: 'No, urban design must no longer suppress architecture. Let us develop, enlarge and reduce each building instinctively, in complete autonomy.'⁶ These principles can clearly be recognised in the master plan coordinated by Zevi: apart from the central arrangement already mentioned, all the buildings have a certain degree of autonomy as regards their shape and relationship to one another.

A few months after the presentation and immediate-

ly after a change of political power in the local authority a new policy paper on urban design was prepared which influenced the subsequent bureaucratic treatment of the plan. The town planning department's representative Gaetano di Benedetto made known that the authority had adopted a different policy for the use of former industrial areas. In contrast to Zevi's pronouncements, the basis for the development of these locations was to be the urban morphology of the historic centre. Faced by this new vision, the old proposal was put aside and a new commission prepared for the Novoli area.

The new plan, prepared under the direction of Leon Krier, retained the idea of the central park, but was morphologically determined by small low-rise blocks of not more than four storeys, with irregular floor plans and lining narrow twisting streets. Not only did this reference to the mediaeval Tuscan urban street plan ignore the preceding ten years' planning work, it also embodied a peculiar interpretation of urban transformation, including a reconstruction of something that had never actually existed.

Krier chose not to permit any direct relationship between the park and the blocks. The theme running through this proposal was not repetition but variation. Krier saw these basic principles as the outcome of a process of reinterpretation which took as its basis the development mechanisms of the old city centre. Looked at this way, this version of the master plan was an anti-modernistic answer to models of the city pivoting on such basic principles as the separation of functions, the relationship between building block and environment and the major dimensions of the building. However, major question marks remain as to the randomness of the planned street pattern. According to Krier the arrangement was inspired by

strong 'urban emotions', of the kind that someone might experience when faced by unexpected views over the river Arno in the old part of Florence.⁷

Subsequently the architects Gabetti & Isola were brought in to handle the development of the project. In principle they adhered to the basic principles formulated by Krier and designed the central park themselves. The two sections of the operation can be identified on the two sides of the park. The north-west section is characterised by the presence of Ricci's courthouse and sixteen blocks of various shapes. The south-east side contains twenty-seven blocks, providing accommodation for example for the university (designed by Natalini) and local services. In Gabetti & Isola's master plan, Krier's pseudo-organic ideas were translated into a strict zoning plan that was to exercise a considerable influence on the design of individual blocks. None of the buildings was to have more than three storeys, the frontages were required to follow the layout of the streets, the heights of arcades and subways were fixed, flat roofs and balconies were only permitted if they faced the inner courtyards, and so on. According to Ferlenga this tightly controlled zoning plan and the accompanying standards considerably limited the designers' freedom of action, as he found with his own design. Furthermore, references to the emergence of the blocks in the old city centre are conspicuous by their absence. In mediaeval Florence spontaneity and *genius loci* left no room for alignment, standard heights, symmetry or the rectangular arrangements of blocks.

In the summer of 2001 Aimaro Isola advised the project developer and the local authority to attract a number of young architects to design for the plots in the north-west section of the park. The architects were

chosen on the basis of a selection process published in the architectural journal *Casabella*, 'Almanacco dell'Architettura Italiana'.⁸ In an editorial written in 2002 Francesco Dal Co (director of *Casabella*) described how he believed the selection of architects would contribute to the project's successful completion. Apart from a positive reaction to the selection procedure and the method of phasing, Dal Co stressed that it would not be easy for the designers to manoeuvre within the plan's closely defined framework. He also clearly indicated how the procedural input, and the plan's cultural impact in particular, conflicted with Halprin and Zevi's original principles. On paper there appeared to be an excessive difference in scale between Ricci's courthouse (some 65 m high, designed in line with the principles of the Zevi plan) and the low blocks in Gabetti & Isola's plan. Another sticking point was the lack of any relationship between the central park and the adjoining urban fabric.

A bird's eye view of all the designs prepared by the young architects invited to participate shows that it is highly doubtful whether any clear interaction can be created between the buildings. Though all the projects will initially seem to share a common appearance due to the strict provisions of the zoning plan and the standardised presentation technique, it remains a riddle whether these architectural interventions flow logically from the urban design fundamentals of the old city centre. Ferlenga does not tackle this issue, although a trace of dissatisfaction can be discerned in his account. In all probability he would have directed the process differently.

Hans Kollhoff – urbanism and architectural form

Like Coenen, Van Reeth and Ferlenga, the Berlin architect Hans Kollhoff takes the

European city as the standard for his architecture. In contrast to his colleagues however, Kollhoff's research into urban architecture is mainly carried out at the level of the material and detailing of the building. As he sees it, this is exactly where the urban quality of the architecture must be demonstrated.

Referring to Rossi's theory of the city⁹, Kollhoff typified the European city as a city based on the long term (*longue durée*), on the permanence of the substance of its buildings and the physical legibility of its history. These properties are directly opposed to what he termed the 'tendency to dematerialisation' in contemporary building culture. This 'disappearance' architecture results from both the economic forces at work in the city and developments in architecture itself.¹⁰

Market forces have led to buildings having an ever shorter lifespan, determined only by their economic depreciation period. Kollhoff believes that this market logic is not only ecologically irresponsible, but has a destructive effect on the spatial structure of the physical city ('Stadtzerstörerisch'). Kollhoff's answer to this development is to plead for 'sustainable architecture'.¹¹

A primary characteristic of the European city is an architecture which traditionally makes use of stone. Kollhoff believes that a sustainable architecture, as implied by Rossi's term 'permanence', manifests itself not in glass or aluminium, but in monolithic forms of buildings, constructed in brick or stucco. He rejects the 'incorporeal' architecture of today's visual culture, which serves only as a sign or billboard, reducing the building to no more than a 'decorated shed'.¹² To counter this development Kollhoff attempts to divert attention away from the surface of buildings to their volume. He has therefore investigated

the architectural qualities of buildings viewed as bodies. Endorsing the reading of architecture of the 19th-century architectural historian Wölfflin, he says: 'Thus we are interested in the position of a building: its proportions, whether it is essentially vertical or horizontal, whether it rests firmly on its foundation, whether it seems to rise from its foundation or float above it, whether its outlines are definite or seem to dissolve into the air, whether it is solid or porous.'¹³ Architecture is not a representation of contemporary volatility and instability, as supporters of the *Zeitgeist* approach would have us believe, but in fact a way of expressing the weight and inertia of buildings.¹⁴ That is why Kollhoff's buildings are monolithic, often executed in materials which simulate stone, preferably in brick. References include the skyscrapers of the Chicago school, but also the expressionistic brick architecture of the early 20th century, such as the Chile Haus in Hamburg and the architecture of the Amsterdam school, all of which Kollhoff sees as textbook examples of *Großstadt* architecture.¹⁵

For him however the urban quality of a building does not subsist merely in its monolithic stone form, but is ultimately only achieved by the material and the details. Here Kollhoff goes rather further than Coenen, Van Reeth or Ferlenga. Ultimately the form of a stone building is determined by the surface treatment. For Kollhoff this mainly affects the way in which the components of an elevation are combined and connected to one another with visible or invisible seams or joints. Not surprisingly he sees the question of joints as one to be dealt with primarily in the urban design stage. This is particularly relevant to the application of brickwork, where the issue is the choice of the type of joint (flat or concave) and the colour of the mortar.¹⁶

Kollhoff believes that the way in which the elements of a building are combined, their formal arrangement and the way in which they express themselves is precisely what makes buildings 'architectural'. Here Kollhoff is harking back to the term 'tectonics', a traditional term in the profession, last used by Gottfried Semper in the 19th century. Kollhoff brought the subject up to date in 1991 when he organised a symposium in Basel on tectonics in architecture.¹⁷ Tectonics refers on the one hand to the structure of the building, the relationship between its parts and the whole, and on the other hand to the relationship between the supporting framework and the skin or cladding. Kollhoff goes along with Semper's view that the architecture of present-day cladding is a fact. In modern buildings support elements and elevations no longer coincide. Elevations are composite constructions, in which the outer skin functions mainly as cladding. The architectonic question which Kollhoff believes should be put here, is how the support structure and the skin relate to one another. In what way is the construction visible in the elevation? Kollhoff dismisses the functionalist view of 'constructional honesty' according to which the construction is literally made visible. He prefers the indicative gesture, in which the structure is 'implied' by the skin of the building. Brickwork lends itself supremely well to making the structure of a building apparent in the elevation. Brick, and the typical brick-laying process, provides the best way of articulating an architectural structure: the bonding of bricks as a form of ornamentation.¹⁸ It is precisely the standard dimensions and the joints between the bricks that enable the support structure to be 'shown': they create an impression of 'support' by stone 'walls' and the diversion of horizontal and verti-

cal forces. The most subtle example of Kollhoff's development of this view is to be found in his tower block for Daimler-Benz on Berlin's Potsdamer Platz.¹⁹

This brick-built Berlin tower block consists of a pile of building volumes which develop upwards from a block into a tower. The characteristic massing of receding building components articulates the building vertically into five parts: the main body of the building, divided into three sections, lies between the attachment of the building at street level via a stone arcade and the culmination of the building in a gilt cornice. The first of these three sections, a component of the plinth, is a flat, elongated, horizontally articulated volume, indicating the downwards force exercised by the building. Its horizontal character is achieved by having horizontal elements in the elevation (window sills, lintels, parapets etc.) sticking out from the surface and vertical components (piers, window jambs etc.) flush with or even below the surface. The middle section is a transitional volume: its proportions are shorter and higher than the volume below. Here horizontal and vertical divisions melt into one another: the elements that make up the elevation are interwoven in both directions. The third section is formed by an upright volume; its height is greater than its width and its articulation is vertical. In this section the piers are not interrupted by horizontal elements, but climb without interruption along the surface of the elevation, covering the vertical joints between the 8.1 m long prefabricated parapets, as in the middle section. The emphasis on vertical elements indicates the way this section of the building strives to reach the sky. In this section of the building the vertical development is reinforced even further by a narrowing of the piers from 100 cm in the horizontal

section of the block to 44 cm at the junction with the cornice, where they turn into thin balusters. Here the building seems to free itself briefly from the weight of its urban architecture, though it remains abundantly obvious that the lightness of contemporary architecture is unbearable.

