



The Heart of the City

International Congresses for Modern Architecture
Congrès Internationaux d'Architecture Moderne

The Heart of the City:

towards the humanisation of urban life

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FIG. 1: Poster for CIAM 7.

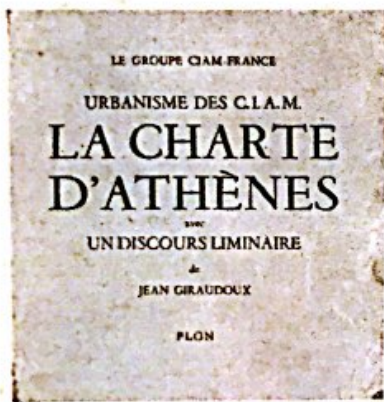


FIG. 2: An Analysis of City Planning: the outcome of CIAM 4, at Athens 1933.



FIG. 3: Housing for the Lower Income Classes: the outcome of CIAM 2, at Frankfurt 1929.

What are you?

– I am a communist, I am a socialist, I am a liberal,
I am a conservative, I belong to the M.R.P, P.K.Z,
Z.M.V, M.R.T . . .

– Fine! But I am asking you what you are.

– Oh, well I'm a grocer
I'm an engineer
I'm a bricklayer
I'm a banker.

– Fine! But I am still asking you what are you?

– Well, I've told you. That's all I am. I belong to
Mr Boum's party and in ordinary life I'm a grocer . . .

– All right then; let me tell you what you are. You
are a man – or a woman –
you are young
or you are old,
you are a poet
or you are an athlete,
and perhaps the two together (which
would be excellent),
you are inquisitive, you are inventive, you
like taking things apart,
or you are an earnest reader, eager for
knowledge
or you like to work with your hands under
the star of geometry – you are an engineer,
or under the star of colour – you are a
painter
or under the star of form – you are a
sculptor
or under the star of order – you are an
architect.

You are a thinker, my dear sir, you have
the makings of a philosopher
etc . . . etc . . .

Ladies and Gentlemen,
you are a human being, living, thinking,
doing.

You are not a soldier ordered about by his

sergeant, or a merchant ordered about by his money; you are not just one of the 100,000 onlookers at a football match, you are one of the 22 or 30 who take part in the game.

But alas, you do nothing with your hands, with your legs, with your head, with your voice, because you have nowhere – neither a place nor a building – where you can make a noise

where you can mess about
 where you can be quiet
 where you can be alone
 where you can be together.

The present situation – the fatal evolution of mechanisation – is trying to turn you into robots. You are almost robots, in the streets, in your rooms, along the roads. You are the victims of an unlucky period.

you are passive
 you live passively
 you are outside life, outside its richness,
 outside its excitement

But there you are: it's not your fault
 But then: CIAM is here to help you.

CIAM is made up of architects and town planners from all the five continents; troublesome fellows with independent minds, who have been working and meeting together for twenty-three years. Inspired by a common faith and determination they offer you a solution: build up again good fellowship amongst yourselves, take an active part at the core of our rapidly changing world. You belong to Mr Boum's party and in ordinary life you are a grocer: CIAM will help you to be a citizen and an individual. It will put you in touch with the infinite cosmos and with the common forms of nature – with God and with the spirits of the earth. It will provide you with places and buildings where you can live a full life, both in mind and body so that you will no longer be crushed, but can rise up and shine.

The radiance of nature and of the heart are both within your reach. You have all that you need to be friendly and sociable, or to become so.

The town-planning ideals of CIAM have provided it with a powerful social instrument with which it can present, both in plans and in action, this next essential phase of our modern development:

The reign of harmony! In other words people and things must be joined together in mutual sympathy: the intercourse of man with man, man with work, and man with nature – in the understanding development of the widespread resources of the universe.

L. C. 14 July 1951



FIG. 4: Dwelling and Recreation (the Neighbourhood Unit): the outcome of CIAM 5, at Paris 1937.

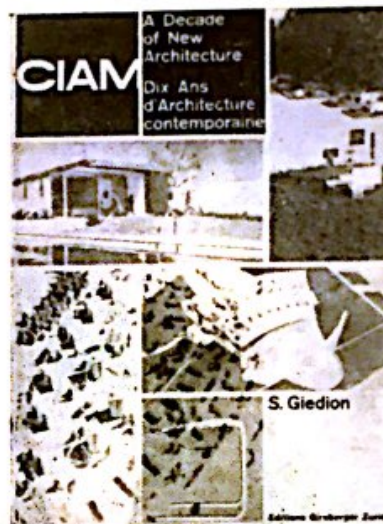


Fig. 4a: A record of Contemporary Architecture 1939-45: the outcome of CIAM 6, at Bridgwater 1947.

Aspects of the Core: The Heart of the City

Centres of Community Life	Sert
Historical Background	Giedion
The Past and the Present	Paulsson
The Individual and the Community	Williamson
Conversation on the Core	
A Meeting Place of the Arts	Le Corbusier
The Human Scale at the Core	Gropius
Sculpture at the Core	Sweeney
Old and New	Richards
Spontaneity	McCallum
Relations between Men and Things	Bakema
The Heart: Human Problem of Cities	Rogers
Discussion on Italian Piazzas	
New Trends will affect the Core	Wiener
The Idea and its Realisation	Fry
Formation of a Community Core	Neutra
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The Commercial Core of London	Holford



FIG. 5: The Piazzetta, Venice.

Centres of Community Life

J.L.SERT (*New York*) President of CIAM

'For in truth the most accurate definition of the *urbs* and the *polis* is very like the comic definition of a cannon. You take a hole, wrap some steel wire tightly round it, and that's your cannon. So, the *urbs* or the *polis* starts by being an empty space, the *forum*, the *agora*, and all the rest are just a means of fixing that empty space, of limiting its outlines. The *polis* is not primarily a collection of habitable dwellings, but a meeting place for citizens, a space set apart for public functions. The city is not built, as is the cottage or the *domus*, to shelter from the weather and to propagate the species – these are personal, family concerns – but in order to discuss public affairs. Observe that this signifies nothing less than the invention of a new kind of space, much more new than the space of Einstein. Till then only one space existed, that of the open country, with all the consequences that this involves for the existence of man. The man of the fields is still a sort of vegetable. His existence, all that he feels, thinks, wishes for, preserves the listless drowsiness in which the plant lives. The great civilisations of Asia and Africa were, from this point of view, huge anthropomorphic vegetations. But the Greco-Roman decides to separate himself from the fields, from Nature, from the geo-botanic cosmos. How is this possible? How can man withdraw himself from the fields? Where will he go, since the earth is one huge, unbounded field? Quite simple; he will mark off a portion of this field by means of walls, which set up an enclosed finite space over against amorphous, limitless space. Here you have the public square. It is not, like the house, an "interior" shut in from above, as are the caves which exist in the fields, it is purely and simply the negation of the fields. The square, thanks to the walls which enclose it, is a portion of the countryside which turns its back on the rest, eliminates the rest, and sets up in opposition to it. This lesser rebellious field, which secedes from the limitless one, and keeps to itself, is a space *sui generis*, of

the most novel kind, in which man frees himself from the community of the plant and the animal, leaves them outside, and creates an enclosure apart which is purely human, a civil space.*

After the Frankfort Congress of 1929 CIAM recognised that the study of modern architectural problems led to those of city planning and that no clear line of separation could be drawn between the two. Since then, the International Congresses have dealt with both architecture and city planning in all their meetings. Our housing studies led us to consider land use, community services, and traffic (Brussels Congress, 1931), and the analysis of whole cities followed as a natural consequence. The City Planning Chart was formulated in Athens in 1933 as a result of this analysis. The task of CIAM since then has been the development and the application of the principles formulated in that chart.

The study of new residential sectors where houses, community services, and recreational facilities would be integrated into one plan was the theme of the Paris meeting in 1937. Then came World War II before the Congress could meet again, and when CIAM members and groups got together in Bridgewater in 1947, the Congress had to recognise that *architecture and city planning were tied closer together than ever before*, as many architects were faced with the problems of reconstruction and the development of new regions demanding the creation of new communities.

The end of the war found CIAM architects occupying important reconstruction jobs. Young groups were following CIAM directives in remote countries and the Congress has ceased to be exclusively a Western and Central European organisation, as many of its members, old and new, were now dispersed over different continents. As a consequence of this dispersion

* JOSE ORTEGA Y CASSET. *The Revolt of the Masses*. W. W. Norton & Company Inc (New York 1932), pages 164-5.

CIAM has broadened its scope, and its views had to be broadened accordingly. Many problems that CIAM had been dealing with in pre-war years were more European than universal; they referred to countries with relatively high standards of living, to overpopulated regions, and to old cities with more of a past than a future; but we had overlooked the fact that four-fifths of the world population do not have these problems.

Besides, with the revolutionary changes of the last years, many new countries have emerged and vast undeveloped areas are being linked by new means of communication to the more advanced parts of the world. There is a general awakening of peoples in Asia, South America, Africa, etc. Simultaneously, new means of production are being developed rapidly. These facts have an enormous bearing in the fields of regional planning, city planning, and architecture, and there is an increased recognition in all countries for a need for integration and co-ordination of all city planning activities to stop chaotic growth.

Late changes in politics, sciences, and techniques make the future unpredictable, but as planners and architects we have to face the realities of life and try to do our best with the changing means at hand. We have to work for the world we live in, with all its faults, doubts and limitations, but this should not prevent us from envisioning a better world and trying to orient our work towards it. Plans should be flexible and facilitate all changes for the better, so that the cities of today may develop normally into those of tomorrow.

The need for a Civic Core

The study of the heart of the city, and in general that of the centres of community life, is to our minds necessary and timely. Our analytical surveys show the decay and blight of central areas and the disintegration of what was once the heart of the old cities, their Core. With the unprecedented suburban expansion of the last 100 years (normal consequence of the new means of transportation, the growth of industry and of land speculation) the suburbs have

outgrown the city proper, and in some nations the populations have 'gone suburban'.

Many city planners have let themselves be carried away by these prevailing trends, and in their studies suburbanism has taken the upper hand and decentralisation has become a magic word, a world panacea.

The garden city is a favourite topic, and the successors of the builders of the skyscrapers appear ashamed of the work of their predecessors and ignore the real civic problems. Meanwhile the city breaks up and becomes nothing but a place to work in and to endure – a place you have to go to but want to leave as soon as you can.

As life has been leaving the old Cores, business and commercial areas have developed spontaneously along the new roads and new main streets. These streets soon become congested and decay in their turn as blight continues to spread from the centre outwards. This process of constant and unchecked decentralisation and land speculation, is a real menace to all our cities and to the stability of civic values. It only works in the interests of a few against those of the citizenry in general. It brings in its trail municipal bankruptcy, and it must be stopped. To put an end to this unplanned decentralisation process we must reverse the trend, establishing what we may call a process of *recentralisation*.

This recentralisation process demands the creation of new Cores that will replace the old ones that the unplanned growth has destroyed.

What these new Cores should be like is what this book will try to explore. They have not been well defined to date, and we feel that this definition is necessary, and that is why we have chosen this theme for the 8th Congress of CIAM. We have also made this choice because, after the last war, a great many of our members and groups in particular, and modern architects and planners in general, have been faced with the replanning of central areas in bombed-out cities, and they soon found out that *these areas require a special treatment – that previous city planning studies had never dealt with.*

FIG. 6: Rockefeller Plaza, New York City.
New York has no appropriate place where people can celebrate events. Any small open space becomes a meeting place. A well between high buildings is better than nothing, and people gather here to see some flowers bloom or to watch others skate and amuse themselves.

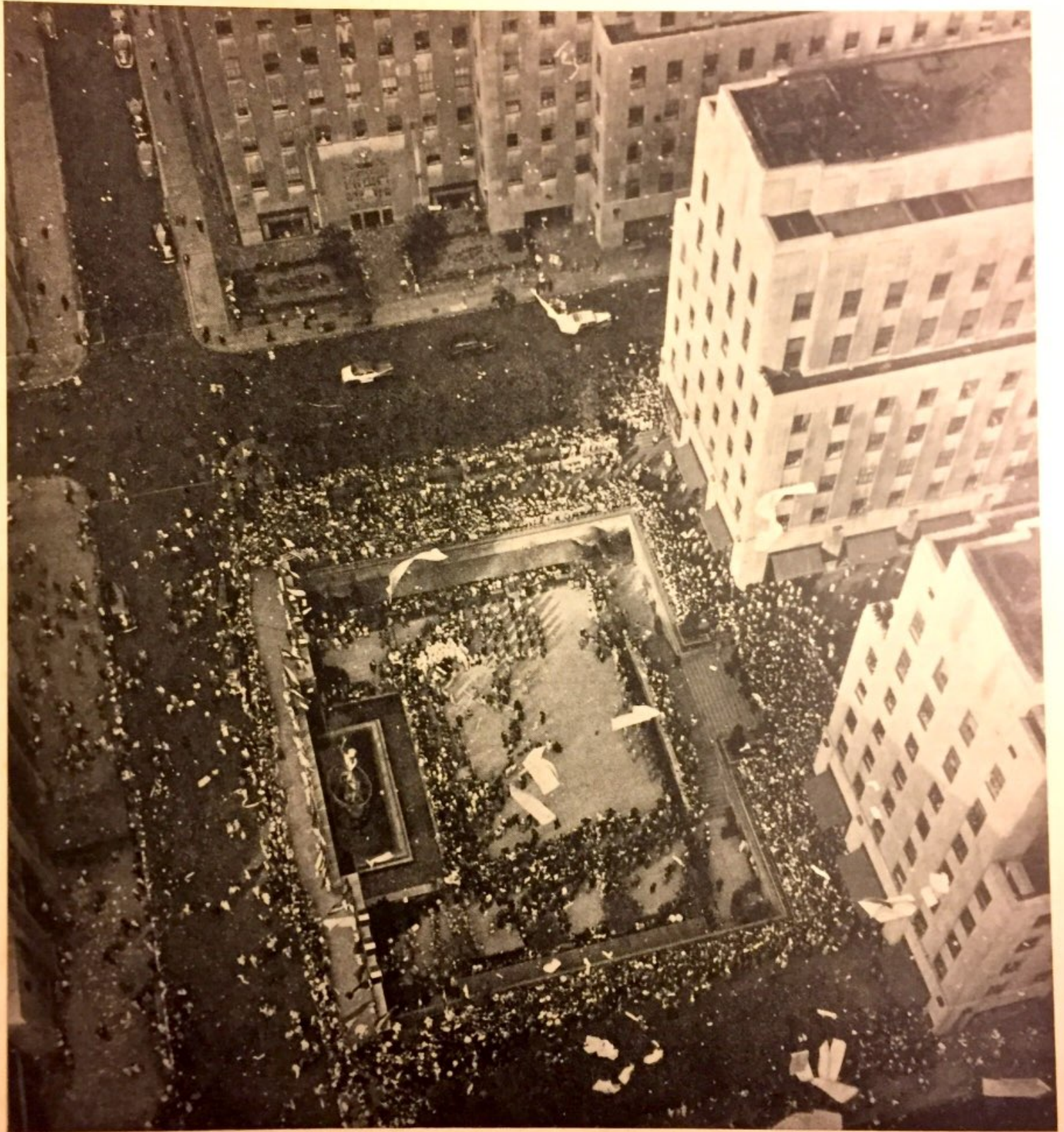
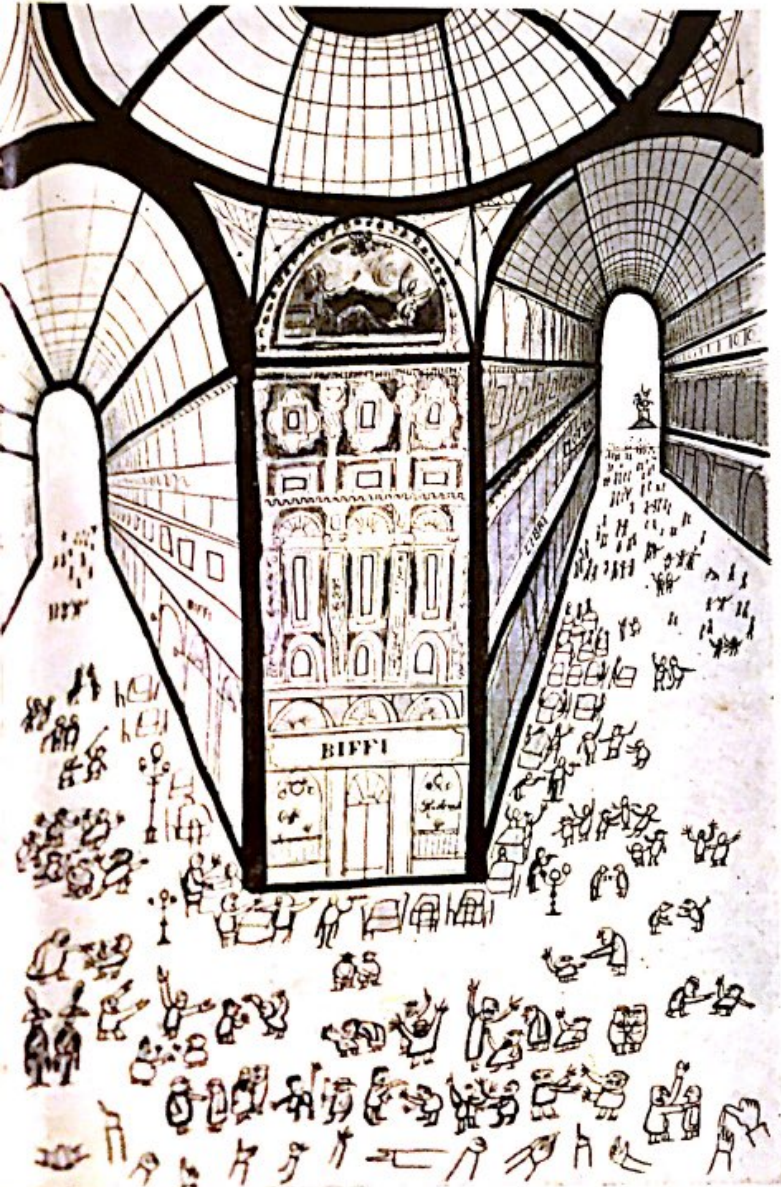


FIG. 9: RIGHT Groups round election speakers in the Piazza del Duomo, Milan.
In the Core people should be able to gather freely round any spontaneous speaker. The Core should be a container both for planned and for unplanned meetings.

FIG. 7: LEFT Piazza del Duomo, Milan, showing entrance to Galleria Vittorio Emanuele.

FIG. 8: Galleria Vittorio Emanuele, Milan (drawing by Saul Steinberg).



Planning such community centres is basically a social problem in which architectural design and city planning are very closely linked. Because these International Congresses have studied the integration of planning and architecture since the early 'thirties they are especially well prepared to suggest programmes and definite solutions for the new Core. This is not an easy subject, and it needs not only definition, but careful analysis and clarification of concepts, and this is the task of the 8th Congress.

Our Congresses have taken a more human view of modern city planning than other technical bodies. We have seen in popular scientific magazines too many descriptions of the life in the cities of tomorrow, where radio and television in every home and the helicopter in every backyard should make dispersion an ideal way of life. Radio, movies, television and printed information are today absorbing the whole field of communication. When these elements are directed by a few, the influence of these few over the many may become a menace to our freedom. Conditions in our cities to-day tend to aggravate this situation as over-extension; traffic congestion and dispersion have separated man from man, establishing artificial barriers.

While fully recognising the enormous advantages and possibilities of these new means of telecommunication, we still believe that the places of public gatherings such as public squares, promenades, cafés, popular community clubs, etc, where people can meet freely, shake hands, and choose the subject of their discussion, are not things of the past and, properly replanned for the needs of today, should have a place in our cities.

Many cities of the past had definite shapes or patterns, and were built around a Core that very often was the determining factor of those shapes. It was the cities that made the Cores but they in turn made the city a city, 'and not merely an aggregate of individuals. An essential feature of any true organism is the physical heart or nucleus, that we here call the Core.'

'For a community of people is an organism, and a self-conscious organism. Not only are the members dependent on one another, but each of them knows he is so dependent. This awareness, or sense of community, is expressed with varying degrees of intensity at different scale levels. It is very strong, for example, at the lowest scale level - that of the family. It emerges again strongly at five different levels above this: in the village or primary housing group; in the small market centre or residential neighbour-



hood, in the town or city sector; in the city itself, and in the metropolis the multiple city. At each level the creation of a special physical environment is called for, both as a setting for the expression of this sense of community and as an actual expression of it. This is the physical heart of the community, the nucleus, THE CORE.*

If we want to give our cities some definite form we will have to classify and subdivide them by sectors, establishing centres or Cores for each of these sectors. These Cores will act as catalysing elements, so that around them the life of the community will develop. In these new nuclei, public buildings of different types will be grouped in harmony of form and space; they will be the meeting places of the people, community centres where the pedestrians will be given preference over traffic and business interests. Their measure will be dictated by the activities that have to develop in them, but walking distances and man's angle of vision, and his well-being will be the outstanding factors in the determination of their final shape. They will be the opposite of what 'Main Street' is today, where business interests have taken the upper hand.

The social function of the new community centres or Cores is primarily that of uniting the people and facilitating direct contacts and exchange of ideas that will stimulate free discussion.

People meet to-day in our cities in factories and busy streets, in the most unfavourable conditions

* From the MARS Group programme for the 8th CIAM Congress.

for a broad exchange of ideas. The organised community meeting places could establish a frame where a new civic life and a healthy civic spirit could develop. The most diverse human activities, spontaneous or organised, would find their proper place in such community centres. And citizens would have an opportunity to know other people, as these meeting places would also be open to strangers. They could gather there and see and enjoy the best the community could offer them in terms of amusements, shows, cultural information, and general opportunities of getting together. These strangers could thus discover fresh human values among the people and obtain opportunities for social contacts of which they are deprived today. The plans of these new centres and the shapes of their buildings would express this function.

We are not talking of things that are entirely new, for such centres once existed in our cities, and what came out of them has shaped our civilisation. Free thinking did not find its shape in rural regions, neither is it a product of press, radio or television, it owes more to the café table than to the school and, though other means have helped, it was mainly spread by the spoken word and born in the meeting places of the people.

Through the centuries, people have been getting together on the village greens, market places, promenades and piazzas. More recently, the railroad stations, the bus terminals, and even the landing strips have become places of gatherings. People go there to see and to be seen, to meet friends and sweethearts, to make new acquaintances, to discuss politics and sports, to tell of their lives, loves and adventures, or to comment on those of others . . .

Such meeting places, though inadequate, exist in big cities: Trafalgar Square, Piccadilly Circus and Hyde Park, the cafés on the Paris boulevards, the Galleria Vittorio Emanuele in Milan, the Canebière in Marseilles, the Piazza Colonna in Rome, Times Square in New York City, the Ramblas in Barcelona, the Avenida de Mayo in Buenos Aires, all the 'plazas de Armas' in Latin-American cities, etc, are examples of the meeting places we all know. They are maintained alive by the people, are still used by them on special occasions, and are a proof that the urge to get together exists in every community, large and small.

The following five scale-levels of the Core have been selected for analysis at CIAM 8:

1. The village (rural) or primary housing group

(urban) representing the smallest satisfactory social unit.

2. The small market centre (rural) or residential neighbourhood (urban) in which the residents are still acquainted with one another and which can be socially self-sufficient.
3. The town (rural) or city sector (urban) in which there is already some degree of anonymity and which can be economically self-sufficient.
4. The city or large town which includes several city sectors.
5. The metropolis or important international centre of several million people.

We have revolutionary means at hand to plan these new Cores. The movies, the loudspeakers, the television screens have come to the public squares, cafés and places of gatherings. Everything could easily work towards the popularisation of these new means of communication, and this popularisation would have immeasurable consequences if it were put to the service of popular education.

Visual education in such places would teach people without effort, craft demonstrations would encourage working abilities of all kinds, new machines would develop interest in new trades. Music and literary work retransmitted by radio would put their creators directly in touch with the people. Works of painting or sculpture could be part of a permanently changing display and could also use the television screens that have a new world to discover and show. Inventors and creators of the art of our time could then live with the people in these places of their daily gatherings and they would help link the remotest lands together (visual images have no barriers like language), regardless of mountain ranges or oceans which would no longer present insurmountable obstacles. These community centres would then be not only the meeting places for the local people but also balconies from where they could watch the whole world.

A task for the City Planner-Architect

The architect-planner can only help to build the frame or container within which this community life could take place. We are aware of the need for such a life, for the expression of a real civic culture which we believe is greatly hampered today by the chaotic conditions of life in our cities. Naturally, the character and conditions of such awakened civic life do not depend entirely on the existence of a favourable frame, but are tied to the political, social and



FIG. 10: Avenue des Champs-Élysées, Paris.
Big avenues are not meeting places, they were built for parades. The pedestrian becomes a spectator and ceases to participate in the show. He watches the military parades or the cars as they pass by. Central traffic separates the people on different sides of the avenue and only those in the cars dominate the view.

FIG. 11: The Sunday promenade where people stroll about to see and be seen.



FIG. 12: TOP Hyde Park Orators, London.

LEFT Piccadilly Circus on New Year's Eve, London.
When Londoners wish to celebrate they invade Piccadilly Circus and stop the traffic, for there is otherwise no room for them.

RIGHT Trafalgar Square Protest Meeting, London.

Trafalgar Square is used for demonstrations of a political character and Hyde Park for spontaneous speakers.

economic structure of every community. If this political, social, and economic structure is one that permits a free and democratic exchange of ideas leading towards the government of the majority, such civic centres would consolidate those governments; for the lack of them and the dependence of the people on controlled means of information makes them more easily governable by the rule of the few.

The creation of these centres is a government job, (federal, state, or municipal). These elements cannot be established on a business basis. They are necessary for the city as a whole and even for the nation, and they should be publically financed.

When a city is replanned it is divided into zones of different land uses – industrial, commercial, business, residential, etc. The resulting pattern should then be organic and different from the shapeless growth we have today. Each of these sectors or parts of the city needs to have its own centre or nucleus and the system as a whole results in a *network or constellation of community centres*, classified from small to large, one main centre being the expression of the city or metropolis as a whole, *the heart of the city*.

One of the first requisites of all of these centres of community life is the separation of pedestrians and automobiles. Motorised means of transportation must reach different points of the perimeter of these areas and find the necessary parking facilities right there, but the land inside these perimeters should be only for pedestrian use, and screened from the noise and fumes of the motors. Trees, plants, water, sun and shade, and all the natural elements friendly to man should be found in such centres, and these elements of nature should harmonise with the buildings and their architectural shapes, sculptural values, and colour. Landscaping must play a very important role. The whole should be so arranged as to please man and to stimulate the best in human nature. All the elements that commercial and business centres have banned from the city in their ruthless urge for speculation should be reinstated in these centres of community life. Harmony in such places is only possible when all parts are subject to a whole, and we should now recognise that nobody really benefits from individualism carried to extremes. Our shopping centres today are the expression of competitive individual business, and no architectural solution can be found for a whole district unless certain overall rules are imposed. If free competition is to exist in these centres, it will have to be subjected to a unified architectural frame.

In these community centres the pedestrians should be protected from extreme heat or cold. It is curious to note how modern cities have ignored this important consideration. Covered streets, porticos, patios, etc – all elements of frequent use in cities of the past – seem to have disappeared from our towns and cities, where everybody is expected to use car or bus for the smallest displacement. It is encouraging that some of the new shopping centres in the U.S.A represent a trend in the right direction and that attempts have been made to protect pedestrian circulation from traffic and rain, and to create landscaped areas that can make shopping more pleasant.

It is difficult to give general programmes for such Cores as they will vary greatly in scale and importance from the small town centre to that of the urban sector, the city, or the metropolitan area. Besides, the climate, the customs of the people and standards of life, and the financial means at hand will in each case help define and shape these different types of Cores. But we can say, in general, that all these community centres will have open areas for public gatherings, such as public squares and promenades. The general trend should be towards the revival of the public squares or 'plazas' and the creation of pedestrian districts. The boulevards and corridor streets for motorised traffic as well as pedestrians, characteristic of our cities today, are outmoded. Through traffic streets should be reserved entirely for traffic. The plans for the community Cores should be a clear expression of this separation of pedestrians and automobiles. This establishes two different scales that will appear clearly on the plans in the second part of the book.

The differentiation of scale can also be expressed in the heights of the buildings. Many of them must be walkups, two to three floors, covering vast extensions of land. Elements in these low buildings should be those which need to be near to the pedestrians in their daily walks. There must also be high tower elements, expression of the use of the elevator. All intermediate heights could easily be omitted. This contrast of low and high, of slab-like towers and patios, and of open and enclosed spaces will help animate these Cores. The spacing and form relations of these groups of buildings and the open areas for public use, presents an interesting subject to the planner-architect to-day. Such forms could be the expression of our culture, our technical knowledge, and above all, of a new way of living. Administration buildings, museums, public libraries, theatres, concert halls, recreation centres, commercial and

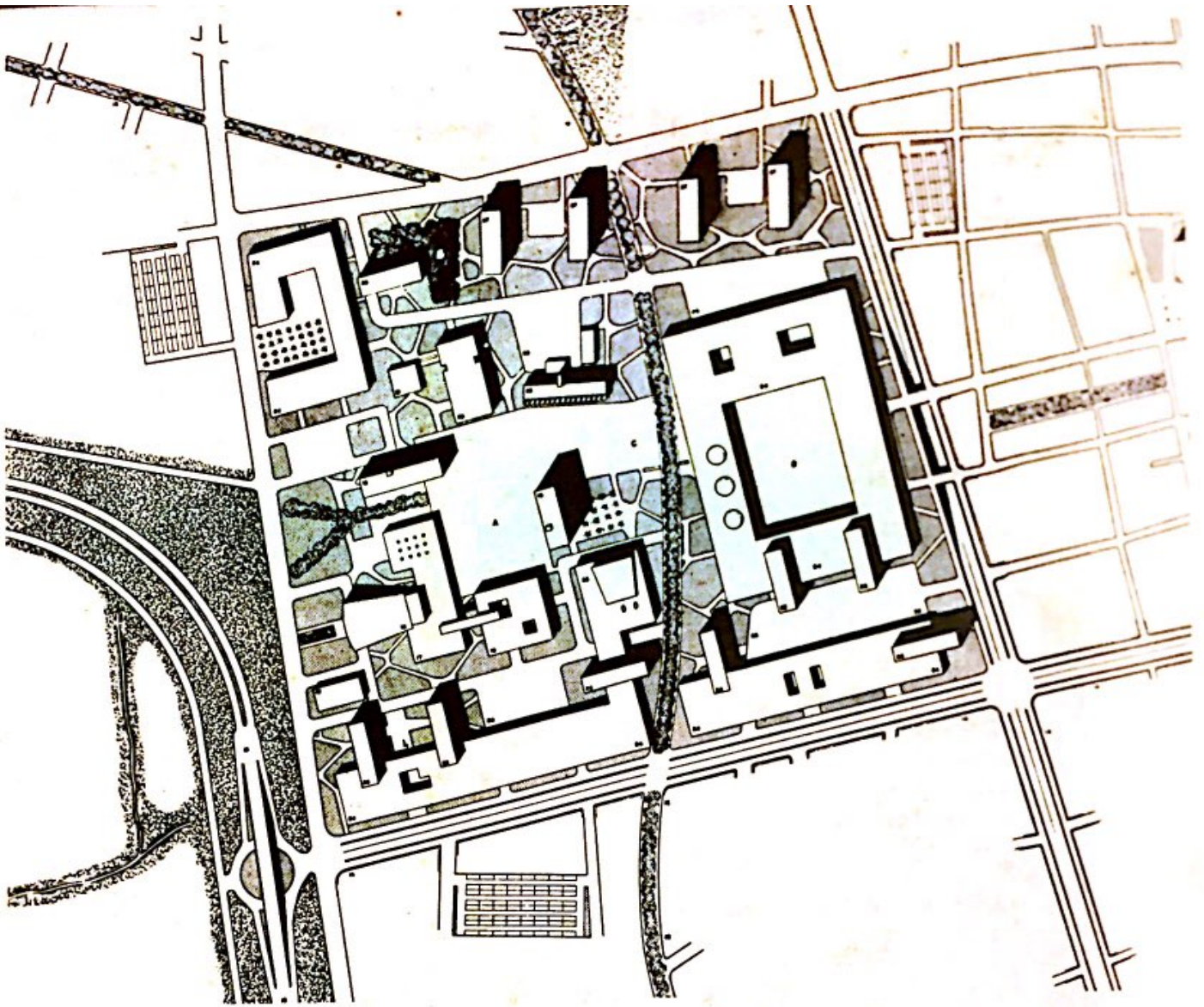
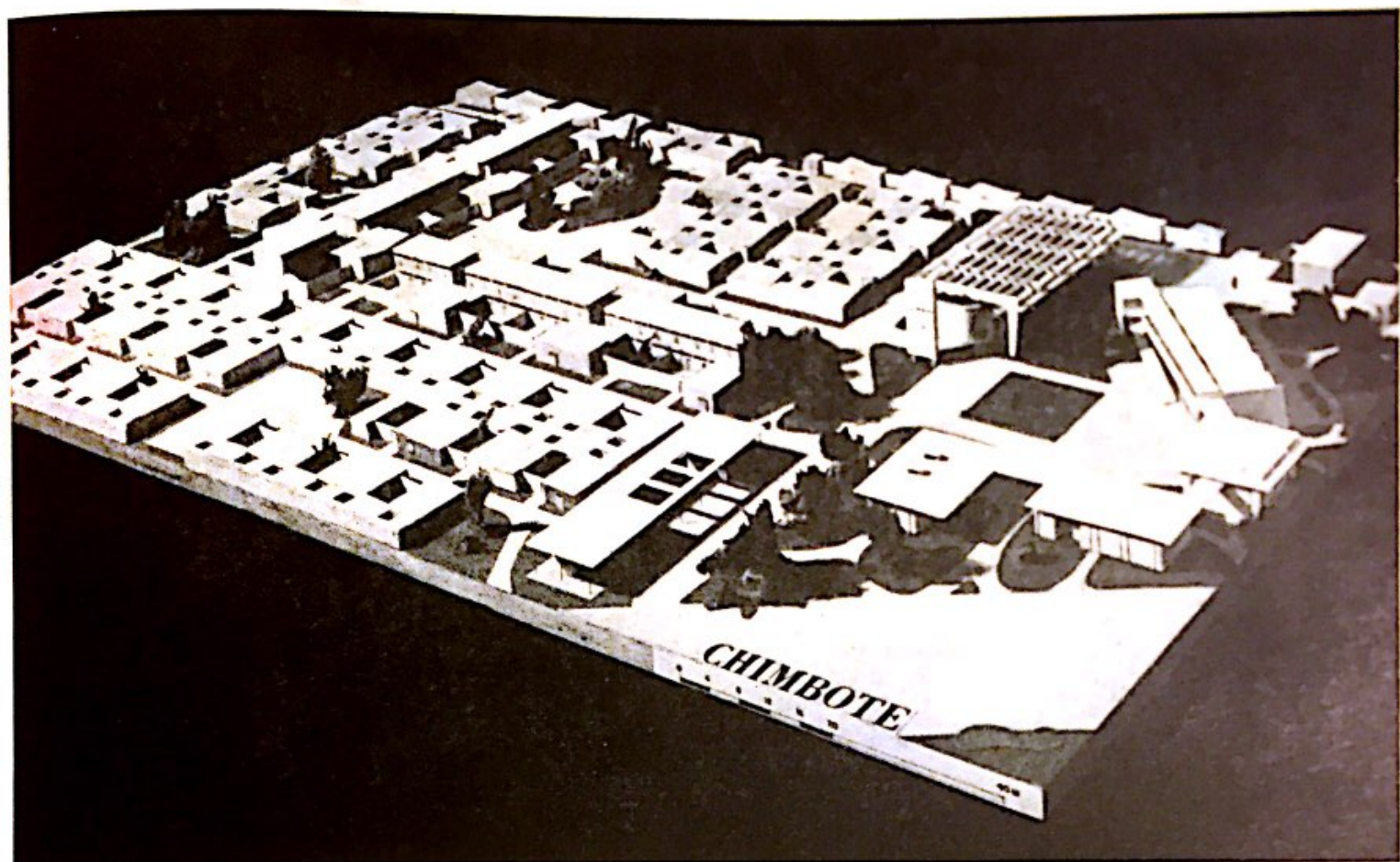


FIG. 13: Civic and Commercial Centre for the City of Cali, Colombia (P. L. Wiener and J. L. Sert with local group). This centre is divided into two main areas; the commercial and the administrative. The shops in the commercial area are built around a closed plaza; the administrative buildings are grouped around another open space of the same size that will appear completely different because of its architectural treatment. This Core has been planned for a city of 700,000.

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FIG. 14: An early version for the main Core of the City of Chimbote, Peru (P. L. Wiener and J. L. Sert with the Oficina Nacional de Planeamiento y Urbanismo). Like the traditional seaside colonial cities, the Core of Chimbote opens on the water front, and the new plaza will have a view of the bay and direct access to the beach. The public square groups an administrative building, public library and museum, hotel and tourist centre, church and bell tower. Parking spaces are on the perimeter and only pedestrians enter the Core. The whole Core for this town of 40,000 covers about six hectares.



sports areas, parks, promenades and squares, tourist centres, hotels, exhibition and conference halls, etc, all form part of these community centres.

The examples of different types of Cores shown in this book may help to clarify the foregoing statements. We have chosen several projects, characteristic of these types, from the material presented to the 8th Congress by the CIAM Groups. These projects, unified in presentation, adopted the grid system devised by Ascoral and modified by the MARS Group for this particular subject.

Architecture, Painting and Sculpture in The Core

CIAM is not only interested in the study of the Core as an element of city planning, but also considers this exploratory work important because it opens a new field to contemporary architecture. The functional aspects of contemporary architecture are now fully

appreciated by a great many people, and it has become generally accepted for utility buildings of all sorts, such as low-rent housing, hospitals, schools, factories, etc. But these same people cannot imagine its possibilities if applied to groups of public buildings, because there are no examples of this type. On the other hand, most contemporary architects are now well aware that the period of house-cleaning of the 'twenties is over. We have outlived that period when architecture aimed solely at expressing function. New trends are now apparent towards a greater freedom of plasticity, a more complete architectural vocabulary. No matter how beautiful structure alone may be, should we forget that flesh and skin can be added to the bones? The need for the superfluous is as old as mankind. This must now be openly recognised and an end made of the deceptive attitudes that try to find a functional justification for elements

that are frankly superfluous when judged by the stern architectural standards of the 'twenties.

This does not mean buildings should not be functional. They should, as much as we have always wanted them to be. Elements that can be added towards a greater architectural expression, a richer plasticity, a more sculptural quality should not hinder function in any way. Neither should the elements lending more expression to a building borrow anything from past styles. The best painters and sculptors of our time have found new means of expression. They show us the way towards a more completed architecture, where colour, texture, and sculptural values could play a very important role. Contemporary architecture has been too much divorced from the sister arts in late years, though in its origin it owes much of its inspiration to them.

Besides, many modern architects feel the need for a close collaboration with painters and sculptors such as has always existed in past periods of architectural greatness. *A reuniting of the plastic arts will enrich the architectural language, and this collaboration will help architecture itself develop greater plastic value – a more sculptural quality.*

When dealing with problems of planning and re-planning cities, it becomes evident that the treatment of groupings of public buildings, together with their related open spaces, requires this reunion of the arts to display a more generous plastic expression. In these centres of community life the city planner-architect deals with *civic design* uniting planning and architecture. This community life will shape the Cores of the village, of the neighbourhood or city sector, of the city itself. Throughout history it is in such places of public gathering – the *agora*, the forum, the cathedral square – that the integration of the arts has been most successfully accomplished.

Here again we do not imply that this reunion of the arts should copy old examples. We have means today that were totally unknown in the past. Light and mobile elements can play a very important role. Centres of community life could be constantly transformed. Many of our best artists today still think in terms of murals or monumental sculpture for eternity, but commercial advertising has developed new techniques that could produce wonderful works if used by our most creative artists for non-commercial purposes. Visual stimulus in our cities is today controlled by commercial advertising and it is this advertising that is in touch with the people. The works of the great creators of modern art are not shown in the places of public gathering, and are only

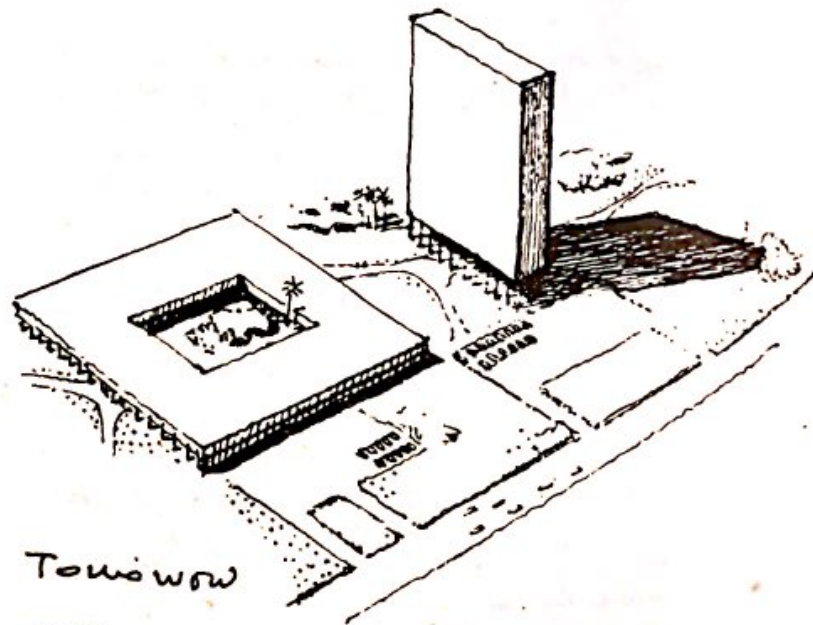
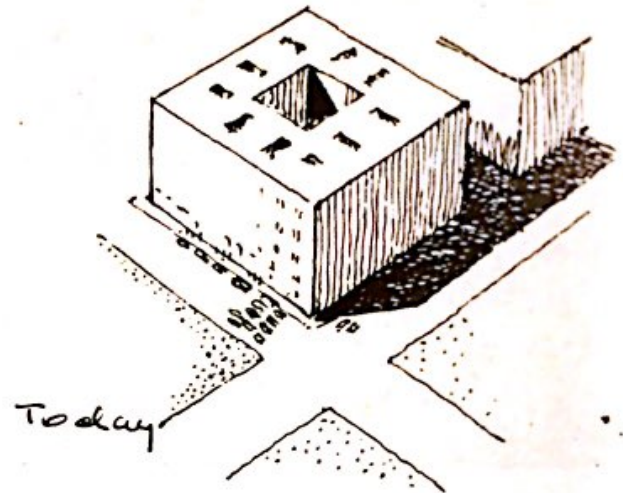
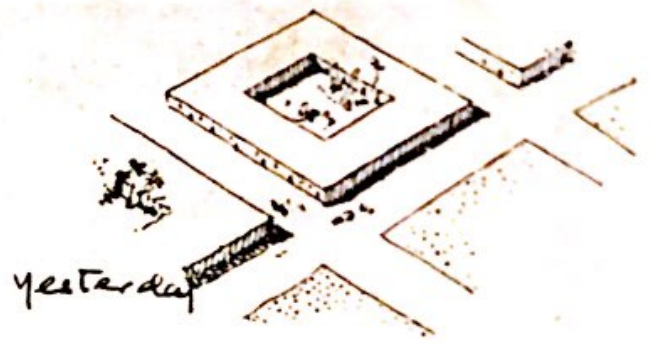


FIG. 15.

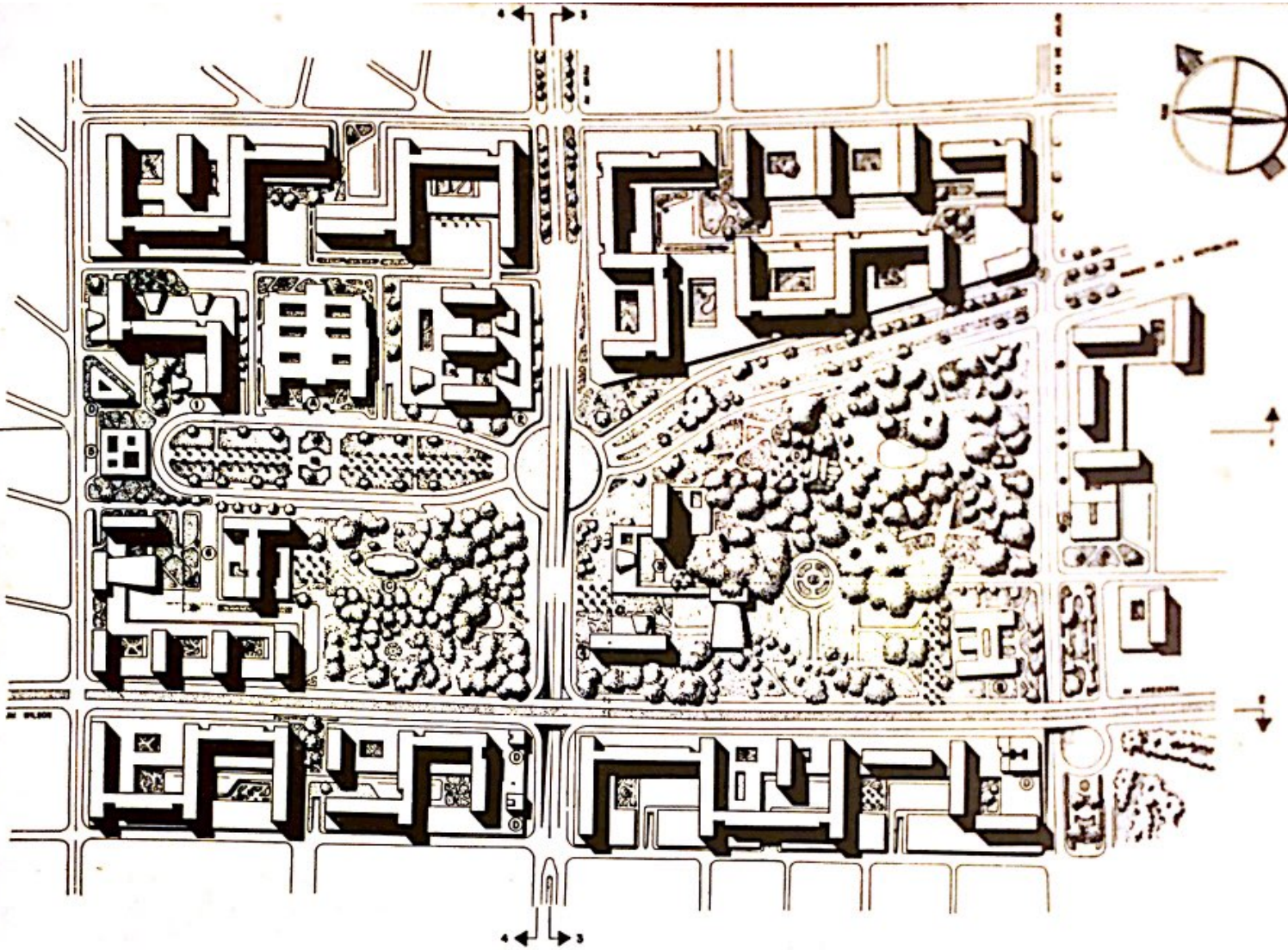


FIG. 16.

