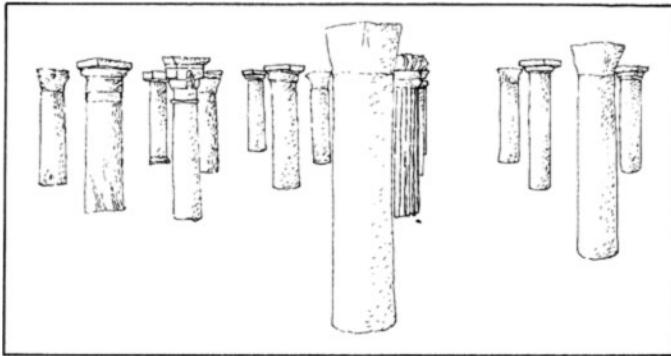


URBAN TRANSFORMATIONS



1 Roman and Byzantine columns in sanctuary, room of Al-Naqah Mosque



2 House in the Roman Campagna decorated with archaeological fragments.

& The Architecture of Additions

The various modes in which towns are expanded, renovated and updated are broadly restricted to three basic types:

Urban growth by extension — characterised by the urbanisation of new areas which are incorporated into the town;

Growth by substitution — which occurs whenever new urban elements replace the pre-existing ones, and involves demolition and reconstruction;

Growth by additive transformation — in which an original nucleus is transformed by a sedimentary and incremental process of addition of new parts.

This third form of growth has been almost completely ignored in recent periods of urban development, and the notion of a balanced form of development has been disregarded in favour of indiscriminate and wild urban extension, often combined with unrestricted destruction and renewal.

Additive transformation is only one of the possible mechanisms of growth and change, but it presents some characteristics which are important for the quality of the town.

First, by being a gradual and organised incorporation of parts into an existing core, it implies the use of a pre-existing structure, and by doing so it extends the likelihood of this being in use for a prolonged period.

Second, by being based on the retention of what already exists, additive transformation allows for a form of development characterised by its low cost in both social and material terms: it doesn't necessitate the compulsory migration which — whether temporary or permanent — is required in other cases. Some kind of continuity of the normal rhythm of life in the affected area is maintained; and the material costs are low since extensive use is made of existing elements and facilities.

Third, because it is a sedimentary process, additive transformation ensures a sense of continuity in the construction of the town, and a sense of 'place' in both historical and spatial terms: in historical terms, because it is in this way that the city builds

upon itself, and buildings become repositories of successive interventions; and in spatial terms, because a true complexity and a meaningful variety arise from the gradual accumulation of elements which confirm and reinforce the space in an incremental process. This sense of continuity is further reinforced by the intelligence of successive generations which, through trial and error, produces a type of architecture which, by being so meaningful in social terms, by being elaborated with the concurrence of so many people, becomes almost necessarily a product of great quality.

How different has been the approach to all forms of development (including naturally urban development) in the modern period when

society squanders its resources as though permanent abundance were no less than the obligation of history.¹

The idea that the old mechanisms by which towns evolved are no longer valid for the modern town has gained support with the belief that the complexity of the modern town has reached such a degree that it has become a unique phenomenon in the history of planning, and totally isolated from past experience.

But this supposed complexity is in many respects a fallacy. Considered from the point of view of their fabric, of their architecture, modern towns appear to have a poor, sometimes very loose, and frequently mechanical and repetitive structure of spaces. Spatial identity is often non-existent and the types of accommodation it is possible to find in modern developments are almost always very standardised and reduced to a minimum of set variations.

This reduction of complexity can be experienced at many levels and it is perhaps very much tied up to a centralised system of control. Thus the hyper-market which caters for a vast number of inhabitants is completely isolated and more elementary as a building than the supermarket which at least

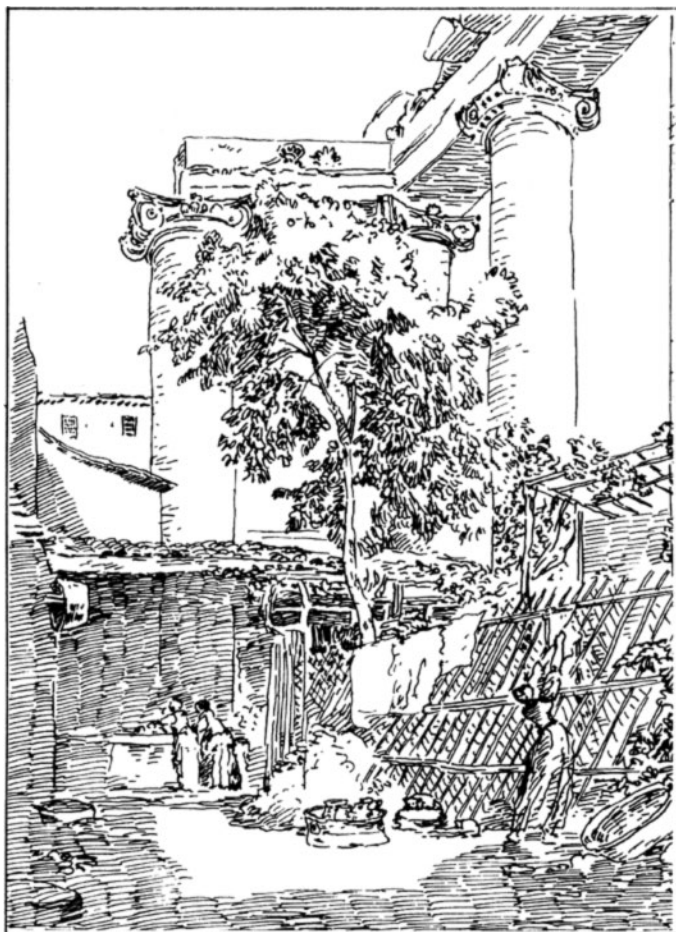
has to keep some relationship to the immediate context. Traditionally the same volume of transactions took place in an infinity of small shops, alleys, arcades and market squares. The significance of a traditional structure of commerce upon the spatial structure of the town is of very great importance.

Also from the point of view of the activities which take place in the town, there has been a radical change into a pattern of highly segregate zones where different activities take place in isolation. The disastrous effect of 'zoning' has been widely discussed but it is worth repeating that zoning constitutes yet another form of compulsory and ruthless schematisation of the town into elementary and well-defined parts, which can be more readily administered from a central body.

Whether buildings are used as quarries to extract building materials, as foundations for emergent buildings, as support for additional structures, whether they are rearranged, subdivided, added to, or transformed in terms of modifying their structure of connections and access, whether they are upgraded in terms of their quality for habitability or whether they are changed in terms of their symbolic role — the variations indicate gradations only on an overall process of continuous adjustment, rearrangement and transformation which occurs constantly and at different levels to the towns.

The selective and organised salvage of components is but one way of building with inherited parts: the Al Naqah mosque in Tripoli (8th to 10th century) serves to illustrate a case where an imaginative and resourceful use was made of columns and capitals of disparate character obtained from the dismantling of Roman and Byzantine buildings. There is a similar case in the mosque of Cordoba where columns of different height had to be buried as needed until the same level was obtained at the top of the capitals for the construction of the arches.

In a small house in the Roman countryside, fragments of ancient sculptures were inserted into



3 The temple 'Demonumentalised': the pronaos of the Temple of Saturn, Roman Forum (drawing based on original 'Washerwomen in the ruins of the Temple of Saturn' by Hubert Robert c 1760).

the walls to become part of the building. It is difficult to visualise situations where old and new become integrated to the same extent as they are in this small building.

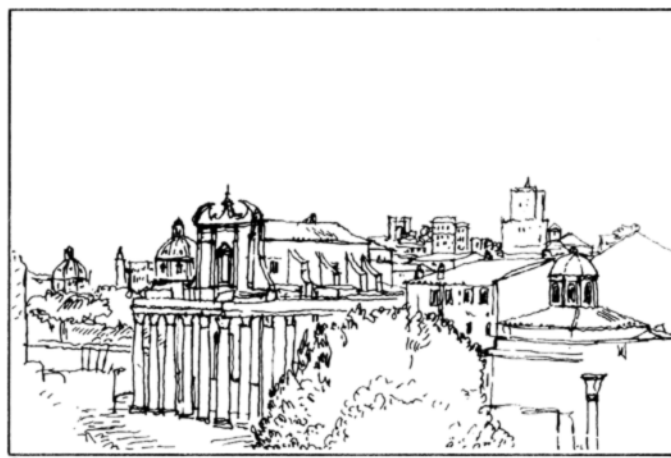
It is in Rome that much evidence can be found of this confrontation of the inheritance from the past with a positive, practical sense, simply by making the best use of that which is inherited.

Rome is indeed unique amongst the European capitals in that after having been the largest city of antiquity, it fell — as a consequence of the collapse of the empire — into an extremely prolonged period throughout which the still standing structure of the imperial town largely overshadowed the precarious structure of the emergent medieval town.

It is the very fact of the continuity of use of Rome as a town that explains the preservation of so many of its ancient structures. This was, however, basically an utilitarian preservation.

It is a motive of joy rather than sorrow that the new town was built upon the old one. If it wasn't for this circumstance, a great number of ruins and works of art would have been irremediably lost.²

It is utilitarian preservation because it



5

4 A building within a building, the church within the Temple. San Lorenzo in Miranda Rome (drawing based on painting by Canaletto).

approaches its built legacy by functionally incorporating it into the present, by reabsorbing it into the living city rather than preserving it in isolation as it so often happens when urban preservation is carried out with a dominating archaeological purpose.

Travellers described with amazement this peculiar association of old and new. But they didn't always approve of the results of such combinations:

and as for the buildings which were now being built on top of the old ruins, although they did contain some qualities which could enrapture our present times, they were more likely to remind us of the nests which sparrows and rooks were building in France in the walls of churches demolished by the Huguenots.³

The buildings of the second Rome were hybrid products of the unique historical circumstances which this town experienced. But the process was by no means reduced to isolated phenomena, and in effect it can be observed in all major towns up to the 19th century. The Romans 'transformed without mercy the ancient monuments'.⁴ But the ancients themselves resorted to the pre-existing structures with similar lack of mercy. Masonry stones were recycled from one building to another,

5 The Church within the Temple: Temple of Antonia and Faustina in the Roman Forum, converted into a Christian Church in 1602.

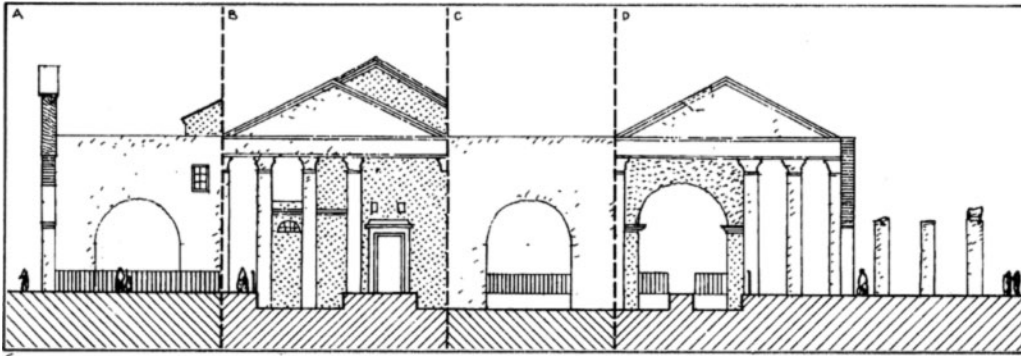
components were reassembled.

Some stones were employed in a sequence of different uses; the pedestal of a statue erected in a small countryside locality to the memory of an illustrious citizen . . . served in 285 for the restoration of the baths of Caracalla and later in 365 was used for the construction of a monument to be erected in the honour of Valentinian the 1st.⁵

Many of the important Roman constructions of the ancient period are in fact good examples of this process of dismantling and recombination.

The Aurelian wall was erected using the debris of destroyed monuments . . . for the completion of the Basilique Julia at the Forum, Gabinius Vezio made use in 377 of the marble masonry of the forum Svarium . . . The Colosseum itself was completed at the expense of other monuments . . . The Arch of Constantine is ornated with statues and stone carvings which had belonged to another arch, perhaps to the Trajan arch which has since disappeared completely.⁶

Discussions on conservation were held by the representatives of the town, and the senate also maintained surveillance over what was built.



6 The portico of Ottavia converted into a Church (S Angelo in Pescheria) elevations of portico in its present state.

7 Schematic section through portico

8 Reconstruction of the portico in the Imperial period, with the Marcellus Theatre in the background.

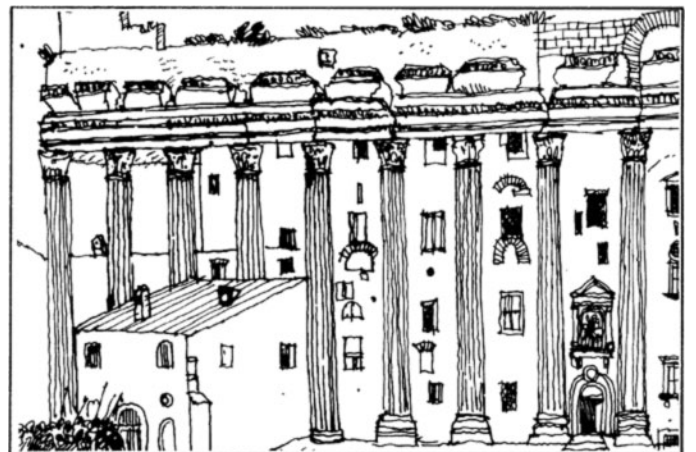
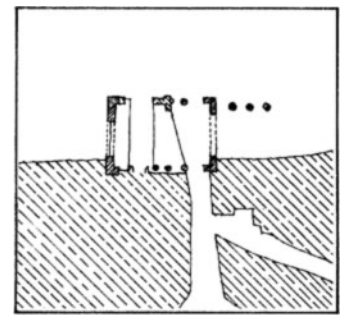
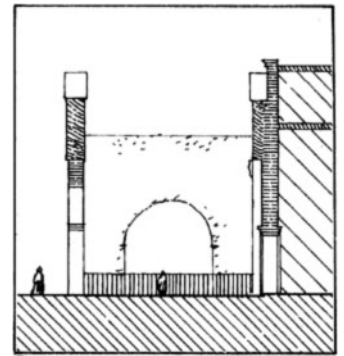
9 Schematic plan of the portico. Note the freestanding columns to the right, the only remains of the extended colonnade.



10 The temple added to the Church: St Paul's London after the great fire. The portico was designed by Inigo Jones.

11 St Martin's in the Fields, London: The spire added to the temple.

12 The temple secularised: temple of Neptune, Rome, converted for civilian functions.



Temples

The transformation of Roman temples was carried on for centuries, to such an extent that analysis of the various resulting ensembles is extremely useful.

The temple type is one of the most persistent types in the history of architecture. Its pagan origins and its association with pagan rituals were a challenge to the Christian builders of the 'second' Rome and the fate of these buildings was far from predictable.

The temple of Antonio and Faustina in the Forum was converted into a Christian church; a tympanum was added to it in 1602. The church was arranged within the enclosure of the temple; its front, recessed in relation to the temple front, left the freestanding colonnade of the original building. To no other building are more appropriate the observations of Louis Kahn:

Each part that was built with so much anxiety

and joy and willingness to proceed tries to say when you are using the building 'Let me tell you how I was made'. Nobody is listening because the building is now satisfying need. The desire in its making is not evident . . . As time passes, when it is a ruin the spirit of its making comes back . . . everyone who passes can hear the story it wants to tell about its making. It is no longer in servitude; the spirit is back.

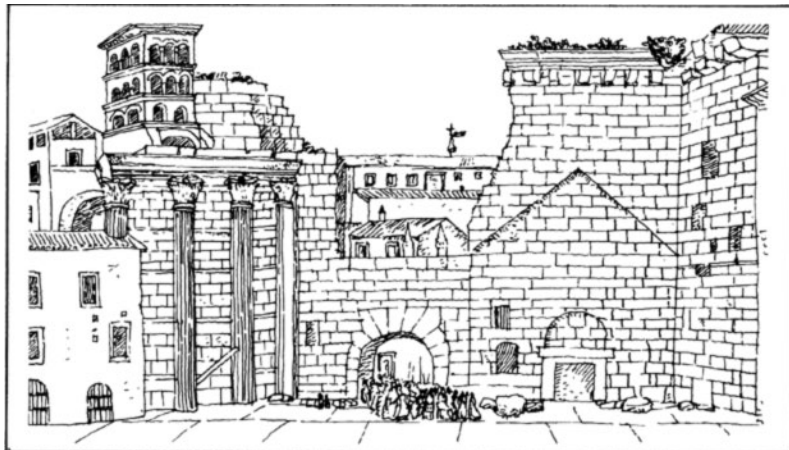
But this building, half ruin, half habitable, is still 'in servitude' and yet the presence of the ruin is perhaps so much stronger by virtue of this very relationship to which it is bound.

The temple of Saturn, surrounded by houses and absorbed into the texture of domestic buildings in the town, was disengaged from all additional constructions and the impressive but somewhat pathetic remains of the pronaos are still visible today amidst the historical remains of the Forum. The church of S Lorenzo in Miranda was built

within an ancient temple in a similar fashion to that of the church built on the temple of Antonio and Faustina. The temple of Neptune (in the present Piazza di Pietra) was first erected by Marcus Agrippa in celebration of his naval victories and formed part of a large complex which included a huge portico, whose remains are still to be seen in the basements of the adjoining streets. Eleven of the columns of the northern side of the building are still standing and the building of the Roman stock exchange has been incorporated into it.

This is, in its way, almost as interesting a relic as the temple, as it is one of the most extensive examples of a Roman architectural palimpsest to have survived the archaeological fervour of the fascist period.⁸

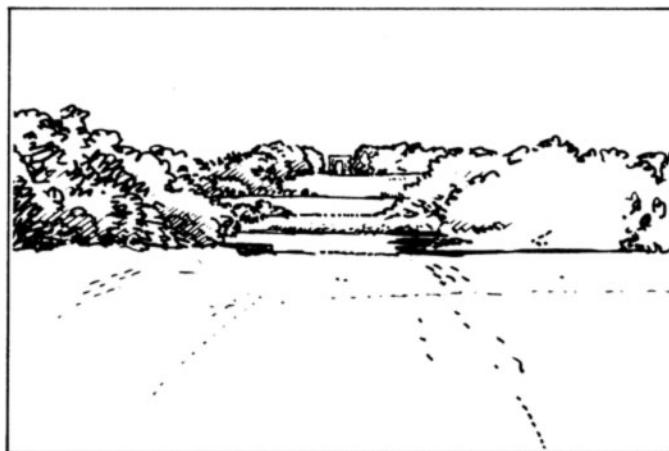
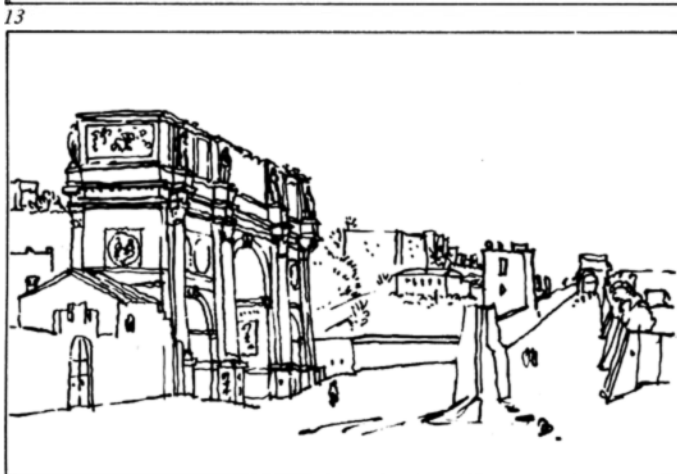
The temple of Vesta in the forum was transformed into the church of S Stefano alle Carozze which was later to be named Sta Maria del Sole. And



13 Rome: The architectural palimpsest. Ancient walls and Medieval additions on the site of the old Forum of Nerva. (Drawing based on the etching by Giovanni Alo, 1619).

14 The arch of Constantine, Rome c 1560. Ancient monuments were surrounded by minor buildings before the era of archaeological reconstructions. (Drawing based on sketch by Giovanni Antonio Posio).

15 In Stowe Gardens Buckinghamshire the arch is placed as the focal point in a perspective view in the middle of the countryside. The monument in complete isolation.



14

numerous other examples could be cited.

So, on the one hand, the temple remains were demonumentalised and incorporated into the anonymous scale of the fabric of the town, while on the other hand, what could be described as the appropriation of the symbolic value of the temple – as a sacred building, but also as a monument – occurred, and consequently temples could be transformed into Christian churches or conversely, they could be secularised and transformed into civil monuments.

The temple form had a strong attraction, perhaps because it was a form product of such a prolonged period of selection and perfecting. But it was still too closely attached to all that was regarded as pagan. A synthesis had to be found whereby it was possible to combine the quality of this perfect form with some architectural element of equivalent weight which belonged unquestionably to the Christian cultural tradition. The spire was an ideal element for this purpose. Thus, in many instances, there was an attempt to combine the spire with the temple-like church nave. The design of St Martin's-in-the-Fields by Gibbs is perhaps the most interesting solution. Unlike his predecessors who built the spire as an adjunct to their churches, Gibbs built his tower inside the west hall of the church and made it emerge through the roof.

This church is important not only as an achievement in itself but for its enormous widespread and continuous influence . . . It became the

15

type of the Anglican parish church and was imitated wherever in the world English was spoken and Anglican worship was held.⁹

So it happened that two types which had quite different origins and evolutions became associated by proximity, when one was attached to the other, and ended up combined in a single composition which generated a new type form.

The fact that components could be reassembled worked both ways: the process could happen on a temporal basis simply by a sequence of interventions over the same building to which porticoes, towers, rooms, could be added. On the other hand, a natural evolution of styles could result in the selection of elements from a range available from the cultural patrimony of a period and the creation of new combinations resulting in the invention of new types would occur.

So when Palladio said that

In all the villas, but also in some of the city houses, I have put a frontispiece on the forward facade where the principal doors are because such frontispieces show the entrance of the house and add very much to the grandeur and magnificence of the work . . .¹⁰

he was referring directly to this process. In the same manner he referred to the origin of the portico from the temple which had originally borrowed it from the Greek house – and indeed

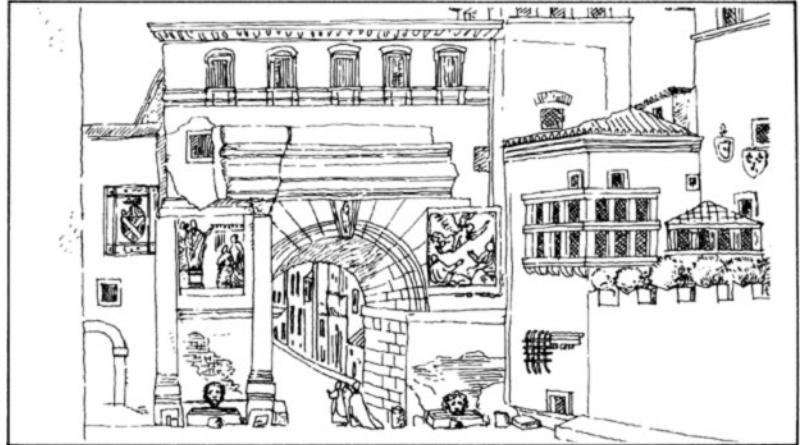


16 Christ Church Spitalfields, London (Hawksmoor, 1729). The spire is ingeniously designed as a combination of heterogeneous components carefully arranged one on top of the other.

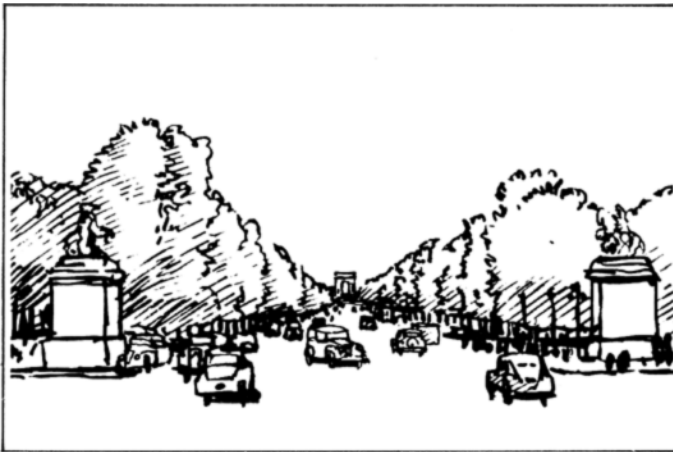
17 Ancient Roman arches didn't escape the sedimentary transformation of the town: the second Rome was built upon the ruins of Imperial Rome. (Drawing based on etching by Giovanni Alo, 1619).

18 The Arc de Triomphe in the Champs Elysées: The Triumphal Arch larger than anything the Romans could have imagined, acting as the focal point.

19 The Arch in Nancy acting as a monumental gateway between the Place Royal (now called Place Stanislas) and Place de la Carrière.



17



18

for all these elements to be taken apart and recombined they had to have some integrity, some quality in themselves even when seen in isolation.

The portico could be added onto a building as a second intervention, and if it could be added onto a house it could certainly — and perhaps with more propriety — be added to a church as well. This happened to the old St Paul's cathedral transformation devised by Inigo Jones. The west front facade was refaced and a large Corinthian portico was added to the main entrance. One existing tower was recased and a new one was added to the other side for symmetry. The aim was to give the church a classical expression, but the bizarre result lacked unity. It is ironical that so much ingenuity and effort was invested to transform Roman temples into churches while architects were working on the difficult task of disguising the church behind the temple in the reverse process . . .

Ruins were reincorporated into the functions and uses of the town in a variety of ways. Transformations were carried on to such an extent that in many instances it is impossible to reconstruct the image of the original buildings.

The portico of Ottavia in Rome formed part of a large complex of porticoes which enclosed a precinct where there were temples, libraries, and public rooms, and it was intended to be a foyer for the adjacent theatre of Marcellus.

A fish market grew up in the portico and a church was built into the remains of the original



19



20 The Fontaine St Michel, Boulevard St Michel, Paris: The Triumphal Arch becomes, finally, an element of applied decoration.

buildings which by then had suffered from decay. The church was known as S Angelo in Pescheria due to its proximity to the fish market. It was rebuilt in the 8th century and again in 1869. Arches were erected during the Middle Ages to support the Roman fabric of the portico. This curious complex has fortunately remained up to the present days. Even though the remains of each period are fragmented there exists a strong cohesion between the parts; buildings of different periods are held together conforming a dense urban block.

Triumphal Arches

In the triumphal arch we find again a building type of incredible persistence and widespread diffusion. There existed different types of triumphal arches in Rome, some built as isolated entrances to monumental zones, others were built spanning a road or as a base for statues. But while the most famous ones in ancient Rome did stand in isolation, on key locations along a route, they never reached the monumental character which, by scale and location, the one erected in the Champs Elysees achieved as a focal point for a vast area of Paris. Here the arch became an enormous building, detached and commanding. In England one was built not only detached from other buildings, but also from the city, standing as a focal point in the central perspective of the gardens in Stowe, Buckinghamshire. It is difficult to find an architectural arrangement with a similar feeling of immensity

Amphitheatres

21 Hypothetical transformations of the Colosseum with buildings within the arches.

22-23 Plan and elevation of the Colosseum with the proposed church on the arena according to the project by Carlo Fontana, 1723.

25 Nîmes: 'Les Arenes'. The amphitheatre converted into a town plan in 1782.

27 Nîmes: 'Les Arenes'. External view 1794 (based on etching by Cornelis Apostool).

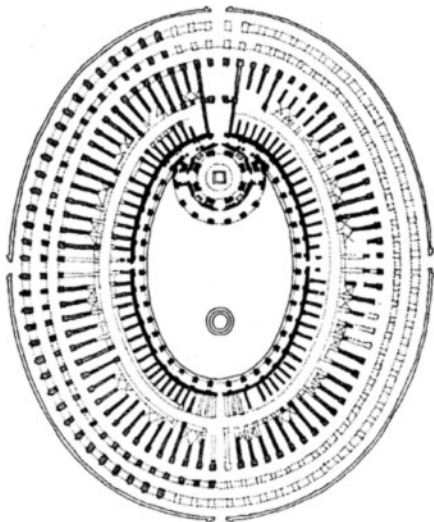
28 Arles: 'Les Arenes'. The amphitheatre converted into a town (drawing based on 18th century etching).

29 Nîmes: 'Les Arenes'. Plan in 1809.

30-31 Florence: The amphitheatre absorbed into the urban domestic texture (ill 30 based on plan by Corinto Corinti, 1924).



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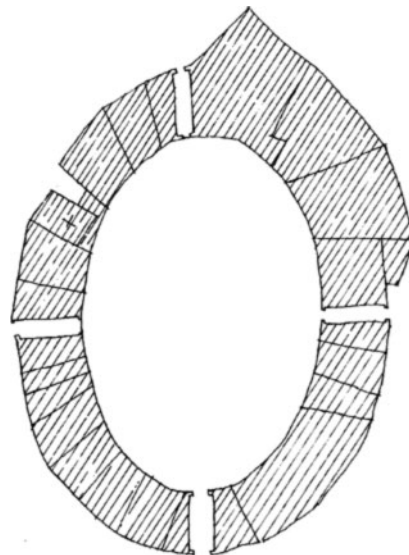
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anywhere else in England. So the arch, born in the centre of the busy areas of Rome, was placed in different contexts, and was eventually located in the exact opposite context of the original — the absolute isolation of private grounds in the countryside.

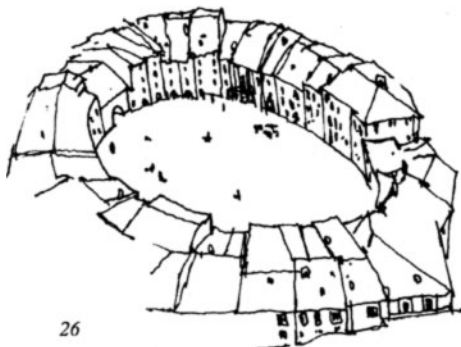
Another process also occurred: the use of the triumphal arch within diverse compositions. Such cases exist in the monumental facades such as the Fontana de Trevi in Rome and that of the Fontaine St Michel in Paris, or the incorporation of the arch as one of several elements which were carefully piled up, one on top of the other, to create the tower of Christ Church in Spitalfields, London.

Amphitheatres

The amphitheatre has got a precise and unequivocal form and also a function; it is not thought to be an indifferent container, quite on the contrary, it is extremely precise in its shape, in its architecture and its structure . . . but an extraordinary event, one of most extraordinary moments in the history of humanity transforms its function; a theatre is transformed into a city . . .¹¹



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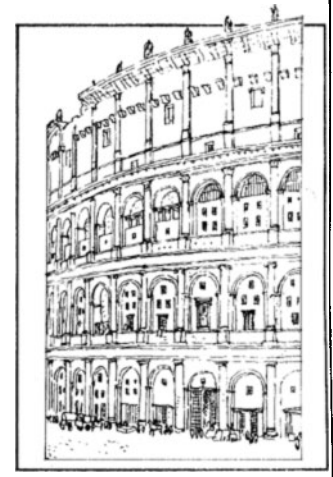


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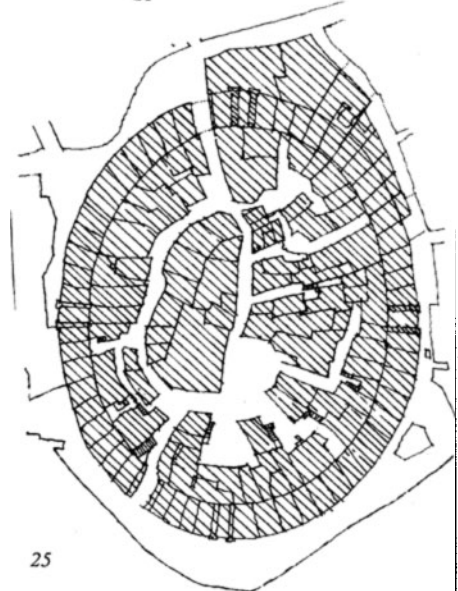
24 and 26 Lucca: 'Piazza del Anfiteatro', aerial view and plan.

Aldo Rossi refers with these words to the unique transformation of the amphitheatres of Arles and Nîmes. The one in Nîmes, built for 25 000 spectators, fell into disuse until six centuries later when:

The region became a dangerous area and the amphitheatre was converted . . . into an



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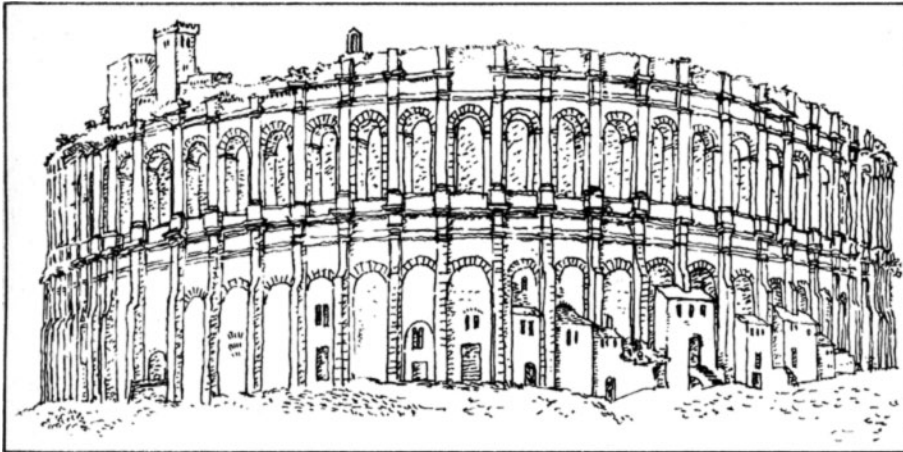


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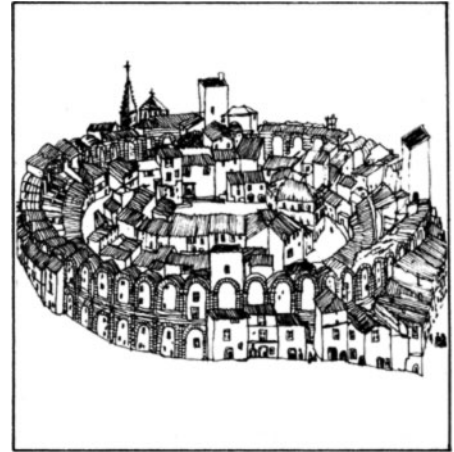
impregnable fortress. The arcades were filled in during the 12th century and transformed into defensive walls . . . The interior became a village with houses, chapels dedicated to St Martin and St Peter, public squares and alleys . . . arranged over the arena and over the sitting areas. Francois I ordered the demolition of additional buildings in 1535, but it was at the end of the 18th century when the arena was entirely cleared . . . At the beginning of the 19th century the engineer Grangent was put in charge of the reconstruction of the amphitheatre and he ordered the demolition of a number of buildings which included a palace of justice, a theatre and around a hundred houses . . .¹²

The amphitheatre of Arles was also transformed into a citadel, houses were built within the piers, over the arena, the sitting areas, and were also attached to the building externally.

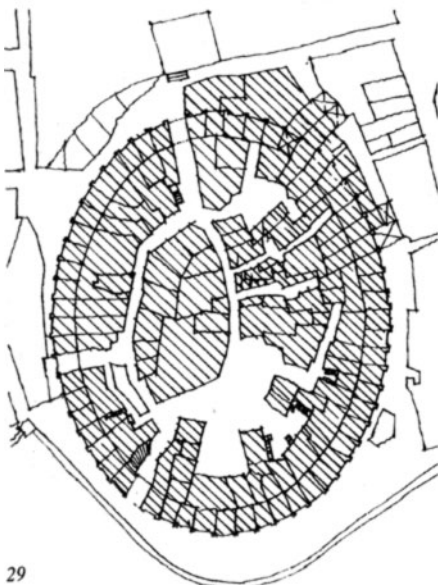
The amphitheatre of Florence was absorbed until it disappeared into the homogenous fabric of the town. The ground plan indicates clearly that the reason for the oval shape of the plan lies in the Roman building; party walls and foundations follow faithfully the layout of the radial walls and piers of the amphitheatre. Two streets were opened



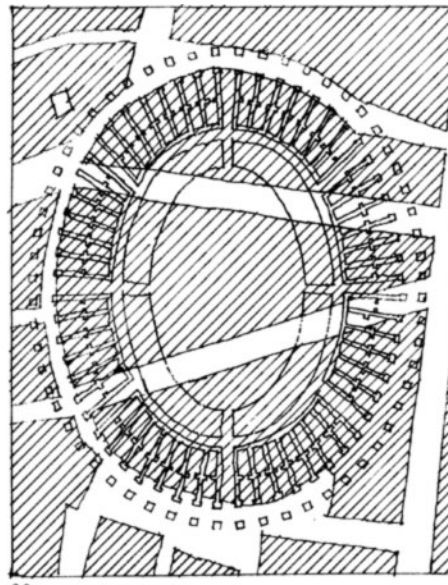
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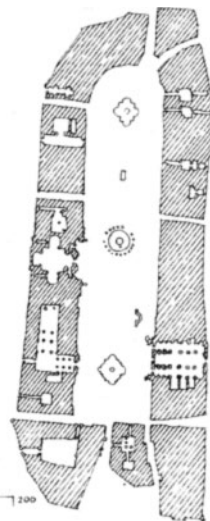
through what had been the arena.

No traces of the original structure are easily recognisable in Lucca either, except for the central space which has evolved into a public square, and the main entrance ways, arranged symmetrically in relation to the arena. And something similar occurred to the stadium of Domitian in Rome which was destroyed during the Middle Ages and served later as a foundation for the buildings which were erected around the Piazza Navona.

This permanence of urban spaces of monumental character was one of the consequences of the superimposition of one town upon the remains of a previous one:

To this phenomenon was due the presence in the new town structures of certain grandiose vistas and epic dimensions which otherwise would have been inexplicable, such as the vast scale of the Piazza Navona and the long rectilinear line of the Corso.¹³

Sixtus V has a project for transforming the coliseum into a workshop. Working spaces would occupy the ground floor, spaces and workers' dwellings would have been arranged on the upper floors



32 Rome: Piazza Navona, once the stadium of Domitian (plan based on Nolli's plan 1748)

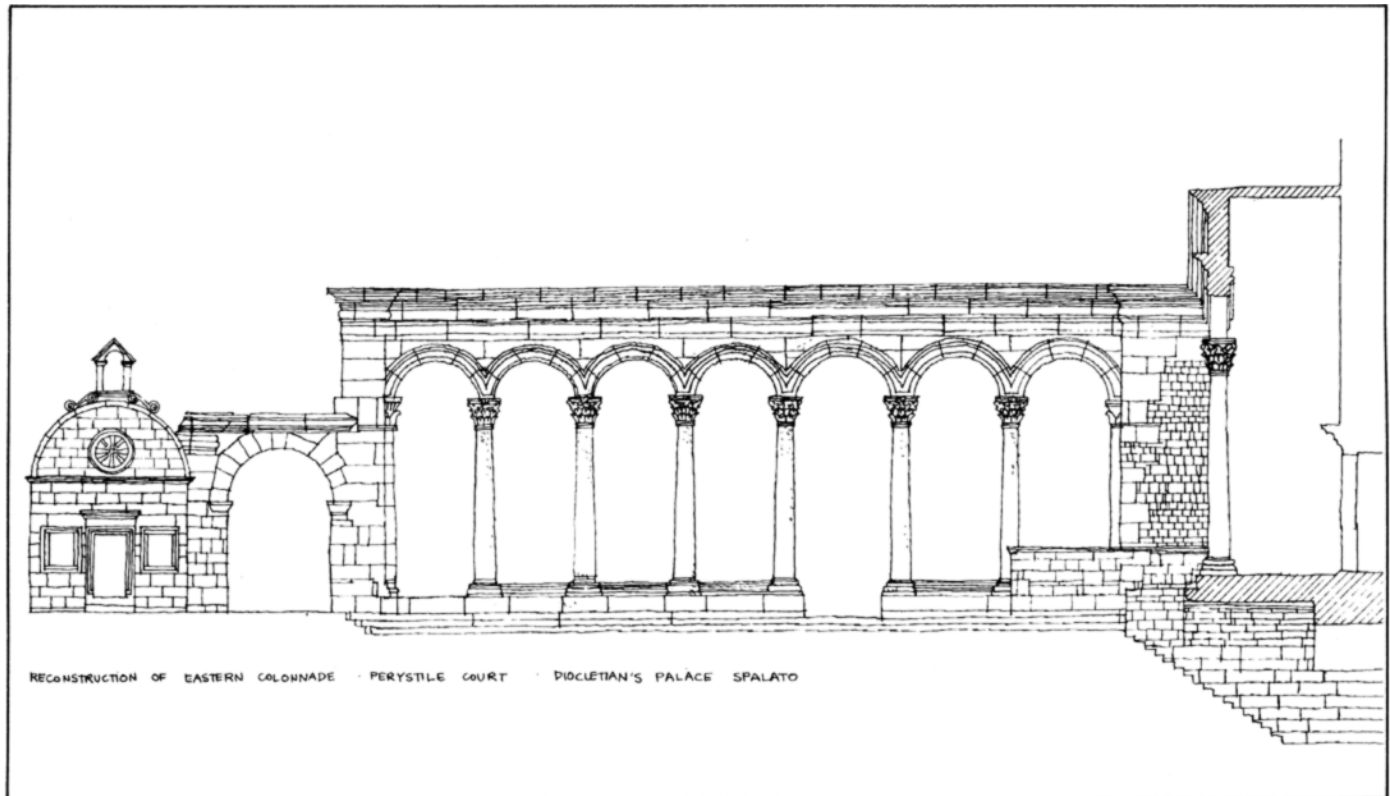
(had this project been realised) . . . the coliseum would have become a worker's quarter and also the first rationalist factory.¹⁴

And indeed had the coliseum been used continuously to the present day, that whole section of Rome in which it stands would have evolved in a different way.