Conclusion

In the work of the Hans Kollhoff, Jo Coenen, bOb van Reeth and Alberto Ferlenga the idea of continuous strategic transformation seems not simply to postulate an end point for the European city project nor even to prescribe the same collection of planning remedies. If a city is continually subject to change, where is the urban continuity to which these architects so often appeal? The idea of a city and the associated collective memory seems to need continual revision. Now that demolition (and reconstruction) are back on the agenda, the doubt that arose in connection with notorious transformations in the past is quick to reassert itself. In this context the deep-rooted work of Kollhoff and Van Reeth on the one hand and the investigative manipulations of Coenen and Ferlenga on the other seem at very least to be instructive references to: '(...) the natural succession of artefacts resulting from architectural interventions. Because if nothing guarantees effective continuity, it is important to know the mechanism of transformation and above all to establish how we can act in this situation. Given that the total control of this process of change in urban artefacts is doomed to failure, the question that arises is what are the most important artefacts emerging in our era. Such questions can only be resolved at the concrete level of urban architecture.'²⁰ This is the work that Hans Kollhoff, Jo Coenen, bOb van Reeth and Alberto Ferlenga have already begun.

Notes

1. From Aldo Rossi, *L'architettura della città* (paraphrased). Padua (Marsilio) 1966; Milan (Città Studi) 1995, pp. 119-120. Dutch translation: *De architectuur van de stad*. Nijmegen (SUN) 2002, p. 105. English translation: Aldo Rossi, *The Architecture of the City*. Cambridge, Mass./London (MIT Press) 1982, p. 96.
2. This article is a reflection on the symposium 'Transformers of the European City', organised by the urban architecture research group of Delft University of Technology's faculty of architecture, held on 7 November 2003. It looks further into the individual contributions to the symposium made by four professors of architecture, Jo Coenen (Maastricht and Delft), Alberto Ferlenga (Milan and Venice), bOb van Reeth (Antwerp and Delft) and Hans Kollhoff (Berlin and Zurich) particularly as regards their views on the relationship between the architectural project and the transformation of the contemporary city.
3. As a result of the Dutch tradition of meeting the demand for public housing by mass house building, larger areas which become available in the neighbourhood of the historic city are often developed at one go, no longer for housing associations, but for the market. This formula is known as public private partnership (PPP), in which developers arrange to have plans prepared by urban designers and architects within limiting conditions imposed in line with the policy of the relevant local authority. First an urban design is prepared by a reputable architect or urban designer. After political approval and legal checking, the design is developed into a zoning plan and subsequently filled in with specific buildings designed by different architects under the supervision of the author of the master plan and a management team responsible for cost control.
4. See H. Coenen, Jo Coenen: *Schetens, Roughs, Noordknoop Céramique Maastricht*. Rotterdam (NAi) 2001, in which Coenen gives an excellent account, supported by outline designs for the 'Noordknoop', of the length of time required before building is possible. There were worries about money, programme, policy, health and how to direct headstrong architects.
5. In his lecture at the symposium the required lifespan was reduced to 200 years.
6. Bruno Zevi, in: *Casabella*, no. 703, 2002 (special edition on Novoli-Florence).
7. L. Krier (see note 6).
8. *Casabella*, no. 703, 2002.
9. Aldo Rossi, *L'architettura della città*, 1966 (see note 1).
10. Kollhoff, who is currently viewed as an anti-avant-gardist, presented a remarkable argument in favour of mainly 'doing the usual thing' and 'more of the same'. Here 'doing the usual thing' (to which Piraeus forms no exception, because the strikingly sculptural nature of this residential building on KNSM island in the Amsterdam harbour suggests a 'normal' typological development, rooted in the rationality of the urban block) refers explicitly to the idea of the *Großstadt*. The buildings' references to Wijdeveld's Amsterdam blocks must form a 'Großstadtraum'. Kollhoff speaks of a fascination for the bricked-up Berlin firewalls as an early source of his work: the volumes appear rooted in the ground. Kollhoff's tower blocks, including the planned ministerial tower blocks on the site of the present Black Madonna in The Hague, ascend with a horizontalising articulation to form an urban elevation, above which rises an increasingly verticalising development deriving its significance from the city or metropolis: high-rise too is very 'usual'.
11. G. Alicki, L. Ziemke and J. Kallfelz, 'Klinker als Strukturprinzip des Ganzen' (inter-view), in: *DBZ*, no. 6, 1998, pp. 115-120.

12. F. Neumeyer, 'Tektonik: Das Schauspiel der Objektivität und die Wahrheit des Architekturschauspiels', in: H. Kollhoff (ed.), *Über Tektonik in der Baukunst*. Braunschweig/Wiesbaden, 1993, p. 68.

13. Kollhoff, 'De mythe van de constructie en het architectonische', in: Oase, no. 47, Nijmegen (SUN) 1997, p. 62.

14. P. Vermeulen, 'Bouwen als instrument van verlangzaming. Hans Kollhoff's verkenning van de tektoniek', in: *Archis*, no. 10, 1997, pp. 32-45.

15. The term 'Großstadt-Architektur' was first introduced at the beginning of the 20th century by the German architecture critic Karl Scheffler in his book *Die Architektur der Großstadt*. Berlin (Bruno Cassirer) 1913, and subsequently adopted by Ludwig Hilberseimer in: *Großstadtarchitektur*. Stuttgart (Hoffmann) 1927.

16. H. Kollhoff, 'Architecture today', in: *Domus*, no. 756, January 1994, pp. 72-78.

17. The contributions to this symposium have been published in: H. Kollhoff (ed.), *Über Tektonik in der Baukunst*. Braunschweig/Wiesbaden 1993. The anthology also includes Kollhoff's own contribution: 'Der Mythos der Konstruktion und das Architektonischen', Dutch translation in: Oase, no. 47, Nijmegen (SUN) 1997, pp. 56-65. The 'revival' of the subject of tectonics which Kollhoff started with this work was confirmed four years later by the publication of Kenneth Frampton's *Studies in Tectonic Culture*. Cambridge, Mass./London (MIT Press) 1995.

18. 'Klinker als Struktur Prinzip des Ganzen' (see note 11).

19. See: U. Brinkmann, 'Südllich ... Potsdammer Platz', in: *Bauwelt*, no. 27, 2000, pp. 14-19. Kollhoff learned from the Potsdammer Platz that a shopping centre is the only scenario still remaining which allows a large-scale urban design to be carried out *ex novo*.

20. Paraphrase on Aldo Rossi, *l'architettura della città* (see note 1).

The study of urban form in Italy*

Nicola Marzot

This paper demonstrates the strong relationship between urban morphology and urban design within the Italian traditions of architecture and urbanism. Attention is focused on the work of architects and urban planners during the twentieth century, the period in which urban morphology and urban design emerged in Italy. A common cultural background shared by all those contributing to the field is the concept of 'type' and the assertion of a close connection between urban morphology and building typology. In contrast, different positions emerge in the interpretation of what the contemporary city should be, and this has, in turn, had an influence on the analysis of urban form. For this reason the typological debate in Italy has always had a strong ideological component. Instead of a common attempt at mutual understanding, urban morphology has been strongly characterized by a systematic, reciprocal misunderstanding among its followers. This paper attempts to define the multiplicity of cultural positions within the field according to the particular design and planning goals of those positions, in the conviction that the complexity of the current urban phenomenon can no longer be confronted from a single point of view.

From the Italian point of view, no critical interpretation of an urban phenomenon can be considered outside a specific design strategy for the phenomenon to be investigated.¹ This explains why the most significant contributions to the

development of urban morphology as a disciplinary field in Italy are to be found in the research of architects, urbanists and urban designers. This approach has mainly been realized with an ideological aim.² So, instead of focusing on urban form as the complex result of specific historical constraints, each clearly identifiable in intentions and formal results, Italian architects and urbanists have attempted to interpret urban form in its entirety from a unique point of view. That point of view has clearly corresponded to the idea of the city they wished to spread.

The interpretation of urban form has mainly been pursued through an instrumental use of the concept of 'type'.³ Such a use of type inevitably leads to a consistent diminution in the effectiveness of the interpretation. In fact, the more an interpretation follows the historical process involved in the production of a particular form, the more that interpretation determines a contextualized system of knowledge. That system has a wide range of possibilities because every definition of a type refers to a specific idea of architecture. The range of ideas offers the choice of the most appropriate solution to a given problem.⁴ As a consequence, urban form has almost never been investigated in the terms in which it was conceived, analyzed, built and successively modified over space and time. Rather it has been investigated more simply, according to a subjective idea, sometimes widely shared, about what the future cityscape should be, according to a predetermined theory of urban design.