FIGS. 15, 16, 17: Studies for the Pilot Plan, Lima, Peru (P.L. Wiener and J.L. Sert with the Oficina Nacional de Planeamiento y Urbanismo).

The basic approach in our plans for Chimbote, Lima, Medellin and Cali has been the use of two contrasted building heights: **LEFT, TOP:** The walk-up two or three-story buildings which cover considerable surface of the ground and are grouped around large patios, reminiscent of the old colonial cities. **BOTTOM:** High buildings with elevators - 18-20 stories. This system permits the unification of old and new and provides open spaces that can be fully used and are not too extravagant to maintain. **THIS PAGE:** In planning Cores for South American cities, two and three-storied buildings with patios offer good facilities for shops and cafés, and small mezzanine offices overlooking the patio recall the traditional patterns and scale of the colonial cities. Concrete slabs or vaults on posts protect the pedestrian from sun and rain, and pedestrian arcades between shopping façades facilitate circulations. The contrast of these low buildings with high elevator office buildings offers a contemporary architectural formula for such cities.

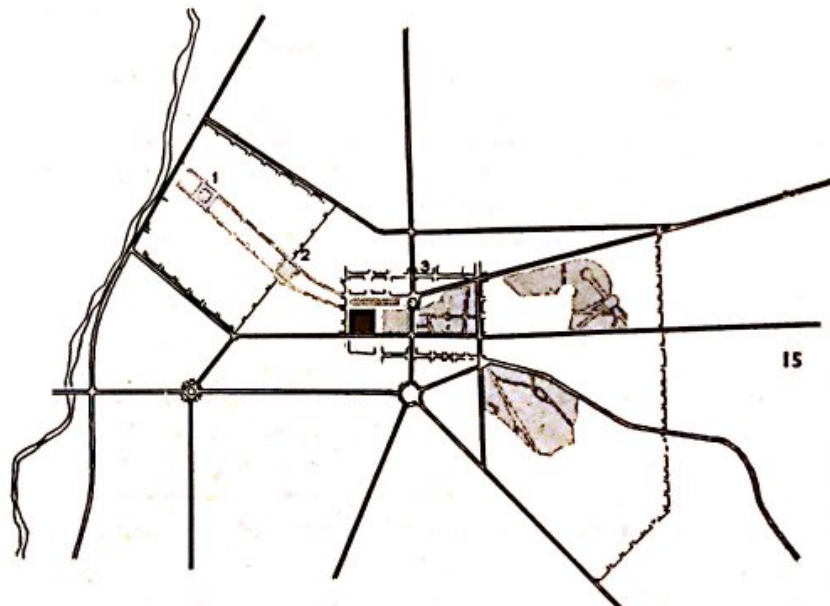


FIG. 17.

known to a select few. Our best artists are divorced from the people. Their works go from their studios to the homes of wealthy private collectors, or to the deep-freeze compartments of the museums. There they are catalogued and belong to history. They join the past before they meet the present. This unnatural course leads nowhere. Painting and sculpture have to be brought to the living centres of our communities, to the Core of the city, for the visual stimulus of the people, for their enjoyment, for their education, to be submitted to their judgment.

City planning, architecture, painting, and sculpture can be combined in many different ways, but these fall into three main categories – integral, applied, and related. Which way should be used in each case will depend greatly on the character and function of the buildings and on the artists themselves and the nature of their work.

The integral approach is tied to the conception of the building, the architect himself often acting as a sculptor or a painter, or establishing a very close collaboration with them. Their tasks cannot be separated and this collaboration has to be carried through, in team work, from beginning to end. We find examples of this type where the buildings as a whole are a sculpto-architectural unit, in certain Indian temples, parts of Gothic or Romanesque cathedrals, some works by Michelangelo, Borromini, Bernini, Churriguera, and Gaudi. It is difficult in these works to determine a line of separation between architecture and sculpture.*

In the more frequent case of applied works the building is conceived first. Its expression will be intensified by the co-operation of the painter and the sculptor, but the character of their work and the space allocated for it, are generally outlined by the architect. Sculptor or painter only participate in one section of the building. But for the better integration of their work with that of the architect, each should be familiar with the other's work and congenial to it. In the majority of examples where this combination is successful, the success is due to close understanding or friendly relationship between architect, painter, and sculptor.

Finally, architecture, painting, and sculpture may be simply related to one another, each work standing alone. The best examples of this type belong to the field of city planning. We here refer to groups of buildings, generally public buildings, where a certain

relationship has been established between open and built-up space. Sculpture and painting may come to enrich these groupings; and, as a result of a relationship of values, the whole becomes greater than the separate parts. Like instruments in an orchestra, each plays its part, but it is the added effect that counts. The best examples of the past are well known – the acropolis in Athens where also the landscape views are parts of the whole and incorporated, like the free-standing sculptures, to the buildings and their space relationship. In a different but similar way the examples of Pisa, Florence, Venice, Versailles, etc, are present in our minds. Why should not our modern world have similar examples to offer? Once the Cores of the modern communities are established, the containers for such experiments will be at hand, and the means at our disposal are greater than ever before. A great symphony is no easy task – it has never been one.

This book is a first attempt to explore the subject of the contemporary design of the hearts of our cities, by presenting a series of fresh ideas and opinions on the matter from well-known architects, planners, and artists of many different countries. It also shows, in unified presentation form, some examples of the work on the Core prepared by several CIAM groups, and winds up with extracts from statements prepared by the 8th CIAM Congress. None of these pretends to be final, and this difficult subject will require further research and study.

* See S. GIEDION. *Space, Time and Architecture*, page 54, on Borromini.

Historical Background to the Core

S. GIEDION (*Zürich*)

Secretary General of CIAM

In his clear and condensed introduction Sert has asked why it is that we are now discussing the Core of the City. Why another of these experiments that seem too hot to be handled, and that have not been considered before.

Sert answered this by reminding us that CIAM has the custom to explore unknown and undeveloped paths, and so long as it acts in this way CIAM has a right to exist – but not one moment longer! The members of CIAM groups are not interested in well-worn subjects nor in the fight for organisational matters or organisational rights.

Maybe we are being forced to this discussion by outside events, but I believe it is rather our own inner demands that are forcing us into a process of humanisation of our environment, and that it is this that has led us to the path we are now following.

No one can foretell how things will develop, but my observations of the generation now about twenty-five years of age leads me to believe that this trend exists today in all countries of the western civilisation. Our present interest in the Core is a part of this humanising process or, if you prefer it, the return to the human scale and the assertion of the right of the individual over the tyranny of mechanical tools.

The question that is always asked is: How can we build the Core in the absence of a well-defined structure of society? Perhaps I may be allowed to return to this question again later.

We can see in contemporary art – poetry, music, painting, architecture – that in the last forty years a new language has been evolved, out of the depths of our own period, by artists who seldom adhere to a formal religious creed or hold well-defined political convictions. This development is not without an inner significance. It seems that a new stage of civilisation is in formation in which the human being as such – the bare and naked man – will find a direct means of expression.



FIG. 17: Berne is one of the many new towns founded in the twelfth and thirteenth centuries. The cross streets were the chief traffic routes and the long main streets served as elongated market places.

We do not know consciously why certain shapes or forms which have no direct significance appear again and again in the works of the most diverse painters. All of these forms are somehow bare and naked. They are, at any rate for the present, symbols without immediate significance for – as Sartre once wrote – ‘we need today signs and symbols which spring directly to the senses without explanation’. He then strengthened this statement by referring to experiments that have been carried out by certain psychologists.

How does it come that I, an historian, am standing here before architects and planners, speaking – at their request – upon the historical background of the Core? This certainly is not because architects and planners have a special interest in the record of historical facts. It is much more because our period has lost so many of the formerly accepted codes of human behaviour and human relations that a new

interest has now arisen in the continuity of human experience. This interest is concerned with such questions as 'How did those before us handle certain problems?' For instance, 'How did they develop social intercourse and community life?' There is, of course, no suggestion that we should imitate our forebears, but I believe (and here I come back to the symbol of the bare and naked man) that there are certain continuous things running through history – certain experiences which appear and are lost and then come up again. To take only a very simple example: the right of the pedestrian in the centres of community life – in the Core. This was carefully respected, and indeed self-evident, in all former civilisations. Today this right of the pedestrian – this human right – has been overridden by the petrol engine, and so the gathering places of the people – the places where people can meet together without hindrance – have been destroyed. To-day one of our hardest tasks is the re-conquest of this human right, which is not only in danger but has, in fact, been destroyed altogether.

So, when we look into history, our urge today is to pose a human question, such as 'What is the same and what is different between us and you?' Or, in our own case, 'Is there a real demand, a real need, for the Core today?'

Does this question really need an answer? Many architects and planners are at this moment engaged in the actual work of construction and reconstruction of city centres: they are in the midst of the practical problems of realisation of their plans. But there are other anonymous signs of interest in this question, which are, from the point of view of the historian, just as important. There are direct impulses from the side of the general public.

The man in the street – and that means each one of us – has undoubtedly an urgent desire to get away from the purely passive position of an onlooker at a football match. He – and this is different from the nineteenth century – wants today to act his own part in social life. He wants to be himself.

An experience of some weeks ago: in June we had a festival in Zurich to celebrate the 600th anniversary of the entrance of Zurich into the Swiss Confederation. The streets of the medieval city centre were closed for two days to all traffic, and benches were spread over the tracks of the tramways. It poured with rain, and yet one couldn't chase the people away from the streets. Everywhere was music and throughout the whole night people danced in the streets under umbrellas. Medieval corners and

squares were also used as open-air theatres. The festival was a reunion of the whole canton of Zurich, and the people from each part gathered together and performed their own plays. We had been very much afraid that the medieval Core of Zurich had been altogether destroyed. Suddenly we discovered that something still remained and that – given the opportunity – people will dance and play theatre in these open spaces. Everybody was astonished at the spontaneity of the public. It is clear that the public is ready. The question is whether we are. Not the other way round. So, let us not wait for a structurally well-defined society to arise. Let us just ask what lives in the bare and naked man and needs to be expressed and given form. Let us just ask what is in the bare and naked man, who is not a symbol but we ourselves.

A few days ago I had another experience in Amsterdam. I saw the children's playgrounds that have been created under the guidance of Van Eesteren and designed by a young member of the Dutch CIAM group, Van Eyck. They have been made from very simple elements – a large sand pit, some upright steel hoops, a parallel pair of tree trunks lying horizontally. But these simple elements are grouped so subtly – with a background of the Stijl movement and modern art which injects some kind of vitamin into the whole thing – that they act as fantastic starting points for the child's imagination. These playgrounds also, simultaneously, fulfil another function. A formerly useless piece of waste ground has been transformed, by an extremely careful layout, into an active urban element. One need only provide the opportunity and we – the public, who are also maybe children of a kind – will know how to use it.

Like plants, human settlements require certain conditions for growth. Only human community life depends upon far more intricate conditions than the plant. What is common to both, however, is that there are periods which favour growth and other periods which hinder it. There are periods in which many new cities are founded, and hundreds of years during which no new cities are started at all.

A city is the expression of a diversity of social relationships which have become fused into a single organism. The conditions which influence its growth can be of a widely dissimilar nature. New cities have arisen in periods of dictatorship, when the despot has had power to compel everyone to build in conformity with a single design. They have also arisen in periods of purposeful communal energy. The despot has the



advantage of his capacity for rapid and ruthless action; but, as his sovereign will is bound to ignore the imponderable laws which stimulate human co-operation, a city built under a dictatorship can never acquire that essential quality of organic diversity.

In cities that have been developed by the united efforts of their citizens, everything – even to the last detail – is permeated by a marvellous strength.

When I was in the United States I felt – like Sert – the absolute absence there of places to stand about – to rest, to stop, to speak, just to move about in – and so in 1942 I conducted a seminar at Yale on Civic Centres and Social Life to try to find out the proportions of public open space and private dwelling space at different periods. I repeated this in Zurich and, last year, at the Massachusetts Institute of Technology, where the illustrations on the next pages were made by the students. These illustrations follow the normal methods of CIAM in that each city was represented in the same manner and upon the same scale. The problem of how to depict both the lines of the city plan and the topography of the country on the same sheet, in monochrome, was solved by our friend Gyorgy Kepes, who suggested that we worked on grey paper, making one part of the contours black and the other white, using solid black and white lines for the buildings at the Core.

Never since the democratic way of life first found expression in the fifth century BC has so much loving care been lavished upon the gathering places of the people, or space been so amply provided for them. Nor has the place where the decisions of the people have been enunciated ever dominated the

FIG. 18: In Amsterdam formerly useless pieces of waste ground have been transformed into active urban elements by the subtle use of extremely simple features. Not only are they gathering places for the children but they also serve as a visual focus amid commonplace surroundings.

physical and moral structure of the town so effectively as the *agora* of the Greek cities of this period.

In our seminar we first made a study of Priene and the Greek cities of the fourth and fifth centuries BC. Immediately the sociological question was raised: 'What was the relation between the plan of the city and its social life?' And immediately we were plunged into this curious experiment of Greece – I guess the most exciting that mankind has ever experienced – this sudden awakening of the individual mind with, behind it, the enormous background of oriental and Egyptian tradition.

The grid-iron system is an oriental invention. This is clear not only from recent discoveries in the valley of the Indus, but – above all – in the work of the only Egyptian revolutionary, the Pharaoh Akten-Aton, who, about 2,700BC, built within twenty-five years a city on the Nile, on the site of the present village of Tel-el-Amarna, which is absolutely on a grid-iron system. But the Greek grid-iron of Hippodamus is something completely different from the grid-iron of Akten-Aton (and also completely different from the grid-iron of Manhattan). In both Egypt and the culture of the Near East, the grid-iron had as its centre either the palace of the king or the temple. In Greece it was completely different. Here the focus of the grid-iron was the *agora* – the gathering place of the people.

What is the *agora*? It is now known that at the beginning the *agora* was, above all, the gathering place of the people and not just a market. It was in the fifth century BC, with increasing trade and wealth, that the *agora* became more intermingled with commerce. The *agora* in principle is an open space – a square – surrounded loosely by simple buildings destined for public use. In the Hellenistic period the *agora* came to be bounded by simple standardised elements – columns, porticos, and an entablature – forming the *stoa*, a covered way protected against rain and sunshine and serving, above all, as a meeting place for the formation of public opinion. Sociologically, it is especially interesting that no buildings faced directly upon the *agora*. The *stoa* was supreme. The public buildings – *prytaneum*, *buleuterium*, etc – were in close contact with the *agora*, but behind the *stoa*. The *agora* was only for the community: not for the council, not for anyone else, but only for the people and exclusively for the people. On the inner wall of the *stoa* and in the square itself were objects placed there in memory of those who had worked well for the community.

Priene (Fig. 19, page 21) is one of the best examples to study because it is the best excavated, and it is interesting to notice here the lack of direct relation between effect and cause. Here, as in so many other cities, the final status of the *agora* only came after the Greeks had lost their liberty. *Agora* in their final form were made at the time of Alexander or later; very few before. But the idea of the *agora* is inherent in the democratic conception of Greek life.

One thing more. In the Greek cities there is a clear classification of functions. Monumentality is only for the gods. The Acropolis was never a gathering place. First it was the quarters of the king, then, when he was eliminated, it became the quarters of the gods, the consecrated area with the temples. Recent American excavations have shown that there was a temple on the *agora* at Athens, but this *agora*, which was gradually built throughout centuries, was an exception. The *agora* is a community place, well defined and very nicely arranged, but very simple. Then there is the private life. By the law of Athens any citizen who had too large a house was chased from the city. The private life was very humble. These three degrees – first the gods, then community life, then private life – were never afterwards distinguished so clearly. Even in medieval cities – the only time in which we can see a continuation of antiquity – the different functions were intermingled.

Now to the Romans. What is the difference

between the Forum Romanum and the *agora*? It is very clear and very great. The Forum Romanum was a completely disordered place. It would have been impossible in Greece to place the prison, the *carcer*, next to the *rostrum*, the people's platform. *Carcer*, *rostrum*, temples, treasure house, and *comitium* (the patricians' stronghold): this was the Roman *forum*. The Romans from the beginning intermingled business, religion, justice, and public life. But this doesn't mean that the Romans did not understand how to build cities. It is true that Rome itself had never had a plan. All failed who made the attempt – Julius Caesar, Nero, the Antonins. Rome itself was so much a disorder that traffic had to be forbidden in the streets during the day by law. The rich lived in the best places on the hills, and the poor in squalor in buildings of five to eight stories. But there are small Roman cities, such as Ostia or Pompeii (Fig. 21, page 23), where things are much clearer. In both of these there is a temple dominating the *forum* – a thing impossible in Greece – but common to both *agora* and *forum* is the right of the pedestrian. This was sacrosanct.

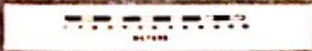
One word about the Imperial Fora of Rome (Fig. 22, page 24), which were built over a relatively short period – Julius Caesar to Trajan. The Imperial Fora in their sterile pomp are, for me, the beginning of academic architecture. They somehow foreshadow the beginning of the nineteenth century when again the emperor, religion, and money were fused into an inextricable whole.

What happened through the medieval period? Decay, decay, decay, through centuries! The standard of life sunk rapidly. Existing cities became depopulated and hung heavily, like over-large garments, upon the shoulders of their shrunken inhabitants. Then came a sudden awakening. In the eleventh and twelfth centuries new cities were founded all over Europe. I may have a certain prejudice, but I find the most interesting are those in South Germany and Switzerland. The normal view of the romantic medieval city is entirely false. These new towns were not at all haphazard foundations. As a consequence of the low standards of living that had prevailed through centuries, these new medieval cities, in contrast to the new cities of Greece and Rome, show an intermingling of public and private life. The market place, whether bordered or not by arcades, is surrounded by the private houses of the citizens. Also, in contrast, for instance, to Pompeii with its stepping stones, no care is taken to see that

FIG. 19: Priene was a Hellenistic city of some 4000 inhabitants, built between the fourth and second centuries BC on a mountain rising up from the Meandros river. The wide parallel lines indicate the *agora*; the narrow horizontal lines the main recreational places; the wide vertical lines sanctuaries. Our calculations showed that the space on the *agora* amounted to seven square feet per person.



PRIENE



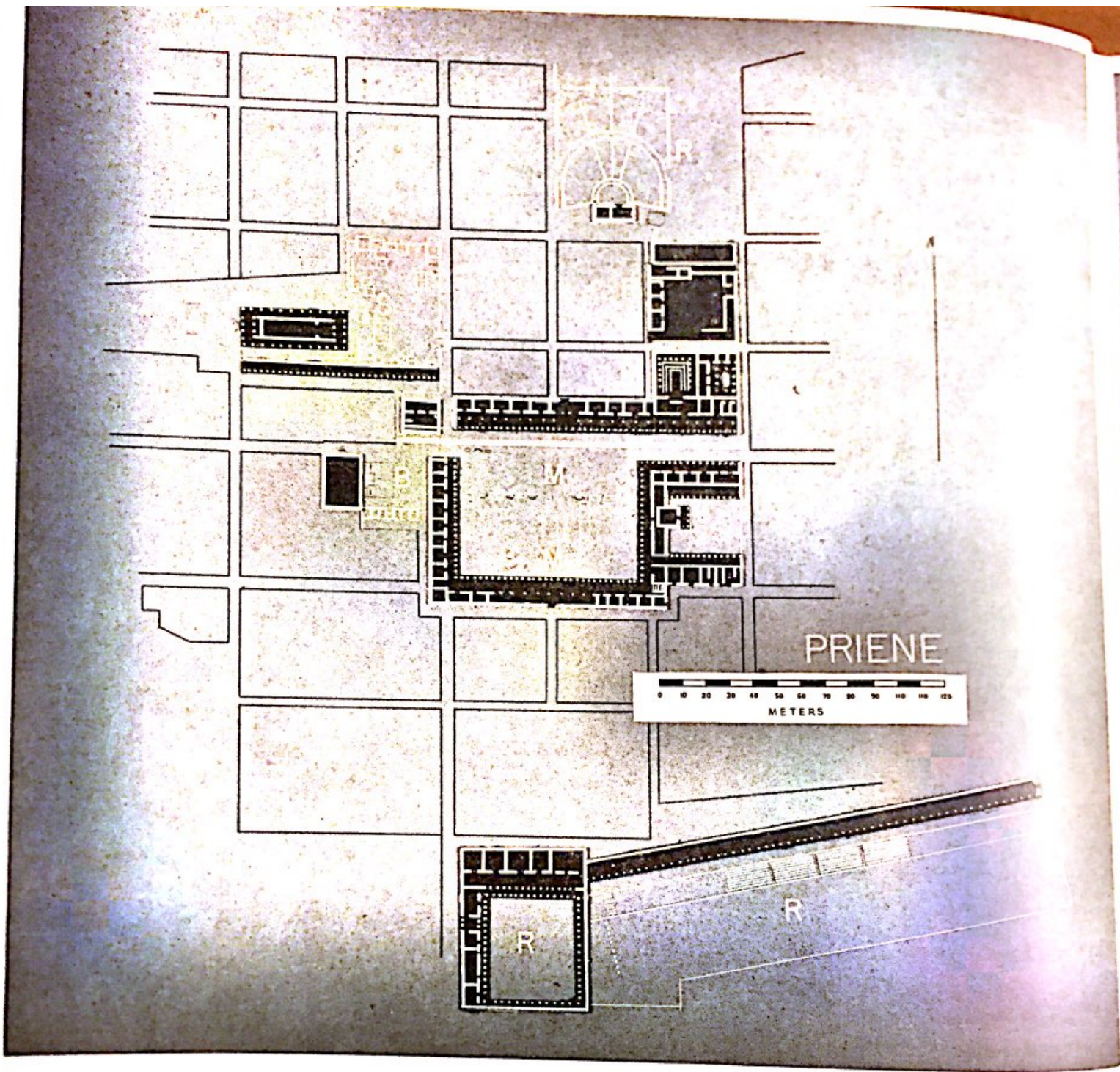


FIG. 20: The *agora* of Priene was surrounded by the *stoa* – the colonnades. The public buildings on the north side (*buleuterion* and *prytaneum*) had no façades. On the west, the Asklepios Temple and hospital was separated from the *agora*. To the south is the large gymnasium. Common to both *agora* and *forum* is the absence of traffic – they are only for pedestrians. Different is the dominating place in the *forum* given to sanctuary.

Key for all maps: R= Recreation, M= Meeting Places, S= Sanctuaries, B= Business.

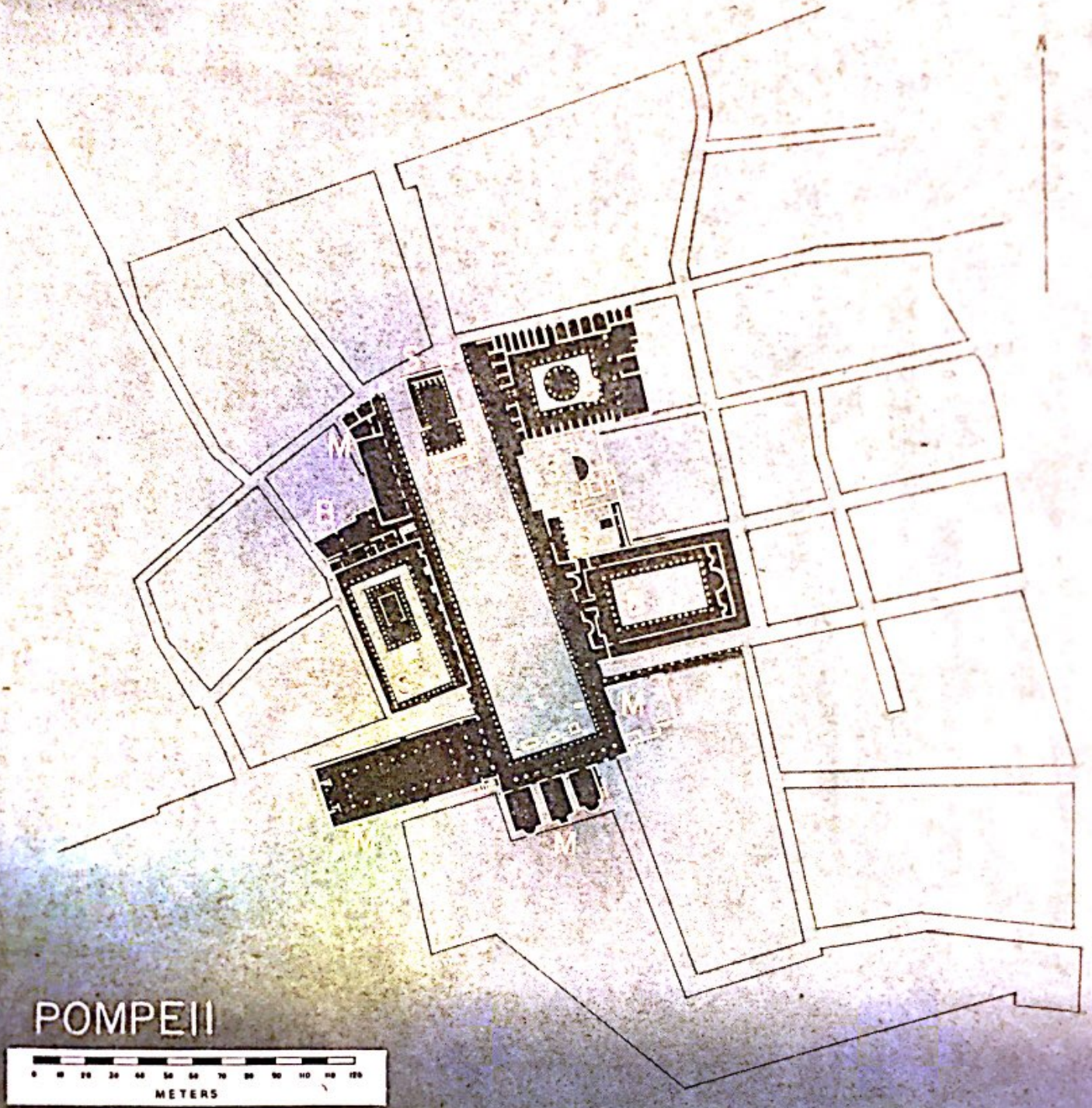


FIG. 21: The *forum* of Pompeii was built in the first century AD and had colonnades of two stories along both sides. Opposite to the dominating Temple of Jupiter is the *curia* for the government and the *comitium* for the selection of the officials. The largest building is the *basilica* (court of justice) in the south-west corner. Other buildings are for sanctuaries, merchant guilds, market places.

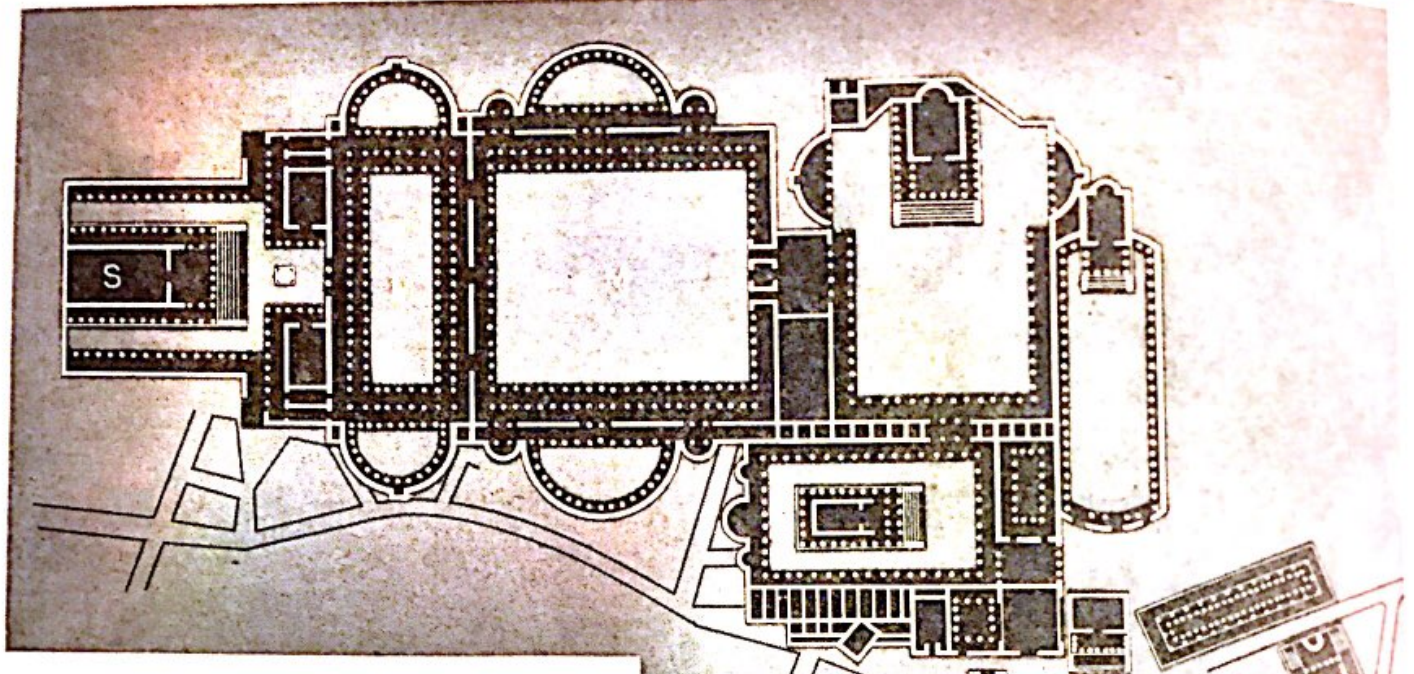


FIG. 22: The Forum Romanum is to the right with its *rostrum* (platform for the speaker) and next to it the Temple of Concordia and - not marked - the *carcer* (prison). No traffic, but a complete intermingling of business, jurisdiction, sanctuaries and meeting place. Above and to the left is the large complex of the Imperial Fora - from Julius Caesar to Trajan. Strong oriental influences. Deification of the emperor, but lacking the inner conviction and dignity of the Egyptian kingdom. Birthplace of sterile architecture.

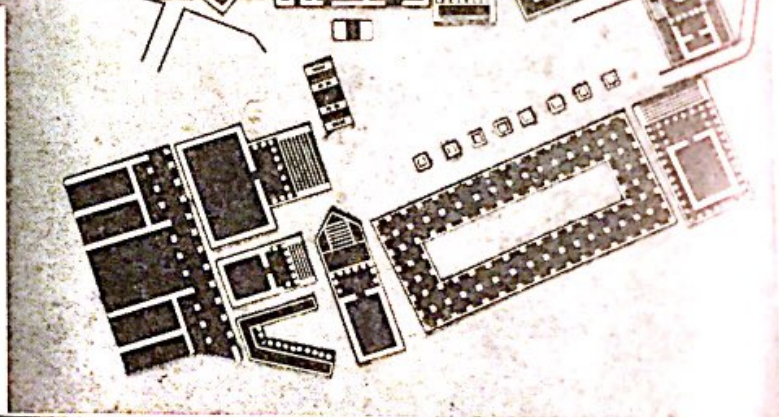
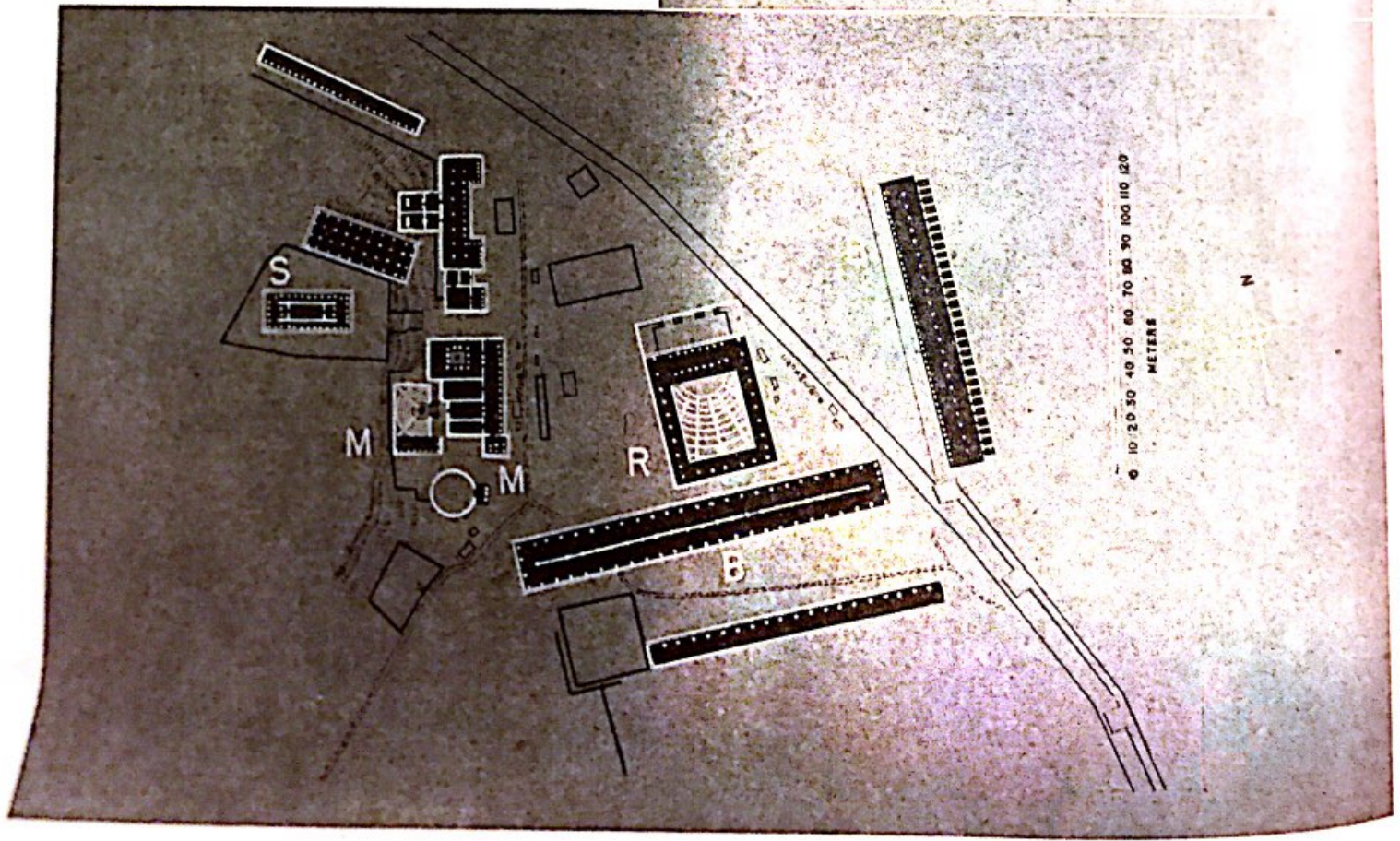


FIG. 23: The agora of Athens had never a plan. It sprang up like democracy. But it had an idea.



traffic is kept out of the public square. On the other hand, the street – the shopping street – acquired a new and much more intense significance.

The city of Berne (Fig.17, page 17) may be taken here as an interesting example of one of these planned towns of the thirteenth century. It was laid out in regular and equal ground plots along broad straight streets, bordered by porticos which stood in front of the houses. These arcaded streets became more important for social contacts of the populace than the squares before the church and town hall. The protector of trading rights and also the owner of the streets and the porticos was the emperor or his representative.

One can find foundations of similar cities from the south of France to East Prussia – indeed all over Europe. They had one or two main streets, and along these streets were houses all on the same module. There was a completely regular plan in all the newly-founded medieval cities.

And now let me finish by answering the question I put at the start. There is certainly some relationship between the social structure of a city and the physical structure, or urban form, of its Core. But one must warn that this is not always strictly true.

It was all so easy in the old days – even in the nineteenth century! History was simple and so was physics: effect and cause in history, effect and cause in physics, effect and cause in psychology.

It was the physical sciences that first abolished this rule, and today we are forced to recognise that the relation between the Core of the city and the social structure of the city is not at all so simple and so rational as we once thought. It does not always obey the law of effect and cause.

Let me finish with one example. It is a tragic example. I speak of the Capitol at Rome of Michelangelo. The area Capitolina occupies one of the hill-top sites of the ancient city of Rome. It is composed of a complex of the square itself (which is not a real square but more of a trapezoid); a broad ramped stairway (the Cordinata); and three buildings (the Senatorial Palace or town hall in the background, the Palazzo dei Conservatori on the right and the Capitolina Museum on the left).

The architectural composition of the Capitol can be rapidly summarised as a comprehensive development in depth: piazza, stairway, and the visual relation with the old medieval city of Rome.

In 1530 the city-republic of Florence lost its independence to the Medici despot, Cosimo the First. As you will know, Michelangelo came from an old



FIG. 24: Michelangelo's Capitol in Rome: a modelling of space with all and everything; from the siting of buildings to the organisation of the floor.

Florentine family and, in 1534, he left Florence for ever and spent the remaining thirty years of his life in voluntary exile in Rome. Here he gave concrete reality to what he had derived from his youthful democratic experiences in Florence. Here, in the Rome of the Counter-Reformation – a Rome in which there was no freedom and no democracy! Michelangelo's Capitol – a very perfect expression of the Core – was a symbol of the vanished liberties of the medieval city-republic that he held in his heart. It was, at the same time, a memorial to the tragic dreams of its creator.

The lack of imagination usually shown today (though there are a few exceptions) in our attempts to devise new city centres – new city Cores – is invariably excused on the ground that we no longer have a way of life that it is possible to express. What Michelangelo has mirrored in his Area Capitolina is the baffling irrationality of historic events and the enigmatic omission of any direct relation between effect and cause. Once more we realise that a great artist is able to create the artistic form for a phase of future social development, long before that phase has begun to take tangible shape. This is our task today.

The Past and The Present

GREGOR PAULSSON (*Upsala*)

We have been running the risk of falling into what might be called the historians' fallacy. This is the substitution of the present for the past, identifying what we see before our eyes today with what was once built by other people.

It is quite natural that outstanding examples of Cores should be mentioned and, to a certain degree, shown as ideals to the contemporary architect. The *fora* of Rome, the *agora* of Athens, the Piazza San Marco of Venice, etc, are notable manifestations of the social spirit of a town or a government, and we have the right to admire them.

But if the discussion stops there it is insufficient and dangerous. It gives us wrong conceptions about what those Cores stood for. The difference between a Roman imperial forum and the *agora* of Athens at the time of Pericles is not only a difference in forms, the forms have emanated from different functions and from differences in public spirit. As Giedion has pointed out, the Imperial Forum in Rome was at the same time a place for state functions, military, legal, and religious, centred in the person of the emperor; hence its formal unity. The democratic *agora* of Athens was primarily a public meeting place – the religious functions had retained their old ground on the Acropolis. As town planning it was the result of a muddling-through process. Its formal diversity was to a great extent the result of chance. The Piazza San Marco was mainly a meeting place, and I venture to say that its form was conditioned by a pattern of behaviour characteristic of the aristocratic Venetian republic, a community governed, and consequently socially 'owned', by a *numerus clausus* of families. The Piazza San Marco of today, with its additions from the early nineteenth century, though certainly the most pleasant of public places, is not the same place as when Guardi and the Canalettos depicted life in it, and still less as when Gentile Bellini painted his solemn processions of the brotherhoods of

merchant adventurers and others whose toil and enterprise created the glory that was Venice.

Before using historic backgrounds as models for our practice as town planners today, we must be sure what the examples stood for in the days when they were built. The ambition to create architectural values for eternity has given the cities of the western world that pseudo-monumentality which may have been an adequate expression of the mind of nineteenth-century imperialism – whether military or economic or civic or bourgeois does not matter – but which certainly does not enable democratic man of today to live a good life.

This identification of the present with the past may also lead to another fallacy, which we can call the town planners' fallacy. Let me give an example of what I mean. The town planner sees a hub of a megalopolis – the Place de l'Opéra or Piccadilly Circus – and says to himself: 'This is obviously an organic part of the great city. But it lacks intimacy. Let us go to Bloomsbury and study its quiet squares, or what is left of their quietness. These were places made for men to lead a quiet and dignified social life. Let us give our great cities their inevitable megalopolitan hubs as Central Cores, but let us also make Sub-Cores for the citizens daily life.' This reasoning goes on in spite of the fact that in present-day London there is hardly a single square that has not been invaded by business or professional life. The 'Sub-Cores' of Bloomsbury did not come into existence as what we mean today by Sub-Cores, but as habitats of the new middle class of the eighteenth century. When it has been used as a model in planning suburbs (which as you know is very common) the square has remained just a formal pattern, deprived of life, barely ornamental. What I mean to say by this is that we have no evidence whether classification such as 'Central Core' and 'Sub-Cores' really relates to the life of a modern city or not.

This leads to a first postulate: historic examples of town planning should be studied as expressing the result of historic causes, not as monuments expressing invariable architectural values, which can be transferred from one city to another or one period to another. It is only in very few cases that they can. In the growth of a city there are two causes at work: one has a generalising effect, e.g, the predominant industry; the other an individualising effect, e.g, the geography and topography of the site and also the manifold human factors. The interplay of both gives a city its individuality and conditions its architectural form. The master science of town planning should therefore be the interrelation of architecture with the modes of life it expresses.

How should that study be approached? The answer lies near at hand. The naturalists have long since made it a subject of research to investigate the interrelation of plants and animals with their habitats. They now know the laws of those relations fairly well: the optimal conditions of a habitat, its decay, the invasions of new populations, the migrations to other habitats, etc. That science is ecology – derived from the Greek word 'oikos', house. The ecology of man, the primordial animal, however, is an

almost unknown subject, and the research work done can be counted on the fingers of the hand. Only if we study old cities from the ecological point of view, their demographic structure, the structures and patterns of the families, their occupations, leisure, social intercourse, the municipal and economic structure, can we get informations of any real value about the shapes of towns.

The town planner can only get useful information about the Core when he has been given adequate answers to such questions as: what numbers and what kinds of people will use the Core? How will they behave there? How could they behave and how can the design of the Core help them in that respect? How does the villager behave? The townsman? The megalopolitanian? What kind of life does a Coreless community engender? What goes on when the city is growing – a disintegration or a differentiation? Does what the biologists call mutations exist in the life of cities? Those problems cannot be solved on the drawing board. We have to go out into the towns to watch the forms that the life is taking.

Studies of this kind were no concern of the town planner in a pre-industrial society. (As a matter of fact, however, many of the classical treatises of



FIG. 25: Finchingfield, Essex: an English village green. Before using historic backgrounds as models for present-day town planning we must be sure what the examples stood for at the time they were created.



FIG. 26: Times Square, New York. The noisy hub of a great metropolis is clearly an organic part of the big city.

urbanism contain several ecological arguments of which their authors were not aware; space prevents me from giving you examples.) Today such studies are necessary because the life of man in our present economic system is conditioned by his surroundings to a higher degree than ever before. Recently I read a most appalling book by James L. Halliday, the well-known British psychiatrist, in which he showed how the increase in psychosomatic diseases – conditioned by the way of life in modern urban communities – was making men invalid to a greater extent than we realise. He told of psychosocial disorders that threaten to turn a society into a sick society, and which have, in certain cases, already made it so.

The task of the town-planner is to make a good habitat for man as an individual as well as for man as a social animal. His first job should be an analysis of the social life and its deficiencies; on the result of that analysis his constructive work should be based.

There are two outstanding deficiencies of modern city life:

1. In the modern city there is no biological

equilibrium; that did not matter in the past because the cities could be fed with the overspill of the country. But how can this go on when fewer and fewer people stay back in the villages and on the farms? In an urbanised world the cities have to become demographically self-sustained.

2. In the modern city the psychological equilibrium tends to disappear. The modern city dweller is not living any longer in primary groups, with their face-to-face relations which engender diversity, but in masses, or coteries, which have a contrary effect.

These deficiencies, to me, are the real historic background for the study of the Core. They belong to the complex of the social functions of the Core.

I shall deal with some of the basic psycho-social functions of Cores because they may give a general formula of the interrelation Core-Community.

Speaking in terms of ecology there is one radical difference between men and animals. The latter live their lives entirely within the limits of families or herds; but that is the case with man only in the nomadic stage, or when the household of the family

group is completely self-sustained, materially and mentally. In all other cases we can divide the life of man in two more or less distinct parts: the activities within the family group, and those falling outside it.

To the first category belongs work, even if it is done outside the house, because its function in the average case is to sustain the family group. It is doubtful whether education belongs to it or not; it is done *for* the family by the school, to relieve the mother or father of a burden which in modern society would be too heavy to carry. But on the other hand, life in school engenders ideas and patterns of behaviour which are related to the life of the young as members not of families, but of groups or communities. Such educational items include decidedly extra-familiar activities, such as initiation rites.

For every new activity going on outside the family the consequence will be some sort of urban institution. If all or some of the material needs of a family group must be met by exchange of utilities, there will be a market-place. If the spiritual needs cannot be fulfilled by some member of the group, a congregation headed by a priest emerges, and a religious Core is the consequence. If a community is governed by members of every family within it, the job can be done in the market-place or in the church. But if there is some sort of representative government, an administrative Core comes out sooner or later. As the history of town planning teaches us, its form depends on the form of the government. If the adults want to chat after working hours, there will be a stoa or an esplanade; if they want to drink, there will be a café or a pub. Even the canteen, as a substitute for the intrafamiliar dining-room, is to a certain degree a social institution.

