

Areas of concern

The nineteenth-century metropolitan city quarters in Europe: criteria for action on their integrated conservation. Part II

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FIG. 1. The longest urban linear axis in Europe: the so-called 'East-West axis' in Berlin. Total length over 10 kilometres. The Brandenburger Tor is situated between the Friedrichstadt of the eighteenth century and the western expansion of the nineteenth century. The Tiergarten park, a formal royal hunting ground, was integrated as an important green space into the fabric of the metropolis. In the background, a typical example of a nineteenth-century urban landmark: the Siegessäule (column of victory).

Urban form: the three-dimensional image

The characteristics of urban form

1. Type and distribution of built volumes

Visual density. Robert Krier distinguishes three possible organizational patterns for the spatial structure of a city.

1. A street grid is established; buildings follow this street pattern.
2. Buildings are erected; the 'negative structure' of the urban space presents itself as 'building interspace'.
3. Main and secondary urban open spaces are grouped; the buildings stand around these 'negative spaces'.

To interpret these models of formation as possible alternative organizational patterns would be a naive typological oversimplification. In reality the three modes of formation coexist and are valid in a parallel way for any and all urban agglomeration—irrespective of whether their formation is evolutive or preconceived. This also holds true for the nineteenth-century city quarters. Other organizational patterns, however, are specific for each period: for instance, what should be called the 'visual density' of a city. This indicator has nothing to do with the dwelling density, nor the floor space ratio. The 'visual density' depends, to some degree, on the built volume of a given area but results primarily from the 'interrelationship' of built volumes, their differentiation, the reliefs of the roofs and the more or less compact distribution of the various volumes. It therefore represents a visual-spatial value which is clearly perceptible but cannot be evaluated quantitatively and be presented numerically.¹

Free-standing volumes and street alignments. In the nineteenth century, the rhythmic alignment of individual buildings to form building blocks, was responsible for a balanced type of spatial image. Also in cases where the block structure shows gaps in the alignment and becomes a halfway open pattern of courtyard buildings, the compact and uniformly continuous arrangement of buildings still stands (Fig. 2). The free-standing building is met only in the form of symbolic elements (monuments, churches, columns, etc.) not incorporated in the building block. Exceptions are block corners, built as towers or crowned by a cupola; these are supposed to create a kind of 'gate-situation' at the end of main axes.

Uniform urban setting. The setting is clear and uniform—particularly as far as the building heights (5 to 6 floors) and the division into lots are concerned. This type of urban setting reflects the will to utilize the ground evenly; it also develops into a principle of urban design.

2. Type and distribution of urban spaces

Street networks and systems of axes. As already mentioned while dealing with the basic schemes of traffic networks, the lay-out of the street

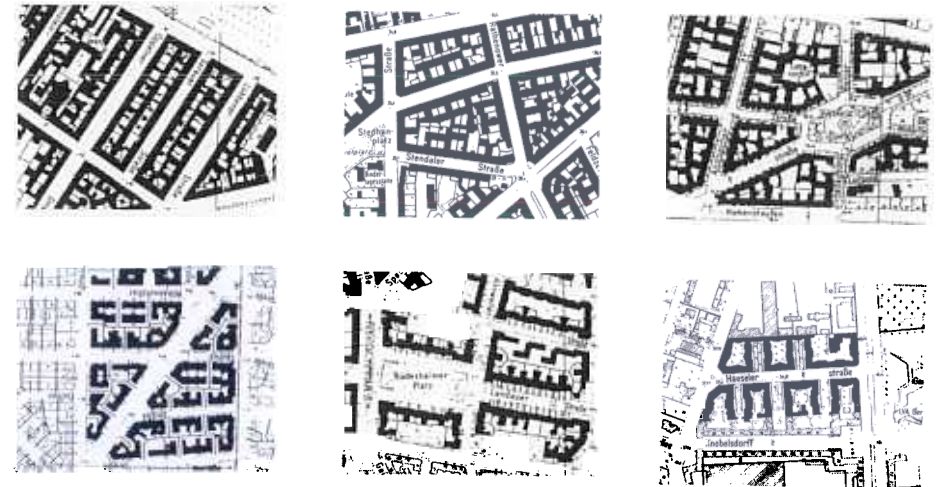


FIG. 2. Examples of closed and 'compact' building blocks characteristic of the urban pattern of the nineteenth-century city quarters. The typical alignment of the built volumes on a street front is kept even in the case of half-opened, U-shaped, block forms.



FIG. 3. The Champs Élysées in Paris, part of the monumental linear axis Louvre–Concorde–Étoile–Pont de Neuilly. The uniform alignment of the trees dramatizes the perspective view of the landmark (Arc de Triomphe) erected at a major 'centre' of the street system (the stellate Place de l'Étoile).

¹ Medieval towns and vernacular settings show the highest visual density despite their relatively low floor space ratio. The nineteenth-century city quarters, on the other hand, display a balanced visual density despite enormous dwelling densities (up to more than 1000 inhabitants per hectare) – a fact that leads to the false feeling that the ground coverage is about 0.5 (which is rarely the case).

² Another formal principle, strict symmetry, (often but not always linked to axiality), is missing totally in the nineteenth-century urban fabric. High building density, the arbitrary break-throughs when creating new boulevards, the eclectic variety of forms and the manifold interaction of sub-patterns within the urban space—all this permitted a rigid symmetry in exceptional cases only.

network follows a clearly recognizable geometric pattern both in newly built cities (Barcelona) and in city expansions (Berlin) or urban re-shaping (Vienna, Paris). A special geometric feature of the street pattern in nineteenth-century city quarters is the existence of axes and centres as ideal and real elements of support for the entire network. Systems of the grid-iron type co-exist with triangular or trapezoid patterns or—preferably—star-like radial compositions.² Landmarks of all kinds (we refer to them later) lend the necessary accent to special intersections of main arteries. The system of axes and centres stemming from Renaissance and Baroque times is further developed as a structural principle of urban form in the spirit of 'representative' town planning. (Figs 1 and 3). These inventive and differentiated street patterns constitute the dynamic compensation of the axial 'monumentality'; they provide the urban spaces with their solemn, yet flexible character.