However, even if the Italian scene has been characterized by a multiplicity of conflicting contributions, it is possible to find some common themes within the development of the debate on architectural and urban design theory, including

some common to researchers from different schools of thought. This framework inevitably leads one to accept every morphological approach as a sort of algebraical function whose value can only be determined within a previously identified domain of validity. Outside this approach, different principles and rules apply that render a given function insoluble.

To define the limits of the effectiveness of the more important contributions to the development of urban form, albeit limiting attention to the twentieth century, is needed in the current context in which architects and planners are requested to solve ever more complex and diverse problems. The multiplicity of approaches and theoretical positions yields a range of possible devices for solving a specific morphological problem.

Urban morphogenesis as a matter of continuity

The Italian morphological tradition is peculiar in that it has always acknowledged a close link between tradition and innovation, with different researchers having shown an interest in the connection over a long period. This peculiarity is reflected in the rooting of design projects in existing urban tissues, both in practical and theoretical terms. Moreover, the relation between tradition and innovation, between a preindustrial and a modern approach to urban form, finds a fertile field of application in typological studies. Specifically, a typological approach is distinguished from all other Italian contributions by its classical concept of architecture as a tectonic system, a system legitimized by its derivation of principles and rules from the practice of building, according to a strong integration of structural, distributional and volumetric aspects.

The foundations of this approach can be found in

the early-twentieth century, during the Fascist period, in Gustavo Giovannoni's consideration of historical centres and Giuseppe Pagano's studies of the politics of the development of rural settlements. More recently, Save-rio Muratori, Gianfranco Caniggia, Paolo Maretto, Sandro Giannini and their followers placed more emphasis on urban design, bridging the gap between architecture and city planning through a deeper understanding of the historical processes by which urban structure is modified. They also stressed that the abstract interest in the problem of the city had been replaced by an interest in a more realistic problem, connected to specific case studies considered as the basis of a new urban science.

Giovannoni is considered to be the father of the Italian urbanist tradition. It is not by chance that he was the leader of the group that gradually put together the Law of Urbanism, Number 1150, passed in 1942 and still current today.⁵ His most important work, *Vecchie città ed edilizia nuova*,⁶ is a successful attempt to set out a contemporary theoretical and operational treatise of urban design. Starting from a historical framework, it deals with the principles of urban growth and transformation as they emerge from an analysis of different geographical situations over a long time-span. His work matured as he supported the politics of *disurbanamento* (disurbanism) put forward by the Fascists to counter the growth of larger metropolitan areas and the increasing pressure placed on historical centres by the building market. Instead of promoting the systematic refurbishment of city centres, replacing the pre-modern urban blocks with new skyscrapers as proposed by Le Corbusier, Giovannoni moved towards a strategy of complementarity between new and old. According to

him, tradition and modernity could continue to co-operate within a new concept of 'organicity', in which the historical centres were sites for acts of *ambientismo* (contextualism), and the new expansions could be realized through *borgate satelliti* (satellite quarters). While the former expressed the idea of continuity with existing urban structures, the latter used modern technical tools to achieve urban dispersion.

The main problem becomes, therefore, the investigation of the *innesto* (seam) between the new quarters and the old urban structure. In this way life and history could be integrated, as in the past. Taking on this urban design objective, Giovannoni began working on the structure of historic city centres, concluding that there are no cities that are truly old or totally new. Historically, the strategy of the seam seems to be a commonly-used approach. By analyzing specific case studies he formulated the well-known and fruitful *permanenza dello schema planimetrico* (permanence of the planimetric pattern) before Pierre Lavedan set out his 'law of planimetric persistence'.⁷ Giovannoni also introduced the idea of the city plan as a *palinsesto* (palimpsest), whose dense stratification of different layers reveals the progressive, partial accretions and erosions of the initial implantation. Most significantly, he derived from the study of urban morphology the idea of form as the transitional stage in a never-ending process of development, of which the form itself preserves and constantly manifests internal traces. From this basis he argued for the priority and importance of the *Piano Regolatore Generale* (master plan) for creating the proper conditions for starting and realizing the process of urban design over time.

Giuseppe Pagano also sought to define form as a temporary phase in a histori-

cal process of modification, even if his intentions were quite different. In fact Pagano is well-known for his intolerance of Fascist rhetoric. He tried, therefore, to support the rationality of Modern architecture as a possible antidote to it. In order to critically demonstrate the similarity, both in historical and logical terms, between Mediterranean local traditions and the new international tendencies, and so avert attacks from the conservatives, Pagano focused on rural settlements. He found in the clear, logical and rational principles of construction of the architecture of rural settlements strong evidence for the systematic evolution of Modern architecture.

Pagano's idea of rationality seems, however, to be very different from that promoted by the supporters of Modernity. To him, the rationality or logic of architecture is not a universal system of shared values, independent of time and location. On the contrary, it belongs to the constructive process itself. At the extreme, rationality becomes synonymous with the intelligibility of the process through which a form is derived from the past once deprived of its previous functional constraints, until it is reduced to a simple aesthetic matter. Rationality is, therefore, an attribute of the form, its structure, and the historical process of transformation.

Pagano also arrived at another important result: he affirmed the priority of ordinary building as the material basis from which all institutional architecture is historically derived. According to his masterpiece, *Architettura rurale italiana*,⁸ the rural building is considered to be a working tool and the result of a spontaneous consciousness inherited from cultural habits passed from one generation to the next. On this basis it is possible to see the objectives of his endeavour: to describe the character of

the contemporary farmhouse through its evolution from the primitive local formulation; to find a line of evolution from autochthonal building traditions to Modern architecture; to discover some kind of eternal law of growth; and to derive aesthetics from a logical functionality. As a consequence, houses seem to be deeply rooted, in their inception, in local conditionings. In addition, he finds a chain of mutual constraints according to which every modification of a building maintains the memory of the formal structure of the previous state, from an elementary arrangement to a more complex configuration. The form is preserved even when the original functional needs cease to apply. In this sense, continuity encompasses tradition and innovation.

The same concept of *preesistenza ambientale* (environmental pre-existence) was explored by Ernesto Nathan Rogers over a period of intense architectural debate during the 1950s.⁹ The subject of much of the debate was the attempt to overcome what were, by then, considered as the obsolete principles developed by the Modern Movement, in particular the idea of the 'dwelling for everybody', in order to reach the idea of the 'dwelling for each individual'. Within that context, the notion of *preesistenza ambientale* clearly expresses the aspiration for continuity between design, history and regional specificity. Rogers's efforts, however, lacked rigour and merely produced an architectural and urbanistic poetry without a corresponding analytical method.

If Giuseppe Pagano can be considered to be the first to posit a general typological process whose singular stages could be traced back into different geographical traditions, Saverio Muratori developed that intuition further. In doing so, he focused on the subject of the urban house, showing

the extent to which the evolutionary process is rooted in specific local environmental constraints resulting from pre-existing urban structures. In 'Vita e storia delle città',¹⁰ Muratori criticized the contemporary urban sciences because of their essentially positivistic approach to urban design. For Muratori, the laws that describe the birth and the transformation of the city are not 'natural' but emerge as the result of precise cultural behaviour. According to him, Modernity discarded the inherited knowledge of construction, seen as a system, and reduced architecture and urban design to simple technical matters. There was no longer any awareness of the inner logic of the transformation of buildings that represents the historical rationality identified by Pagano. This is the reason why Muratori kept a critical distance from both the model of the *Ville Radieuse* offered by Le Corbusier and Wright's Broadacre City on the one hand, and on the other, the Italian conservatives who considered everything as worthy of preservation. While the former are accused of having interrupted the continuity between tradition and innovation, the latter, mainly technicians and historians, have tended to treat the city as an open-air museum. Starting from such premises, Muratori began working on specific case studies to find the laws of continuity within a transformational process. With *Studi per una operante storia urbana di Venezia*¹¹ and *Studi per una operante storia urbana di Roma*,¹² he laid the first stones of his theoretical structure.

Muratori discovered the rationality of history through the reconstruction of the process of derivation of both architectural and urban form, from previous built structures to more recent, complex configurations. The process of derivation retains the traces of a form's inception in simple original

arrangements by updating them over the centuries according to a 'handicraft' approach to tectonics. In addition, he put particular emphasis on the concept that matters of building are mutually related according to a hierarchy of different levels which he terms *scale* (scale). As a consequence, Muratori believed that it was not possible to understand the richness of any effort at building without constant reference to all the components that it encompasses and to the *ensemble* to which it belongs. In such a way, he became the father of Italian architectural 'structuralism'.