It might therefore be said that every group activity outside the home gives life to a Core of some kind. The Cores existing in a community condition the orbits of its inhabitants. In a Coreless community, e.g. a village of *braccianti* in Italy, or a saw-mill settlement in Sweden fifty years ago, the orbits of men are from their houses to the places where they work and back again, the orbits of the housewives will consist of the homes, a few shops, and the doorsteps where they chat with their neighbours. Whereas the orbit of a Cambridge student will be his rooms in college, the hall, the libraries, the playing fields, the club, etc. In the first cases the orbit is very simple, in the last it is complex.

As it is quite obvious that the extrafamiliar activities and the structure of the family group have a negative correlation, the disintegration of the

family into a group consisting only of parents and – more or less independent – children, educated by the community during their infant stage, earning their living outside the home during adolescence, presents to the urbanist problems which did not exist in past ages. We are still in a position to study the orbits of the pre-industrial city dweller in remote towns which have still a medieval character, and where the Cores were mainly two: the church with its close, and the market-place. That means that the orbits were not only simple, but had the same shape for everybody.

As the disintegration of the family group into small pair groups is a fact, the basic elements of a modern community will have a structure different from that of a pre-industrial town. *It is therefore quite obvious that the history of town planning, as a history of forms, cannot teach the modern urbanist anything worth while.* His concern with old urbanistic patterns will to a great extent be what to do with Cores that have deteriorated. To take one example, the Piazza di Soagna in Rome, which functioned as an *agora* from the seventeenth century to the age of the motor car, and as such had an importance for the culture of the western world unsurpassed by few public places, has now been turned into a parking place. It has a technical function, its social life has ceased. It is only a matter of time before, as a consequence, the whole region shares the same fate. The same process happens when it is the masses, rather than motor cars, which invade an existing Core. The mob may take possession of the most dignified places, thereby depriving them of the values they were built to serve. Commercial recreation is one of the mass or mob-making constituent in the modern city. It can make bright-light areas out of quiet living quarters.

To study these and other similar processes is the scope of human ecology. But in order to serve the urbanist the ecologist must not only make observations. He must evaluate the regions he observes and the orbits of the different strata of the population. 'Evaluate' is an ominous word for a scientist, and perhaps sociological evaluations could be substituted by the observations of another kind of scientist, *i.e.* the biologist. He would probably be in a position to give the final verdict and tell the urbanist whether the orbits lead to a good, healthy and diversified life, or the contrary. The study of past and present urban shapes, urban ecological processes and urban health, will give the material for the urbanist's vision.

The Individual and the Community

G. SCOTT WILLIAMSON (*London*)

I hope you will forgive the discursive nature of this address as your most kind invitation came upon me unawares. The first principle is that the underlying and main 'force' met with at every turn in Biology is Nature's Tendency to Wholeness, Health or Healing. It is this natural force that the doctor—wittingly, or unwittingly—takes advantage of in effecting the 'cure' of the patient.

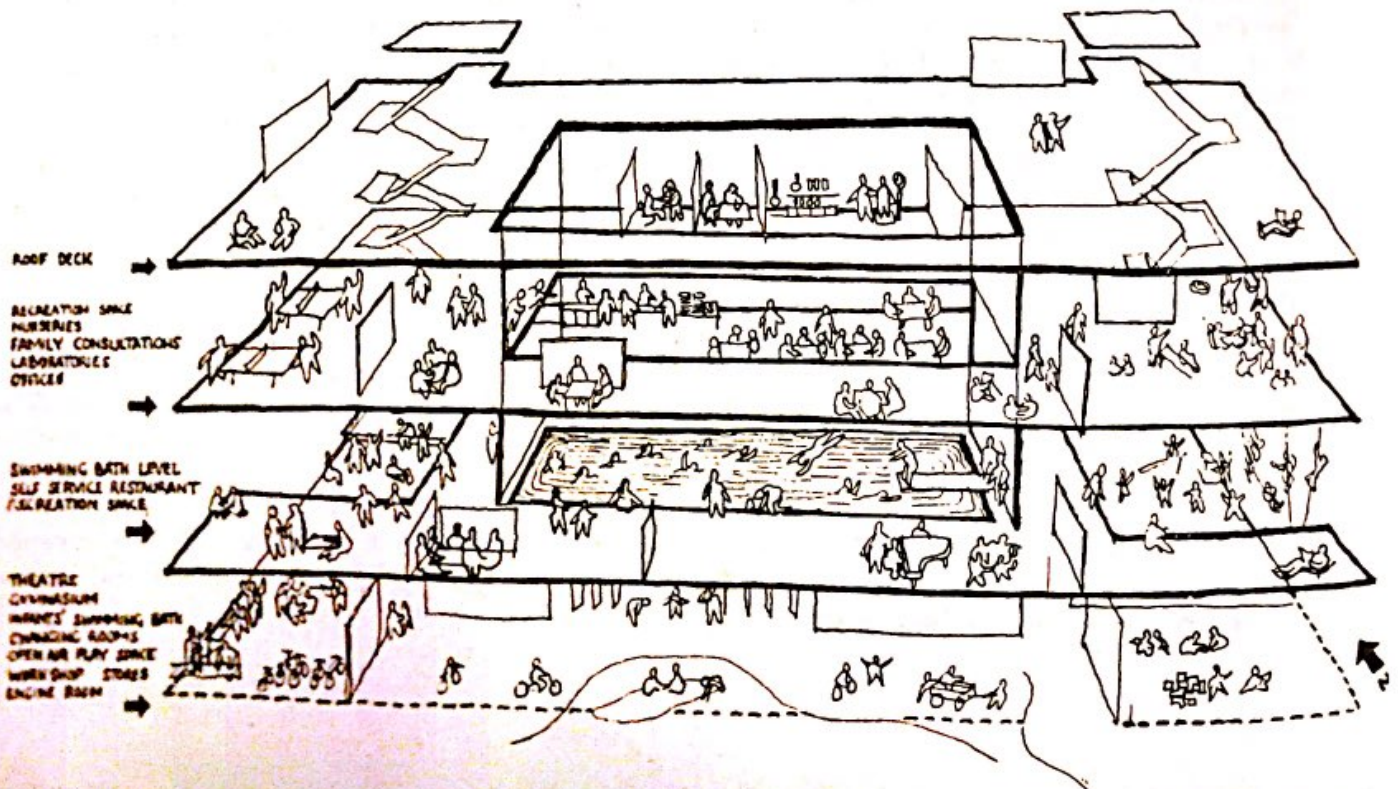
Then there is another principle which I think we have substantiated in our experiment at Peckham. It is that the human organism is 'the-Family-in-its-Home'. You can visualise this organism as a sort of cell—the nucleoplasm constituting the 'home' and, at its centre, dominating it, a nucleus consisting of the members of the family—like the powerful genes of the nucleus of a tissue cell. Round the nucleus is

a nuclear membrane—the *house* that enfolds the family. This house is a material structure enclosing the functional 'hearth'.

There has been great stress laid upon housing. But it is the 'hearth', or heart of the house that matters: a lively and directive energy attempting to creep out and bring within its assimilative influences experience from the broader avenues of society. Now, England having become largely an urbanised country, most of her people live completely shut into little houses, not attempting to come out, meet their fellows and create anything in the nature of an inter-related sociological medium or matrix, through and from which they can feed.

The principle of the 'Family-in-its-Home', then, is a fundamental one. It is the 'Core' for human

FIG. 27: The Pioneer Health Centre, Peckham.
Opened 1935 and closed for lack of funds 1951.



development. The smallest living human 'whole' is this family embedded in its own bit of the environment which it has specified, or made its own – by familiarity. It can be closely local, or it can be world-wide in its excursion.

Obviously this 'home' hasn't anything in the nature of a simple physical constitution, and yet it is not metaphysical. In our experiments at Peckham, we assembled people in their families; and each family brought its home with it into the Centre – or such parts of its home as it was prepared to expose to public gaze. That was one of the most noticeable features of the observations that we were able to make in the concourse of some 800 or 900 families in constant daily association in the Centre. They brought with them not only themselves, their persons, and their personalities, but they brought something more than that: they brought the unity of their homes. That was the most striking and important fact that dominated whatever they did.

That is a very practical issue which has emerged from the Peckham Experiment. All planning for the future must be based on the new functional unity, the human organism as a whole; *i.e.*, the 'Family-in-its-Home'. The individual which, in the past we have assumed to be the human organism, is a mere part of the organism – the blossom of the human stock; not its fruit. The natural ripened 'fruit' is the new family which drops off the old tree and starts growing anew in a new soil or environment. This is a tremendous jump, from the old idea of the individual and the individualistic attitude to all human affairs which has derived from it. We have now to cater for homes – an almost intangible concept and one extraordinarily difficult to get hold of for you people who are dealing with bricks and mortar.

Now we come to a third matter which is becoming apparent as the study of biology begins to move from consideration of the body, or mechanism of the animal to a study of its 'living'. Let us take a simple experiment to show you the significance of the biological process. When the physiologist is studying the faculty for digestion in the stomach of the as yet unborn or new-born infant, what he does is to extract the digestive juices from its stomach and the intestines. These juices are then placed in a test tube and to the test tube a well-mixed feed of beefsteak and onions is added. At the end of the requisite time, if the incubation is at the proper temperature, there occurs a complete and perfect digest of the beefsteak and onions. If the biologist, on the other hand, attempts to feed a new-born infant with beefsteak

and onions, however well mixed and minced, and if the child will ultimately yield to force and swallow it; and having swallowed it will retain it, the child will certainly die. Of course, we don't do that experiment ourselves! There is no need to, because there are thousands of experiments of that order every day – people rushing to the doctor late in the evening with a semi-dying infant.

Buried here is a very significant fact. The new-born infant has a perfect mechanism for digestion; but when new born it does not know how to use it; it has to teach itself to use it. The physicist and the physiologist only tell you *what can* be done; you have to turn to the biologist to discover *how* what can be done will be done. That is the essential difference between the physiologist and the biologist. The biologist is essentially studying how things are done in nature – the *HOW*. You remember our grandfathers and greatgrandfathers had a saying, 'Manners maketh the Man'. Modern biology seems to be substantiating and proving that 'Manners maketh the Man', except, of course, that Man is 'Home Grown' – not made by artifice. It is how people do things that matters: it is that that gives them their personality and individuality.

Physical science is concerned only with *WHAT* can be done. Biological science is concerned also with *HOW* to do what can be done – a very clear-cut definition.

Now when we followed up this '*HOW*' in our laboratories in Peckham, we discovered something very extraordinary and very interesting. Let us take, for instance, the faculty for speech, which is really the faculty for making a noise. We discover, to our astonishment, that within three weeks a mother can recognise the noise that her own child makes in a babel of fifty or sixty other children making their own noises. In other words, there's something fundamentally specific and different in *HOW* the individual does what can be done. There is nothing specific and diverse in *WHAT* he does; but there is a specificness in how he does what can be done, and this makes him different from all others.

That is the next fact which I wish to underline. The biologists world is a world of *complete diversity*. Now as you know, of course, from the philosophy of the physicists, and the physiological scientists, this is the very opposite to their world. They are working in a world where chance and the laws of probability dominate the whole situation. They are dealing with something which is the very opposite of diversity – with uniformity and universality;

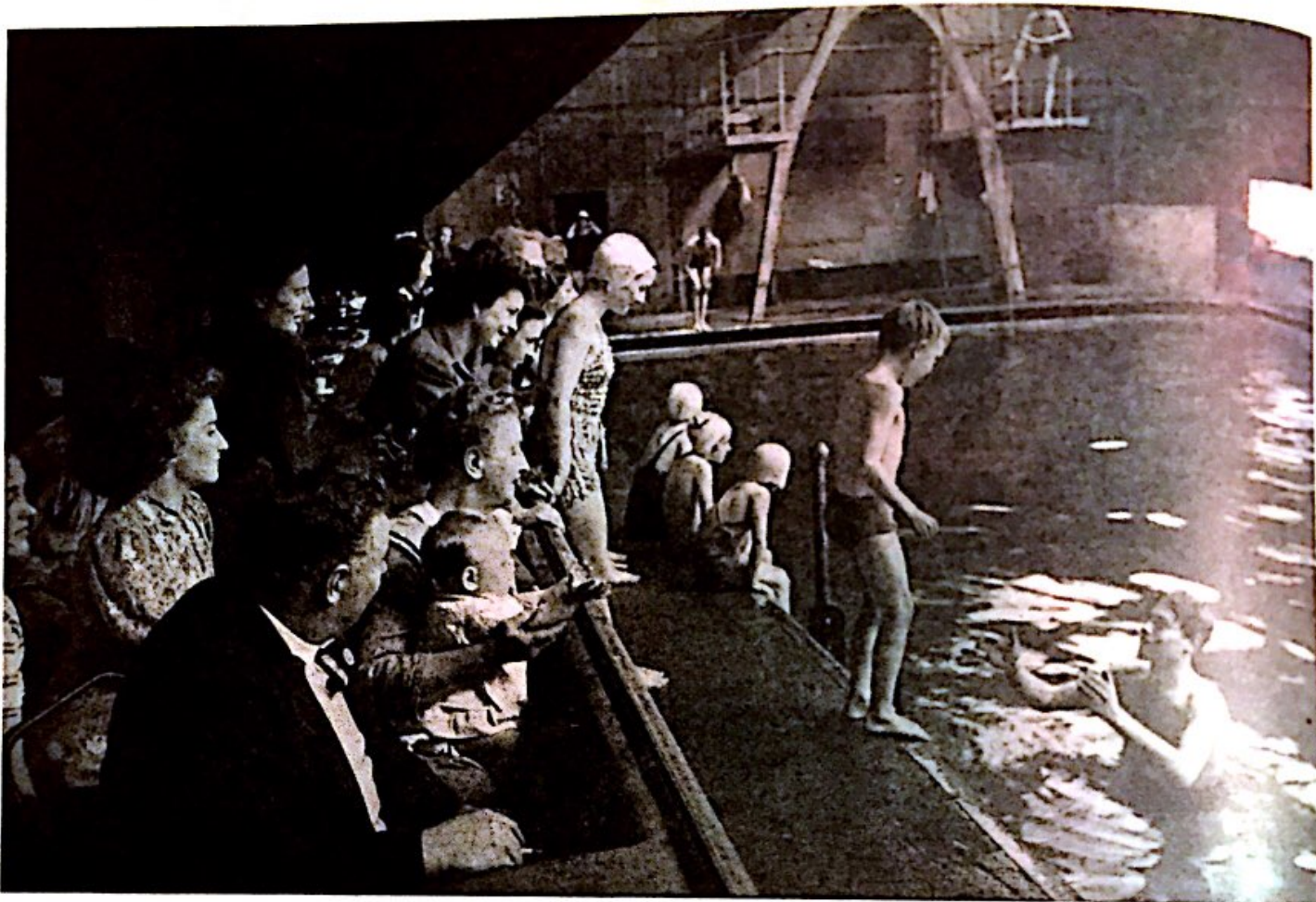
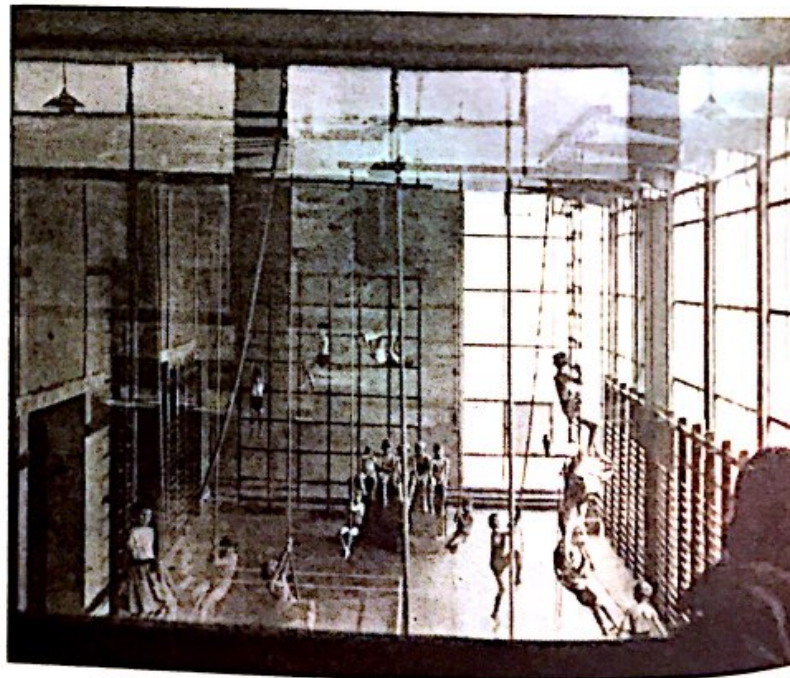


FIG. 28: The Swimming Bath at the Centre.

FIG. 29: The Gymnasium.



whereas in the biological field, we are dealing with complete specificity, and complete diversity.

This brings us to a consideration of the evolutionary process itself. If we look at the evolutionary process from the point of view of the physicist and physiologist, we get a picture of the development and evolution of what can be done; but if we turn now to the functional attitude, the biological attitude, we find that man's ultimate achievement from the point of view of biology is his freedom. He is now no longer dominated by instinct. His instincts are at the behest of his will. He can *choose* how he *will use* any of his instincts. He is not even like his nearest relations, the monkeys, who still are dominated by compulsive instincts which make them obey, and do what they must do, in given physiological situations. When it comes to man, however, we have been unable to find, in our close studies, any instincts that are necessarily compulsive. But unfortunately, though they are not necessarily compulsive, they can become so. Pavlov, for instance, in his work has demonstrated that you can *condition* your reflexes, that is to say, you can reduce man again to an automatically acting instinctive individual. There is another way of looking at this. If you get the conditions right, your actions will be right: they will be selective. This is where it comes very much into your sphere. The power of the architect to fix the conditions in which life and living has to take place, is tremendous – almost frightening. Are those conditions going to do away with human *autonomy*, and press man back into a purely instinctive automatic individual; or can they be such that they will maintain and sustain his autonomy?

When we opened the Peckham Health Centre and watched the new families coming in, we discovered a new kind of man – not a *homo sapiens*; but a *homo sporogenes*. He was like one of those bacteria which, when it meets adverse circumstances, goes into a sporing stage and grows round it a crust or membrane which protects it from its adverse surroundings. In the families that came into the Centre, we saw this poor unfortunate *homo sapiens* totally enclosed in a spore case – a membrane of habit. It did not matter whether the habits were good or bad, he had become simply a creature of habit. He was quite unable to respond to the surroundings in which we placed him. But as we watched him during the course of some months, we saw him slowly shedding this membrane, and becoming a free-moving whole *homo sapiens* once again.

It is really horrible to think that some 90% of

people are really of the type of *homo sporogenes*, not *homo sapiens*. They are people who have lost all their autonomy, and are incapable of exercising their will. It was one of the most disturbing things that we had to face; but with patience, we watched them shedding their skin, and ultimately participating in all sorts of things. For instance, one of the surveys that we made of individuals was to estimate how many faculties each was using – if any. We discovered that only 10% of the people could do anything, and only about the same number really *wanted* to do anything. The rest were in retreat, resting, self contained, behind this wall of the spore.

After we had been running for three years, however, the situation had completely changed. Instead of only about 10% of them attempting to do anything, we had now 80% of them *doing* something; and doing it with great sense, and under complete autonomy. One of the conditions of our experiment was, that within the confines of the building, everyone could do 'as they liked, when they liked, with what they liked and how they liked'. We had no policemen in the building to tell people what they ought not to do; nor had we any teachers, leaders or organisers to tell them what they ought to do. They were free to do as they liked; and they took full advantage of that. At first, for about eight months, we lived in a state of complete chaos. Everything that was for use, was broken; nothing was respected, and the whole place was a severe strain on everybody. So much so that my staff came to me almost daily and told me that we must do something about it, especially about the children. But not only that, some of the parents came to me and told me, 'You know, doctor, it's really serious, my three little boys were quite nice boys when they joined the Centre; now look at them'. But we persevered through that, and at the end of eight or nine months quite suddenly – perhaps not as suddenly as it seemed, though the change was so great that it did seem very sudden and spontaneous – there emerged order out of the previous complete disorder. This was summed up in a Sunday meeting when a newly-joined man said, 'I thought I could do as I liked', but another older member said, 'You've got it wrong, the thing is *everybody* can do as they like – not *anybody*'. He had got it right. The value of home and family is that it elicits an altruism, because each of the parts acts in awareness of the whole.

I was doing an investigation for one of the railway companies, many years ago now, and in the course of it I had to go into a signal box just outside York

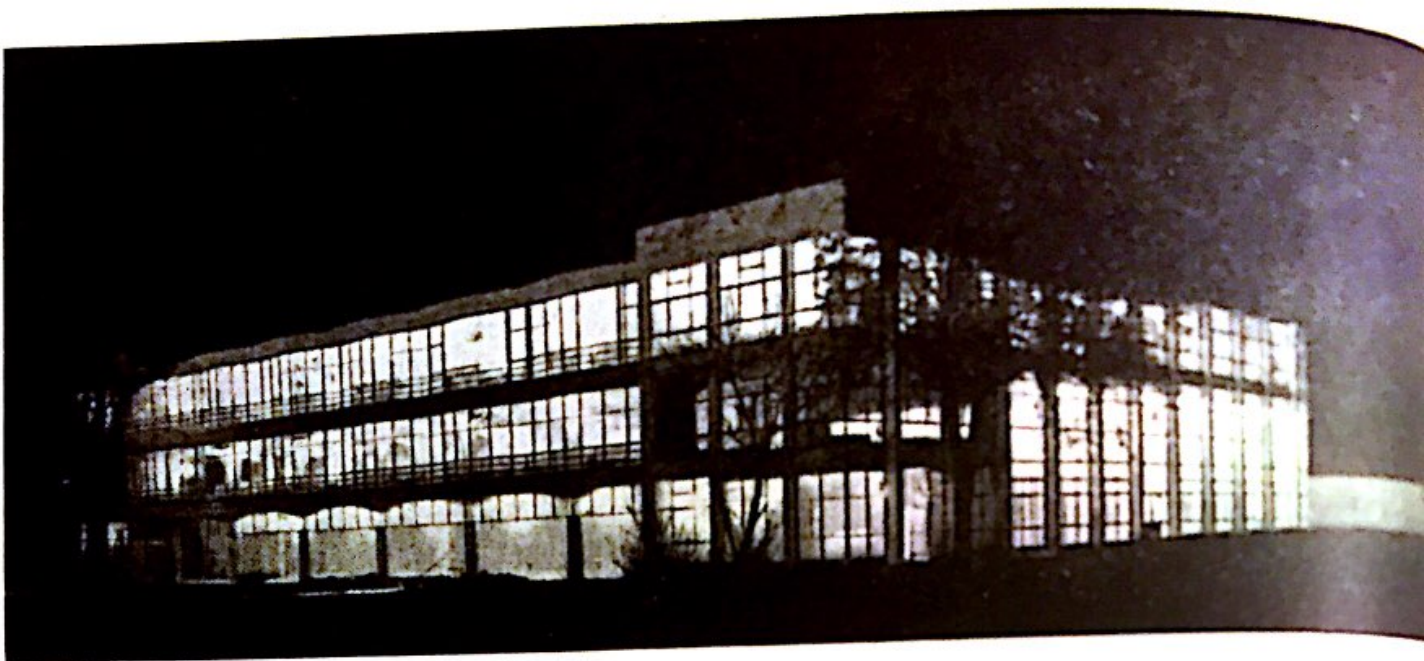


FIG. 30: Peckham Health Centre at night.

Station and sit with the signalman all night. We were sitting chatting, and I was discovering those things that I wanted to know about the signalman's life, when he said, 'There's the express - but MacDonald's driving it; it should be Smith'. I went into the York station next morning to enquire if this were true. They told me Smith had been stricken ill just as he was mounting the train and MacDonald had taken over instead. This signalman sitting a mile away was able to detect the specificity of MacDonald through this extraordinary unwieldy instrument of the Scots Express. You can see there how deeply penetrating this principle of diversity is. I could go on illustrating points like this over and over again. We have studied this closely in Peckham and know we can recognise an individual; and not only that, we can very often tell what is wrong with him when we hear his footsteps coming up the stairs. The significant fact that we are all diversified by how we do things; not by WHAT we do.

Now an experience that touches on the problem of the shift of the 'Core'. Of course the war had shattered the district of Peckham, and many families who had lived there before had moved out. When we reopened they were making a deliberate effort to get back into their district. We thought at first, feeling rather pleased with ourselves, that they were only coming back because the Peckham Health Centre was in that district. But when we made

closer enquiries, we discovered that there was something deeper than that. These people had left their homes; their homes were situated in Peckham; and so Peckham drew them back. They wanted to come back 'home'; to get back to that curious thing called the home which has the power of drawing people to it. You find illustrations and photographs of his home in almost any soldier's pocket book! It was the 'home' which was this powerful drawing agent.

But when they got back they often found, in fact, that their home was not in Peckham where they thought it was. What had happened was that these folk had gone away, and had acquired new methods of behaviour in their dispersion, and when they brought these new methods back with them into Peckham, they no longer fitted the situation.

That they must fit the situation is a very important factor. It introduces the principle of indigeneity in biology, the last principle I wanted to touch upon.*

We found the same thing with the conscript soldier. In our community there were some 100 or more conscripts, who went away at that critical age of 17-20. That left a complete hole unfilled in the community life of the Centre. The girls of the same age missed their *vis-à-vis*, the fathers and mothers missed their sons; the younger boys missed the natural

* The principle of indigeneity is not a space-time factor, but a feature of memory.

stimulus of the older adolescents. Conscription was a completely disintegrating factor in society.

When the conscripts came home, we had an opportunity of studying them, not only in their behaviour, but also through their mental and thought reactions. Of course, as you know, there is much wisdom in the ordinary man, a varied wisdom that is always popping in and out in odd ways. You can get extraordinarily wise answers from these people, if you put them in the right situation and ask them the right questions. These conscripts told us that when they went into the army, it was no use using the morals and manners of their homes. Their pattern of action, and attitudes, their relationships to one another in their homes – which was all they knew – did not work when they came to be applied to the homogeneous, mono-sexual community in the army. As the result of this home morality not working, they evolved a new morality peculiar to the army. It is a very terrible morality when you see it written down on paper, as told you by the young boys coming back from it. Then, when they came home and went back to their parents' house, they found themselves 'foreigners', in that their manners did not fit those of their parents in their own homes. Great disasters followed from that. You found these young men going out and marrying, often the first girl that they met, just to get away from their homes. The basis upon which they were going to create their new morality in their new home was the basis they had acquired in the army, the last step towards their dissolution and disintegration. The 'Core' you are interested in is something, then, that may shift and move, like a spotlight, according to the circumstances of the environment.

That brings me to two other points. One of our procedures was that all the young people about to marry were offered the chance of a pre-marital consultation and a talk about the situation that they were moving into by marriage. These talks brought us much enlightenment. We discovered, for instance, why people wanted to marry. People do not marry because of all this sex business you read about in books. Sex, as it is commonly understood – the sensual side – seems to have very little or nothing to do with marriage. The reason why people marry is to have a *home of their own*. In other words, they are now mature, and ready to create their own diversity and establish their own identity as a unity in society; and that is what they want to do. As one young woman said to me, summing up our talk, 'Yes, of course Doctor, any two silly people of the opposite

sex can have babies, but it takes *somebody special* to make a home'. They were rejecting the general physiological explanation commonly attributed to their actions and complying with the biological determinant of specification. This is yet another instance not of the WHAT, but of the HOW. In biology the nest comes before the egg.

Now the end. What sort of thing is this 'Whole'? What is its substance? And the only thing we can think of that would frame or form its substance is Memory. Memory – the analogue of space. We must not confuse memory with what we can remember. One has a faculty for remembering, just as one has a faculty for seeing. That faculty can either operate positively or negatively. That is to say, you can either remember or forget. But what you remember is something in *Memory*. Memory, in fact, is outside you – is part and parcel of the great world, and it is full of specificity. In fact, the logical necessity for memory is for the registration of specificity and diversity. So that this Space that the physicist and physiologists talk about is filled with contrasts of human form and human activity in nature, and this is just one aspect of a much more universal condition – the constant of Memory: Memory and Will. Will, because a diversity can only be matched or mated by Selectivity. That is to say, you have got to choose. And when you are choosing – matching – specificity, you have moved away from the world of uncertainty that the physicists and physiologists have created for us, and you are moving directly into a world of certainty, in which you can choose and match up the specificity.

Let us finish then by coming back to our topic. I have explained that you inherit genetically WHAT you can do, but you have to acquire HOW to do it.

That does not belittle what you can do, nor does it elevate how you do it, nor justify the creation of either of them into a 'speciality' separated off in a watertight compartment one from the other. Looking at it from a biologist's point of view, these two different aspects of the same thing are complements, one to the other, of the whole. They are two specific elements of the situation, of what you do and how you do it – and you cannot neglect one without denigrating the other. They are complementary actions which are assembled in the whole; and 'the whole' is the primal driving force of the biology of Cosmos.

I hope these principles if you think about them, will illuminate some of your problems; anyhow, they will raise questions in your minds about much that is usually taken for granted.

Conversation at CIAM 8



FIG. 31: LEFT TO RIGHT Le Corbusier, Alauant, van Eesteren, Sert, Emery, Peressutti.

VAN EESTEREN (*Amsterdam*). The important thing to ask ourselves is where, within the urban complex, is the right place for the Core.

EMERY (*Algiers*). When I first saw New York at night, with its blaze of lights, I wondered why the clusters of lights were gathered just where they were. It was as though one had sown a field of corn and it had sprung up in some places and not in others. It has been said that it is up to us architects to determine the best places for the Core, but I think it is an entirely spontaneous creation. The only thing we can do is to put certain things in a position where they can be used by the public. It is not our responsibility whether the plant grows or not. Actually, of course, we are all of us bothered because there are plants that have not grown and we try to find out why they did not, but I don't think we shall really be able to do this.

LE CORBUSIER (*Paris*). All the same, we can be a bit more definite than that. We can design special places for the Core, though it is of course impossible in our present time of rapid change to be certain that these are the places that will continue to develop in the future.

VAN EESTEREN. In Holland we have been planning an area that will eventually house 10,000 people. We are starting with the small Cores, and will afterwards make the central one.

EMERY. Are you sure of the place where this will be? Will it really develop in the centre?

TYRWHITT (*London*). In the smaller English towns the main Cores have always grown around the first centre of development. It seems very difficult to change this. The first Core to grow seems to remain the real centre.

EMERY. Like the saloon in the Far West which becomes the hotel and then fixes the shopping centre.

LE CORBUSIER. This means one must decide from the start what one wishes to accomplish - where one wants to go.

SERT (*New York*). We must try to define the kind of space that is able to grow into a Core. It must be in the strategic centre of the town, a place chosen by the people themselves, hallowed by use. It must be preserved from being built upon and be available for spontaneous manifestations by the populace. Here the individual is king, the pedestrian is his own master, and vehicles are unable to penetrate. In the course of years this space will take on some special form, created by the needs of that particular population, and interpreted by the architects of the time.

LE CORBUSIER. The word spontaneous in our period of uncertainty and doubt must mean that this space is open and available to everyone who wishes to put forward something that could be useful. The expressions of life within the Core must not be confined to the professional classes, nor to any one profession.

VAN EESTEREN. We must reckon with the changes that will come. In our altering society the Core itself must be flexible, so that new needs can find their expression there. This may mean that we should construct temporary buildings.

LE CORBUSIER. If we are not too ambitious at the start, it should be possible to reserve space for future needs. This can be done with gardens, though it goes without saying that both architect and landscape architect must avoid giving any impression that their work is temporary or provisional. This means that we must conceive of an architecture that is

neither temporary nor eternal, and that the places themselves should be considered rather as laboratories – research studios of ideas – than as settings for monumental public buildings. There is a subtle difference between these two approaches, which is extremely important.

SERT. The buildings would belong rather to the type of exhibition buildings.

LE CORBUSIER. That's not impossible, but it contains great dangers. It would seem better to make an effort to maintain the human scale at all stages: in other words to keep the scale of the Core in direct relation to its use at the one time, and to resist the introduction of elements outside this scale.

VAN EESTEREN. To return to the example of a village. At the moment life in a village is dominated by small individual undertakings – shops and so on – but there is clearly a tendency towards a more cooperative life. The plan for the Core must give opportunities for this freer life to find expression when it is ready.

LE CORBUSIER. The word 'laboratory' should be taken to include clubs of all sorts. The various clubs require specific forms, specific lighting, specific positions. It is not necessary that all clubs should be grouped together, but it is necessary that the place itself should be constantly alive; used day and evening, all the week and all the year. This is a complete architectural programme in itself.

SERT. You are talking of clubs, which are meeting places. It is also necessary to have places where things are displayed – works of art, paintings, etc. These buildings should be available for the most varied activities, discussions, concerts, exhibitions of the most diverse sort – ranging from paintings to machines.

TYRWHITT. Should the market be in the Core of today?

LE CORBUSIER. Theoretically this should disappear. The people of Marseilles, where the sun is hot, prefer to sell their potatoes under cover. Even though tourists find the open market picturesque, it is best to provide shade and cover.

SERT. We must work for the people of the town, not the tourist. The tourist is only incidental. Its fine if he finds the place attractive, but we should not design it for this purpose. I would like to return to the need for choosing the right places for the Core. We have in CIAM accepted the idea of a series of



FIG. 32: Facing camera de Vries, Chermayeff, Maekawa, van den Brock.



FIG. 33: Vetter, Roth, Senn, von der Muhl.



FIG. 34: (Student), Maekawa, Rogers, Sert, (Student).

FIG. 35: Mainly students.



groupings of habitations. The Cores of the small sectors should not be entirely enclosed and isolated from one another. We need a sort of necklace of Cores. On 14 July in Paris the people move around in their district from one local Core to another. They know at which particular points there will be festivities. It is important to stress that this series of Cores leads finally not to a head but to a heart – a 'Cœur'. Here we have the right word. The heart of the city as the source of activity that flows to the other Cores – represented both by actual mobile elements that can be moved around and by some visible expression of the living spirit of each city.

VAN EESTEREN. It is essential that we should always ask ourselves whether the elements we are introducing are really in accord with the actual habits and desires of the people of the town. You have been speaking of big towns, and it is accepted by us that they have got too spread out and need drawing together.

SERT. It is not only that the town has become too spread out. It is that we need to introduce within the town a series of enclosed spaces linked to the main heart by lines of communication. Sometimes one can use the banks of rivers to form these links. It is essential to point out that we are against separated 'village' centres – against spreading cities out, just for the sake of spreading out. In South America I have seen many communities planned on the ideal of the garden city with quite deplorable results, because the people had no money to keep up the wide paved roads, nor cars to run along them, nor water to keep the lawns green.

BATISTA (Cuba). Is the idea of the Core different from the idea of the Neighbourhood Unit?

SERT. It is quite different. There should be no Neighbourhood Unit without its own small Core, but this only a local reflection of the main Core – the Heart of the City.

38

HONNEGGER (Geneva). There are, in fact, several Cores in a city. The general, the political, the artistic, the theatrical, etc. Some are gathering places for small groups, some for large. Some have to be close to local dwellingplaces, some draw upon a vast public.

SERT. Our job is to design the container in the best place available. The public will then decide how it shall develop.



FIG. 36: Foreground Merkelbach, de Vries, Bakema.



FIG. 37: Le Corbusier.

FIG. 38: Van den Brock and students.



WISSING (Rotterdam). We do not only need to draw life up from the Neighbourhood Unit to the heart of the city, but also to spread life down from the heart to the neighbourhood.

LE CORBUSIER. The really important question is how do men group themselves together and why. The question of the Core – of the creation of centres of social life – is really the question of the reform of the structure of the city. It is our job as architects to create a physical synthesis of the social life, and the basic economics of each place.

BAKEMA (Rotterdam). It is true that every Neighbourhood Unit needs a Core, but – looking around us – we notice that there is an absence of what one can call the 'element of the Core' in our social life today, and we need to find forms to crystalise such elements as do exist. We must strive to give physical expression to our ideals for the Core in order to stimulate public demand.

TYRWHITT. One of the primary functions of the Core is to serve as a place where adults can move about informally, and a hopeful sign is the immediate use that is made today of any provision for this kind of informal strolling within the city. Two important things seem to be that the Core should provide a sympathetic setting for varied moods and that there should be a close physical nearness of all that goes to build up the heart of a city. There should be no distinct zones of separation between, for instance, the shopping centre, the cultural centre, the administrative centre. The Core should be filled with a great diversity of people.

REAY (Glasgow). The climate of Scotland makes it almost impossible for people to gather in the open air.

GIEDION (Zürich). In Italy people sit about in the open on steps and stairways. In Switzerland, as in Scotland, this is not possible. But one can always create something that will suit the climate – such as the squares of Bloomsbury. The most beautiful Cores have always taken a long time to grow – the Piazza San Marco took 500 years. The important thing is that, even if the first things are small, they should be on the right spot. In Rome, Sixtus V had the imagination and foresight to place his obelisks on spots where he felt a Core could arise, and around them some of the most beautiful squares of Rome have since developed.

MAYEKAWA (Tokyo). The Core in Ancient Japan was round the palace – more like the cities of Egypt and Mesopotamia that were despised by the Greeks

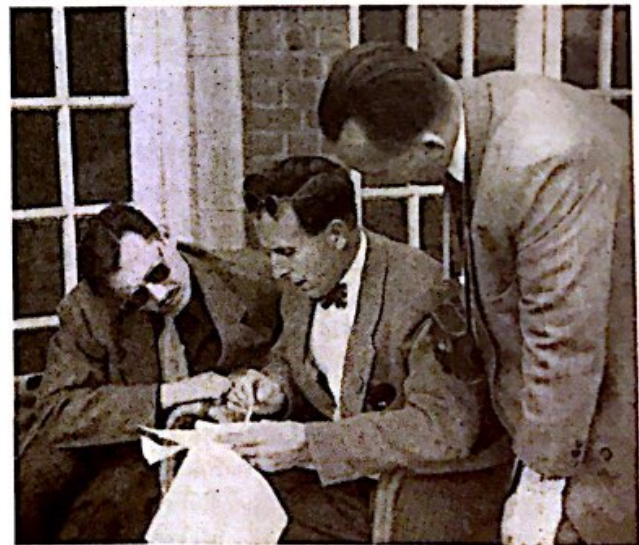


FIG. 39: Gropius, Ling.



FIG. 40: Cadbury Brown, Tyrwhitt, (student).

FIG. 41: Wissing, Thunstrom, Fitschy.



because they contained no *Agora*. Later it was round the castle of the feudal lord, and only after the seventeenth century did the tradesmen get enough power to consolidate themselves in a strong guild or independent organisation and build a separate commercial Core. When one thinks of the Core in Japan one tends to think of a closed guild or society. Yet today the Core must be built for the open community. The business centre is not a Core, nor can the amusement centre satisfy our image of a human being. The Core must have open space and serve the citizens for recreational and cultural activities. Japan has no such Cores at present, but in the Hiroshima Peace Project one is being built.

PAULSSON (*Uppsala*). There are not many opportunities today to build Cores for cities with a large diversity of people. Sweden's problems are the building of new villages, company towns, forestry settlements, etc, in which only one social level predominates. The history of such small communities has not been studied. Some never had a Core at all, but they still maintained a biological equilibrium.

ALAURENT (*Paris*). The Core should contain both services and pleasures. As the scale of the Core increases, the growth of administrative services causes pure democracy to decline. We pass from the village and the neighbourhood to the third scale – the town. Here technical services predominate. At the fourth scale – the city – transport; and at the largest scale – the metropolis – geo-political considerations predominate. The same differentiation takes place with education, shopping, etc. One thing remains certain. If activities take place in many different places, it is impossible to have the close proximity of man with man that is so desirable. The Piazza San Marco at the moment of the draw for the Venetian Lottery is a good example of how a whole crowd can enjoy a perfect setting, the perfection lying not merely in the architecture but also in the intimate nearness of a host of activities created by the past and the present.

ROTH (*Zurich*). Valery said we need an architecture that sings. I think we need towns that sing. This is the role of the Core. Tunes should be played by each of the local Cores, but in the central Core – in the heart – there should be a symphony. In our present actively mobile civilisation it is important that the Core should be relatively static. Not constantly changing, but something that remains. Sert is wrong in talking of mobile or temporary elements. Art is created for eternity. The Core should be a place for noble thoughts and the highest expression

of life. The synthesis of the arts is as old as mankind. It is for us – as architects, the co-ordinating art – to restore this synthesis. To do this the architect must himself study painting and sculpture so that he can understand them, and, of course, the artist must be brought in at the very outset of any project and not just at the end.

SERT. When Roth says he is against mobile elements at the Core, he is thinking of us – people who travel around and for whom life is always changing. The majority of the populations of the world are still sitting at their doorsteps in the city in which they were born, and their only walk is through the public square. It is for these people that I want to bring mobile elements into the Core, by means of a visual education as to what is happening outside.

ROGERS (*Milan*). I don't think the discussion is between eternal art and temporary art. We must always work – as the Latins said – as though our work will be eternal. Never mind if it is not. I, myself, think it should not be. But each time we draw a line, we ought to do it as though it were for ever. This is very important. It is a moral matter.

SERT. It is not necessary for CIAM to question the need for a Core. We know there is a need. Honnegger once told a story of some houses he had built in North Africa with running water. The people left because the women no longer had a pretext for going to the well. In Spain people meet around fountains. In New York the Rockefeller Centre is only a well in the midst of the skyscrapers, but people go there. The need exists. In South America there was great activity in town planning at one period under Spanish law (1560–70). All the towns had a main square of a certain size which was surrounded by government buildings and not private houses. The approaches along the four streets were protected by porticos from sun and wind. These Cores have served a good purpose both then and now. We have to assume the need for a Core today. Many Cores have taken long to build. The new Cores will not be carried out as one unit and there is no need for us to make plans that go down to the last detail. In 1945–6 when designing the Core of a city in Brazil, we established a few things that we considered of the utmost importance: (a) separation of cars and pedestrians, (b) open space for the use of the people, (c) roofed space also for public use. Both open space and covered space were necessary, and modern building methods lend themselves to the possibility of large covered spaces.



The Core as a Meeting Place of the Arts

LE CORBUSIER (*Paris*)

FIG.42: The domestic hearth – the age-old centre of family life.

1 Centres of Life

The title that the President of CIAM has given me for one of the chapters in this book suits me perfectly: *'The Core as a Meeting Place of the Arts'*. But the original subtitle *'The relationship of the plastic arts at the Core'* does not seem to me to be on the same level. I would rather combine title and subtitle under the single heading *'The Core considered as a place for the expression of life'*. It seems, alas, my fate to be always the 'wandering knight' – Don Quixote fighting the academic world. One who thrusts behind the finest words and the best intentions! Instinctively I am opposed to an art that is encouraged, commanded, in the service of . . . organised by a church, by a power, and employed as a means of propaganda.

2 The Spontaneous Theatre

Creative – fatigued – inspiration comes only from life itself. *Spontaneously*. The inspiration of the moment, caught at the moment and given life by those who have 'both belly and head so full' that they would burst if they were obliged to hold themselves in. **SPONTANEITY** signifies to erupt, not to record carefully. To erupt from the depths of one's being – which is consciousness. And consciousness is a formidable concentration of experiences recorded in one's deepest self. I oppose propaganda with consciousness.

Consciousness comes from within; propaganda only beats upon the walls; it floods everywhere.

Brazil

Here is a quotation from a talk I gave at a meeting in the Sorbonne, 1948, devoted to the relationship between the theatre and the drama of today and tomorrow.* 'I was particularly struck, on my second visit to Brazil – I had been there for the first time in 1929 – by the presence of three races of mankind: the Indian, the Negro, and the White (Portugese). Their collisions, their contacts, their violent differences made the streets themselves into a veritable theatre. This was apparent the moment we arrived in Brazil. We had landed in our zeppelin at Pernambouc and I saw Negroes hanging on to the cables of that indescribable instrument of navigation – 227 metres long, carrying a total of twenty-nine passengers, navigating at a height of 100 metres. These Negroes were avid. After we had landed I gradually began to observe this gesticulating population who had their own feelings. The one dominant at that time being either an extreme melancholy, a fine air of gloom – the gloom of Negroes and Indians is truly magnificent – which recalled the memory of a lost

* First session of Centre d'Etudes Philosophiques et Techniques du Théâtre, 4th Meeting, 2 December, 1948. Chairman: Le Corbusier. See *'Architecture et Dramaturgie'*. *Bibliographie d'Esthétique*, published Flammarion.