Street profiles. The uniformity of the building heights, the continuous closed street walls, and also the resulting enclosure of street space, characterize the urban setting. The frontal juxtaposition of buildings creates the feeling of enclosure but not that of rigid delimitation of urban space (Fig. 4). The difference between these two situations is enormous. We will give examples later of such unfortunate 'delimited' spaces, but the closed yet differentiated urban space which we have missed so much during the past thirty years, was—par excellence—the urban space of the nineteenth century. The 'Rues-Corridor' in the bourgeois quarters, so much criticized by Le Corbusier, offered, with their decor and tree displays, an image of busy life. They often led into squares or open natural spaces (river banks, parks) so that they never conveyed the impression of

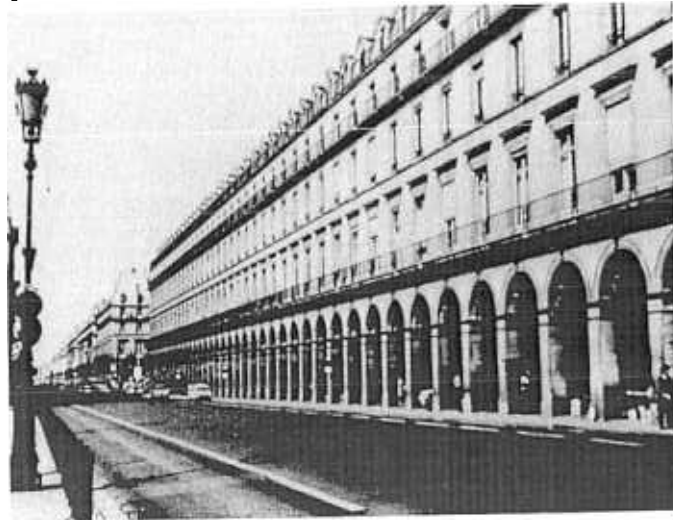


FIG. 4. The typical monumental alignment of individual buildings, forming a homogeneous street front with a strict architectural order imposed by royal decree. The Facades ordonnancées of the Rue de Rivoli, next to the Tuilleries gardens in Paris. Architects: Percier et Fontaine. Early nineteenth century.



FIG. 5. A well-known nineteenth-century spatial type, a roof-covered passage on the right bank of the Seine in Paris, animated by an intense urban life.

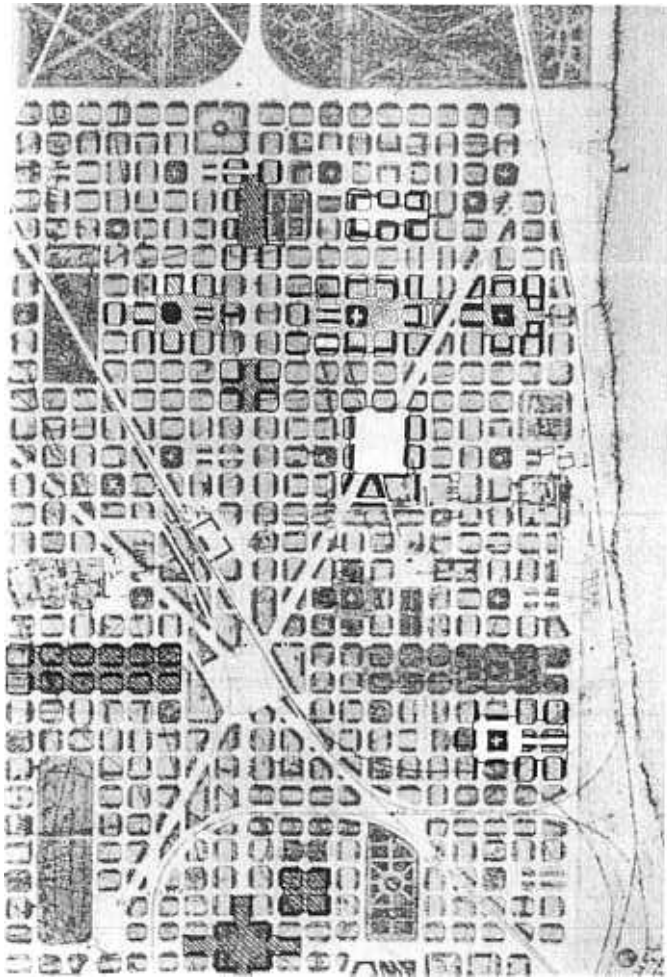
a depressing fenced-in bottle-neck but rather that of a closed intimate space which nevertheless provided all kinds of perspective vistas to the eye. And this impression also held true for the poorer working class quarters such as, for example, Kreuzberg, Berlin. The opening of the streets towards squares and the variety of urban spaces could also be found here. An important nineteenth-century spatial type was the covered public space, such as arcades and passages. They represented a valuable alternative and a desirable complement to urban spaces. The close connection between public 'inner' and 'outer' spaces was guaranteed by broad glass roofs in the case of passages, and by the direct access to the open air in the case of arcades. These spatial urban elements once again successfully combined the wish for a representative city image and the fulfillment of the many activities of daily life in the city (Fig. 5).

Forms of squares. The 'centres' of the network of public spaces are the actual squares. In the big city of the nineteenth century, squares are not conceived as functional widenings of the streets at intersections to ease the traffic (Cerdà's Barcelona concept is an exception), nor are they meant to serve—at least originally—certain functions (for instance a market place). They are considered as important links, as 'hinges' within the street network and are the crystallization points of city life.³ Under these circumstances, the choice of dimensions and form is free. Rectangular, polygonal, round and trapezoid forms of squares alternate with open sites such as esplanades, parade grounds and riverside promenades (Fig. 6).

Location and form of green spaces. Public green spaces in city quarters of

³ By 'crystallization' we mean both the ambition of the growing bourgeois class to be representative and—more important still—the desire for the then called 'embellishment' of the city and the creation of a background against which city life takes place.

FIG. 6. Detail of a sector of Cerda's plan for Barcelona. A unique achievement in urban design is met here: within the stern geometric pattern of a grid-iron street layout and an orthogonal disposal of built volumes, an enormous variety of urban spaces is created defying any symmetrical arrangement!



the nineteenth century are city parks or park-like squares, clearly delineated. They are the microcosm of a planned natural space which is in deliberate contrast to the massively built-up urban fabric. The densely planted green areas and the impressive tree plantings are an ecological but also a visual balance to the hard environment. Although the total areas covered by green are insufficient in proportion to the built-up surface, they have the pleasing character of 'urban oases'. The fences around these parks—mainly in the Latin countries—with their monumental iron fences, underline this closed oasis character and also protect the lawns and

trees. Security reasons, too, (no entry permitted after dark) play a major role. Urban parks are often interconnected by tree-lined alleys.