Muratori set out a unique theory that defines all aspects of the human environment. It encompasses all steps of mutual interrelations, from the single building to the totality of the territory. Each of these, as a single aspect, has been systematically developed by one or another of his followers: Gianfranco Caniggia worked on urban tissues,¹³ Paolo Maretto on aspects of architectural language,¹⁴ Alessandro Giannini on the territorial scale,¹⁵ and Renato and Sergio Bollati on urban tissues.¹⁶ This theoretical approach was so successful and fruitful in the interpretation of the pre-modern urban structure that, during the 1970s, the resurgence of interest in these matters brought forward a new generation of researchers who have contributed to the use of historical knowledge as an operational tool. These include Giancarlo Cataldi,¹⁷ Paolo Vaccaro¹⁸ and Gian Luigi Maffei.¹⁹ Even today, the continuing diffusion of the principles espoused by the school shows the viability of this approach in solving specific problems.²⁰

All of these contributions have a common cultural background which allows us to understand their approach to urban morphology and urban design. They all clearly belong to the classical tradition in architecture and

urban planning. As a consequence, they stress the importance of architecture as a tectonic praxis and urban design as a way of maintaining formal control over urban growth, according to an ideal of harmony and organicity in the public realm of building. This, in turn, leads to a refusal of any kind of compromise with the principles of the Modernist *tabula rasa*. They try to accept just those aspects of modernity dealing with technical, social and economic progress that are pertinent to inherited building and urban structures. At the same time, they seek to demonstrate the possibility of critically recovering the transformation of urban form according to a 'handicraft' approach, re-establishing a connection between the current and pre-modern periods. This effort was originally, and is still to some extent today, an attempt to fill the gap dramatically opened during the Enlightenment period from which Modernity derives.

Functionalism and organicism in urban morphology

The diffusion of Modernity is closely related to the resurgence of the problem of the residence. The increasing demand for a place in which to live, owing to the rapid spread of urbanization in the second half of the nineteenth century, required an urgent solution. The cultural background to the demand can be found in contemporary fiction and social inquiries into living and working conditions such as Charles Dickens's *Hard times* or Friedrich Engels's *The condition of the working class in England*.²¹ This situation inevitably led to greater emphasis on the dwelling as opposed to the question of the new city which, by contrast, was clearly addressed by Le Corbusier and his model of the *Ville Radieuse*.²² As a result, the traditional concept of a house is systematically subdivided into its main components according to function. The famous aphorism 'form follows function' has sometimes been interpreted in a restrictive sense, not without some ingenuity, as the attempt to subordinate a formal process to a merely functional programmatic sequence that is supposed to be objective. Taken further, according to the positivistic approach, architecture should be based on laws and principles which could, because of their endogenous rationality, be assimilated into natural processes. This inevitably leads to an attempt to define form through a rational process of dismantling the old spatial configuration, considered to be the product of old-fashioned prejudice, and rearranging it according to a universally shared rationality. Each component should therefore be individualized according to a specific role in the *ensemble* in order to obtain a common rational goal.

Within the field of urban morphology, this approach was followed in Italy mainly by Ireneo Diotallevi, Franco Marescotti and Pasquale Carbonara. Diotallevi and Marescotti identified the problem of low-income housing as their principal field of interest. Their approach, clearly stated in *Il problema sociale, costruttivo ed economico dell'abitazione*²³ systematically established the design of the dwelling according to a series of factors: the constraints of local climate (for example, prevailing winds, solar orientation, average temperatures and humidity); the results of technical progress (for example, the potential of new structural systems and artificial materials); the efficiency of different systems of internal distribution (according to which they start to analyze different dwelling types as solutions); and rationality in the use of space (in this regard the problem of modern furniture has increasing importance).

To Diotallevi and Mare Scotti, the city should not limit the conditions of life in any dwelling. As a consequence, the city is simply conceived as an extension of the same principles, bringing the 'particular' to the 'general' according to an inductive process. The project for a *città orizzontale* (horizontal city)²⁴ clearly states that city form is the result of an additive process of combining single units all sharing the same spatial arrangement, without any modification caused by an internal hierarchy of public spaces. History is not taken into account except in the form of the well-known literature of social pathology previously mentioned. As a consequence, this method for architectural and urban design, if applied to the analysis of pre-modern urban form, inevitably leads to great misunderstandings.

Pasquale Carbonara showed a wider interest in building. His goal in *Architettura pratica*²⁵ is, therefore, to define a theoretical framework for architecture that enables individuals to cope with the multiplicity and complexity of functional themes to which modern cities aspire according to criteria of shared rationality. Even if he was aware of the interdependence of structure, function and form, his interest was evidently directed toward the *caratteri distributivi* (distributive characters). With that emphasis, spatial arrangement becomes the most important matter in building and is carried out according to strictly functional principles. Carbonara was also conscious, however, that rationality reveals itself in different ways depending on the cultural aspirations and institutions of the society. He therefore always attempted to contextualize the treatment of a singular functional theme in its historical framework, from its origin to the present. This was not an attempt to root architectural practice in local tradition,

but simply to affirm that rationality is a function that binds social aspirations to contingent limitations in terms of functional demands, technical responses and expressive values.

The aspiration to a dialectical synthesis

The crisis of the Congrès Internationaux d'Architecture Moderne (CIAM)²⁶ was revealed during the Hoddeston meeting in 1951 when the results of its housing policies were examined systematically. The theme chosen for the meeting, the 'heart of the city', clearly revealed the shift of interest from an urban model constituted by autonomous architectural objects to a new one based on mutual interrelation. The emphasis was in fact placed mainly on the nature of urban space as the place of reciprocal connection and principal expression of livability.

In 1953 in Aix-en-Provence this cultural change led to the rescinding of the Athens Charter, which all of the participants considered to be obsolete in its basic principles. Most of the criticism was aimed at the idea of subdividing the city into different functional areas according to the metaphor of industrial production. This principle was considered to be the main cause of indifference towards, and dissatisfaction with, the public realm.

At the last CIAM meeting in Dubrovnik in 1956, Team 10 was born, affirming the end of one period and the beginning of another. The Modern tradition was immediately compared to the historical. Alison and Peter Smithson, for example, spoke about the necessity to learn from the street of the traditional city but also from that of nineteenth-century by-law extensions. They spoke about the need to rethink the priority of the spaces between buildings as the basis of any architectural intervention. The attention paid to the spatial arrange-

ment of the historical city and primitive village, in particular by Aldo van Eyck and later by followers of 'Dutch Structuralism', had the aim of finding unifying principles capable of gathering into a higher level synthesis and coexistence the modern and pre-modern traditions. This intention inevitably leads, however, to a form of abstraction due to the different nature of the postulates implicit in the two approaches.

Manfredo Tafuri pushed the international debate in the direction of a new approach to urban design²⁷ that sought to encompass a distinctly dialectical synthesis of the pre-modern tradition and the contribution of Modernism, the latter being extensive even in Italy after the reconstruction period and the Istituto Nazionale delle Assicurazioni (INA) Casa experience. According to Tafuri, historical centres and modern quarters could not be merged within a unique reconfiguration, because of the incompatible nature of their principles and inner laws. In this, Tafuri followed the perspective formulated by Giuseppe Samonà, according to whose *L'urbanistica e l'avvenire della città*,²⁸ the historical centre became nothing more than a pure object of contemplation, flanked by a totally different modern city structure. The unique solution would appear to reside in the conceptual dimension with an abstract three-dimensional structure whose neutrality, yet radical Utopianism, could act as a reference system through which it becomes possible to systematically measure the difference between the existing approaches.

This conceptual framework found fertile cultural ground during the 1960s and became manifest in the urban design theory of the 'large scale'. The architectural debate had, in fact, to face up to the rise of new forms of urbanization that

consumed vast areas of land, as exemplified by the experiences of the New Town movement in the UK and the French *Villes Nouvelles*.²⁹ A consequence of this new attitude was that the city gradually tended to disappear into an extensive urban landscape. Vittorio Gregotti provided an architectural theory that took up these new goals of urban design in *Il territorio dell'architettura*.³⁰ Here, Tafuri's synthesis finally found both a possible metaphor and a model in the infrastructure of the wider landscape (*territorio*). According to Gregotti, the type, intended as a pre-figured formal structure able to guide the project, no longer had any historical reasons for existence. Nor did it have any critical potential at the lower levels of scale because of the increasing frequency of transformation that systematically erase every contingent solution, making it obsolete as soon as it is proposed. Only the logic of settlement location could stand as a permanent factor in the development process. So his interest shifted towards features characteristic of the wider landscape as the unique items capable of giving the 'large scale' an order from which all other decisions regarding building derive. From this point, he began to analyze the history of urbanism and, as a result, moved much closer to a geographical approach.

Ludovico Quaroni offered a similar interpretation in terms of urban design. He began with a deep analysis of the process of transformation of historical urban aggregations, taking an approach that shared many features with that introduced by his colleague and friend Saverio Muratori.³¹ From there, he conceived the idea of the city as a fluctuating infrastructure that systematically merges together urban voids and built objects, ordinary and institutional buildings, architectural expressions

derived from the past and interventions attributed to the rudest modernity, private manifestations and public behaviour, sacred values and profane attitudes. All would be combined into an internally consistent totality. In *La torre di Babele*,³² probably his best-known text, this infrastructure acquired the unstable, fabulous consistency of something like a Persian carpet expanded into three dimensions or a modern interpretation of a *medina* that encompasses all the scales of building and, at the same time, conceptually, extends beyond them.

Costantino Dardi pushed research into the 'third level' further, pursuing a total abstraction and lightness in architecture, interpreted as an ephemeral installation³³ similar to those used in fairs. The result is an expression of a pure, abstract and neutral three-dimensional geometry that makes it possible to conceive every composition imaginable in a never-ending process of unpredictable materialization. Rejecting the concept of type because of its historical constraints, he moved towards the idea of *configurazione* (spatial arrangement) to establish yet again an architectural language starting from its syntactical and grammatical structure.