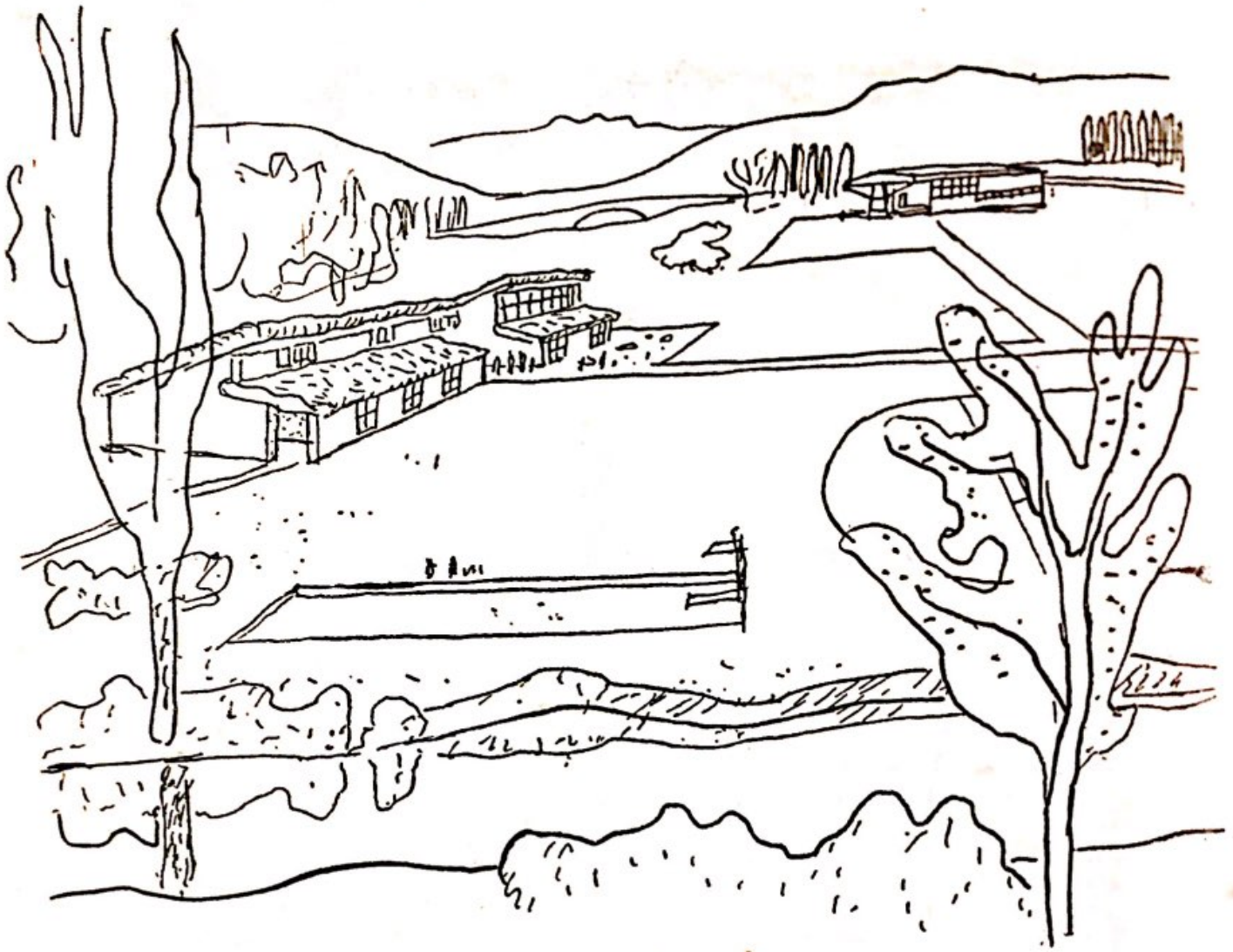
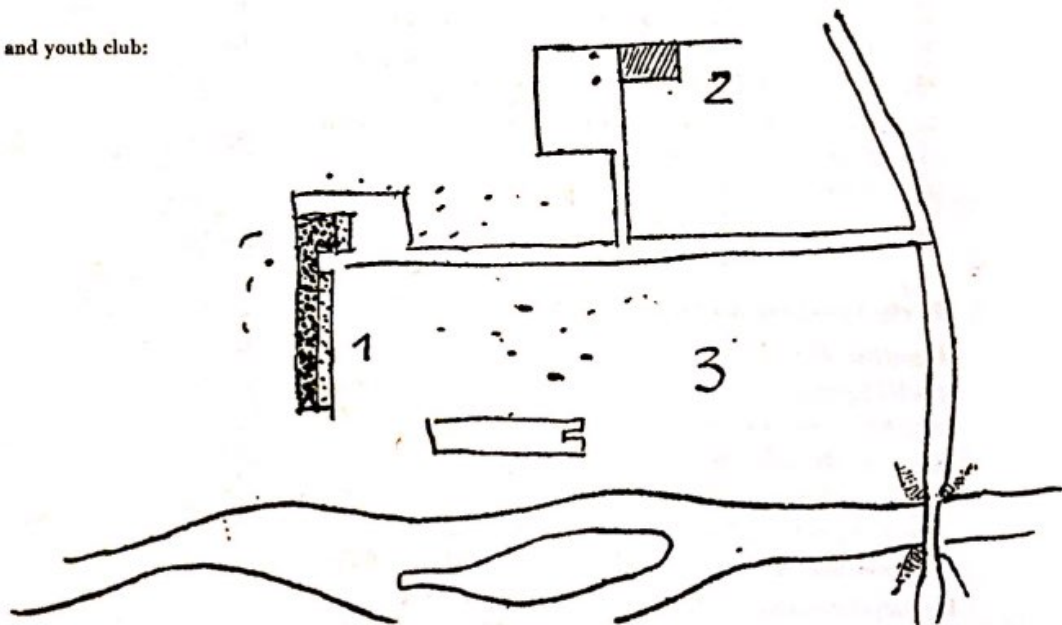


FIG. 13: A good site for a village school and youth club:

1. The youth club.
2. The school.
3. Playing field.



civilisation, or else a physical and psychic revolt which, on days of carnival, took the form of hurling aside all restraints of morals or custom and becoming – for the duration of the feast – monarchs of all they surveyed.

‘I told the Minister, in reply to a question, “M. le Ministre, don’t just build a theatre for ordinary touring players! What you need here is a means of acting yourselves. Create this! You only need a setting. Create platforms everywhere in your immense, gigantic country so that the people themselves can enact their own drama. There are plenty of poets among them, plenty of able people. Not perhaps deliberate and conscious theatrical performers but orators, hecklers, ranters, mourners, etc – actors of every kind. Create something out of this.”

France: Reconstruction Projects

‘The second time such an idea came back to me it arose from a dream that we all – or almost all – of us cherished: that wonderful moment of the rebirth of France after the Liberation. We dreamt of a wonderful adventure, of the gigantic building sites that were everywhere cleared . . . The great cities would empty themselves of their construction workers; these would rush upon the blitzed areas, rebuilding in record time all that was demolished, making it anew to demonstrate the modern way of life. These battalions of workmen – masons, excavators, plasterers, plumbers, locksmiths, carpenters, joiners, etc – these innumerable men, working amid the grand music of construction in the midst of its discords and its harmony, would find themselves at the end of the day with weary, dangling arms; they would assemble in canteens, enormous canteens for men without women, alone, bored to death despite the stimulus (so often deceptive) offered by the cinema and the radio.

‘I therefore said to myself “This is going to be a fine opportunity. For those who have their eyes open it could be great fun.” I then thought of the *Commedia dell’Arte* which I had never actually seen but of which I’d seen pictures. I saw pictures at the Castello S. Angelo in Rome when I was about 20 years old: figures and costumes. It was clear that the *Commedia dell’Arte* had been able to create an extraordinary – a magnificent – form for the expression of human feelings. As each player entered one could tell his character at once from his costume and manner, and one knew that he would express such and such sentiments. This saved a lot of tedious explanation and enabled the play to move swiftly.

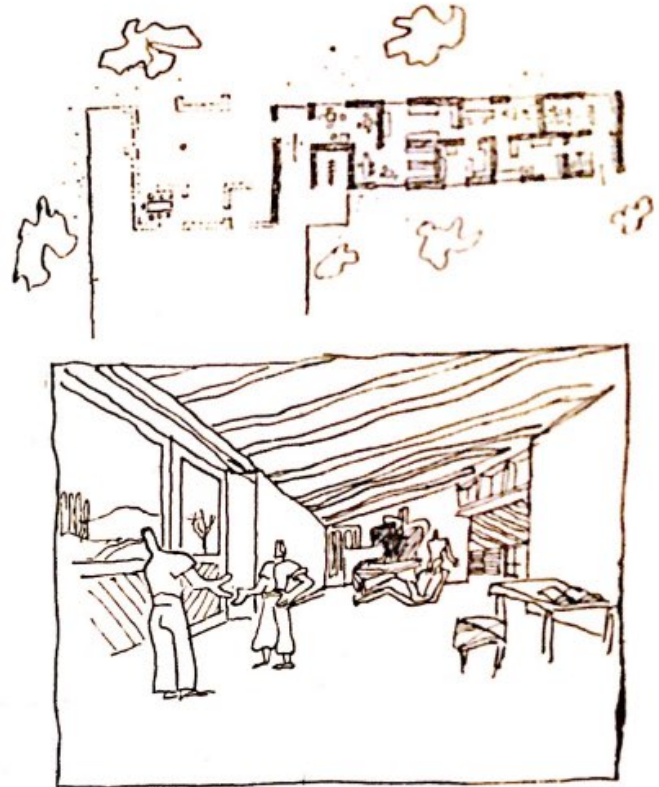


FIG.44: Rural Club: the hall and plan of the club.

‘I experienced this same speed of movement, this same intensity, on a journey to Buenos Aires in a French boat. After lunch the nurses and children used to watch the ship’s Punch and Judy Show. I was the only adult to join them. I enjoyed myself enormously, not only through observing the pleasure of the children but on my own account, and I said to myself – when one of the characters was being soundly thrashed with Punch’s stick on back and sides – “How often in one’s life one would dearly love to do just that to certain people! This way of expressing one’s opinion by beating with a stick (I was in a quarrel with many things at the time) is not such a bad idea . . .”

‘The puppet show, this simplification of expression and of method, is excellent. So many of the refinements which our society has created are tinsel compared to the powers of expression that could appear . . . when events are ready.

‘Those of you who are aware of spontaneity, please imagine the fine parade that I am going to set before you. We do not have such spectacles yet, but they will come! These could be the performers. One would start with the minister, then the councillors, then the Civil Servants. Behold those who are irritable and those who are not; those who are happy in their home life

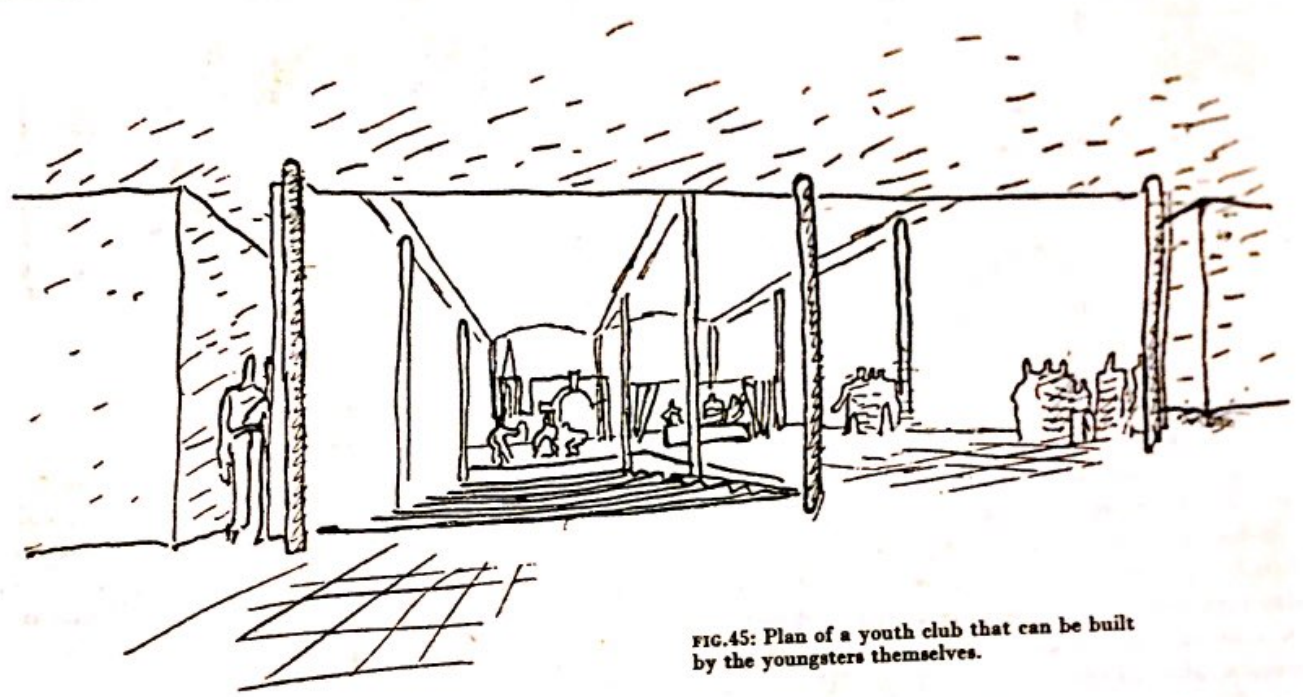
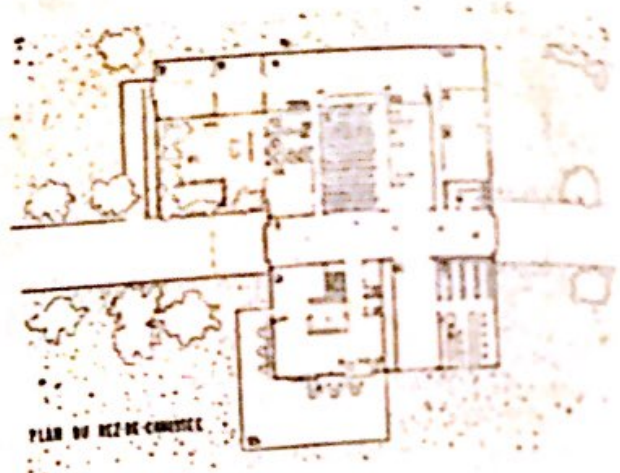


FIG.45: Plan of a youth club that can be built by the youngsters themselves.

and those who are miserable; those with the stomach-ache and those with a smile for everyone. There are fat men and thin men, those who seek after money and those who never think of it. There is the slide-rule merchant who works out those elaborate calculations, so clever and so undecipherable! There are . . . well, who else? The workers. Workers of every kind. I have already listed these once; I will not do it again . . . At the end, behold the engineers and then - the supreme chief - the architect! The whole would make a very fine puppet show.

'On a reconstruction project one could put on the kind of crazy farce that sometimes actually happens. It's tremendous. I have myself spent plenty of time playing the clown under such conditions, in the centre

of a large and solemn committee, where one could find every type and hear every accent. In the great empty area of the reconstruction site, during the evening or on a Sunday one could certainly find a few - young or old - able to suggest "I'll put on a performance of that scene the other day" . . . one of those indescribable slices of life, from a dramatic or a comic point of view, or maybe something that is touching or witty.

'Everything is there. One can find everything on a big construction job, whether of little houses or big houses, cathedrals that need re-roofing or canals that need repairing, bridges or roads, etc, etc.

'You can grasp the idea, but not to what it applies. It applies to the great fight of today in which the

entire world is seeking to find again its equilibrium: the battle of the old and the new, to give it a pleasant sounding though somewhat oversimplified form, so that one can laugh rather than weep . . . For it is not quite so simple as that; it is far more complicated, also far more rich.

'The spontaneous theatre! There would be people to create it, to play and to watch. There would be boards and a stage for the actors. There would be benches for some of the spectators, the rest would have to stand. In effect, my idea is completely traditional, isn't it? This has always existed! But it could have been fine, at that moment which I realised so intensely: that manifestation of a society in full action, full vigour, full confusion . . . Alas, dusk falls again over the graves . . . the great ship was never launched . . . One day it will sail . . . Have faith . . . It is still too early . . .'

So much concerning workers and technicians connected with building.

Around 1930, my friend Bézard (a farmer from La Sarthe) and I were bending over the problem of the abandoned farmlands. Here is what I said:

Rural Clubs

'Another occasion for the manifestation of life in the spontaneous theatre is offered by the rural scene. I noticed this when I worked for years with the country folk on rural reconstruction, including in particular the introduction of "co-operative centres". The programme was how to employ agricultural machines which require a greater stretch of land than that determined up till now by the footprints of cattle, man, and horse. The co-operative centres made it possible, in my view (supported by my studies), to check the decline of a fine way of life and to reinstate it in full vigour; as the new organisation would bring a modern life abounding with vitality into the countryside from which so many had drifted away to seek the doubtful profits of the towns.

These co-operative centres included a club. This club, on our plans, contained a room where many things could be welcomed and sheltered: a library to start with, a little café and then the hall – a hall for dances, for Christmas parties, for agricultural festivities that are often carryovers from pagan days. This hall was fitted up with a stage, not for the reception of travelling theatrical companies, but for the use of the young people of the area, who would one day know how to express here the splendour of the labour of the earth. A hall for the young people of the village

who would here be given an opportunity to create something; to create with music, with speech, with drama! This hall, supplying many needs, would be small and simple – as economical as the village budgets. It would be able to remain at a human scale (an efficient human grouping).'

3 The Human Scale

'The Human Scale.' These words make me turn to another consideration. Architecture once was and always should be upon the human scale. It was so before the advent of the schools and academies. One day the inflation of dimensions took the place of emphasis. Loss of the human scale . . .

'Théâtre de Nature'

We tried to create a natural amphitheatre. When I was a lad – I was 14 or 15 years old – my teacher led us up a mountain. We started off very early in the morning. We reached the peak – 1400 metres. Up there, there was a tremendous view. He said to us: 'We will spend the rest of our time building upon this vast ridge an immense amphitheatre to which people will come from everywhere and from which we can see everywhere!' Grandiose dream . . . 1400 metres, it's still pretty high . . . the pitch rises!

The *théâtre de nature* tried to let air into the stuffiness of early mechanisation which, following the steam engine, has already overrun many human traditions. It seemed a regenerating influence. I saw *A Midsummer Night's Dream* played in a pine forest in Berlin. It was very boring; the sound didn't carry and the dim light was not as amusing as all that! On the other hand the very same man who had staged *A Midsummer Night's Dream* among the pines – Reinhardt – put on *The Merchant of Venice* in 1934 in Venice itself, on the occasion of the Conference on Art of the International Institute of Intellectual Co-operation. This was really very good. He had taken over a piazzetta – a real stage scene: walls on three sides, a canal in front crossed by an alley which slipped across and then slid into the night by the side of a great garden enclosed by a high wall. In the left angle of a little bridge was a house with a half-open door; above it a room, that of Shylock, and then three more rooms. The actors played from each window on all four floors. Our amphitheatre of spectators was surrounded by three-storied houses whose windows were filled by the occupants and their friends. To the left a shop had been rented and here a forestage had been built to the side, in front of the canal. We found ourselves in the midst of a stage set

that was itself alive. I assure you that it was an extraordinary – an overwhelming – experience to be present at this spectacle. When I came away I was intoxicated, moving in a world of fantasy. I didn't go to bed until nine in the morning after prowling around all over the town, on land and on water, and watching a variety of spectacular sunrises.

Visual Acoustics

Why was this performance so good? Because of something to which I want to draw your attention. There are certain *exactly proportioned spaces of perfect harmony* which one could describe as places of 'visual acoustics' – places of such perfect proportions that the onlooker is made one with the surroundings. Move away a few paces and you no longer experience this: the harmony is broken or you are no longer in the play.

In my architect's office – where I had no longer any place of my own; they'd pushed me away from the drawing boards – they built me an office without windows, 2.26 × 2.26m, lit by an electric lamp. It is certainly at the human scale, although extremely small.

There are certain distances at which things appear good or bad. You must excuse me if I speak of personal experiences. I have a dining room of very cramped dimensions which, for technical reasons, and not due to aesthetics, is furnished with a barrel vault 4 × 4m square and 3m high to the top of the vault. The vault has an excellent visual scale and is pleasant to look at. Say we are dining six or eight persons. I am constantly obliged to call out 'Quiet! We must start again!' cutting short any conversation in which voices have become raised, because a false accord in the measurements has made the acoustics in this little room quite deplorable. Although I know a good deal about the matter of acoustics, I never even dreamed of this false relationship of dimensions.

A good accord exists in theatres when it is possible for the audience to see the actors really well – that's partly the reason why they pay for their seats. Well, but now we are talking of building auditoria in which the distances are so great that one can no longer see the actors – or only very badly. We once had to work on an auditorium for 14,000 listeners or spectators. And I protested 'But what are you going to perform there? It's as big as the Place de la Concorde in Paris. Once the actor is on the stage no one will see him.' I then thought up a reasonable theory, which could not however be confirmed by evidence, as the auditorium was never built. Here is

the theory: if everything is in proportion a harmony is created in which – I repeat – there is a *visual acoustic* which is similar to that of sound. A sound is emitted: if you know how to do it you can transport that sound hundreds, thousands, of yards. But it is complete disaster if you transport it badly – as in the case of my dining room.

I can imagine an auditorium in which all the elements (amphitheatre, stage and ceiling) are in complete harmony, a well-modulated shell. Not one of those flat parterres which prevent people from seeing one another. If there are a number of people it's a good thing to realise that they are there, and to see them. An important sensation: a strong point in circuses, arenas, bull rings. It is this visual solidarity that is the main value of large meetings. If the people don't actually see one another there, the occasion has the remoteness of abstract numbers. You are told that it was a meeting of 100,000 but you are not aware of it because you didn't see them. Instructions have to be given over the loudspeaker – a depressing sensation which reminds one of the hypnotised crowds during the war, before the war.

But if our great amphitheatre is a receptive shell and if our stage, whatever its kind, and the ceiling, which is acoustically determined, are related to the ears of each person sitting in the amphitheatre: if – in one word – you have made your plan well, you will have attained a perfect mathematical relationship, a visual order. You will have put the actor in contact with the audience by means of reflecting forms. You will thus accomplish a kind of plastic concentration which compensates for the visual loss occasioned by distance. Such halls are of course only suitable for certain spectacles. One can contemplate parades of tanks and airships and airplanes – coming through huge arches... This sort of thing pleases some people. The parades of July 14 on the Champs Elysées also please certain people... This is an aspect of the drama that makes one uneasy. But I do not acknowledge limitations. Maybe we have no right to impose limits. Everything is possible if it is well done, if it is successful. Perhaps some day someone may even create a spectacle so perfectly attuned to its setting that it will dispel this uneasiness I now feel for overpowering distances.

Shortly after this experience we had the task of designing an auditorium for popular festivities to seat 100,000 spectators. This is a lot! It's too many! 100,000: it's enormous! A major social objective is necessary to cause such a crowd to come together. I prepared a multiple attraction. First a political

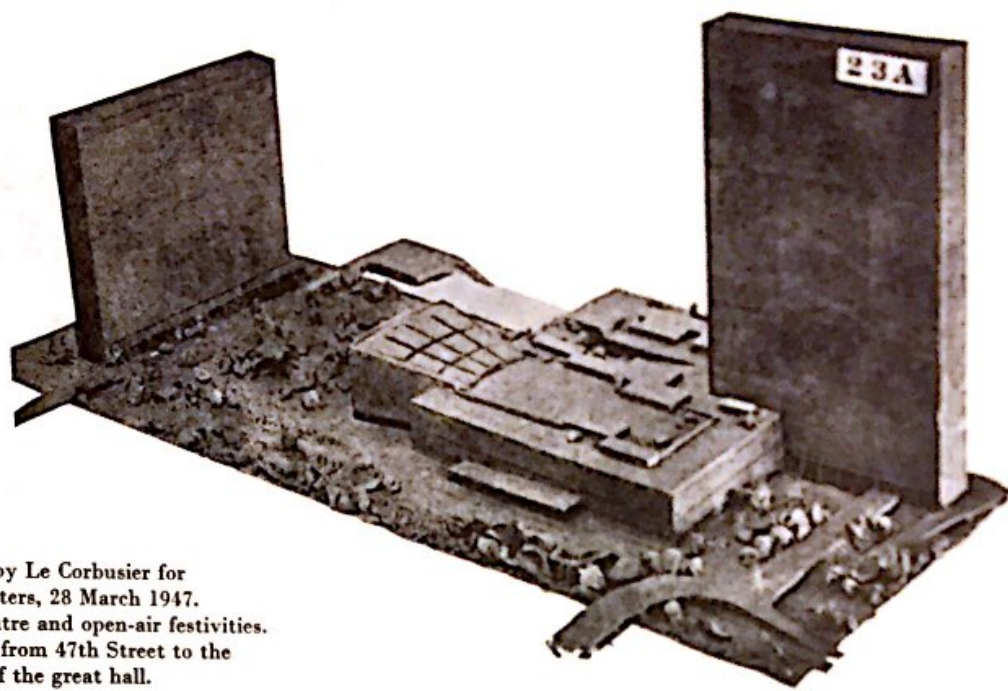


FIG.46: Photograph of model by Le Corbusier for the United Nations Headquarters, 28 March 1947. Rooftops for restaurants, theatre and open-air festivities. Indication of the seven levels from 47th Street to the open-air theatre on the roof of the great hall.

rostrum, because this is, actually, the great 'dada' of today; orators can then find a place for their declarations. Then I proposed there should be an amphitheatre and also a parade ground – something to please everyone. Finally, a gigantic gymnastic display. Why not? Here we reach one of the extreme limits where the emanations of a crowd can come into play. It's clear that this exercises a considerable power. One day the doctors may be able to measure with their instruments how much energy emanates from individuals and then, consequently, how much is generated by large crowds – positive or negative energy – with which one can play. That is, with which those people who want, or who will want to, can play!

The UN Buildings

My last experience with this sort of thing was with the United Nations in New York, where I had thought of something pretty cute. This is now being built. It's being built because Americans like ideas that come from France: they are pleased with French ideas and they carry them out themselves . . . employing their powerful organisation and today's compelling force of the almighty dollar. So in the urban landscape of the East River, where the horizon is barricaded by enormous billboards dedicated to Coca Cola 40 metres high (these will disappear one day in deference to the United Nations), there rises the building of the UN Secretariat: a building for 5000 employees, 100 metres long and 200 metres high. After that comes a block of assembly rooms and auditoria, 150 metres along the side, with a depth

greater than that of the Palais de la Concorde. Imagine the Place de la Concorde as a solid square, built over to the height of its palaces. After that one comes face to face with a third building. The whole group is laid out on a site 450 metres long (the park at Versailles is 400 metres wide). All around the three architectural masses is open parkland. I imagined a ramp rising gently from the park to the roofs of the great square block. Let those who know New York imagine that scene! The night, when countless glittering diamonds from the lit skyscrapers stud the sky. Night gives everything a wonderful unity. That great building rising 200 metres high, shimmering with electric light; lower down, this square roof (150×150 metres) with the roof of the Great Assembly Hall rising at the prow. This roof of the Great Hall is an inclined plane; but instead of leaving this sloping surface as a playground for alley cats, it could be used as an open-air theatre. This really could be something! Instead of serving cocktails in the lounge of the Waldorf Astoria or some other dismal hotel, they would be served here! What an atmosphere! Mr Trygve-Lie's cocktail parties, given on this high plateau, would have all sorts of impromptu surprises. Every country would have an opportunity of making its own contribution in song, in dance, in poetry. In truth, a good ending to a day of work. Between nine in the morning and five in the afternoon one could battle within the committees and congresses. Then one would come out upon the magic roof and drink a glass of refreshment and friendliness. It wouldn't be too bad up there, under the stars, amid the magic space of this great landscaped plateau of

architecture. It would be something new – something to stir the blood . . .

I have nothing more to say. I would like so much to see my little spontaneous theatre: it could contribute something both to the organisation and to the world.

4 Art is Revealed

If only the youngsters would show us up whenever we make ourselves absurd! We have now arrived at a state of total imbecility! One is left aghast at the sight of modern life today. But if one could put it on the stage in the spontaneous theatre either in the form of a Punch and Judy show or as the *Commedia dell'Arte*, I am sure that something would come out that would be of real value in the field of literature as well as in the fields of physical planning and plastic art. I believe that, from the point of view of social vitality, it is in this way – getting down to the roots of reality – that we can find the key to freedom for a society which is seeking a variety of means of self-expression. I believe that this basically is the role of a living theatre, at all times – to set before us the intensity of life, the great moments of life.

In designing literature, as well as in designs for physical planning, plastic art, and melodious sound: in all designs, the idea leads to a form of poetry which may be expressed by words, movement, form, colour, or sound. This gives it its style, or, one can say its style comes to birth at this moment – and it can be either good or bad. The poetry springs up, or it fails to rise. Art is revealed or it is not revealed.

From within; exploding; erupting (as I have already said); not by trimmings embroidered or engraved upon set themes; social, religious, or political, adventure or romance, commercial or economic, etc.

Spare us from deceptive lessons upon the walls of our public buildings. The newspapers can do this task – they come out every day: the technical papers do it too – they can be filed away! Four hundred years have passed since Gutenberg performed his labours! This would be a confusion of motives: things would become out of scale. Everything, good and bad, has a right to be communicated to the public – but in a suitable form.

I have said: Art is revealed. Look in the face of the devouring, perilous flame of poetry made manifest and do not cover yourselves with the cold ashes of redundancy!

**5 Men have always felt the need to gather together
Make contact by switching on the vital current! And**

as men have a need to gather together, let them here test out their own powers of understanding, of discovery; let them be on the watch for new inventions. What are the main themes of sculpture? Man, woman, drama, elegy, storm, sorrow. See the truth and look within and do not entertain for one moment any idea of making a photograph or a newspaper report, or a school lesson. Men, women, and children will gather here: they come together for a short period of *human friendliness*, for the pleasure of the spirit. It must be on a high level and never mean rather hard to understand and to interpret, if one must: inaccessible rather than on the ordinary, everyday level – which it must never be.

The Common Meeting Place

I will explain myself by giving a simple example: let us imagine the most banal of themes which fits in with all political opinion, all propaganda, all the average demonstrations which are organised for the average person: the meeting place of the district, of the community, of the village, etc . . . A minor Rubens pretends to depict upon a civic mural this spirit of the average – an historical event, which . . . when . . .

And thereafter, everyone will be lulled to sleep by the dust accumulating upon this work which may not be one of those selected by destiny. I prefer that walls should only be covered temporarily by illustrations of momentary events which should be cleared off and replaced so that they always express genuine feelings. And this task should be the responsibility of those who have something to offer – without vanity or financial support – here again spontaneously.

The Ballroom of the Taj Hotel

Examples of this kind of thing appear under our eyes to right and left: we must just recognise them when we see them and draw the lesson. For instance the other day in Bombay, at the Taj Hotel, I poked my nose into the door of the ballroom and saw that the decorations for Friday were under way. Those that I'd seen there a month ago had already been replaced three times. The job consisted of painting four murals, each about 25 metres long and each more than 3 metres high, so that a completely different atmosphere was created every week. The paintings were destroyed within the next few days. The painter, in overalls, put the last touch to his decorations. He was a young Indian. The theme this week was in the honour of great capital cities. The painter had certainly worked in Paris as the Eiffel

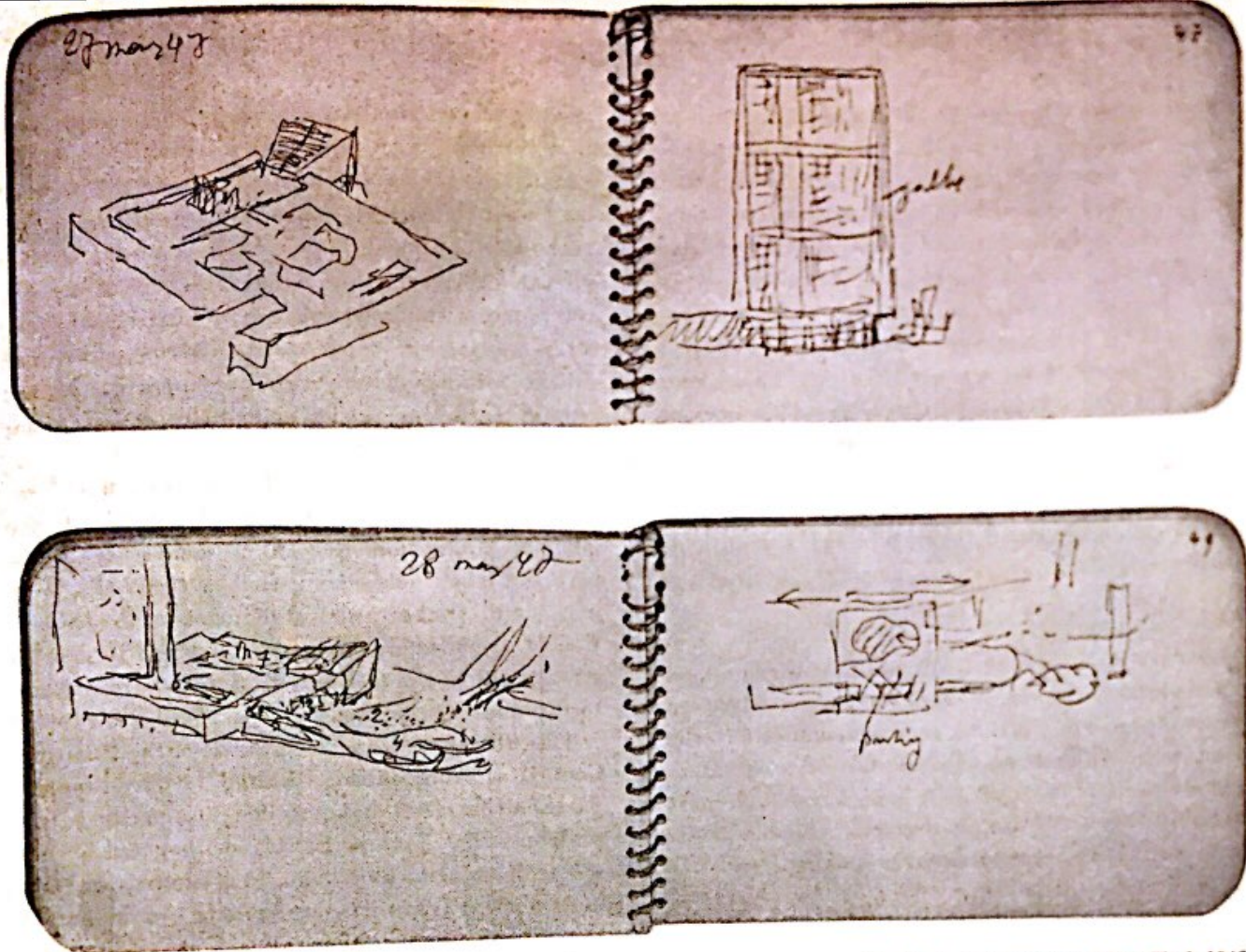


FIG.47: Four pages of Le Corbusier's notebook, New York 1947.

Tower and the Arc de Triomphe occupied an entire panel – clear evidence of his affection! There was also the Tower of London as well as the skyscrapers of New York; then there was a viaduct from the Engadine (certainly copied from an advertisement); St Peter's at Rome, and so on. A hundred metres of mural paintings for one evening – made on paper. The paper would be burnt. Pleasure had been given to the guests of the Taj Hotel, and perhaps more than just that if there happened to be some 'kindred spirits' in the room. An artist had been given the chance to demonstrate on a large scale what he knew and what he felt; he had been able to have a definite and fruitful experience.

A Children's Art Club in Sao Paulo

Another example: a Museum of Modern Art has recently been opened at Sao Paulo in Brazil under the direction of our friend Bardi, whom we have known since the fourth CIAM Congress at Athens. He has organised here a 'Children's Art Club' connected with the activities of his great museum. Here the

children of the locality can find conditions in which they can work and produce. There is a children's orchestra, a school of dancing, a theatre, studios for rural painting made by the children, sculpture, and guided tours round the museum exhibitions.

Marseilles

Third example: in our building at Marseilles – the Unité d'Habitation designed for 1600 inhabitants – three of our architectural draughtsmen who were overseeing the site-work took advantage of the opportunity to paint some lively murals there (3.66m × 2.26m). These paintings were made on plaster panels which acted as fire screens: they required to be covered (and afterwards were covered) by wood panelling. The paintings disappeared. But they had been conceived and they had been painted; they had given pleasure to those who had thought of them and carried them out. They have disappeared, been buried, just as each of us will be one day – buried or burnt!

These same draughtsmen were living in some

American barracks near to the building site. There they painted the cubicles that served as their bedrooms, the communal dining room, the corridors, and so on . . . They were able to express themselves, they gave pleasure to their friends, and they learnt that it is difficult to paint murals and that there are as many failures as there are successes. Life was experienced; its current ran through them and was also felt by their friends and visitors. Those who stand and wait for the art that is eternal can occupy the present time by taking photographs of such work and putting them away in a drawer to wait for the day when Sigfried Giedion will open the drawer and, by his comments upon them, establish the outlook for posterity!

Children's Club

As we are at Marseilles, I will add that we equipped some places for the children of the project: places so small that one might think they were unusable – the remainder of the areas set aside for elevators. Here the children, if they are well guided, can take part in a multitude of clubs: photography, cinema, painting, sculpture, dance, orchestra, cooking, etc.

A Museum of Knowledge in India

The municipality of Ahmedabad in India has recently asked me to build their municipal museum, in conformity with the studies I have been making for twenty years for a 'Museum of Knowledge' of unlimited growth, and of finding a solution to the delicate architectural problem of creating an expression of exclusively internal architecture – *one interior* – in other words, a museum without façade. These museums of knowledge will become an indispensable

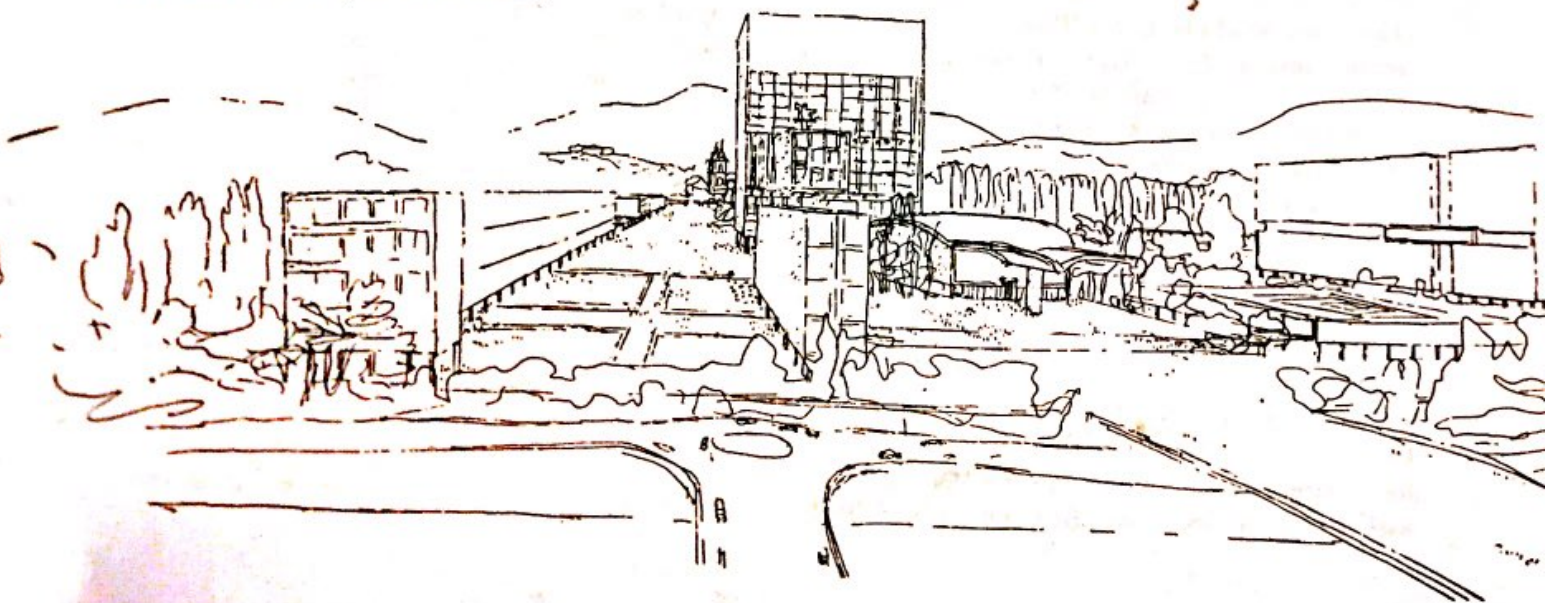
tool for all communities who wish to act and produce in accordance with their past history, the enduring conditions of their environment, general and particular events that closely concern them, their resources, tapped or untapped: in one word, a means of illuminating the best line of action. This type of museum composed of square spirals with its balance of open-air rooms and research rooms and its varied and mobile equipment affords new opportunities for exhibition, demonstration and, finally, of experimentation. Research studios.

If the site is well chosen, the exterior can itself be used as an open-air theatre, a revolving stage, or for cinema club, documentary films, conferences, a library, etc. The whole scheme enables the public 'to be exposed to' (to borrow an Americanism) the fascination of visualisation (to understand and to demonstrate) and to the fascination of action (to explain, to formulate, to invent, to *love*).

This, therefore, is the programme of the Municipal Council of Ahmedabad, directed by Shri Gautam Sarabhai: a clear and succinct statement of the problems that have to be solved, prepared by far-seeing town councillors who, in a country with the most ancient traditions, are seeking to take part in the mechanistic evolution.

'In this town, we have not only need of a centre where valuable objects can be placed and cared for, but a centre which can serve to develop the culture of the town. While it is known that museums are useful to shelter and classify specimens of artistic work, whether literary or plastic, natural or scientific, they can and should have another use that is certainly closer to the life of man, they could provide the basis for a programme of visual education. This

FIG. 48: Sketch of plan for St Dié, Vosges: the establishment of a centre both for city life and civic affairs.



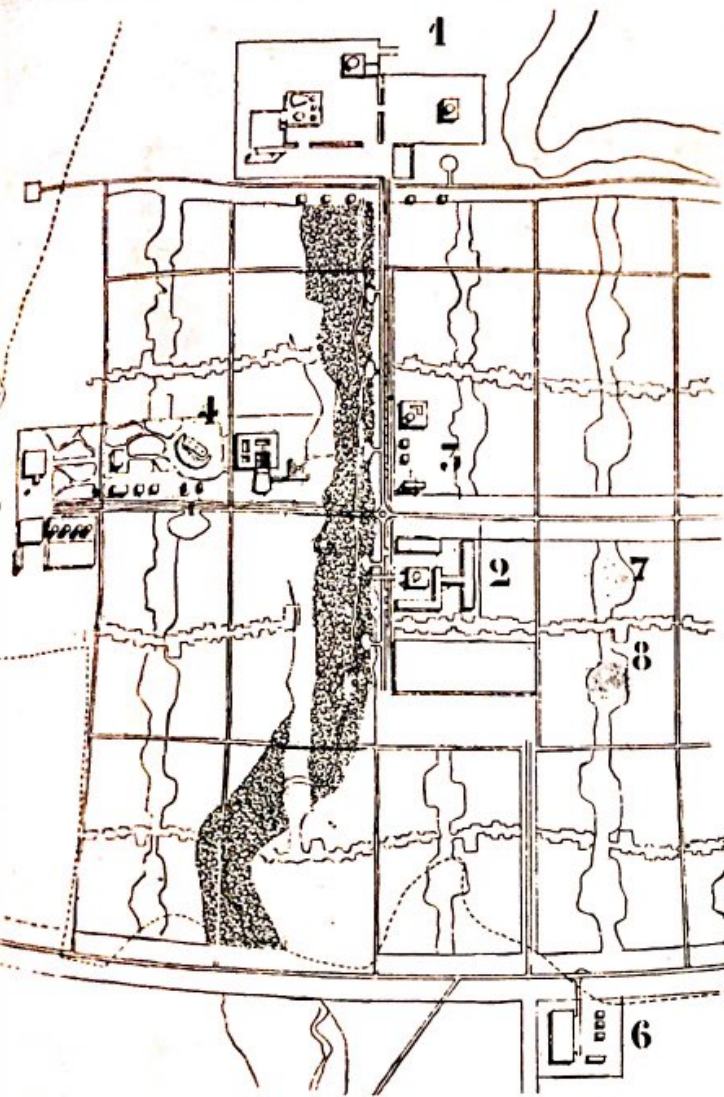


FIG.49.

is especially important in view of the number of illiterates.

'There are innumerable subjects of interest, and the ideal would be to have a museum for every speciality: a museum of fine arts, of archacology, of natural history, of industry, of science, of commerce, etc. But this is not yet possible here through lack of funds. We can but glean here and there and try to house everything in one modest museum, within the financial means at our disposal. But a heap of scattered information can be of no use unless it is coordinated. It is therefore better to start the museum very modestly. It is better to have a few sections very complete rather than to have a number of sections assembled incoherently. New sections must be able to be added in proportion to the funds at our disposal.'

6 The many Cores of a town: Chandigarh
 One last example may serve in conclusion: it is the

new capital of the Punjab, Chandigarh, which is being built upon a magnificent virgin plateau crowned by the spurs of the Himalayas.* You will notice the presence of many different centres linked together by a 'civic valley'.

Indians will like to promenade upon this great plateau planted with fine trees. In one part, a phenomenon of erosion has scraped away the earth and created a gorge five or six metres deep and varying in width from one hundred to two and three hundred meters. Six metres below ground is enough to create an atmosphere of solitude and complete isolation. No automobile will disturb this rural valley. The auto routes run along the plateau and cross the valley on bridges.

The various parts of the new capital Chandigarh (see Fig.49) are:

1. The Capitol – a vast esplanade on which are grouped the Assembly Hall with its Secretariat, Governor's Palace and High Court of Justice. The 'civic valley' goes through the most crowded quarters up to this Capitol, which also includes a pedestrian promenade of four kilometres. On the way it links with:—
2. Town Hall and Shopping Centre. Also Public Service Buildings, both of the State and the Municipality.
3. Business Centre (commercial firms, agencies, etc) and – further on – Banks and Private Offices, Hotels and Restaurants.
4. A Recreation Centre:
 - (1) A Museum of Knowledge joined to a Museum of Popular History (type Henri Rivière, Paris) and a Museum of Humanity (type Dr Rivet, Paris).
 - (2) A Club for Engineers.
 - (3) A Stadium.
 - (4) A Double Theatre (interior and exterior): the 'magic box of wonders'.
5. To the west, and near the Museum is the University which is of a special type with the Examination Hall, a Dormitory for 2000 students, Laboratories, and a Hospital linked to the Medical School.

This capital city is made up of fifteen residential sectors, each of the same dimension (1200×800m) but each different and containing different categories of population at different densities.

* Circumstances have enabled me to take up again a friendly and fruitful collaboration with Pierre Jeanneret and, in addition, with Maxwell Fry, who have both gone to India for a period of three years to direct the Planning Office (drawing office) using only Indian assistants.

6. Industry. This is not an industrial city.
7. Finally, green ways climb from the foot of the town to the top of the plateau, crossing each sector. These contain the schools, sports fields, youth clubs, etc.
8. These sectors each possess their Section Centre: market, administrative services, cinema, local library on the irregular bullock road, water reservoir, and a connection with the Main Street. In the green areas surrounding the residential sectors and in immediate proximity – in poor areas as well as rich areas – there are nursery schools.

The principle of the seven roads (V7; see p. 153) enabled us to separate the pedestrian from the car. The V3s in particular are designed exclusively for motor traffic and the roads are bordered by high walls with no access whatsoever along the whole stretch except for the auto service stations. This is a decisive innovation.