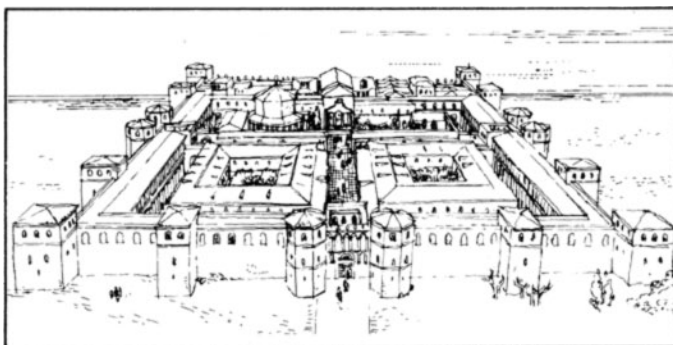
Another project was devised by Carlo Fontana for the building of a church inside the arena with a colonnade which would encircle the open space. Had it been built, the most imposing of the ancient Roman buildings would have changed not only in its use but also, substantially, in its significance for the town. The cupola and towers of the church would have been seen from outside the ruins depending on the relative position of the observer. The silent presence of the empty tiers of seats would have added drama to a place in the city already charged with memories.

The fate of the ruins was a different one though, the remaining rooms were never going to be occupied again. The fabric of the coliseum was used as a quarry right up to the 18th century.

According to Augustus Hare in 1840 the arena of the coliseum was still like an English abbey,



33



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an uneven grassy space littered with masses of ruins, amid which large trees grew and flourished ... the flora of the coliseum numbered 420 species some alleged to be exotic importations. After 1870 all vegetation was extirpated and the cells beneath the arena were excavated.¹⁵

And such is the condition in which it remains now, cleared of its exotic plants, protected as a monument, isolated as a traffic island, and internally rather like an impressive toy which has been torn apart to see how it works.

Spalato

The Roman palace of Diocletian in Spalato, on the Dalmatian coast, was built in an unusually short period, for the Emperor had abdicated and wanted to spend the last years of his life in this quiet and beautiful locality.

The enormous rectangular building (180 x 215m) was divided, in the usual Roman manner,

by two roads which crossed each other at right angles. The area next to the seaside was designated for the Emperor's quarters, for the palace proper. These buildings were built over enormous basements which extended all along the front of the palace. Direct connection was provided from the peristyle court through the basements to a small door which lead to a pier and the vastness of the Adriatic Sea. The other quarters were inhabited by soldiers and servants.

The Emperor died in 316 AD and the palace complex fell into a long period of decay. Peasants and villagers of the neighbouring areas created legends around this imposing building, half palace and half fortress. But an unexpected event was to have perdurable consequences in the history of the palace, when the nearby city of Salona was invaded and sacked by the Slavs around the year 614AD. The inhabitants who escaped the massacres first fled to the safe refuge of the islands in the Adriatic Sea, but once they could return in safety they did

33 Spalato, Diocletian's Palace, elevation of the eastern colonnade, peristyle court.

34 Diocletian's Palace transformed: view of western colonnade, peristyle court (based on etching by Lavalley-Casas, 1802).

35 Aerial view of Diocletian's Palace looking towards the sea.

36 Plan of Diocletian's Palace: the Cardos and Decumanus intersect at right angles, and the Emperor's apartments are at the bottom-half of the

palace.

37 The remaining fragments of the original building.

38 The palace transformed into a town: present state. The new street network is shown shaded.

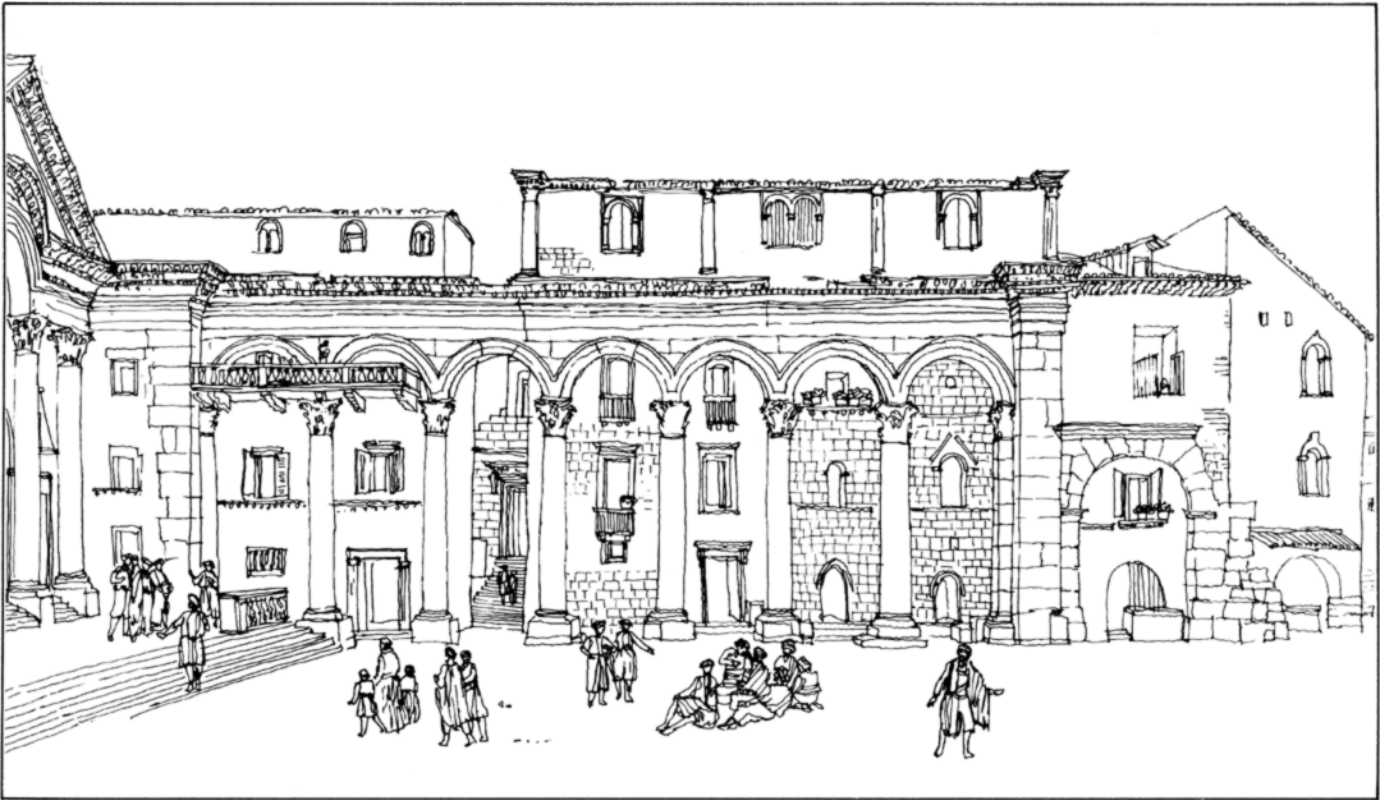
39 View of the peristyle court, 1757 (based on drawing by C L Clerisseau).

40 External view of the town from the seaside (based on etching by R Adams, 1764).

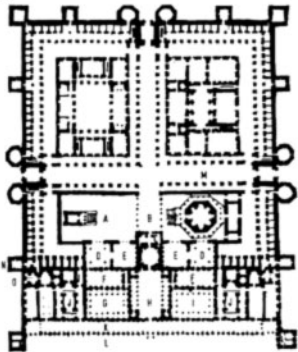
so, not to their destroyed town but to the remains of the palace.

A conversion operation of enormous scale took place from that moment onwards: the ruins of the palace were gradually transformed into a town and the social stratification of the inhabitants were reflected in the way the grounds and available spaces were used. Thus, the wealthy took possession of the areas inside the palace precincts where they could build their mansions, the less powerful citizens inhabited the rooms and spaces which had remained from the original fabric, and the plebeians were left with the crypts, basements and cellars. New buildings and a new street layout were superimposed on the Roman ones. Existing buildings were converted: the mausoleum of the Emperor was transformed into a church and a campanile was built next to it; the Palatine temple was transformed into a baptistry.

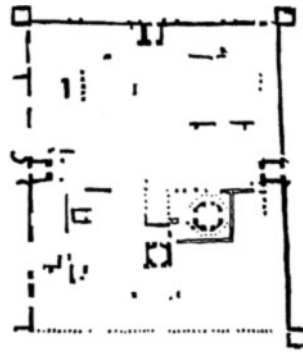
The town expanded beyond the boundaries of the Roman walls, land was reclaimed from the sea,



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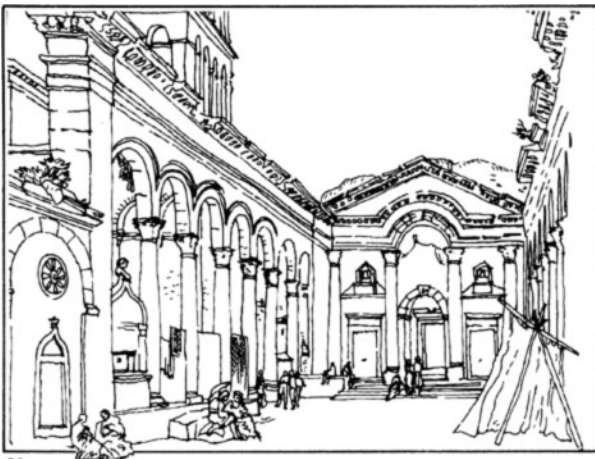
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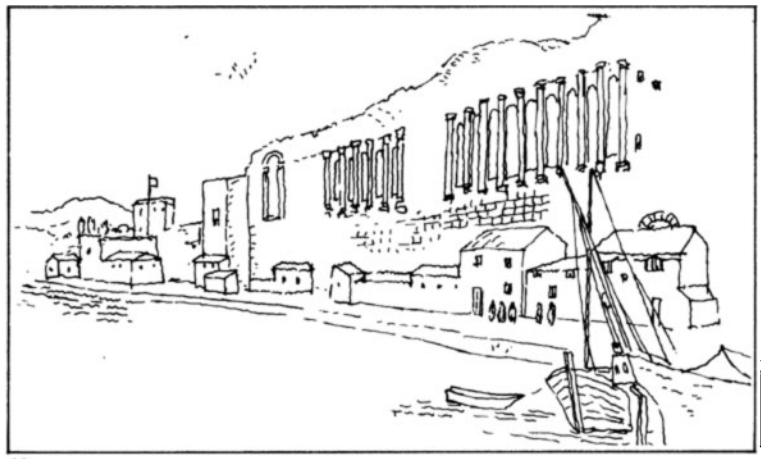
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41 Cuzco, plan of the town in 1850. The thick black lines indicate the extent of the original Inca stone walls which were kept by the Spaniards and used as foundations for the colonial town. The Inca fortress of Sacsahuaman is shown on the upper left hand corner.

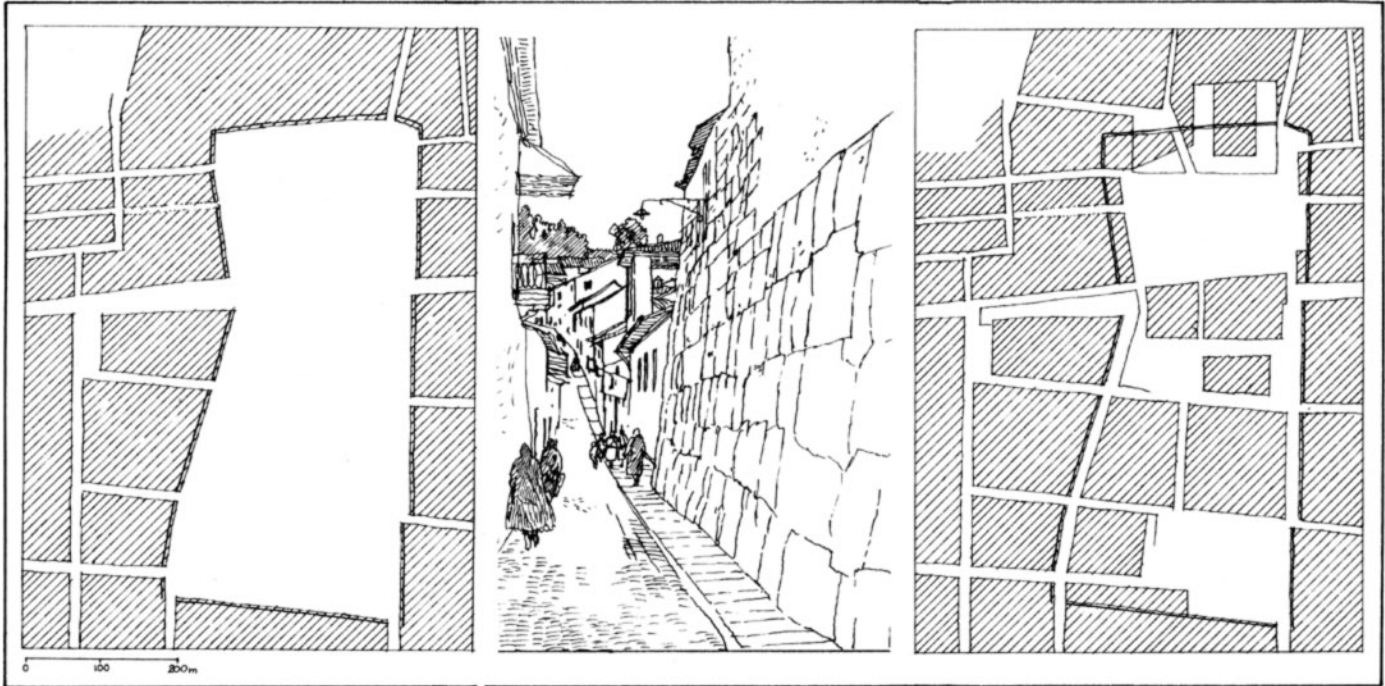
42 Plan of the central square of Cuzco before the conquest. The square was divided in two areas by a small water course, and Inca palaces were built around it.



41

43 View of a street in the old town: 'adobe' Spanish walls were built upon the unique Inca masonry.

44 The plan of the central square transformed by the Spaniards. Three squares were created in the place of the old one, and in some places the Inca boundaries were reurbanised and a complex space arrangement was created.



42 and houses were built leaning against the front wall of the palace.

Cuzco

Another case of such a large scale transformation happened in Cuzco, Peru, the old capital of the Inca empire. The town is located on a narrow valley high up in the mountains, midway between the Pacific coast and the Amazonian forests. Its character was not a monumental one, although there existed impressive stone-built palaces and temples and a very large central square. Inca palaces surrounded the square as it was customary for every Inca to construct his own palace. It is estimated that the old town had some 4 000 dwellings when it was still the capital of the Inca rulers, but it is known that many times this number must have been scattered through the suburbs. The Spaniards violently entered the town in 1533 and, after sacking it and stripping the buildings of everything of value, they designated

43 plots of land to every soldier, taking possession of the conquered place.

In a few decades the physiognomy of the city changed. The Inca square was reduced to less than a fourth of its size, churches replaced the Inca religious constructions and many fine walls of hewn stone belonging to the palaces of the erstwhile lords of Cuzco were used as foundations for the large houses of the conqueror. The layout of the Cuzco of the Incas is still partially in existence . . .¹⁶

The tall plastered and whitewashed walls of Spanish mansions were built upon the interlocked stones of the pre-existing Inca fabric which remained exposed as a rusticated ground floor and sometimes up the the first floor.

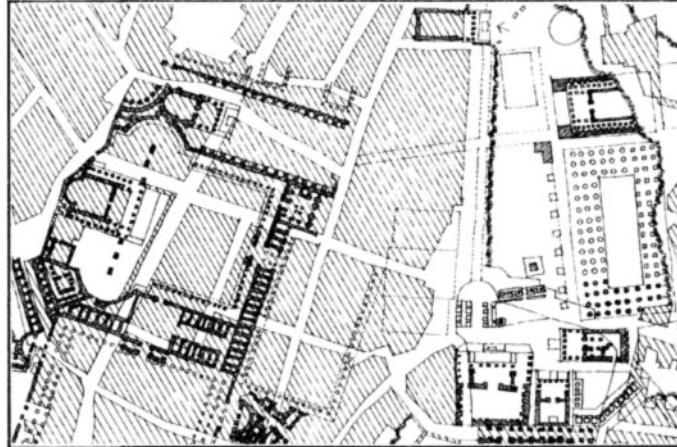
It is still possible to admire the skill of Inca stone masons in the walls of the extant palaces

and temples which the stroller encounters as the facade of a street, the base of a church, or the framework of a colonial gateway. It would seem that different qualities of stone were used according to the importance of the buildings, thus a hard dark nearly black stone was used in the constructions of the center, while the more common types, such as limestone, were used for fortifications and other general purposes. Nevertheless it was adobe, or clay, in the form of large blocks which was the most frequently used construction material . . .¹⁷

The adobe walls have since disappeared but the sight of the stone masonry as the foundation for the Spanish buildings is one of the most graphic examples of sedimentary growth one can find in any town. This sedimentation is literal in Cuzco, with layers which correspond to two cultures, one dominant, the other one destroyed.

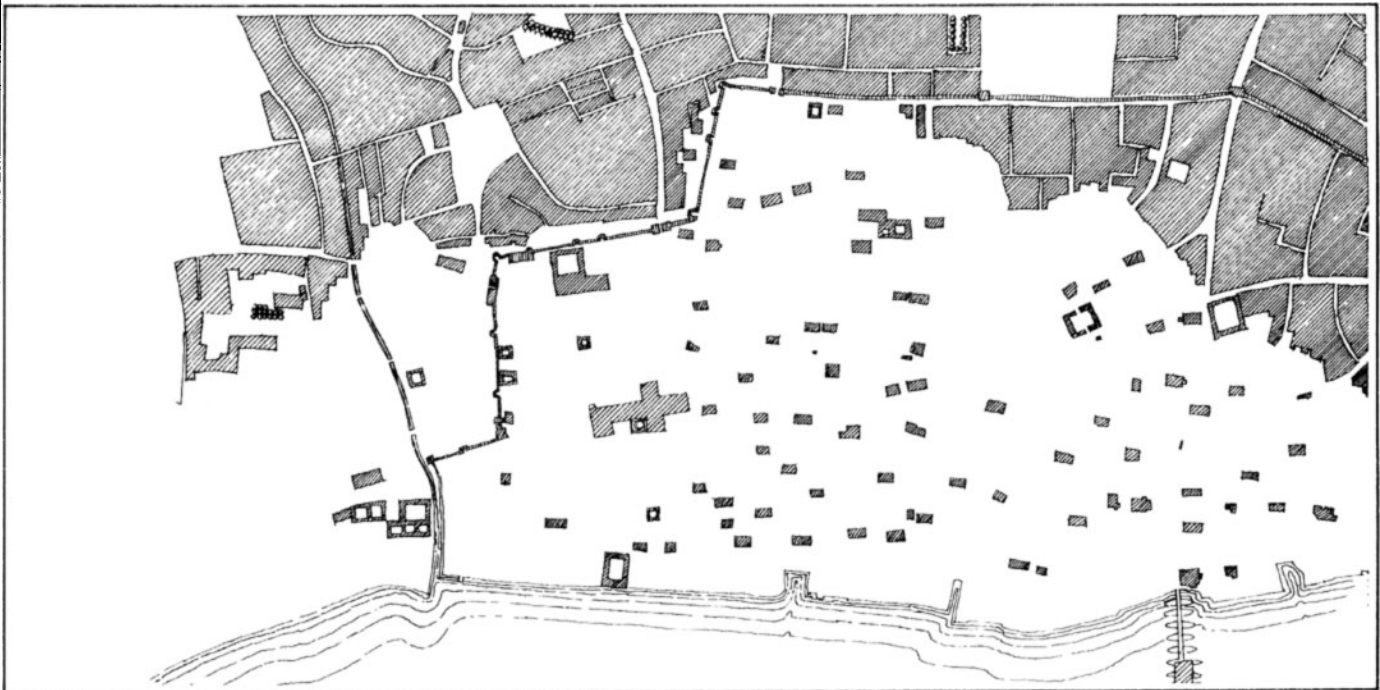
It is interesting to notice that while the layout

45 *The Imperial Forum Rome, 1877: before large scale archaeological reconstruction and urban destruction. Roman Forum on the right, Trajan Forum on bottom left, Augustus Forum on centre left and the Forum of Nerva at the top left. Some elements of the ancient layout survived the continuous transformation of the town, others were absorbed and lost within the new urban blocks. The plan of the Temple of Antonio and Faustina is shown in the Roman Forum (arrow).*



45

46 *London after the Great Fire, 1666. Considering how few built elements were left after the fire, London could have been subject to a much more radical transformation, but the old street layout was preserved and also the property structure, buildings changed from Medieval to Neo-classical but the structure of the city remained unchanged.*



46

of the old town remained unchanged to a great extent, spaces were entirely transformed when the proportions were distorted, and the expression of the buildings became entirely different.

But if anything, the structure of the town as a system of spaces has been improved. And it is in the nature of an urban layout that it can be interpreted in a variety of ways without losing its quality. Cuzco is a case of such radical reinterpretation, but its transformation was as unique as that of Diocletian's palace in that it happened as a total operation – affecting the totality of the pre-existing plan, and happening simultaneously throughout the whole place.

Cuzco, Spalato, and Rome testify to the validity and permanence of an urban plan well beyond its original and foreseeable development. But in the three cases (which are taken as archetypical ones) there has been one rule which has commanded the process: a correct relationship between urban morphology and building types has been maintained.

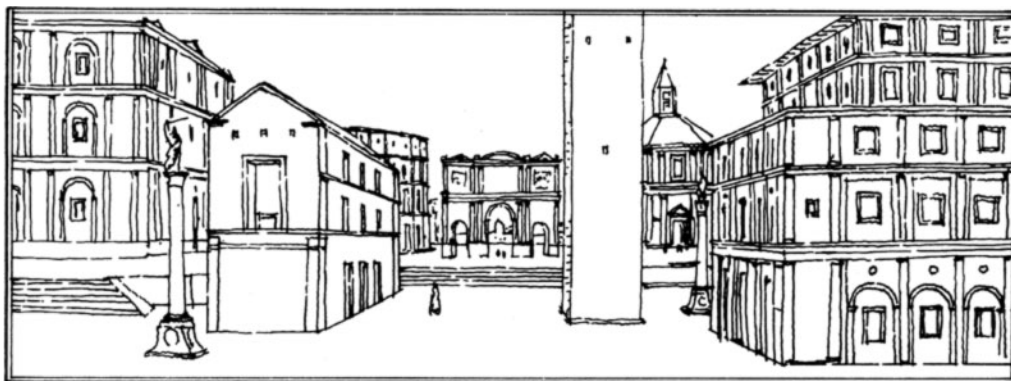
But these transformations have gone further than a reinterpretation of a pre-existing layout or the conversion of a multitude of isolated buildings. On the one hand there are transformations of buildings through the functional transformation of almost every single space; while on the other hand there are profound transformations of the urban morphology. These have happened within certain areas of the town (as in the transformation of the main square of Cuzco by the Spaniards) or to the whole of the town's pre-existing plan (as with the ancient plan of Rome of which only a few traces remain).

The Inca square of Cuzco was divided into two sectors separated by the canalised bed of a river, but it was essentially one very large space. The Spanish intervention in this area consisted of 'invading' the open space and organising it into a more complex structure of open spaces and building blocks, so that three new squares were created on the space of the old one. The old

boundaries were partly retained and partly overgrown by new buildings. These required more space and took over part of the open space. However, except for the east side of the Inca square which was completely redefined, other alterations to the old boundaries took the form of minor re-adjustments.

This form of growth – internal extension which occurs within the boundaries of the built up area of a city – is similar to additive growth in that it requires a carefully controlled operation which is very much related to pre-existing elements. Developments of this kind take place with the advantages, but also within the constraints, of the preexisting framework. And it is in this context that the development can be seen as a variety of additive transformations which almost invariably become associated with urban intervention.

Towns need permanence at least as much as they need transformation. An urban place without memory or reference of any kind would become



oppressive. Meaningful urban transformation occurs in relation to meaningful urban places. Additive transformation occurs on a great scale in modern towns, but it occurs as an infinitely fragmented process of repair and enlargement. Such additive transformations are typical of suburban districts, but because of their fragmented nature, it is unlikely that they will have any real power to transform suburban districts into urban ones. The modern city has become degraded to a fragmented collection of suburbs and its dynamic has been degraded in the process.

Understanding the relationship between permanent and temporary elements in the city is most important for the understanding of the process of urban evolution. The very permanence of elements in the town depends on their capacity for being transformed and adjusted, there exist buildings or parts of towns which become consolidated to the

extent that they can be intimately associated with the character of a particular town; while the continuous collective use of these buildings and parts of towns results in continuous changes in their architecture. The plan of a town is a permanent element in so far as its essential features tend to remain. It is difficult to think that the entire structure of streets and open spaces can be altered, but it allows for some changes: the street network may become denser; open spaces can be built upon; urban blocks can occasionally be cleared to give way to new open spaces; and the relationship between open spaces and buildings occurs within a boundary zone which is constantly revised. The plans of Cuzco, Spalato or Rome illustrate this capacity of the plan for transformation and permanence. But this is valid within certain margins which regulate the process. Neither indiscriminate clearance nor densification to the extent of overcrowding can produce beneficial effects. Rather the breakdown of the urban balance and

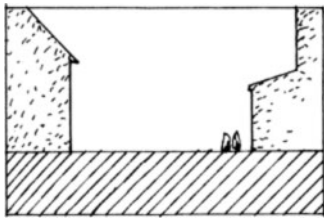
the paralysation of urban life is caused by the complete destruction of urban continuity that results from indiscriminate clearance, while normal human relations become impossible with overcrowding.

The monuments are permanent elements of significant importance:

... This permanency is given by their constitutive value, by their history, by art ... by memory ...¹⁸

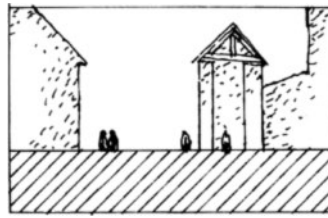
They are unique buildings differentiated from the fabric of the towns by their architecture, urban location, symbolic value, and their fixation in time.

But while they may have very precise and definitive forms they can, at the same time (and in an apparently contradictory process), accept radical transformation. The analysis of urban transformations has produced evidence to the effect that



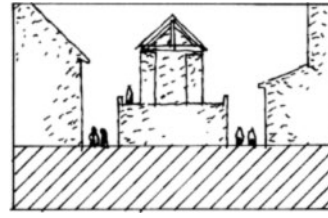
47 Types of additive transformation:
Top: the urban elements before the transformation process.

Middle: one form of intervention; the open spaces are built upon. Each building is in this context – a small urban block; the street network becomes more complex.



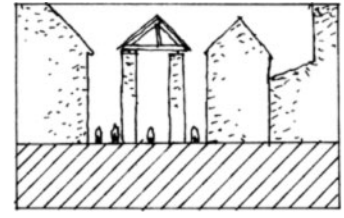
Bottom: a different form of intervention over the same place; the urban space is modified as a consequence of the construction of new buildings which are attached to the pre-existing elements.

(drawings based on paintings by Luciano da Laurana c1500).



48 The street front constitutes a zone constantly subject to revision; transformations which occur on this highly sensitive area have immediate repercussion on the quality of the urban space.

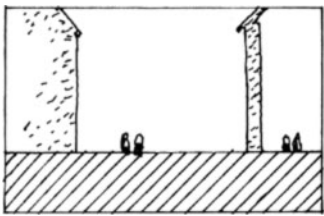
(A) The pre-existing space



(B) An element added to the one side regularising the street line

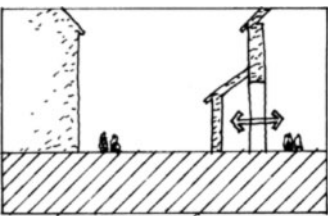
(C) A freestanding element results in the densification of the street network.

(D) A combined intervention



49 The perimeter of a monumental room is particularly sensitive to change; small transformations might leave its spatial quality unchanged but can produce important functional transformations.

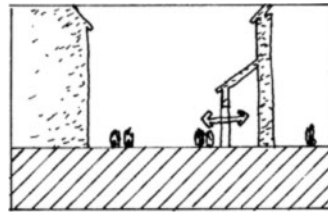
(A) The pre-existing elements



(B) The monumental room is extended taking over public space.

(C) A new street front is created, new buildings have access from the street.

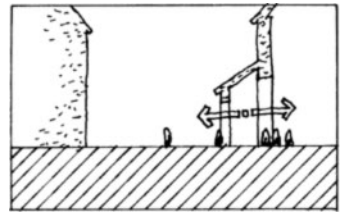
(D) A connector space is created.



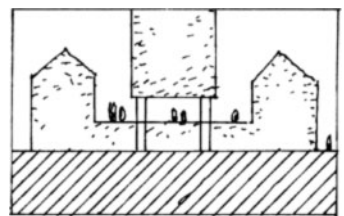
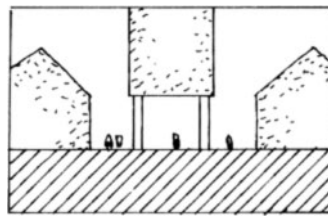
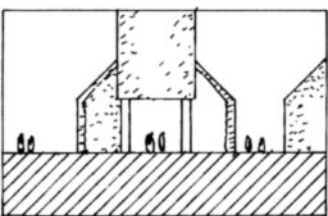
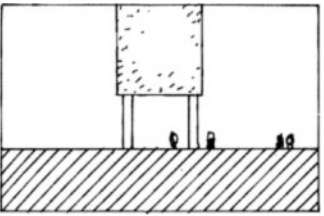
50 (A) The open space of a building raised on 'pilotis' is often meaningless.

(B) If enclosed as shown it could be transformed into a useful nave, or,

(C) When integrated into a structure of urban spaces becomes spatially and functionally meaningful



(D) But it can also be subdivided and absorbed into a structure of urban blocks.



Those elements which have reached the maximum degree of architectural precision – as it happens with monuments – offer, consequently, the maximum distributive choice and in a more general sense the maximum functional choice.¹⁹

But some other characteristics also explain the capacity of buildings for transformation: built form is ambiguous in relation to function, it transcends the circumstantial conditions under which it has first been materialised.

Distributive indifference is, according to Rossi, in the nature of architecture. And this indifference explains finally the adaptability of buildings for different functions.

Buildings are also ambiguous in relation to their meaning in that though it is difficult to eliminate the symbolic value of outstanding buildings it is possible to manipulate it so that the building will represent something different from that which was

originally intended.

Periods of transformation and stabilisation occur one after the other. Once the possibilities of a building are exhausted it will become obsolete and eventually be abandoned or destroyed.

Stabilisation is – in a sense – completion. But completeness of a building is not an entirely objective concept. It depends on functional and cultural considerations. At a functional level there exists a basic state of completeness when a building is fit for habitation. But this fitness depends very much on the evolution of material and technological standards of habitability for a particular society: systems for lighting, heating, water provision . . .

At a cultural level the concept of completeness corresponds with predetermined images. It is for this reason that 'brutalist' buildings of exposed concrete facades were resisted as unfinished by the laymen while they were considered as complete by the architects. And in a similar sense a culturally

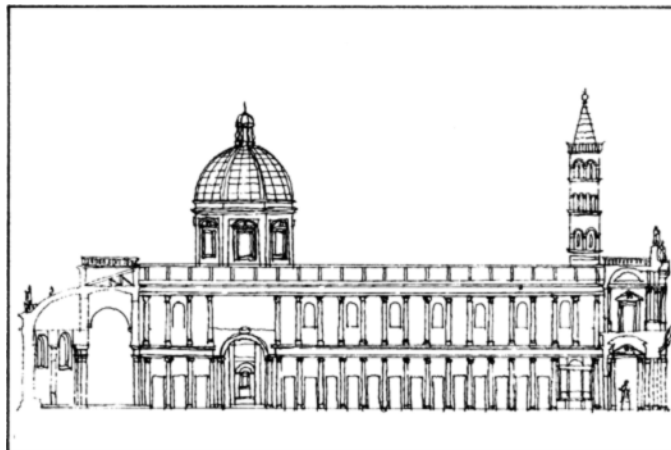
pre-defined image affects the interpretation of the past. That is why classical Greek buildings, eroded by the effect of time and cleaned of their paintings and decorations, are more akin to the present epoch's tastes and expectations than they would have been had they retained all their features. And this is equally true of many contemporary architects' references to ancient Roman monuments.

Monuments constitute unique nuclei around which developments will take place. The collective internal space of a monument (such as a major church) will generate uses which tend in time to diversify and require even further space. Such internal, collective space is not different from the collective open space of a public square. Indeed some of the most suggestive examples of monumental space within a building show similar architectural features to monumental spaces outside.

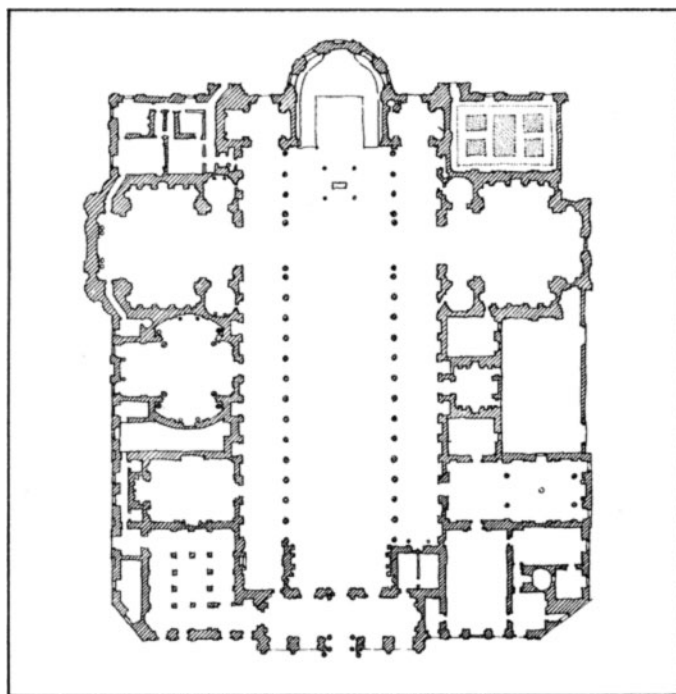
So, in the same way in which the public square becomes a privileged location for buildings, the perimeter of a collective internal space also tends



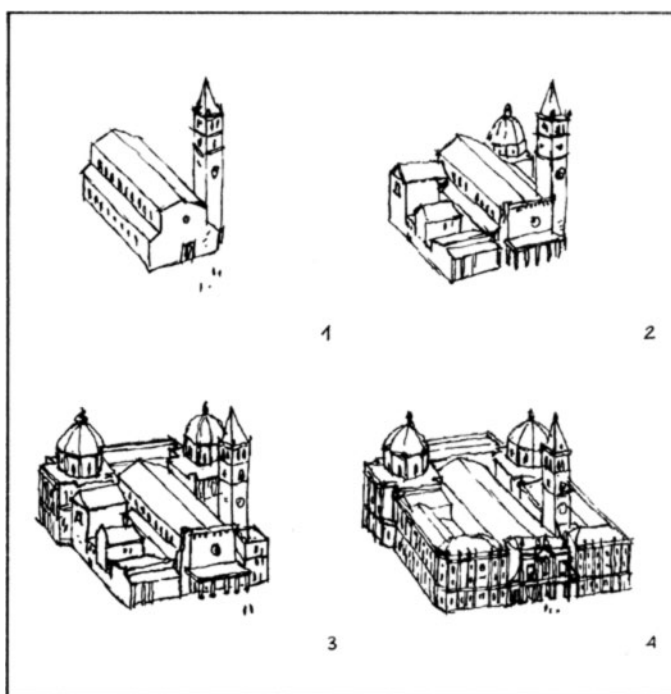
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to become a privileged location for further buildings and spaces. And, these additional buildings and spaces are yet another case of additive transformation. Further, the external perimeter of a monument also becomes a preferred location for those activities which depend for their existence on their close proximity to such large collective internal spaces. Such is the case of numerous monuments which have been slowly surrounded by minor buildings, shops, workshops, houses. In addition to this one must take into account the urban tendency to maintain the continuity of the street front: for, the street wall of a monument – however architecturally rich it may be – usually signifies an interruption in the sequence of activities along that portion of the street – a sequence which has to be restored to regain the full use of the street. The case of the basilica of Santa Maria Maggiore in Rome seems to be an appropriate one to close this presentation on historical examples.

This short account of instances of urban trans-

formation gives some insight into an often forgotten mechanism of urban development and renewal. These few case studies have only briefly been analysed, and although they represent different scales in which the process takes place, it is not intended that they be considered a comprehensive picture of the process. Innumerable other cases could have been mentioned and analysed: the great Gothic cathedrals continuously enlarged and transformed throughout the ages, the great Baroque complexes, palaces, churches, public buildings, the urban bridges of London, Paris, Florence – the *ponte maisons* – those complex urban streets spanning rivers, temporary constructions in public places erected for significant events . . . What has been stressed here is the nature of the process of transformation of built space, the different mechanisms by which a town can develop and incorporate new parts, the peculiarities of these mechanisms, and the role of additive transformation in the need for attaining historical and spatial

identity for the places in the city.

In all transformations there exists an element of predetermination and an element of circumstance.

Transformation is predetermined in the sense that the range of transformations possible are restricted at any particular time by the culture within which they occur. The limits as to which transformations a particular culture can conceive will depend on its technical capabilities, its capacity for organisation, and also on the language of architectural forms and spatial arrangements understood by that culture.

This element of predetermination that underlies all transformations, arises out of the restrictions which are imposed by pre-existing buildings, by the morphology of the urban context, by the evolution of building types, by the specific historical and geographical location of the transformations.

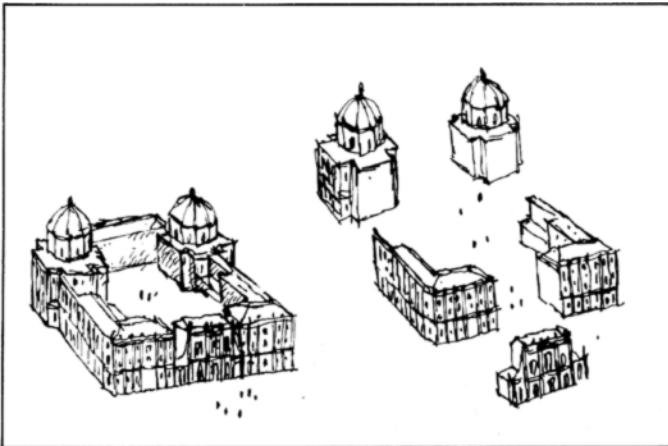
The circumstantial conditions governing transformations spring from the particular needs which generate the brief for the extension and trans-

51 View of the church in the process of transformation. The body of the nave of the old basilica is visible, the large side chapel is the Capella Sforza by Michelangelo.

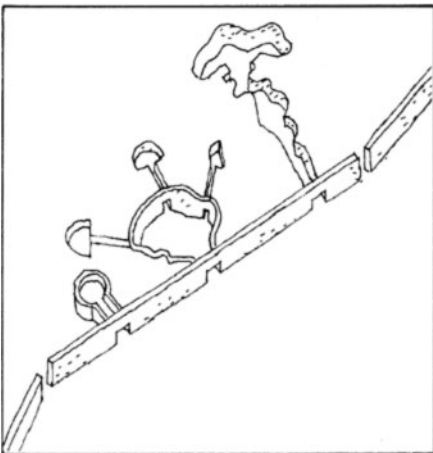
52 Longitudinal section through the completed building (based on section by Letarouilly).