Similarly, Franco Purini shared Dardi's interest in architecture as a processual method of investigating transformations of abstract geometric systems through specific formal operations, as well as Gregotti's ideal of the large scale,³⁴ finding a recurrent source of suggestions in the larger built elements in the landscape, such as viaducts, aqueducts, bridges and dikes.³⁵ Purini stressed the importance of indeterminacy as the key factor in understanding the never-ending process of the growth of urban form. His systematic advocacy of the ideas of complexity as applied to the analysis and design of urban form points

to three important attributes of the dynamics of urban form: the non-linearity of the processes of growth, the adaptability of architectural systems and the non-predictability of the results. In emphasizing these points he no longer considers the type capable of taking a leading role as an *a priori* project to be realized in practice. Instead he came to regard it simply as the ultimate exploit in the continuing development of architectural language.³⁶

The idea of coexistence in urban form

Aldo Rossi must be considered to be the source of a very particular interpretation of urban form. According to Rossi, urban form is the result of a patchwork in which different features are stitched together. He envisages a coexistence of different features, each of which belongs to a clearly identifiable interpretation of city form; yet no one interpretation is able to encompass all the others within a single image, and no urban design strategy is able to erase the pre-existing interpretations. New and existing views cannot then be gathered together into a unique morphological perspective. To this end he has pursued the urban design strategy expressed by Law Number 167 of 1962, which introduced the *peep* (*Piano di Edilizia Economica e Popolare*) (Plan for low-income housing program). According to this legislation, new low-income housing should act in the cityscape as self-contained, autonomous urban features, where residential buildings and corresponding services fit together. To express the notion, he introduced the concept of *città per parti* (the patchwork city), an idea clearly enunciated in *L'architettura della città*.³⁷ This volume enjoyed worldwide success but offers no systematic methods owing mainly to its inception as a collection of papers written largely during

the years of his apprenticeship as a teaching assistant to Carlo Aymonino in Venice.³⁸ Although he wrote of the city as a *manufatto* (manufactured), suggesting the idea of the unity and organic nature of the cityscape, this label is more appropriately interpreted as an attempt to define an urban theory based solely on spatial arrangement, in accord mainly with the contributions of architects and geographers. In fact, he considered explanatory interpretations of urban form based only on political, social and economic aspects as insufficient, although he was very aware that those subjects were part of the interdisciplinary nature of architecture. As a consequence, he aimed his criticism at functionalism and organicism; both derived, in his opinion, from a positivistic approach to building in the broad sense. The correspondence of form to function cannot explain the permanence of architectural forms over the centuries, even if those forms are updated to confront new needs.

This provided the basis for his criticism of the *Existenz-minimum* (minimum space for living) and its correspondence with the idea of *Siedlungen* (working-class quarters). Rossi considered these ideas and their realization to be merely an attempt to translate a specific political objective into a formal goal. The relation between form and function is so close that, once completed and once the historical limitations that prompted the design no longer apply, the corresponding urban form immediately lacks significance and reveals its precarious nature due to the application of an abstract set of rules.³⁹

In contrast, Rossi emphasized the importance of Le Corbusier's *Maison Domino* as a system of solutions that enables us to solve different problems over space and time. Consequently, he directed his

research efforts to finding spatial arrangements indifferent to social, technical and political constraints, and relevant to the entire historical development of the cityscape. He was not interested in the evolution of the concept of 'house' over space and time because of its contingency and ephemeral value, but he was more generally interested in the residential area, which encompasses a wider time span and shows more consistency.

Rossi interpreted the evolution of the cityscape as a dialectical opposition between *elementi primari* (primary elements) and *aree-residenza* (residential areas). The former were considered to be the generators of a specific urban form and capable of accelerating the urbanization process. In some, but not all, cases they are identified with monuments and are totally independent of functions that change relatively frequently. Primary elements are revealed through formal permanence. In contrast, residential areas undergo a continuous transformation of internal components, mainly single plots, which he considered irrelevant to urban form, demonstrating their contingent and precarious nature.

According to Rossi's interpretation, the concept of type gives primary elements a character of permanence and stability that endows them with the capacity to accommodate changing needs. As a consequence, Rossi firmly rejected the historical dimension of type. Type becomes a constant that applies to all urban facts. Hence architecture, in its individuality, could be considered a historical interpretation of the type, according to specific constraints. Architecture is a historical interpretation of a universal concept of type.

If Rossi believed that type does not evolve and does not undergo transformations, his definition

seems more closely to fit that of 'archetype'. As stated in *L'Architettura della città*, the configurations to which the term type applies are clearly considered primary and widely-shared spatial arrangements according to which all architecture is made. Architectural history can then be considered nothing but a repetition of such archetypal configurations, and their permanence over time is an implicit legitimization of their strength. According to this interpretation, form should be considered as a permanent, universal and static matter.

However, the archetype also refers to the creation of architecture. In the archetype, creative episodes and the architectural signs that are their trace are clearly identified. By reading those signs, Rossi was able to interpret and discover the complex history of the city. The close relationship between his particular interpretation of urban form and a theory of urban design was expressed more directly in the idea of *La città analoga* (the analogous city)⁴⁰ and the *Tendenza*,⁴¹ the latter becoming a cultural movement promoting the former. According to the idea of *Tendenza*, urban design is seen as a compositional exercise whose components are predetermined. The meaning of urban analysis emerges at the end of the design process from the system of relations among all the predetermined components.

Gianugo Polesello shared Rossi's theory of urban design,⁴² even if he did not share the view that architecture is simply the result of a continuous process of interpretation of permanent formal configurations.⁴³ According to Polesello, the type is the 'structure' of the architectural form. The term 'structure' expresses the system of components and mutual relationships that define form, which is seen as a logical matter independent of

its physical substance and ultimate use. Construing type as a logical entity implies the existence of 'composition' as a more general language for design theory, according to which different types can be obtained. The elements of the composition are therefore 'components', 'parts' and 'totality'. Polesello considered composition to be an act of synthesis. He also affirmed that composition can use existing types as components or parts of a new type or modify existing types. The relation with history does not, therefore, affect the legitimacy of the formal procedures.

Polesello clearly expressed his debt to Enlightenment theories of architecture and urban design, especially that of J.N.L. Durand, adapting them in the search for an ultimate abstraction. As a consequence, the components of composition are no longer pillars, columns, doors, windows etc, but primary geometric solids; the parts are no longer vestibules, rooms, stairs, courts etc., but merely aggregations of simple geometries. His approach can explain many aspects of Modernism but obviously cannot be successfully applied to understanding the evolution of traditional settlements because of the different nature of the chosen parameters.

Giorgio Grassi's contribution to urban morphology and building typology has a similar aim. In *La costruzione logica dell'architettura*,⁴⁴ he stressed the importance of type, independent of its historical use, as the logical structure and inner rationality of form, yet having no necessary relation to the functional programme. Form appears as the result of an arrangement of components simply guided by composition and its laws. Laws of composition change as aspirations change in the course of time. The constructive aspect came to play a clear role merely as a phase in a

succession: a moment of material definition of a logical spatial arrangement. Accordingly, Grassi analyzed contrasting situations, using different case studies to show the specific nature of the assumed laws.⁴⁵ In his theory of design, the components he used are derived from the history of architecture, independently of any local constraints. He chose those components in order to show the possibility of a dialogue between the traditional and the contemporary. But obviously, when the quotations derive from a tectonic tradition developed over time and rooted in a particular place, this approach inevitably leads to a sort of implicit misunderstanding of the sources quoted.

The theory of modification

Carlo Aymonino might be considered as the first author to attempt systematically to legitimize the potential of Modernism to transform the historical city in its entirety. It is not by chance that he recognized the importance of Saverio Muratori's work in establishing the strong connection between urban morphology and building typology. Aymonino shared Muratori's view about the connection but, at the same time, was careful to keep a clear critical distance from his attempt to identify structure with history.⁴⁶ According to Aymonino, to equate the two would be to subordinate current social, cultural, political and economical aspirations to the inherited material constraints of history.