Conclusion

I have tried to show that LIFE forges the tools. *The Core as a place for the expression of human life.*

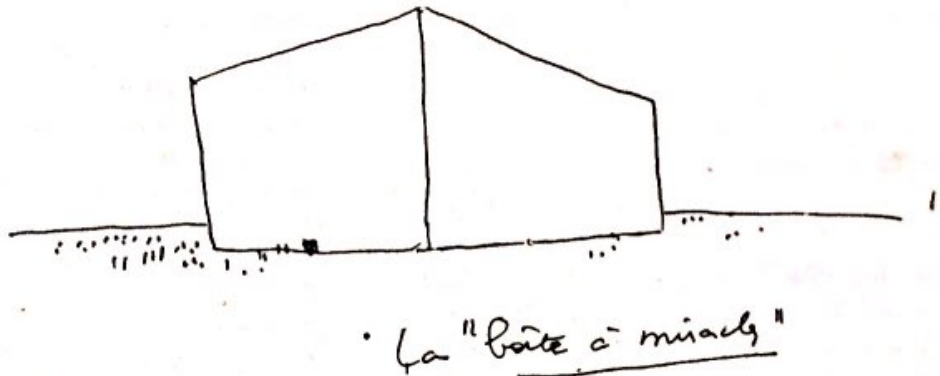


FIG.50: The Magic Box.

'... the real builder, the architect, can construct the most useful buildings for you, because he knows most about volumes. He can in fact create a magic box enclosing all that your heart desires. Scenes and actors materialise the moment the magic box appears; the magic box is a cube; with it comes everything that is needful to perform miracles, levitation, manipulation, distraction, etc. The interior of the cube is empty, but your inventive spirit will fill it with everything you dream of – in the manner of performances of the old Commedia dell'Arte.'

The Human Scale

WALTER GROPIUS (*Harvard*)

In America everything is big – the cars and the streets and the buildings – but one does not experience a direct relationship to them. In England, as you drive along through the countryside, you see that everything is small – the cars and the streets and the houses – and one is aware of a direct relationship both to them and to the landscape. It is obviously a very tamed landscape. It is so old and people have lived there so long that a deep relationship has grown up which is not possible with the wilderness which still extends over so much of America.

Still, in spite of this difference, the Core in America, as in England, is within the realm of the family, not within the public place. Obviously, the Anglo-American habit is to use the private home as a forum or *agora*. The domestic scene is constantly invaded by social activities, which put an enormous strain upon the housewife; activities which in other countries are carried out at some neutral meeting place. As each private home exerts a dominating, if ever so subtle, influence on all those who enter it, it is almost impossible to arrive at the free giving and taking and rubbing of elbows with all sorts of people that the public meeting place provides, say, around the Mediterranean.

The means of expression for the Core for physical planners is in terms of space and scale. Sert has quoted Ortega y Gasset, and there is a similar children's riddle: 'What is a gun?' 'You take a hole and pour metal round it.' The invention of the enclosed space is the same sort of magic – humanising a small part of the infinite field. Each one of us has made attempts to understand what is the infinite space by lying on one's back and looking into the stars and thinking and thinking, and trying to find out. But we have found that it is absolutely impossible for us humans to get a notion of what infinite space is. The mathematician assumes the infinitely small and the infinitely large quantities. He has certain

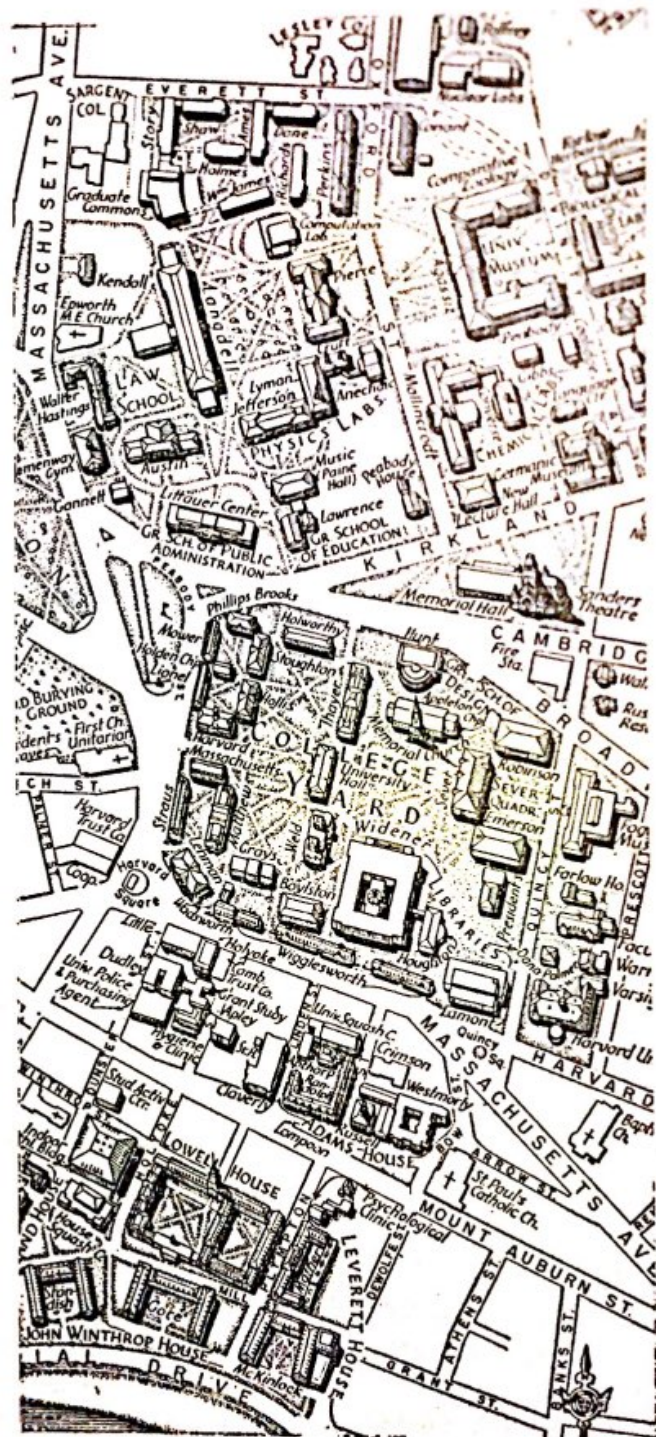


FIG. 51: Harvard College Yard, Cambridge, U.S.A.

signs for each. But each is an abstraction. We cannot understand them. We understand space and scale only within a frame of reference that is finite.

The most important factor in building a Core is the relation between the building masses and the enclosed open space. This may appear obvious, but I have found that many people are not aware of this relation, and that there are even trained architects who do not understand the meaning of open spaces. They think only of the buildings themselves, ignorant that the spaces between them are just as important. We must go far deeper in our studies than has been done already in this field, and try to check for ourselves why one open space within a Core is pleasant to us and another is not. After that we will have more knowledge about the sizes and proportions of such open spaces in relation to man.

I have found that if the overall composition of building masses and open spaces is well done, and in keeping with the human scale, such a composition is able to absorb even an ugly building. When we were working on the Graduate Centre at Harvard, we started off by making a study of what is good in the architectural composition of the Harvard Yard and we found that it was a certain sequence of open courtyards between the buildings, which every contributing architect had faithfully followed through several centuries. This spatial theme we found good and pleasant, so we started to measure these spaces and to find out for ourselves which ones have the most pleasant proportions, and kept these experiences in mind when conceiving our own contemporary scheme. If we examine the Cores of old towns in Italy or France, etc, we find that very different individual buildings, often centuries apart, are living side by side, and that this is good and harmonious if the open spaces around these buildings have been made to a good human scale.

When teaching architecture I always try to emphasise first of all the characteristic differences of the three main disciplines to be integrated in architectural design, namely, the sciences of space, of construction, and of economy. Beyond the evident expediency of construction and economy, architecture can come to life only through the mastery of space. When we build an enclosed space of a certain length and width and height, we must first know about the strength and character of the materials to be used, and about the law of gravity. But beyond this, we are able to change the psychological effect of such a space by surface illusions only. For instance, when we paint a ceiling flat black it appears to come lower

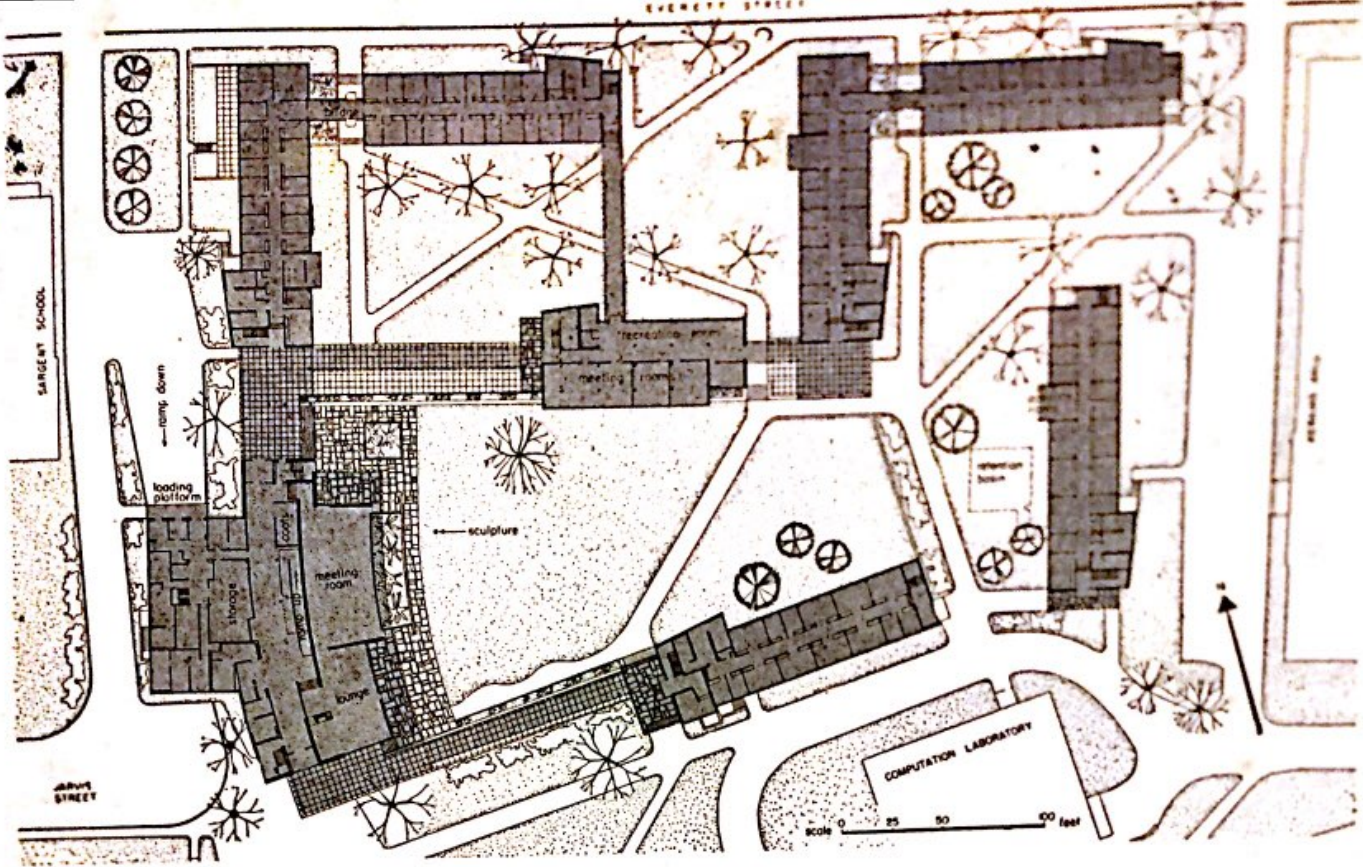


FIG. 53: Harvard Graduate Center, Cambridge, U.S.A. The pleasant proportions of Harvard Yard were kept in mind when designing this contemporary scheme in its vicinity, by the Architects' Collaborative Partnership.

FIG. 54: Site Plan of Graduate Center. The Center contains a common building with common rooms and cafeteria style restaurant and several dormitories. The plan shows a series of interlocking quadrangles. Most of the buildings are connected by covered walks.

down. When we paint a wall lemon yellow it will advance towards us, but it recedes if it is painted dark blue. This illustrates the psychology of space. It is part of a science which must be known if our architectural intentions are to be realised. Imagine two similar buildings each of which fulfils all the functional requirements demanded of it. Both buildings may be equally efficient, yet one you love and the other you do not. What can be the reason? Of course, the answer is that the psychological effect of one building is better if it is more in keeping with the human scale, and with the human desire to have it well related to the spaces around it. When these psychological requirements are fulfilled as well as the practical ones, the result will be 'beautiful'.

In the matter of scale we have two opposites to be avoided. One is claustrophobia, the fear of space which is too small, which too oppressively encloses us; the other is agoraphobia, the dread of large open spaces. For instance, when one visits Chateau Versailles, walking across that very large square in front of it, sensitive people feel dizzy and frightened. They feel lost in a space the size of which is not in keeping with the human scale. But if some vertical planes were erected on that open space, like wings on a stage, such as shrubs, fences or walls, the illusion of safety would be reinstated and dread would disappear; for the eyes of a person groping in space would find a finite frame of reference to support them.



The Caesars, playing God and intending to subjugate their subjects by fear, asserted their power by using spaces of superhuman scale. Hitler and Mussolini both received in rooms of colossal size seated at the opposite end to the entrance. The approaching visitor was made to feel uneasy and humble. It is this kind of experience in human scale that we architects should make use of when we are trying to gain knowledge of the illusions of space.

As we are living in a century of science, we know that the sensitivity of people to art, to space and form, is not highly developed today. Among the mass of the people it hardly exists at all. The only way to alter this situation is by better education, by education through art, otherwise conditions will not improve.

I would like to add a word on the collaboration of the artist with the architect, particularly at the Core. When we look at a gothic portal we discover how closely the sculptor and the architect must have worked together. Here one cannot separate the sculpture from the architecture, or vice versa. The *task of their work is one complete, inseparable entity. This entity could not be achieved by commissioning a sculptor to work upon a portal that an architect has already designed. Such wholeness could only be reached within the closest collaboration between the two starting right at the first conception. In the gothic period artists and architects together lived*

on the site and co-operated intensively. This was very different from the way we work today.

I faced this problem when I was working on the Harvard Graduate Centre. I was fortunate enough to obtain permission to invite modern artists to contribute to the building. I knew of no artists in the neighbourhood with whom I would feel willing to collaborate on a job of this order. So it proved necessary to reach out to Europe and to the other side of the American continent to find the right artists. From the economic standpoint it is scarcely possible nowadays to invite artists to spend a year on the spot in close collaboration with the architect. So in this case, the work had to be done in leaps and bounds and with a rather loose connection between us. I have found this difficult and insufficient. I think that a painter who is supposed to make a colour composition, or for that matter a chosen sculptor, should be on the spot right from the beginning, taking part in the initial conception of the whole work with the architect, each influencing the other. This sort of contact would result, I believe, in a much deeper integration of the various individual contributions and lead to a balanced entity of the whole building, where no part can be taken off or added without destroying its wholeness. I have not seen any building yet in our period where that kind of deep integration has brought about a solution which we could consider completely satisfactory.

Sculpture and the Core of the City

J.J.SWEENEY (*New York*)



FIG. 54: Mosaic, Torcello Cathedral, near Venice.

There is no reason why an architect should not employ sculpture, or any other means of expression to convey his aesthetic vision in the fullest degree possible. But such a means must be intimately related both in structural technique and in time-spirit to the building or buildings in question, if it is to function as an architectural element and not merely as an applied decoration.

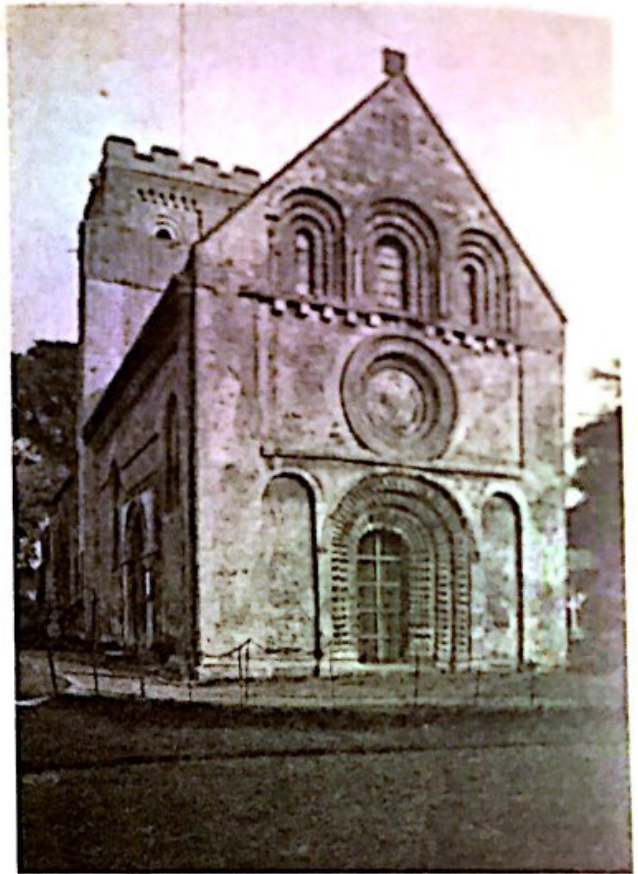
In the romanesque period sculpture had a formal and material kinship with the architecture of the period: the full, rounded volumes of a romanesque Madonna had their link with the round arches of the romanesque church, with its solidity and its amplitude of space, even as its polychrome character had its relationship with the mosaic decorations of the period. In gothic times aspiring, attenuated human forms in sculpture took the place of the full, rounded ones of the romanesque, in keeping with the architecture of the new age. An emphasis on nature and on naturalistic representation kept in step with the growing interest in nature; and in many, so different from the former period's primary aim, the glorification of the supernatural. And colour now found its link, with the vivacious, brilliant gamut of stained glass windows, as the sun's rays poured through them, rather than the opulent calm of mosaics. Even in Mohammedan architecture we see the use of script as a decorative feature, always intimately fused with the specific building of which it is a part.

When we come closer to our own day, we find in the work of the architect, who has, perhaps, most successfully employed sculpture as part and parcel of his architecture – Antoni Gaudi (particularly in a late work such as the Mila House in Barcelona) – an unfailing kinship of form, material and texture of the sculpture with the building itself. And, what is most striking in Gaudi's mature architectural

FIG. 55: OPPOSITE Chancel arch capital, Chetton, Shropshire.



FIGS. 56 and 57: Ifley Church, Oxford.



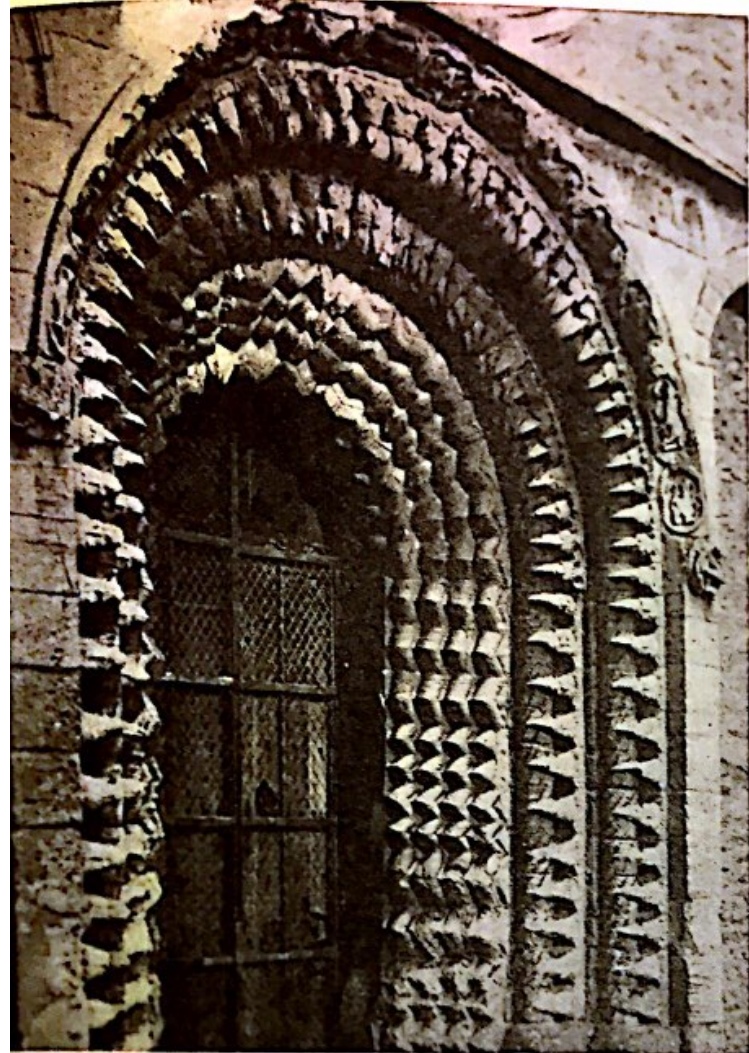
sculpture, is a freedom from outdated representational conventions—from conventional naturalistic expressions, for example—with the result that the sculpture appears an integral part of the architectural totality: sculpturally individual in its contribution, but never merely 'applied'.

This is probably what Ruskin had in mind when he wrote in the Appendix to his *Edinburgh Lectures*: 'This is a universal law. No person who is not a great Sculptor and Painter can be an Architect. If he is not a Sculptor and a Painter he is only a builder.' Even if it is not exactly what Ruskin in his day would have exclusively subscribed to, it is what keeps his statement valid for our time. An architect, to be sure, need not be a practising sculptor—nor even an artisan sculptor—but he must have a sculptor's sensibility and conscience for the preservation of the unity between the building and its related sculpture, or kindred decoration, if he is to escape the confusion which will otherwise result.

The fact, too, that a building is essentially commercial in character does not necessitate its being stripped to the barest structural requirements. The full architect is never satisfied to remain merely a 'framemaker' as Ruskin expressed it on another

occasion. Architecture 'uniting,' as he wrote, 'the technical and imaginative elements as essentially as humanity does the Soul and the body . . . shows the same infirmly balanced liability to the interference of the constructive, with the purity and simplicity of the reflective element'. And sculpture, properly conceived in relation to an architectural conception, is always a potential complement to this latter.

First of all, sculpture, conceived and carried out in the structural spirit of the building of which it is a part, affords the architect an opportunity to marry the material character of the building with an immaterial, suggestive, even associative factor. For in sculpture the associative factors can be brought to a focal intensity and often to the most concise expression of the building's purpose, social character, or ideal. But obviously a bald, naturalistic symbolisation of any such features would not fuse successfully with the greater part of our most authentic contemporary architectural expressions. There must be a kinship of technique, form and spirit between the sculpture and the architecture of which it is a part, just as we saw was the case in the gothic and romanesque periods, and just as we find it exemplified in those sculptural features which constitute the



ventilators, chimneys and roof balustrades of such buildings as Gaudi's Mila and Batllo houses in Barcelona - perhaps some of the most imaginative and successful marriages of sculpture and architecture in twentieth-century work.

Again, sculpture, in its opposite approach to the realisation of an effect of monumentality from that of architecture, provides the architect a further means to enrich his work by underscoring his architectural evocation in a different, but related mode of expression. For architecture can achieve an effect of monumentality only by scrupulously observing its basic human measure, or module - by constantly returning to it for reference. Sculpture, on the contrary, achieves its expression of monumentality through a suggestion of the immeasurable: by avoiding any exhaustively factual, or obviously measurable representations of natural forms.

Architecture fails aesthetically to move us whenever it disregards the human module. It is built essentially around and for man.

Sculpture, on the contrary, when closely tied to the human being through naturalistic representation - whether it be the largest Nazi or Soviet monument, or the seated figure of Abraham Lincoln in the

Lincoln Memorial in Washington, D.C. - is at once dwarfed for the very reason that it is seen as 'measurable'. It loses its mystery of form - its power of suggestion. It becomes merely a simulacrum of which we know the limits: we feel them with our muscles even as we read them with our eyes. We dwarf such assertively naturalistic sculpture in our ability to feel its measurements, even as the gigantesque in architecture dwarfs us because we cannot feel its measurements.

Measure, in architecture, is a source of comfort; in sculpture the suggestion of immeasurability releases the imagination. Therefore the combination of a truly monumental sculpture with architecture will provide a fusion of two contrary approaches to the same aesthetic goal, which liberates the total expression from the limitations of either constituent.

These are merely two features of sculpture's potential contribution to architecture. In one degree or another it can contribute along these lines to every individual work of architecture that goes to make up a city. But with regard to that area which has been described as 'the Core of the City' these features should receive an even stronger emphasis, and as a consequence should become more effective than in any other quarter of the city. It is only logical that they should, since the 'Core' will undoubtedly embrace the official structures which shelter or symbolise the most vital spiritual, social, and administrative activities of the community. But also, if 'the Core' is to function spiritually as a Core, human attention must be brought to focus there as intensely as possible; and sculpture by its very nature is a most efficacious means to this end.

To be sure painting is not to be excluded. In fact, through polychrome effects, painting is understood as making a part of sculpture, as it always has in sculpture's greatest ages. Mosaic, ceramics, and new synthetic materials also have their parts to play.

But what is most important for the Core of the city is the focal intensity which sculpture can provide, whether free-standing sculpture related by similarity or contrast to the architecture of the city's Core and composed spatially with the surrounding buildings, or sculpture that makes an intimate part of the buildings themselves through a unity with them in technical expression as well as in symbolic associations. Such a marriage of the material and immaterial and such a footnote of monumentality to the architecture's own expression of monumentality is what sculpture, conceived in proper relationship to a building, or to its surroundings will provide.

Old and New Elements at the Core

J.M.RICHARDS (*London*)



FIG.58: Part of bombed area of central London.

The city, the town, and the village exist in time as well as space. Their shape and appearance are derived from their past history as well as their present function, and to some extent also from their future development, insofar as the latter is already being shaped by the forces of planning, property investment and local government control. Except in the rare instance of the new town planned on a virgin site as a single conception and constructed in one rapid building operation, every city, town and village – the fact is so obvious as to be hardly worth stating – carries evidence of its growth and history on its face. And at the Core this has a special significance, because at the Core, more than anywhere else, resides the personality that distinguishes one place from another, and that fixes the nature of the place in the memory of the inhabitant and the visitor.

This personality has evolved gradually, and is not fixed. It – and the Core that is the embodiment of it – must always remain capable of change, and the planner's difficulty is to decide how far the change should be subject to control and how to ensure that the essential personality is either preserved or

transformed into a different but equally vital personality, whatever replanning and rebuilding is necessary; to counteract, that is to say, the tendency for towns to become more and more like each other under the influence of standardised building types and routine planning solutions. One means to this end is to see that new buildings have a proper relationship with the old buildings by whose agency the personality of the Core has been established.

Respect for old buildings, which everyone demands of the planner, is not therefore only a matter of preserving for posterity the examples of fine architecture which it would be vandalism to destroy except to make possible some quite imperative improvement – and faster traffic flow, incidentally (though many municipal authorities seem to think so), is not necessarily an improvement. Respect for old buildings is also part of the means of maintaining that continuity of human experience which it is one role of the Core of the town to preserve, but it hardly needs emphasis on these pages that it does not involve either designing new buildings in traditional styles or compromising with obsolete practices

of any kind. The town centres we build are an expression of our own culture. They are what our imagination can create out of the resources put at our disposal by science, and must be in every way characteristic of our own day. Nevertheless, we cannot be unaware of old styles of architecture when building in the new, if only because they provide the setting in which the newest developments in this constantly unfolding drama of urbanised life are to be enacted.

Our interest in what has gone before thus takes two forms: appreciation of the atmosphere the past has created and visual awareness of the physical objects – in the shape of spaces and buildings – that it has left behind it. The first is not so much an aesthetic as a psychological form of apprehension, for it must not be forgotten that only the architect himself has the habit of applying strictly aesthetic standards to what he sees. To the inhabitant of the town – for whose benefit the Core exists – it is not primarily a work of art, to be apprehended as an aesthetic experience, but a collection of symbols and a familiar assembly of objects having certain associations and reviving certain memories – since *the Core is the repository of the community's collective memory*.

The physical character of the Core is determined therefore by aesthetic, physiological and representational needs – each dependent on the other; each continually changing and modifying the other. Some are within the capacity of the architect to control; others are controlled by the human activities of the Core, and all the architect can do is to intensify what is already there; to underline its significance as it were by allowing it the maximum visual expression.

This is where his treatment of existing buildings becomes particularly important, for the true significance of a given site can often be found by analysing the role it has performed throughout history, and if its significance has been destroyed during the past century as a result of the misapplication of science, as is often the case, the architect's role may be to recreate it in a modern spirit.

An example is the heart of Westminster in London: the space enclosed by Westminster Abbey, the Houses of Parliament and other public buildings, and comprising Parliament Square, Broad Sanctuary and adjoining streets. This space constitutes a Core, albeit of a somewhat specialised kind. Its character, evolved as a result of many centuries of use, first as the precincts of the Abbey and the collegiate buildings attached to it, then, in addition, as the forecourt

FIG. 58: OPPOSITE Part of the bombed area of central London awaiting reconstruction. In replanning city centres the architect, more often than not, must work against a scenic background of older buildings and incorporate in his modern design isolated monuments from the past.



FIG. 59: Westminster, in the heart of London. A pedestrian precinct destroyed in the nineteenth century by traffic routes carried through it.

FIG. 60: Westminster restored. An illustration by Gordon Cullen from a plan, put forward in 1947 by *The Architectural Review*, for restoring the enclosed, precinctural character of Westminster.





FIG. 61: The Parade, Festival of Britain 1951. The South Bank exhibition showing the panorama of Westminster across the river used as a scenic background to the modern buildings.

FIG. 62: RIGHT A nineteenth-century building on the north bank of the Thames similarly incorporated into the spatial composition of the South Bank exhibition and given a new significance thereby.

to a royal palace, where Britain's first Parliament met, then as the meeting ground of Church and State and public administration as Westminster became the centre of government. Parliament Square was the setting for public ceremonies. In it were placed the monuments to famous statesmen and around it were official institutions of various kinds.

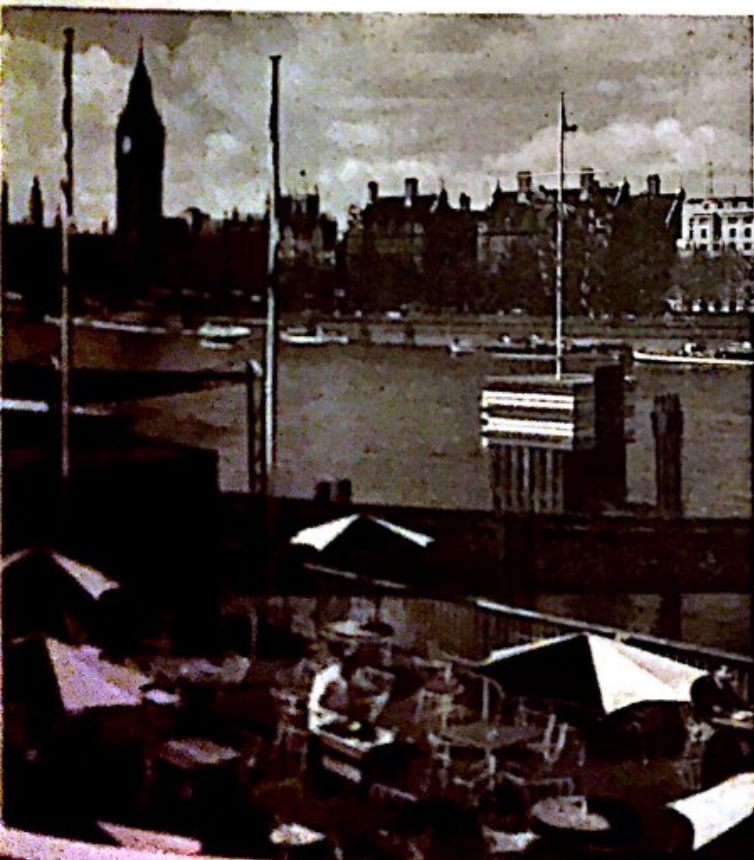
But in the nineteenth century the enclosed, collegiate character of Westminster was allowed to disintegrate. The traffic engineer took charge. Wide streets were carved through the middle of it, leading to the new railway terminus at Victoria. The quiet pedestrian precinct became a traffic route, the Square a roundabout and the surrounding buildings mere architectural incidents separated by moving vehicles instead of unified by the space between them.

It may still be possible to recreate the traditional nature of Westminster. Plans exist for doing so: for taking the traffic routes round it, restoring its pedestrian character and its fitness for ceremonies and processions, erecting *modern* buildings where necessary, designed so as to preserve the traditional scale and the sense of enclosure, but in an architectural style that will be as true to our day as the Abbey and Westminster Hall were to theirs. But whether these plans are put into effect in our lifetime or not (if they are not, Westminster as a Core will destroy itself), it remains both a warning of the perils that ensue when

the traditional character of a place is ignored by the new generation that has charge of it, and an example of the type of problem which constantly confronts the contemporary town planner.

For very few of our Cores are new designs. Our task is much more often to give shape and coherence to an ill-designed Core or to carve out a Core from a formless built-up area, as in most nineteenth-century industrial towns. And the raw material we have to use includes not only plots of ground but existing buildings in which the history, and therefore the personality, of a particular place is embodied. Whether he is creating a new Core or revitalising an old one, the dominating elements are existing buildings of all kinds and periods, which the town-planner must analyse and know, as the painter knows the colours on his palette. They are the raw material he works with, as much as the nature of the ground, the quality of the sunlight, the soil, the rivers, and the trees. The total effect of the Core he designs depends on the use he makes of them, on how he weaves old threads into his new fabric.

To look to Westminster again for an example: at the South Bank exhibition – which was in a sense the starting point of a new Core for London – older London was used as a kind of contrasting back-cloth to the new buildings. The towers of Westminster across the river were consciously employed as a scenic background to certain groupings of modern buildings. Without compromising the modernity of the Exhibition they were incorporated in the same picture, and given fresh significance by the part they had in it. And it is not only the important architectural monuments that can be treated in this way. There was a nineteenth-century block of flats nearby which was effectively used to close the vista down the main concourse of the same Exhibition. It is what would be called a bad nineteenth-century building, but it possessed a strange, romantic outline which the Exhibition planners exploited for their own purposes, at the same time giving it a new life and new significance. For in this scenic use of existing buildings, the intrinsic merit of the buildings themselves is largely irrelevant. The colour, outline, scale and texture they possess can be used by the planner with a discriminating eye to provide a foil to the architecture he himself has the opportunity to contribute, to bring out the latent character of every place, and intensify its functional significance. He can help each generation, instead of being inhibited by the past, to see it with its own eyes and endow it with its own fresh significance.



Spontaneity at the Core

IAN McCALLUM (*London*)

I understand the CIAM Congress was planned at Hoddesdon partly because it was feared that the attractions of that monstrous conurbation called London, might if the Congress took place there have proved too great – that the meetings might have been held without the delegates.

Though I would give way to none in my dislike of some aspects of our cities, I wonder if there is not a lesson somewhere for town designers in the devilish attraction they exercise over us, one that we have tended to ignore in our worthy concern with the practical side of things. That the facts will be hard to pin down goes without saying. I suppose one could zone areas of greatest attraction; with time and patience plot the peak hours; draw graphs of ecstasy mounting; record the catastrophic drop in London around 10.30pm – it would be fun, but somehow one feels it might miss the point.

How, then, in reconstructing existing towns or building new ones, to make sure that vitality infuses the hygienic and well-arranged husk?

You have no doubt noticed how flowers and weeds can push their way between even the best laid paving stones. There seem to be two schools of thought about the rights and wrongs of this. One believes that the paving stones should be kept clean and clear, fearing perhaps some challenge to order in the unbridled vitality of nature; the other condones the impudence, even makes provision for it by here and there leaving cracks, presumably on the ground that some contrast to the inert – though well-laid – stone is refreshing.

In the matter of the Core – or town centre – with which we are at present concerned, much the same situation seems to prevail. Most of the plans one sees are well laid, the outlines are clean and clear. There seems to be general agreement that the first school of thought is the right one – that no allowance should be made for the spontaneous effect. This idea certainly prevails in modern architecture. Little provision

is made for spontaneity there, except perhaps in children's rooms where a blackboard is sometimes provided as an outlet. Nevertheless, spontaneity of a kind often asserts itself soon after the client takes over, much to the pain and displeasure of the architect. Nothing can really be done about this, for there are limits to the power one can wield over a client's personality. You cannot, in fact, stop up the cracks when you feel nature is going or is likely to go too far. You can only wait until by one means or another clients arrive at that stage when their unconscious as well as their conscious aesthetic aims parallel our own. I suggest, however, that in the design of towns the circumstances are different, and that these circumstances, with the opportunity they provide for the designer, have not yet been fully appreciated or exploited.



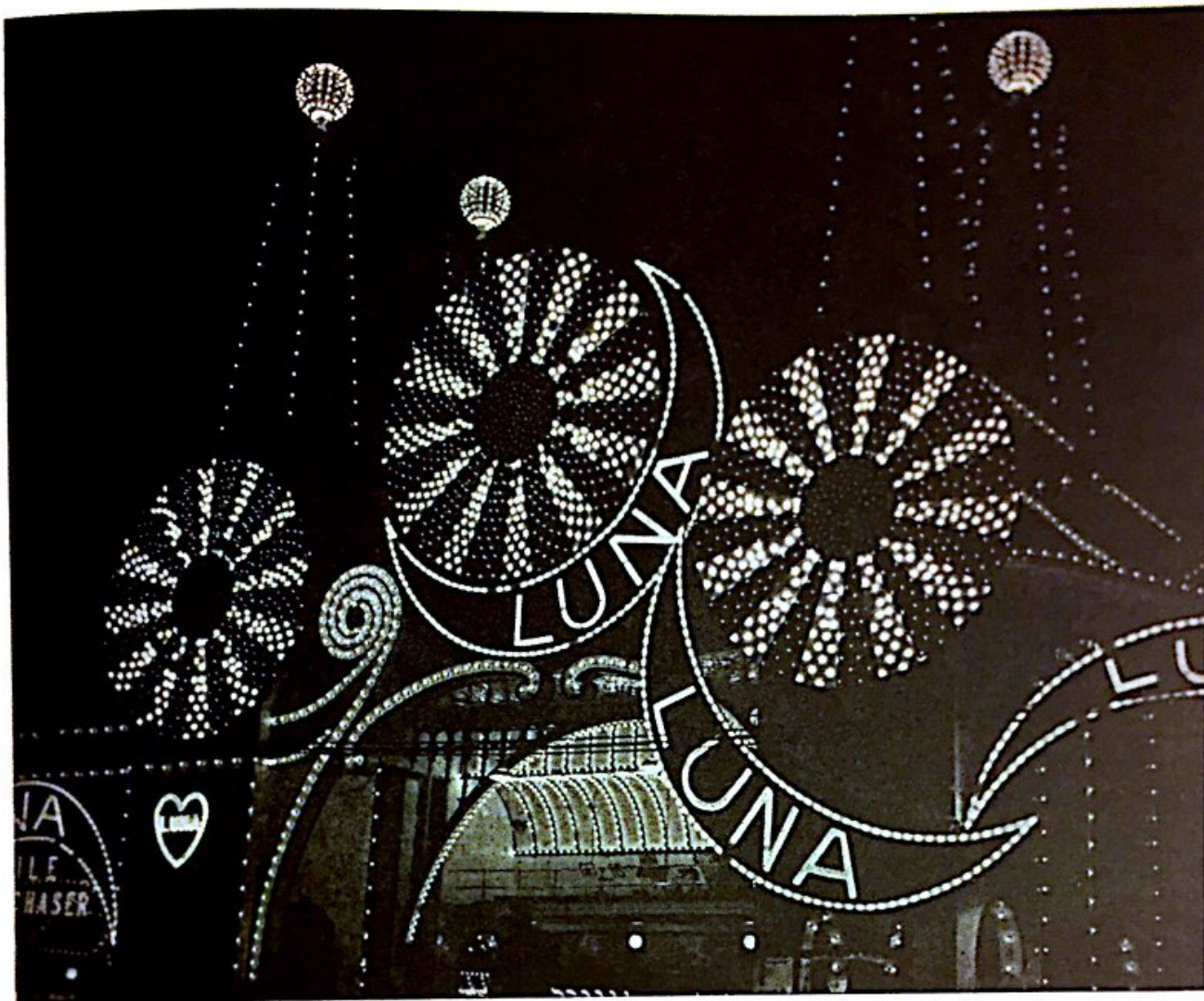


FIG. 63: OPPOSITE A pavement scene, a minor manifestation of the desire to advertise – and a charming one; note the excellent tree surround.

FIG. 64: ABOVE Luna Park at night. Another field that the professional designer has hardly begun to enter, yet one that offers immense possibilities. This photo only gives an inkling of what could be.

There appear to be two possible reasons why this should be so. Either architects, and they are the ones most often involved, consider the design of towns and particularly town centres to be a conventional architectural problem, one where the client won't let you do the furniture and decorations, or, fearing that vulgarity might get the upper hand, and depending on legislation to back them up, they consider it safer to close all the cracks and check spontaneity at its source. The first reason is I believe faulty; the second might be fine if the architect is sure he can afford to throw out a healthy baby with some admittedly dirty bathwater. Either way, most of the designs for old or new town centres now being produced exhibit a peculiar kind of deadness, an absence of the thousand

and one effects possessed by the town centres one has always known and enjoyed, effects that make them more than bearable in spite of their often appalling general squalor. Perhaps it is time to list some examples of the sort of thing I mean – they are all from London, because it is a city I happen to know – the same observations, however, apply to many other cities and towns, at least the ones one remembers with the greatest affection.

To begin with, take casual commerce, ranging from markets like Petticoat Lane and the Portobello Road to surreptitious little men selling black market nylons out of battered suitcases. The first are fully appreciated by everyone, including the architect – the new market square at Lansbury is an example – the

second we would perhaps all agree contribute little to the gaiety of the urban scene, and don't need enough space or shelter in any case to worry us much. But in between these extremes are dozens of varying nomadic and semi-nomadic commercial activities, gay, colourful, lively, and useful that could only be counted an all-round loss if a new town centre, or a reconstructed old one, failed to provide for them. What about the flower girl near where I live, for instance? There she is, year after year, her enormous bulk poised on a wooden box and surrounded by a constantly renewed display of flowers. Their equivalent would cost the municipality a fortune, were it to turn her corner into one of their crazily-paved little gardens of remembrance. But what is more, she's an excellent exchange for local gossip, her flowers are cheaper than in the shops (for her overheads are lower), and she's there longer, which is a godsend in England where the shops close at the same time as the offices. Other autonomous enterprises of the same sort are the carved and painted barrows (constantly hounded by the police for obstructing the roadway) piled with fruit and nuts, with their bright green artificial grass skirts and makeshift night-lights; the chestnut man's mobile furnace, and so on. There are few of these things that can be

provided by municipal action - they would largely lose their character if they were. But they are things which you would expect the architect at least to show sympathy with - if only by leaving an odd corner or space for them in his plans or by including them in his perspectives. In the more static category come the tobacco, magazine or advertisement kiosks, seen at their vivid best on the Continent. Similar in effect, but of more ancient tradition, are shops which display their wares in the street. Bringing the shop into the street may largely have given way nowadays, with the use of large recessed areas of plate glass, to taking the street into the shop (both are anyway more effective than the shallow display window), but there are still, among smaller neighbourhood shops, particularly ironmongers, sellers of garden furniture and plants, greengrocers, junk dealers and so forth, those who if they are given sufficient pavement space, provide an extremely effective, and sometimes very carefully thought-out, sideshow. On a matter of detail, there are the blackboards used by fishmongers, with their infinite variety of cursive scripts. However, this is an activity so minor and modest in its impact that it will no doubt flourish or die according to its own mysterious laws, without help or hindrance by planner or architect.

It may be asked whether this is not the case with all the things I have mentioned - and with others, like soap-box orators in Hyde Park, pigeons in Trafalgar Square, the more varied bird life in St James's Park, the contribution (and this could be particularly valuable if we paid some attention to it) of street furniture, of advertisements, night-signs, and floodlighting. None of them is apparently considered to be within the province of the designer of towns, yet all are things which can make or mar the best or the worst town centres. Surely we should and can find some way of exploiting them to our own ends. For they bear much the same relation to town centre design that furnishing and decoration do to architecture, with the difference that because exterior furnishing is so much less self-conscious an operation, without the social distinctions and inhibitions that surround interior furnishing, it is a much more fruitful field for the architect. Obviously it is one he will have to tread warily, if he is not to destroy much of the spontaneity which gives it life. But if the architect does not soon take an interest, does not quickly encourage these activities by exploiting their visual effects, this kind of vitality will either decline further than it already has, or else we shall produce towns entirely lacking in it.

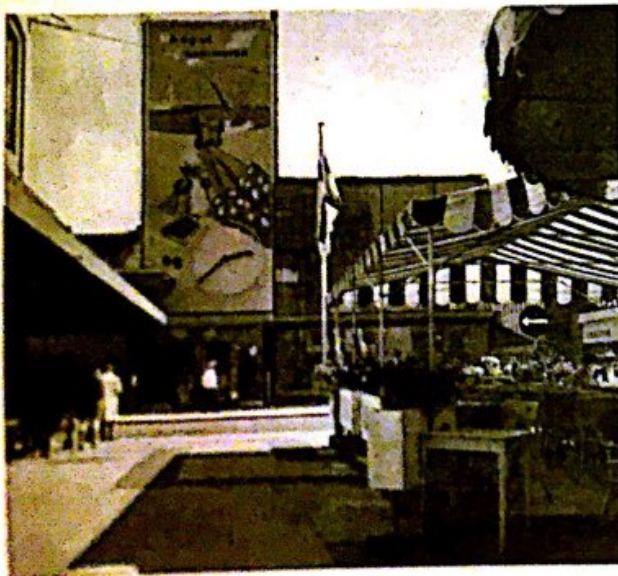


FIG. 63. Copenhagen - awnings, advertisements, direction signs, flower boxes, flower surfaces, flagpoles - here is a modern urban centre where everything has been used for its contribution to the scene, instead of the more usual ill-designed effect of designed bits with the rest of the paraphernalia inserted afterwards as a necessary evil.

Relationship between Men and Things

J.B. BAKEMA (*Rotterdam*)

We speak of the Core as an expression of life, but I immediately ask myself, 'Why this title?' Is there also in our cities the possibility of a Core as an expression of death? For example, can a cemetery be a Core?

Some months ago I was walking in the cemetery of Asplund's crematorium in Stockholm – in this wonderful composition of trees, grass, halls, flowers, hills, rocks, and living and dead people. Several people were there: they went there to remember their dead. I think in this cemetery there is a Core – though a Core of a special kind. It is a place where the isolation of life from death has been altered into a wonderful relationship.