53 Plan of the completed building (Letarouilly).

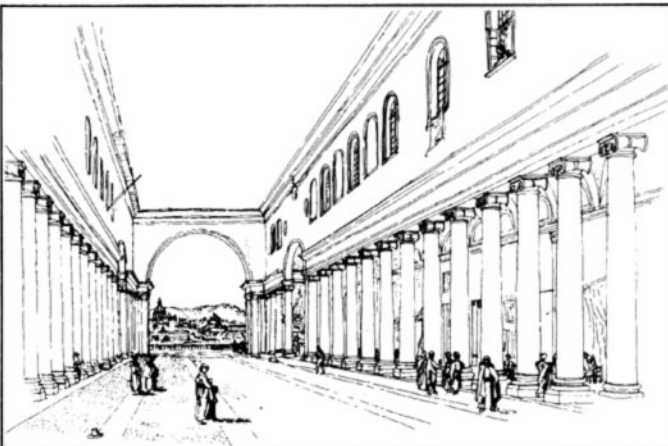
54 The transformation process:
1 The original building.
2 Addition of the side chapels and portico.
3 Creation of the transept and addition of elements to the back facade.



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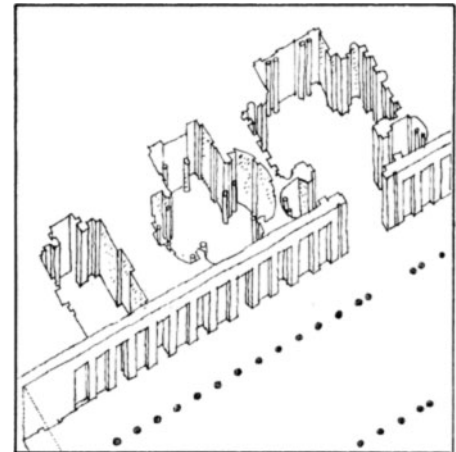
4 The building is regularised; construction of new entrance front and normalisation of the side facades



56

55 The buildings added around the perimeter of the old basilica; the new perimeter retains its integrity. Even when seen isolated from the original complex.

56 Front view of the finished building facade by Fuga and F. Ponzio (1741-43).



58

57-58 The perimeter walls of the nave have a similar role to the facade wall of a building. The unity of the public space (nave) is retained despite the disparity between the subsidiary spaces (drawing based on sketch by Leo Krier).

59-60 The nave of the church is a collective space; its architecture is similar to that of a Piazza: The nave of the basilica without a roof resembles the Uffizzi ... while the Uffizzi roofed-over became a monumental nave.



60

formation of a building, from the balance of power (economic or otherwise) within society, from the coincidence of ideas, and from fortuitous and accidental events.

While there always exist several architectural possibilities for the development of any single building or any part of the city, only one materialises at a time. But however different these possibilities might look they are all, nevertheless, determined by common cultural factors. It is exactly in this sense that science-fiction-type projections for the future of our cities tell as much about the characteristics of our present society, about our limitations and achievements, as any actual modern part of a town does. Science-fiction is limited by the range of what is possible to society at any point in its development; while innumerable variations about the form of buildings could be explored before the invention of the arch, none of them could include this element and its possibilities. The contemporary case is somewhat different: the problem confronting architects is not what can be imagined when imagination is the only limit, but rather, what can be imagined, however radical, that could be materialised under present contingencies for an actual society and in a real place?

All the transformations analysed so far have been actual historical cases or projects, that is, transformations which actually took place or which were envisaged at a particular period but didn't occur. However, it is also possible — on the basis of extensive solid knowledge of a particular

historical period — to speculate on those alternatives which could have materialised historically.

The reason for exploring this field of imaginary transformations lies not so much in the need to investigate a particular historical period, but in the opportunity these permit for exploring the nature of the transformation process. Some examples dealt with on the following pages illustrate particular forms of consolidation which didn't take place, but which could have occurred (since they were feasible in relation to technical means available). For example, the analysis of the progressive development, enlargement, and consolidation of the basilica of Sta Maria Maggiore, as it actually happened, is followed by a speculation on 'the Sta Maria Maggiore which didn't happen'. The comparative analysis should bring out some of the peculiarities of this building, as much as it should reveal something of the mechanisms of additive transformation.

Finally, a set of examples of contemporary work is presented. The analysis of buildings by Le Corbusier and Louis Kahn will present the case of contemporary buildings devised as ensembles of rooms and groups of rooms, which in themselves constitute complete building units. They are no different in this respect from those classical buildings analysed on the previous pages. Le Corbusier and Kahn did not have to deal with the restrictions imposed by pre-existing elements (except in few projects such as the early town houses by Le Corbusier or the museum in Yale by Kahn). Their

projects do, however, suggest innumerable possible transformations. This is particularly true for Chandigarh and Dacca.

One form in which these monumental centres could be transformed is suggested, on the basis of a further development of their plans.

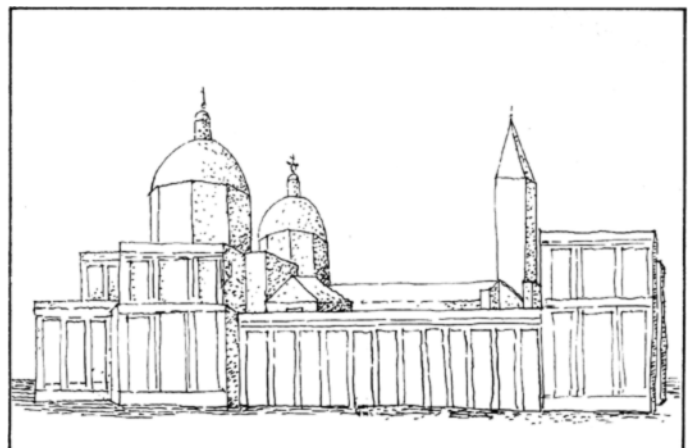
In addition, the work of some contemporary architects who have produced work based on the principles of additive transformations to pre-existing buildings is briefly analysed.

The majority of these architects share an interest in the study of urban form and urban history, in the study of history as a source of material for the construction of the town, in the investigation of urban building types, in the design of buildings which are composed of well defined and highly integrated parts. They also share an awareness of the importance of the spatial continuity and functional diversity of the city, of the necessity of a policy of *de-zoning* as the basis for a normal urban development. These architects share a common purpose of recapturing the integrity of the urban fabric by making use of the existing elements, and also for creating as many additional elements as are needed for reconstructing the unity and continuity lacking in the contemporary city.

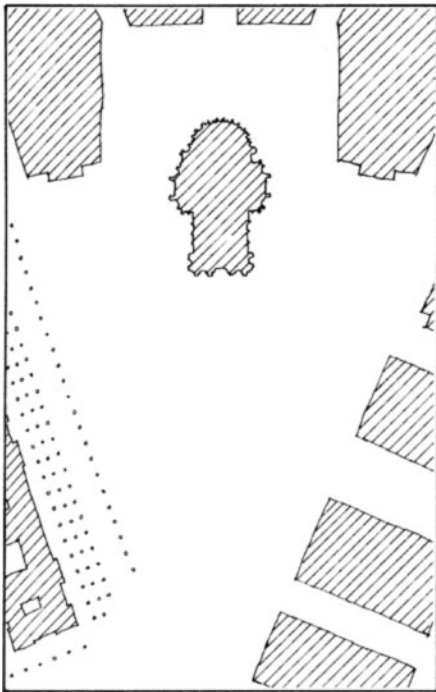
All projects presented here are feasible, they could be implemented and realised. These are not fictions but images of a reality which could happen today, and could help to restore the infinite richness of urban life which is so absent in the modern town.

61 Every building contains clues for its transformation: scales, portions, materials, use, structure; but the way these can be taken varies considerably.

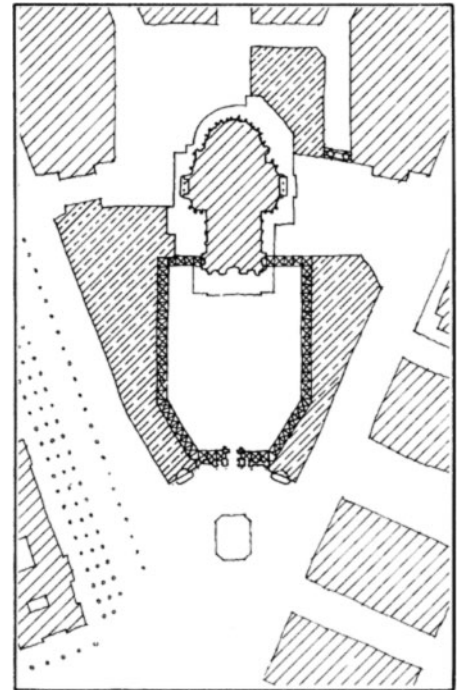
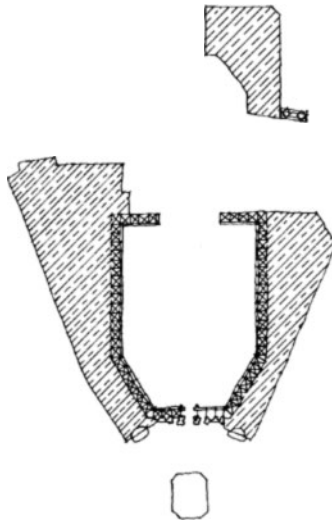
Had the extension of the fabric of St Maria Maggiore been based on the extension of the vocabulary of the Capella Sforza it would have been a very different complex.



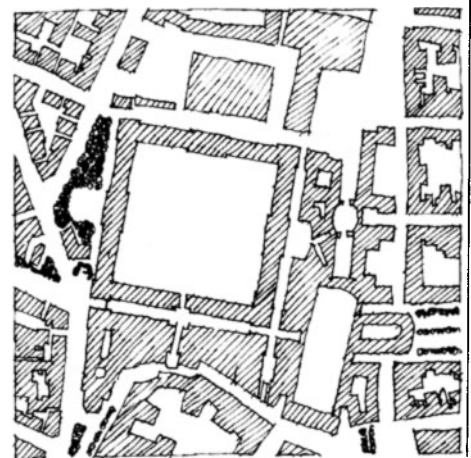
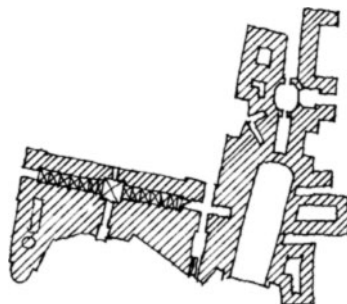
62 Conversely had the extension been faithfully based on the vocabulary and scale of elements of the church, the result would have been more monumental. The solution adopted for the completion of the church is closer to this than to the previous one.

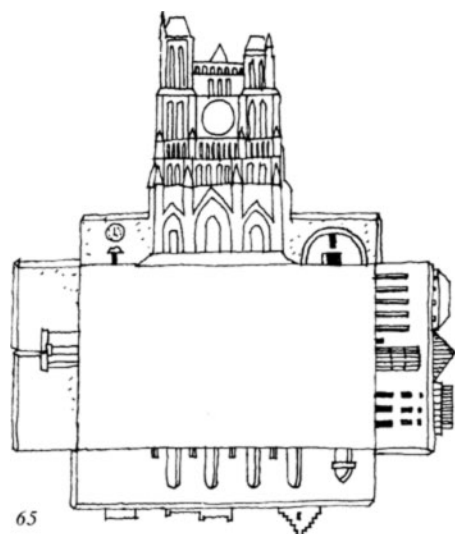


63 Camillo Sitte's proposal for the transformation of the Votive church plaza: The extended and badly defined space around the church is rearranged. A new square is created in front of the church, and a small building ingeniously placed between the church and pre-existing buildings defines another small informal square.

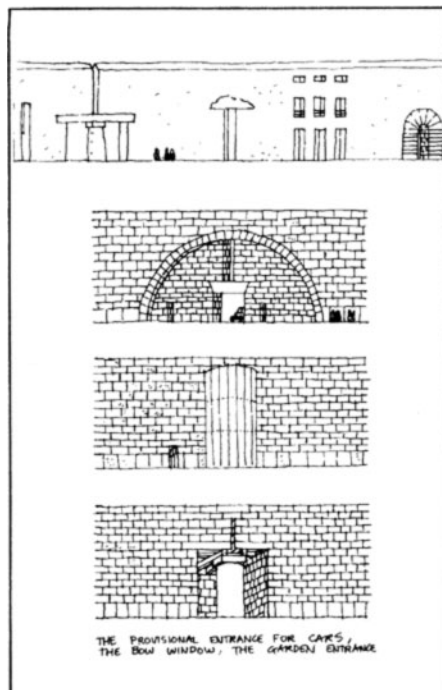


64 Robert Krier's proposal for the Rotebühlplatz in Stuttgart. The existing U-shaped building was a decaying army barrack block built in the last century which is restored and a new pavilion is created forming a quadrangle. A series of infill blocks and a small square create a meaningful continuity in the town. This is one of a series of proposals for the reconstruction of the urban space in Stuttgart.



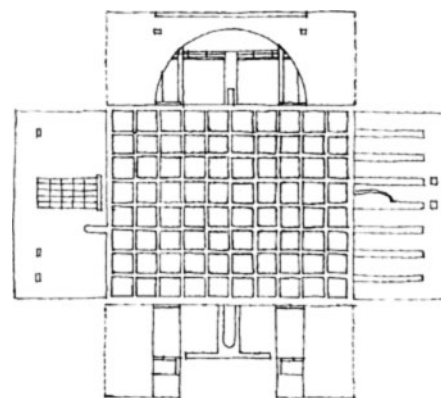


65 A monumental wall enclosing a quadrangle is proposed to create spatial order in a situation of chaotic disintegration. The scale and material of the wall relate to the great Gothic cathedral.



66

a regular space has been suggested in previous sketches in Krier's work; it appears also in his project for the Royal Mint Housing competition (1974). In the Royal Mint the idea has been to define the space first and bring public buildings which could communicate to this public space, attaching them to the pre-existing wall at a later stage, whereas in

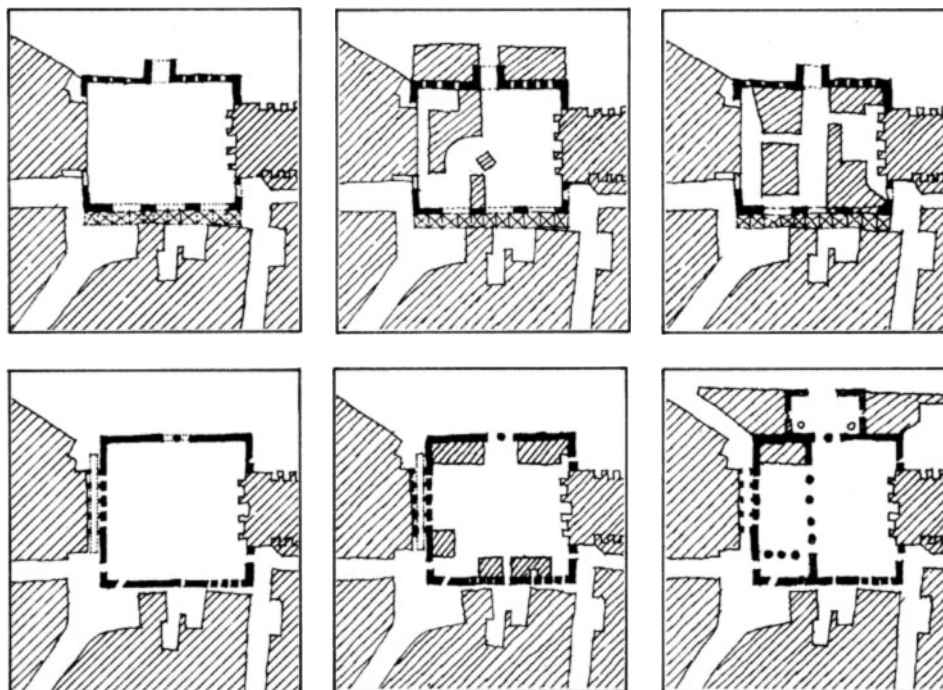


67

Amiens the wall comes after the buildings.

68-69 The quadrangle form contains numerous possibilities for its ulterior transformation; as soon as the 'Wall of Amiens' was built, a new set of possibilities would be open to the town for its development. Naturally the space could remain as proposed

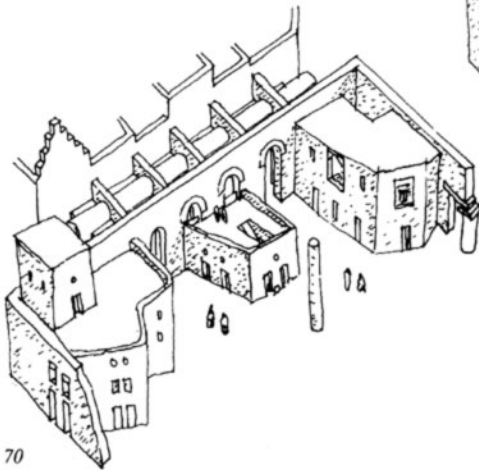
but it could also be transformed in its interior by the erection of buildings attached to it and the erection of freestanding buildings; the wall creates a unifying background. Any intervention over this well defined space would have a strong effect over the totality of the space. Further, the area between the wall and the existing buildings, and beyond the wall (to the open space) could also be transformed.



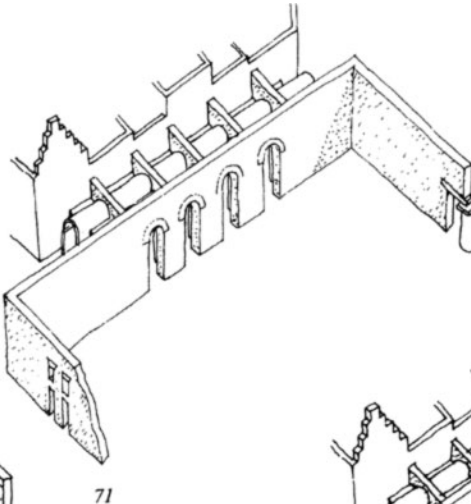
68 - 69

70 Krier's proposal

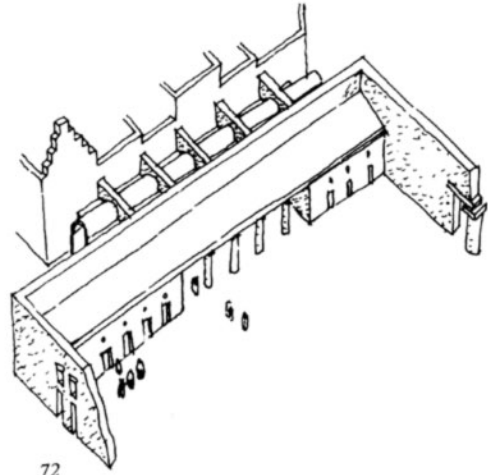
71-72 New interventions could either have a regular and geometric character or an irregular random quality. It could lead to large scale centrally controlled operations or to small scale operations staggered in time.



70



71



72

Echternach

High school at Echternach, 1970:

The brief required the provision of new accommodation amounting to an area as large as that of the existing school.

73-74 The town of Echternach retains a very strong urban character and a coherent unity. The school buildings form an important part of a Baroque complex. In the town the solution meets the requirements of the programme without having a negative impact on the development of the town. This was achieved by duplicating the school building by

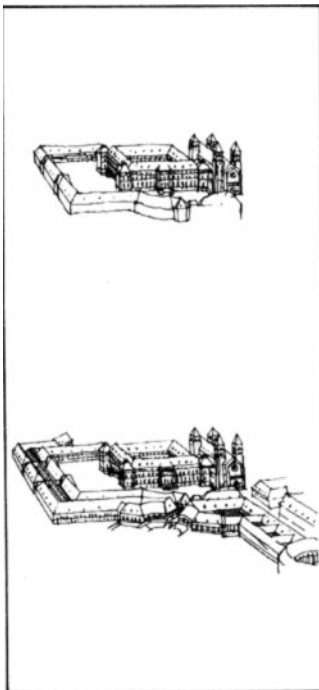
means of the construction of an externally identical block running parallel to it and creating an arcade in the space left between the buildings.

That the appropriation of the existing architectural vocabulary has been carried out to an extreme in this project, is legitimised by the need of creating a large building and making

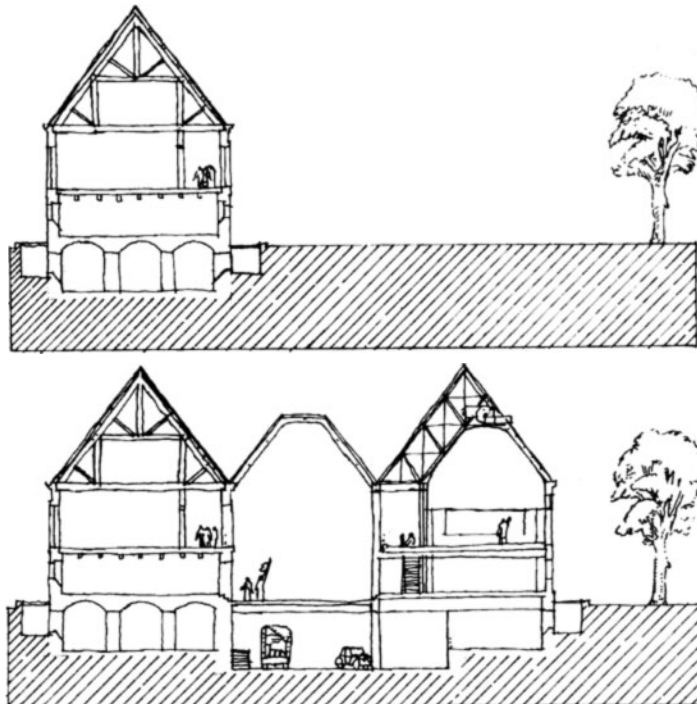
it disappear at the same time within the general context of the town.

75 Transformation of the basilica of Saint 'W': various alternatives for creating an entrance porch are suggested.

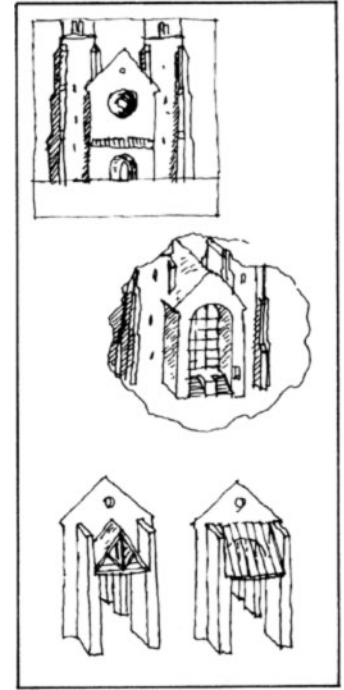
(All drawings based on originals by Leon Krier)



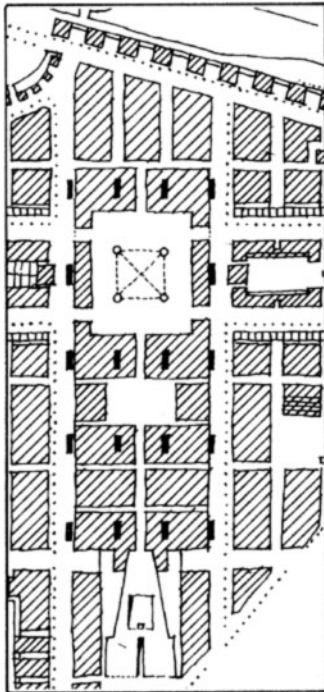
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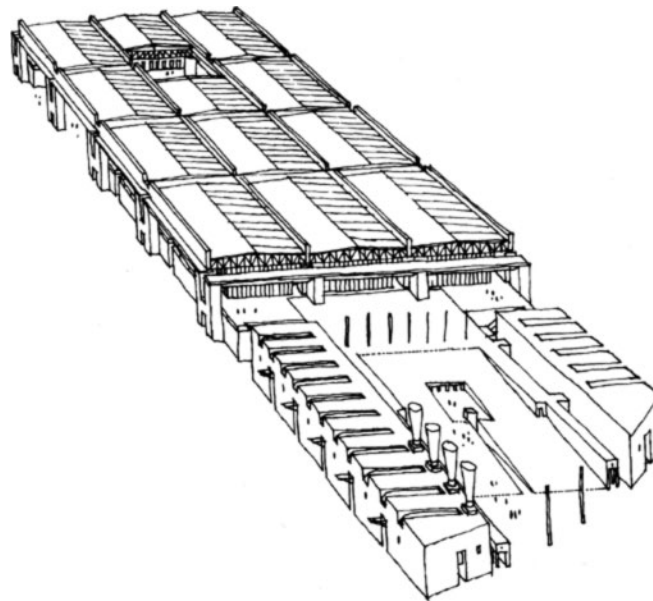


76
La Villette, Paris, 1976, Leon Krier.

The brief of the competition called for the reutilisation of two large buildings existing on the site: the 'Grande Salle', a slaughterhouse built in 1958, and the 'Grande Halle', one of three large buildings which constituted a cattle market, built in 1866.

Dusseldorf

Düsseldorf, James Stirling



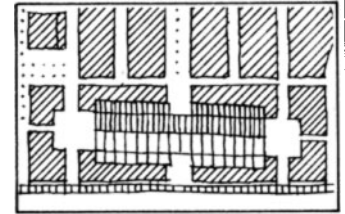
76-77 The 'Grande Salle' transformed: the urban grid penetrates the building. This is possible because of the gigantic scale of its structure. The main boulevard crosses through it, and an open space is created (Place des Congrès) in the centre of the intersection. The monumental slaughterhouse is transformed into an important part

81-82 The museum building is closely related to pre-existing buildings to the point of having a small facade of its own on the street. A series of

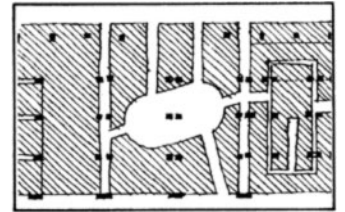
of the quartier, and though it retains its monumental character, it is also integrated into the domestic structure of urban blocks. The plan reads in these two opposite but simultaneous aspects.

78 The project by Agrest and Gandelonas is similar in that the 'Grande Salle' is also integrated into a

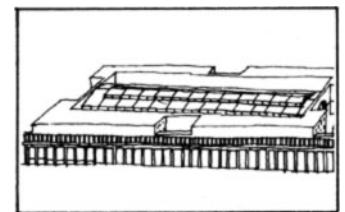
interesting spatial experiences is organised on a small site along a route which crosses through the building.



79

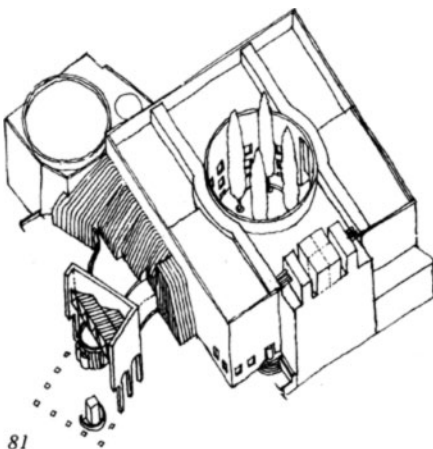


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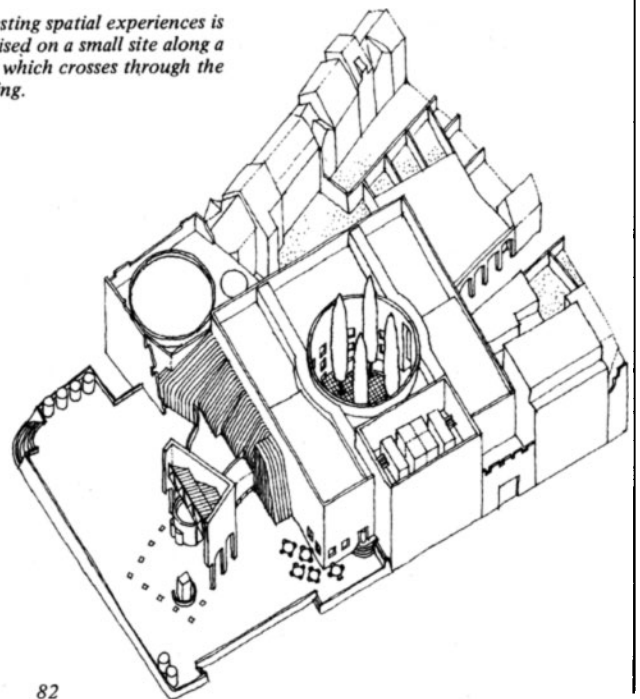


80 compact urban formation. The slaughterhouse, never used for its original purpose, could become a primary element of the quartier of La Villette.

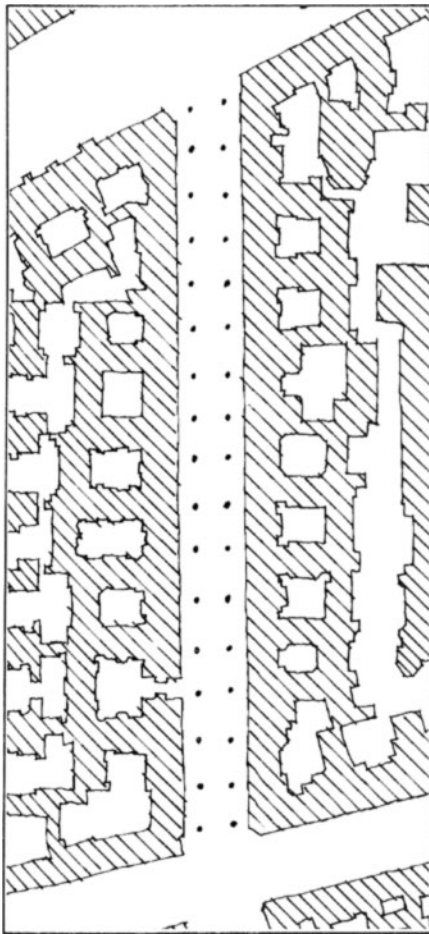
79-80 The 'Grande Halle' transformed: 'This 19th-century market building becomes reduced by its two lower aisles and built into a block with artisans workshops.'



81



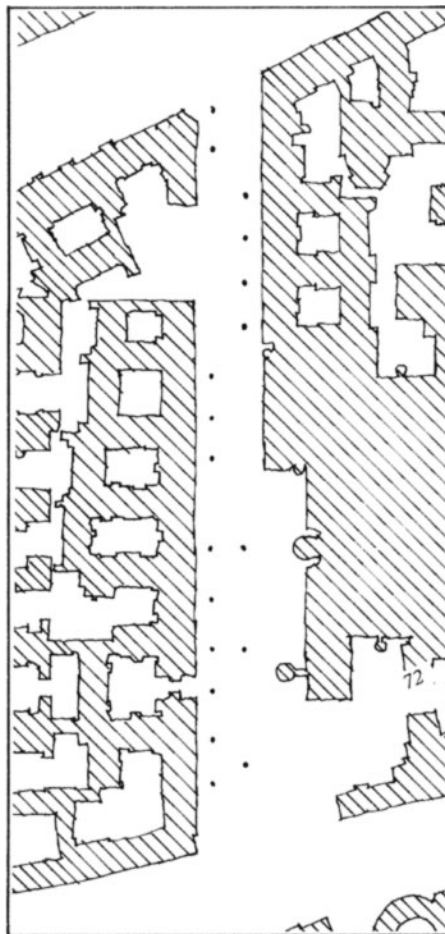
82



83
Meineke Strasse, Berlin, James Stirling

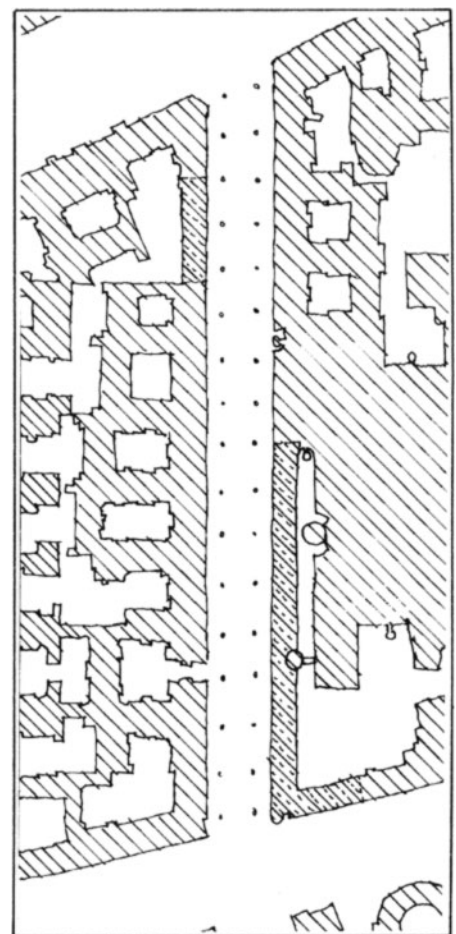
83 A residential street with an homogeneous character.

84-86 Was largely destroyed for the construction of a multi-storey car park which does not only completely destroy the street front, but also is

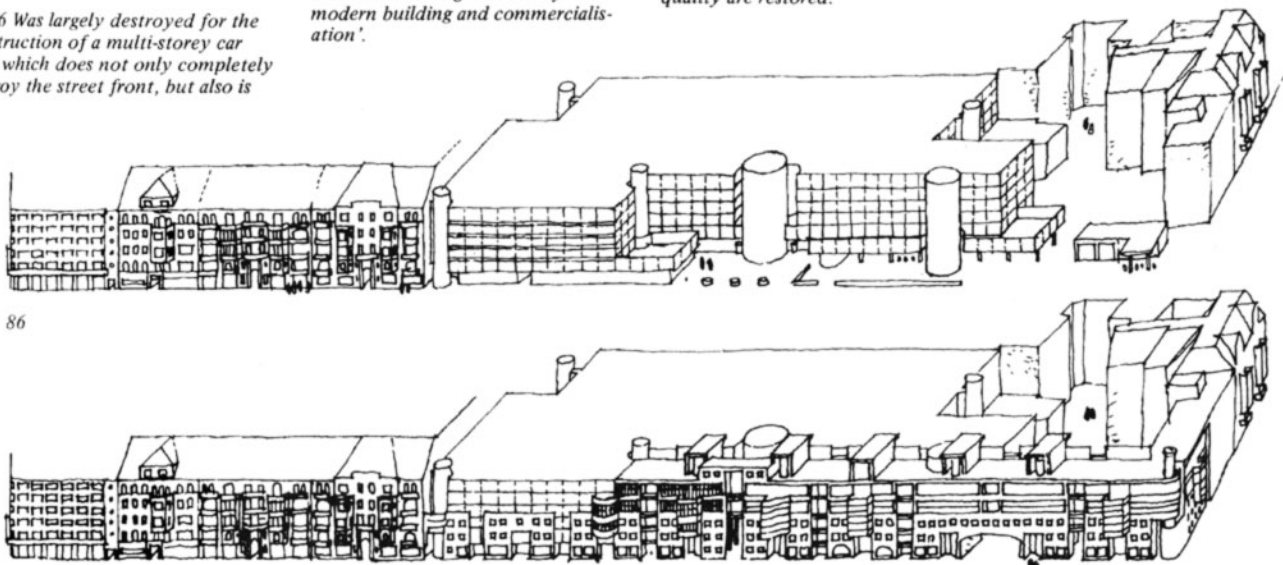


84
disruptive because of its scale and the clumsiness of its architecture.

85-87 The architect's objective has been 'to make good the post-war destruction brought about by modern building and commercialisation'.

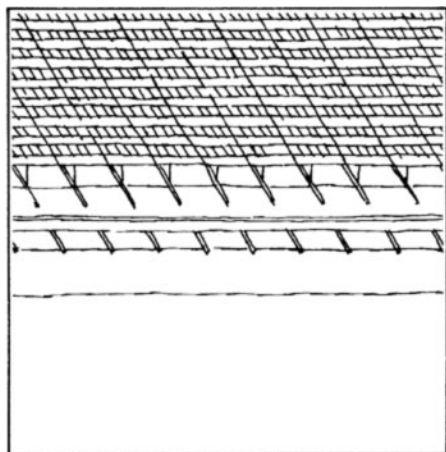


85
A new building is proposed, which conceals the garage block and yet allows for its normal functioning. A variety of accommodations is provided, and the street scale and quality are restored.

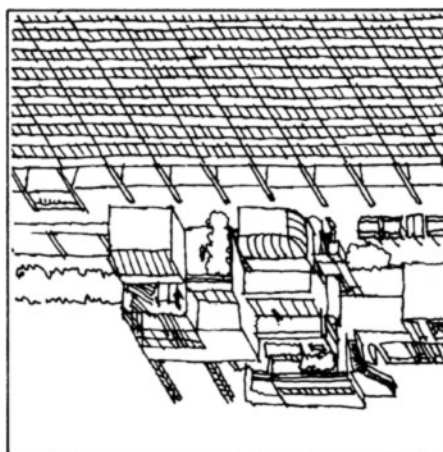


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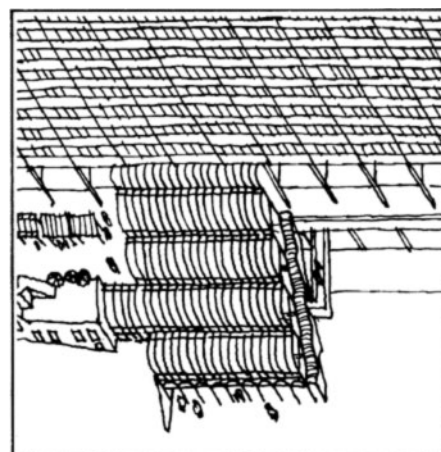
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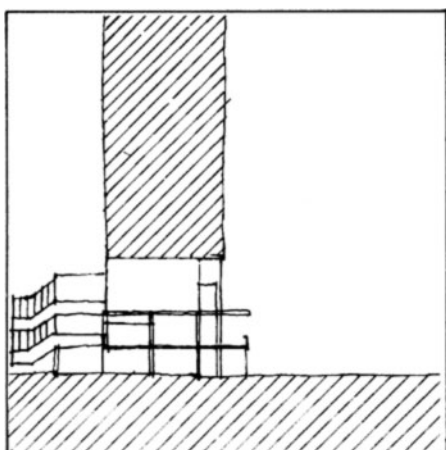
88A



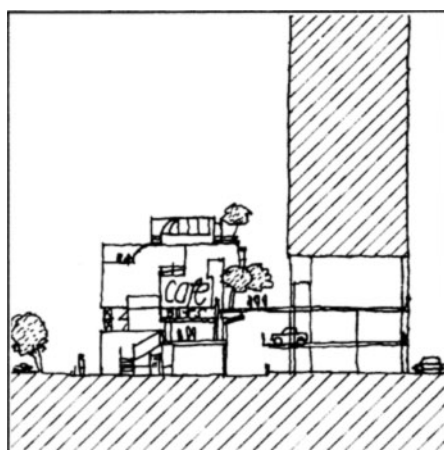
88B



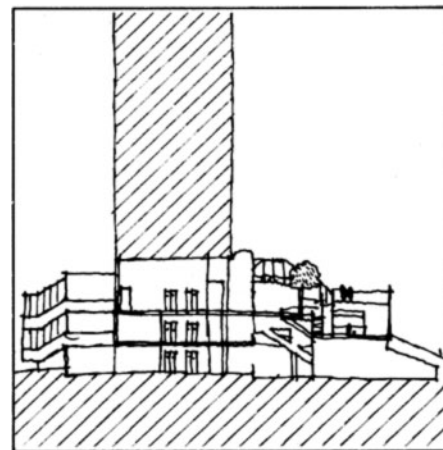
88C



89A



89B

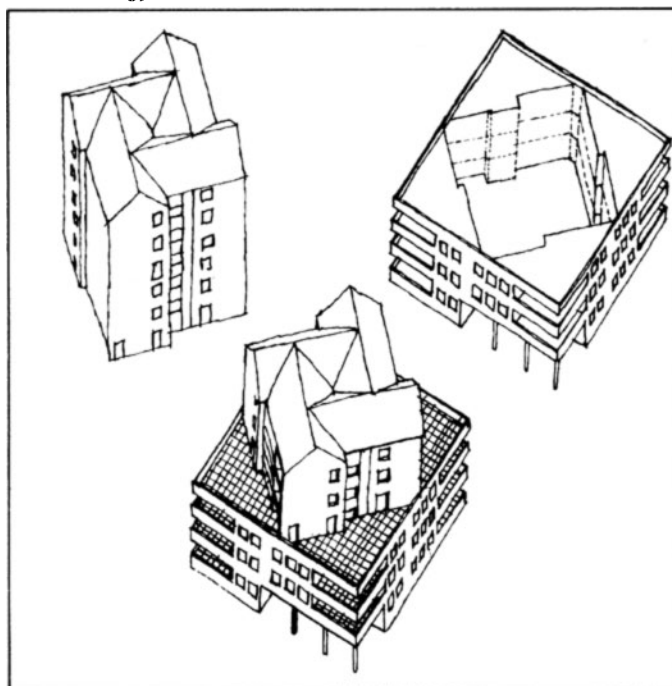


89C

Transformation of Housing estates

The transformation of housing estates into integral parts of the city requires an intervention of two connotations: at one level, the addition of new buildings is necessary for creating an urban structure, and for creating an intermediate urban scale which mediates between the monumental scale of the tower block or slab block, and the open space. At a different level, such action needs to contemplate the diversification of functions (de-zoning) necessary for a real integration of the buildings with the diversity of urban uses.