3. Townscape: the silhouette

The city contours. The 'Velum'. Elements of visual reference. The basic patterns described so far—type and distribution of built volumes and urban spaces—represent the essential characteristics of urban form which cannot be changed without, at the same time, betraying the very essence of the city of the nineteenth century. The resulting city image can, from an overall point of view, either be perceived as 'city quarter silhouette' or, in its details, as 'street image'. The latter offers several possibilities for innovation which do not hurt the global form of a city. The preservation of the silhouette, however, depends on whether or not the patterns already identified are retained or altered. The nineteenth-century city quarters are central parts of big cities located in flat regions and can therefore be viewed from elevated points such as terraces or observation towers. Two constant characteristics become evident: on the one hand, the carpet-like compact character of the built volume (the perspective view hardly permits a recognition of streets and other spaces) and, on the other hand, the gently curved 'Velum'⁴ spread in almost even height over the city (Fig. 7). Representative alignments of street façades, uniformly

⁴ 'Velum' is the imaginable upper surface of the city, the 'skin' so to say, which outlines the city against the sky. Higher buildings, church steeples, even bigger landmarks such as the Eiffel Tower in Paris or the Radio Tower in Berlin, piercing the Velum, still play the role of points of orientation but are no longer points of culmination (as was the case in the medieval town) within the built volumes.



FIG. 7. The general townscape of the nineteenth-century city: the carpet-like compact character of the town's fabric and the uniform undramatic 'Velum': Barcelona.

FIG. 8. The fine grain of the 'Velum': the 'roof-landscape' of Kreuzberg in Berlin.



high, located along major riverside promenades—as for instance the left bank of the Seine in Paris—are also important details of the city silhouette. The upper contours of these riverside fronts have recently come under protection as a result of the legal ban of even remote multi-storey buildings within certain fields of view so that the silhouette may remain intact. As far as the fine grain of the Velum is concerned—the so-called 'roof-landscape'—it is, except for uniform street fronts, of great variety and rich in differences of heights (Fig. 8). Uniform roofs—as for instance on the reconstructed ideal perspective of the plan proposed by Cerda for Barcelona—hardly exist (Fig. 9). Today, there is no interrelationship between these city quarters of the nineteenth century and the natural space because of their central location in the urban agglomeration.

4. Townscape: The street image

Street façades: design, form and colour. If we look at the details of the street image, we detect a dialectic tension between the representative-static-serene and the dynamic-manifold-vivid elements. The façades consist of mostly uniform elements arranged in a simple rhythmic way: vertical, rectangular openings as windows, open or closed balconies, ledges, attics. The fronts are perforated massive walls (ratio of windows to wall surface—roughly estimated—is 1:2 to 1:3). Natural materials and a 'precious' external texture are often used (sandstone for the façades, copper or lead for the roofs). The colours of the plaster and stucco façades

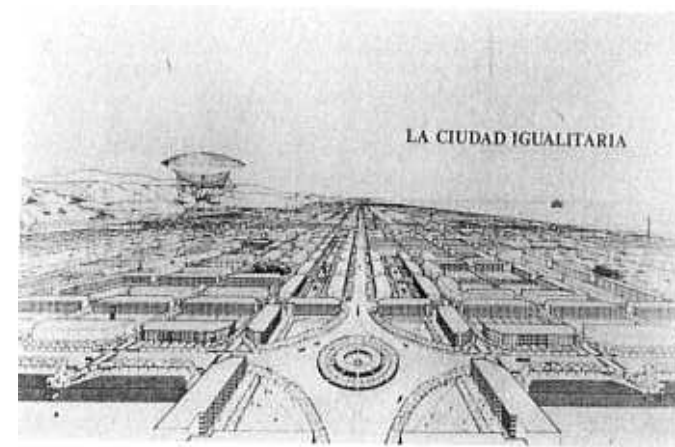


FIG. 9. An aerial hypothetical view of Cerda's proposed town pattern for Barcelona, which has never been executed. Note the ingenious combination of slabs disposed at right-angles to form a great variety of urban spaces, while mostly keeping the traditional 'rue corridor' of the nineteenth century intact.

are a conservative white, brown or ochre). All this points to a rather austere repetitious form which should result in a static street image. And yet, this street image is very vivid (Fig. 10). The free hand that was given to every architect when designing building façades is a strong differentiating factor. While the general form, the elements and rules of the game

FIG. 11. Elements of industrialised street equipment: an ingenious combination of street lamp and public clock mounted on the same mast, Place des Pyramides opposite the Louvre in Paris.



FIG. 10. The street image of Berlin at the end of the nineteenth century: the façade of the Palast Hotel on the right of the picture denotes the static-serene disposal of uniform structural and decorative elements despite the pompous eclecticism of the architectural language.



always remain the same, the proportioning, the selection of the decorative elements and the colour scheme differ from one building to the next, and create an environment that is balanced in its spatial effect and extremely differentiated in its architectural details.

Street equipment and street greens. Street covers. We find the same dialectic tension as before in the placing of various space-affecting elements within the urban scene. On one hand, the planting follows a rigid rhythmic pattern: streets lined with deciduous trees of equal size form alleys which emphasize the uniformity of the street space by underlining the perspective vistas. A variety of imaginative and decorative forms of street equipment counteracts this uniformity: kiosks, lamp-posts, benches, posters, canopy roofs, fountains, public toilets, etc. (Fig. 11) fulfil practical needs but also differentiate the urban space and contribute to the animation of the street image. The texture of the street cover finds the same differentiation and animation in the cobblestone pavements and the granite kerbs of the sidewalks. Inscriptions and advertisement posters are legion, but they fit into the frame of the façades without disturbing the street image.

Symbolic orientation elements. Next to free-standing buildings (churches, public buildings), there are purely plastic forms (monuments, obelisks, gates and columns) which serve as orientation points. At the same time, they function as differentiation marks within the city and meet the desire for an 'artistic embellishment' of the street image. On the other hand, these elements completely lack any playful undertones. The urban events were caused by urban life itself and not by any artificial activities (urban 'happenings').

Alterations of the urban form

Open conflicts. How did the twentieth century interfere with these city quarters of the past century? Which were the new concepts and which the alterations imposed?

The new urban design concepts are contained in an exemplary way in Le Corbusier's 1922 plan for the remodelling of central Paris, the so-called 'Plan Voisin': on a site of several hundred hectares, located on the right bank of the Seine in the heart of the city, Le Corbusier planned ruthlessly and irrespective of the pre-existing city structure, the erection of his towers and rows of low-rise buildings. Complete alteration of the visual building density, open urban space, free-standing built volumes erected on broad open surfaces, loss of the closed block structure, squares not conceived as urban spaces but as traffic intersections—all this points to a radical new orientation of urban structure and form. One may argue over the chances of success and the desirability of these new patterns; but what seems incomprehensible are the ruthless way in which the existing structure was treated, the direct putting together of such incompatible spatial concepts, the breaking up of a vital, mature city centre. This