A few days before, in Aulanko in Finland, we were waiting in front of an old wooden building – waiting until we could take a 'sauna', the Finnish steam-bath. Six persons were waiting there, sitting together. We asked them how to take a sauna, and why do the Finnish people bath in this way. We then talked about so many things that we almost forgot to go in at all! I assure you a Finnish steam-bath can be an element of a Core.

Corbusier has said that in every private house there is a Core: in the early days around the hearth; in our days, or in the coming days, perhaps round the television screen? Or around the mechanised kitchen?

What I ask myself is, at what moment can we really speak of CORE – the Core that we can plan in architecture and town planning.

Perhaps the answer is this: *There are moments in our life in which the isolation of man from things becomes destroyed: in that moment we discover the wonder of relationship between man and things.*

That is the moment of CORE: the moment we become aware of the fullness of life by means of co-operative action.

The developments of science have made it clear that the things we see in nature and culture are not



FIG. 66: Air view of Groningen.
The three-dimensional emphasis of the church tower signals the presence of both the quiet churchyard garden to the right and the busy town hall square to the left.

really there. Every day we discover that the only thing that exists is relationships, and perhaps we can even say that the goal of human life is to become aware of the governing principles of a full life. This seems to me to be the reason why, in the development of spatial conceptions in architecture and town planning, we speak so often of continuity in space.

For us in CIAM the relations between things and within things are of greater importance than the things themselves.

One can express this awareness of relationships, and one can also predict how they may develop.

In CIAM people come together who like to prophesy. We are a fighting group, and in the Dutch group to which I belong I think it was van Eesteren who said that we must today anticipate the day of

tomorrow. Perhaps that is why we are now discussing the Core. We feel a lack of the Core in society, and we know that we need it in order to be really free and happy.

In the medieval cities of Holland there is a clear expression of the Core. Why? Because then every aspect of life was in a kind of balanced value to every other. There was work, circulation, living, cultivation, religion – and work was a human value. A man with a small bag of tools could be student in the Guild and then, later on, he could be a master. In the workshop there was a certain balance in the atmosphere.

This atmosphere was destroyed by the development of mechanisation. We had the period of capitalism in which it was said that the goal of life is to possess things. The master in the workshop became the owner of machines. The relationship between him and his collaborators changed to one of owner and non-owner. The ethics of to own and to possess made people confused about life. Things became more important than the relationships between them. In the town itself there was no longer a clear expression of the value of relationships.

In our own days a new feeling is growing up about the value of labour. It is a pity that politics have taken over this word. It is better perhaps to speak of 'activities'. People can realise that the fundamental way of becoming aware of relationship is by taking part-through activity – and in CIAM we have to stimulate this possibility by our town planning, architecture, sculpture, and painting.

This is why the Dutch group in Rotterdam developed a small living unit of 5-700 persons, in which every kind of family can find a home. There will be constant activity within this unit, where single people, small families, large families and old people all meet one another daily. If just one kind of family lives in a unit, life is sterile and dry.

The expression and indication of space within the unit is created by organising the various building types and, because we believe that activity can be a direct approach to life, we translate this in planning terms by giving each unit space for gardening and other forms of self-activity.

Five or six of these small units are related to a group of workshops and a kindergarten, and – via these – are led to a central point where there is a twelve-story apartment block with a number of community rooms on the ground floor. This apartment block is simultaneously an expression of collective space, of a centre of local activity and also an

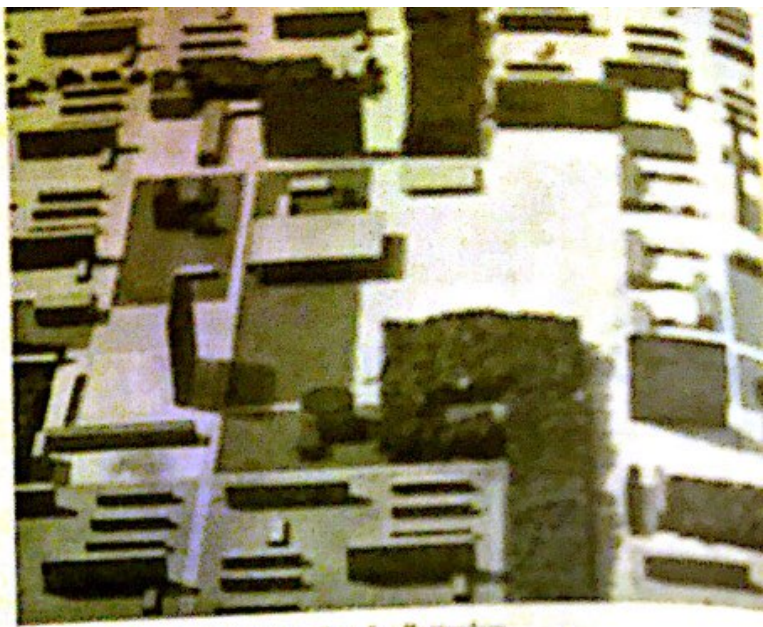


FIG. 67: Model of a Community Core for Rotterdam (Group Opbouw, CIAM). In this model three-dimensional expression is given by the four thirteen-story apartment blocks that signalise both the centre and each of the local units.

indication of the nearness of the Core of the neighbourhood.

By this gradual build-up we hope to express in a three-dimensional way the relationship between the small unit and the 'locality' (five to six units) and the 'community' (four localities).

The community (some 15,000 people) also contains a certain amount of light industry (flatted factories) so that working activity is integrated as a basic human value.

Activities, together with schools and shops give expression and stimulation for a full life in the Core of the community, but the problem we set ourselves was to stimulate awareness of the governing principles of a balanced life even within the smallest unit, by making each of these as complete as possible within their own scale.

From the artistic point of view we have tried to imagine and to develop the possibilities of relationships between people by forming the Core – in a three-dimensional sense – as a clear continuity of space.

We hope that this has been done in such a way that people living in it will have no feeling of isolation, and that, through their own activity there, they will discover the wonder of a new value – a new kind of relationship – which is a characteristic of the world in which we live today: in which our Japanese friends are able to be with us within only two days from their home.

The Heart: Human Problem of Cities

ERNESTO N. ROGERS (*Milan*)

The idea of the Centre contains in itself two principles, one geometrical (a consideration of a defined urbanistic design), the other functional (a consideration of purpose and usage). Often the two aspects coincide: the centre of gravity of a city may at the same time be the Heart of the city, but this is not an absolute rule. Frequently, outside the geometric centre, one or more quarters, zones or architectural incidents can be distinguished where the communal life has developed a particular intensity – governed by the objective conditions of the topographical character of the place as well as by particular sociological and historical factors. In the functional centre living connections between the individuals of a community are developed; and it is to give some precise meaning for this centre that we have introduced the word Heart into the language of urban technique. We could also employ the word Core – that part of the fruit that contains the seed, the potential energy of an organism. But the Heart has more beats, and also implies the physiological and biological values of sentiment.

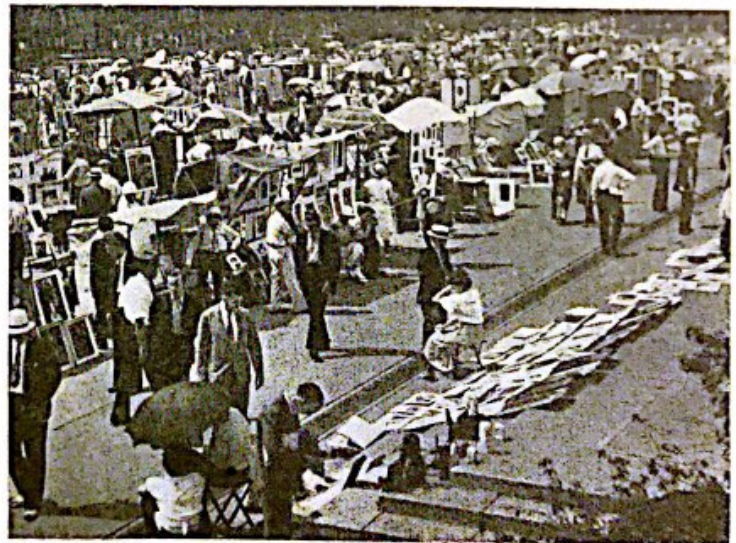
The Heart is the symbolic centre of love; and I do not think I go too far in the illustration if I insist on giving this interpretation to the concept. For only those architectural compositions that receive and arouse such vital feelings of human sympathy can dare to become the centre of a community – the Heart of the City.

Many cities (in particular those founded in medieval times) are monocentric; and, by being so, they now suffer from congestion of the Heart. Milan, for example, in spite of the existence of secondary centres of some importance, has a typical monocentric structure – a congested focus of multifarious collective activities. There are other urban conglomeration, sometimes very large and of quite recent origin (one finds dozens in America – more in the north, with its Anglo-Saxon origin, than in the south, with its Spanish origin) which are really cities without any Hearts at all; where one can search



FIG.68: Carpet merchants in Rumania.

FIG.69: The sale of prints and drawings in Chicago.



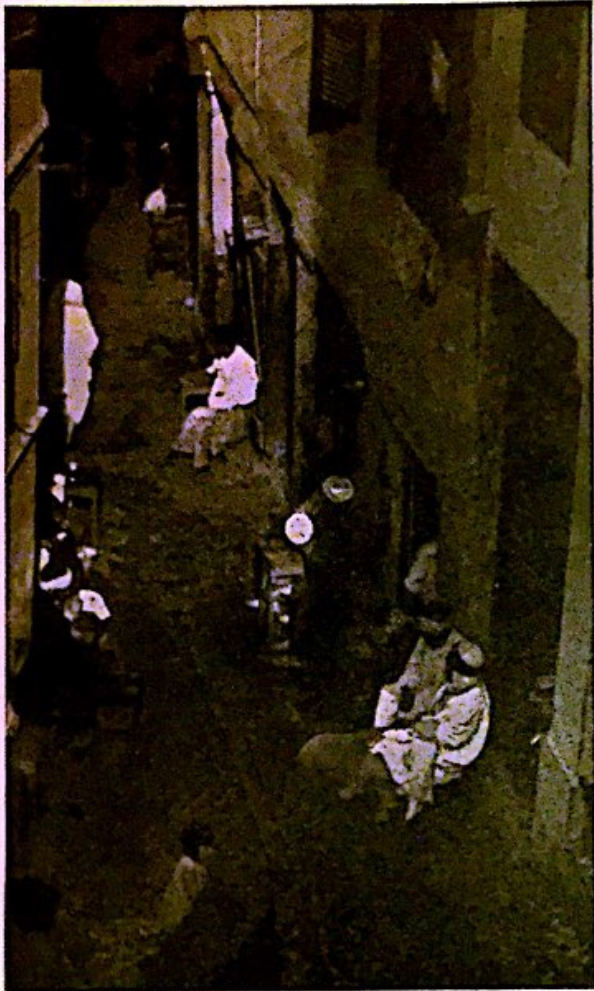


FIG.70: Discussion in the Casbah.

FIG.71: The Market – from a painting by Magnasco.



in vain to locate the convergent point of the community. These two extremes are equally dangerous, though the latter is far more disconcerting. They illustrate one of the many difficulties confronting the problem of the Heart of the City, looked at from the point of view of CIAM.

We are clear enough about the idea of modern architecture – but which is the modern civilisation that must furnish the content of our work? The miracle of the Pope; the formula of Einstein; Marxism; Liberalism . . . all are contemporary incidents, but are they all being equally modern? And in what way are we able, as architects, to discern the modern living spirit (which is a subjective judgment) from the merely contemporary (which is an objective judgment)? Any urbanistic theory – and in particular one that concerns the Heart, the most sensitive part of the city – must put this and many other questions to itself. In CIAM, our responsibilities for town planning now extend from one extreme of the globe to the other, from cultural stratification to the historic present, each distinct and often contradictory. We must take all into consideration when we formulate our principles if we neither want to escape into an abstract reverie of the ideal city nor wish to reduce ourselves to embalmed mummies.

We must create cities for free and living men; that is for men capable of being different. The Heart is the greatest expression of this quality. It must be the centre where liberty consummates itself and explains itself. A cosmopolitan overbearing arrogance and a complacent demagogic folklore are the extreme errors that architecture can commit when it fails to express reality, with all its diverse exigencies, in a universal language.

Blind destruction and passive conservation, even though apparent opposites, are the results of an equally arid mentality: they are moral sins.

Unfortunately in the past, and at the time in which we now live, the centres of many cities have suffered from some calamity or another which has mortally wounded their Hearts. One thinks of the carnage perpetrated by Spanish civilisers in Peru, where oppressed expressions and submerged local civilisations are only now beginning to bloom once more; or of the passive stylistic reconstruction in Warsaw; or the pseudo-culture, worse than all other foolishness, that has ruined for all time the quarter round the Piazza San Pietro in Rome; or the harmful

clichés of the last century of the Ecole des Beaux-Arts which even now operate under new but likewise vain eloquent appearances.

A lack of human respect everywhere.

A lack of truth and of poetry.

To conserve, to move, to re-establish, to enliven, or frankly to invent, the Heart! These are the different aspects of our work, which requires that everyone – in different centres and under differing circumstances – must bring a particular approach to the subject, from the social, aesthetic, technical, and psychological points of view.

It is evident that, in every case, our task is to give form to the dialectical synthesis of the complex field of culture in which we are participating: to create an artistic surrounding in which the realities (and the problems) of today are expressed. This is our position, which refuses all preconceived dogma or superficial formalism, and so does not permit us to define in any general terms of universal validity a confined and explicit form for the architectonic-urbanistic solution of the Heart. Nevertheless, in the definition of a universal language the application of the functional method, that is at the root of our creative process, recurs to us and represents our common ideological premise. This method, urging more exacting empirical researches in the practical field and more unprejudiced adventures of fantasy, results in a really international architecture which, however, is personified in the individuality of the artists and characterises itself in local genius.

In spite of differing cultural and economic conditions, everyone can profit to a certain extent by technical progress in order to embrace the widest



FIG. 72: Circus in a populous quarter of Genoa.

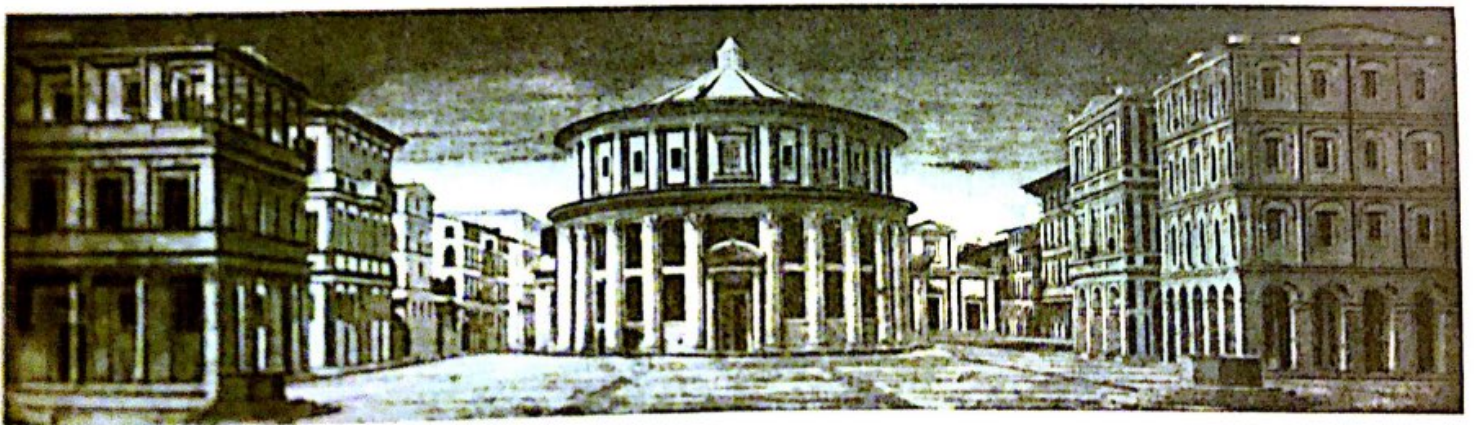


FIG. 73: Study of a piazza by Pier della Francesca.

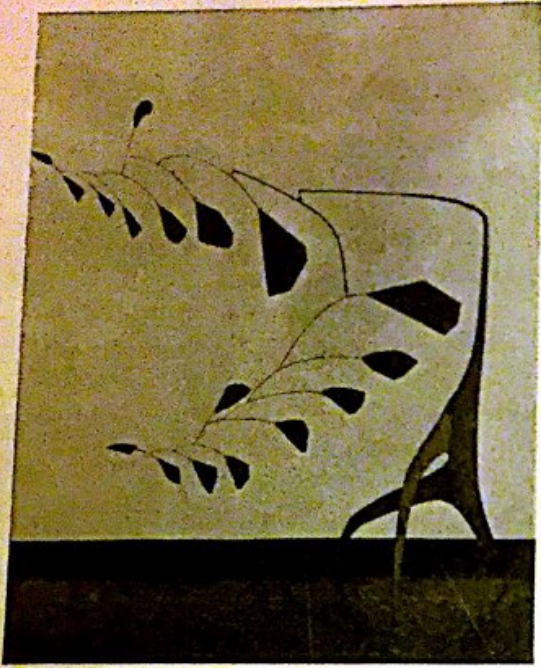


FIG.75

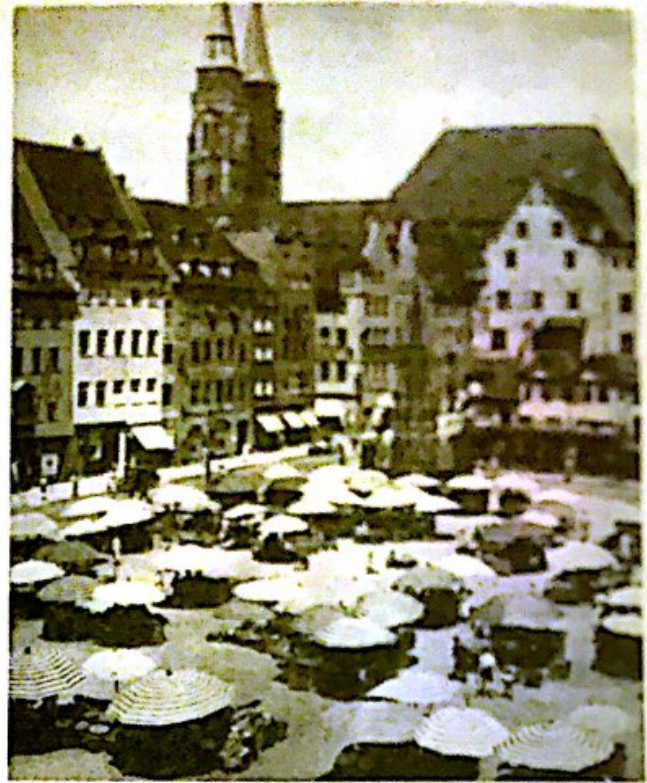


FIG.74

FIG.74: Open-air market, Nurnberg before the war.

FIG.75: Red Petals - mobile by Alexander Calder.

FIG.76: Bookstalls in Paris.

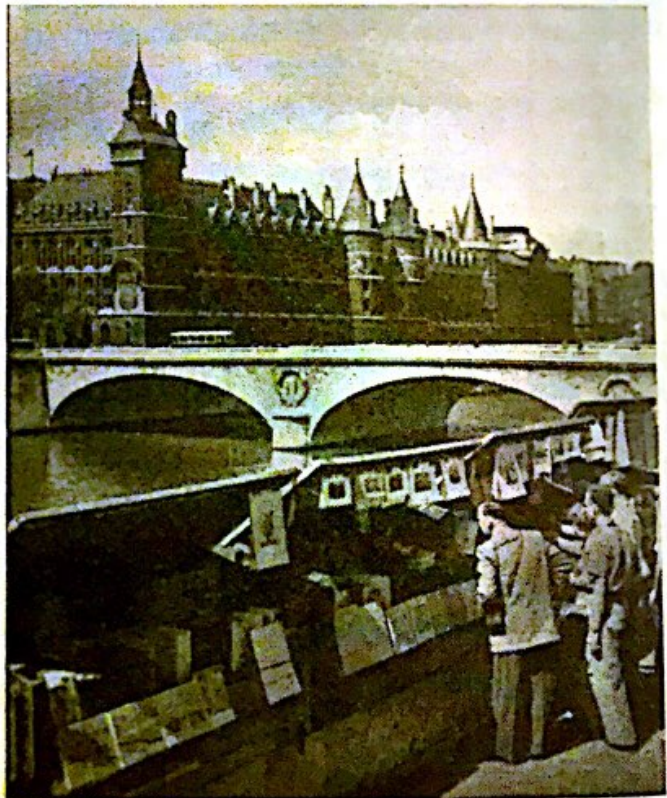


FIG.76

horizon of experience; but the sources of artistic expression always remain to be found within the depths of each one of us.

The functional method operates dialectically between the opposite poles of the objective and the subjective. Interpreted in its truthful significance, it enables us to impart much more – both generally and particularly – to the architectonic solution of the Heart of the City by giving it both an up-to-date aspect with the most perfect technical inventions and a modern outlook from the life-blood drawn from the living conscience of the artist.

Old cities and new cities, monocentric and polycentric, large and small: these present very different conditions. But if approached with the same methods it is possible finally to extract some essential requirements that can establish in each a fruitful harmony between the individual and the community.

Perhaps never have the Hearts of cities been more neglected than they are today: but they will never be more necessary than they are now. In fact, as we develop more and more the sense of the home, and the possibility of satisfying within it a great part of our needs – whether practical or intellectual (now also television has come) – it becomes all the more essential that we should find some way to save men from an isolation that risks an increase in laziness, egotism, and social indifference.

The mistake has often been committed of destroying old centres, rich in spiritual tension, in order to resolve banal traffic problems; because the intensity of traffic has been confounded with intensity of life. But even the most alive crossroads will never be the Heart of a community: it will be the complete opposite.

No one denies the importance of the means of transport. These means are essential elements of contemporary life; but they are, of course, merely means to reach some of the ends of existence. The Heart can be neither the centre of business, as in the capitalistic organisations, nor the factory, the symbol of a proletarian society. The Heart of the City must be the centre of more extensive human relationships: conversation, discussion, the shopping parade, 'paseos', 'flâner', and that priceless 'dolce far niente' in its finest significance – the natural expression of contemplation, leisure for the quiet enjoyment of body and spirit.

Whether a city should have a single centre containing the Heart, or several centres is merely a technical question. The importance is that each centre should synthesise all the principal activities;

for specialised centres are humanly incomplete. The Heart is the integral centre for a society of individuals integrated among themselves in their community life.

Such an organism can only be expressed within an urbanism integrated with architecture and the arts. Only in this way can the values and highest aspirations be reflected in its general composition as well as in its several parts. The composition of the whole, no matter how logical and elegant it may be, cannot, however, achieve its aim unless it offers, beyond the vision of the whole, the enjoyment of a rich, varied and surprising orchestration. The piazzas of Italy – spaces open and welcome like vases – are wonderful examples of generous Hearts. The children play, riding the lions of marble; the old people linger in the covered walks; the bells ring out; the fountains whisper kind words that the young men repeat to their loves; meanwhile the people stroll up and down, from the Palazzo Municipale to the Church . . . The human significance of this value is eternal and universal, but the conditions under which it is realised in each period and place must naturally vary.

The framework of our lives today cannot be either static or absolute. Even though conceived *sub specie aeternitatis* (or better, say as if it were eternal) it still must be capable of flexible adaptation to the rapid mutations of life. (Calder's sculpture, that is clearly defined in its different forms, but mobile and relative in its successive relations, can serve as a symbolic comparison.)

Within the terms of these premises – a conception simultaneously unitarian and free – the Heart of the City could be brought into being for the City of Man, which concretely stands midway between the transcendent City of God and the totalitarian City of the Sun.

Discussion on Italian Piazzas

W. GROPIUS (*Harvard*)

I once tackled the subject of the Core with my students at Harvard. I suggested a retrieval of the right of way for the pedestrian, disenfranchised by the automobile, and I suggested we should start with a study of what had been done in other countries in earlier times. I had just come back from a visit to Mexico, and had been deeply touched by the life in the Cores of the little Mexican villages. In each of these there is a fairly large square with arcades around it, the public drawing-room for the people, where they shop, gossip and make love. It serves as the centre of life for the population. So I tried to tell my students that I thought here was something in existence that we could study as being ubiquitously valid and applicable for the creation of Cores of a similar character in the United States. But they didn't accept it. They thought the idea of a square with arcades around it to give protection from sun and rain belonged too much to former times, and that it did not fit in with things as they are today in the United States. So I wondered whether it was just being old-fashioned of me to suggest it to them. Now I know they rejected it because they did not know it. They had never seen it, they had never experienced it, so they could not conceive of it. Not long after I got a letter from one of them – a very gifted boy – who had gone to Italy and seen the Piazza San Marco. He was so deeply impressed that he wrote to me that he had changed his mind, reminding me of our discussions. The problem to be solved is, therefore: what can we do to inform people of the possibilities that they can have, but of which they are not aware? How can we create a public demand for the Core, quite apart from the problems of how we should design it?

E. N. ROGERS (*Milan*)

I come from Italy – a country that specialises in the Core, because it is the country of *dolce far niente*.

Dolce far niente – to think, without effort – to contemplate – is a great quality of the Italians and is, I think, the reason why we have such good Cores. The Piazza San Marco is a very high expression of *dolce far niente*.

This is something we do not consider very much today. We speak always of how we should work and what we should do – never about how we should rest – how we can rest creatively.

Recently I worked with some students in London who had the task of designing the Core of a small village. It was a shock to me to see how each of these students had a different idea of what constituted the Core: some thought the centre of the Core was a church, others a cricket ground, many thought it was the school, and some that a pub could be the centre of the Core. Some even put the Core around the factory, and these clearly had no idea what the Core really is.

The answer is, of course, that everything must be at the Core. The Core is the centre of the life of the place. This is so in Italy. We have sport, the church, arts, all together – a synthesis of all activities. In the Piazza del Duomo in Milan we have the cathedral, which is still a very important building, and we have also the Galleria Vittorio Emanuele – the place where the business men meet – with all the cafés, cinemas, and theatres. It is there that we have the *piropeo*. This is a word I learnt in South America and which means, in Spanish, to say kind words to ladies while walking – and this is also something we do in the Galleria Vittorio Emanuele.

In Italy our problem in large towns is not what to put in the Core, but how the Core can expand. For instance, in Milan there is such a terrible concentration in the centre of the city that we made plans for a new Core further out. These plans did not succeed. One reason was the political and economic difficulties, but another was that it is very difficult to oblige people to *piropeo* just where we architects think they should.

G. PAULSSON (*Upsala*)

We have used the Piazza San Marco as a brilliant example of the Core as an expression of human life, and of the Core as a daily meeting place for the citizens. We need, however, to remember that the Piazza San Marco today is a very inadequate example of these things as Venice is almost a dead city. If Carpaccio or Gentile Bellini, who made those wonderful pictures of life and processions in the Piazza San Marco, were alive today they would certainly agree with this statement. Were it not for the millions of tourists that go to Venice, the city would barely survive today.

I will use two other examples to make my point. In Florence there are three piazzas that form the central part of the city: the Piazza della Signoria, the Piazza Vittorio Emanuele, and the Piazza del Duomo. I will make a comparison between the first two, not as an expression of the life of their own days, but as contributing towards a good life today; as a meeting place for the people of today.

The Piazza della Signoria is a wonderful work of art, apparently made for eternity. The Piazza Vittorio Emanuele is architecturally (in my opinion) a horrid place. But in the evenings in Florence you will find that the Piazza della Signoria is a dead Core. Nobody is there. Whereas all the people are assembled in the Piazza Vittorio Emanuele. I have asked myself whether this is entirely due to there

being cafés and restaurants in the Piazza Vittorio Emanuele and not in the Piazza della Signoria; but I have given myself the answer that even if there were the same cafés and restaurants in the Piazza della Signoria it would not function as a real Core. It ought to, but I am not sure that it would, because it is too much an expression of the Florence of the fifteenth century. It was built by the plutocrats of Florence at that time. We often forget that. We think that it was an expression of the life of the whole city. It was not at all. It was built by the upper classes and we know that the *popolo minuto* (the small people of Florence who dominated the politics of the city only during short periods) contributed nothing at all – or almost nothing – to the architecture of the Piazza della Signoria. Whereas the Piazza Vittorio Emanuele is an expression of the Italy of the Risorgimento: a period when Italy was very proud of the work that had been done by its statesmen in reuniting the country. This period is nearer to the dominating sentiments of the Italy of today than the period of the Piazza della Signoria.

The comparison of the present-day life in these two piazzas makes me suspicious about the attitude of building for eternity. The demand of Valéry – ‘*L’architecture doit chanter*’ – is one every architect must strive to fulfil, but if the Core is made too consciously a repository of the history of the town there is a danger that it will only sing like the golden nightingale of the fairy tale.



FIG. 76: LEFT Piazza della Signoria, Florence.

FIG. 77: Piazza Vittorio Emanuele, Florence.





FIG. 78: Piazza San Marco in Renaissance times (painting by Gentile Bellini).

One postulate is clear above all others. We must have an architecture that is true to the functions about which we know now. We know nothing whatsoever about the functions of fifty years hence. We only know what is now. Let us be true to our own pattern of behaviour and not to some vision of a more dignified, but perhaps make-believe, behaviour. So, when building or rebuilding the Core let us not worry too much about eternity.

J. L. SERT (*New York*)

We all admire the Piazza San Marco. It is one of the most wonderful places in the world. But in talking about it we should not forget to consider what it once meant to the people of Venice who surely had different views from ours. For them it was the centre of life in the city, and this centre of life was constantly changing as Venice was one of the most important commercial centres of the world. The Piazza was a place for celebrations of all kinds. Its architecture was the background to life and to a constantly changing decoration. Tapestries, banners and processions of all kinds were constantly animating the square. All these elements made the Piazza much more lively than it is today, when there are only a few tourists sitting in the cafés, the ones on this side watching the others across the square.

One of the most important things about the Core is that it is a place where people can see people. The

FIG. 79: Air view of Piazza San Marco, Venice.



Piazza San Marco is perfectly scaled for this. Whenever a beautiful woman, or even a dog, walks across the Piazza it is silhouetted against the architectural background, exactly like in a painting by Carpaccio or the old Bellini. If the setting were more like a garden landscape, people would not see one another in the same way.

The landscape of the Core is essentially a civic landscape. It is a place where the civic expression of the town finds its highest point. This civic landscape is a product of man as opposed to a natural landscape, and in some cases natural elements – even trees – would be out of place. I would not suggest that this should be a general practice, but just consider for a moment how horrible a tree would look in the Piazza San Marco! It just could not live there: it does not belong, for man has taken the place of the natural elements and geometry has become paramount.

If some people object that these beautiful Italian piazzas, today deserted, look too cold and dead, we should not forget that when they were created they were the containers of the life of the city, and they then were alive with colour and banners and other elements that were constantly changing. The use of these mobile elements represented a contribution by the people to the enlivening of the Core.

The Core of a modern city should also show such elements, contrasting with the more static architectural background.

PHILIP JOHNSON (*New York*)

I think spontaneity is wonderful when it comes, though I don't believe that I as an architect can create it. But it is certainly our job to create the background for spontaneity and I would like to discuss how we can go about this.

I have seen some nice Cores in which I feel very good. There is the Piazza San Marco and also the smaller *Core du quartier*, the Piazza San Giovanni e Paulo. There are three elements that I like to enjoy in a Core, all of which I find in these two Venetian piazzas. First there is monumentality: in the one the Campanile, in the other the Colleoni. Art will come. You can't stop it any more than you can stop a tree from growing. The only thing I am afraid of is whether today we have anything that we want to celebrate. Do we have any desire to create the Campanile? (I reproach my British friends for the inadequate size of the Skylon. How can anything as small as that become a symbol for a century of effort? There was nothing small about the Crystal Palace.) The Colleoni is large and the Campanile is

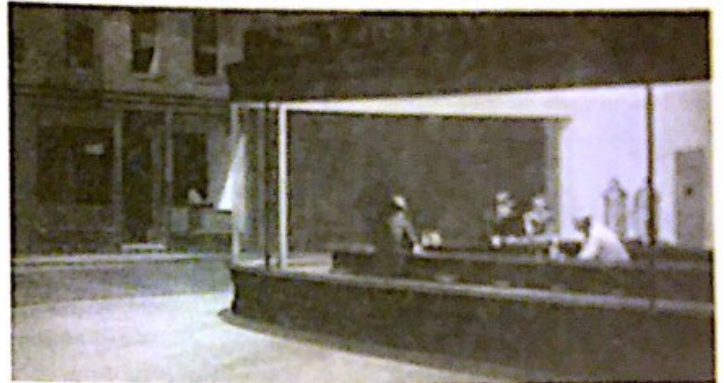


FIG. 80: Drugstore, U.S.A
(painting 'Night hawks' by Edward Hopper).



FIG. 81: Piazza San Giovanni e Paulo, Venice.

large, and they each have an emotional central feeling which I consider essential to any sense of wellbeing at the Core.

The second essential element – and there is no word for this – is a feeling of being ‘cuddled’. A feeling that you get in that café in the Piazzetta when you sit backed up against that terribly bad orchestra, and when you know that nothing is going to happen in that town that won’t sooner or later come into your field of vision. But you, yourself, are held – you are ‘cuddled’. This is still more so in the Piazza Giovanni e Paulo where there is only the one café and you can dominate both directions of the ‘L’ of the Piazza as well as the canal at your left. You are in a little retired place from which you can watch the world go by.

We have this feeling in the drugstore of our American Mid-Western towns. The drugstore is a concept entirely foreign to European life, but I rather like it – I suppose because I was born there. There we stand with our feet up against the window, leaning in a row: and we know that, sooner or later in the course of the Saturday evening, everyone of importance is going to go into that drugstore

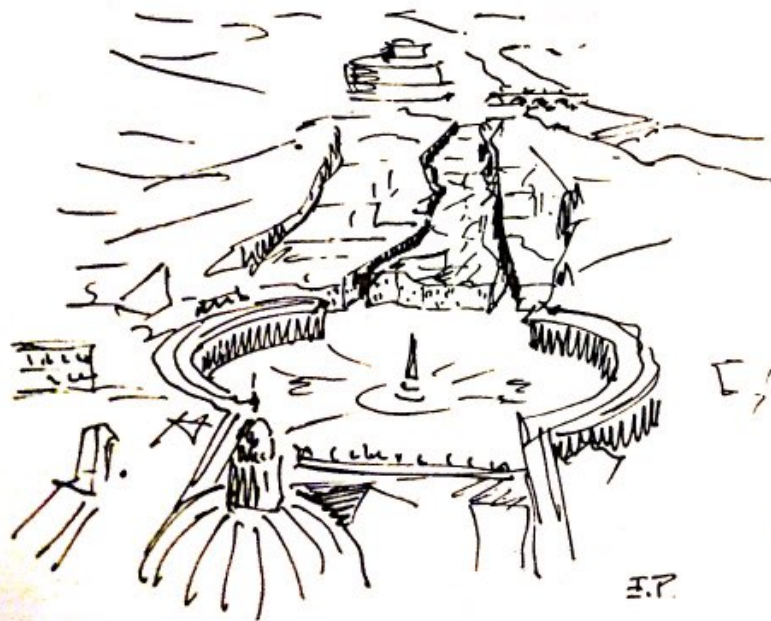
for a soda or a coke. The feeling of course is the sense of protection, with a wall behind you, and yet where people are going by around you.

The third essential – which I do not find except in Venice – is a feeling of processional development within the Core. As you approach Venice from the sea you know that the Campanile must mark some important place, for there it waves above everything. Then you have a beautiful entry in the width before the Palazzo. Then you turn one corner, and you are in the Piazzetta. You sort of see there is something beyond but you are already in the centre of the town – you already have that protected yet central feeling. Then you go into the Piazza proper, which is too large to sit in and feel protected, but which represents that public part of the Core where gatherings can happen, where parades can happen, where fireworks can happen. This is the square of the people of Venice, and you have made three right-angled turns from your entrance to achieve this sense of magnificent enclosure.

I don’t hear these aspects discussed in connection with the Cores we are building today. I have read Maxwell Fry’s explanation of why he left a green



FIG. 82: LEFT Scheme for the approach to St Peter's in Rome from the Ponte San Angelo, prepared by Carlo Fontana, 1690.



space among the houses in Harlow New Town. He says 'this corresponds to the place where the church was in old English villages'. Well, it may correspond, but does it perform the same function? Is it a symbol, is it an enclosure, is it the reason for coming to the place, and does it develop so that you turn and twist into a space in which you feel good? None of these exists, and my guess is that this will always remain just as an open space and will not correspond to the church green of an old English village.

Fortunately my story ends extremely well, for there is one magnificent contemporary Core – though it will never be built – and this is St Dié. I have wandered through that town ever since the plans were published and I know exactly where I want to sit. There is a little 'L' where the shops come round just before they drop off to the river, and there is probably a rail there that you can stand and hold on to as you look out across the river to the factories and station on the other side. You are in a private café square from which you can see around other buildings and through other buildings to the public type of square. Away to the left is a very tall public building that gives you a centre to allocate yourself

as you walk around through the town. But here you are enclosed. You are held in by the rail, by the shops, by the theatre and museum. This square develops into three or four more squares, but you have to turn to get from one into the other. St Dié has every facet of what I would like to see in the Core of the city.

E. PERESSUTTI

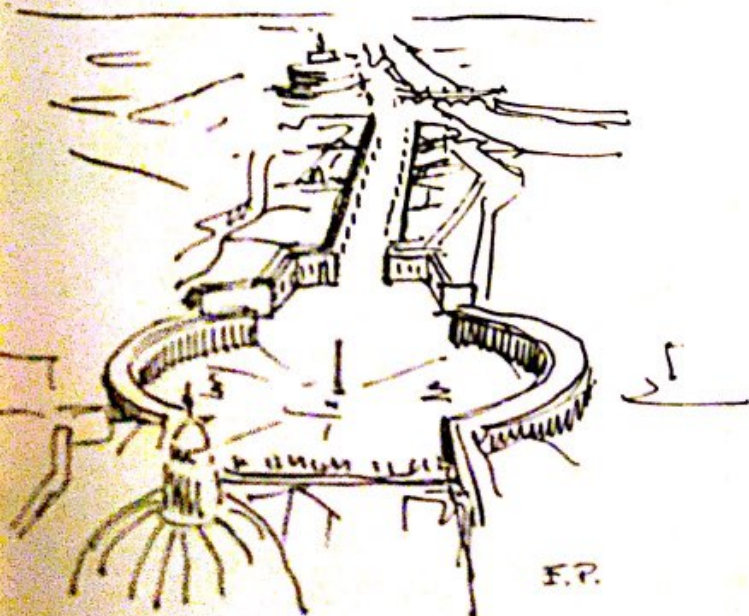
We all try to describe how one should build a Core. It is just as important that we should not destroy those Cores we have. I am thinking of what the Italians have done to the Piazza San Pietro in Rome. We had behind the Piazza San Pietro a small Core where there was a very special life (Fig. 82 centre). It was an important place: a place where one could sit down, with something behind one, and look at a very important monument. Now this beautiful little Core has been entirely destroyed. It has been opened up in this way (Fig. 82 right). It has ceased to be an enclosed space; and this is the worst thing one can do to a Core.

S. GIEDION (Zürich)

I am of the same opinion as Peressutti, but I would like to remind you of a scheme for the elongation of the Piazza San Pietro that was made by Carlo Fontana about 1690 (Fig. 82 left). It was never carried out because the power of the Popes declined around that time, and there were not enough funds available. Carlo Fontana wanted to create an approach that would enable one to see the cupola of St Peter's the moment one crossed the Tiber. It is very interesting to see how differently the Baroque and Fascist periods approached the problem of opening this area. Piacentine (Mussolini's favourite architect), with an incredible lack of artistic sensitivity, destroyed the approach to Bernini's colonnades; first, by placing at the end of them – and in competition with their marvellous oval – a square piazza surrounded by high buildings, and then by continuing the opening with a much too wide avenue beset with Lilliputian obelisks. By the way, though it seems barely conceivable, the spirit of this architect still tyrannises architectural education in Italy today. Carlo Fontana, at the end of the seventeenth century, just prolonged the approach to St Peter's by rows of small and simple shops for pilgrims on both sides. Then he slowly let the avenue converge as it approached the river, thus giving evidence of his

BELOW, LEFT: The approach, with the Bernini colonnades, as it stood till the time of Mussolini.

BELOW, RIGHT: The Mussolini plan carried out after 1937 (drawings by E. Peressutti).



instinct for civic design. This example shows that it is possible to create openings without destroying a Core – but Fascism does not seem to have the talent to develop this sort of solution.

I understand Sert when he likes to introduce mobile elements into the Core. We have so many opportunities at hand today which have not yet been incorporated in architectonic expression, but have only been used or misused for publicity purposes. But at the same time we have to make a clear distinction between those elements of the Core which are thought to be permanent and those which will perhaps change. The Core should not look like a travelling exhibition. It has also to impart the spirit of continuity.

Paulsson's remarks on the relation between the Piazza della Signoria and the Piazza Vittorio Emanuele in Florence give another example of the fact that centres shift as life shifts from one part of the city to another. In Paris, for example, the Palais Royale was the Core for the French bourgeoisie between 1820 and 1840. Then it shifted more and more to the west, and is now along the Champs Elysées. Maybe in the case of Florence life in the Piazza della Signoria would not have shifted to a nineteenth-century square if a late scheme of Michelangelo's had been carried out. This was to surround

the Piazza with colonnades, which would have been as hospitable to cafés and restaurants as is the Piazza Vittorio Emanuele.

I am for mobile elements within a Core, and I am also for the shifting centre. Life sometimes demands that the centre shall shift, but we should not design a centre with the idea that it may shift, for it does not always do so. Schiller once said: *'Wer genug getan hat für seine Zeit, hat genug getan für alle Zeiten'* – he who has done well for his own time has done well for eternity.

J.M. Richards remarked earlier that the Core is the repository of the group's collective mind. All we need is the courage to say – not that we will build for eternity – but that we will create something for our own period, and maybe also for the next!

We cannot dare to say that the Core must always contain this or that building. All we can say is that the Core is destined for the people. A free space where people can move around. And this free space should contain something which stimulates those who come there. Also, the Core is an artifact – not a romantic garden dissolved in landscape. The Core consists of man-made architecture and man-made art, which should bring to consciousness the spirit that dwells in the individual community – a repository of the group's collective spirit.

FIG. 83: The Piazza at Vigevano, near Milan – the first of the Renaissance squares – carried out by Count Ludovico Sforza in about 1495.



New trends will affect the Core

PAUL LESTER WIENER (*New York*)

Every element forming the frame of life and work in the century and a half before 1914 has changed so fundamentally and swiftly during the past generation that, despite the speed and scope of information and education, men's minds have not as yet been able to absorb the significance of the transformation, still less to adjust their lives to it. So we live in a time of confusion and deep-seated anxiety without parallel in our experience. The almost psychopathic emphasis on the idea of security and the frantic search for mechanisms and formulas to attain it, attests to this.

Among the more obvious changes in the frame of reference which have taken place are the factors or forces which seem to be shaping the frame of the future. For convenience they can be divided into three classes - the technological, biological, and ideological - though these are constantly interacting and cannot be clearly separated.

Among these factors, the most obvious and most basic are the technological and economic. They have to do with the fundamental change in the character of the arts of production, distribution and finance which has occurred more or less unnoticed in the past thirty years, and which the atomic bomb has brought to a catastrophic climax of confusion, fantasy and fear in men's minds.

The industrial revolution freed vast populations from local bondage to the soil and gave them larger purchasing power in terms of money, wages, industry, labour, and markets, but they were still tied to the iron, coal and gold mines, both geographically and economically, and limited by the means of transportation and finance which these made possible. Increased use of electric power and the internal combustion engine extended the industrial revolution to the First World War.

From here on the frame breaks up on the technological and economic side. The world emerged from

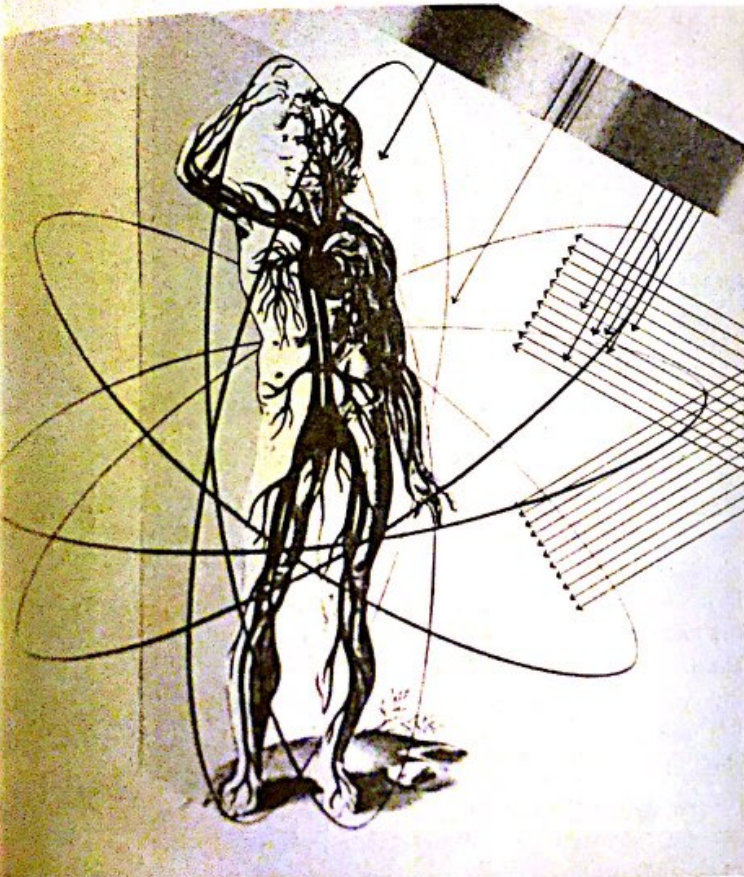


FIG. 84: The artist symbolises the new era.

upon their institutions and international relations. (I will deal with the many possibilities in a forthcoming book.) The whole concept of property in an age of automatic or magical abundance is probably a confusion out of the past, except perhaps as regards the passing possessions of purely personal use.