Aymonino clearly held to the aim of dismantling the historical monocentric urban model and substituting it with a decentred strategy. According to that strategy, new urban 'foci' should be scattered far from the old kernel to become the leading attractors within new residential areas. For Aymonino, the New Town experience shows the potential of this new system of urban design.⁴⁷

To illustrate his view, Aymonino started with the Enlightenment period, during which, according to Muratori, the crisis of architecture and its progressive loss of identity began. As clearly stated in *Il significato delle città*,⁴⁸ Aymonino saw in the rise of bourgeois culture the first clear attempt to satisfy social demands for which there was no precedent and which did not permit a compromise with the *ancien régime*.⁴⁹ This inevitably led to a search for new prototypes, as opposed to the modification of old buildings that had normally been the case up to that time.⁵⁰ According to the Marxist interpretation, architecture is in fact a 'superstructure', in other words, an intentional representation of the economic, social, and political values that create it. Thus, according to Aymonino, the bourgeoisie attempted to distance themselves from history and give form to a new model for society. He also analyzed the Enlightenment strategy of transforming a substantially medieval city into a modern one by acting on it in a discontinuous way, through the location of new institutional buildings. The disposition of new buildings within the existing city could rearrange the way it functions, as was demonstrated for the first time by Paule Patte's aerial vision of Paris. This specific planning goal led Aymonino to prefer the study of proto-modern and modern architecture⁵¹ rather than focusing on traditional culture.⁵²

An approach similar to that of Aymonino was taken by Guido Canella. During the 1960s it was already clear that to overcome the principle of functionalism it was necessary to focus on the close relation between urban morphology and building typology. The connection between the two underlines the impossibility of defining architectural form simply according to an inner rationality inherent in the design brief or pro-

gramme. In fact, the brief is never 'natural' or 'neutral', but is always 'intentional' and 'cultural' and, as such, systematically changes as does every specific product of a society. For Canella, this led to the identification in the city of a field or matrix out of which society manifests itself in unpredictable modifications of habits.⁵³ Accordingly, Canella considered the metropolitan model to be the most accurate representation of the situation currently faced by society. Architects should, therefore, move in the direction of suiting their work to the mechanism that drives and creates it. Mass society facilities could then act as the social 'condensers' around which a new way of living might start working. Canella, working in the metropolitan area of Milan, has constructed the opportunity to verify what Aymonino had essentially theorized: the idea that new foci can transform the existing city. This accords with both Canella and Aymonino in Modernist traditions and in the logic of discontinuity reinforced by the creation of more and more extensive infrastructure and greater mobility. Consistent with this attitude toward planning, Canella always tried to analyze urban form transformations over time, sharing with others his work as a member of the *Gruppo Architettura*.⁵⁴

Antonio Monestiroli takes a similar approach to urban design, as is evident in his *Temi urbani*.⁵⁵ He considers Modernism, however, to be the result of a transformative process of the traditional city through a sort of 'handicraft' method. According to this view, the material forms of the city have been deprived of their original reasons for existence in order to address the needs of current society, even if that might be considered a paradoxical statement. Despite his identification of a coherent transformative process in analysis, he takes a ran-

dom approach to the creation of form that avoids any sort of evolutionary interpretation. Monestiroli expresses the concept of modification and transformation simply to justify reinstating a constructive relation between tradition and innovation in order to find urban design strategies that provide an alternative to the functionalist rejection of history. Referring in particular to the significant transformations that emerged within so-called proto-industrial society, he defines the implied consequences for urban planning with precision and underlines the corresponding consequences for transformations. For instance, the comparison between closed and open city models leads Monestiroli to a clear understanding of the transformation undergone by current theories of urban design and their components. For example, large open green spaces, in the shape of public parks, have progressively assumed the connective role that once belonged to building tissue (*tessuto*). The *campus* model has overwhelmed the dense city.

By always deriving forms from the past, independent of local constraints, Monestiroli tends to emphasize the importance of architectural language. The existence of architectural language implies that various expressions have a generic similarity, independent of their specific nature, as is demonstrated by the similarity of buildings from a given historical period, regardless of their type. This focus on language is necessary because one must take into account the modifications that inevitably arise out of cultural changes and have different impacts on existing objects and tissues. A consequence of modifications is that, for the purposes of defining an architectural language, language turns out to be more wide-ranging and far-reaching than type, a point made by Monestiroli in

L'architettura della realtà.⁵⁶ A single language can be used in a wider variety of situations. The language thus becomes a unifying factor, capable of interrelating the different features of a building, independently of its nature. If buildings are then differentiated depending on their function, the language takes on special meaning, assuming the role of a metaphorical connective tissue.

Conclusion

This review has sought to demonstrate how, in Italy, the concept of type has always had a strong and systematic connection to the design of urban form. This conclusion does not, however, imply a direct correspondence between the two terms in the different historical perspectives outlined in the paper. In fact, if urban design, in simple terms, expresses the intention to transform buildings and the public realm in response to emerging expectations and needs, type has always represented the translation of that intention in terms of spatial arrangement.

Architectural language has always been identified as the unifying feature capable of transforming the irreducible specificity of different urban phenomena into transmissible 'signs'. To define the type as a sign implies, therefore, establishing a direct correspondence between the formal process, which is the architectural language, and the results obtained through its practice. Each type cannot be interpreted according to the same language. The ideological approach to urban form that entails interpreting all building types according to a unique language rather than focusing on the relevant historical ones, seems to be the source of recurrent misunderstandings in urban morphology. The systematic attempt to interpret urban form not as it really was, but as it should be,

according to an evident prejudice, has unfortunately reduced the importance of architectural language, in all its richness, as the real unifying and historical factor in urban morphology and the theory of urban design. Any revisionism should seek to rectify this, with the same strength that has been evident over the last decade in other disciplinary fields.

This task has been even more important over the '90s, during which the international debate systematically shifted from an overwhelming interest on the historical centres to a more consistent emphasis on the periphery issue, due to the evidence of the urban sprawl phenomenon. If the first topic outlined the idea of the organicity and continuity of the historical processes of building transformation, the second one refers to the notion of fragmentation and 'accumulation' of different urban design strategies reciprocally in contrast. In addition, as well as the analysis of pre-modern context put into evidence a notion of type deeply rooted into the local history, through a systematic process of mutation of the inherited building structures, the development of the modern city followed a different strategy. The type simply expresses a specific and 'local' interpretation of 'global' models, asking for widening the conventional solutions to new intellectual stimuli and modifying the current approach to urban morphology.⁵⁷

This means that interpreting today town plan structure implies a systematic work of interrelating the different evidence of the built city to the blurring international theoretical debate, forcing researchers to mutually interweave by crossing national boundaries and sharing values and methodologies.

Notes

* This article is an adapted version of a paper originally

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1. This concept was clearly developed in: G. Samonà, 'I concetti di standard e di tipologia nell'urbanistica', in: G. Samonà, *L'unità architettura-urbanistica. Scritti e progetti: 1929-1973*. Milan (Franco Angeli) 1975.
2. The idea of comparing urban morphological strategies according to a single ideological formation has unfortunately never been translated into practice. See G. Samonà, 'Città e territorio negli aspetti funzionali e figurativi della pianificazione continua', in: *Proceedings of the Tenth INU Congress*. Trieste (Istituto Nazionale di Urbanistica) 1965.
3. For a wide range of interpretations of the concept of type see: G. Argan, 'Sul concetto di tipologia architettonica', in: G. Argan, *Progetto e destino*. Milan (Il Saggiatore) 1965, pp. 75-81.
4. This concept is systematically developed in: G. Caniggia and G.L. Maffei, *Lettura dell'edilizia di base*. Padua (Marsilio Editori) 1978.
5. The text has obviously undergone various modifications, but the original structure remains intact.
6. G. Giovannoni, *Vecchie città ed edilizia nuova*. Turin (Unione Tipografico-Editrice Torinese) 1931.
7. His first expression of this was published in G. Giovannoni, (1913) 'La teoria del diradamento edilizio', in: *Nuova Antologia*, 1913, while Pierre Lavedan's law is introduced in P. Lavedan, *Qu'est-ce que l'urbanisme?* Paris (Unione Tipografico-Editrice Torinese) 1926.
8. G. Pagano and G. Daniel, *Architettura rurale italiana*. Milan (Ulrico Hoepli Editore) 1936.
9. See E.N. Rogers, *Esperienza dell'architettura*. Turin (Giulio Einaudi Editore) 1958.
10. S. Muratori, 'Vita e storia della città', in: *Rassegna critica di Architettura*, no. 11-12, 1949/1950, pp. 3-52.
11. S. Muratori, *Studi per una operante storia urbana di*

Venezia. Rome (Istituto Poligrafico dello Stato) 1959/60.

12. S. Muratori, *Studi per una operante storia urbana di Roma*. Rome (Centro Studi di Storia Urbanistica) 1963.
13. See, for example, G. Caniggia, *Lettura di una città: Como*. Rome (Centro Studi di Storia Urbanistica) 1963; Caniggia and Maffei, *Lettura dell'edilizia* (see note 4); G. Caniggia, and G.L. Maffei, *Strutture dello spazio antropico*. Florence (Alinea) 1981; G. Caniggia, *Il progetto dell'edilizia di base*. Venice (Marsilio Editori) 1984.
14. See, for example, P. Maretto, 'L'edilizia gotica veneziana', in: *Palladio*, no. 3-4, 1960, pp. 123-201; P. Maretto, *Realtà naturale e realtà costruita*. Florence (Uniedit), 1980, p. 355; P. Maretto, *La casa veneziana nella storia della città. Dalle Origini all'Ottocento*. Venice (Marsilio Editori) 1986, p. 564.
15. See A. Giannini, *Corso di lezioni sul territorio*. Rome (Istituto di metodologia Architettura) 1964; A. Giannini, *L'organismo territoriale*. Genoa (Istituto di Progettazione Architettura) 1976; A. Giannini, *L'individuo territoriale*. Genoa (Istituto di Progettazione Architettura) 1980.
16. R. Bollati, *Metodo di lettura delle strutture urbane, attraverso le fasi evolutive, applicato ai centri calabresi di Gerace, Cosenza, Reggio Calabria. Ipotesi di lavoro*. Reggio Calabria (Istituto Universitario Statale di Architettura) 1976; S. Bollati, *Tesi storiche relative alla formazione ed allo sviluppo di un aggregato antico attraverso la lettura delle sue strutture allo stato attuale*. Reggio Calabria (Istituto Universitario Statale di Architettura) 1976; R. Bollati, *Metodo di lettura delle strutture urbane, attraverso le fasi evolutive*. Reggio Calabria (Istituto Universitario Statale di Architettura) 1980; S. Bollati, *Formazione e sviluppo di un aggregato antico*. Reggio Calabria (Istituto Universitario Statale di Architettura)