88 and 89 Transformation of Aylesbury Estate, South London. Students of the Architectural Association were asked to produce schemes for creating a connection between the pedestrian deck on the second floor of the housing blocks and the ground. New facilities should be provided around the system of staircases or ramps which were developed in the proposals. Although the schemes



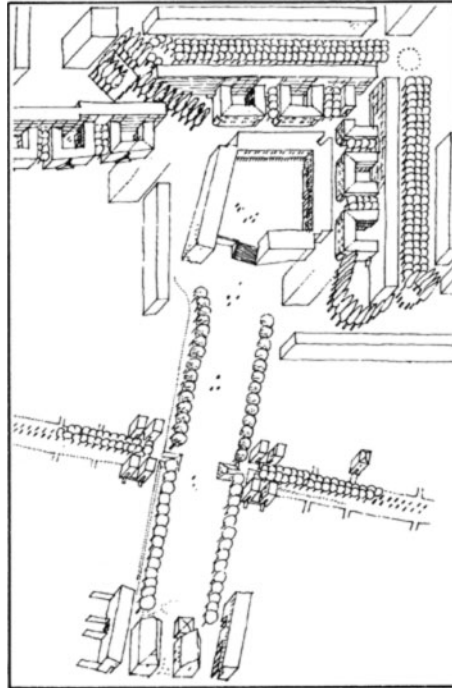
90

refer to only one reduced area of the estate, they indicate a viable way of dealing with under-used pedestrian facilities and lack of urban contact with the ground.

90 Transformation of a housing estate, Clapham Junction, London, Dominique Gerard. This project was developed within a more comprehensive framework, since the systematic transformation of an entire housing estate into an urban quartier was required. The useless space created by the position of the tower block in relation to the street is filled in with additional buildings which creates larger flats on the three lower floors, and shops at street level.

91 A French 'Grand Ensemble', consisting of very large slab blocks and vast open spaces, is transformed by means of the construction of the 'court' type buildings which are attached to the original blocks, and some free-standing buildings strategically located creating a sense of spatial definition. Trees are planted on very regular layouts, reinforcing the definition of the urban space. Additional blocks in these projects are intermediate in scale and the disproportionate large scale of the pre-existing buildings is effectively broken down into separate sections with a strong sense of identity.

Project by B Althabegoity, V Cornu, M Kétoff, P de Turenne, students of architecture.



91

92 to 94 An exercise in the transformation of a hypothetical housing estate. The conditions sought are:

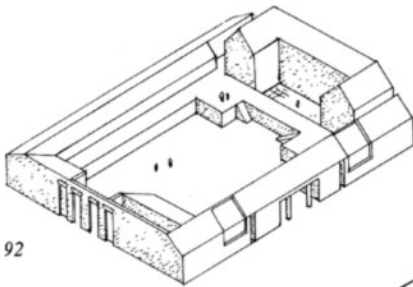
1 The reconstruction of urban space;

2 The creation of a variety of accommodation;

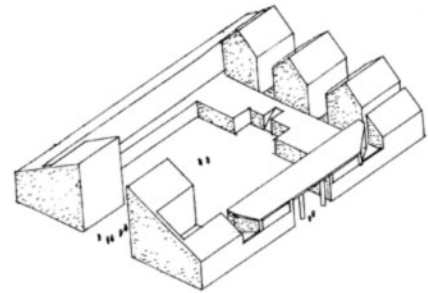
3 The transformation of an open-plan ground floor, with the building raised over columns, into a room of collective use and different possibilities of access.

The additive buildings are attached to the blind walls typical of a housing block of this nature, and create courts around the building. The scale and character is domestic, the elements are traditional.

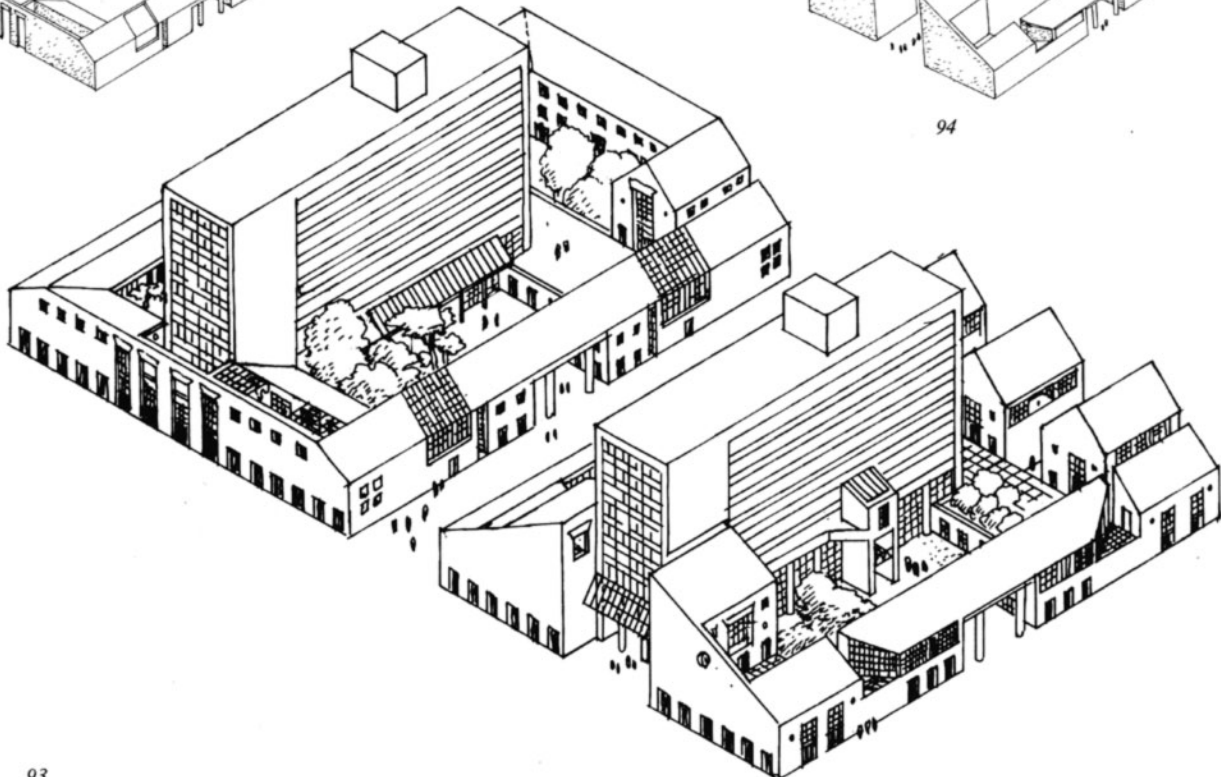
Project by Rodrigo Perez de Arce.



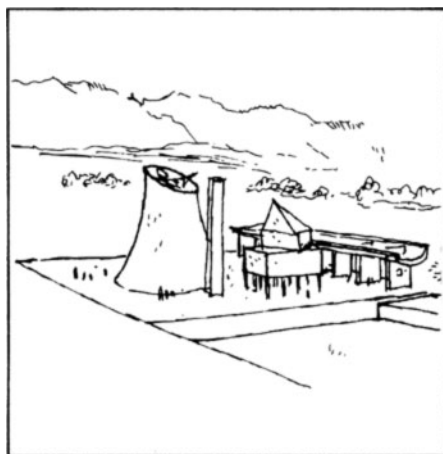
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94



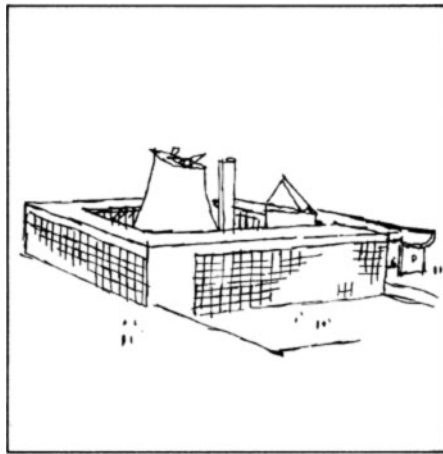
93



95A

95 The Assembly Building in Chandigarh is an ensemble of disparate buildings grouped together to meet the requirements of a complex brief.

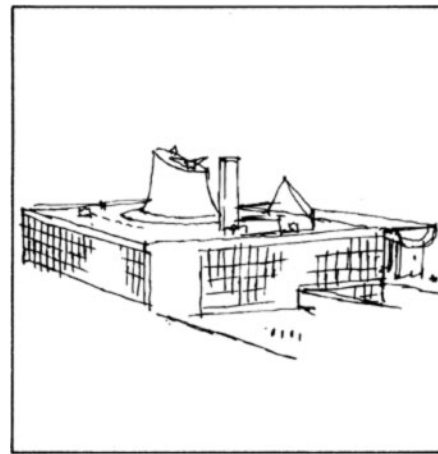
(A) The hyperbolic shell of the assembly chamber with its pyramid roof and the monumental portico constitute its monumental elements.



95B

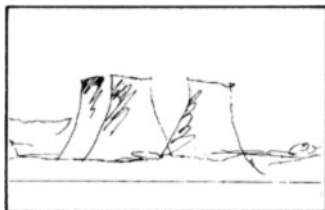
(B) These are in turn encircled by an office block with a brise soleil covering the external facades.

(C) The space defined between the office block and the free-standing elements is roofed over to complete the building, leaving some of the building's singular elements projecting through the roof.

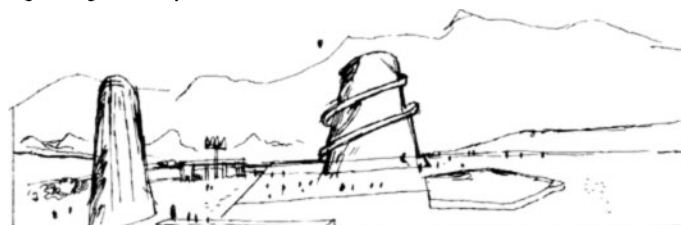


95C

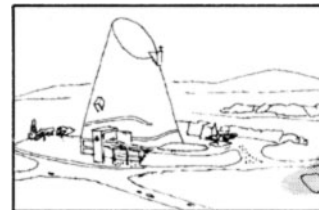
96 Le Corbusier developed these elements in isolation before grouping them together. His preliminary sketches show the origin of the hyperbolic concrete shell for the council chamber. The church of St Pierre in Firminy was to be based on a similar form, but in this instance, standing in isolation.



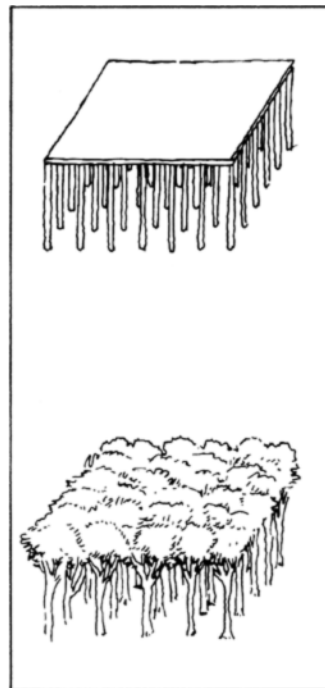
96A



96B

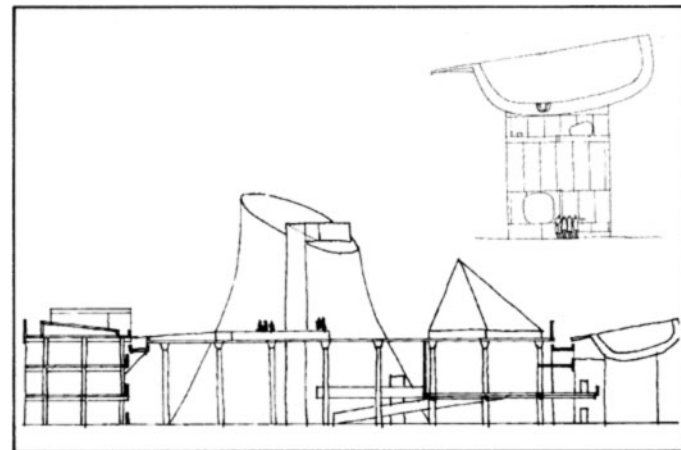


96C



97

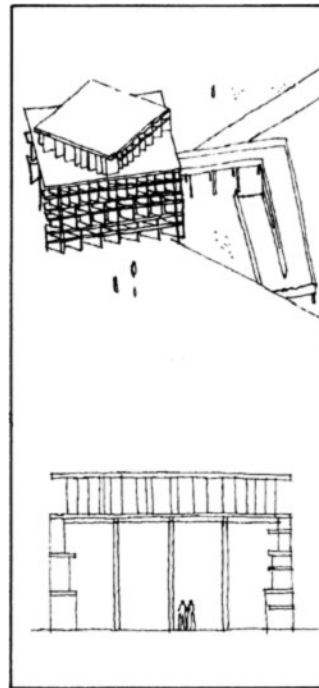
97 The infill columns and roof which cover the space left between the buildings are strikingly similar to those elements shown as possible ways of roofing over the central space in Leo Krier's scheme for the Royal Mint Housing Competition. (drawing based on Krier's sketches)



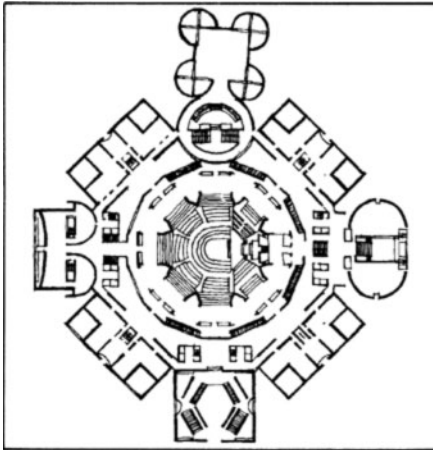
98

98 The precise shape of the portico was revised several times until the final form was reached.

99 The 'Tour des Ombres' (Tower of Shadows) was one of the monuments which was intended to be placed on the vast central esplanade. The 'Tour des Ombres' is a Corbusian brise soleil without a building.



99

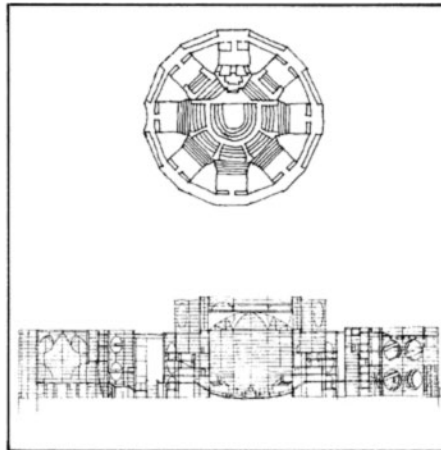


100A

100 (A) The Citadel of the Assembly, Dacca (Louis Kahn) is the most complex of Kahn's 'societies of rooms'. Each part of the building has an integrity of its own.

(B) The assembly chamber is a cylindrical shaped building – a 'building within a building'. The basis for the design of this chamber is explained by Kahn as follows:

'Once in class while explaining that structure is the maker of light, I introduced the idea of the beauty of the Greek columns in relation to each



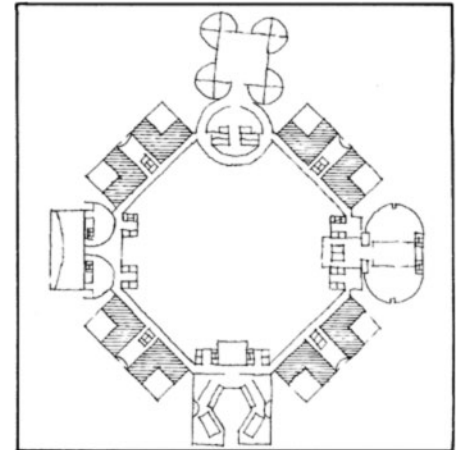
100B

other and I said the column was not light, the space was light. But the column feels strong not inside the column but outside . . . and more and more the column wants to feel its strength outside, and it leaves a hollow inside more and more, and becomes conscious of the hollow. And if you magnify this thought the column gets bigger and bigger, and

the periphery gets thinner and thinner, and inside is a court.²⁰

(C) The outer building is composed of eight integral parts: a mosque, an entrance hall, four identical office blocks, the ministers' lounge, and a building for dining and recreation.

101 and 103 Each component build-

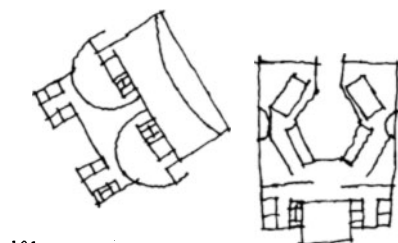


100C

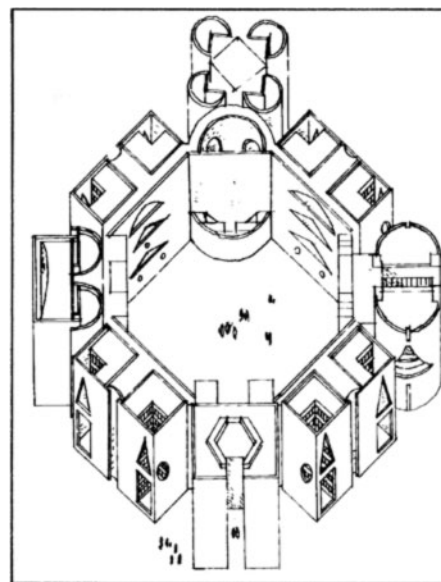
ing has a very strong identity and a precise geometry.

102 The outer ring of buildings seen in isolation suggests that the parts of the citadel have a value in themselves, but they also acquire a special quality when grouped together.

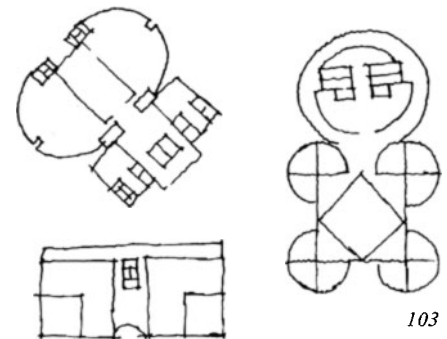
104 (A,B,C) Kahn probably did not have this column building in mind when exploring the design possibilities of the assembly building. In this project by Francois Barbier (1768-1826) the column becomes hollowed only to be occupied by a building which is placed within it.



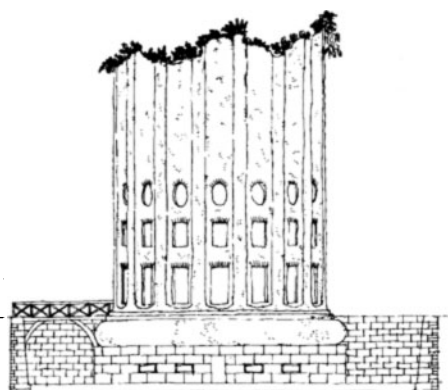
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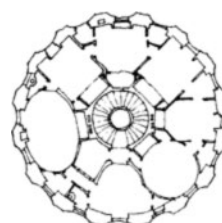
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103



104A



104B



104C



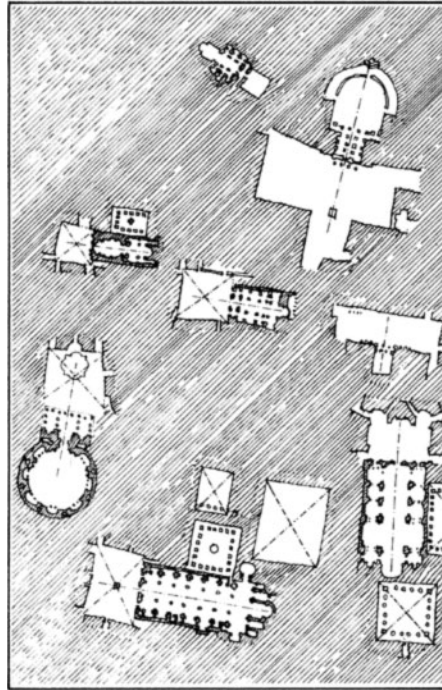
105A

105 (A) Nolli's plan of Rome (1748) is extremely important in that it shows the plan of the city as the plan of the totality of spaces which have a spatial relevance and a monumental dimension.

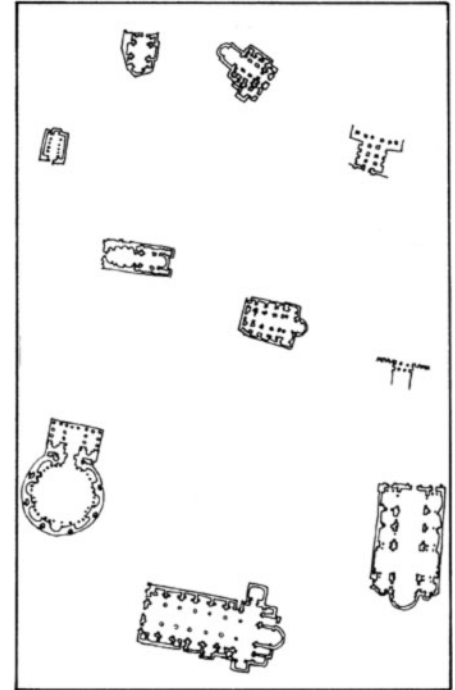
(B) Within the framework of an irregular street layout there exist regular spaces: the monuments and their adjacent spaces.

(C) A further simplification of the plan shows the impossibility of urban order when the city is constituted from isolated buildings of monumental character only.

106 This is the case of the Capitol area in Chandigarh: the Assembly Building, Secretariat, and High Court



105B



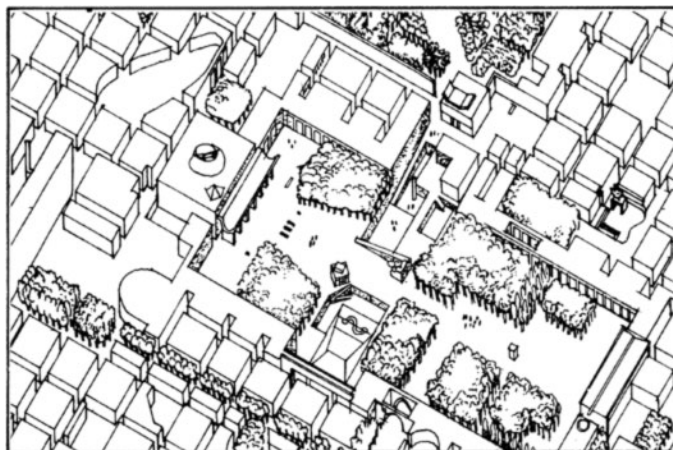
105C

are placed not only at considerable distance from each other, but also at the edge of the town.

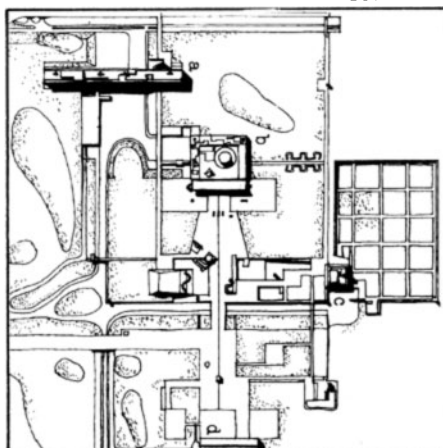
107-108 If the monumental centre of Chandigarh were re-urbanised in much the same way as Diocletian's Palace, but basing this action on a plan of re-urbanisation developed in relation to Corbusier's layout, a surprisingly effective result could be achieved.

The original layout contains the basis for a tridimensional space arrangement when a simple grid (50m x 50m) is superimposed on it.

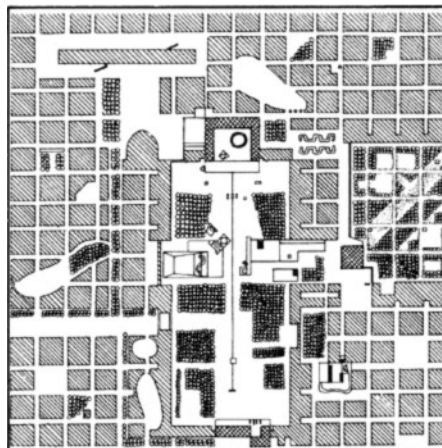
109 An alternative plan is shown with a denser occupation of the central area where urban blocks reach right to the perimeter of the esplanade



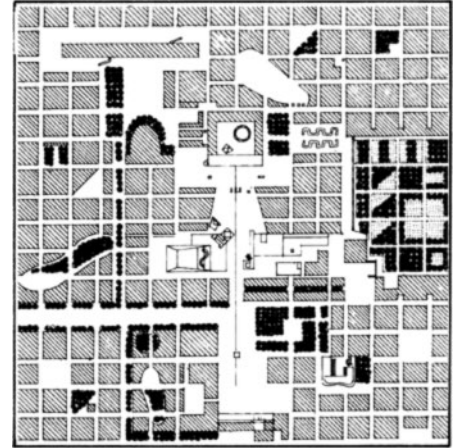
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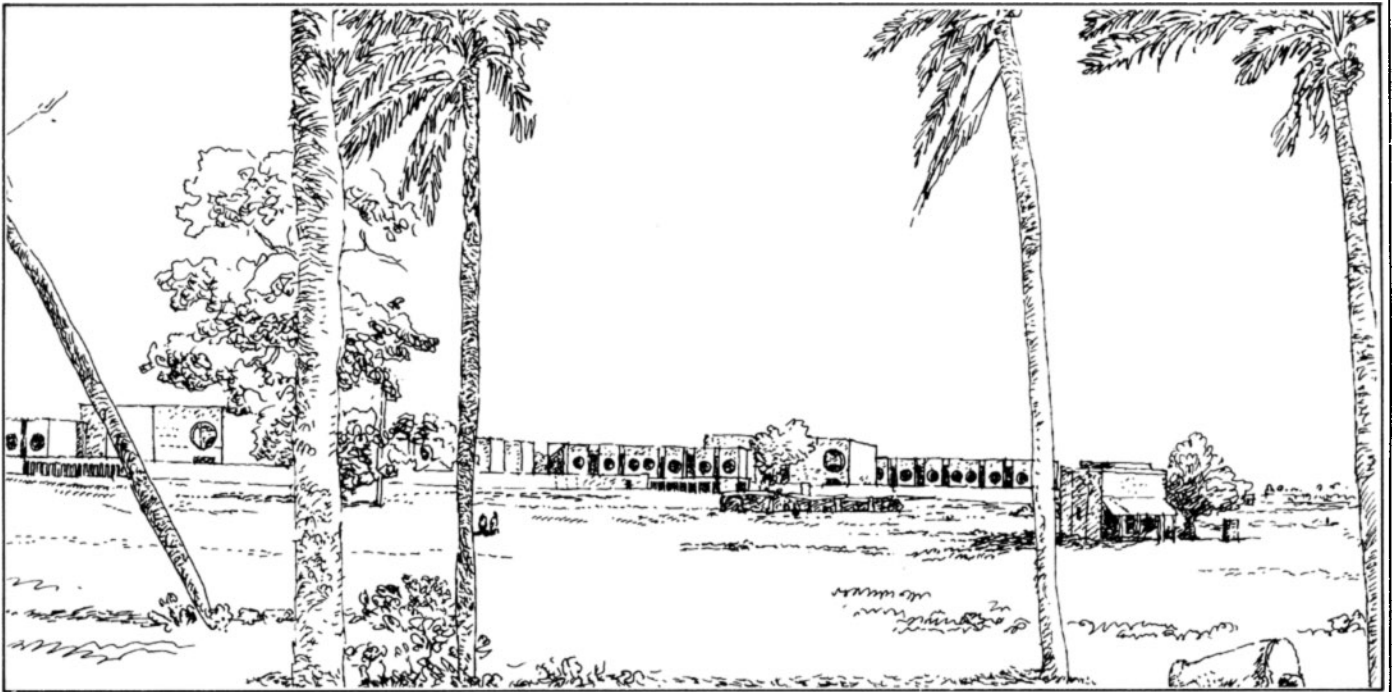
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108



109



110

110 The government centre at Dacca suffers from the same problems as Chandigarh. Kahn's plan leaves enormous spaces between the groups of buildings. These spaces, as in Chandigarh, were designated by Kahn as 'green areas'.

111 The plan as laid out by Kahn is centred on two areas: the Citadel of

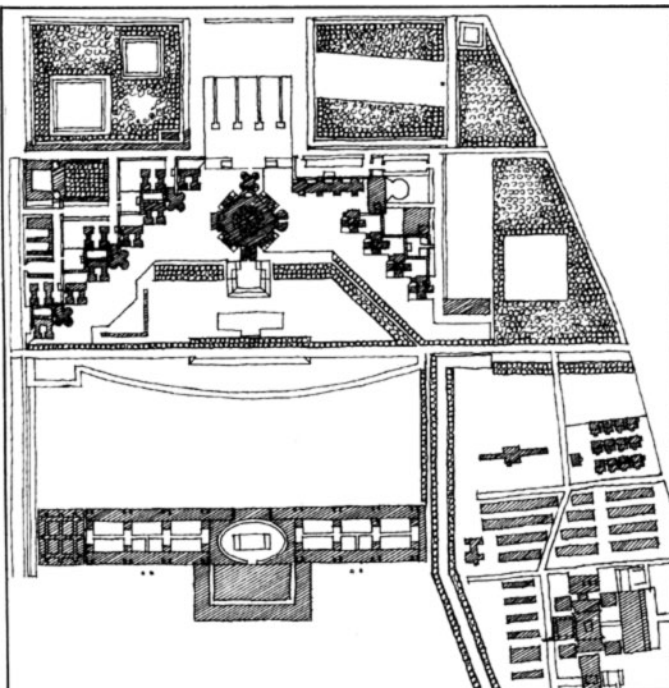
the Assembly (with the assembly buildings and the ministers' and secretaries' hostels stretching along the lake); and the Citadel of the Institutions (with the Secretariat Building and the future institutional buildings extending towards the north).

Between the two built-up areas there is a vast public park which is

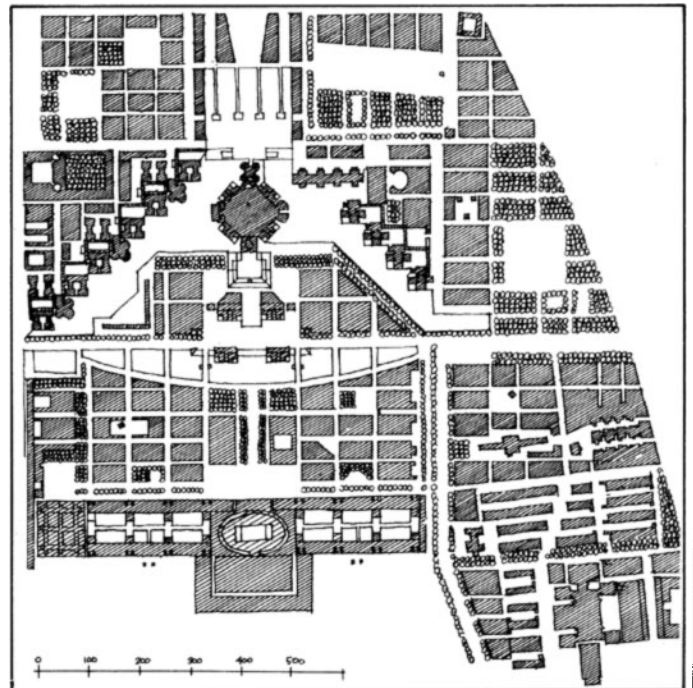
only interrupted by two lakes which create an island situated in front of the assembly.

112 The re-urbanisation of the government centre in Dacca could be resolved in various ways. This particular plan is based on the superimposition of a regular grid pattern laid over the existing plan, the

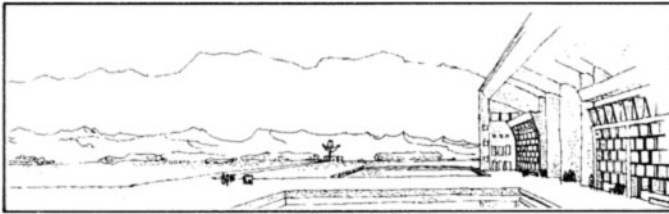
creation of a central esplanade on the axis of the Assembly and the Secretariat to produce a monumental space, and the spanning of one of the lakes to create a continuous urban pattern from the Secretariat to the Assembly.



111



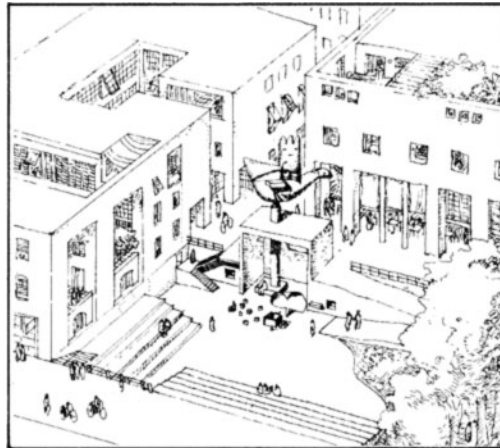
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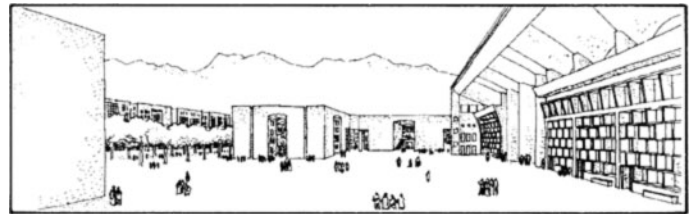
113

113 The High Court area in Chandigarh before and after the transformation. The reflecting pool is filled in so that the square reaches right up to the High Court Building. The new buildings are suggested with large openings which lead to internal garden courts and galleries. These buildings could contain areas of housing, shops and offices, and buildings relating to the government centre.

114 The Open Hand monument is now surrounded by buildings which create an intimate square. The relationship between the sculpture

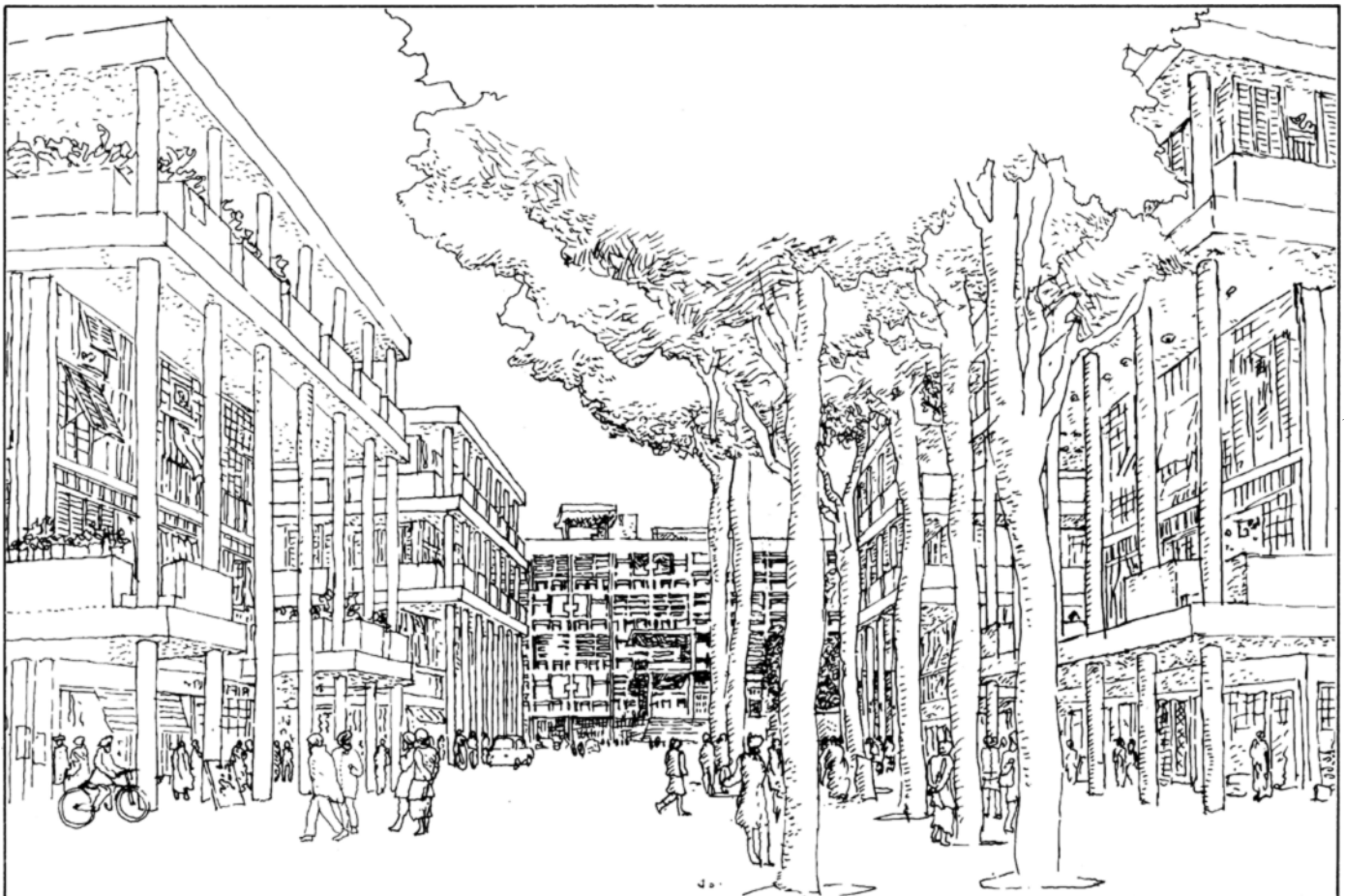


114



and the nearby buildings is one of a dramatic contrast of scale, texture, and shape. The 'pit of contemplation' is used here as a playground for children.

115 The boulevard of the Secretariat is a broad and well-shaped street. The buildings located alongside the boulevard are designed in accordance with the modular building type proposed by Le Corbusier for the shopping centre of the town. This type allows for a certain flexibility, and the unified character and proportion of the street is ensured.

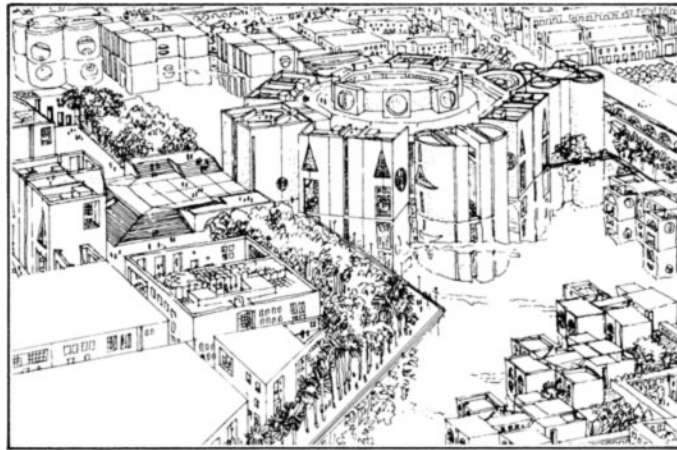


115



116 Many architectural forms which could be useful in the re-urbanisation of the government centre of Dacca exist already in the buildings designed by Kahn. Complete components such as the office block elements of the Assembly Building are used here in their own right standing alongside the central esplanade. The ground and first floors could be given to different uses other than offices: shops, galleries, or even housing.