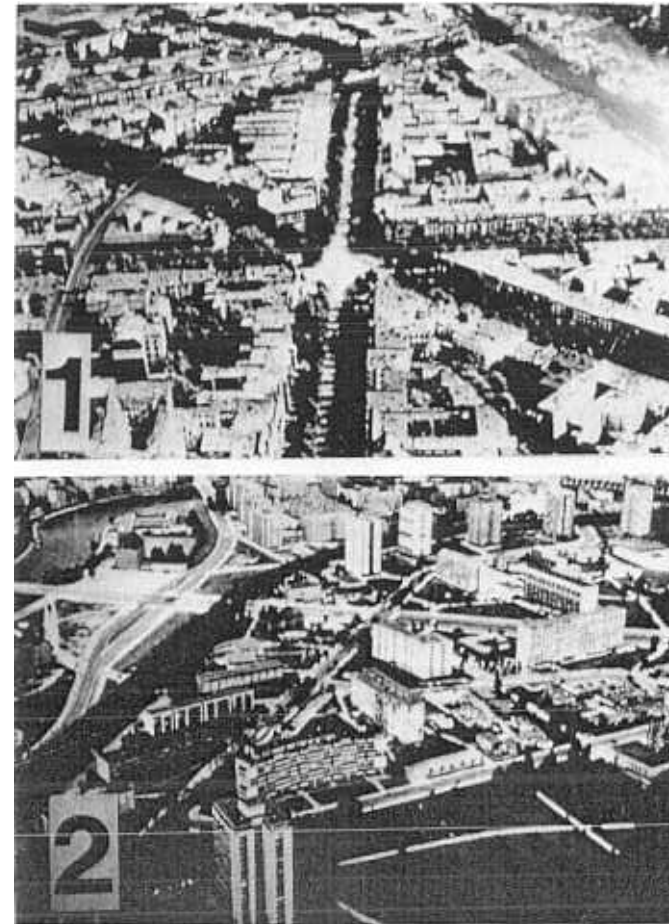
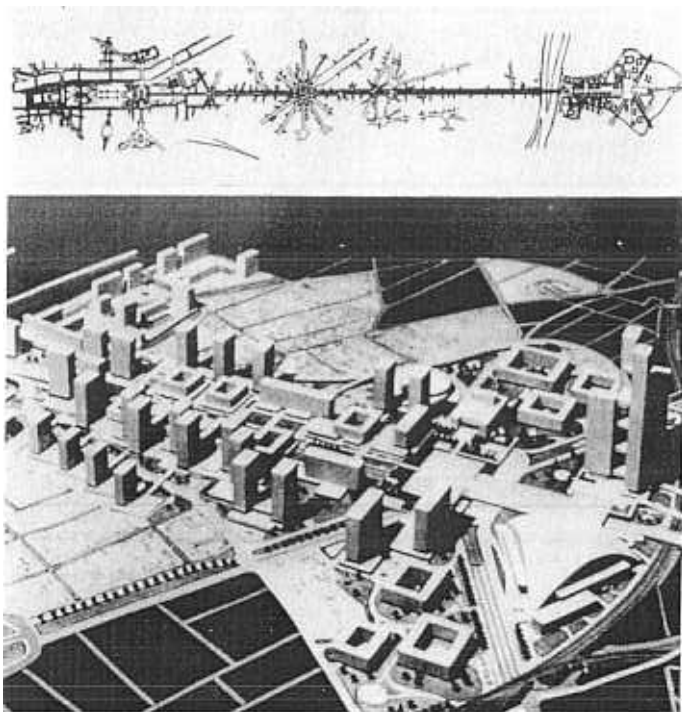


FIG. 12. The ruthless 'redevelopment' of a heavily war-damaged district in Berlin: the Hansa-Viertel as it stood before World War II, and as it was redeveloped after the international competition of 1957. The open contrast between two totally opposite concepts of urban space!

monomaniacal erroneous plan of one of the pioneers of modern town planning, who did not think in terms of spatial and social interrelationships but in dimensions of plastic megalomania, luckily was never implemented. The late acceptance of such concepts appeared only in the fifties and sixties as almost all big European cities demonstrate. We think of the Hansaviertel in Berlin (Fig. 12), the remodelling of the centre of Stockholm, of the 'towers' in the heart of Paris (Fig. 13).⁵ It is little consolation that these 'projects' never reached the scale of Le Corbusier's ideal. It still holds true that the principle of a harmonious co-existence of urban structures of different periods (which also had followed different

⁵ In this connection, may we give one positive example: the new business and administration district 'La Défense' in Paris. As far as a 'public place of human interaction' is concerned, we do not want to criticize, at this moment, the questionable results of that large-scale project. But we do point to the discrete way in which the new centre was erected in the right scale near the historic part of Paris. The new 'ensemble' located as a linear extension on the axis Louvre-Concorde-Etoile-Pont de Neuilly, yet sufficiently removed from the historic core—is a contemporary contribution which takes into account the existing architecture and develops it further. Unfortunately, such examples are rare.

FIG. 13. The new business and administration district La Défense in Paris. A contemporary big scheme development which takes into account—through its correct location—the preexisting historic city.



concepts of spatial design) was not taken into consideration when creating this unfortunate juxtaposition of old and new.

False concepts. Historic continuity. At first glance, one could think that two other urban design approaches seem to treat the nineteenth-century urban structure with more understanding. These are the pseudo-classical urban design of twentieth-century totalitarian regimes and the latest, so-called 'rationalist' movement. Both trends unfortunately turn out to be misunderstood offsprings of nineteenth-century thought about urban form. The megalomaniacal plan of Albert Speer (1938) for the so-called North-South-axis of Berlin (Fig. 14) (recently published retrospectively by the author) tries to develop and remodel the grown city in a manner that is an authoritarian encroachment. A false classical vocabulary of the eighteenth century seems to have been revived and the attempt is made to expand the axial system and to revive the use of the design tools of the nineteenth century. Yet all these efforts cannot disguise the basic errors of the concept. Overdimensioning of built volumes, also of the blocks, rigid symmetry of the building frontages and of the buildings themselves, monotony and dullness of forms are by no means a further development