1980; R. Bollati, S. Bollati and G. Lonetti, 'L'organismo architettonico. Metodo grafico di lettura', in: *Studi e Documenti di Architettura*, 1990. 17. See G. Cataldi, *Sistemi statici in architettura*. Florence (G.e.G.) 1972; G. Cataldi, 'Il territorio della piana di Gioia Tauro', in: *Studi e Documenti di Architettura*, 1972; G. Cataldi, *Per una scienza del territorio. Studi e note*. Florence (Uniedit) 1977; G. Cataldi, F. Farneti, R. Larco, F. Pellegrino and P. Tamburini, *I tipi 'radice'*. Florence (Alinea) 1982. 18. See P. Vaccaro, *Tessuto e tipo edilizio a Roma, dalla fine del XIV sec. alla fine del XVIII sec.* Rome (Centro Studi di Storia Urbanistica) 1968; P. Vaccaro, *Cortona: il piano del centro storico e la sua gestione*. Cortona (Comune di Cortona) 1980; P. Vaccaro, B. Gialluca and E. Lavagnino, *Cortona struttura e storia. Materiali per una conoscenza operante della città e del territorio*. Cortona (Editrice Grafica L'Etruria) 1987. 19. See Caniggia and Maffei, *Lettura dell'edilizia* (see note 4); G.L. Maffei, *La progettazione edilizia a Firenze*. Venice (Marsilio Editori) 1981; G. Caniggia, and G.L. Maffei, *Il progetto dell'edilizia di base*. Venice (Marsilio Editori) 1984; G.L. Maffei, *La casa fiorentina nella storia della città*. Venice (Marsilio Editori) 1990; L. Bascià, P. Carlotti and G.L. Maffei, *La casa romana nella storia della città dalle origini all'Ottocento*. Florence (Alinea) 2000. 20. The revival of interest in traditional dwelling types and urban tissues has inspired Claudio D'Amato at the Politechnic of Bari to bring together a group of researchers led by Attilio Petruccioli and Giuseppe Strappa, all of whom come from the *scuola muratoriana*. 21. C. Dickens, *Hard times*. London (Everyman's Library) 1992; F. Engels, *Die Lange der arbeitenden Klasse in England*. Leipzig (Wigand) 1845. Published in English

translation as *The condition of the working class in England*, 1892. 22. Le Corbusier (C.E. Jeanneret), *La ville radiéuse*, Boulogne (l'Architecture d'Aujourd'hui) 1933. Published in English translation as *The radiant city*, New York (The Orion Press) 1967. 23. I. Diotallevi and F. Marescotti, *Il problema sociale, economico e costruttivo dell'abitazione*. Milan (Edizioni Il Poligono) 1974. 24. See I. Diotallevi, F. Marescotti and G. Pagano, 'Quartiere della Città Orizzontale', in: *Costruzioni Casabella*, 1940, p.148. 25. P. Carbonara, *Architettura pratica*. Turin (Unione Tipografico-Editrice Torinese) 1954. 26. For a wider perspective on the urban theories of CIAM see E.P. Mumford, *The CIAM discourse on urbanism, 1928-1960*. Cambridge, Mass. (MIT Press) 2000. 27. M. Tafuri, *Teoria e storia dell'architettura*. Bari (Laterza) 1968. 28. G. Samonà, *L'urbanistica e l'avvenire della città*. Bari (Laterza) 1959. 29. To understand the cultural atmosphere of this period it is important to read G. Samonà, *La città territorio*. Bari (De Donato Editore) 1964. 30. V. Gregotti, *Il territorio dell'architettura*. Milan (Feltrinelli) 1966. 31. To understand the similarity of Quaroni's approach to that of Muratori see L. Quaroni, *Progettare un edificio. Otto lezioni di architetturae*. Milan (Giuseppe Mazzotta Editore) 1977; L. Quaroni, *Il progetto per la città. Dieci lezioni*. Rome (Edizioni Kappa) 1996. 32. L. Quaroni, *La torre di Babele*. Padua (Marsilio) 1966. 33. See C. Dardi, *Il gioco Sapiente*. Padua (Marsilio) 1971; C. Dardi, *Semplice, lineare, complesso. L'acquedotto di Spoleto*. Rome (Kappa) 1976. 34. See F. Purini, *L'architettura didattica*. Reggio Cal-

abria (Casa del libro Editrice) 1980. 35. See the works collected in F. Purini, *Luogo e progetto*. Rome (Kappa) 1976. 36. See Purini, *L'architettura didattica* (see note 34). 37. A. Rossi, *L'architettura della città*. Padua (Marsilio) 1966. 38. Among the most famous of these papers are A. Rossi, 'Considerazioni sulla morfologia urbana e la tipologia edilizia', and 'I problemi tipologici e la residenza', in: A. Rossi, *Aspetti e problemi della tipologia edilizia*. Venice (Cluva) 1964; A. Rossi, 'Aspetti della tipologia residenziale a Berlino', *Casabella Continuità*, 1964, p. 288. 39. The importance of the set of rules defining building in the development of city form is also stressed in A. Rossi, 'Tipologia, manualistica e architettura', in: A. Rossi, *Rapporti tra morfologia urbana e tipologia edilizia*. Venice (Cooperativa Libreria Universitaria di Venezia) 1966, pp. 69-81. 40. A. Rossi, 'Introduzione all'edizione portoghese de "L'architettura della città"', in: R. Bonicalzi (ed.), *Aldo Rossi. Scritti scelti sull'architettura e la città, 1956-1972*. Milan (Città Studi Edizioni) 1975, pp. 443-453. 41. A. Rossi, 'L'architettura della ragione come architettura di tendenza', in: Bonicalzi (ed.), *Aldo Rossi*, pp. 370-378 (see note 40). 42. P. Grandinetti, 'Gli elementi del progetto', in: G. Polesello (ed.), *Progetti di architettura*. Rome (Kappa) 1983, pp. 5-10. 43. See G. Polesello, 'L'architettura e la progettazione della città e nella città', in: *Gruppo Architettura, per una ricerca di progettazione* 1. Venice (Istituto Universitario di Architettura di Venezia) 1969; G. Polesello, 'La composizione architettonica e la progettazione urbana. Procedure ed esperienze', in: U. Trame (ed.), *Tipi architettonici e fatti urbani*. Venice (Cooperativa Libreria Universitaria di Venezia) 1982.

44. G. Grassi, *La costruzione logica dell'architettura*. Padua (Marsilio) 1967. 45. G. Grassi, *L'architettura come mestiere e altri scritti*. Milan (Franco Angeli) 1979. 46. C. Aymonino, *Lo studio dei fenomeni urbani*. Bari (Laterza) 1967. 47. See C. Aymonino and P. Giordani, *I centri direzionali*. Bari (De Donato) 1967. 48. C. Aymonino, *Il significato della città*. Bari (Laterza) 1974. 49. Ibidem. 50. This concept is also developed in C. Aymonino, 'La formazione di un moderno concetto di tipologia edilizia', in: C. Aymonino, *Rapporti tra la morfologia urbana e la tipologia edilizia*. Venice (Cooperativa Libreria Universitaria di Venezia) 1966. 51. C. Aymonino, *Le capitali del XIX secolo: Parigi e Vienna*. Rome (Officina) 1975; C. Aymonino *Origini e sviluppo della città moderna*. Venice (Marsilio) 1971. 52. The most important exception is C. Aymonino, M. Brusatin, G. Fabbri, M. Lena, P. Lovero, S. Lucianetti and A. Rossi *La città di Padova*. Rome (Officina) 1970. 53. G. Canella, 'Relazioni tra morfologia, tipologia dell'organismo architettonico e ambiente fisico', in: G. Canella, *L'Utopia della realtà*. Bari (De Donato Editore) 1965. 54. G. Canella, *Per un'idea di città. La ricerca del Gruppo Architettura a Venezia (1968-1974)*. Venice (Cooperativa Libreria Universitaria di Venezia) 1984. 55. A. Monestiroli, *Temi urbani*. Bari (Laterza) 2000, p. 82. 56. A. Monestiroli, *L'architettura della realtà*. Bari (Laterza) 1976. 57. N. Marzot, 'The paradox of Castel Maggiore. A planned city without any prescription about urban form', in: A. Petruccioli, M. Stella, G. Strappa (eds), *The planned city?* Bari (Uniongrafica Corticelli Editrice) 2003, pp. 159-165; N. Marzot, 'Per un aggiornamento del concetto di periferia', in:

Bologna. La metropoli rimosa, Gomorra, no. 7, (Meltimi Editore) mai 2004, pp. 63-67.

Book review

S. Umberto Barbieri

Wim Denslagen, *Romantisch modernisme. Nostalgie in de monumentenzorg*. Amsterdam (SUN) 2004, 255 pp.

Andrés Duany, Elizabeth Plater-Zyberk, Robert Altimana (eds), *The new civic art. Elements of town planning*. New York (Rizzoli) 2003, 416 pp.