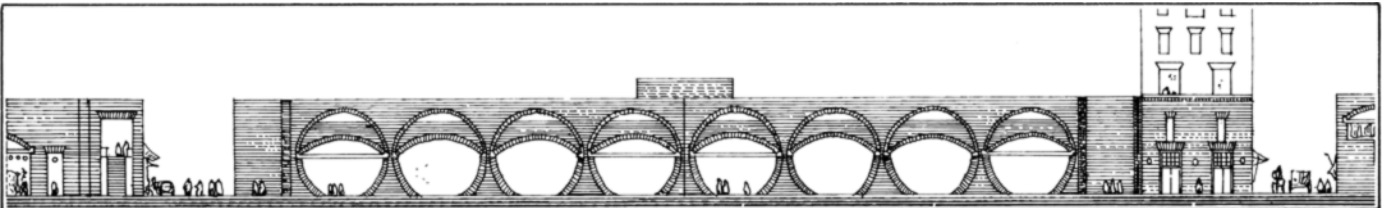
117 The aerial view shows many of the existing buildings, such as the Assembly Building with raised platforms which extend from it on two sides, and the ministers' and secretaries' hostels flanking one side of the lake. These buildings are now integrated into a dense urban grid,



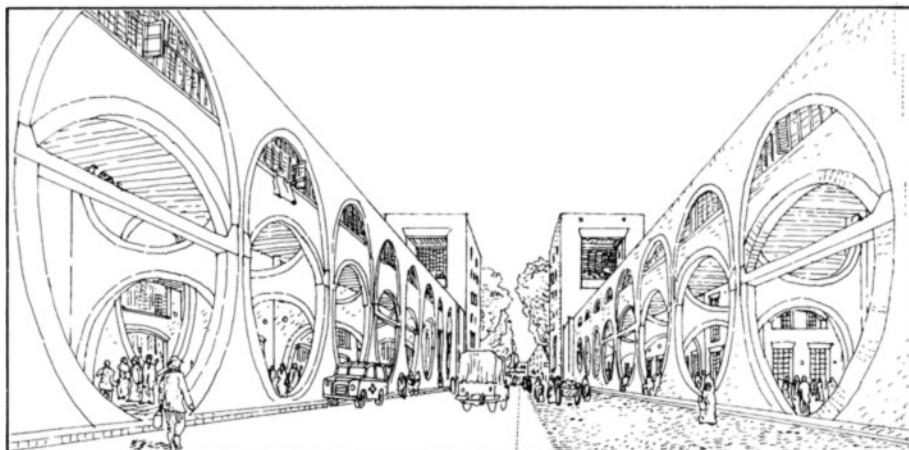
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and they become part of a far richer spatial context.

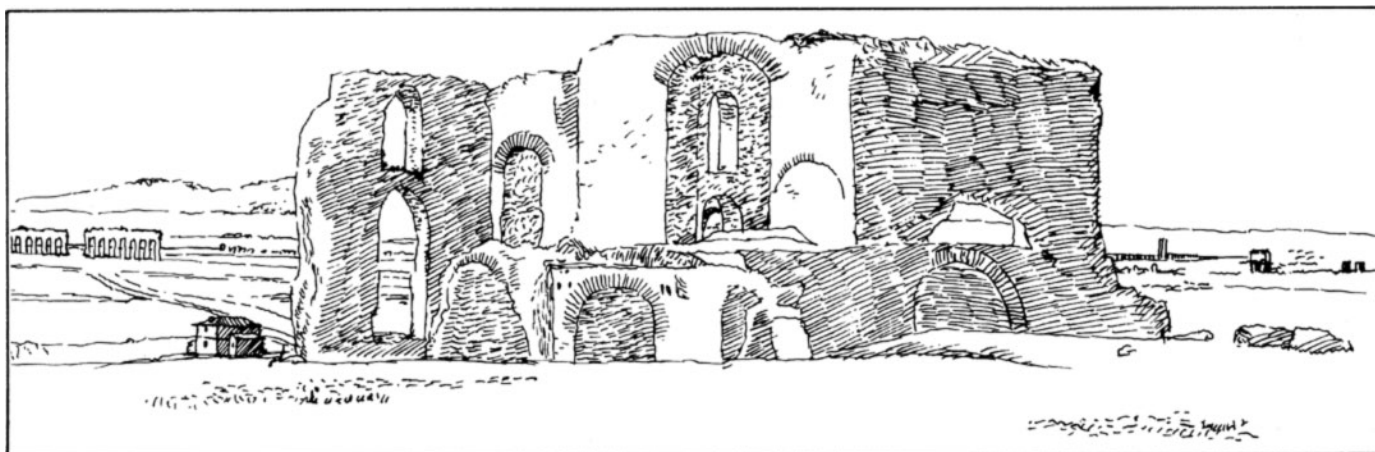
118 Kahn designed the portico of the hospital building and produced a unique building with circular brick openings and a complex system of arches and openings to its interior. But the hospital's portico stands in isolation as having been designed — becoming almost irrelevant in its isolation. An identical portico is suggested, creating a street of unique quality by reusing an urban element already designed and adapted for a different function — as a public place with shops and workshops attached to it. The height of the portico could be used as a datum height indicating the extent of fairfaced brickwork throughout the city: buildings projecting above this level could have a different finishing material.



118



118



To conclude this study, two divergent opinions on the conception of the city are quoted here. They reflect the profound differences which exist between those who on the one hand cannot understand the remains of the past in any way other than as anomalous elements which, depending on the value they place on them, should be either preserved or destroyed; and, on the other hand, those who understand the construction and structure of the city, and accept no valid difference between 'old' and 'new' when integrating the remains of the past into the living city.

I should like to divide the problem of Rome, the Rome of the 20th century, into two categories: the problems of necessity and the problems of grandeur. One cannot confront the latter unless the first has been resolved. The problems of necessity rise from the growth of Rome and are encompassed in this binomial: housing and communications. The problems of grandeur are of another kind: We must liberate all of Ancient Rome from the mediocre construction that disfigures it . . . but side by side with the Rome of Antiquity and Christianity we must also create the monumental Rome of the 20th century.

Mussolini²¹

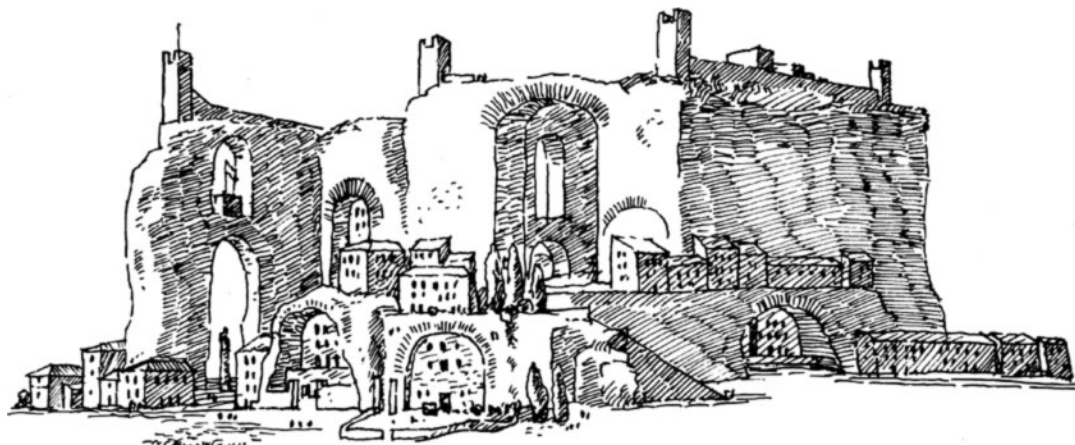
To understand monuments as pieces of cities, sedimentations of materials that can be transformed, adapted, and arranged for a fresh life, does not mean a cultural adventure, but a great project for the principal nations of Europe. This, to some extent, happened – and often catastrophically – during the Napoleonic era and after the Unification of Italy, but despite the way it was carried out, it constituted a progressive fact.

Today this analysis can and must be carried out upon the city's outskirts too. There are factories, farms, and suburbs that need to be used not simply in terms of reuse, but through a plan.

Aldo Rossi²²

Notes

- 1 Segal, R; *America's Receding Future*, Pelican, 1970
- 2 Les Monuments de Rome Après la Chute de L'Empire
- 3 Montaigne; *Journal*
- 4 *Ibid*
- 5 *Les Monuments de Rome Après la Cute de L'Empire*
- 6 *Ibid*
- 7 Cook, J W and Klotz, H; *Conversations with Architects* (from chapter on Louis Kahn), Lund Humphries, London
- 8 Masson, G; *Rome*, Fontana Collins, London, 1965
- 9 Summerson, J; *Architects in Britain: 1530-1830*, The Pelican History of Art, Penguin, 1953
- 10 Palladio, A
- 11 Rossi, A; *La Arquitectura de la Ciudad*, Editorial Gustavo Gili, Barcelona, 1971
- 12 Le Merdy, P; 'Reconversion: La Cité Fortifiée, Nîmes', *Architecture D' Aujourd'Hui*, 12/77
- 13 Portoghesi, P; *Rome of the Renaissance*, Phaidon Press, 1972
- 14 Rossi, A; *op cit*
- 15 Masson, G; *op cit*
- 16 Hardoy, J; *Urban Planning in Pre-Columbian America*, Studio Vista, London
- 17 *Ibid*
- 18 Rossi, A; as quoted in *Architettura Razionale*
- 19 Scolari, M; as quoted in *Architettura Razionale*
- 20 Kahn, L; statements on architecture during a talk given at the Milan Politechnic, Jan/67, *Zodiac* 17
- 21 Kostoff, S; *The Third Rome* (the quotation is from Mussolini's speech on the development of Rome, 1924), University Art Museum, Berkeley, 1973
- 22 Rossi, A; 'The Analogous City Panel', *Lotus* 13



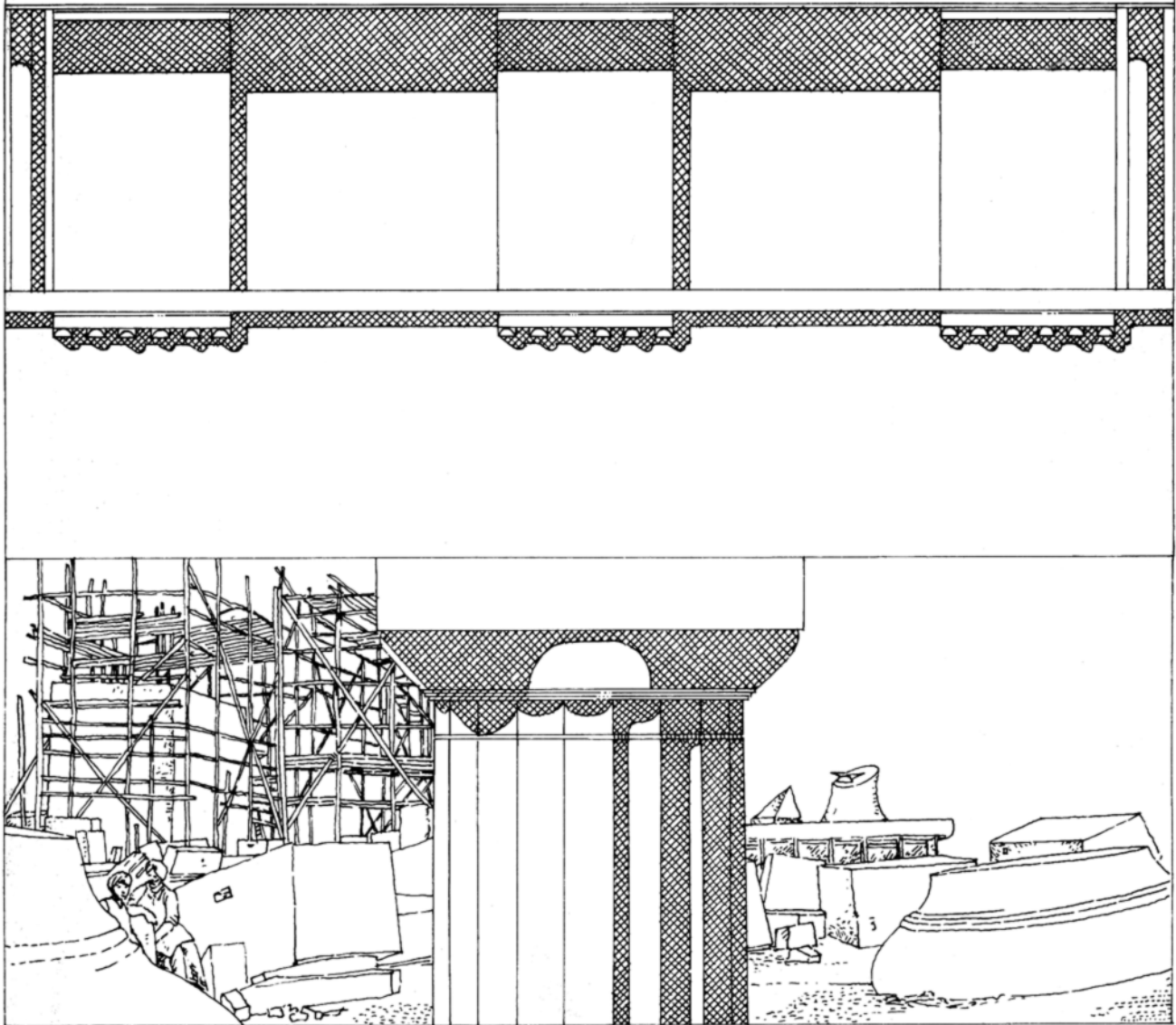
Rodrigo Pérez de Arce, born in Santiago, Chile, 1948. Studied architecture in Santiago. Worked for one year in Valparaíso on a research project on the evolution of the town which is currently

being published in Chile. In 1973 published a collection of architectural drawings of Bolivian Andean towns, produced in association with Teodoro Fernández. Worked with his father and

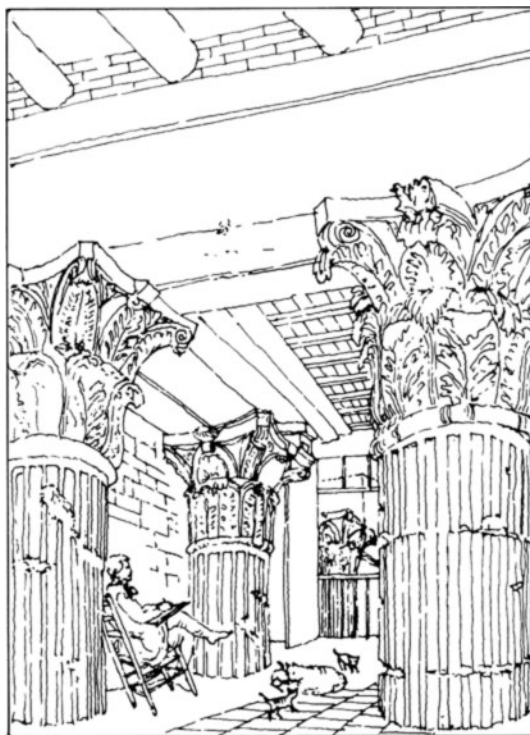
brother until joining the AA graduate school for two years as a part time student. Working extensively on urban transformations from which this article is taken.

URBAN TRANSFORMATIONS

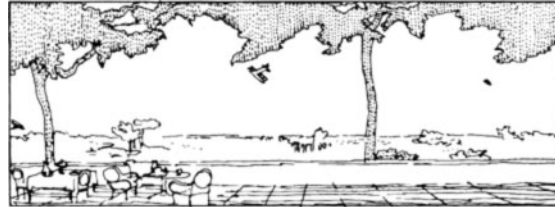
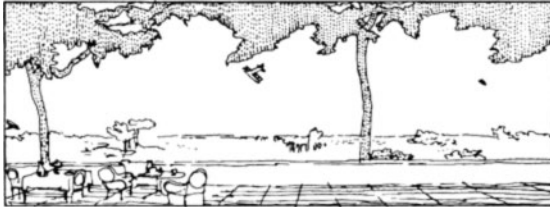
URBAN TRANSFORMATIONS · RODRIGO PEREZ DE ARCE



THE ARCHITECTURAL ASSOCIATION · 34-36 BEDFORD SQUARE · LONDON WC1



EXHIBITION
24 APRIL - 16 MAY 1980



URBAN TRANSFORMATIONS

RODRIGO PEREZ DE ARCE
1980

INTRODUCTION

By the early seventies, no one could dispute the bankruptcy of modernist planning; not so much because it was unrealisable but, ironically enough, because it had become a reality. The modernist desire to universalise the city had led to a 'logical, univocal, mathematical' city-machine. Thus the 'aura' of the building as an individualised object as well as that of the street, piazza, court, or city-block as particularised places had been disdainfully eradicated.

It is in the light of such a debilitating experience that the work of Rodrigo Perez de Arce should be seen. Two major issues underlie his work. First, a concern for the re-urbanisation of the Ville Radieuse; second a concern for the sedimentation of architectural history. The first is a critique of Cartesian reason, not so much because it cannot be trusted, as for its having been idolised as an exemplar of the positivist spirit. In that sense, the project for the re-urbanisation of the modernist city embattles the scientific cult of 'order without rhetoric'. Similarly, his project for the sedimentation of architectural history

Demetri Porphyrios

aims at a critique of the serialised universality of modernism. Perez de Arce substitutes the lavishness of iconographic association for the sobriety of a factitious utilitarianism, hoping to retrieve in this way the lost 'aura' of architecture.

However, neither the revival of the European tradition of city building, nor that of an *Arbeitskultur*, can materialise within the economic-political context of the Industrial Plan. In its preoccupation with material civilisation, the Industrial Plan can allow for tradition and culture only at the level of art. Perez de Arce seems to be aware of such an *impasse*. His Piranesian taste for erosion and historical sedimentation allows him to see both the architecture and the city of modernism already as ruins. In mending these ruins, however, there emerges a taste for the retrospective, the figuratively historical, and the sentimentally or languorously cultural. Architecture and the city embrace historicist figuration out of a wish to circumvent the cultural debilitation they are pushed into by the Industrial Plan.

STATEMENT

Rodrigo Perez de Arce

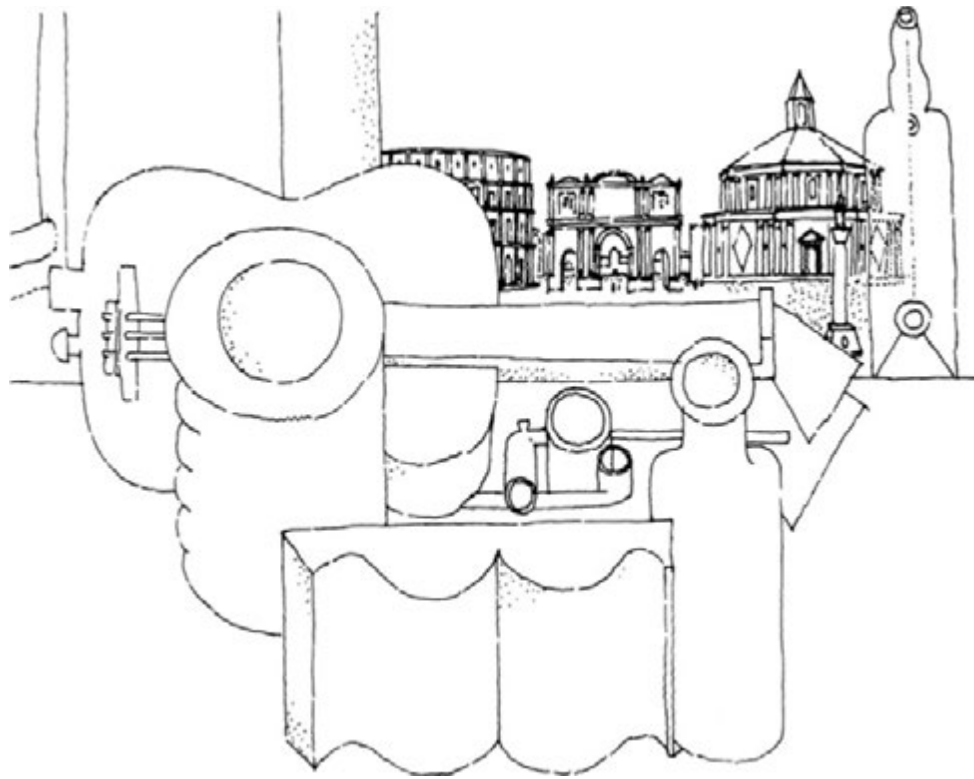
This work represents an intermediate stage in the development of an idea. It is not conclusive; rather it is an attempt at the correct identification of a problem.

It deals with consecutive transformations of buildings and urban spaces, the characteristics of this process and the quality of architectural spaces generated by it.

Drawings have been extensively used as analytical tools and to illustrate the various cases of transformations. These visual images, produced directly, have provoked notions and thoughts that were not fully formulated before work began. Drawings have a power to focus thoughts with precision and explicitness. This working method has not been thoroughly rational and possible contradictions will have to be unravelled.

Both the areas of work, projects and research into urban transformations, are concerned to introduce a historical dimension, to establish the historical status of buildings and urban plans for the present and foreseeable future.

The pre-industrial city is a sedimentation, a layering of interventions which enrich spaces and urban life. This occurs according to three types of transformation: the recycling of architectural elements, the reappropriation of ruins and urban fragments and the transformations of inhabited buildings. Each of these transformations is of an accumulative nature; it tends to put old and new together, and it generally provokes an intensification of use. Major monumental buildings (churches, monasteries, palaces, mosques, and other public buildings) are built up in this piecemeal fashion, yet they retain cohesion.



The modern city has a tendency towards dispersal and fragmentation. Urban expansion and urban development are dominant; accumulative forms of transformation do not play an important role. The effect of this is negative in that it prevents a consolidation of the urban fabric and it prevents the intensification of the use of the city. Because it does not encourage any significant relationship with existing elements, it provokes a discontinuity between past and present. The pre-industrial city tends to evolve by integrating all elements into a totality according to a hierarchical order. The modern city has evolved into fragmented parts isolated in space and time. Both projects and research work call for consideration of the entire city as a continuous historical construction, rejecting the historicist approach which results all too easily in a treatment of ancient buildings as relics isolated in space and devoid of meaningful use. The accumulative construction of the city is a relevant alternative to the dispersal and fragmentation caused by modern urbanism. It can re-establish continuity in space and time, connecting the scattered fragments together and generating a sense of historical identity by linking existing and new parts. The projects have been developed according to this approach. Thus the point of departure for these urban interventions is a fragmentary urban order. The existing fragments have been studied, and wherever possible, the original vocabulary has been extended. This appears most clearly in the project for the reurbanisation of the Capitol area of Chandigarh which already contains an implicit urban layout. It also exists in the project for the re-urbanising of Runcorn's Southgate residential area



Stone gardens: the monuments without the city.

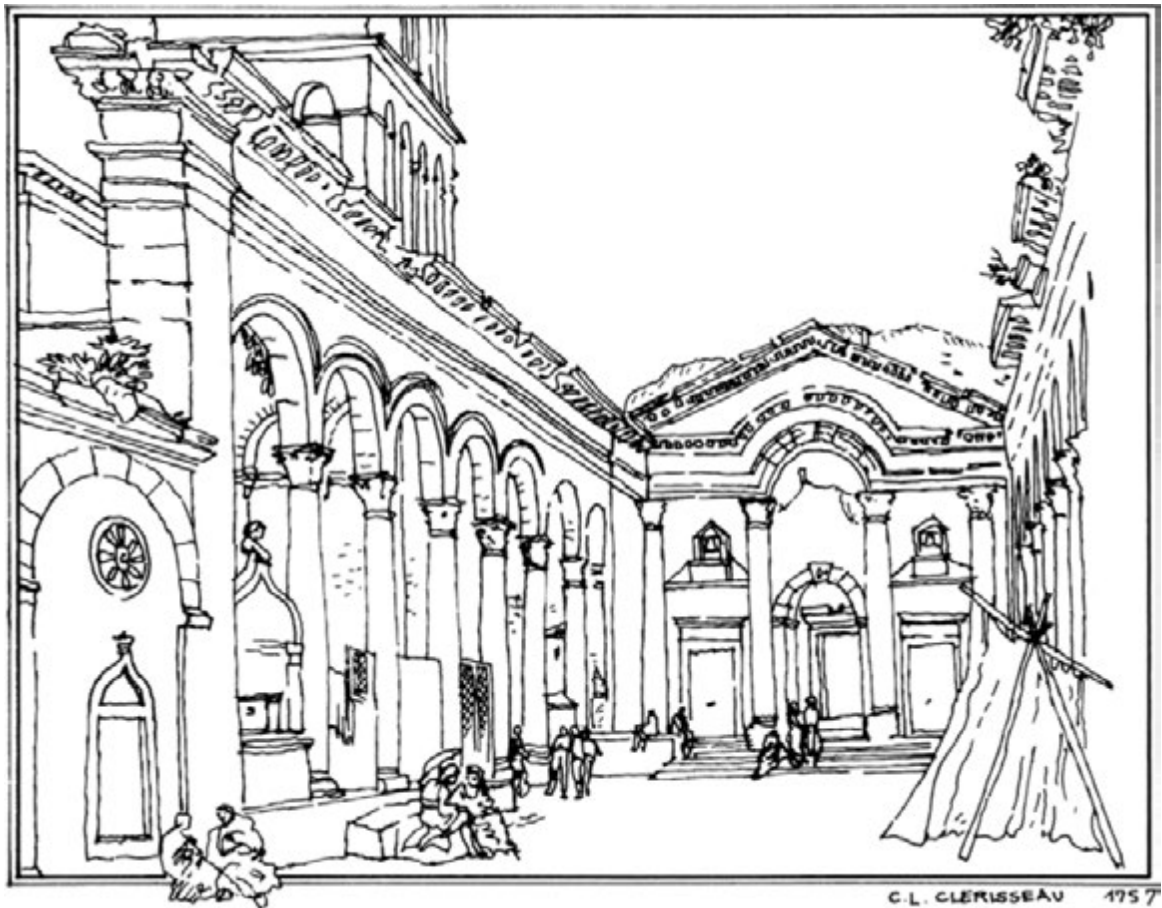
but it is more diffuse in the case of the government centre in Dacca which appears to be extremely fragmented.

There was no first-hand experience of Chandigarh and Dacca. The lack of knowledge about established modes of social life, urban traditions and architectural typologies, places obvious limits on these proposals. Nevertheless, they open up possibilities to further development. Because the same concept can generate alternative schemes, it is possible to see these proposals as preliminary statements which require further revision and development.

The Runcorn scheme differs from the others. Whereas in Chandigarh and Dacca there is no context of an urban fabric for the monuments, in Runcorn monuments are absent except for a faceless, monolithic shopping centre: it is the urban fabric itself which assumes a monumental dimension. The re-urbanisation of Runcorn requires the reconstruction of an urban order and the re-establishment of a hierarchical system. The monumental residential blocks have to be de-monumentalised. The mechanical and repetitive plan has to evolve into a new plan which emphasises the distinctive character of streets, squares, courts and alleys.

These projects are planned interventions. They describe the general framework for the evolution of these cities. They operate like foundation plans, establishing a basic set of rules and relationships and co-ordinating the various urban elements.

A spontaneous transformation of these fragmentary cities could be an alternative to these schemes. The formal result would be entirely different but the purpose would most surely remain the same.



The transformation of Diocletian's Palace, Spalato: view of the peristyle court.

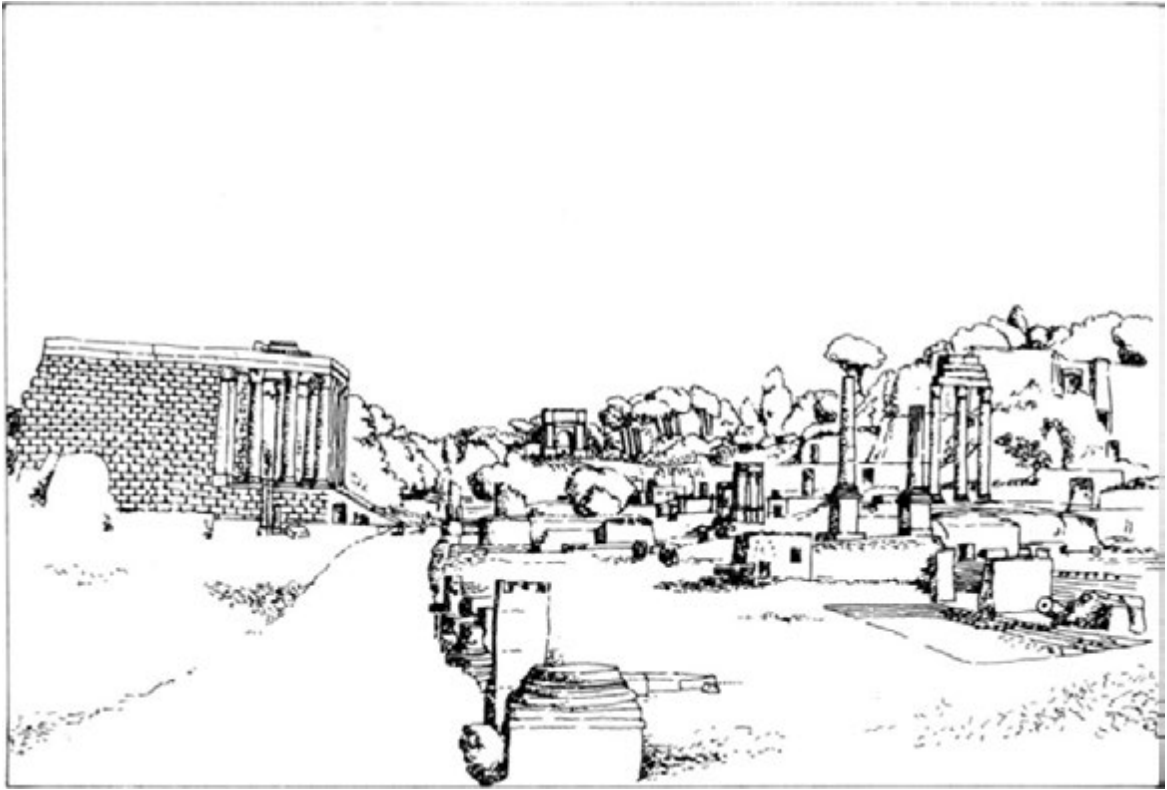


Archaeological sites in historical centres have broken the continuity of the plan and have often led to a pernicious form of 'historical zoning', giving to particular areas single functions, eradicating everyday life. The aims of archaeologists are not always clearly defined, whether to reveal the essential nature of one chosen period, or to keep the surviving evidence of



multiple periods of occupation. The two views of the Roman Forum before and after excavations and another showing it as it might be with evidence of all medieval and subsequent occupation removed, thus stressing the Roman image, indicate just how difficult archaeological decisions can be.



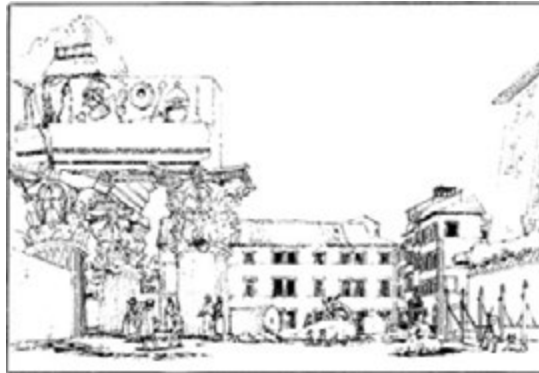


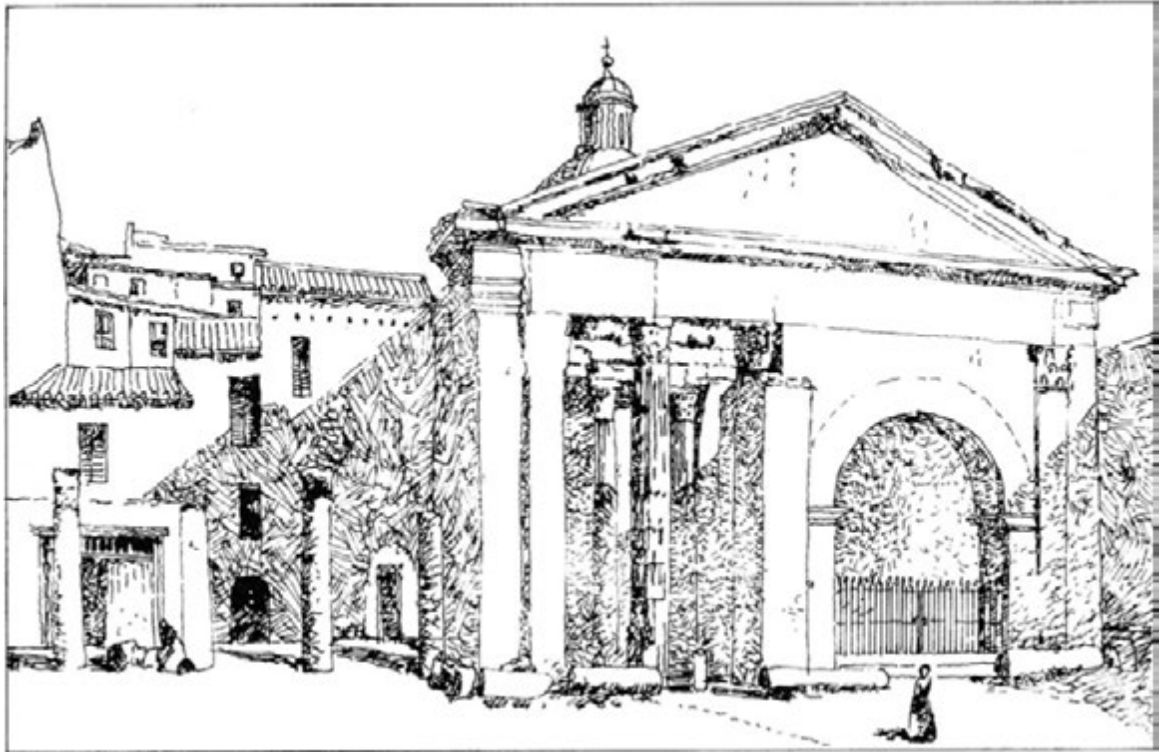


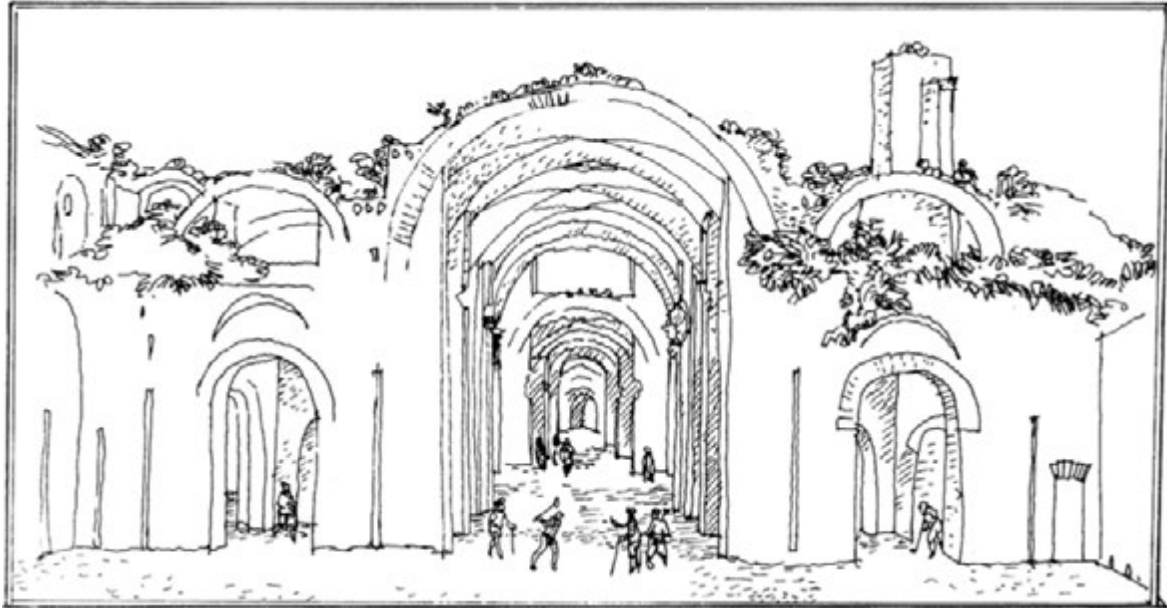
The co-existence of ruins and buildings in use is one form of relationship between the existing and the new, but this relationship can also occur when



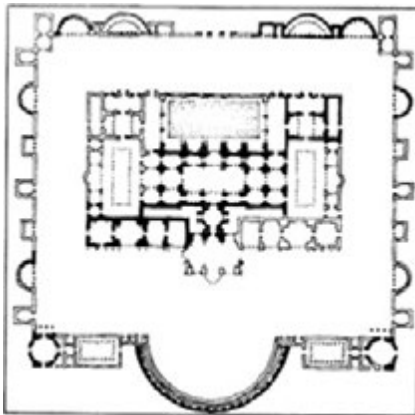
existing fragments are recycled and more elaborately integrated, such as the transformation of the Portico de Ottavia, Rome, into a church.







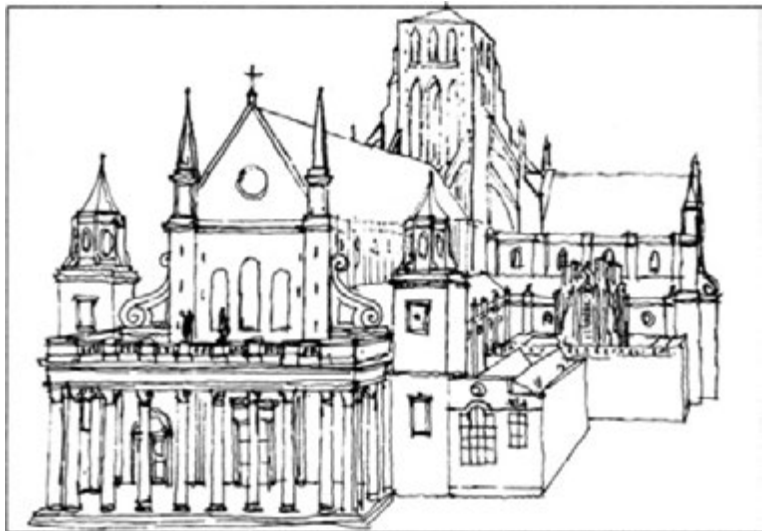
Ruins are ambiguous by nature, evocative and suggestive. The hall of Diocletian's Baths, prior to its transformation by Michelangelo into a church, is not dissimilar from the emerging fabric of St. Peter's Basilica, expanding slowly from the central crossing towards its perimeter. Both buildings conform to a model of additive transformation, both of them limit the activity of the architect, who must needs take account of a dominant existing fabric.

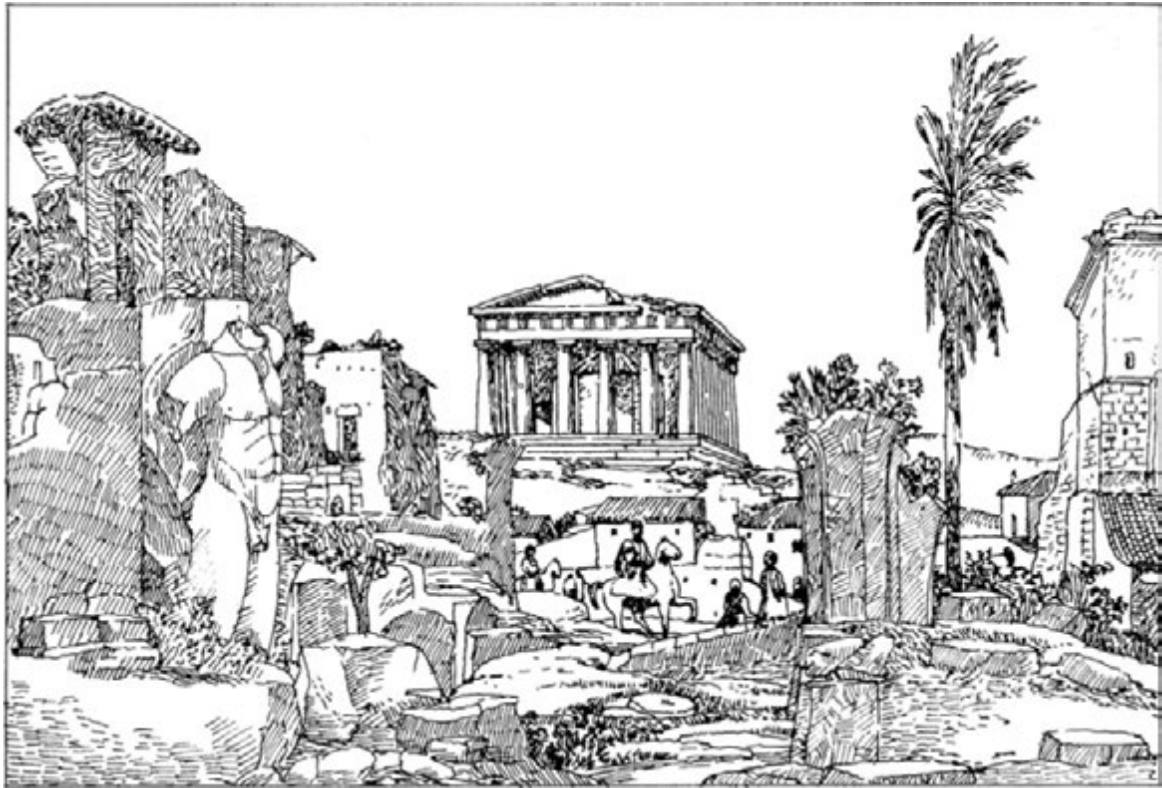






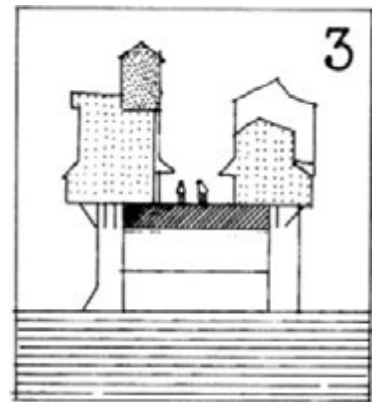
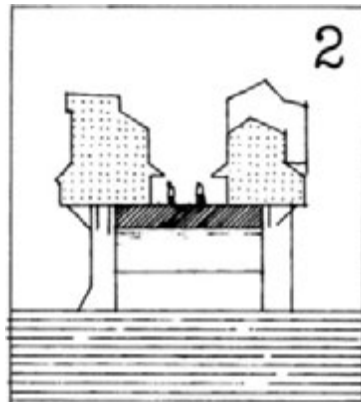
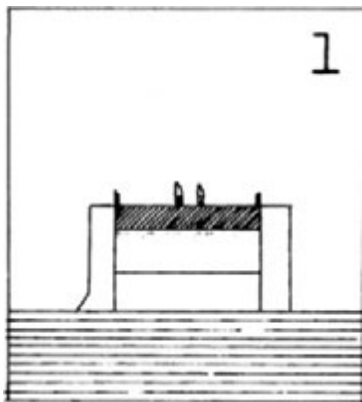
The process of metamorphosing architecture allows Palladio to combine known architectural elements in a new way, Wren to add a dome above old St. Paul's to replace the medieval tower, and Inigo Jones to provide a classical dress and a portico for the same building. The impulse is symbolic rather than pragmatic. Classical architecture is surprisingly flexible. Its long history offers innumerable instances of the transformation of classical buildings, such as that of the Temple of Hephaistos in the Agora in Athens.