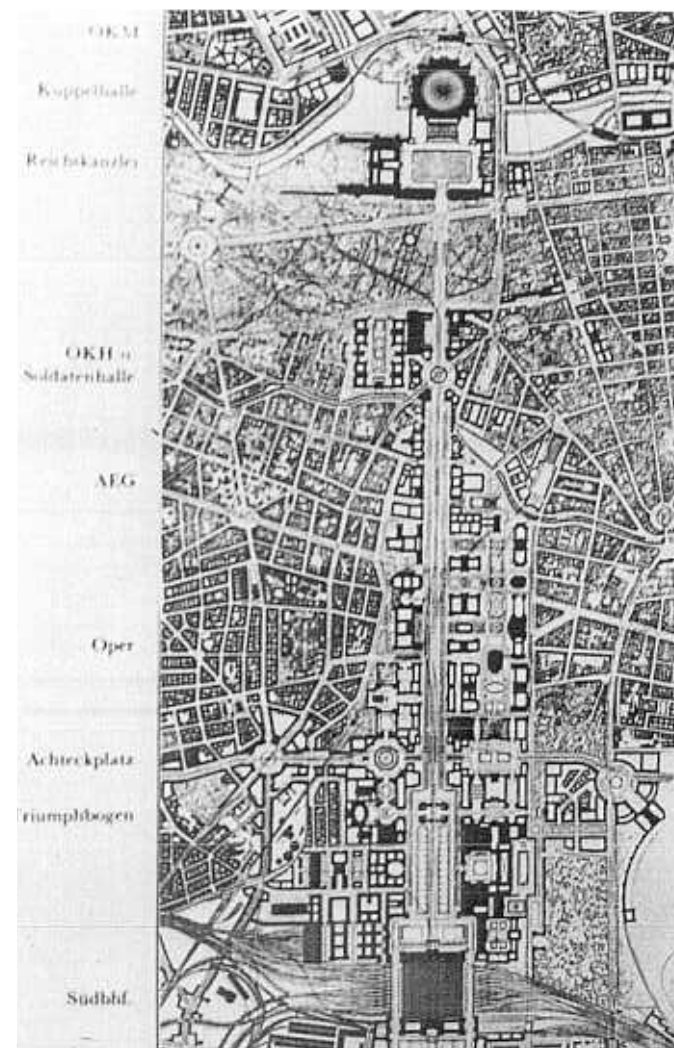
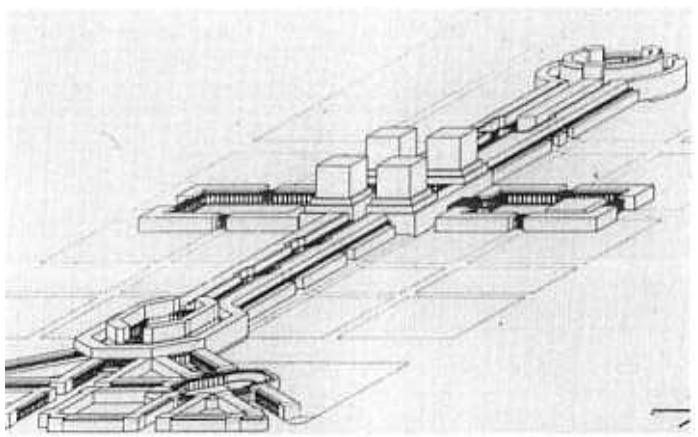


FIG. 14. Albert Speer's redevelopment plans for central Berlin (1937-40): a prototype of a 'rigidly delimited' urban space of totalitarian character as a surrogate of the nineteenth-century concepts!

of the nineteenth-century city! But the most obvious falsification of the 'space feeling' of the nineteenth century expresses itself in the already mentioned change in character of the 'closed urban space'. Symmetrically 'locked' public space is created, which serves as a colossal expression of power. All positive qualities of the nineteenth-century space, characterized by a variety of vistas, forms, and dimensions, are missing. The Stalin Allee realized in East Berlin after the war is the poor offering of these

FIG. 15. Robert Krier: central area of a town extension. Volumetric axonometry: the absurd play of arbitrarily combined forms of urban spaces and the display of meaningless monumental volumes!



ideas. During the last few years, the renewed call for closed and differentiated urban spaces has introduced a strange movement in urban design. Originating in the desire to 'regain the European city' and to increase the 'urban character' of towns, the so-called rationalists began to develop hazy ideas, sometimes misunderstood even by themselves. We say 'so-called' rationalists because nothing in their proposals presents itself as a rational structural idea but rather as an arbitrary playing around with forms. In such games, the rigidly delimited urban space in which monotonous symmetrical arrangements are being playfully presented as an end in itself, is carried to absurd limits (Fig. 15). No serious attempt is

FIG. 16. The erroneous redevelopment proposal for a building block in Barcelona. Students of the Royal College of Art, London, under the guidance of Leon Krier, elaborated this strongly formalistic proposal, decomposing the block into a great number of 'individual' buildings, separated by narrow corridors!

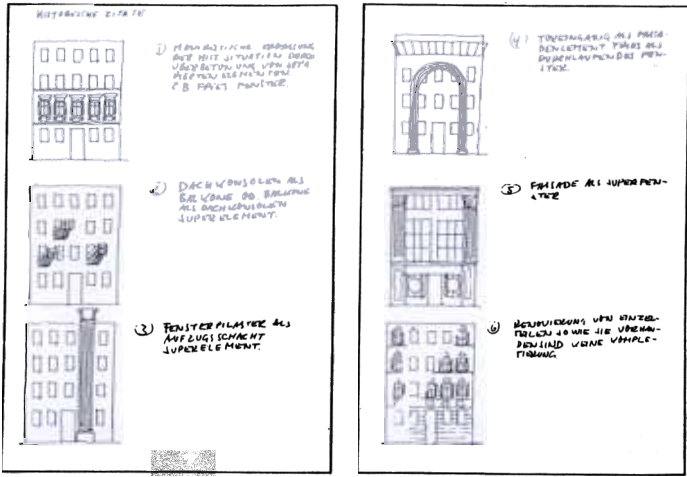
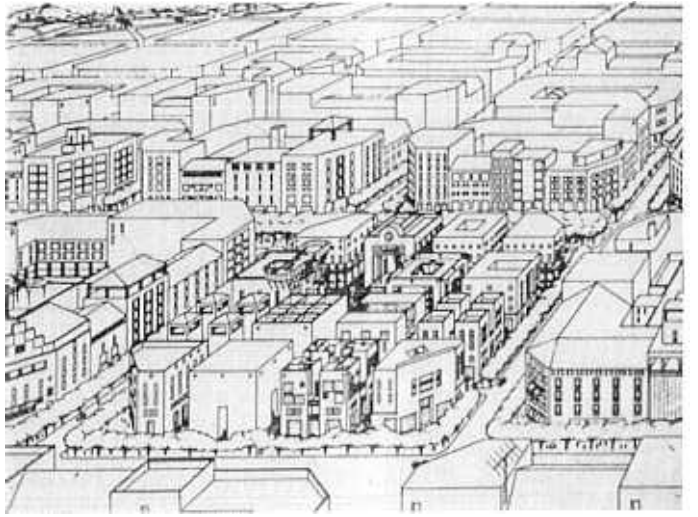


FIG. 17. The design delirium of 'historic quotations' affixed as superfluous and offensive gadgets on an austere facade of a Berlin 'Mietskaserne' deprived of its stucco decor.