There are already many indications that, through collective saving and consumption, through the growing tendency to equalise and guarantee money incomes or living standards, by law, taxes and public spending, we are moving swiftly away from the form of economic organisation which related remuneration in some fashion to individual effort, thrift, risk, ingenuity, or enterprise; and thereby the significance of our corresponding manners, morals, customs and institutions is being dissolved. But what is replacing them as the impulse, motive power, or principle of life and work? It is already plain to anyone who understands the meaning of what is happening today that in fact we are no longer living in a money economy.

With the coming of the atomic age something momentous has happened not merely to matter and to money, but to men. It is a fact which we must accept and use for the welfare and freedom of mankind. The inescapable problem which atomic power puts to us is the biological, spiritual and political problem of men's power over themselves.

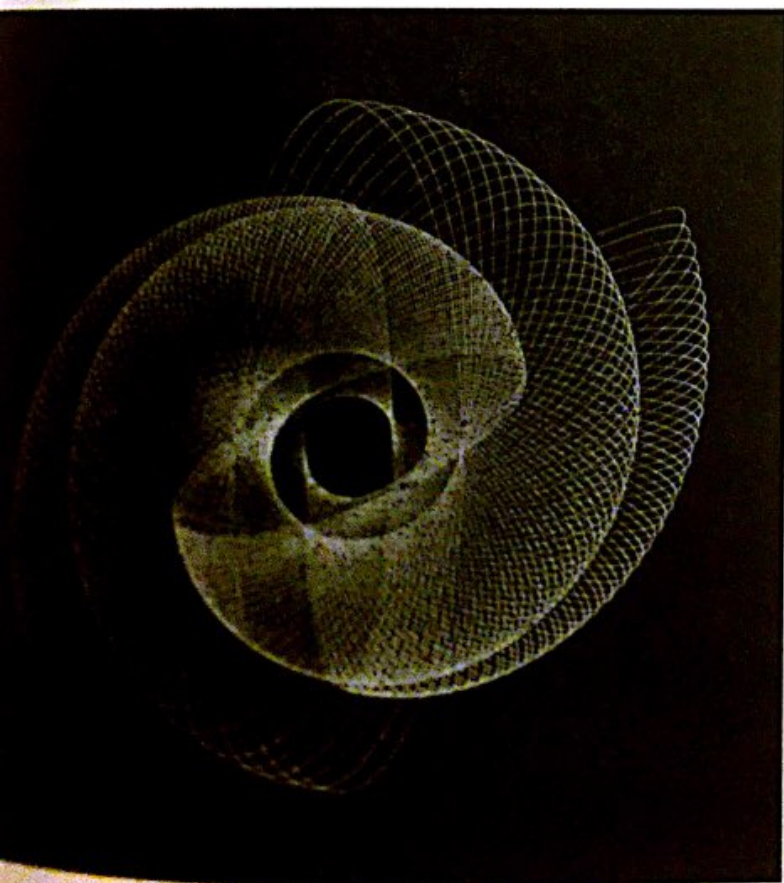
The vast gamut of implications of the solutions to these problems cannot be readily deducted, but some few are discernible and they are of vital importance to the planner.

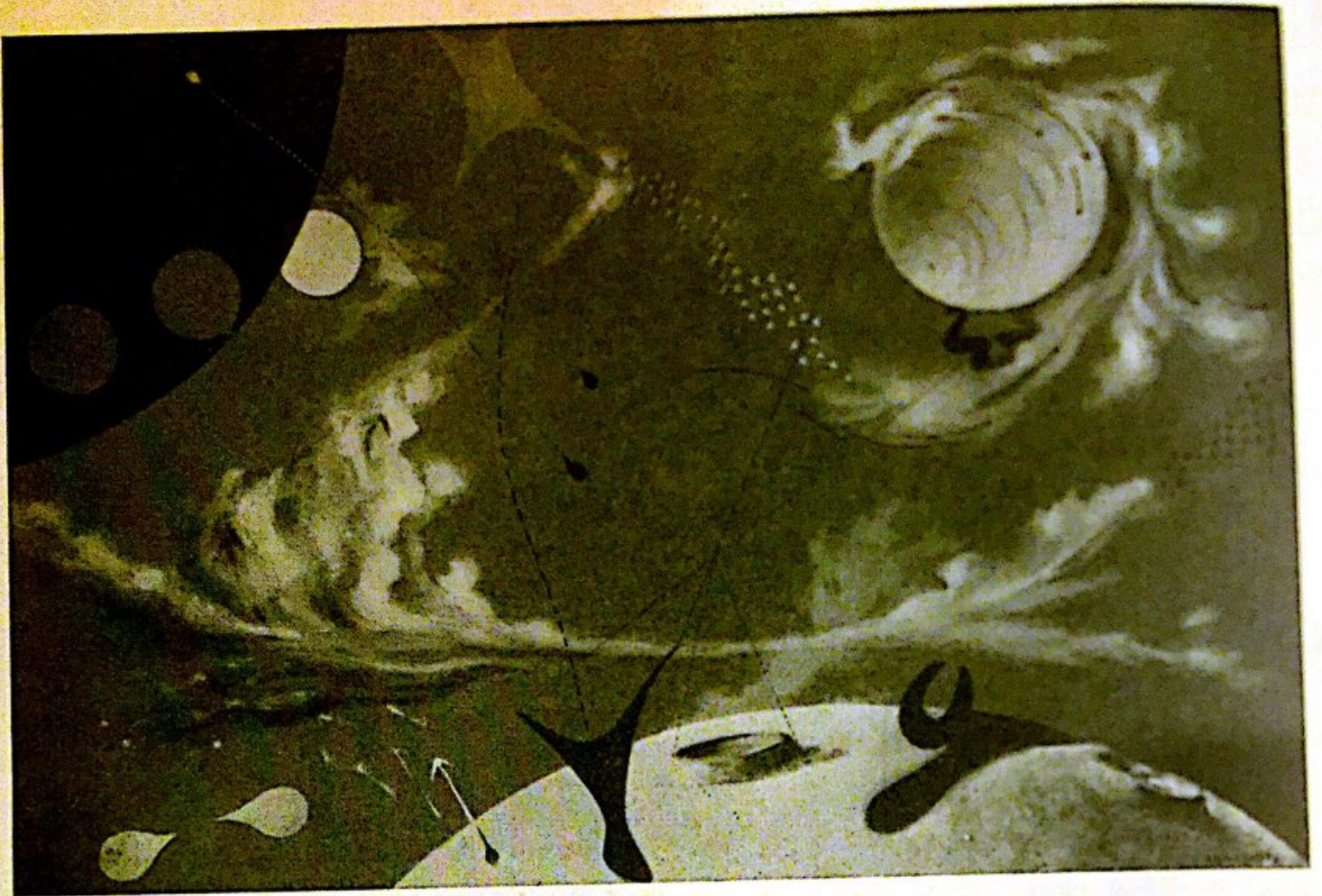
There is evidence that urban and industrial population of Western Europe and America will soon cease to grow and in fifty years will begin to decline. The rapid increase in population that accompanied the industrial revolution stopped in Europe and America about the same time as the transition from the machine age to the chemical age started, about a generation ago. There will be fewer people in Europe fifty years hence and there will be fewer children, more old people, more mere consumers, fewer workers, and more pensioners.

The unprecedented growth of the western peoples in the past two centuries has been made possible because the power machinery required more workers and consumers and made it possible to support them. We know also that these peoples have tended to become uniform, stereotyped, group-minded, and susceptible of mass manipulation and regimentation.

FIG. 85: OPPOSITE 'Messages through the atmosphere'.

FIG. 86: Physiograph.





the machine age into the chemical age, but we did not fully realise it till the atomic bomb burst in upon our consciousness.

What has happened is not merely or mainly that in the release of nuclear energy the world has formed a new source of power to move machines. The age of *alchemy* in which we live today means essentially that it is now become possible to make anything — materials, machines, and energy — out of anything or nothing, anywhere in the world, in any amount, almost without measurable cost in terms of time and labour.

We know that in one generation modern industry, especially in America, has ceased to be an assemblage of miraculous and almost human machines tied to coal and iron or to electric power. It has become a chemical or electronic laboratory process, a continuous confluence of atoms, molecules and energy, involving less and less men, money, machines, or natural materials, and almost no special local habitation.

We are already familiar with the fantastic technological consequences that flow from the age of

alchemic transmutation of matter; we have been living in and by chemical and electronic laboratories for nearly a generation, and have used plastics, synthetic rubber, textiles, vitamin extracts, hormones, new organic materials, and new metals in everyday life and in war. It is easy to imagine how this new revolution has made, and will make, the process of production an unlimited, inexhaustible, universal and completely flexible flow of atomic and molecular materials and energy, unrestricted by natural resources to any part of the world, and less and less dependent upon time, labour, and fixed plant. It is easy to understand, too, how the age-old dream, hope or demand for unlimited, universal, automatic, and almost magical abundance and leisure, has emerged anew with this new age of alchemy.

It is more difficult to envision what the effect of transition from a mechanical to a chemical technology may mean to the *whole* structure of our present society, economically and politically. Still more difficult is it to envision the effect of all this upon men themselves, upon their growth, vitality and qualities,

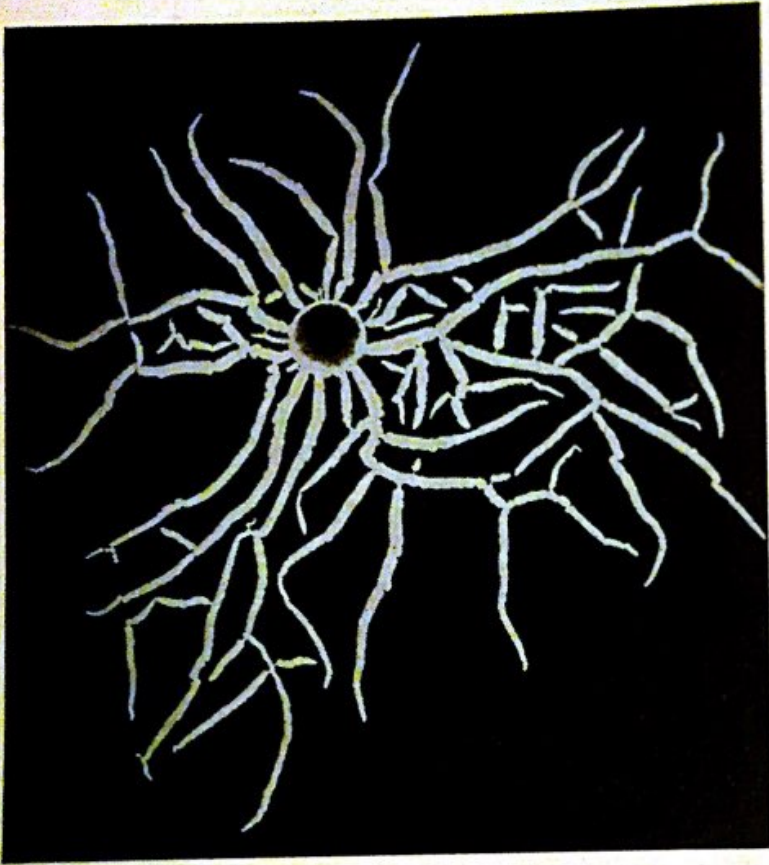
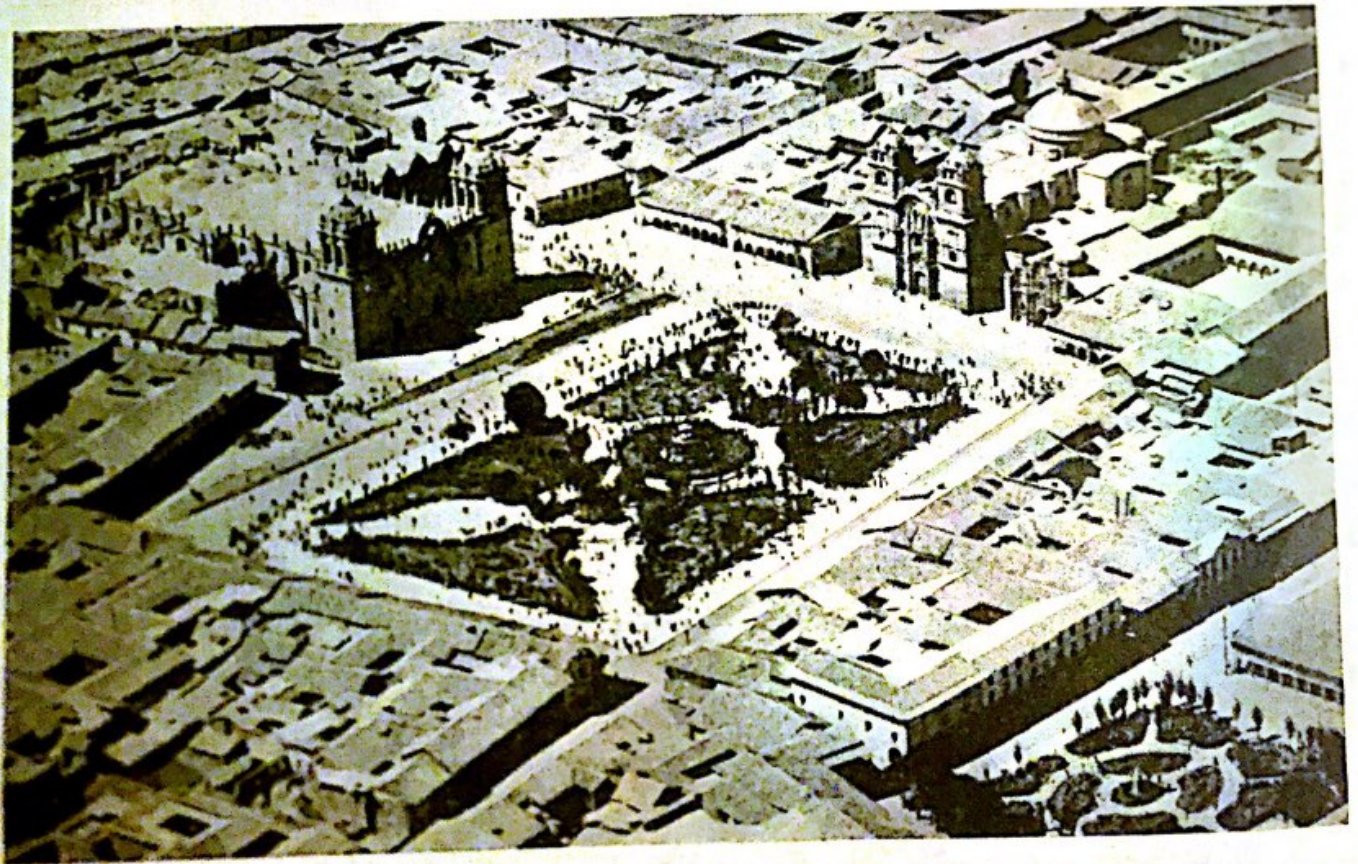


FIG. 87: New science reveals new visions; Lichtenberg figure.

FIG. 88: BELOW Plaza of Cusco, Peru, in the Spanish-Colonial pattern of city Cores.



There is an ever-increasing trend toward effortless consumer satisfactions, and passive spectator pastimes and amusements.

The emerging atomic age may resolve our economic difficulties, but the problem of human time and activity, of providing occupation and entertainment for the masses will grow more pressing as will new and old psychological and moral problems.

What has been indicated is only to serve the purpose to direct the planner who is charged with charting the course of cities to stop and reflect at every turn. The 'Core of the City' is also the core of his problem.

Translating some of the observations on the new atomic age into plans of future cities, we will be wise to provide facilities for greater and more numerous common meeting places, based on more and more leisure and upon a greater freedom from want. It is reasonable to anticipate planned land use of common ownership. Perhaps in the new chemical-atomic age the needs of men can for the first time be provided for in orderly fashion. The new sources of power will meet man's physical needs and he will learn slowly to live without the age-old economic struggle and thereby discover his 'better self', his superior spiritual and moral qualities.

The civic Core should be the physical expression of this 'collective better self'; it should reflect the general forces and conditions which I have defined as partly technological, biological, and ideological.

Even today, as we design for the future, we should override the immediate obstacles which are part of the transition from the industrial to the chemical atomic age and permit the future resultant behaviour to find room in the new Core.

In our pilot plan for Lima (page 15) we have aimed to do that, and in the master plan for Medellin (see pages 148 and 149) we have removed the physical obstacle (central market and railroad station) to a newly-recovered land area to give room and scope for the new civic Core of the future. It groups the administration and office buildings around several plazas and parks that are spatially correlated with the riverfront, and the beautiful Nutibara Hill and mountain chain act as backdrops to the civic centre. Of course, pedestrian traffic is segregated from vehicular traffic, and parking for the shopping centres and the open-air theatre, and for the other recreational and cultural buildings are conveniently located to contribute to the efficient functioning of the civic centre for large groups of people who would meet during work hours and leisure hours - on weekdays and holidays. In the

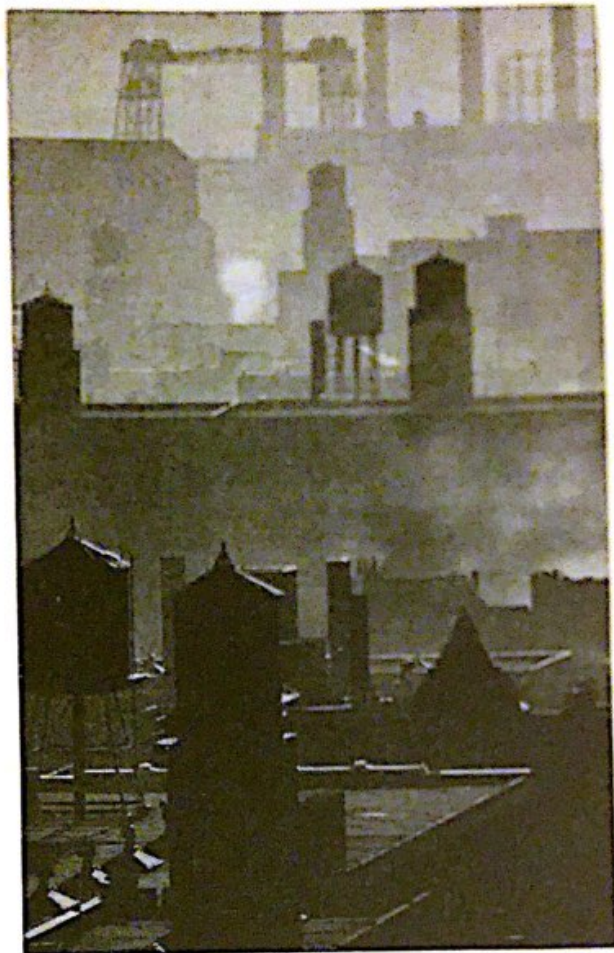


FIG. 89: Typical rear façade of the Core in industrial cities.

near future the land for the civic centre will be freed for construction, as the railroad and central market which now occupy a part will be exchanged by the municipality for new land that the banking of the River Medellin will make available.

The present civic centres of Lima are still the same size as they were in Colonial days. They reflected their period quite typically and beautifully. Since then the population of Lima has grown to 800,000. A new large civic centre has now been planned utilising the existing road and park system, the Ministry of Justice, Public Works, Italian Museum, and other buildings. As Lima is the capital of Peru the civic centre has many new ministries, the present ones being now accommodated in old inadequate scattered buildings. While large recreational facilities are not located at the Core, Lima's future population will have a beautiful park with architectural groupings of public and cultural buildings in the very centre of its city, also a new hotel and shopping centre, surrounded by groups of apartment houses with parking facilities. The civic centre will reflect the colonial heritage by extending the principle of the

pattern. Low buildings are placed in juxtaposition with tall apartment houses (see page 13).

In our town plan for Tumaco, a small island port on the Pacific coast of Colombia, we have arranged a civic Core by grouping all cultural, commercial, and recreational building elements into an architectural pattern to human scale. The civic and commercial centre starts at the port and extends across the city island. It is designed for the advantages of the new era in a remote part of the world.

It is my impression that the CIAM Athens Town Planning Chart and the city plans that were built upon it have clarified the troubles and needs of populations in prophetic fashion.

In the last years a greater awareness of the human factors, as against the predominant physical-functional ones, is to be noted. The investigation of the 'Core of Cities' is testimony of the search for broader cultural interpretations. The present preoccupation to interrelate the free arts within the 'Core of Cities' raises CIAM's work to the moral and cultural responsibility which the new era demands.

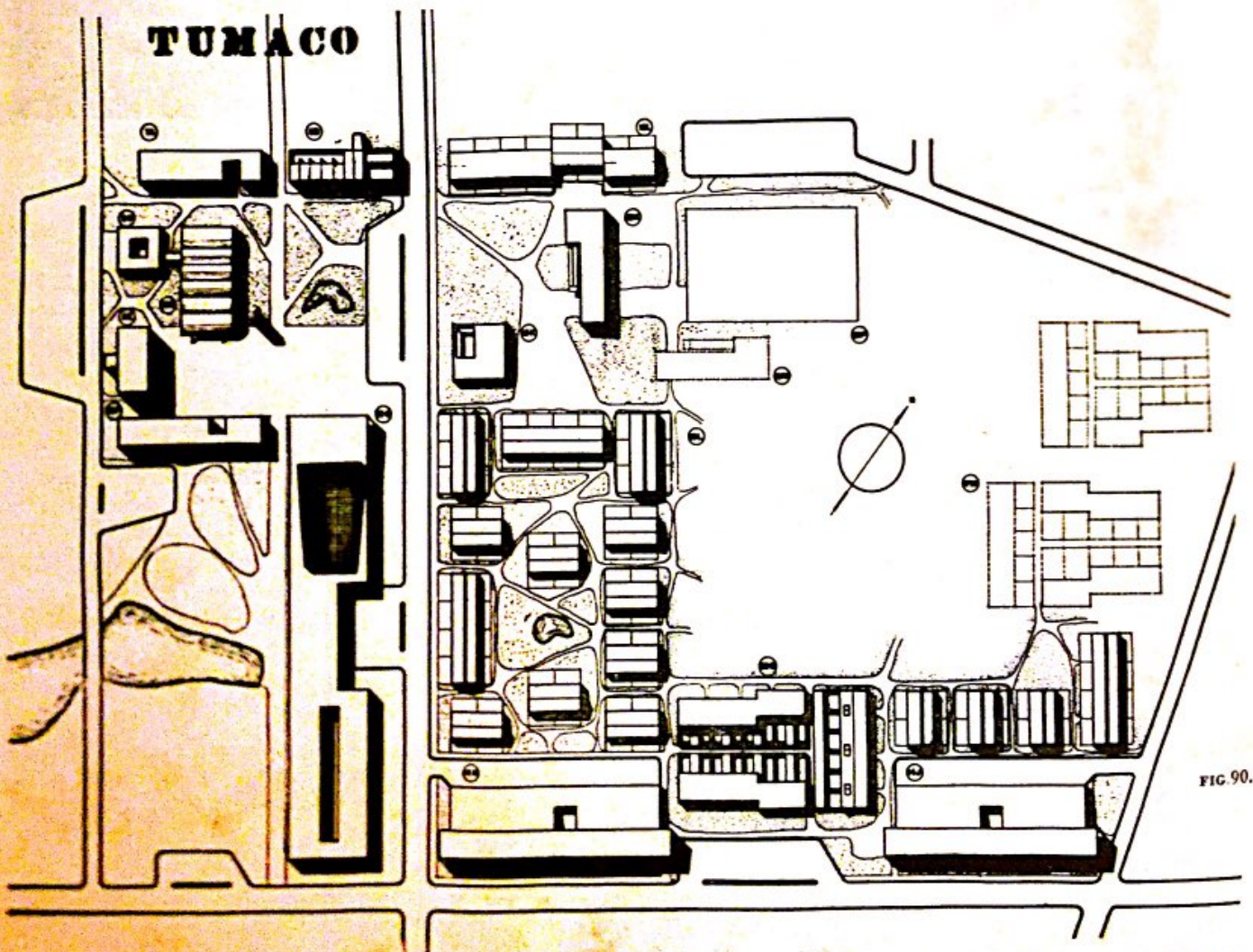


FIG. 90.

The Idea and its Realisation

MAXWELL FRY (*Simla*)

Every writer that has preceded me in this work has dealt with one or another aspect of the Core – its function, its scale, relation to persons and things past and present, its appearance. It remains but to build it, to translate ideas into terms of building.

If I were to say that, given the whole-hearted acceptance of these ideas by all who could be concerned with the building of the Core, the thing would be as good as done, you would believe that I spoke nothing but the truth. But knowing, as you do, that no two persons hold the same version of a single idea; that no two persons are able to share one single idea completely in common but have each their individual view of it, you will recognise that to translate, by the work of several or many people, one single idea into the fact of building is no ordinary feat.

Having read this book so far you will have noticed certain discrepancies, divergencies, contradictions even, between the views held by different writers as to what the Core of the city should be. In this you have the advantage over me, since I know only who will write the various sections, but not what they will say. But from my knowledge of their character, as exposed in their architecture or their writing, I am prepared to find these differences, and to find them expressed with all the force of the writers' characters.

With such divergence at the core of the Core what hope of the Core, you might say. And that, dear readers, is indeed a question. But accompanying this divergence, which it is not my wish to stress more than is necessary for the argument, is a measure of agreement. The whole book, with its illustrations, will, if I am not mistaken, embody a single generalised idea of the Core of a City as existing in the collective imaginations of a group of contemporaries; and though one may have certain views peculiar to himself, and to me perhaps peculiar; or another may grow very angry about something which hurts him but does not touch me; we are all, as men of good will, swept along in the corpus of an idea of the good

contemporary life, so that you might say that, if the matter were in our hands and the work within our power, the job would be done.

That may not strike you as being completely satisfactory, but how still further unsatisfactory may be the truth of the matter when translated to the market place, to the seat of operation of the Core of the city.

If the carrying out of this idea among us demands sacrifices of individuality, what submissions will it not call for from the thousands and ten thousands involved in the great act itself! Is it to be an idea shared, and therefore willed, by the ten thousands, or an idea imposed?

You may remind me that the creation of a city is an intellectual exercise above the comprehension and outside the interest of the mass of people involved in it, and that the intellectual acceptance of the idea is necessary only to those in whose power it lies to make the necessary decisions; to organise the work and the financing of it; and to impose regulations to ensure its performance and safeguard its maintenance: that the idea need be shared only by a ruling minority.

If this be so let us hasten with it to some centre where the minority rules in sufficient security – to Moscow perhaps, or Buenos Aires, or to some more secluded and sheltered seat of absolute power. But will we not find ideas already enthroned there? Anyhow, where to find a dictator in whose veins the streams of power are mingled with sweet reasonableness, whose absolute decree runs also with the wishes of his people?

But were we to find such a man; were we to pour forth our song to him as we sat at his frugal board; were we to see him rise enflamed by our idea of a new city and striding on to the terrace, and lifting his noble head to the heavens, swear to the gods that it should be done. Oh my friends! What a temptation! What a dream!

Put not your trust in princes. It would not be accomplished; or, if done, an ignoble thing; for the gods dictators call to are not our gods.

It would seem that our idea of the city must commend itself not only to the minority that governs but to the majority that suffers. As I write by my hotel bedroom window in Simla – this strange city of nostalgic Englishmen – I hear the sounds of a pipe played by the humblest of the peasant type, whose wretchedness stirs my conscience. And I must listen to that music, for it is an extract of pure beauty that reminds me that beauty is seldom the attribute of power. Many an Englishman there must have been, in the days of our imperial rule in India, who listened also to this piercing sweet melody – so like but so much more beautiful to us than the song of birds – and listening, tempered his rule with love.

We have then, I hope, no faith in the idea imposed by the man of power, nor by any that prize power too highly, for fear that it might lose its purity, and thereby its value, in the process.

Now this idea has at its inception two elements, one of which is concerned with the interpretation of things temporal and the other with things eternal.

What exists for us of the city centre of Venice – the strange and wonderful beauty of this arrangement of buildings in space, the harmony of it – speaks to us of the values of proportion, space, and colour; and the strong life out of which it arose is with difficulty guessed at from the frescoes and statuary that record it. Yet both grew together, inextricably intertwined, and what we most prize, not only here, but in any architecture whatsoever, is to be got only where life moves strongly and from among things evanescent.

The stronger the life, the more varied its contacts, the more widely power is shared and ideas valued, the greater chance there will be of a vigorous architectural idea; of innovation in accordance with life itself. Under the dictator there is not strength but violence, and dictators build lies in hopes of deceiving posterity. They may have to do good in the process, but that is incidental.

So this idea of a city Core, which we may assume to have been born out of the strength and sweetness of a free society; and to be based not upon the needs of a ruling caste or of a dictator, but upon those of a free society in all the tumult of evolution; with its instruments of production not yet completely understood, its organs of government still in the making, with inequalities and conflicts, and disorders not yet diagnosed: this idea of a city heart in harmony with the truth of times present, and with truth for ever,



FIG. 91: The evening way home from the hills, near Simla, India.

is one in need of human contact at every stage of its inception. Emperors and priests have built palaces and temples in the past, monuments beautiful and horrible, to temporal power and the sheer beauty of life; but only where a people was swept along by an idea of what its life was and meant to it, do we find whole cities beautiful in their biological form, and to be considered as works of art.

It is that, no less, that we are seeking in this symposium, and how to carry it out is the subject of my article. But, it is because I value the purity of the idea and believe that moving men's minds and hearts is the surest way to command their adherence, that I cannot bring myself easily to a discussion of the ways and means of safeguarding an idea when it has once been introduced into the market place.

I have seen in my lifetime an idea of a garden city embedded into the law of the land with every provision for its promulgation and acceptance; and what came out at the latter end I have seen also. The idea was not a good enough one and no power on earth could protect it.

I have fought against, and lost, the idea that good architecture could be induced by regulation and prohibition. And I have fought for the repeal of the same laws, with a whole council containing every shade of architectural salvation in unanimous agreement, and lost, because it is easier to make laws than to unmake them.

The architects of England were organised into an institution in 1834, about the time that architecture fell into a serious decline, and the by-laws and the regulations of the nineteenth century, and all that followed in the twentieth century, restrained the

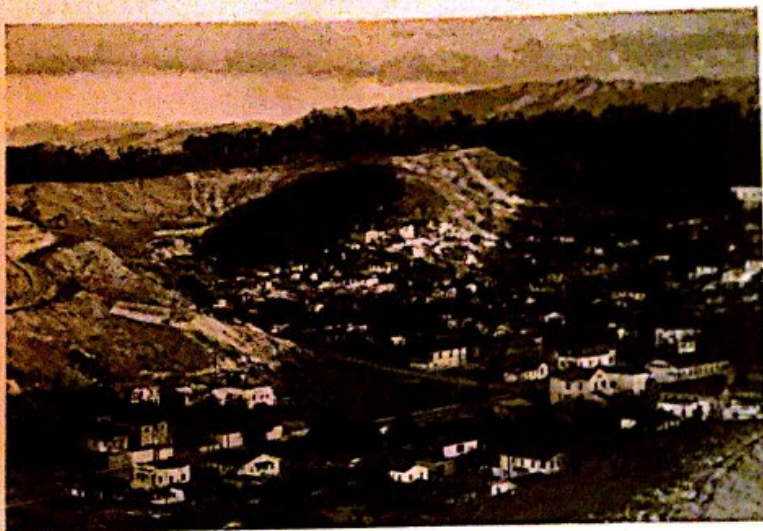
wicked man from his wickedness, but for the cause of beauty did nothing whatsoever.

I am told that there are regulations that govern the height and major dimensions of Paris streets and that they are good, and I answer that they are the index of a rule already accepted, a rule in conformity with ideas so strong that the idea still rules the rule. The Ecole des Beaux Arts is another manifestation of the same period, but where the rule rules the idea, the result is less to our liking.

The rule of the idea is stronger than the rule of law. In the city of Bath, at the dawn of the nineteenth century, there cannot have been a divergence from the rule of taste, not an error anywhere from palace to pigsty, in furniture, in dress, in carriages or carts, in utensils, in everything both great and small; not a divergence from the party line; and no party because society, without other compulsion, conformed to the picture of itself that poets had made for it in the rediscovery of Greece and Rome in a period of secure increase.

We shall make some rules no doubt. We will try to bind men to our idea. But we would be better employed in searching for the rules that govern nature and nature's creature, man; for if this city is to be built it will be built not by one man but many, and not by architects only, but through the will of a society desiring the good life, in terms, understandable, contemporary, but ideal; in which each participant sees his better self reflected; and for the realisation of which it were a pleasure to submit.

Let us therefore try to perfect the idea in our search for the truth of men and things; and like sensible citizens avoid the law, for in the fullness of time we will, as like as not, be swept along by our own ideas, and it is better that they support us in our decline than sink us utterly.



A new Community Core in California

RICHARD J. NEUTRA (*Los Angeles*)

FIG. 92: Air view of Elysian Park Heights, Los Angeles, prior to development.

The strange absence in North American communities of a focal area, or a 'plaza', has often been noted by visitors. It seems so natural that a human neighbourhood should be stabilised and crystallised around a central free space, onto which buildings of communal and commercial significance might face, and where civic feelings and thought might find their anchorage.

The absence of such a feature may well strike one as a failure, yet the matter must first be analysed and explained before we can judge whether this absence can really be remedied.

A case history of Elysian Park Heights,* a part of Los Angeles with unusually well-defined boundaries may clarify the practical opportunities and resistances which determine the role of the Core in American cities.

The development of housing and a whole series of structures for the use of the families of a population approaching 16,000 or 17,000 has recently been decided upon, on the site of an old (almost rural) settlement which had grown up around a street crossing: the existing school, church, and general store being right on the crossing itself.

To shift a long-standing area of social attraction cuts across all the forces of established custom, and so - almost from the beginning - it was decided to create the new community square, near to or at the old centre of activity.

The fact that the existing population was largely of Latin-American stock - or really Mexican Indian -

* An urban redevelopment project of the Los Angeles Housing Authority. R. J. Neutra and R. E. Alexander, Architects.

with rural character and customs, made the architect turn his attention to Spanish colonial towns. In the towns of Peru, the initial conception was the civic centre. Even housing was an afterthought, and the houses developed somewhat accidentally around the planned centre. The traders had more or less temporary quarters within the central square, to which traffic converged from the countryside. The only commuting problem was connected with the marketing of craftwork and rural produce.

In old Cuzco (see Fig. 88) the colonial administration and the missionary church displayed an impressive unity of purpose and aimed at a spiritual and social unification of the population, which was going to be assimilated into the newly introduced ideas and way of life.

Yet, even there, competitive forces appeared at work - even though there were then no different religious denominations as today at Elysian Heights. In Madrid, 5000 miles away, a number of monastic orders lobbied outside the doors of the royal council, fighting for the prize of the right to colonise the new empire beyond the seas, jockeying for a central position for the buildings of their order upon the plaza of the new town, trying to lay hands upon as much real estate within the area as possible.

The result was that the new plaza contained not one but many churches, each dedicated to a different patron saint and each operated by a competing fraternity - all for the benefit of the somewhat bewildered, recently converted heathen Indians.

Assimilation of newcomers is also attempted in the new American communities, but multiplicity of

purposes and the quantity of internal and external traffic make any unification or social harmonisation of the city pattern far more difficult.

Today housing - accommodation for family living - is the first consideration. The next determinant is the daily journey to work, whether to nearby or far distant employment centres. A reasonable solution for this journey to work - which is an unavoidable fact - gives far more security to the inhabitants than any scheme of self-containment or, so to speak, 'taking in each other's washing'. The bus-line and the plan of connections for a far-reaching motorised community - who must make their living over a wide-flung area - govern the layout far more than the self-centredness of neighbourhood life. This may be deplorable, but economic realism, as well as psychological familiarity with a people who have a modern command of space, inevitably determine the planning process.

Central bus stops and a traffic loop through the neighbourhood - of sufficient dimensions to take care of morning and evening rush hours - must be related to the Core of the neighbourhood: must have access

to it without destroying its serenity. The planner is forced to budget large sums for wide, easily graded traffic lanes and for street parking. Almost one third of the total area must be paved to meet these demands. Segregated pedestrian traffic; with crossings on the level over or under the streams of vehicles and with separate forms of illumination at night; these must be fought for with untiring zest, and often without success. Both the initial cost and maintenance costs militate against the simple human comfort of walking along undisturbed paths and reaching undisturbed areas of human gathering.

Thousands of car owners will not even walk for half a mile, but will use their cars and demand parking areas adjacent to every destination - the community building, the three or four churches, the two or three schools, the administrative centre (where, for example, rentals are paid on the first of each month), the cinema, the food market, the shopping centre, etc.

Any attempt to centralise these various facilities produces a vast concentration of vehicles - in motion and in temporary storage - which destroys dignity

FIG. 83: Sketch of Development Plan.



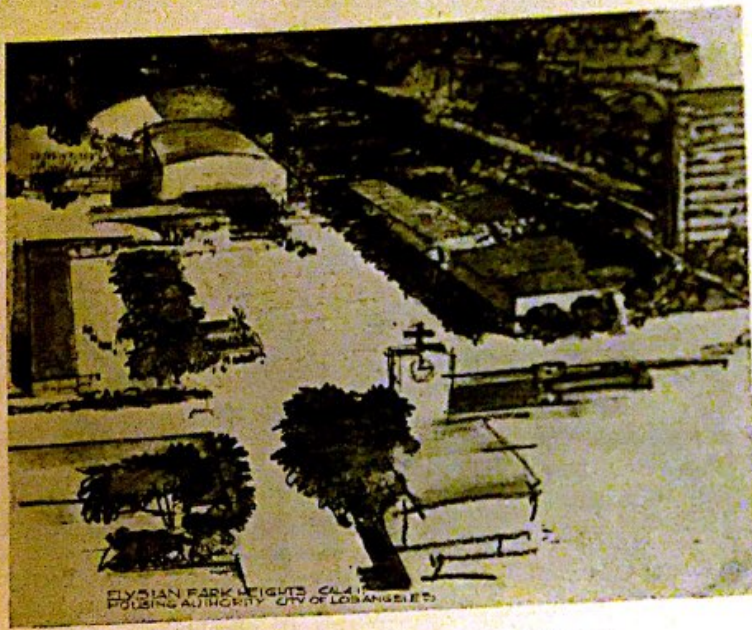


FIG. 94: Community Hall at Elysian Park Heights.

and peace of the mind and the senses. A modern church site under these conditions differs greatly from the romance of the quiet churchyard or the dignity of the ancient temple or the cathedral fronting upon the public square. The catholic archdiocese withdrew from the expensive central property which it owned at Elysian Park Heights and purchased several acres, well off-centre, to accommodate its new church, rectory, convent for teaching staff, twenty-class school, gymnasium, and assembly hall. The Committee of Protestant Churches, after long deliberation, made a similar decision, separating their three different denominational establishments. All churches endeavour to avoid difficulties and conflicts of management by having their own private parking spaces, which must by law be provided within their own property.

Public elementary schools now need plots of seven to eight acres, including their playgrounds. The tendency will be to withdraw them from the rolling traffic in the centre and give them locations on the periphery that will be safely accessible to the children. Kindergartens and day nurseries have two conflicting needs: for safety they need to be even more decentralised than the elementary schools, but they also need to be beside the roads that take their mothers to and from their places of work morning and evening. These married women require day care centres and shopping facilities that can be easily reached from bus stops or from the main traffic

routes. The entire commercial area - including gas-filling and motor-service stations - is most rationally sited near to the main entrance to the neighbourhood. Here the existence of passing motor traffic with possibilities of developing "pick-up trade" may add to the economic security of the commercial establishments.

In the case of hilly Elysian Park Heights, the shortage of buildable land and the need for a circular traffic route, which could not be easily clogged or blocked by accidents or careless street parking, as well as all the factors already mentioned, induced a decentralisation of many of the elements which planners would normally have loved to assemble in a solidified Core. The business and commercial area has been placed near to the main entrance into the area from the city street system and the metropolitan freeways. The schools have been moved out towards the green areas of the park. The churches, after equally careful and protracted negotiations, have not been assembled near to each other, but dispersed according to their self-selected isolationist inclinations. Even the administrative unit, which also serves as an information centre for visitors, has been placed near the southernmost entry into the area. This is because it is closely linked to the maintenance building which is served by a good deal of cumbersome truck traffic from this direction; but it means that the administrative building has become widely separated from the large community hall which alone occupies a central site. The parking areas of even this one unit show up the problem that is created by the psychological barrier formed by a herd of automobiles that shuts away the neighbouring residential sections. When unlimited space is available it may be that this problem can be alleviated by landscaping pedestrian walks through the car parks; but the kind of proximity and intimacy of living right around the civic Core, as in Siena or Stralsund or Nuremburg, seems out of the question for a modern American community.

Nevertheless, it is the large community hall, with its bandstand facing towards the plaza, and its outdoor stage facing a natural, bowl-shaped open auditorium for thousands, that forms the real Core of this neighbourhood. Clubrooms with an outside patio upon one side, a playing field with recreational activity rooms and a playground director's office (to control the inner and the outer scenes); these complete this community centre which both serves the needs of a modern American community and provides it with a desirable feeling of centredness.

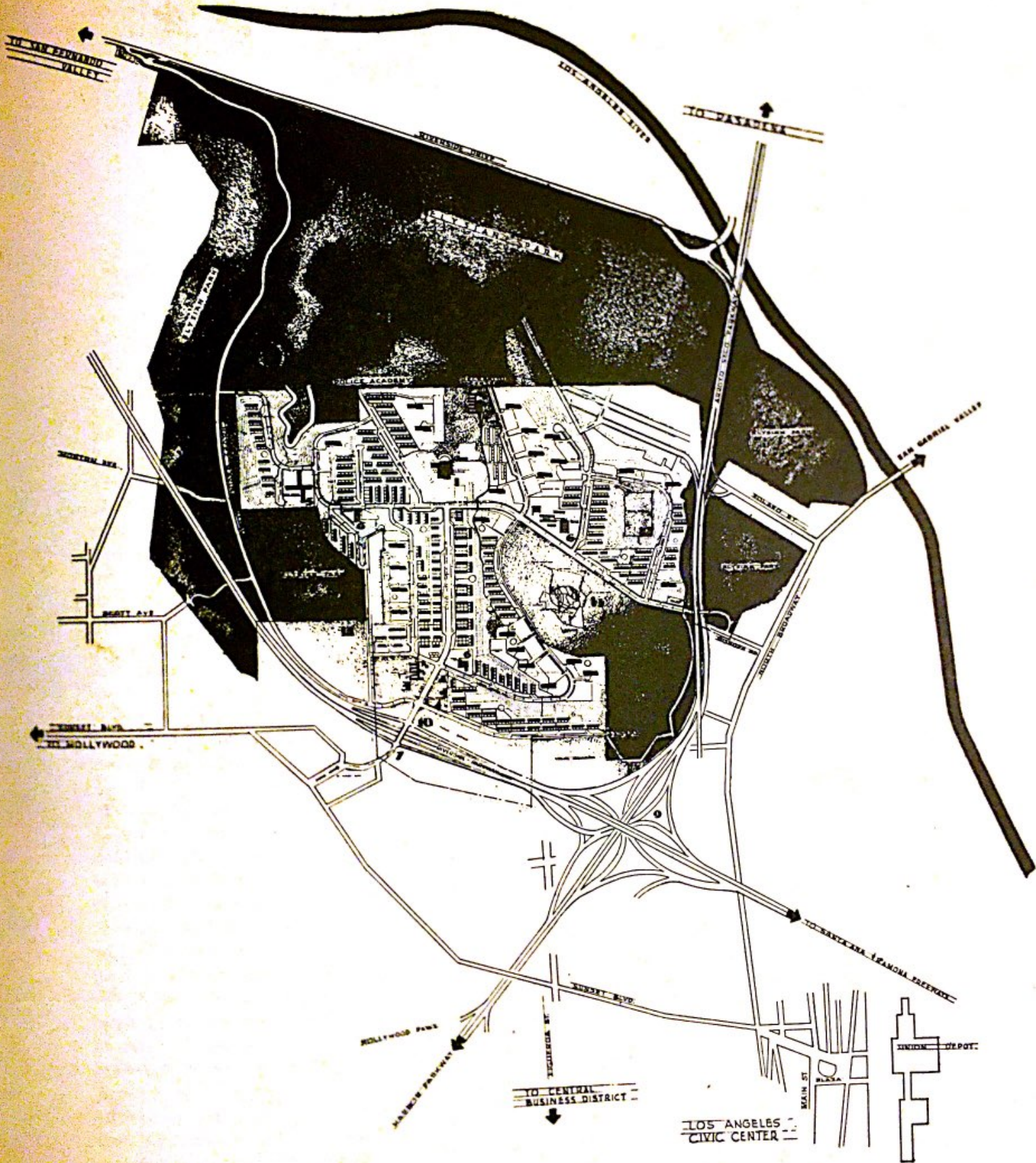


FIG. 10. Plan of Development.

Satisfying Human Needs at the Core

ARTHUR LING (*London*)



FIG. 96: The new market in Lansbury - one of the neighbourhoods under construction as part of the reconstruction of the East End of London. The market square takes the place of a former street market which prevented a proper traffic flow. Vehicular traffic is excluded from the new shopping centre, delivery of goods being from the rear. In all, 1300 acres of land are being acquired by the London County Council, the new landowner on a large scale, working on behalf of the community to secure comprehensive town planning.

Human needs must be the starting point for good architecture and town planning. They are inescapable as a basis for the design of residential areas, but in the Cores of towns and cities their influence can easily become more remote. The very fact that they are the centre points of human activity means that there are many opportunities for obscuring, distorting, or even suppressing human needs. Land is in great demand, its value is therefore high, there is business to be done and profits to be made. Architectural and town planning standards do not today naturally take first place as they did in the eighteenth century, when human needs for the privileged section of society were paramount. The problem now is how to parallel such achievements in the twentieth century for society as a whole. To do this it is necessary to understand the role of the intermediary in the process of town development. One or two examples of deterioration in the design elements of city centres will illustrate the harmful effect of allowing intermediary demands to take priority over human needs.

The courtyard, for instance, was once a noble element, an enclosed space to be enjoyed by those who lived and worked in the surrounding buildings as well as by the casual visitor. With the growth of towns, ever-rising values of land have tended to squeeze space out of architecture, and space in architecture is life. In this squeezing process the courtyard has eventually emerged as the internal light well which, but for town planning and health by-laws, would probably disappear altogether. Space is now money and is measured in terms of pounds and shillings per square foot. Thus the intermediary demand for a maximum return from building activity overpowers the original human need for pleasant working conditions. From good architecture and fine layout with very little or no control by Acts of Parliament or local by-laws, we have descended to second-rate building and poor layout with



FIG. 97: An aerial view of central London on either side of Regent Street. Here can be seen, quite clearly, the effect of the break-up of large-scale ownerships of land and of rising land values. The courtyard, once a noble architectural element, has been replaced by the internal light well. Town planning and architecture cannot thrive under such conditions and town planning regulations to secure adequate daylight and avoid redevelopment of individual sites are no substitute for comprehensive redevelopment.

extensive controls as doubtful means of preventing the chaos which conditions would otherwise produce.