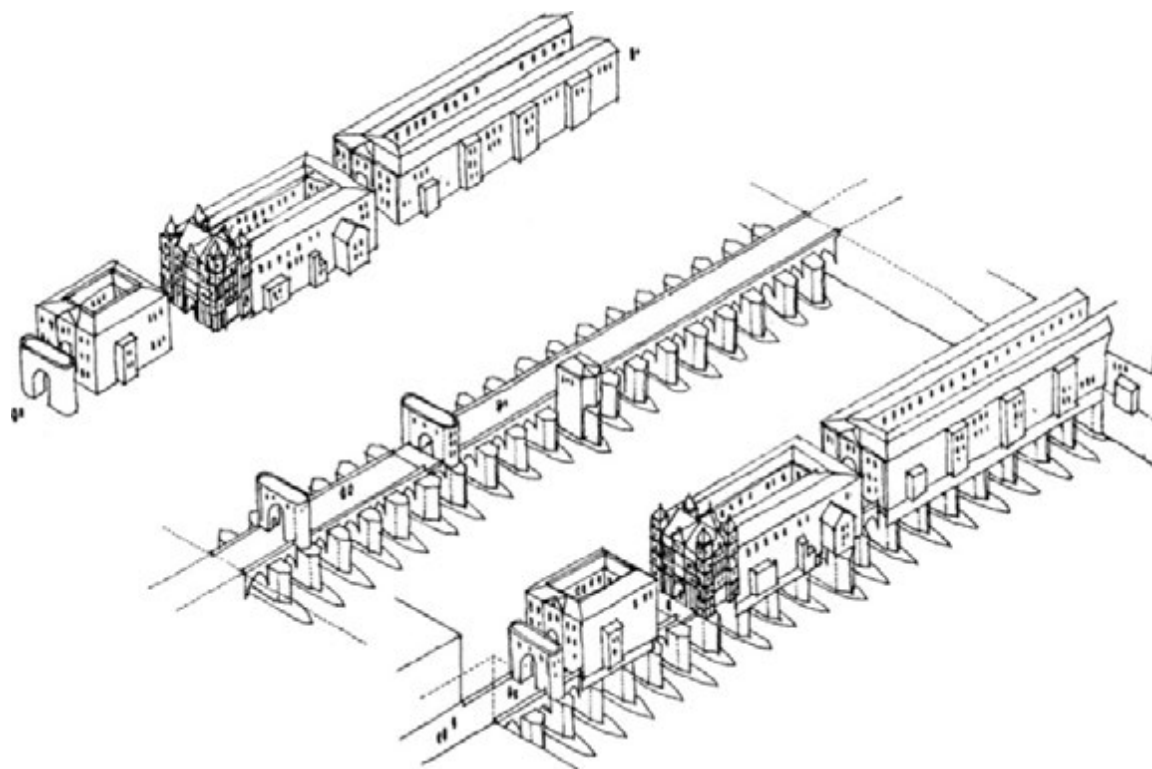






The *Ponte Maison*, a building type which has almost disappeared, embodies the idea of the continuity of urban texture and the intensification of the urban landscape, natural and artificial: the roadway becomes an active street. Both old London Bridge and the Ponte Vecchio in Florence are examples of additive transformation.



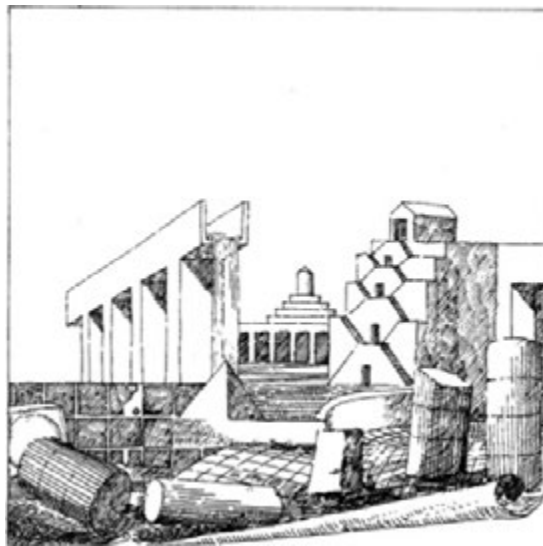


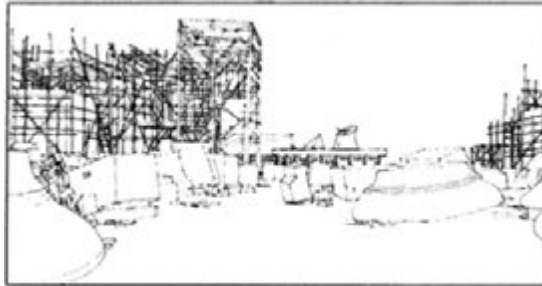


The Acropolis, Athens. 18th century view.

DACCA CHANDIGARH RUNCORN

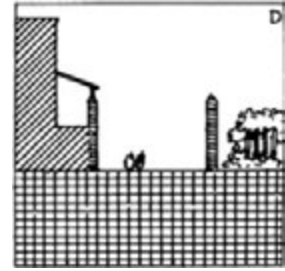
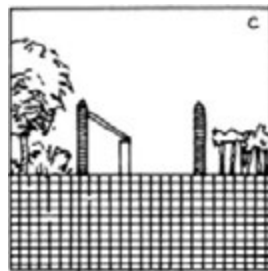
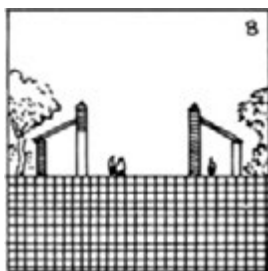
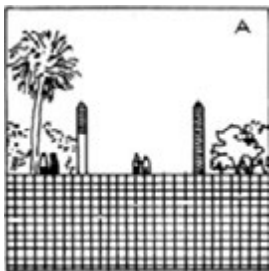
THREE PROJECTS FOR THE
RE URBANISATION
OF THE
MODERN
CITY

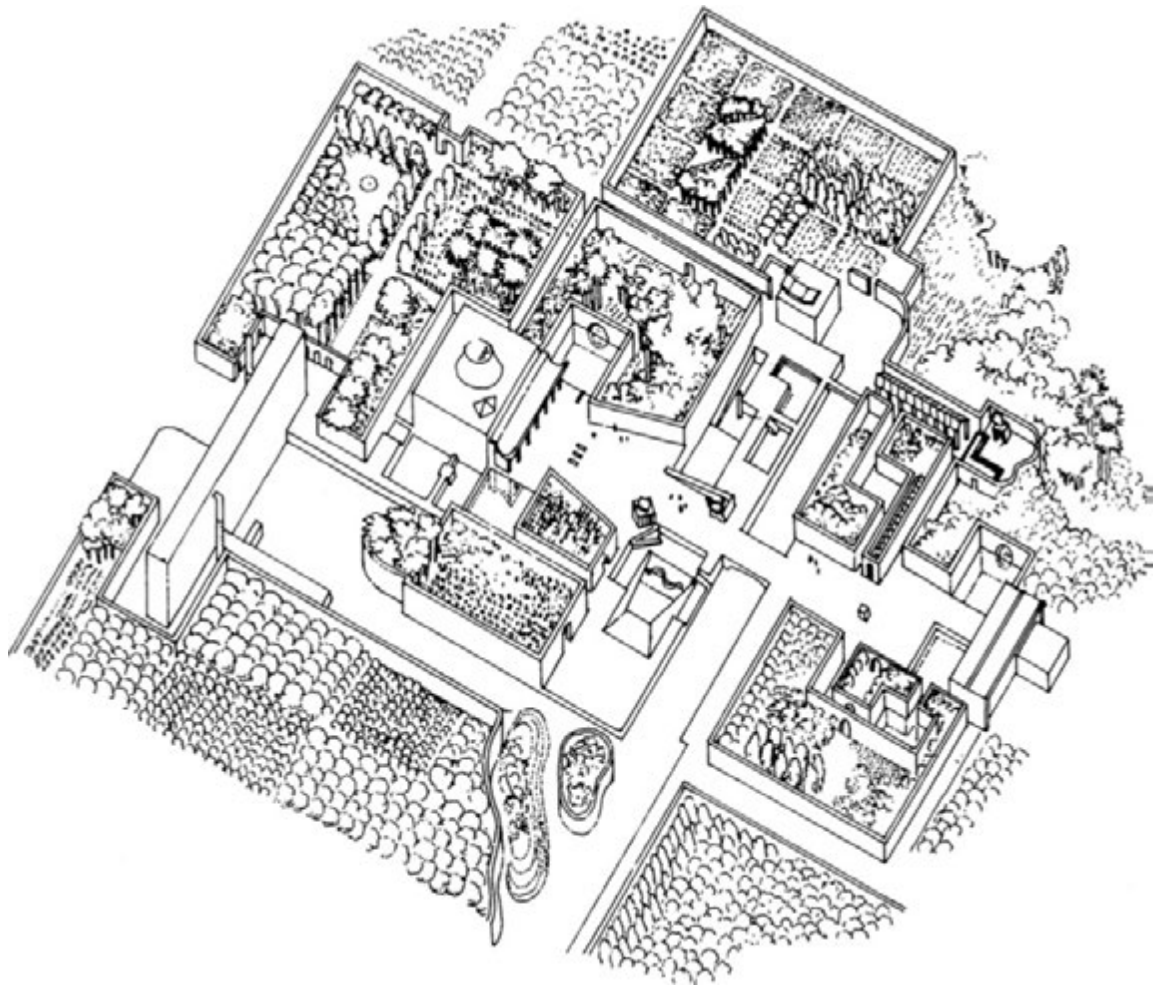




RE-URBANISATION OF CHANDIGARH

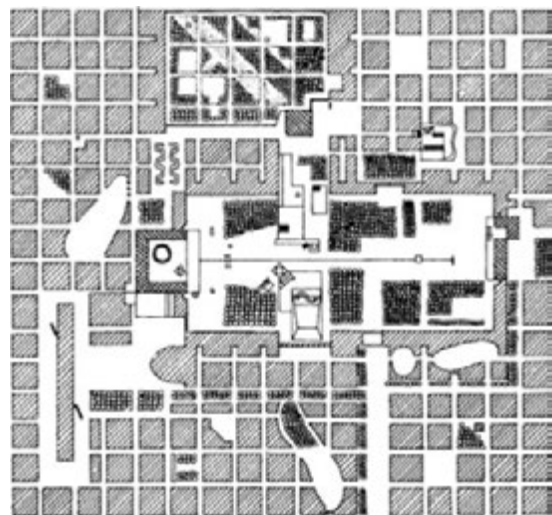
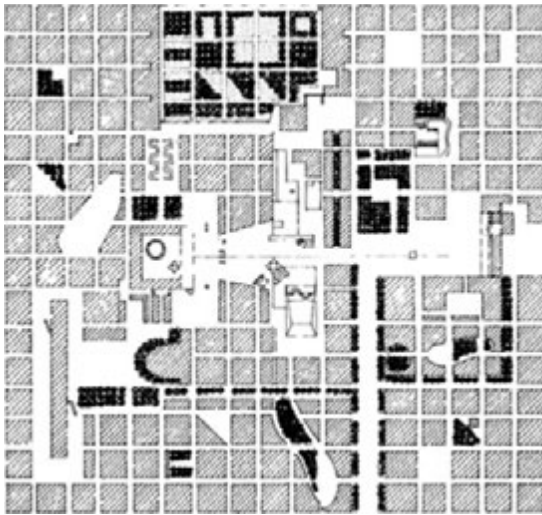
The first stage of transformation consists in walling up the open spaces, creating a network of streets, squares and garden courts, some of which can be used for growing food; others can be used as public or semi-public gardens. These can be slowly built over, the garden courts becoming urban blocks.

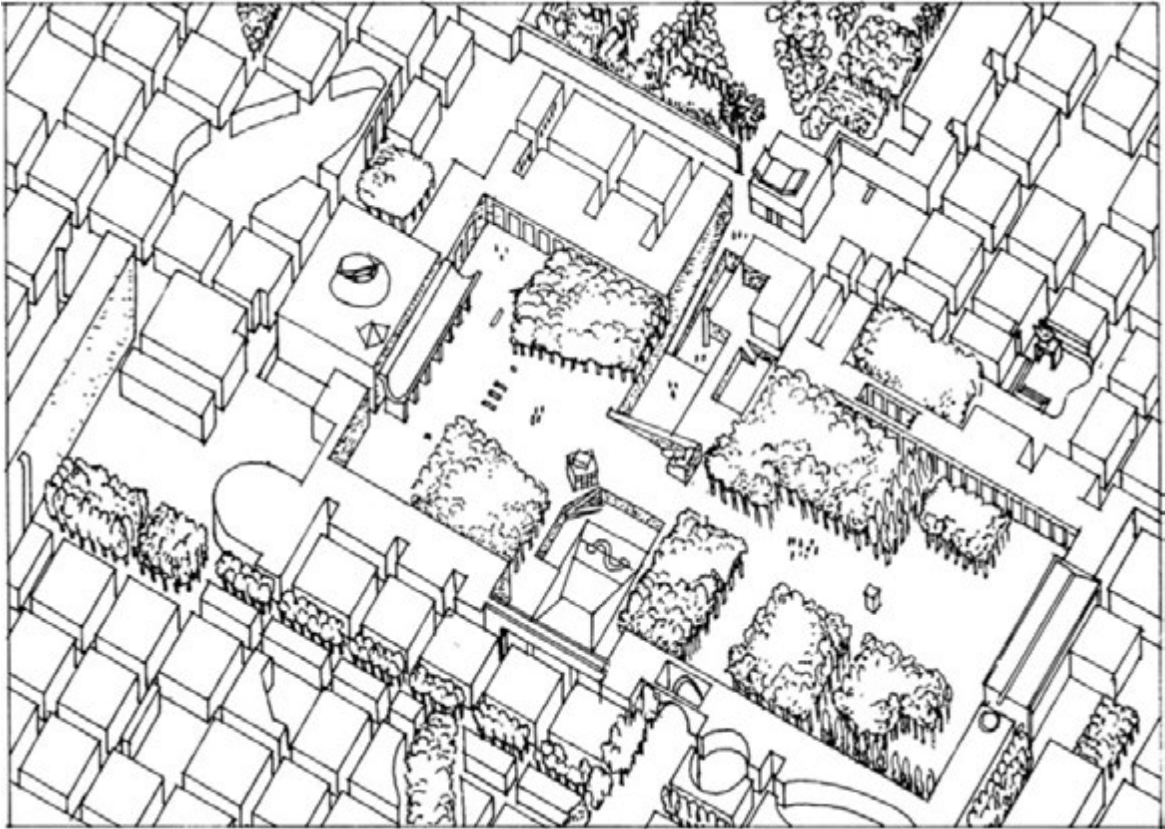


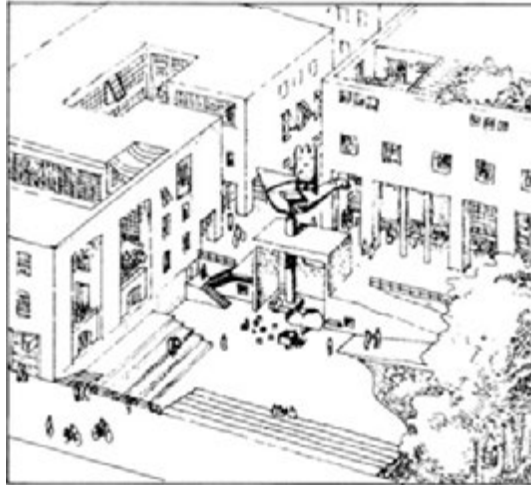




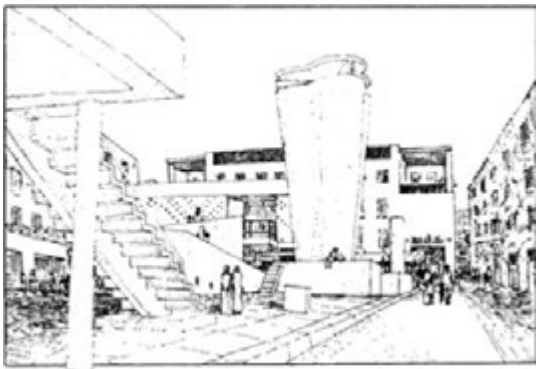
In these alternative plans based on Corbusier's layout, the 'green areas' of the original become the fabric of the new town. Existing buildings are enriched when incorporated into the new plan.

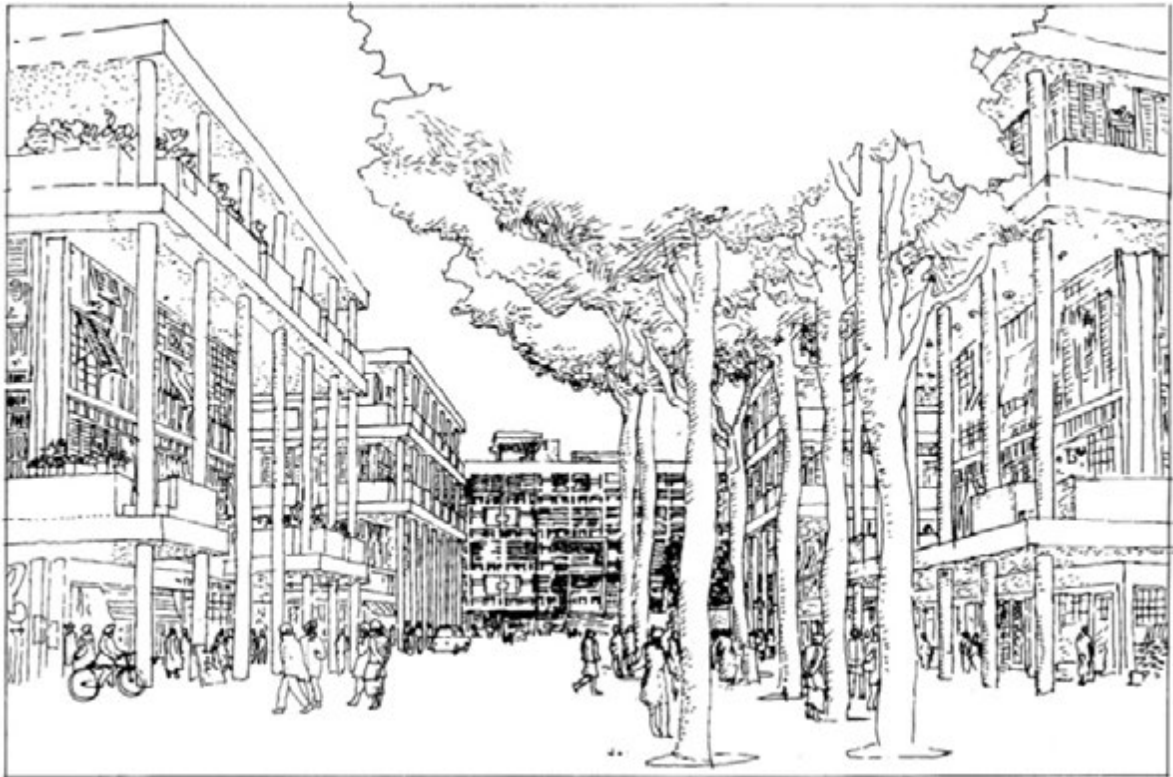


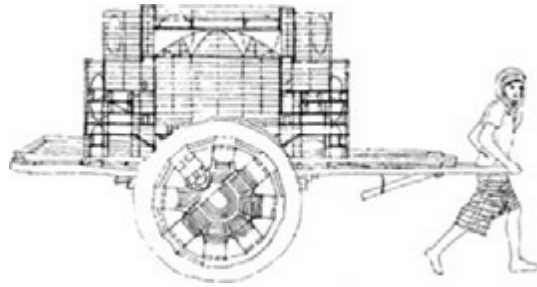




The public spaces of the transformed town: the tree-lined boulevard of the Secretariat, the 'open-hand' square, the local service buildings and the new square of the Supreme Court.

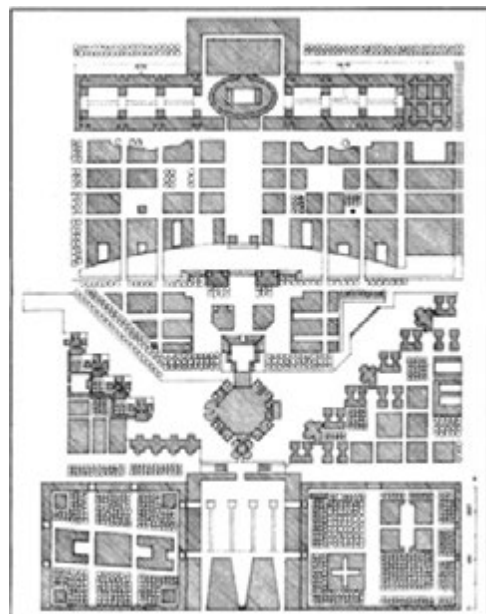
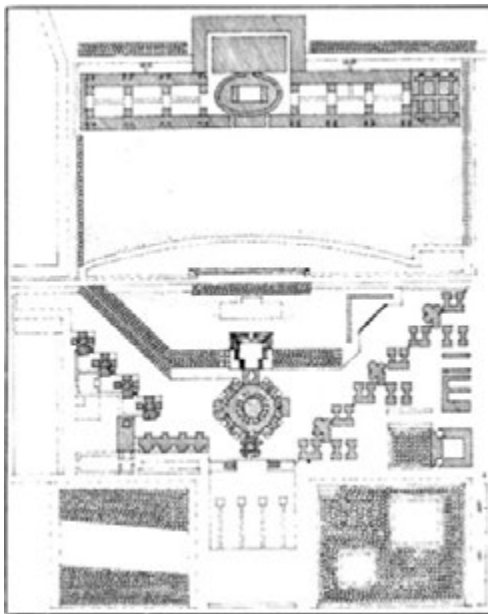


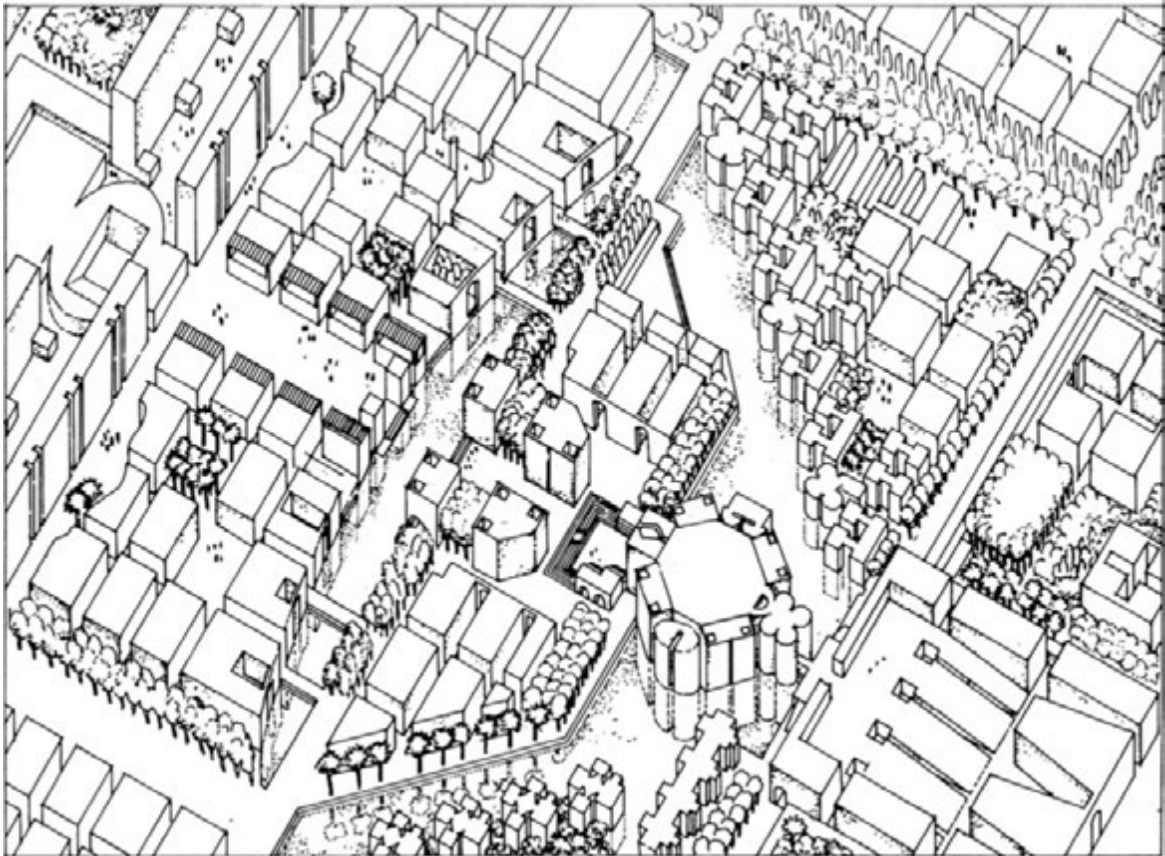




RE-URBANISATION OF DACCA

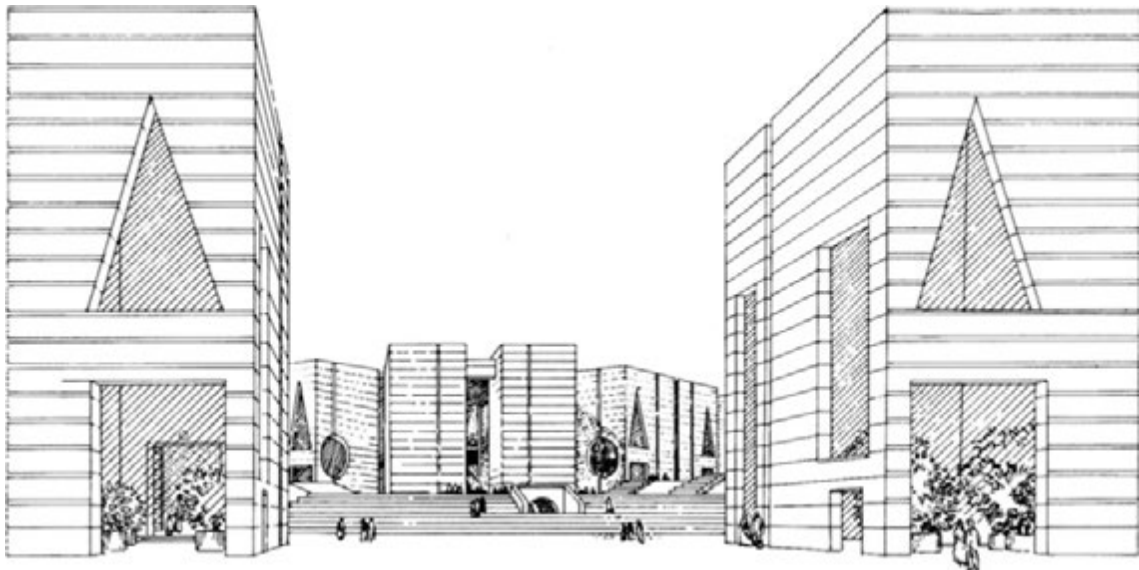
Existing and proposed plans of Dacca. The half-moon lake is spanned by four bridges, connecting the island site in front of the Assembly building to the rest of the city. The main axis proposed by Kahn, relating the Assembly building to the long Secretariat building, is retained and developed.

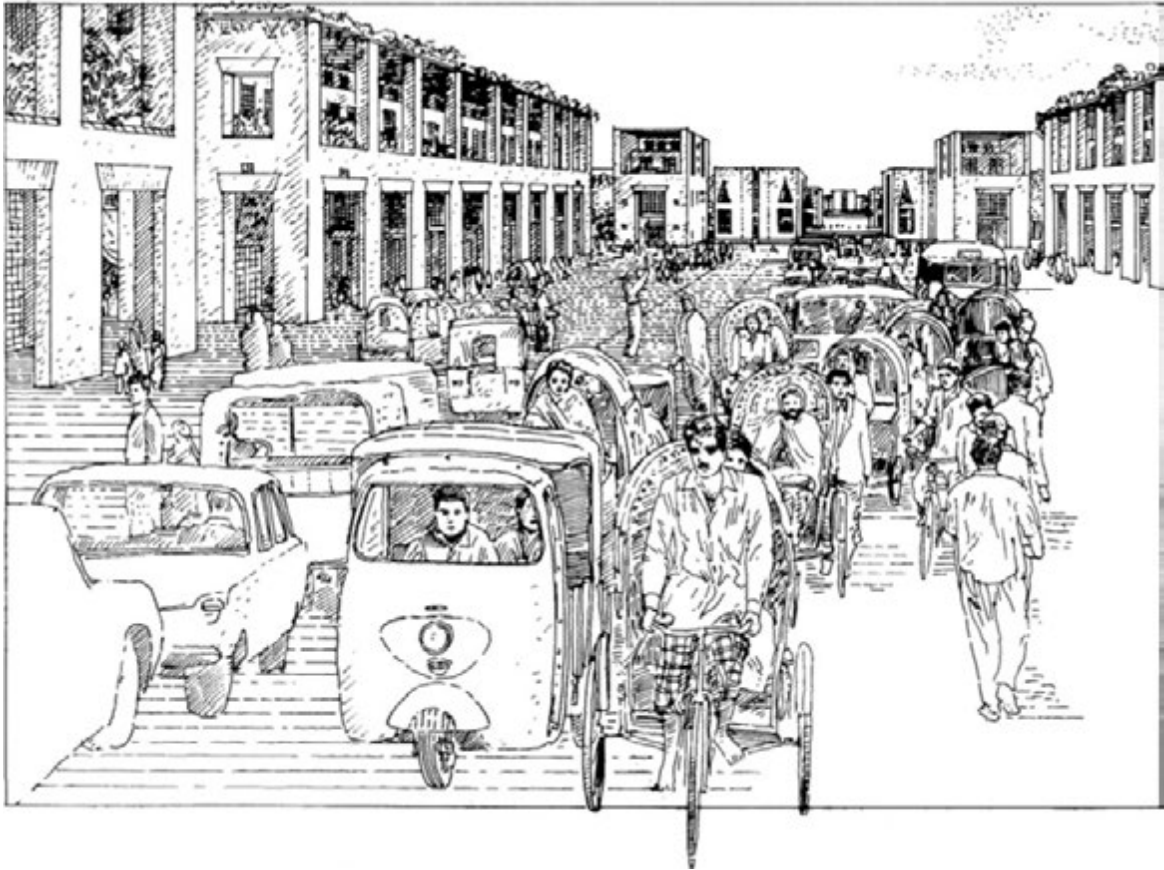


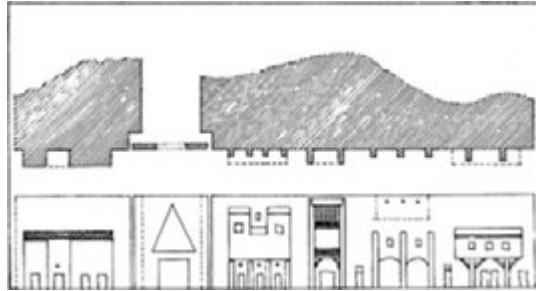




The system of public spaces can be related visually without a physical connection between the Assembly building at one end and the Secretariat building at the other. The office blocks of the Assembly building are treated as independent elements and are repeated in pairs in front of it, flanking the Assembly Square.

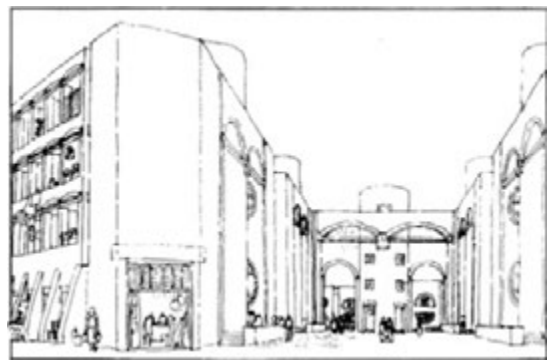


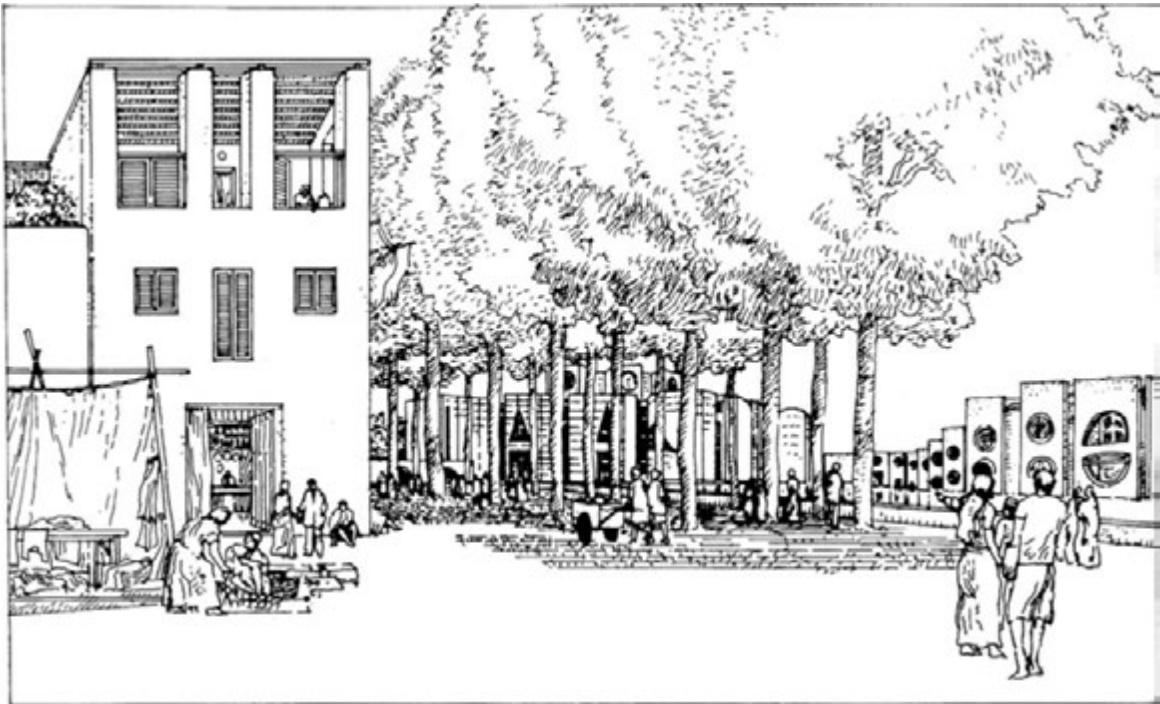




A lakeside promenade is proposed as a public space facing the existing Assembly building and Ministers' hostels across the lake.

The domestic courts and shaded streets relate to the buildings designed by Kahn for the Government Centre.





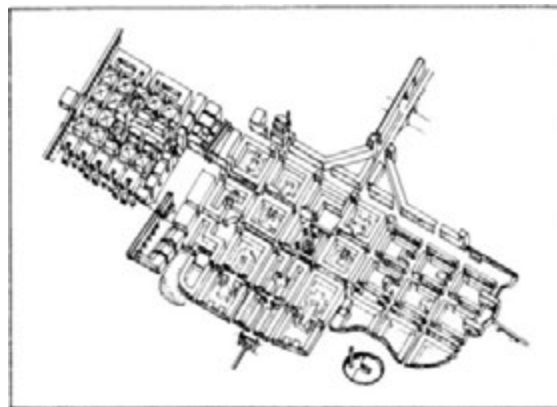
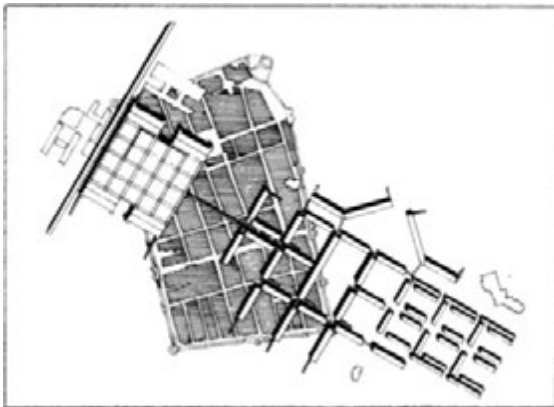


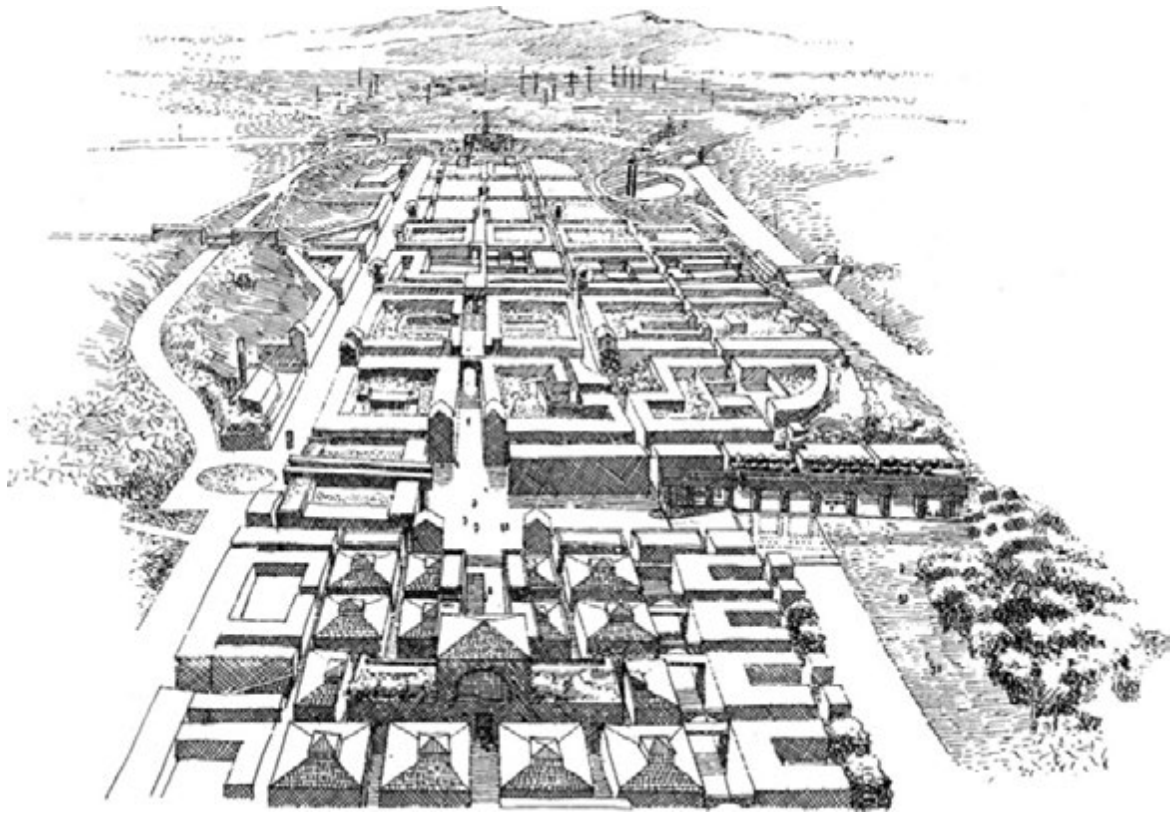
RE-URBANISATION OF RUNCORN

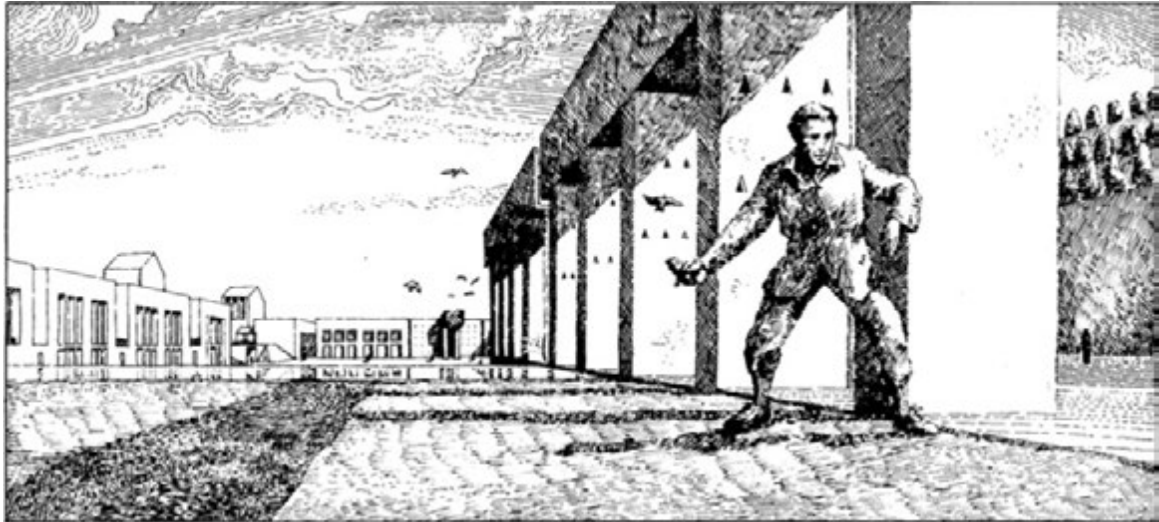
Domestic buildings take on monumental expression in Runcorn. The repetitive monumental order inhibits the creation of a domestic realm and also the development of a true urban monument.