made to understand nineteenth-century spatial characteristics and to conceive an equally valid structure with the help of contemporary urban design (Fig. 16). Instead the saddest examples of the 'power-architecture' of the late Roman Empire are followed in order to find this alleged 'new urban character'. There is no end to the arbitrary way in which strictly geometric urban spaces are combined, and to the ostentatious display of useless monumental buildings! While, during the totalitarian period of European urban design, the arbitrary planning concepts were depressing and pathetic, they have now become senseless activities indulged in by architects who believe they have found the key to the revitalization of the European city through their unrestrained combining of various spatial forms! Still worse are the ideas of such architects when dealing with the differentiation and design of the new building frontages which are to be fitted into the existing nineteenth-century milieu (infill architecture). As can be seen in O.M. Unger's sketches (Fig. 17), they believe they can achieve a continuity of the *spiritus loci* by simply affixing to the building fronts such 'historic reminiscences' as oversized columns, arches, or other elements taken from the eclecticism dating back to the turn of the century. Or they delight in applying an almost childish combination of all kinds of rectangular openings in order to achieve an approximation to the nineteenth century façades! Thus we find the absurd situation that the city quarters in question are endangered not only by the blind renewal prevailing in the fifties and sixties but still more so today by the therapeutic prescriptions (fortunately still only on paper) of our 'rationalists'.

Positive developments. And now a few modest points of departure for a sensible treatment of the nineteenth-century city quarters.

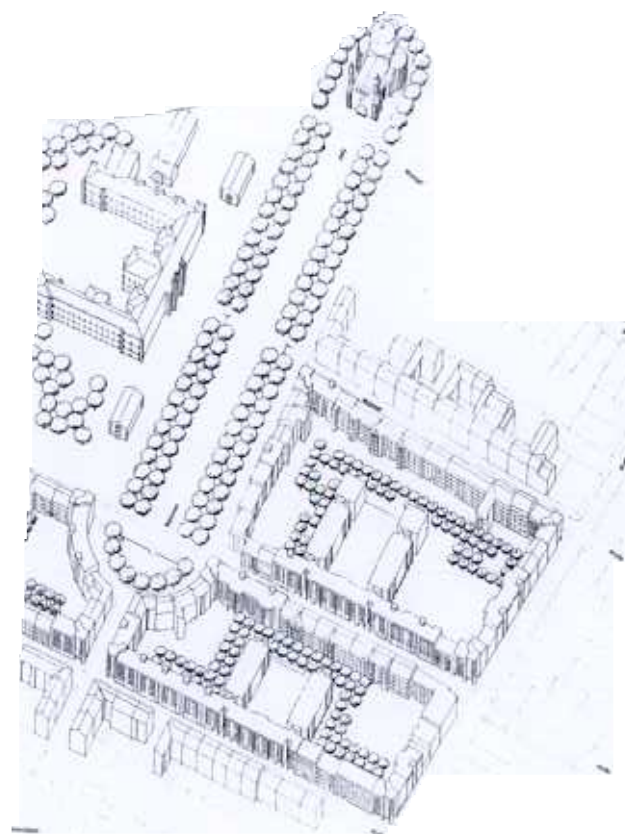
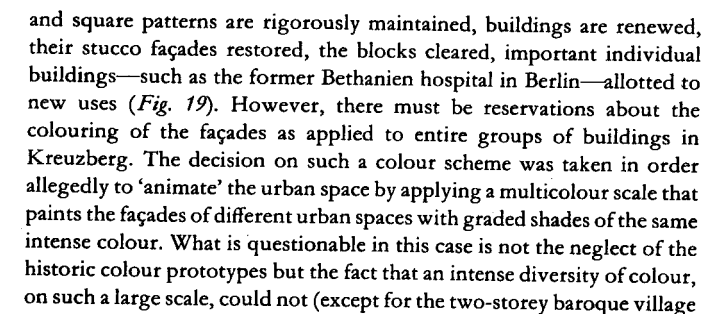


FIG. 19. Axonometric view of part of the Kreuzberg scheme of integrated preservation of a large area of town fabric of the nineteenth century in Berlin. Still in progress.

FIG. 18 An early example of successful 'infill' architecture: The well-known Haus am Michaeliplatz in Vienna, designed by Adolf Loos in 1910–11

Most of the positive performances are regrettably still found only in individual buildings: constructions with daring visible steel or concrete skeletons or others of a more conventional form with adapted (not imitative) frontages—they have continued to be built again and again since the beginning of our century (*Fig. 18*). The common virtue of these buildings lies in the retention of the closed block form, of the facade alignment, of the building height and the formal differentiation of the façades of the nineteenth century. The choice of architectural details, the building materials of the façades, and the inner functional structure of the entire building, are left to the discretion of the architect. These new buildings have been successfully integrated into the historic city, but they are counteracted by numerous infillings of gaps that break up the traditional urban space. Apart from Malraux's gigantic cosmetic concern for the city image—the cleaning of Paris façades in the sixties—the rehabilitation attempts in entire city blocks and quarters are still in their initial phase. In this connection, the Kreuzberg district in West Berlin is an interesting example. After the war, the old Berlin workers' district near the former Luisen-Canal, with its generous layout of streets and squares, was totally run down. Moreover, its closed structure was threatened by the irruption of a planned urban motorway. However, since the early seventies there have been better prospects. Public protest—later supported by the authorities during European Architectural Heritage Year—caused a radical change of thinking. Now, street

houses) be convincing. What it does create, though, is a somewhat forced visual uneasiness and an arbitrary split-up of urban space into differently coloured sectors.

The urban space as a field of interaction

The original character of the interactional space

1. Territoriality: appropriation patterns of urban space

In general, it is expected that a city should be functional; if it grows into a pleasant place to live in, this is greeted as a special 'performance'. And yet, there are numerous non-functioning and badly designed places. However, these 'unsuccessful' towns (as well as the rarer 'satisfactory' examples) invariably have one thing in common: urban life and human interaction in the city.

Psychological links and possibilities for identification on one hand, potential activity on the other, determine the type and the intensity of city events. Links create feelings of security; the possibility of action creates a field of human interplay. Both depend mainly on social circumstances but can be furthered by specific design schemes.

Today, we regard the nineteenth-century trend towards spatial separation of social classes as socially unjust and an encouragement of discrimination. Despite these objections, we must admit that it was just this very segregation that made the feeling of 'belonging' to one's city quarter much stronger than it is today. The reality of neighbourhood was achieved, on the one hand, by a need for solidarity (the community offered insufficient social and technical services), and on the other hand, by a class-oriented social homogeneity. At that time, neighbourhood was a fact, not a projected planners' dream.