Wim Denslagen's book *Romantisch modernisme* opens with an essay on 'the sentimental cityscape', which – particularly in its vocabulary – sets the intellectual tone that typifies this publication. Plunging into the ongoing debate on the relationship between design (particularly architectural design) and historical artefacts, the author offers a review of opinions, acts, examples and standpoints that illustrate the tension between architecture (particularly modern architecture) and the conservation of historical buildings. Readers are presented with information about the situation in the Netherlands and Germany – with occasional excursions to southern Europe – during the periods of reconstruction that followed the two World Wars, as well as discussions and examples focusing on modern architecture and the historical heritage.

The picture the author paints is one of a titanic struggle between two extreme, deeply entrenched attitudes – the avant-garde *tabula rasa* and the reactionary *status quo* – which, in varying constellations, are locked in a battle for urban space. Like politics and culture (which pursue development, progress and creativity) or the economy and institutions, the public and public opinion (longing for

the preservation of a social memory) constantly change position, and the result is a chaotic battlefield in which friend and foe keep exchanging forms. Rather than the football pitch, the city has become the scene of a struggle to achieve two conflicting ideals: conservation of the old versus development of the new, which calls for creativity (p. 17).

Like a thriller, *Romantisch modernisme* rushes its readers through a series of intrigues ranging from 'the square disease' and 'unmannered buildings' to 'the selfish romantic' and 'nostalgia and imitation', in which culprit and victim – i.e. design and history – assert themselves and do battle, with varying results. Sometimes one vanquishes the other, and sometimes they reach a compromise. According to the author, modernisation (*tabula rasa*) was the leitmotif for the reconstruction of European cities (p. 103), with one or two exceptions (such as Warsaw) where 'sentimental' reconstruction was opted for instead. In Rotterdam the Laurenskerk church (the architectural object) was philologically reconstructed, unlike the city around it, which was redesigned in accordance with the 'rules' of modernism.

Romantisch modernisme provides a detailed picture of the century-old conflict between conservation and innovation, with specific reference to the changing fortunes of twentieth-century cities and architecture. It sheds light on the controversy and offers a basis for policymaking, and for developing conservation strategies. However, the direct object of the controversy – architecture – plays no part in the book other than as a caricature. Designs, design viewpoints and design theories are presented only superficially, providing no basis for extrapolation of design models in which the role, position and meaning of the historical heritage are

thematized with a view to the future development of Dutch and other cities and the territory.

The opposite – i.e. an abundance of models and examples that are completely detached from their historical context – can be found in *The new civic art*, which was recently published in the United States. Here again, the focus is on the city and the main desire is for a 'historical continuity' which can be achieved by making sure designers are fed with examples that realise the ideal of 'traditional urbanity'.

Taking Werner Hege-
mann and Elbert Peets' *The American Vitruvius: an architect's handbook of civic art* (published in 1922) as their starting point, the authors, who are linked to the New Urbanism movement in the United States, present a vast quantity of urban artefacts, arranged in chapters with impressive titles such as 'Pattern of urbanism', 'The public realm', 'The private realm' and so on. There are brief (one-paragraph) introductions to the eighteenth- and nineteenth-century graphic material (mainly design sketches), some of it by architects from the US but most of it from Europe.

The new civic art follows the current trend for richly illustrated design manuals: vast compilations of varied artefacts which are presented 'neutrally' – i.e. shorn of their historical and architectural context – as material for acts of design. Yet the taxonomy is not random: the selection of objects is guided by a wish to produce a compilation that focuses on historical and traditional features. The historical element prevails over avant-garde originality.

This book prefers convention to invention, and formal models to spatial frameworks and artistic processes. Accordingly, readers will search in vain for 'spawl of contents' or 'mappings of shapes'.

Instead, the focus is on the 'depicting' capacity of the architectural object and the urban configuration, and on the analytical and other techniques that can specifically serve to distil visual and traditional historical features from the historical artefacts. There is more emphasis on techniques used to manipulate the historical images than on ones used to give programmes and processes a spatial framework, or reflections on the behaviour and attitudes of the modern city dweller.

Given the authors' preference for tradition and continuity, the choice of Robert Krier as the example to follow almost goes without saying, theoretically as well as practically. There is too much emphasis on the formal properties of the historical artefacts, and too little on their programmatic and technical features. The pursuit of historical continuity is linked to a desire to redesign urban space in accordance with the 'classical' paradigm. The aim is to restore vanished spatial and other hierarchies and re-establish the dialectic between architectural objects which acquire their meaning through compositional acts and situational properties. The large numbers of references (to Aalto and Tessenow, and even the Amsterdam School and the young Le Corbusier) make the book stylistically hard to grasp, and the lack of theoretical reflection makes its cultural position a hybrid one.

Detached from their historical and theoretical architectural context, the forms, structures, types and materials are reduced to mere 'depictions' which can be manipulated, processed and used as 'ready-made' objects in a variety of contexts (from inner-city locations to peripheral and rural situations) and for a variety of programmes.

This manual is useful for those seeking to explore the architectural repertory of

examples in which tradition and continuity are key concepts. It is a practical compilation of architectural postcards which can help unadventurous, superficial designers undertake an 'architectural journey'. It is also a useful educational tool that may stimulate students' curiosity and provide them with pointers for more in-depth study.

About the authors and collaborators

Nicola Marzot (Imola, Italy, 1965) graduated in 1994 as an architect at the faculty of Architecture, university of Florence. Since then he worked as a teacher and researcher at the architecture faculty of the universities of Florence, Ferrara and Bologna. In 2000 he finished his PhD at the faculty of Civil Engineering, university of Bologna. Now he is assistant professor in architectural composition and urban design at the faculty of architecture of Ferrara. He is an editor of the Italian journals *Paesaggio Urbano* and *Archingeo*, and the international journals *Urban Morphology* and *Opera/Progetto*. He also is the author of several papers on urban design, presented at national and international conferences. Since 1994 Marzot works as an architect (from 2002 together with Luca Righetti in the office Performa A+U) on several housing projects and public buildings.

S. Umberto Barbieri (1945) studied architecture at the Delft University of Technology, where he is currently professor of Architectural Design. He is a visiting professor at various international universities, and editor and collaborator for magazines like *Opera*, *Casabella*, *Archis*, *Oase*. As architect he worked together with Aldo Rossi on the Bonnefantenmuseum in Maastricht (1989) and with Giorgio Grassi on the Wienerblok in Amsterdam (2000). Barbieri

is co-editor of the book *A Hundred Years of Dutch Architecture* (2003) and editor of the Dutch translation of the books *L'architettura della città* by Aldo Rossi (2001) and *La costruzione logica dell'architettura* by Giorgio Grassi (1997).

Henk Engel (1949) graduated as an architect at the Delft University of Technology in 1981. He is at present co-director of the architecture office De Nijl Architecten in Rotterdam, with three partners. In 1998 his office had an exhibition on their work in the NAI, which was accompanied by the publication *Als we huizen bouwen, praten en schrijven we* (NAI 1998). Engel is an associate professor of Architectural Design in Delft, and teaches at several Academies of Architecture in the Netherlands. He was visiting lecturer in Liverpool, Milan, and Pescara. He wrote extensively on various topics concerning modern and urban architecture, and worked on several exhibitions, amongst which are Frankfurt am Main (1987), *Colour and Architecture* (1986) and the work of De Stijl en J.J.P. Oud.

Roberto Cavallo (1967) graduated in 1991 with honorable mention as an architect at the TU Delft, where he is now an assistant professor Architectural Design since 1996. In 1996 he became partner in Studio di Architettura in Amsterdam (since 1999 Studio Architectuur & Interieurarchitectuur), where he worked on projects for the Bonnefantenmuseum in Maastricht, the city office Laak in Den Haag and popcentre Paradiso in Amsterdam. His research and teaching focuses at the moment on the transformation of railway areas in Dutch cities.

François Claessens (1967) studied architecture at the TU Delft (MSc 1994, with honorable mention) and philosophy at the University of

Amsterdam (MA 1996). He worked for various architecture offices, amongst which are De Nijl Architecten (Rotterdam) en de Architecten Cie (Amsterdam). He teaches at several Academies of Architecture in the Netherlands, and is now an assistant professor of architectural design at the TU Delft. Claessens was editor of the architecture journal *Oase*, and co-editor of the Dutch translation of G. Grassi's *La costruzione logica dell'architettura* (1997). His forthcoming PhD thesis is on the German handbooks of urbanism around 1900.

Filip Geerts (Antwerpen, 1978) graduated cum laude from Delft University of Technology in 2001 with a design for an airport. He is since associated in UFO-architecten (Amsterdam), primarily collaborating with S.U. Barbieri on the Wienerproject (Grassi/Barbieri) in Amsterdam. He received several honorable mentions in design competitions. He is now an assistant professor in architectural design in Delft, and also taught at the Academy of Architecture in Amsterdam. Geerts is editor of the journal *Oase*, and was co-organiser of the design manifestations Indesem 1998 in Delft and EASA 2000 in Antwerp/Rotterdam.

Willemijn Wilms Floet (1962) studied architecture at the faculty of architecture, TU Delft, where she is working as an assistant professor since 1990. Her expertise is documenting and analyzing architectural projects. She worked on the publication *A Hundred Years of Dutch Architecture* (2003) and is co-author of the *Zakboek voor de woningbouw en woonomgeving* [Referencebook for housing and housing environment] (2001). As a self employed architect she won the Henk Overduin Prize of 1998 for the reconstruction of a private house in The Hague and of a beach pavilion in IJmuiden.