A comparison of the scale of central Runcorn and Aigues Mortes (15,000 inhabitants) reveals the extent of the fragmentation of the modern city.

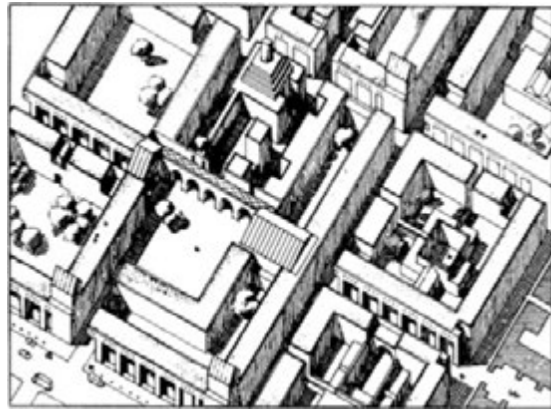
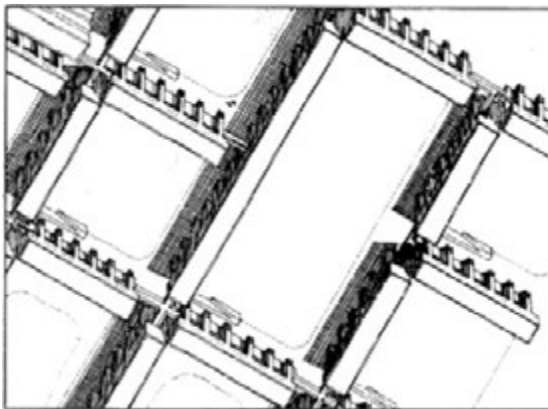
The programme for the re-urbanisation of Runcorn includes the reconstruction of the urban blocks, the breaking down of the monolithic shopping centre into small units, and diffusing the monumental character of the existing houses. A small assembly hall dominates the central area.

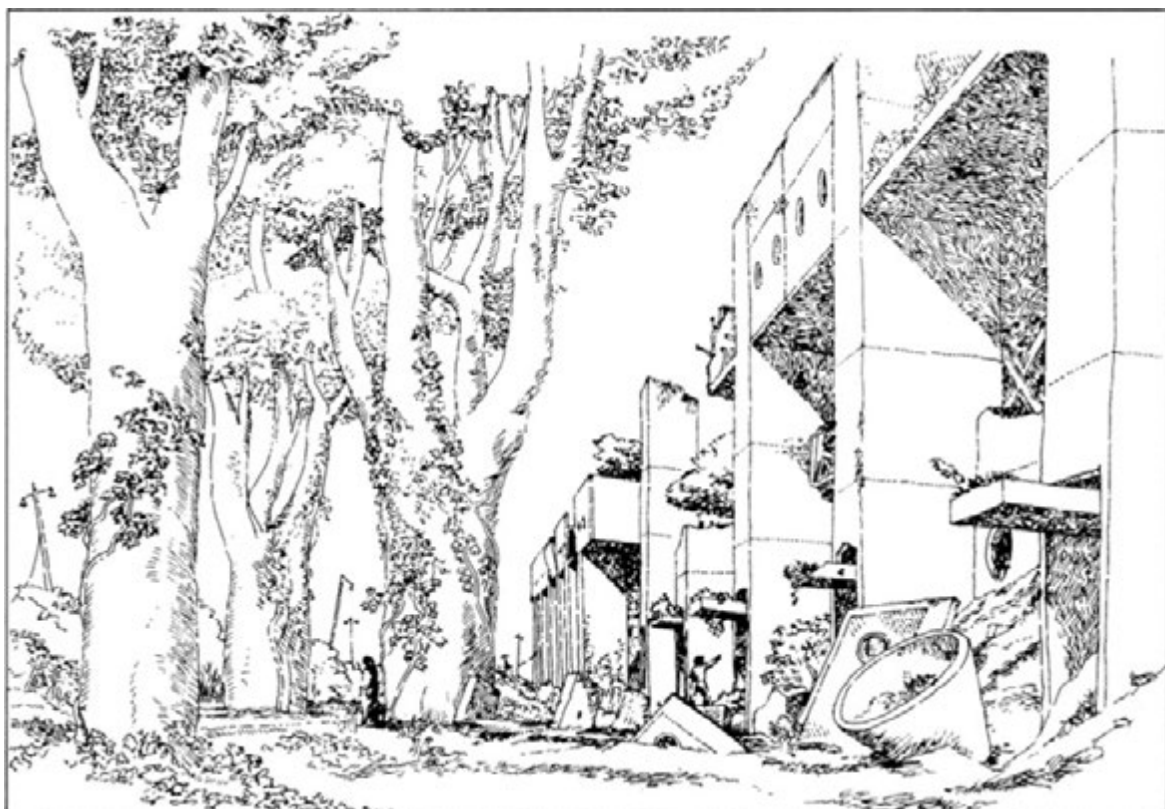






The fountain square in the heart of the city, in which the colossal viaduct forms of Stirling's project are developed as a portico serving as a facade for the town. The 'L'-shaped blocks are enclosed, forming perimeter blocks which include small internal court buildings. The roofs are developed into allotment gardens and the new corner buildings emerge as garden pavilions. What will happen to Runcorn and other modern cities we do not know....





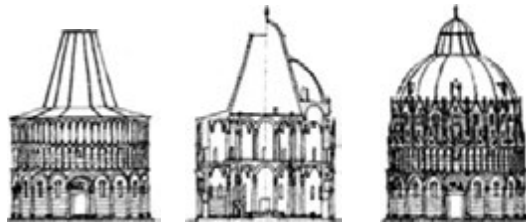


If these buildings are conceived in traditional materials, set within the context of a different economy and a more enlightened appreciation of the value of buildings, it is possible to imagine a cycle of occupation, perhaps followed by abandonment and



reappropriation with further transformations. Whether these buildings make a strong case for transformation is a moot point. The value of modern architecture may be questioned, given its poor performance and impermanence.





BIOGRAPHICAL NOTE

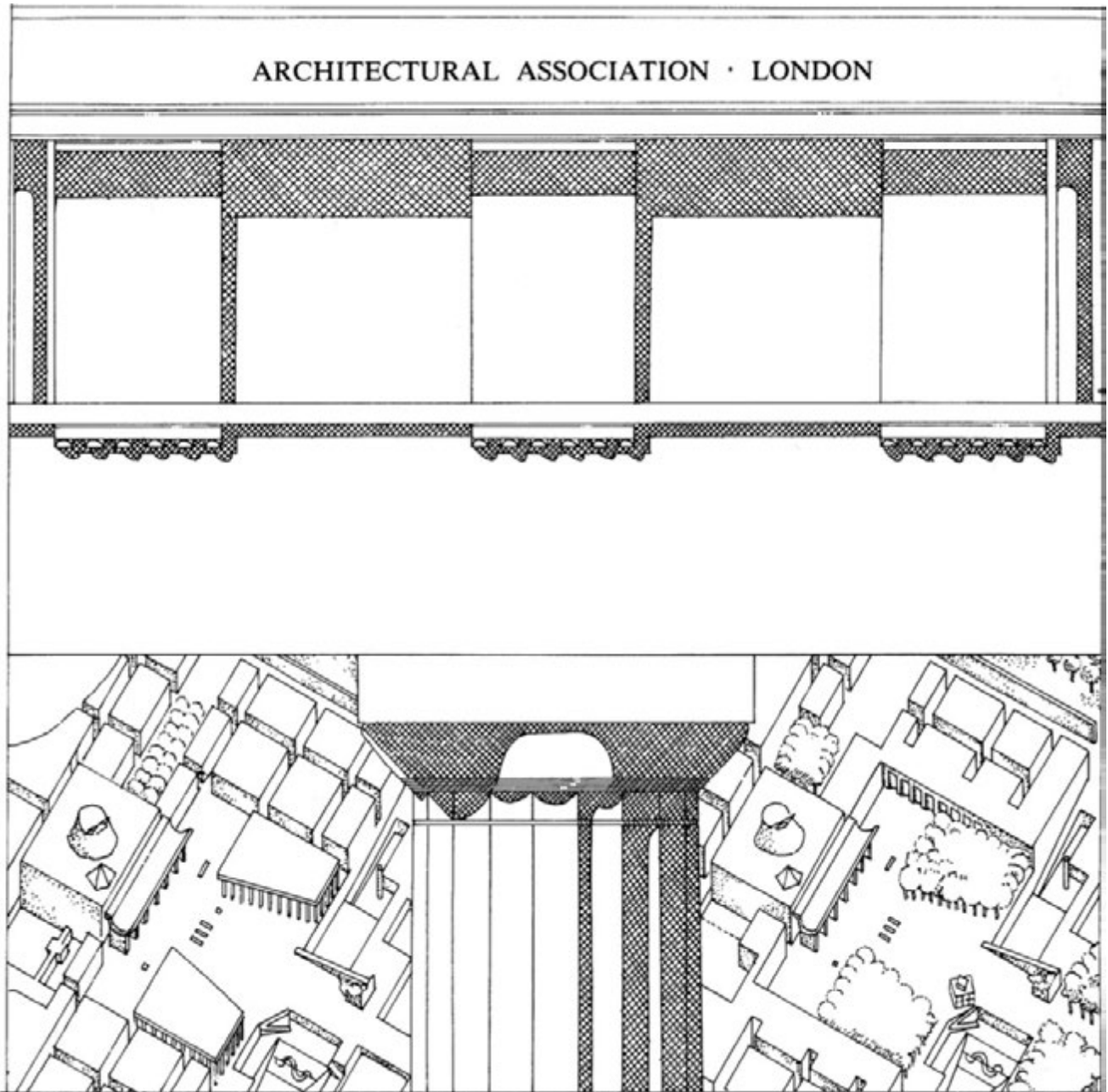
Rodrigo Perez de Arce was born in Santiago, Chile in 1948; studied architecture in Santiago and worked for a while in his father's studio before coming to Britain; attended the AA Graduate School 1973-75 and worked for Williams and Winkley, Architects 1973-79; AA Diploma School tutor from 1978 onwards. Publications: Urban studies on Valparaíso (1973) and Bolivia; articles in *A + U*, *Architectural Design*, *Lotus*, *Techniques et Architecture*, *International Architect*.

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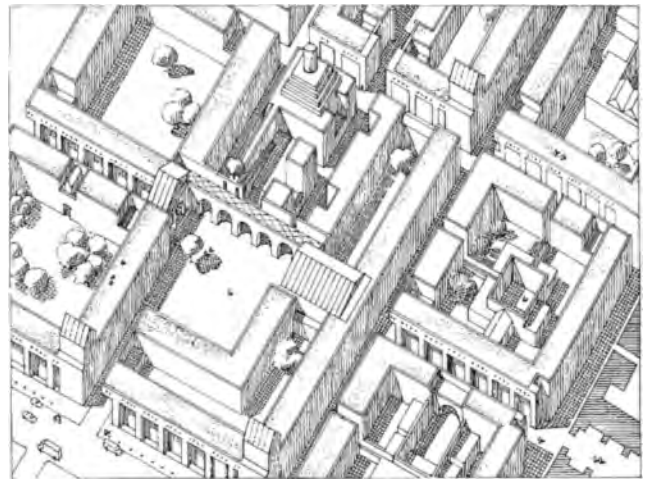
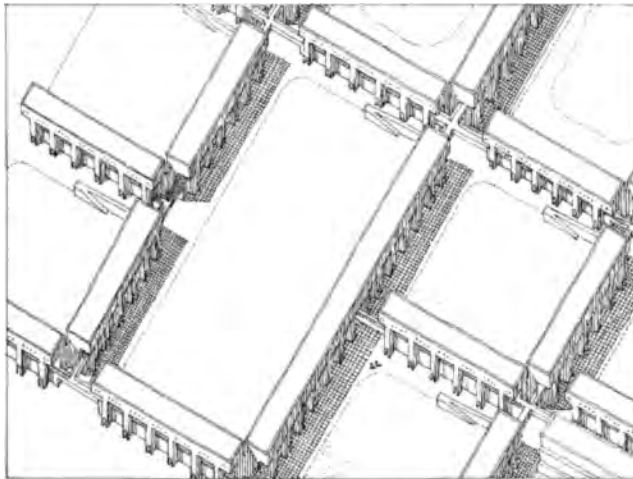
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RUNCORN TRANSFORMED – A LONG TERM CHECK

R. Perez de Arce, Runcorn trasformata/ Runcorn transformed



Runcorn trasformata

Una verifica sulla lunga durata

Runcorn transformed

A long-term check

Rodrigo Perez de Arce

47

La Runcorn New Town è stata costruita nell'arco di quindici anni, partendo, si può dire, da zero, a testimonianza delle notevoli risorse finanziarie, manageriali e tecniche che vengono messe in moto per portare a termine un compito di questa natura e scala. Sotto quest'aspetto, Runcorn è un tipico esempio dei nostri tempi e del modo in cui sorgono i nuovi insediamenti urbani.

Essa pone anzitutto due problemi di fondo: cos'è che fa di un agglomerato una città, com'è possibile che nasca una vera vita urbana e, infine, com'è possibile prevedere l'emergenza di una cultura che si faccia espressione di vita in tale città e che contribuisca, in ultima analisi, all'arricchimento culturale del paese?

La nostra società soffre di una tendenza assai forte e persistente a costruire città e cittadine deurbanizzanti, stimolandone la crescita oltre ogni limite accettabile. Runcorn si offre come alternativa all'incubo delle condizioni di vita dei primi insediamenti industriali. Ma l'introduzione quasi fanatica dell'automobile e la priorità che le è stata assegnata nella pianificazione, il modo in cui le diverse funzioni sono state ghetizzate in aree diverse, generando, di conseguenza, incompatibilità laddove si aveva prima compatibilità, la dispersione, la mancanza di compattezza e la quasi completa assenza di un riferimento ordinatore, configurano un'immagine che non è convincentemente urbana.

Come alternativa alla città qual è oggi, ciò che si propone in questo saggio e nel progetto che lo accompagna è l'ulteriore sviluppo di una delle sue parti in un agglomerato più completo e coesivo. Ciò, in sé, non basta ad assicurare uno sviluppo urbano positivo, ma, per una volta, si vogliono riconcentrare gli sforzi su una precisa possibilità di costruire su un'area partendo da quanto già esiste in essa, con un'attenta considerazione e reinterpretazione dell'attuale progetto urbano, così che le tipologie edilizie, studiate da una nuova prospettiva, possano offrire una molteplicità di soluzioni e, in più, un senso della storia e una consapevolezza del luogo.

Di tutte le zone che costituiscono Runcorn, è stato scelto un singolo insediamento residenziale col suo centro commerciale attiguo, come elementi dai quali partire per un'azione di questo tipo. La decisione non è casuale, ma deriva in parte dal fatto che questa zona della città ha una più forte definizione formale e una chiara — se pur non risolta — ambizione urbana.

Il progetto è ambizioso e non può essere interamente conclusivo. Esso propone un piano per la riurbanizzazione di questa località, cercando di essere unificante pur ammettendo la diversità. Vi è, tuttavia, un'alternativa legittima al piano urbano predefinito, che corrisponde alla graduale riappropriazione di edifici e di terreni vacanti, che può presentarsi ogni qual volta (e per qualunque ragione) scompaiono le forme di controllo sul territorio e sugli edifici, così che un progetto che rifletta intrinsecamente la coscienza urbana degli abitanti può finalmente assumere forma. Questo tipo di sviluppo si situa, per ovvie ragioni, oltre lo scopo del progettista, e le attuali condizioni della nostra società ne rendono l'attuazione ancor più improbabile del progetto originale. L'optimum sarebbe forse l'impostare un progetto che possa servire da base di riferimento, un progetto-quadro, che fornisca il necessario coordinamento degli elementi della città, lasciandone l'attuazione a un'azione di diretto controllo, portata al punto di poter sovvertire anche gli elementi del progetto originale.

Questo è un dilemma intrinseco all'architettura. È rappresentato dal Palazzo di Diocleziano come progetto globale e dalla città che emerge dal suo interno come risultato di una riappropriazione graduale. La sola certezza in merito sta nel fatto che più la città si forma su se

Runcorn New Town has been built almost from scratch in 15 years. This fact testifies to the considerable financial, managerial and technical resources which can be mobilised to accomplish a task of this nature and scale. It is, in this sense, a typical example of our times and of the way in which new urban settlements are established.

It poses fundamental questions: what is it that makes a town, how is it possible that urban life comes into being, and finally, how is it possible to envisage the emergence of an urban culture which becomes the expression of life in that town, and contributes ultimately to the cultural growth of the country?

Our society suffers from a very strong and persistent drive to de-urbanising cities and towns while stimulating their growth to limits beyond the recognisable. Runcorn offers itself as an alternative to the nightmare of the conditions of life in the early industrial settlements. But the almost fanatical introduction of the motor car and the priority which has been given to it within the plan, the way in which functions have been allocated in separate areas with a consequent generation of incompatibilities between what has always been compatible, the dispersion and lack of density, and the almost complete lack of any referential order, configure an image which is not convincingly urban.

As an alternative to the present town, what is proposed here in this essay and in the accompanying project, is a further development of one of its parts into a denser and more cohesive formation. This, in itself, is not enough to ensure a positive urban development, but for once efforts are intended to be concentrated again on an area, with the possibility of building up from the basis of what is given there, with a careful consideration and reinterpretation of the present urban plan, so that the present building types, when studied from a new perspective, can offer a multiplicity of possibilities, and further, a sense of history and a consciousness of place.

Of all the areas which constitute Runcorn, one single housing estate and its neighbouring commercial centre have been chosen as the elements out of which an action of this nature can be implemented. This decision is not accidental, it derives in part from the fact of this part of the town having a stronger formal definition and a clear — if not fulfilled — urban ambition.

This project is an ambitious one, and it cannot be entirely conclusive. It proposes a plan for the reurbanisation of this site which seeks to be unifying while allowing for diversity. There exists, though, a legitimate alternative to the predefined urban plan. It corresponds to the gradual reappropriation of buildings and vacant land such as can occur whenever (for whatever reason) the forms of control over land and buildings disappear, so that a plan which would reflect intrinsically the urban consciousness of the inhabitants may finally take shape. This form of development lies, for obvious reasons, beyond the scope of the architect, and present conditions in our society make its implementation even more improbable than the original plan. Perhaps the ideal would be to set up a plan which could serve as a basis of reference, a foundational plan providing the necessary co-ordination of the elements of the town, its implementation being left to occur as an action of direct control to a point at which even elements of the original plan could be subverted.

This is a dilemma intrinsic to architecture. It is represented by Diocletian's Palace as the all-encompassing plan, and the town which emerges from within it as the result of gradual reappropriation. The only certainty about it lies in the fact that the more the



1. Vista da nord di Runcorn "riurbanizzata" verso la zona di Southgate.

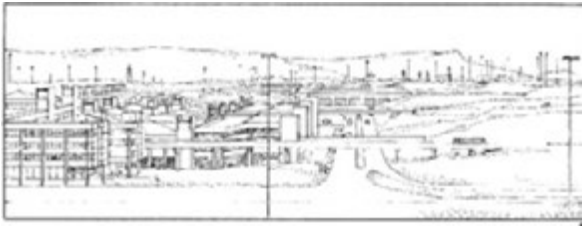
2, 3. Southgate, gli edifici esistenti e la riurbanizzazione.

4. Runcorn/Piranesi, il tempio di Vespasiano e le case di Southgate.

1. View of "re-urbanized" Runcorn from north towards the Southgate area.

2, 3. Southgate, existing buildings and re-urbanization.

4. Runcorn/Piranesi, the temple of Vespasian and Southgate.



5. Runcorn new town, veduta dei blocchi amministrativi, del centro acquisti e di Southgate.
6. Deptford, progetto per un viadotto con abitazioni.
7. Abu Symbel, tempio di Hathor.

5. Runcorn new town, view of administration blocks, shopping centre and Southgate housing.
6. Deptford, a plan for a viaduct with houses under the arches.
7. Abu Symbel, temple of Hathor.

stessa, più questi due fattori sono suscettibili di un reciproco adattamento.

Runcorn: il Master Plan

Il progetto della città si basa su un circuito di strade a traffico veloce descriventi un numero otto e racchiudenti due vasti appezzamenti di terreno che inglobano le varie aree urbane residenziali e il preesistente nucleo urbano: il villaggio di Halton, con la sua collina e le rovine dell'antico castello, che è una delle caratteristiche salienti del paesaggio, e la città originale di Runcorn, che occupa una parte del terreno adiacente al canale navigabile di Manchester (il Mersey). Le funzioni urbane sono rigorosamente zonizzate. A nord vi sono i grandi sviluppi industriali, con frange a ovest e a sud-est, e il carattere e la vitalità della cittadina dipendono in larga misura dall'industria. Le strutture commerciali sono per lo più concentrate in un grande edificio, situato in posizione centrale nella città. La maggior parte delle zone residenziali si sviluppano in forma di quartieri residenziali a bassa densità, basati sul principio della città-giardino, con una profusione di case monofamiliari e di giardini privati. Parallelamente al sistema autostradale, vi è una rete di autobus che funziona come sistema viario indipendente, collegando i vari punti.

Le diverse parti della città sono geograficamente separate l'una dall'altra, e l'effetto delle grandi autostrade, con le loro banchine pronunciate e le "aree a paesaggio" sui due lati, è quello di creare distese assai ampie di terreno senza edifici, rinforzando il carattere di "zona a isola" della città. Automobili ed autobus sono i soli mezzi efficaci per spostarsi da un luogo all'altro, le strade pedonali avendo il consueto carattere desolato e battuto dal vento. Il progetto urbano è discontinuo e assai frammentato, mancano elementi urbani riconoscibili e gli edifici di grande scala sono pochi.

Paradossalmente, in questa città in cui l'automobile gioca un ruolo fondamentale, le strade sono progettate in modo da creare l'illusione di guidare in piena campagna. Come a Milton Keynes, una pervadente uniformità domina i percorsi rotabili, così che la continuità del tessuto urbano è sostituita dalla continuità nozionale stabilita dall'uso dell'automobile. Ciò è sottolineato dalla presenza di una costosa rete di strade di ampie dimensioni, progettate in modo che non vi è senso di gerarchia, luogo o direzione, se non la vista occasionale di una pietra miliare e una diffusa segnaletica.

Ad eccezione del complesso commerciale, di alcuni palazzi per uffici e del progetto residenziale di Southgate (progettato da James Stirling), vi è un accentuato carattere di città senza monumenti, nella quale la scala ridotta e la varietà di pianta e di progetto suggeriscono l'immagine illusoria di un villaggio infinito. Il complesso per acquisti è il caso limite. Edificio senza facciate, dal profilo piuttosto basso e concettualmente crescente all'infinito, esso è in realtà l'unico edificio che consente la fusione di gran parte delle attività urbane associate alla vita commerciale quotidiana di una città. La strada urbana è sostituita da un grande capannone incluso in esso, che contiene una rete interna di percorsi, una piazza e una piazza del mercato, destinate a conservare un senso di realtà e d'immediatezza in questo mondo altamente attrezzato artificialmente illuminato, ossessivamente igienico. La sua vita è dettata dalla scansione temporale delle attività commerciali e se ne avverte la presenza desolata ogni qual volta i negozi si chiudono.

A complicare le cose, il livello pubblico è sollevato di sei metri dal piano terra, su una piattaforma precariamente collegata mediante passerelle ai vari percorsi pedonali che confluiscono in esso da ogni lato. I collegamenti diretti col piano terra sono insignificanti e avvengono a mezzo di scale mobili. L'edificio è fiancheggiato da quattro costruzioni-parcheeggio a est e a ovest e l'intero complesso è gestito da un'impresa privata.

L'origine del piano

Sembrano esser state impiegate due concezioni divergenti. La prima è l'idea della città come serie di villaggi

in cui alberi e vegetazione creano l'illusione di un mondo a stretto contatto con la natura. La seconda è l'idea, solitamente associata con un centro cittadino, della megastuttura che concentra in un solo edificio una varietà di attività pubbliche, così che questo si fa condensato urbano, mondo intenso di vita. In realtà questa seconda concezione fa sì che i villaggi abbiano bisogno della megastuttura e viceversa. Un alto grado di mobilità si fa essenziale e alimenta la creazione di strade a traffico veloce.

Paradossalmente, queste sono così fortemente definite da farsi geografia artificiale modificatrice del paesaggio e la loro presenza è ulteriormente sottolineata dai grandi pali dell'illuminazione, visibili da tutti i villaggi.

Il progetto originale del centro urbano era decisamente concepito come megastuttura, entro la quale una rete di nuclei di servizio avrebbe fornito il supporto strutturale agli elementi "ponte" che dovevano coprire il tratto da torre a torre e che sarebbero stati, almeno concettualmente, sostituiti una volta superata la loro vita utile. Il progetto ricorda le opere dei metabolisti giapponesi, anche se sembra che le pressioni di una definita località, di un bilancio e di un programma precisi abbiano costretto a una soluzione meno spettacolare e più compromissuale. Questo progetto fu poi rivisto, prima di raggiungere la forma attuale.

Da un punto di vista manageriale, Runcorn è un successo. Il compito di costruire la città e di attrezzarla secondo le linee del progetto originario è stato sostanzialmente realizzato e il risultato è un modello di capacità organizzativa. I particolari sono curati, le strade, i parchi e le case completati. Sono stati piantati alberi a profusione, e, ad eccezione dei maggiori edifici (incluso il complesso di Stirling), è evidente che si è cercato di creare un ambiente "amichevole", un'isola di civiltà in una regione fortemente industrializzata. Teti e tegole, muri di laterizio, recinzioni di legno e accostamenti pittorreschi sembrano confermare quest'immagine. Il contrasto si fa stridente ove si confronti Runcorn con Liverpool o con Manchester, le due più grandi città della regione. In realtà, sembra assurdo che lo sforzo umano e finanziario posto nella costruzione di questa nuova città non sia stato concentrato piuttosto sul recupero di questi centri storici. Attualmente è un problema molto sentito, ma non lo si affronta comunque in questo saggio. Per il bene o per il male, Runcorn è un fatto, un nuovo centro urbano che si aggiunge alla mappa di questo paese.

La zona di Southgate

Il complesso residenziale di James Stirling è situato immediatamente a sud dell'edificio per acquisti, fiancheggiato sul lato ovest dall'autostrada che taglia la città in direzione nord-sud. Le banchine dell'autostrada rafforzano un bacino naturale entro il quale si sviluppano gli edifici residenziali, con la collina di Halton ben visibile a nord. Lo schema è del tutto atipico per le isole residenziali della città. Si ricollega alle case a terrazza e ai cortili georgiani, ha un forte carattere monolitico e non fa concessione alcuna a immagini pittorresche o all'uso di elementi vernacolari. Il tessuto è imponente, la pianta abbastanza meccanicistica e la scala monumentale. È costituito da due gruppi di edifici, la prima fase dei quali è stata pubblicata in varie riviste di architettura e compresa nel libro *James Stirling: Buildings and Projects 1950-74*. Gli edifici della seconda fase, che sono meno noti, sono costituiti da gruppi di case a schiera, di carattere più tradizionale, ma sconcertanti. Costruzioni leggere a intelaiatura di legno rivestite di pannelli verticali di poliesteri rinforzato con fibra di vetro di colori assai brillanti, si alternano, creano strisce di grande scala d'arancio, bianco, azzurro e verde.

Ordinamento generale

Lo schema di Stirling corrisponde senza dubbio al desiderio di creare entro Runcorn un settore urbano che si ponga come alternativa alla dispersione degli insediamenti attigui. È organizzato secondo una griglia rigida, che crea una sequenza di corti quadrate e rettangolari.

town builds upon itself, the more these two factors are subjected to adjustment.

Runcorn: The Master Plan

The plan of the town is formed on the basis of a circuit of high speed roads describing a figure eight and enclosing two large pieces of land, which include the various residential urban areas and the existing urban nucleus: the Halton village, with its hill and the ruins of an ancient castle which is one of the most prominent land features, and the original town of Runcorn, which occupies some land adjacent to the Manchester ship canal (River Mersey). Urban functions are very strictly zoned. There are large industrial developments occurring at the north, west and south-east fringes, and the character and livelihood of the town are very heavily dependent on industry. Commercial facilities are mainly concentrated in one large building, which is located in a central position in the town. Most residential areas are developed as low-density housing estates based on a garden city idea with a profusion of individual houses and private gardens. Parallel to the expressway system, there is a bus network which operates on its independent road system, connecting the various parts of the town.

The different parts of the town are geographically segregated from each other, and the effect of the very large-scale roadways, with their pronounced banks and "landscaped areas" to either side, is to create very wide expanses of land which do not contain any buildings, and which reinforce the character of the town as constituted by the island sites. The motor car and the bus are the only effective means of moving from one place to another, pedestrian routes having the familiar desolate and windswept character. The urban plan is discontinuous and very fragmented, there is an absence of recognisable urban elements and only a few large-scale buildings.

Paradoxically, in this town where the motor car plays a fundamental role, roads are so designed as to create the illusion of driving through the countryside. As in Milton Keynes, there is a pervading uniformity along the motorway routes, such that the continuity of the urban fabric is replaced by the notional continuity established by the use of the motor car. This is supported by the provision of an expensive network of generously-sized roads, which are so designed that there is no sense of hierarchy, place or direction, other than the occasional sight of a landmark and a profusion of street signs.

With the exception of the shopping-centre complex, some administrative buildings, and the Southgate housing scheme (designed by James Stirling), there is an emphasis upon the creation of a town without monuments, where low scale and variety of layout and design suggest the illusory image of an infinite village. The shopping complex is an extreme case. A building without facades, of a rather low profile, and conceptually of infinite growth, is in fact the single building which congregates most of the urban activities associated with the everyday commercial life of a town. The urban street is replaced by a large enclosed hangar which contains an internal network of alleys, a "piazza", and a market place which has to preserve a sense of reality and immediacy on this highly serviced, artificially lit and obsessively hygienic world. Its life is dictated by the timing of its commercial activities, and its desolate presence is felt whenever the shops close.

To make matters more difficult, the public level is raised 6 metres above the ground on a deck which is tenuously connected via pedestrian bridges to the various pedestrian routes which approach it from each side. Direct connections to the ground are meaningless, and occur by means of serviced staircases. The building is flanked by four parking buildings to the east and west, and the entire complex is administered by a private business enterprise.

The origin of the plan

Two divergent concepts seem to have been employed.

The first is the idea of the town as a series of villages in which trees and planting create the illusion of a world in very close contact with nature. The second is the idea, usually associated with a town centre, of the megastructure which concentrates in one building a variety of public activities so that it becomes an urban condenser, a world of intense life. In reality, this second concept works so that the villages require the megastructure and vice versa. A high degree of mobility becomes imperative and hence the creation of express routes. Paradoxically, these are so strongly defined as to become an artificial geography modifying the landscape. Their presence is further emphasized by the existence of high mast lighting poles which are visible from any of the villages.

The original plan for the urban centre was more definitely conceived as a megastructure, where a grid of service cores provided structural support for "bridge" elements which would span from tower to tower, and would be at least conceptually replaceable once they had outlived their useful life. The project resembles the work of the Japanese metabolists, although it seems as if the pressures of a real location, a budget, and a programme, enforced a less spectacular and more compromised solution. But this plan was further revised before reaching its present form.

Runcorn has been successful from a managerial point of view. The task of building this town and equipping it as proposed in the original plan is fundamentally accomplished, and the result is an example of organisational capability. There exists a sense of care in the detailing and the completion of roads, parks and houses. Trees have been planted in profusion and except for the major buildings (including Stirling's complex) it is evident that there has been an emphasis upon the creation of an "amicable" environment, an island of civility in this heavily industrialised region. Tiled roofs, brick walls, timber fences and picturesque arrangements seem to confirm this image. It is also true that, because of its being a new town, there is as yet no dereliction or sense of decay. The contrast is striking when comparing Runcorn with Liverpool or Manchester, the two largest cities in its proximity. Indeed, it seems contradictory that the human and financial effort which has been put into the building of this new town could not have been concentrated on the rescue of these historical centres. The issue is very pressing at the moment, but is not dealt with in this essay. For good or evil, Runcorn is a fact, a new urban centre added to the map of this country.

Southgate area

James Stirling's residential complex lies immediately to the south of the shopping building, flanked to its west side by the motorway which cuts across the town in a north-south direction. The motorway banks reinforce a natural basin inside which the residential buildings develop, with the Halton hill closely visible to the north. The scheme is entirely untypical of the residential islands of the town. It makes reference to Georgian terraced houses and courts, it has a strong monolithic character, and it makes no concession to picturesque images or to the use of vernacular elements. Its fabric is imposing, its layout is rather mechanical and the scale monumental. It is constituted by two groups of buildings, the first phase being published in various architectural journals and included in the book *James Stirling: Buildings and Projects 1950-74*. The second-phase buildings, which are less well-known, are groups of terrace houses, more conventional in planning but of a disconcerting character. Light-weight timber frame constructions clad in vertical panels of glass-reinforced polyester of very bright colours, alternated, create very large-scale stripes of orange, white, blue or green colours.

General layout

Stirling's scheme undoubtedly responds to a desire for the creation of an urban realm within Runcorn, which

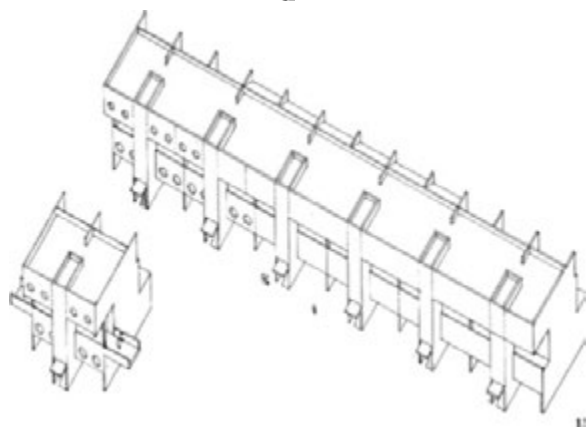
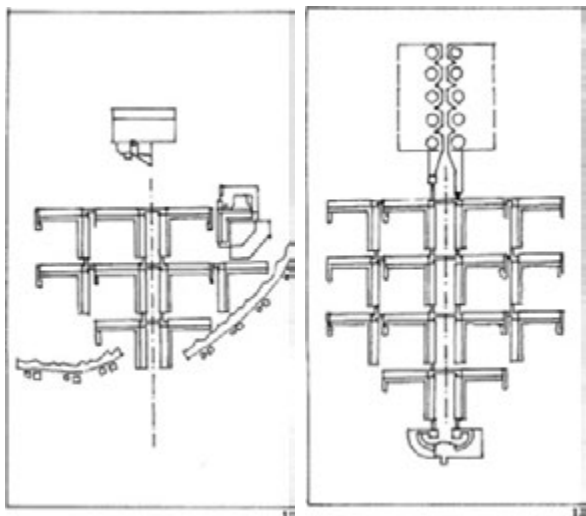


8. Runcorn, rovine di Southgate.

9. Il tipo edilizio di Runcorn.

8. Runcorn, ruins of Southgate.

9. Runcorn building type.



10. Runcorn, paesaggio industriale da Halton Castle.
11, 12. Runcorn riconsiderata, la pianta di Nollis secondo Stirling.
13. Runcorn Southgate fase one, unità e "terrace".

10. Runcorn: industrial landscape from Halton Castle.
11, 12. Runcorn: reconsidered, Stirling's Nollis plan.
13. Runcorn Southgate phase one, the unit and the terrace.

Viene proposto un asse centrale, poi inspiegabilmente soppresso dall'ingombrante presenza di un blocco più grande che racchiude la corte maggiore. Parallelamente ad esso corre un ampio viale che raccoglie il traffico proveniente dalle varie strade, le quali si basano sul concetto delle strade senza uscita, di solo accesso, col risultato che i percorsi si fanno confusi e va perso il senso della direzione.

Nella pubblicazione di Stirling (*Buildings and Projects*) vengono presentate come fonte di riferimento le piazze georgiane, ma le corti di Runcorn hanno sempre fronti su strada su due lati e facciate sugli altri due. Quindi, esse non creano un settore pubblico, né possono trasformarsi in giardini interni ad uso dei soli abitanti. Questa contraddizione si fa apparente ove si consideri il fatto che gli alberi sono stati piantati a filari, così da creare due piani virtuali che suggeriscono il completamento della chiusura della corte e la continuità della strada. Alcune delle prime proposte per Southgate si basavano sull'idea di strade e di piazze che formavano blocchi di dimensioni assai grandi. È possibile che queste proposte siano state scartate su iniziativa delle autorità responsabili della città. Le terrazze residenziali sono simili a molte terrazze georgiane, per il fatto che non vi è in esse individuazione degli angoli né sviluppo di una tipologia d'angolo.

La revisione del progetto

Di tutti i progetti di Stirling, Runcorn sembra essere quello che ha subito trasformazioni più sostanziali allorché venne inserito nella sua proposta per il piano del Nollis, Settore IV. Qui, l'organizzazione assiale è vigorosamente ripristinata, gli edifici sono disposti simmetricamente lungo la strada maggiore e la seconda fase è interamente omessa. Si può dunque concludere che, se Stirling avesse agito senza i vincoli postigli a Runcorn, avrebbe sviluppato lo schema secondo le linee del piano del Nollis? La domanda resta senza risposta e non fa che rafforzare l'apparente contraddizione col vero progetto di Runcorn e il suo frustrato asse centrale.

La tipologia edilizia

Gli edifici della prima fase sono innegabilmente imponenti. La sezione combina una struttura a intelaiatura monumentale che crea il fronte su strada con una struttura di terrazze a gradinata visibile dal lato del giardino.

Questa situazione viene ulteriormente analizzata più avanti, ma anzitutto, è importante considerare le unità residenziali. Lo schema offre sia accessi a scale, assai frequenti, sia un sistema di accessi orizzontali, che si sviluppa a livello del secondo piano e fornisce un collegamento riparato fra le terrazze e il centro per acquisti: se non che i ponti che collegano una terrazza all'altra sono senza copertura. Il progetto della terrazza è tale che vi è una torre per le scale fra ogni coppia di appartamenti. La tipologia edilizia potrebbe essere articolata in due sottotipologie diverse: una basata sull'accesso mediante scale, l'altra basata sull'idea di case costruite su un podio (strade pubbliche a livello del secondo piano). Tuttavia, sembra esservi una ridondanza di accesso pubblico e gli appartamenti che danno sulla strada elevata mancano di quella privacy che hanno invece gli appartamenti dei piani superiori.