The citizen's identification not only referred to his actual place of living, to his city quarter, but also to the far more open city centre which, as a brilliant, multi-faceted city core, exercised a strong attraction. Unlike today, the city core was not almost exclusively an administration and business district. Dwellings, education, culture, amusement and extravagance, all enhanced its attractiveness and created the pulsating 'heart' of the city as we still know it, for instance, in Paris today. Old photographs reveal a colourful pell-mell of all kinds of vehicles and activities, but also people of all social classes in the central areas (*Fig. 20*). Did the citizen have more possibilities of experiencing city life in the big city a hundred years ago than he has today? Probably yes! He could move around much more freely—traffic had not yet been regulated—and there were far more chances for personal contact, caused by the fine-grained mixture of uses in the city centre. A mixture of vehicles and pedestrians, in balanced proportion, created an animated urban space to which every pedestrian still had access. It was—so to say—a daily spontaneous taking possession



FIG. 20. Berlin: The street image offered by the famous Friedrichstrasse in the late nineteenth century: A quantitatively optimal mixture of vehicular and pedestrian traffic.



FIG. 21. Berlin: the street image of the nineteenth-century districts (here the Kurfürstendamm) today: overcrowding by pedestrians and vehicles, strictly separated from each other. The results of the conversion of city centres to exclusive business and administration districts.

of the public space which, today, we try to restore in closed 'pedestrian zones'.

This appropriation of the urban space by the citizen was aided by a number of additional elements. Much less strict building regulations permitted—or rather did not prohibit—the presence of these elements: covered coffee-house terraces on the sidewalks, kiosks, people selling goods in the streets, wooden platforms for the Sunday music band located on squares etc.—these were the visible signs of such an appropriation. Similarly, there were possibilities of private intervention within the dwelling block, inside which space remodellings and ancillary buildings were tolerated. Without being nostalgic, we would like to point out that—as happens so often in town planning—regulations that are advantageous to urban order and hygiene often decrease the individual's capacity to play his part in a city's life.

2. Orientation schemes and movement patterns

The conditions prevailing in the nineteenth-century city (mixture of uses, not regulated and not differentiated traffic) cannot be said to have helped the citizens' sense of orientation. Therefore, we find in literature such attributes as 'chaos' or 'jungle' for the big city. On the other hand,

important 'untouchable' public buildings and monuments must have created a network of orientation marks which, today, after the destruction of city cores during the last war (e.g. Berlin) are often sadly missing.

Within a restricted urban area, there was a geometric layout of streets and squares that presented a clear guide to orientation—a secure basic pattern that facilitated the reaching of certain points. But in a wider urban context the mixture of uses hampers orientation for lack of a specific 'district character'. However, that same mixture proves useful in the case of individual streets. Morphologically differentiated façades and shop-fronts are easily identifiable elements within the smaller scale of neighbourhood units.

3. Information flow

As far as the information flow in the public urban space is concerned, the nineteenth century city introduced all the procedures and habits which are still valid today. The systematic mounting of plates with street names and numbers, of posters with information about administration or cultural events, and public transport stops supplied the factual information. But there were also inscriptions on store fronts, advertisements, even advertising 'slogans' on public transport vehicles and large scale advertising posters—usually mounted on clearly visible gable walls—serving as heralds of 'opinion-making' information..

Significant for these elements was their subtle adaptation to the architecture of façades and to the urban space—almost always designed as decorative additive elements. Oversized advertisements, wall paintings as deceptive views (*trompe-l'oeil*) or even illuminated letters and moving luminous advertising providing the city with a second illusive skin—all these elements did not exist in those days. The urban space was animated but not manipulated!

The changed urban space

How does the inherited urban space function today in places where—such as in Paris or Vienna—it was not subject to much change but where considerable social changes and new technical achievements influence the present metropolitan life?

At a first glance, one would say that it functions unexpectedly well! For the European city-dweller, life in the metropolitan city still means living in the closed and differentiated urban environment that was formed in the nineteenth century. Despite the enormous city expansions of the last decades, there is no new 'image' reflecting our era's metropolitan climate, and we might assume that this type of urban reality stood the test. It might be added that the street network proved to be remarkably receptive to intense traffic, that the building substance itself was remarkably resistant (even after 100 years) and worth preserving, that the buildings

were adaptable to new uses (if one disregards a technocratic perfectionism), and that no better urban space has yet been conceived, as the new city quarters of the post-war period tell us. 'Better' not in its architectural-plastic but in its psychological and social-human sense. And yet, the nineteenth-century city is not quite without problems both as contemporary and future living space.

1. Problems of the inherited city centres of the nineteenth century

- (a) Loss of identification possibilities for the citizen, due to the regrettable separation of uses even in the city core and its monofunctional dedication to the service sector (*Fig. 21*). The consequence: the city centre becomes deserted in the evening. The sophisticated argument 'when city cores become deserted places at night, there just is no soul around to notice it' is a sophism! The dead person, too, is not aware of his being any more! Yet, his death is a loss nevertheless.
- (b) Limitation of possibilities for human interaction due to the total absorption of the public space by the motorized traffic.
- (c) Systematic and reckless distortion of the city image through aggressive and oversized advertising, even by means of 'urban happenings' (see 'packaging' of buildings by Christo, or false perspectives on gable walls, supposed to 'animate' the city image by shock or optical delusions).

These dangerous defects are not easy to eradicate. Guiding lines for their removal are: to maintain the mixture of uses, to promote public transport, to recover the city core for the sake of the pedestrian, to keep under control the profit-oriented advertising and the unreasonable playful games of the 'artists' who ruin the city image.

2. Problems of the city quarters of the nineteenth century

The gradual loss of the sense of neighbourhood in the nineteenth-century quarters is general. Destruction, immigration of foreign workers (as is the case in Berlin), social changes and mixed population; all these events have caused the old bonds in the city quarters to disappear.

Another serious deficiency is the decreasing quality of dwellings and the decay of tenement houses caused by their abandonment under the long lasting Tenants Protection Law. The very high building densities, present from the beginning, also add to the need for renewal of these quarters.

Finally, there is the decisive problem of maintaining the social structure in these quarters. What chances are there that the present inhabitants (tenants) may remain in their dwellings after the renewal of their buildings? While there is a consensus of opinion that the actual

social structure characteristic of the city quarter should not be further destroyed, this is not likely to happen without at least some evacuation of part of the population. Some inhabitants must leave if the dwelling and building density is to be decreased and not all families can afford the inevitably increased rent.

It was just to overcome the latter problem that a strategy of renewal in small increments was developed (for instance in Berlin-Charlottenburg). Instead of a comprehensive renewal, there has been a lot-by-lot programme in order to keep the inhabitants on the spot. Such a policy of a gradual continuous renewal in small steps causes least hardship to the inhabitants and guarantees, at least to some extent, their identification with the renewal process and their cooperation in the work.