Il piano terra è occupato da garage di fronte alla strada, che diventa una strada ingabbiata, con le automobili parcheggiate accanto ai garage che ostruiscono il percorso pedonale. Gerarchicamente, la precedenza è attribuita alla passerella, che diventa essa stessa strada, mentre la strada vera e propria diventa un percorso ausiliario. Quindi, l'ordine urbano elementare è sovvertito, il settore pubblico resta indefinito, orizzontalmente per la natura simultaneamente pubblica e privata delle corti, e verticalmente per la duplicazione delle strade. Gli edifici della seconda fase sono costruzioni a terrazza a due o a tre piani, corrispondenti a tipologie ben stabilite, benché il loro sistema costruttivo e, in particolare, il loro "tessuto", sia del tutto insolito. Qui, le corti si fanno giardini comunali, la strada diventa pedonale e l'accesso al

parcheggio è situato all'aperto, in ciascuna corte. Le condutture del riscaldamento centralizzato corrono a livello delle coperture e si estendono da una terrazza alla successiva all'altezza del tetto, sostenute da telai metallici. Questa caratteristica, che è il risultato di considerazioni economiche, ha l'effetto di portare un servizio alla qualità di monumento e anche qui, come nel Centre Pompidou, l'architettura sembra affermarsi come celebrazione della tecnologia. L'effetto è perturbante, se si considera che l'intera città risente della vicinanza eccessiva e quasi soverchiante dell'industria, delle autostrade e di tutti i simboli del potere industriale.

Alcune ipotesi sulla tipologia edilizia: Southgate e il viadotto

Southgate ha una linea di tetto fortemente orizzontale. Sembra quasi che in essa sia stato stabilito un preciso livello per l'altezza del tetto, e che gli altri livelli siano stati adattati al profilo del paesaggio. Tuttavia, benché tutti gli edifici della prima fase abbiano la stessa altezza, viene a crearsi l'impressione che il terreno sia stato scavato verso ovest per far spazio agli edifici.

L'orizzontalità di queste terrazze è una caratteristica che colpisce. Essa non deriva, come in La Tourette, da una concezione globale, nel cui ambito la linea del tetto è vigorosa e riposante e i livelli più bassi descrivono un profilo accidentato, ma corrisponde alla ripetizione di una tipologia edilizia. L'orizzontalità è accentuata dalla natura a viadotto della semi-intelaiatura delle terrazze. Ed è quando si collegano queste strutture ai viadotti che emerge un'immagine potente. Sia la loro forza che la loro monumentalità acquistano una giustificazione e, come nel progetto di viadotto contenente case a Deptford, le unità residenziali sono qui contenute sotto ed entro il telaio.

Gli alzati posteriori delle case di Royal Mint di Leon Krier, corrispondono alla stessa concezione, ad eccezione del fatto che i piloni non contengono scale, ma sembrano corrispondere a un preconetto circa l'apparenza esterna degli edifici. Come a Runcorn, vi è una facciata rientrante, ma vi sono anche suggerimenti su come far rientrare la facciata fino al fronte del giardino. Costruzioni romaniche e moresche insinuano caratteristiche d'identità per le singole case. Vi sono ovvii riferimenti al progetto Obus per Argel, di Le Corbusier, dove la struttura principale è fornita dall'architetto e i tamponamenti possono variare all'infinito. E, per strana coincidenza, gli edifici di Obus sono viadotti che sostengono le autostrade a livello del tetto.

Le facciate giardino di Royal Mint sono versioni riviste di Runcorn. Le proposte sono cambiate e sono cambiate le finestre a livello di cornicione, è stato introdotto un balcone e le parti terminali sono chiaramente affermate come telai a portale, senza aggetti. A Runcorn le parti terminali sono aggettanti, ma potrebbero venir concepite come archi spezzati, e, di conseguenza, la discontinuità dei telai che costituiscono il viadotto sembra derivare dall'erosione del tempo. Questa concezione è naturalmente del tutto speculativa, non vi è prova alcuna che essa sia stata alla base del progetto di Runcorn. Tuttavia ciò non è rilevante ai nostri fini: l'importanza della concezione sta nel suo farsi principio formativo di un possibile nuovo progetto di Runcorn.

Infatti, si può immaginare un campo occupato da strutture a viadotto originariamente intersecanti l'un l'altra ad angoli retti, ma che, col passar del tempo, si siano erose al punto di diventare strutture indipendenti. Queste strutture erose sono integrate da nuove costruzioni che creano fronti residenziali continui.

Southgate: tessuto-monumento

Se si trasportano a Runcorn le "rovine del tempio di Vespasiano", di Roma, si fa chiaro come l'esistenza di una struttura colossale domini la strada. Non vi è scala mediatrice, e il tessuto è monumentalizzato a un livello tale che, in un simile complesso, non vi è ragione alcuna di creare monumenti. Ciò collega Runcorn ai progetti dei metabolisti giapponesi e agli edifici delle megastrut-

would be set as an alternative to the dispersion of the neighbouring settlements. It is organised in a rigid grid pattern, creating a sequence of square and rectangular courts. A central axis is proposed, and inexplicably suppressed, by the obtrusive presence of a larger block which encloses the major court. Parallel to it runs a wide boulevard, which collects the traffic emerging all the residential streets. The street is entirely based on the idea of cul-de-sac streets, with the effect that routes become confusing and the sense of direction is lost.

Georgian squares are presented in Stirling's publication (*Buildings and Projects*) as a source of reference, but the Runcorn courts are always faced by street fronts on two sides and back facades on the other sides. Thus they do not create a public realm, nor can they become inner gardens for the use of residents only. This contradiction becomes apparent when considering the fact that trees have been planted in rows such that they create two virtual planes which suggest the completion of the enclosure of the court and the continuity of the street. Some of the early proposals for Southgate were based on the idea of streets and squares forming very large blocks. It could be that these proposals were discarded on the initiative of the authorities in charge of the town. The residential terraces are similar to most Georgian terraces in that there is no recognition of the corners, and no development of a corner type.

The revision of the plan

Runcorn seems to be — of all of Stirling's projects — the one which suffers more substantial transformations when inserted in his proposal for the Noll Plan, sector IV. Here, the axial arrangement is strongly re-established, buildings are placed symmetrically along the major street, and the second phase is entirely omitted. Can one conclude that had Stirling operated without such constraints as he confronted in Runcorn he would have developed the scheme according to the Noll Plan lines? The question remains open, but it only reinforces the apparent contradiction with the real Runcorn plan and its frustrated central axis.

The building type

The buildings of the first phase are undeniably imposing. The section combines a monumental frame structure which creates the street front with a stepped terrace structure as it appears to the garden side.

This situation is further analysed below, but first it seems important to analyse the residential units. The scheme offers both very frequent staircase access and a horizontal access system which occurs at second floor level, and provides a sheltered connection between the terraces and the shopping centre, except that the bridges linking one terrace to another are left without roof cover. The plan of the terrace is such that there is one staircase-tower between each pair of flats. The building type could be unfolded into two different types: one based on a staircase access, the other based on the idea of houses built on a podium (second floor level public street). However, as it stands, there seems to be a redundancy of public access, and the flats fronting the elevated street are deprived of the privacy which the top flats enjoy.

The ground floor is occupied by garages fronting the street which becomes a mews-type street with cars parked next to the garages obstructing the pedestrian route. Hierarchically, the emphasis has been placed on the elevated walkway as the street, the actual street becoming a subsidiary route. Thus the elementary urban order is subverted, the public realm being left undefined horizontally because of the simultaneous public-private nature of the courts, and vertically because of the duplication of streets.

The second phase buildings are two or three storey high terrace houses. They correspond to well-established types, although their constructional system, and in particular, their "fabric", is entirely unusual. Here the courts become more secluded communal gardens, the

street pedestrianised, and the parking access occurs in each court in the open. District heating ducts run at roof level and span from one terrace to the next at roof height, supported on metal frames. This feature, which is a result of cost considerations, has the effect of raising service to the quality of a monument and, as in the Centre Pompidou, the architecture seems to be stated as a celebration of technology. The effect is disturbing considering that the whole town suffers from being too close to, and indeed almost overwhelmed by, industry, motorways and the symbols of industrial might.

Some hypotheses on the building type: Runcorn Southgate and the viaduct

Runcorn Southgate has a very strong horizontal roof-line. It is almost as if a datum level has been established at roof level, the other levels adapting to the contours of the land. However, though all buildings of the first phase are equally high, it creates the impression of the ground having been excavated to the west side to make room for the buildings.

The horizontality of these terraces is a striking feature. It doesn't derive, as in La Tourette, from an established idea of building from the sky to the ground, the roofline being strong and restful, the lower levels describing an accidental contour. It corresponds to the repetition of a building type. The horizontality is accentuated by the viaduct nature of the frame-half of the terraces. And it is when one relates these structures to the viaducts that a powerful image emerges. Both their strength and their monumentality become justified and, as in the project for a viaduct containing houses in Deptford, the residential units are contained underneath and within the frame.

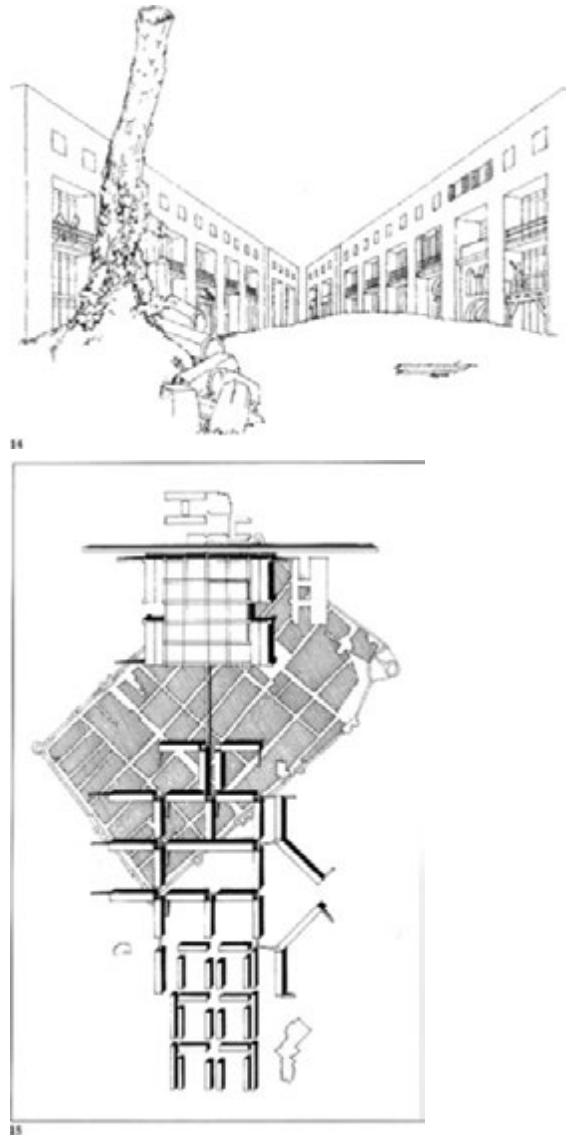
The back elevations of Leon Krier's Royal Mint houses conform to the same idea, except that the piers do not contain stairs but seem to correspond to a preconception with regard to the external appearance of the buildings. As in Runcorn, there exists a recessed facade, but there are suggestions as to how the facade could be pushed back to the garden front. Romanesque and moorish (self-help?) constructions begin to suggest a re-establishment of an identity for the individual houses. There are obvious references to the Obus project for Argel by Le Corbusier, where the major structure is provided by the architect, and houses become infills of infinite variety. And by coincidence, it so happens that the Obus buildings are viaducts supporting the roadways at roof level.

The Royal Mint housing garden facades are a revised version of Runcorn. The propositions have changed and so have the windows at cornice level, a balcony has been introduced, and the ends are clearly stated as a final portal frame, without projections. The ends do project in Runcorn but one could conceive of them as being broken arches, and consequently, the discontinuity of the frames which constitute the viaduct appear to derive from the erosion of time. This notion is, of course, entirely speculative. There is no evidence to prove that it informed the Runcorn project. However, this is not relevant to the purpose of this paper, for its importance lies in the fact of its becoming a strong notion which could serve for the foundation of a new project in Runcorn.

Thus one can imagine a field occupied by viaduct structures which originally intersected each other but which, in the course of time, have eroded to the point of becoming independent structures, these free-standing eroded structures are complemented by new constructions creating continuous residential fronts.

Runcorn Southgate: The monument is the fabric

When the "ruins of the temple of Vespasian" in Rome are transposed to Runcorn, it becomes clearer how the existence of a colossal structure dominates the street. There is no mediating scale, and the fabric is monumentalised to such a pitch that there is almost no scope for the creation of monuments in such a setting. This relates Runcorn to the projects of the Japanese



14. Krier, abitazioni a Royal Mint, Londra.
15. Comparazione di scala tra Runcorn e Aigues Mortes.

14. L. Krier's Royal Mint housing, London.
15. Comparison to scale, Runcorn and Aigues Mortes.

ture in cui tutto è monumentalizzato e ogni distinzione gerarchica è soppressa. Tessuto e monumento sono una stessa cosa, per cui non vi è separazione fra architettura civica o domestica. Un semplice ma essenziale concetto urbano viene omissso.

Il tempio di Abu Symbel in Egitto suggerisce una possibile soluzione alternativa, nella quale le nicchie profonde create da una cornice colossale si fanno impianti scenici per sculture costruite a scala monumentale. La scala è quindi sovvertita e le figure creano la condizione di singolarità appropriata a un monumento. Abu Symbel può essere interpretato come una dialettica fra strutture colossali: la cornice, astratta e generale, e le figure disposte nelle nicchie, specifiche ed uniche.

La cornice è presente a Runcorn, ma non limitata da una specifica definizione di luoghi né da una presa di posizione sul fatto di appartenere al mondo dei monumenti o al mondo più prosaico del tessuto urbano. Questa distinzione è non solo legittima, ma necessaria. Per la trasformazione della cornice, potrebbero essere proposti due modelli: Abu Symbel per la creazione di un ordine monumentale, le case-viadotto di Deptford per la de-monumentalizzazione della cornice.

Conclusione

Runcorn si sta avvicinando al completamento secondo il programma originario. È una città nuova e gode del privilegio di non portar segni di abbandono né di decadimento. È in superscala, quindi non soffre di congestione del traffico, di sovraffollamento o di soffocazione. È gentile e domestica quando se ne vedono le zone

residenziali, è dura — a volte brutale — quando tenta di collegare i vari frammenti urbani e di creare un grande centro civico. Riduce la vita pubblica allo stato di bisogno indesiderato ma inevitabile.

Una casa in una città non può mai essere un castello, se deve contribuire a creare un settore urbano in cui casa e città siano entità complementari e quindi incomplete in sé. Lo slogan — “la casa di un inglese è un castello” — crudele com'è, ove lo si applichi a case o appartamenti a costo minimo — è stato sinteticamente propagandato e trasformato in simbolo di idiosincrasia nazionale. Tutti sanno che, se tutte le case pretendono di essere castelli, i locali del Bingo e i luoghi di scommesse sostituiscono, di conseguenza, i centri di vita sociale, e i supermercati e gli ipermercati sostituiscono i negozi e i mercati aperti, la musica registrata e i divertimenti prefabbricati soppiantano la musica dal vivo e i rituali sociali e, infine, le vacanze organizzate non sono un godimento, ma un bisogno pressante di mettersi periodicamente a contatto con un mondo che non ha ancora raggiunto lo stesso livello di commercializzazione e di de-urbanizzazione. Il turismo di massa è infatti spinto, non solo dal bisogno di trovare luoghi più soleggiati, ma anche di riconquistare una forma più sottile di vita collettiva, di godere la strada, un atteggiamento rilassato verso le riunioni collettive, una liberazione dalla tirannia della macchina e del televisore.

La zona centrale di Runcorn ha bisogno di un intervento urgente; il centro acquisti, per la sua natura inversa e il suo controllo monopolizzatore sulle funzioni urbane, è un'affermazione urbana, senza essere poi

giunta a compimento. Un progetto per la riurbanizzazione di Runcorn dovrebbe mirare a ristabilire la continuità del tessuto urbano, incoraggiare lo sviluppo specifico di luoghi aventi un'identità, individuare aree di maggiore uso pubblico e investire dei simboli della vita collettiva, de-monumentalizzare il tessuto della città e stabilire una distinzione precisa fra settore pubblico e privato, ponendo in essere mezzi sottili ed efficaci per filtrare la vita da un settore all'altro. Questo progetto richiederebbe anzitutto un'accurata reinterpretazione dell'esistente tessuto urbano, una valutazione attenta dei suoi pregi attuali e potenziali, un accertamento dei difetti. Occorrerebbe rivedere leggi e regolamenti che formano lo sviluppo urbano, rendendoli tali da far di Runcorn una città, anziché impedirle di trasformarsi in tale, come oggi avviene. Bisognerebbe informare e consultare in ogni paese gli attuali abitanti, perché possano contribuire alla creazione di un sistema di compensazione attentamente equilibrato per i cambiamenti portati dall'attuazione del piano. Non è poi cosa irrealizzabile, ove si pensi che il processo stesso genererebbe benessere, col trasformare in risorsa il territorio. Le compensazioni potrebbero avvenire a mezzo di pagamenti o di effettivi miglioramenti alle proprietà. Sarebbe ingenuo pensare che la necessità di un tale piano sia subito evidente a tutti. Il modo di vita oggi prevalente dipende dall'esistenza di agglomerati urbani che crescono al di fuori di ogni controllo, e pure guarda con sospetto alla vita di città. Sarebbe però del pari ingenuo il ritenere che l'attuale caos urbano sia risultato da una determinazione cosciente, calcolata e universale.

Runcorn di pietra



metabolists and the megastructure buildings where everything is monumentalised and hierarchical distinction is suppressed. Fabric and monument are one single thing so that there is no realm for civic or domestic architecture. A simple but essential urban concept is omitted. The temple of Abu Symbel in Egypt suggests a possible alternative solution where the deep niches created by the colossal frame become the setting of sculptures built to a monumental scale. The scale is thus subverted and the figures create the condition of singularity appropriate to a monument. Abu Symbel can be interpreted as a dialectic between colossal structures: the frame, abstract and general, and the figures set within the niches, specific and unique. The frame exists in Runcorn but with no limit as to the specific definition of places, and no decision as to whether it belongs to the world of monuments or to the more prosaic world of the urban fabric. This distinction is not only legitimate but necessary. Two models could be proposed for the transformation of the frame: Abu Symbel for the creation of a monumental order, the viaduct-houses in Deptford for the de-monumentalizing of the frame.

Conclusion

Runcorn is approaching completion according to its original programme. It is new and it enjoys the privilege of the absence of dereliction and signs of decay. It is overscaled, thus it doesn't suffer from traffic congestion or suffocation. It is kind and homely when seen in its residential areas, it is crude-sometimes brutal — when it attempts to link the various urban fragments and to

create a major civic centre. It reduces public life to the status of an undesired but inevitable need.

A house in the city can never be a castle if it wants to contribute to an urban realm where house and city are complementary entities and therefore incomplete in themselves. This slogan — "the Englishman's home is a castle" — cruel as it is when applied to minimal-cost houses and apartments, has been consistently propagated and made into a symbol of the nation's idiosyncrasy. Everybody knows that when all houses pretend to be castles, bingo halls and betting shops consequently replace centres of social life, supermarkets and hypermarkets replace shops and open markets, packaged music and packaged entertainment supplant live music and social rituals, and finally, the packaged holiday becomes, not an indulgence, but a pressing need to keep periodically in touch with a world which has not yet reached the same degree of commercialism and de-urbanization. For mass tourism is bound up, not only with a search for sunnier places, but also with an urge for the reconquest of a subtler mode of collective life.

The central area of Runcorn asks for urgent action; the shopping centre, because of its monolithic and introverted nature and its monopolising control over urban functions, is an unbearable obstruction to the development of urban life in the town. So too Stirling's residential scheme, because of its excessively monofunctional quality, because of the absence of an appropriately public realm, because of the lack of a hierarchical distinction between its various places and its general abstract character. Also and perhaps first of all because

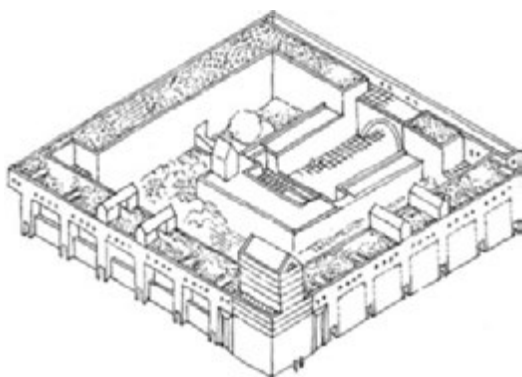
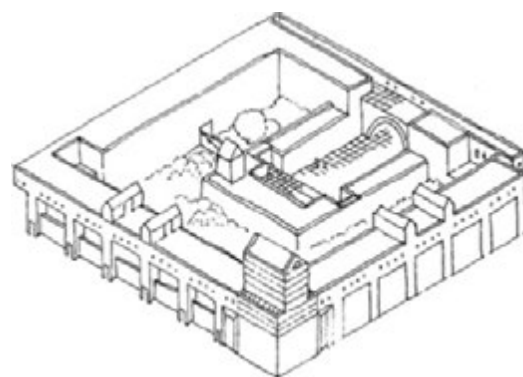
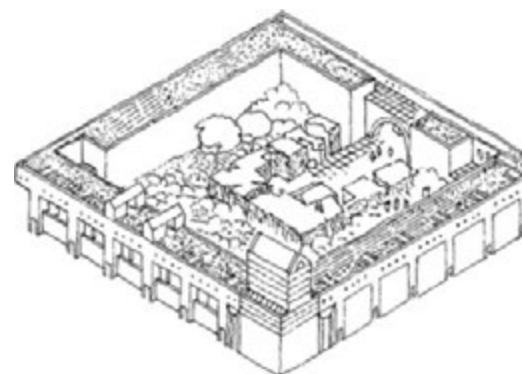
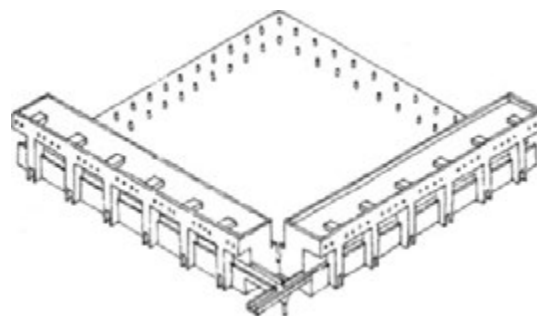
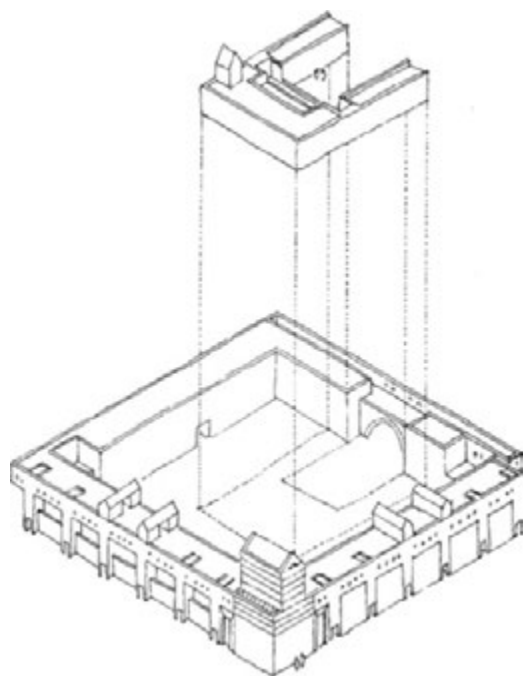
it is stated as an urban promise without reaching its fulfilment.

A plan for the re-urbanizing of Runcorn should aim at re-establishing the continuity of its urban fabric, encouraging the distinctive development of places with identity, identifying certain areas with a major public use and investing them with the symbols of collective life, de-monumentalising the fabric of the town and establishing a precise distinction between private and public realms with the development of subtle and effective means of filtering life from one to the other. This plan would first require a careful reinterpretation of the existing fabric of the town, one which assessed its present and potential virtues and established its failures. The present inhabitants would need to be informed and consulted at every stage, and should contribute to the establishment of a carefully balanced system of compensation for the changes brought about by the implementation of the plan. This is not so difficult if one thinks that the very process would generate wealth by the fact of making land into a resource. Compensations could occur by means of payments or actual improvements to the properties.

It would be naïve to assume that the necessity of such a plan would become immediately apparent to everybody. The dominant life style today depends on the existence of urban conglomerates of uncontrolled growth, and yet it is deeply suspicious of civic life. It would be equally naïve, though, to assume that the present urban chaos has arisen out of a conscious, calculated, and universal determination.

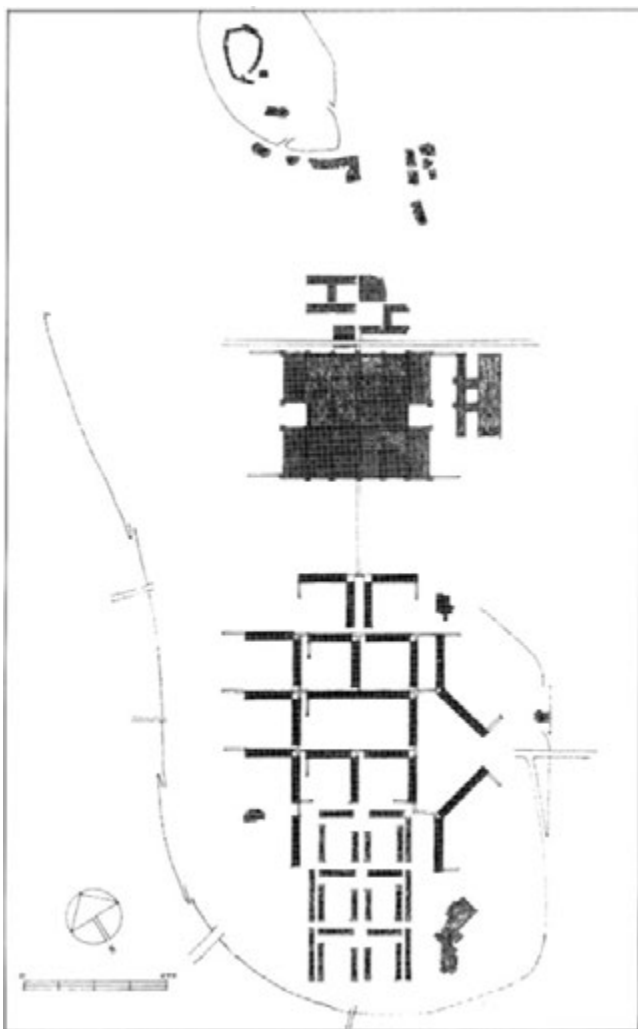


Stone Runcorn



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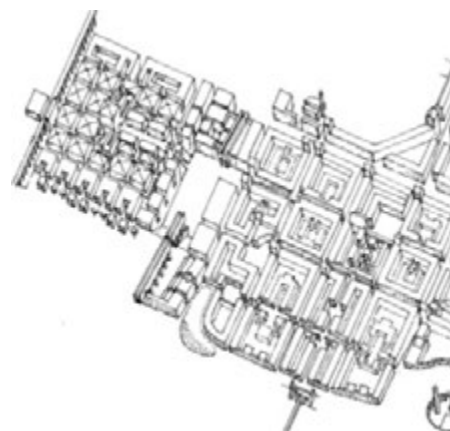
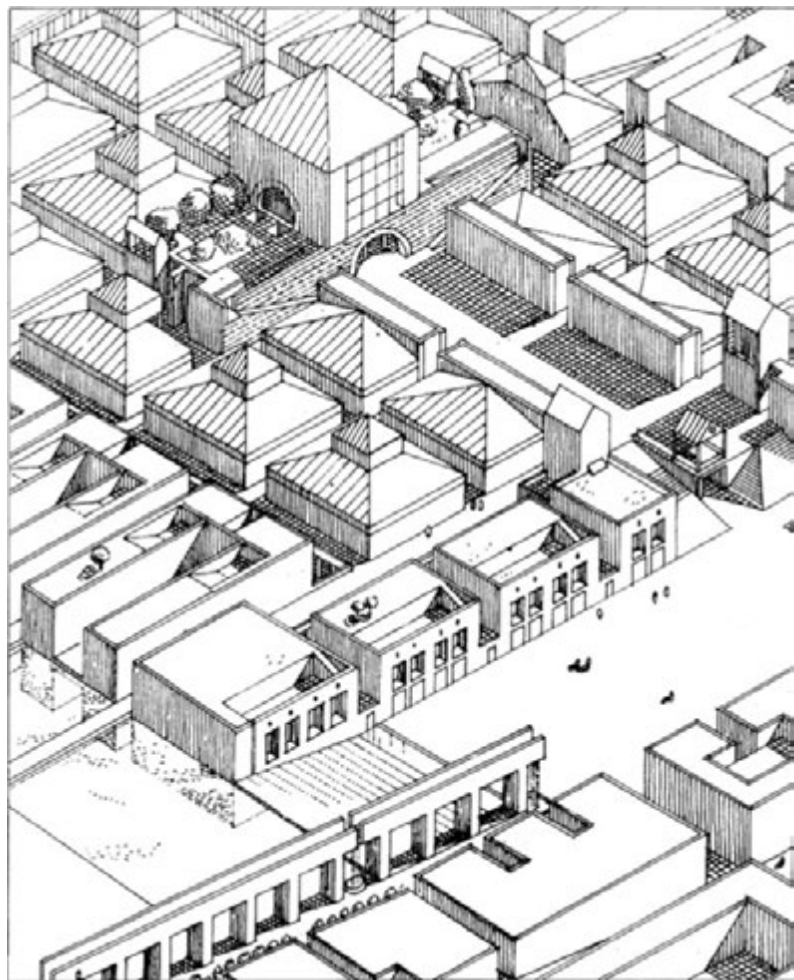
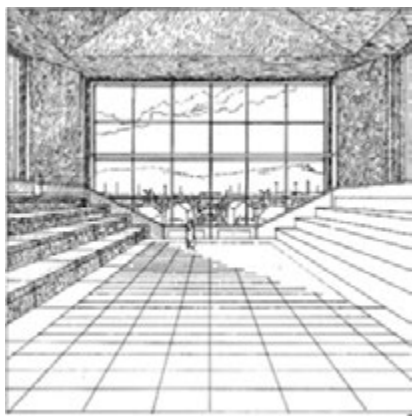
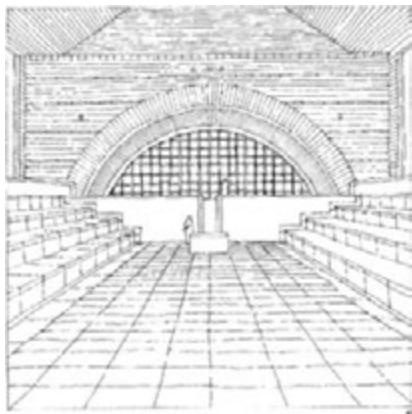
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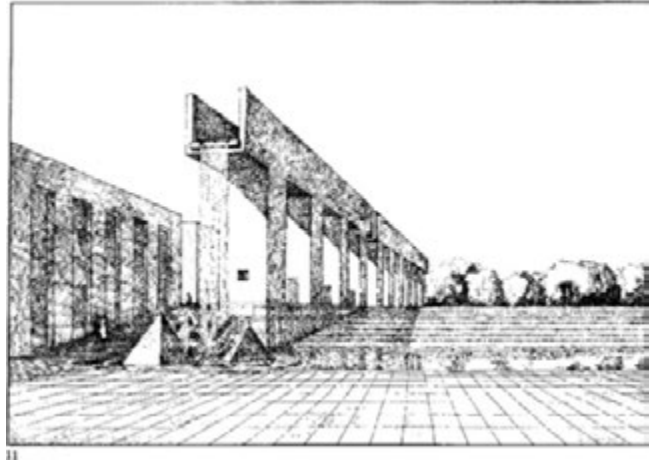
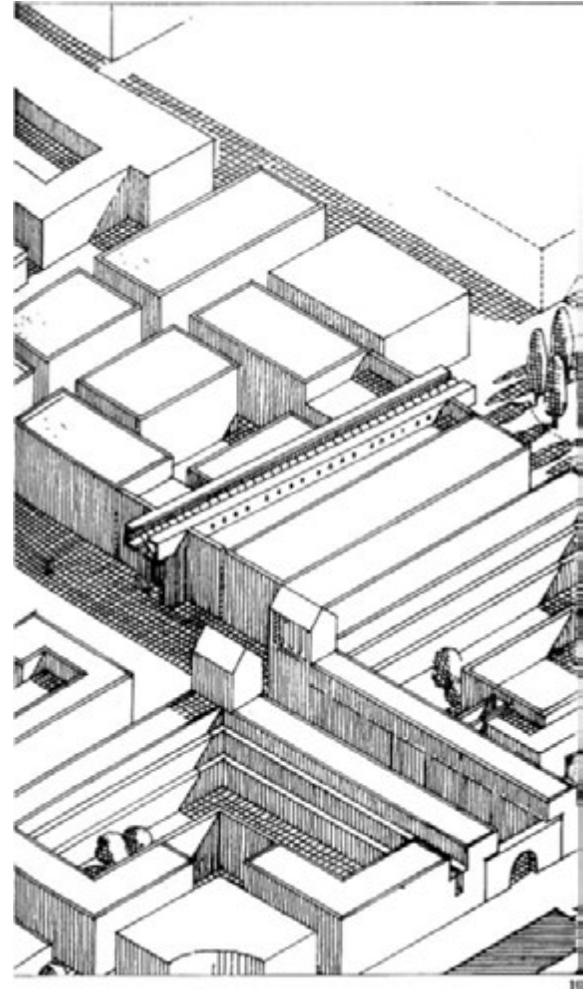
1. I componenti del blocco urbano. Costruzione perimetrale e edifici singoli (scuole, laboratori, ecc.).
2. Proposta delle fasi di trasformazione del blocco.
- 3, 4. Il piano esistente e la riurbanizzazione.
5. Southgate, la condizione d'angolo esistente.



1. Urban block components. Perimeter block and singular buildings (school, workshops, etc.).
2. Urban block proposed phasing of transformation.
- 3, 4. The existing plan and the re-urbanization.
5. Southgate, existing corner condition.



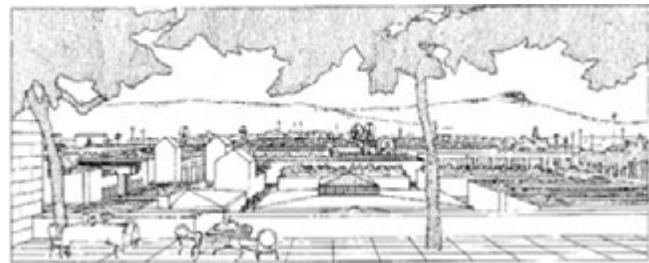
Runcorn zona nord
 6-8. Centro civico, interni della sala delle assemblee e veduta da sud.
 9. Assonometria della zona nord e di Southgate.
 10. Assonometria con la sala delle assemblee e la piazza della fontana.
 11. La fontana.
 12. La piazza della fontana verso nord.
 13. Le terrazze sui tetti dai giardini del centro civico.



11

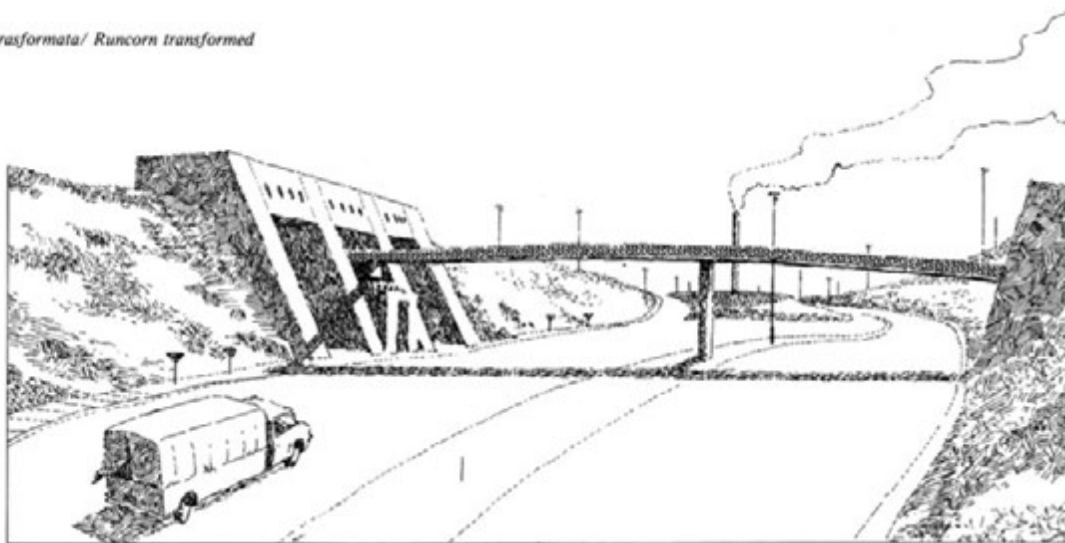


12

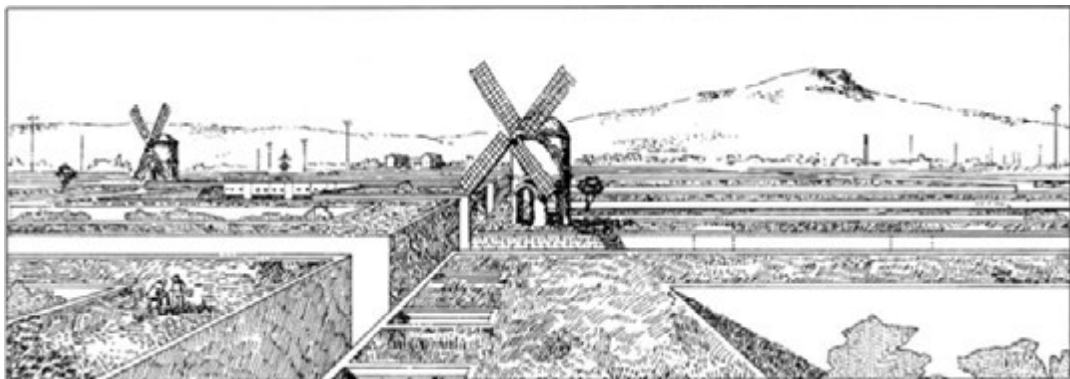


13

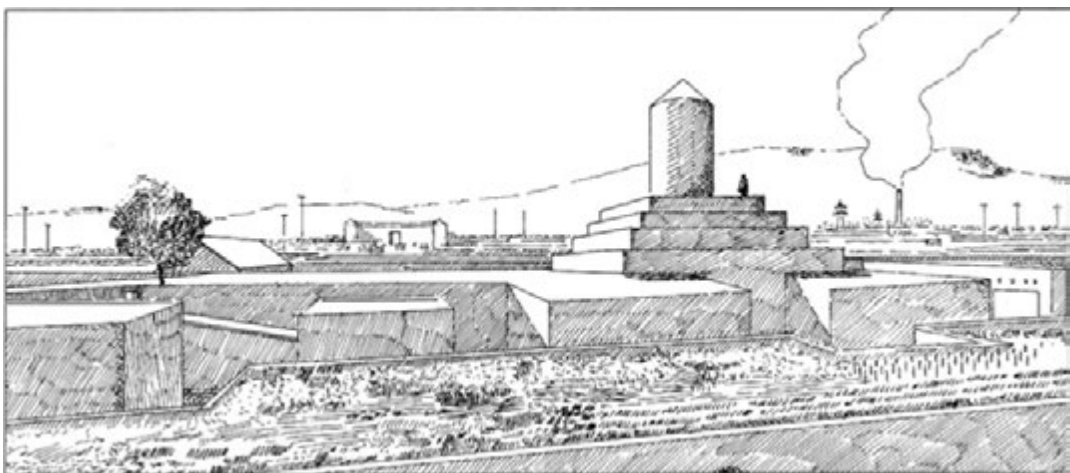
Runcorn north area
 6-8. Assembly Hall, interiors of assembly room and
 view from the south.
 9. Axonometry of north area and Southgate.
 10. Axonometry with assembly room and fountain
 square.
 11. The fountain.
 12. Fountain square to the north.
 13. Roof terraces from civic centre gardens.



14



15



16

14. La nuova porta di Runcorn.
 15, 16. I giardini sui tetti.
 14. Runcorn new gate.
 15, 16. Roof gardens.