Concluding remarks

The preparation of a structure analysis as a preparatory step towards the renewal of a city quarter that is to be preserved, is a necessity. It would have to consider at least the following aspects:

1. Determination of the exact location and delineation of the quarters in question.
2. Typological analysis of the spatial characteristics and qualities of the urban fabric.
3. Functional interaction between the different areas of the quarter. Study of the feasibility of an incorporation of new uses suitable for the area.
4. Analysis of the street image and the space of urban interaction. Visual sequence investigations.

A catalogue of action criteria should be set up for each of those aspects; for example delineation of the city quarters to be preserved is based on the following criteria: the extent of the characteristic repertoire of forms pertaining to a certain area of the city; the topographical and spatial relations of the city quarter to the adjoining quarters; the characteristics of the street pattern; and the existence of city areas with a 'special local character' (type of social structure).

Finally, the following remarks may be put up for discussion in order to reach a consensus, and to elaborate some guidelines for action:

1. A continuous building process and the subsequent changes of the city image and structure are inevitable facts with which we should be prepared to live. Thus, one can also accept the loss of some nineteenth-century architecture provided the specific urban structure of the corresponding quarters does not disintegrate.
2. The characteristic axial street pattern, as well as the strictly delineated

and differentiated urban spaces, is still a successful space of human interaction, as it was conceived a century ago.

In order to save and renew this urban environment which has stood the test, as a closed and coherent structure, the following elements need to remain intact: the basic geometric pattern of the street system; the order of alignment (of façades, trees, lamp-posts); the design and differentiation of urban spaces (i.e., the closed squares and the 'corridor streets'); and the general dimensioning and articulation of buildings (i.e. dimensions of building lots, width of façades, building heights, roof types). Other elements, however, could very well be altered without betraying the urban conception as a whole, as for instance: contemporary design of façades in case of newly erected buildings (taking into consideration the existing urban scale); remodelling of the internal courtyards; and eventual increase of density (by making use of the courtyards) but also less density (by clearing such surfaces).

Safeguarding continuity in the process of change should be the key-word for a reasonable town planning policy. This approach has still to be learnt.

Résumé

Dans cette dernière partie consacrée à la nécessité d'une politique d'action intégrée pour la conservation des quartiers du XIX^{ème} siècle des villes européennes, l'auteur étudie les caractéristiques du schéma urbain. Il examine la densité visuelle qui fut créée, les volumes et les alignements des façades, le réseau des rues et leurs silhouettes, le rôle important joué par les places publiques et les espaces verts. Voilà, explique-t-il, les composantes essentielles de l'urbanisme du XIX^{ème} siècle; elles ne serraient être changées sans qu'il soit porté atteinte à l'essence même de la ville de cette époque. Il considère ensuite les éléments visuels de référence: la ligne des toits, les façades répétées le long des rues et le mobilier urbain ainsi que le pavement caractéristique.

Après s'être efforcé d'analyser plus précisément ces traits de l'urbanisme du XIX^{ème} siècle, il se demande quelles sont les altérations dues à des conceptions ultérieures. Elles vont de changements conceptuels, qui ne sont que rarement le développement logique d'un ancien schéma urbain, à des efforts 'presque infantiles' pour établir une continuité visuelle en intégrant des 'réminiscences historiques' dans les projets modernes. Il résume le problème de la manière suivante:

1. Perte d'identité due à la diversification des usages.

2. Diminution des possibilités dans les rapports humains due à l'appropriation des espaces publics par la circulation.
3. Perversion de l'image urbaine due à la publicité envahissante.

L'auteur réclame une analyse préparatoire des structures et il suggère qu'elle comprenne:

1. L'identification de chaque quartier de la ville.
2. Une analyse typologique de ses caractéristiques.
3. Une étude de nouveaux usages à encourager.
4. Une analyse de l'image de la rue et de ses séquences visuelles.

Afin d'encourager les échanges de vues et la préparation de directives d'action il suggère que

1. Un processus continu de construction entraînant des changements dans l'image et la structure de la ville soit accepté.
2. Certains bâtiments du XIX^{ème} siècle puissent être démolis à condition que la structure urbaine soit préservée.
3. Le réseau des rues et des espaces urbains vieux d'un siècle forme encore un contexte social réussi et approprié.
4. Pour que la sauvegarde et le renouvellement de cet

environnement aille de pair, certains éléments spécifiques soient compris, définis et gardés intacts.

Enfinement, il plaide pour le maintien systématique de la continuité dans les plans d'urbanisme.

Resumen

En esta segunda y última sección en la que el autor considera la necesidad de una política activa para la conservación integral de barrios del siglo XIX en ciudades europeas, se estudian las características urbanas formales. El autor examina la densidad visual que se creó, los volúmenes y alineación callejera, la red y el perfil de las calles, el importante papel desempeñado por las plazas públicas abiertas y las zonas verdes. Cree que todo esto representa las características esenciales de la forma urbana, que no puede cambiarse si se quiere mantener la esencia de una ciudad del siglo XIX. A continuación, considera los elementos de referencia visual, la perspectiva de los tejados, la repetición de fachadas exteriores y los administrículos característicos de las calles y la pavimentación.

Después de haber intentado analizar los componentes del urbanismo del siglo XIX, el autor pregunta qué alteraciones se han efectuado como consecuencia de conceptos posteriores, los cuales comprenden desde cambios conceptuales fundamentales que raramente son continuaciones lógicas o racionales de la anterior forma urbana, hasta las tentativas 'casi pueriles' de asegurar la continuidad visual incorporando 'reminiscencias históricas' en nuevos diseños de edificios. Resume los problemas como sigue:

1. Pérdida de identificación a través de destinos distintos.
2. Limitación de posibilidades de contacto humano a través del aumento de utilización de espacios públicos por el tráfico.
3. Distorsión de la imagen urbana a través de la publicidad incontrolada.

El autor aboga por la preparación de un análisis estructural como medida preparatoria necesaria y recomienda que incluya:

1. Definición de cada barrio de la ciudad.
2. Análisis tipológico de sus características.
3. Estudio de posibles nuevos usos que puedan ser alentados.
4. Análisis de la imagen viaria y sus secuencias visuales.

A fin de estimular el debate y de alentar la preparación de normas de acción, ofrece las siguientes consideraciones:

1. Debe aceptarse un proceso de edificación continua y cambios subsiguientes en la imagen urbana.
2. Puede autorizarse la sustitución de algunos edificios del siglo XIX, siempre y cuando se conserve la estructura urbana.
3. La organización viaria y espacial concebida hace un siglo es todavía un conteto social adecuado y satisfactorio.
4. A fin de salvar y renovar este ambiente, hay que comprender, analizar y mantener intactos ciertos elementos específicos.

Por último, insta a la salvaguardia sistemática de la continuidad en la política de ordenación urbana.