When in recent years there was a fuel crisis in Britain with lengthy power cuts, the great demand for candles to enable people to work in the offices during the day in the big city centres was in itself a reflection of the lowering of standards and the disappearance of daylight as an essential element in the design of buildings.

The effect of similar influences on cultural buildings and shopping centres is no less harmful. Theatres and cinemas are stripped of their architectural significance and become street buildings with their functions expressed only in their façades; advertisements become the dominant 'decoration'. Shopping centres, instead of being safe places free of traffic where people can buy their goods in comfort, are distorted by the intermediary requirements of the shopkeepers into ribbon development of shops

along main traffic roads. A complicated system of land values in built-up areas, based on trade, profit and location factors, determines to a great extent (unless wholesale reconstruction is possible) the general pattern of development. Thus, architects start with conditions which are not intended to give the proper basis for good design.

The system of land tenure is, of course, a fundamental factor. The grand manner of the eighteenth century owes a lot to the large-scale ownership of land. With its break-up there was also a break-up of the architectural profession (in its integrated form) into a series of splinter professions. The piecemeal divisioning of land required surveyors to estimate cost, lawyers to draw up agreements and interpret the law, engineers to design the roads (now separate little pieces of town planning), architects to do their best with the resulting awkward-shaped plots, and 'town planners' to clear up the mess - if they could. It is now more widely realised that co-ordination must come at the beginning of the design process and that although the architectural methods of the eighteenth century are not necessarily valid today, at least the fundamental basis of large-scale ownership of land allowed architects and planners to produce works of unquestioned merit. In this century we are seeking a similar basis but on more democratic lines. The state and the local authorities, representing the community at large, have been given powers (in some countries to a greater extent than in others) to acquire large areas of land which will enable outworn towns and city centres to be comprehensively redeveloped, or new towns to be designed as a whole on virgin soil outside those cities.

These changes are an essential background to a consideration of the detailed problems of satisfying human needs in the design of the centres of towns and cities.

The Core should provide for the interweaving function of work, trade, culture, education, recreation, government, and transport. It is, however, something more than a machine for collective activity and should express in appropriate architectural forms the character, traditions and aspirations of the people whom it serves. The Core of an English town may have the same functional requirements as that of an Italian or Indian town, but I hope we shall never be so falsely international in outlook that we give them the same architectural expression. During the last ten years or so there has been a reassessment of the value of national and regional character as expressed by local traditions and materials, but

insofar as the aesthetic convictions of their clients are concerned architects are still suspicious and often rightly so.

A new technique of patronage has been growing up, with the public authorities taking the place of the wealthy individual. Whereas the latter had considerable experience in differentiating between the good and the bad, and for the most part knew what he wanted, committees generally are still finding their feet aesthetically as it were. They find it difficult to interpret the aesthetic wishes of the community they represent because either it has no views or no means of expressing them. This is the problem of public patronage which is not solved by ignoring ordinary people's aesthetic ambitions nor by pandering to illiterate tastes. On the other hand, architecture is more than the exclusive art of the technician and depends for its vitality on a healthy co-operation between client and architect in the solution of its aesthetic problems. This will not be achieved overnight, but the attempt by the community to give the architect the right basis for his work should be paralleled by an attempt on his part to develop such relationship with the community.

The human aspects of the Core will then not only be a matter for discussion between architects, but also between architects and people. This may sound obvious, and yet how often do we still see the master plan for city and town reconstruction which superimposes an abstract conception originating in the mind of the architect or planner as something which is good for the people whether they like it or not. A plan for the town of Zaparozhie by the Dnieper Dam in the Soviet Union, prepared ten years before the war, provided for a garden city with an open 'Core' surrounded by neighbourhoods which were divided by green wedges coming right into the city centre. In 1939, a new plan had been drawn up and drastic revisions were being carried out on the ground. The green wedges were being built upon, and the low buildings in the centre were being reconstructed to give a more town-like atmosphere. These changes were the result of public discussion when the plan was criticised as lacking in town character and being too disintegrated in form.

There can be no doubt that the best way to ensure that the human aspects of the Core are given full consideration from the outset is to create the opportunity for people to say what kind of a town or town centre they would like to have. Embarrassing for technocrats, perhaps, but exciting for architects with a social conscience.

The Commercial Core of London

W. J. HOLFORD (*London*)

The Core of London – one of the largest and most dispersed cities in the world – is in two parts, which correspond roughly to the ancient cities of London and Westminster. One of these, the commercial and financial centre, is still within the line of its medieval walls and is grouped around two focal points – St Paul's Cathedral on the west and the Royal Exchange on the east – of what is now known as *The Square Mile* – the 660 acres or so of the City of London.

The other centre is governmental and fashionable: it contains the Houses of Parliament, Whitehall and Buckingham Palace, all the big stores and theatres and hotels, and the high-density, high-cost district of Mayfair. It is known colloquially as the West End. These two sections of the Core of London are complementary rather than competitive. The 'city' is practically deserted by 6pm, while the West End begins to light up. Nor can the big restaurants flourish in the City since only one rather hurried meal a day is taken there; and, therefore, most entertainment – apart from that of the City Corporation and the Livery Companies – is carried on in the West End. The commercial centre is mainly composed of offices and warehouses, but carries a very high proportion of the building relics of London's past, such as survived the Great Fire of 1666. The extent of its accommodation is known, and the demands for floorspace are much more calculable than in the zones of mixed and volatile character in other parts of central London. The Inventory of Accommodation as at 1939 can be set out quite simply: of a total land area of 660 acres, 60% was built over, 24% represented streets, and 16% represented un-built land including courts and alleyways. The buildings contained 85.7 million square feet of floor space, of which 76.6 million was in general commercial and industrial use, and 9.1 million in special non-commercial buildings such as churches, halls, and public utilities.

This revealed the fact that, including basements, every acre of building land in the City had the equivalent of five acres of floor space upon it. If street space is added, then every acre of land had the equivalent of three acres of floor space.

Expressed in general terms, the density of the mercantile Core of London may have been said to be an average building height of four stories above ground and one below, over a coverage of 60% of the total land area. The density of the rest of Central London, including the West End, must have been even lower than this since it contains large open spaces and domestic squares. The green open spaces in the City are fairly numerous but they are very small: before the war they totalled only eleven acres.

World War II destroyed altogether 27.6 million square feet of floor space,* nearly a third of the City's accommodation, and since then economic restrictions on capital expenditure have slowed down its replacement to an extremely low rate.

But what is of far greater interest to the architect and the urbanist is the town-planning control that has been introduced since the war, by means of the Planning Act of 1947. It is a commonplace to refer to *surgical* methods as being the only ones appropriate to the redevelopment of an ancient city. Le Corbusier demonstrated this brilliantly in relation to the old core of Paris, now a slum. Yet it remains doubtful whether, under present economic conditions and within a democratic constitution, the surgical or revolutionary method is the one best suited to an old and famous personality such as that possessed by Paris or London. Operations like those performed by Haussmann on the body of Paris, or by Robert Moses on the much younger New York, renew vitality for a time, but lead to further

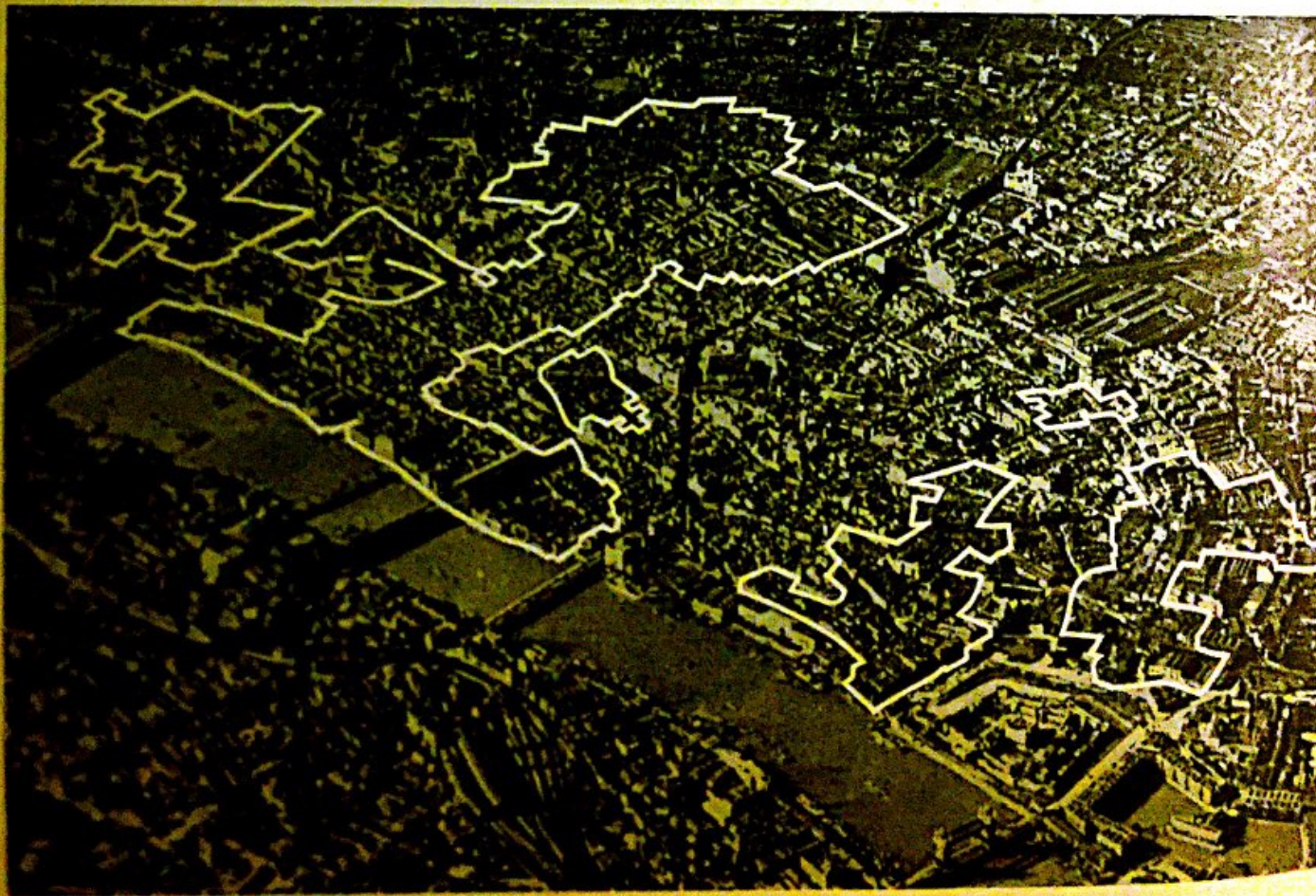
* To express this approximately in square metres, divide by 10.

thrombosis and congestion before long. It is now the turn of the dietician.

This is really the essence of the treatment proposed by the new planning system in Britain. The whole of England and Wales is – in terms of land – overcrowded. There are 750 people to the square mile. And the big cities and conurbations are overbuilt; for example, the working population of the City of London (a purely daytime figure) is more than 900 people to the acre. Before any general improvement in the form, appearance and convenience of buildings can be achieved, the ground itself has to be disencumbered to some extent. That is to say, there must be a limit to the amount of building (and therefore of potential occupation) which a square mile in the centre of a metropolis should contain.

Architecturally, it must rest with the designer whether this average quantum of floor space is expressed in a skyscraper of tower-like dimensions, or in a thin slab of eight to fourteen floors, or in a quadrangular or pyramidal composition of three to eight floors taking up more ground area. But the diet is the same for all; and in the City of London the

average allowance is now officially what it was by common practice in the eighteenth and nineteenth centuries – no more than five acres of floor space on any one acre of land. When the streets and open spaces are added in, this means that the new City, as it gradually evolves, will have no more than three times its total land area expressed in floor space – roughly the same proportion as was permitted after the Great Fire of London in 1666. The administrative instruments by which this control is exercised under the Planning Acts, are as follows: In the first place, there is a tax on all building development which raises to a higher power the exploitation of a site. That is to say, an owner may replace a war-damaged building by a new one, provided that its use remains the same and its cubic content is not increased by more than 10%; but if he increases the volume of building by more than this figure, or if he changes its use from a house to an office, or from an office to a shop, he has to pay, *in advance of building*, the whole of the difference between its former value and the new value, consequent on the permission to increase its bulk or augment its economic uses.



This tax, called a Development Charge, is now generally applicable in the United Kingdom, except to development by local authorities and government departments, who make instead an equivalent return to the national exchequer in due course, which is in fact a bookkeeping transaction. In one form or another, therefore, there is an economic curb on the developer's appetite.

The second and more interesting discipline controlling civic growth under the Planning Acts, is the system of 'planning permissions'. Like all controls this measure is salutary only when it is intelligently administered. In the hands of a stupid or blind bureaucracy it can only be deadening. The essence of the planning control is that permission to build may be refused, or modification of the design may be required if – in the view of the planning authority – the development is contrary to their own planning proposals (whether published or in preparation), or if it ignores generally adopted or specially applicable planning principles which the authority wishes to see observed.

There is, of course, an appeal to the Minister – the

central authority – against unreasonable decisions on the part of the local authority; and appeals are frequent in cases of refusal on grounds of external appearance, or minor changes of use. But should a local planning authority, as in Central London, come to adopt a carefully calculated method of controlling the *volume* or *density* of building in certain parts of its area, then it is very likely that the central and local authorities will support each other in establishing it. This is, in fact, the physical control over the building diet of the metropolis.

There are other controls, outside the Planning Acts, which are common to all highly developed urban communities. One is the control over capital expenditure which includes building among those commodities which have to be rationed in times of scarcity of raw materials or labour, and in periods of financial instability. This is the position in Britain at the present time. Although hopes were high at the end of the war that the peak of replacement of lost floor space in the City would be reached by 1960, capital expenditure on office buildings has been severely restricted. Even though London, the 'head

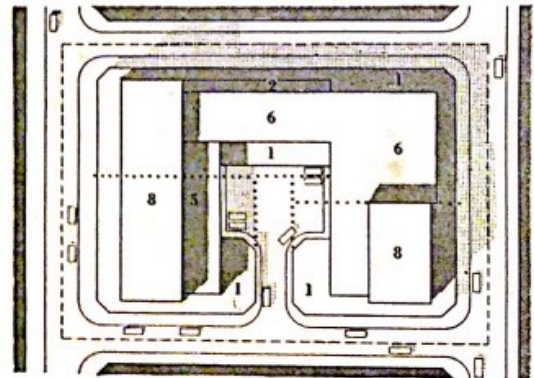
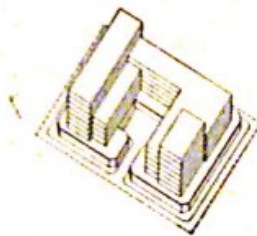
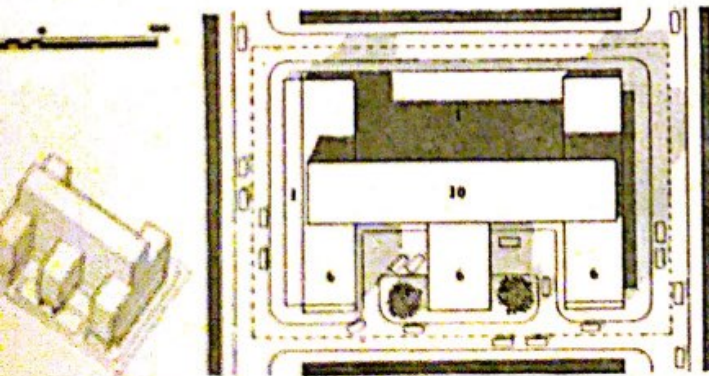


FIG. 95. Method of developing the average city block of just under two acres to one or many different ownerships in such a way as to maintain a constant plot ratio and provide good daylighting, easy access, and room for the parking of cars.

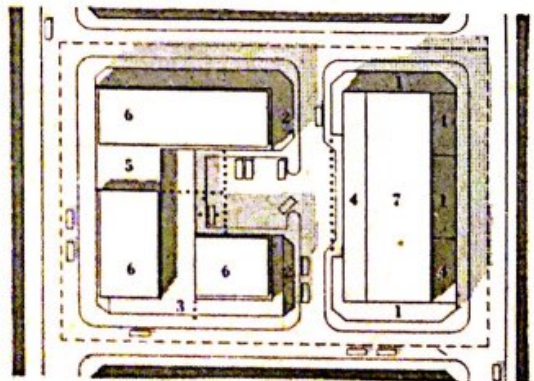
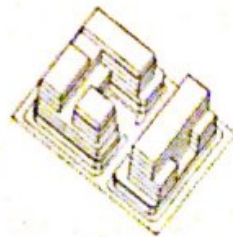


FIG. 96. AIR VIEW OF THE BOMB-DAMAGED CITY OF LONDON.

office centre' has had a large - perhaps an undue - proportion of the permitted total for the country as a whole, the reconstruction of the City, and the making good of normal replacement lost during the war, may well take forty years or more.

The other general control over central area obesity is that of the Building By-laws. These restrict the total and frontage heights of buildings and certain aspects of their layout, in the interest of public health and safety, and of fire protection. But there is nothing new in this form of control, which was as active in 1666 as it is today; only the details vary.

To diet a patient in the interest of health, convenience, and general comfort is not, however, to make him absolutely more noble or more beautiful. Just as nature must renew human tissue, so must the fabric of damaged and obsolete towns be recreated by their engineers and architects. A planning system can only create the conditions of recovery. It can make opportunities for a new and vital civic architecture, but opportunities require imagination as well as discipline for their full realisation.

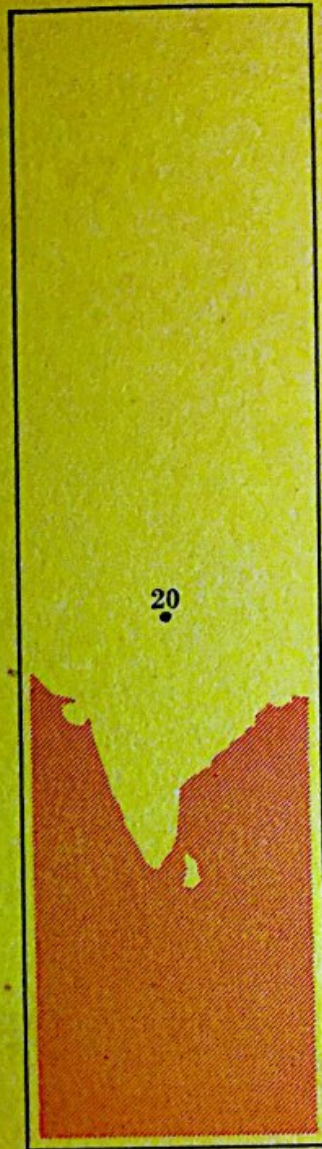
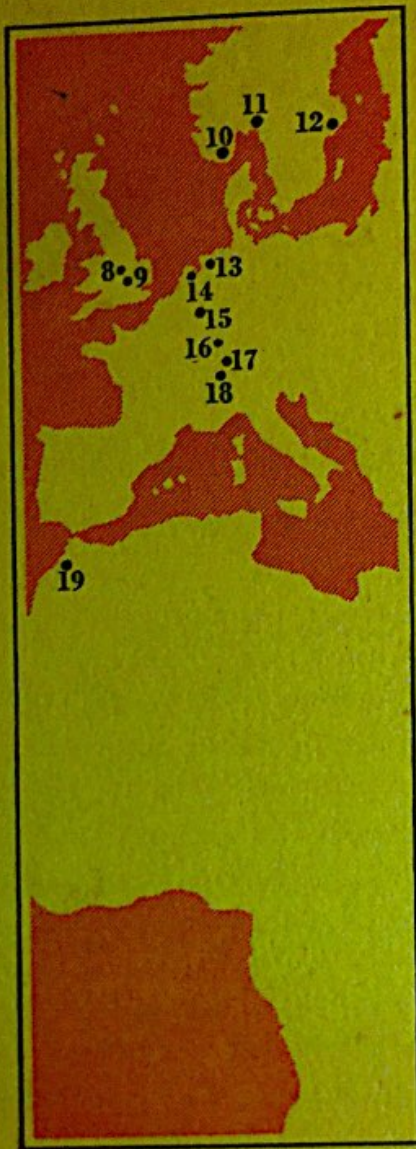
In many cities it might be said that the designers create *in spite of* the prevailing systems of land economics, of building control, and of architectural patronage. In the City of London this tendency is almost completely in reverse. Hardly any opportunities have been matched with an architectural skill of equal calibre. The planning system is vigorous in everything but in visual results. Buildings are slowly being constructed, some of them of considerable size; but although they are on the whole better lit, better serviced, more convenient, and less pretentious than the majority of those erected before the war, not one of them has achieved a total architectural expression which represents all these advantages, and at the same time gives the building a contemporary character and a touch of distinction.

It is probable that the Core of London, ancient and conservative as it is, cannot easily put on a new dress at the same time as it is undergoing a revolution in land control. Economically and socially, rapid change is taking place; aesthetically the standards of the past are clung to, as symbols of continuity and tradition in a changing world.

But London has renewed itself in the past, and the Core has changed its functions as well as its appearance over long periods of time. An exciting and productive architectural adventure awaits the building promoter - whether a public or a private body - who brings in first-class designing talent to calve the new planning system.

Examples of the Core: the work of CIAM

Cores within the Urban Constellation	Tyrwhitt
The Core of the Village	Nagele, Holland Kolsdal, Norway
The Core of a Small Town	Gustavsberg, Sweden
The Core of an Urban Neighbourhood	Chicago, U.S.A.
The Core of an Urban Sector	New York, U.S.A. Rotterdam, Holland Oslo, Norway Liège, Belgium Stevenage, Britain
The Core of a New Town	Stevenage, Britain
Search for the Core of a City	St Dié, France Rabat-Sale, Morocco Chimbote, Peru Paris, France
The Core of the City	Coventry, Britain Hiroshima, Japan Basle, Switzerland Providence, U.S.A. Lausanne, Switzerland New Haven, U.S.A. Medellin, Colombia
The Core of a Government Centre	Bogota, Colombia Chandigarh, India



100.

- 1 CHICAGO
- 2 NEW HAVEN
- 3 PROVIDENCE
- 4 BROOKLYN
- 5 MEDELLIN
- 6 BOGOTA
- 7 CHIMBOTE
- 8 COVENTRY
- 9 STEVENAGE
- 10 KOLSDAL
- 11 OSLO
- 12 GUSTAVSBERG
- 13 NAGELE
- 14 ROTTERDAM
- 15 LIEGE
- 16 ST DIE
- 17 BASLE
- 18 LAUSANNE
- 19 RABAT SALE
- 20 CHANDIGARH
- 21 HIROSHIMA

The big city, the residential neighbourhood, small towns, and country villages all come into the lifetime of experience of most men, and into the space-time of movement within an urban constellation. Though each is but part of the whole, each is – to some extent – a complete entity and therefore each must have its own heart or nucleus or Core.

Designing a Core for a village or town, neighbourhood or city, is not the same thing as designing a group of civic buildings together with their related open spaces. The Civic Centre – that monumental group of buildings standing in isolated grandeur – is not what is meant by the Core.

The Core is not the seat of civic dignity: the Core is the gathering place of the people. The location of the Core can be most easily seen when some collective emotion is aroused. Word goes round. Men leave their individual tasks or sectional interests and pour out into the street. Small excited groups are formed. These coalesce with other groups and move forwards towards . . . what? The market place? The cathedral square? The city hall? The common? The crossroads? Somewhere, whether planned or not planned, a place exists that provides a physical setting for the expression of collective emotion.

In many well-established communities the place of the Core is identical with the setting of the daily or weekly social promenade – the place where the people of these communities turn out to greet their acquaintances, observe their neighbours, gossip with their friends, and meet their sweethearts.

The main elements of the Core will be found in the designs that follow, but the key to the matter lies in the interaction of areas of stimulus and areas of contemplation – of visual dynamism with moments of repose.

Those who lived through the last war in blacked-out cities know well that when advertising signs were again lit up (in Piccadilly for example) the psychological effect was enormous, and had nothing whatever to do with the subject matter of the advertisements. Light, colour, and movement must be part of the architectural composition of the Core.

* The material in this introduction to Part 2 is largely derived from the preliminary work of the MARS Group (in particular Godfrey Semell) and from subsequent discussions with J. L. Sert.

(office and the journey home; concert hall and restaurant) – large areas of parkland are not necessary. In many French towns this repose is created by the sudden transition from bright light to deep shadow beneath quite a short avenue of closely planted trees.

The task of the architect and planner is to appreciate the attributes of each Core and enable these to be developed so that the people of that community can derive the greatest benefit from coming together. The possibilities are different at each 'scale-level' of community, and the need is for a hierarchy of Cores that punctuate the urban constellation – city plus countryside.

The cure for our widespread, amorphous modern cities is more readily achieved by the creation of new Cores – new concentrations of activity – that express the special values of each scale of grouping (and each phase of human life), than by endeavouring to slice the whole area into village neighbourhoods: by a visual emphasis upon centres of integration rather than upon bands of separation.

The exact size of each of the 'scale-levels' that compose an urban constellation must vary according to the density of development over the whole area (determined by its topography, its degree of industrialisation, and the social habits of its people). The following general descriptions may however serve as a guide:

1st Scale Level: COUNTRY VILLAGE OR URBAN HOUSING GROUP with a population of about 500 people. This represents the smallest unit in the western world that can support primary social needs. It is just possible for this unit to provide a satisfactory total environment for the very young and the very old (for the extremities of human life). The position of its Core is usually at a point of contact with the outside world – at a crossroads or before a railway station, etc.

2nd Scale Level: RURAL MARKET CENTRE OR URBAN RESIDENTIAL NEIGHBOURHOOD of somewhere between 1500 and 3000 people. This forms the largest so-called 'face-to-face group' in which all residents at least know one another by sight. Many well-established communities of this size exist throughout the world, and the Core is usually found at the market place or shopping centre.

3rd Scale Level: TOWN OR URBAN SECTOR with somewhere about 50,000 people (sometimes as few as 25,000, sometimes as large as 100,000). This represents the smallest unit that, in the western world, can be socially and economically self-sufficient: i.e., that can provide some variety of industrial employment, an all-round education, a good range of shopping and entertainment facilities, etc. The Core of these communities usually takes on a civic character.

4th Scale Level: CITY of say 250,000 up to perhaps 1,000,000 people (ideally composed of many smaller community groupings). This scale-level represents the smallest aggregate of population in the western world that can provide all that our civilisation has to offer in the form of culture, education, and entertainment, as well as a balance of large-scale industry. At the same time, a city of this scale-level is the largest unit that can still possess a single concentrated Core. It is here, in the Core of the City, that the integration of the plastic arts can be given its most dramatic expression.

The combination of these four scale-levels forms the urban constellation – that area within which a full life can be lived with freedom of opportunity for the development of the potentialities of each individual.

5th Scale Level: METROPOLIS, the important international centre of several million people (again ideally composed of a hierarchy of smaller community groupings). In this final scale-level, the Core, for purely physical reasons, must comprise a series of several related centres. For example, in London the Core is split into four: its emotional centre is still before St Paul's Cathedral, its national centre is Parliament Square, its political centre Trafalgar Square, and its social centre Piccadilly Circus.

The examples of the Core displayed at the Eighth Congress of CIAM came from countries in all parts of the world, as can be seen on page 102. Each example was presented in the form of a grid of panels following the order of the MARS Grid shown on page 107. This MARS Grid (prepared by the MARS Group of CIAM in London) was a simplification, for the special purpose of the Core, of the CIAM Grid which was prepared by the ASCORAL Group of CIAM in Paris for the Seventh CIAM Congress at Bergamo in Italy in 1949. This is reproduced as an Appendix, together with the description of it given by Le Corbusier at the Bergamo Congress.

During the Eighth Congress at Hoddesdon, a selection committee went carefully round the exhibition of plans for the Core, choosing those schemes and panels that were most suitable for reproduction in this publication. Most of the plans shown have already received official approval and are in various stages of construction. A few student schemes are also included to show the trend among some of the younger generation.

These twenty examples of the Core make it evident that the actual design of the Core usually follows one of a few general forms – whether it be the Core of a city or of a village. These forms are determined by the different ways in which the buildings composing the

FIG.106.



Core have been grouped, and they can be classified, more or less clearly, as follows:

A Enclosed Formal: In layouts of this type, the different buildings are closely related and visually tied together. The open spaces are an extension of the enclosed ones – integrated with the architecture and treated in the same spirit.

(Examples: Lausanne, Chimbote, Oslo, Bogota.)

B Enclosed Informal: Here, also, the buildings are closely related, but the whole layout is informal. Outstanding examples of this type can be found in many old medieval cities.

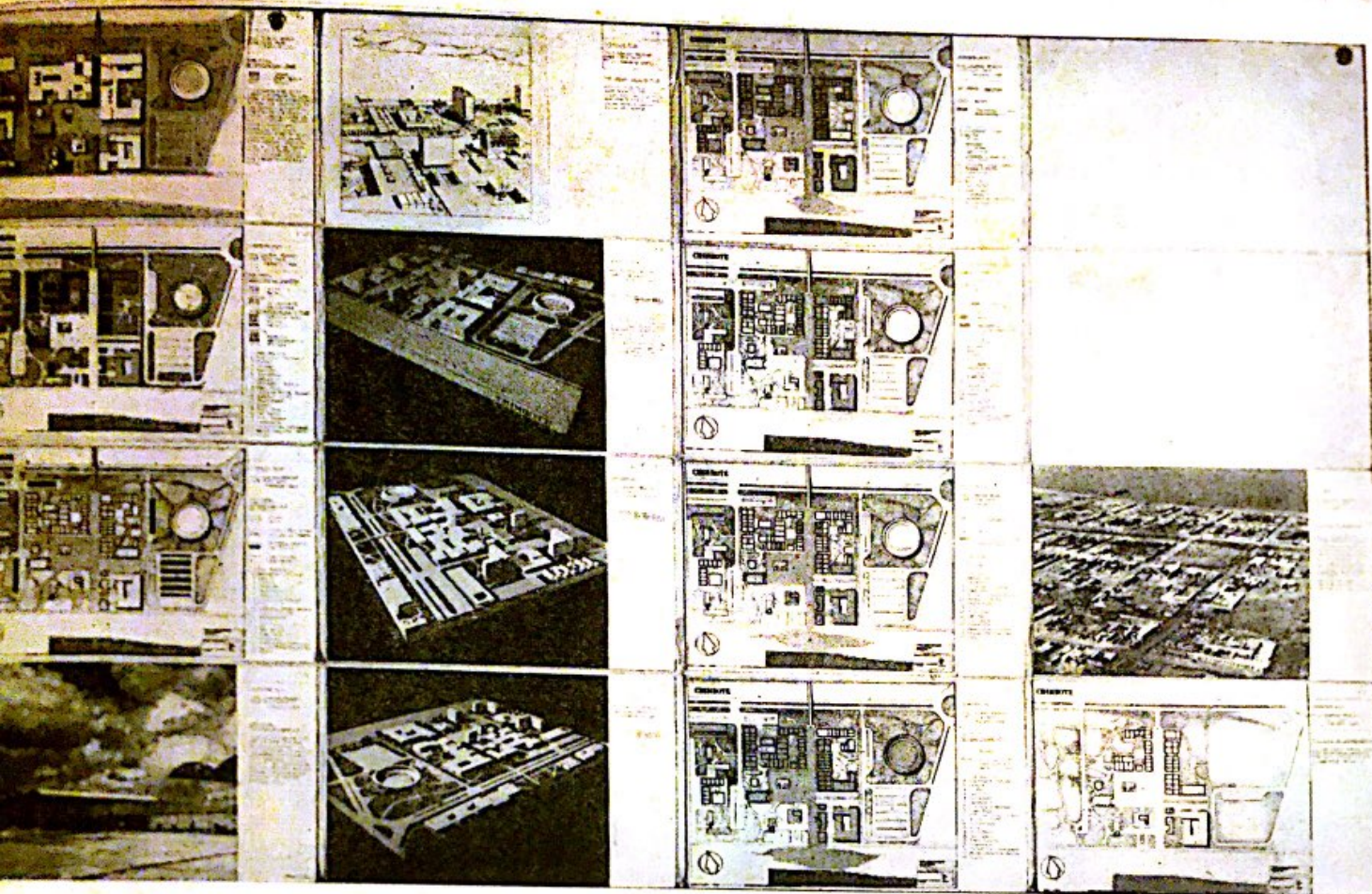
(Examples: Coventry, Kolsdal.)

C Open Informal: Here, buildings laid out in an informal way count as independent units and the relationship between the different buildings is not so close. Landscaping elements have greater importance than in the enclosed layout. Open spaces dominate the plan and are less classified than in the formal layouts, generally counting as one large space, sometimes visually unlimited.

(Examples: Hiroshima, Gustavsberg.)

D Open Formal: Similar to the preceding classification, but the buildings have been laid out to compose a formal pattern.

(Examples: Medellin, Chandigarh.)



MARS GRID

Standard arrangement of panels: TOTAL DIMENSIONS 198x84CM OR 78x33IN: EACH PANEL 33x21CM OR 13x8½IN

THE REGION	THE PLACE	THE CORE: LAYOUT	THE CORE: EXPRESSION	THE CORE: SOCIAL LIFE	THE CORE: REALISATION	
Scale Level NAME OF PLACE Country Population Architects	1A Mean Temp North Point Wind Rose	2A 3 DIMENSIONAL PLAN OF AREA	3A 3 DIMENSIONAL PLAN OF CORE	4A SKETCH OR PHOTOGRAPH	5A DAYTIME Buildings and land in use	6A THE CORE IN THE PAST
GENERAL INFORMATION	1B	2B LAND USE AS PLANNED IN AREA	3B LAND USE AS PLANNED IN CORE	4B SKETCH OR PHOTOGRAPH	5B EVENINGS Buildings and land in use	6B THE CORE 30 YEARS AGO
MAP OF REGION	1C	2C COMMUNICATIONS AS PLANNED IN AREA	3C COMMUNICATIONS AS PLANNED IN CORE	4C SKETCH OR PHOTOGRAPH	5C SUNDAYS Buildings and land in use	6C THE CORE AT PRESENT
MAP OF DISTRICT	1D	2D PHOTOGRAPH OF AREA (or blank)	3D PHOTOGRAPH OF CORE (or blank)	4D SKETCH OR PHOTOGRAPH	5D SPECIAL OCCASIONS Buildings and land in use	6D PLAN FOR THE CORE 10 YEARS HENCE

FIG. 107.

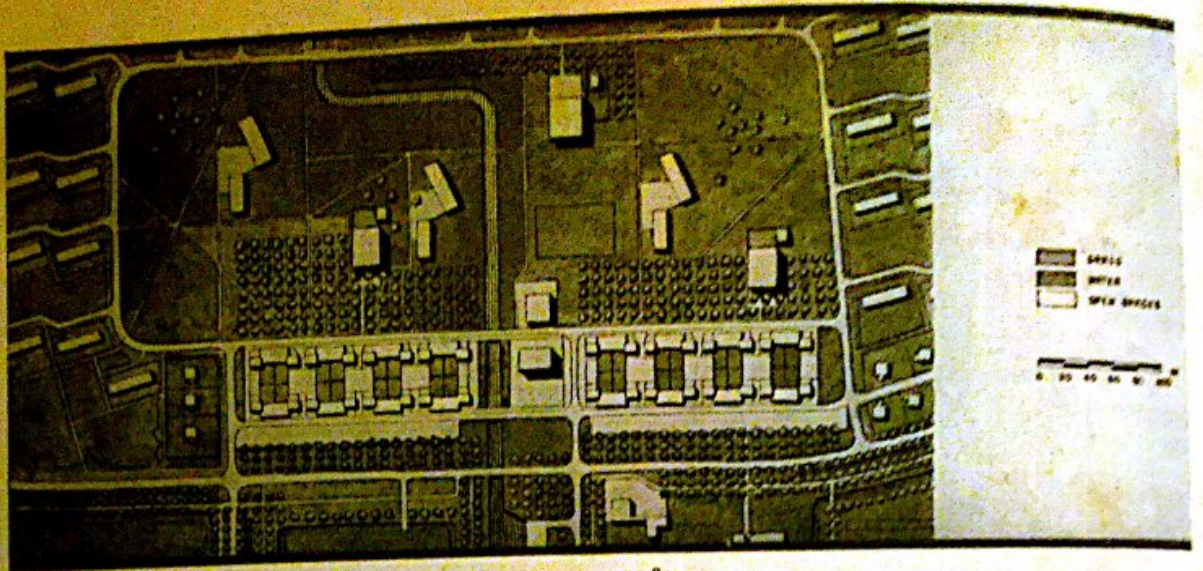


FIG.3A.

The land is quite flat and entirely taken up with agriculture. There are strong winds from all directions. The chief object was to create the Core as a free space sheltered by trees - a human oasis within the mechanised landscape of the 'polder'.

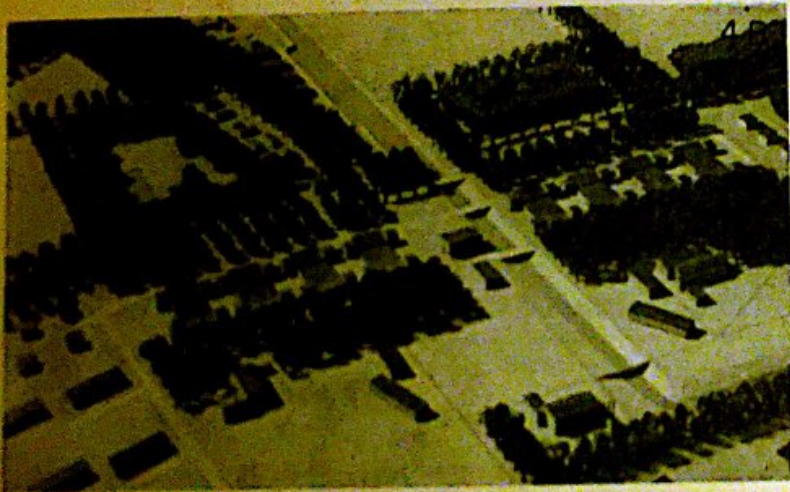


FIG.4B.

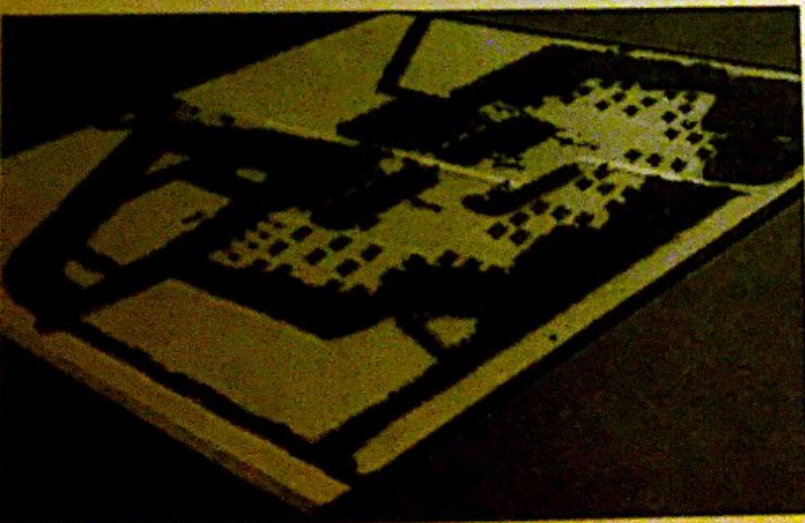


FIG.4A.

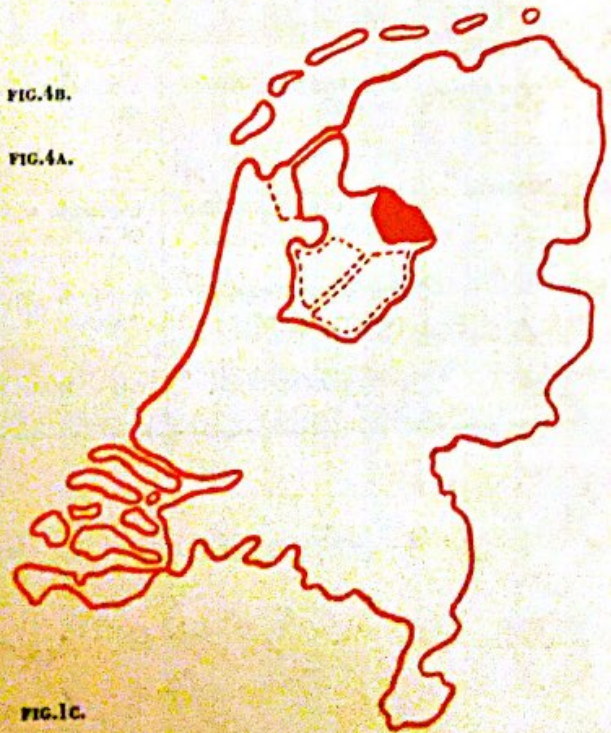


FIG.1C.

HOLLAND : Nagele

a new agricultural village : CIAM Group 'The 8'

POPULATION : 1,400

CLIMATE : 63°F SUMMER

37°F WINTER

RAINFALL : 28"

Nagele is one of ten villages being built on reclaimed land in the N.E 'polder' of the Zuiderzee (see opposite). The inhabitants will mostly be farm workers. In laying out a new town or village it is especially important that the structure of the plan is sound so that, even though in time all the buildings may change, the structure can still maintain a unity. In this case the problem was to discover a form for a new village in a mechanised landscape which does not only serve its own 1400 or so inhabitants, but also another 1200 or so coming in from some 200 farms around the village. A complication was that each of the economic groups lives separately from the others – farm workers, shopkeepers, doctor and schoolmaster, etc, and the well-to-do farmers. The programme for the village was as follows: About 130 dwellings for farm workers with vegetable gardens of 1300 square feet (400 square metres); about sixty dwellings for non-farm workers; about forty middle-class houses; and about ten for the well-to-do (total 240 dwellings). In addition, three churches and three schools (for the three main denominations); a village hall; a café-hotel near the bus stop; two public houses; about thirty shops (combined with dwellings); about thirty workshops (some combined with dwellings); storage yards at the ship canal; sports field and building; swimming pool; cemetery; and village woodlands.

'The character of the "polder" is a checker-board of intensive, mechanised agriculture, upon a framework of rigidly straight roads, a place where one cannot move about freely. The character of a Core – of the agora – is a place where one can stroll about, with hands in one's pockets, and do as one likes. This kind of a place – not governed by the road system nor by agricultural mechanisation – is especially necessary in the "polder" villages. We also know that a Core – in our sense – must somehow express a unity of life, but at present we have only separations – and in Holland these are not only based on different income groups but also on religious groups. In the traditional village plan there are three churches and these are not in the centre of the village but on the outskirts – religion has gone to the outskirts of the village. In this new village we have expressed the need for free space by a central open green, sheltered by trees, and upon this green the three churches have been brought together. Between the green and the main road is the shopping centre and also the village hall.' *C. Van Eesteren.*

NORWAY : Kolsdal

a new housing project : Gegenbach and
Mollö-Christensen

POPULATION : 3,000

CLIMATE : 56°F SUMMER
35°F WINTER

RAINFALL : 47"

Kolsdal is a new settlement of 3000 people outside Kristiansand, a town of 25,000. The people will mostly travel into Kristiansand for work, education, shopping, and pleasure, so that the local Core is limited to the provision of small shops, nursery school, post office, welfare clinic, restaurant, and clubrooms. These are situated within the apartment blocks facing on to the circular open space. The broken character of the ground necessitated a greater density of building than is customary in Norway. To compensate for this, the design is 'intended to give the people an environment contrasting with the apartments'.



FIG. 4b.

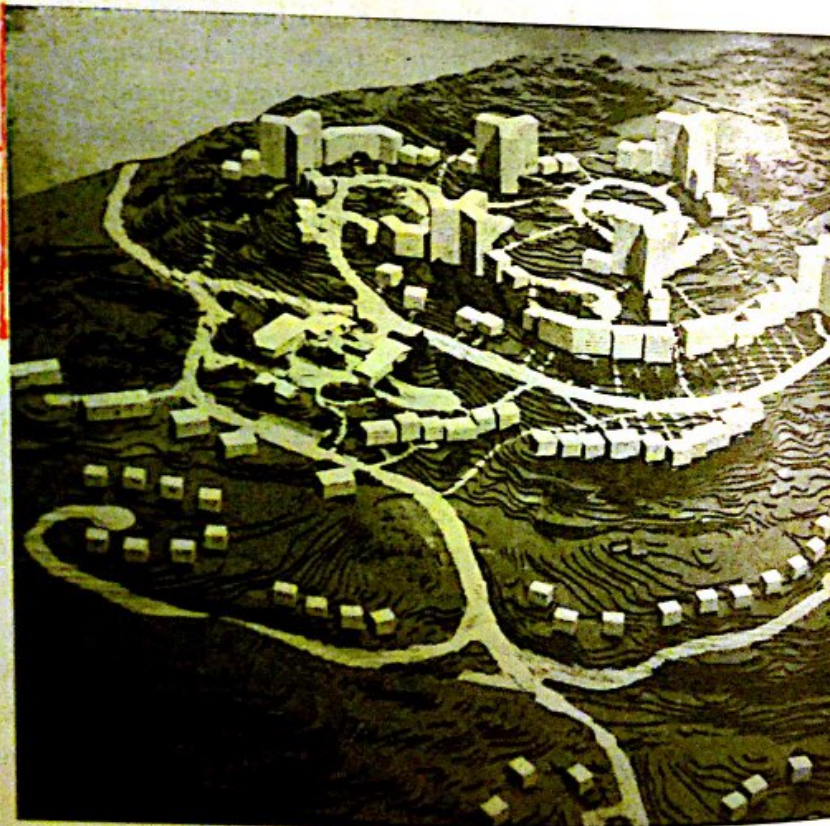


FIG. 4a.

SWEDEN : Gustavsberg

a new centre for an industrial town : Olof Thunstrom
and Swedish Co-op

POPULATION : 6,000

CLIMATE : 63°F SUMMER

27°F WINTER

RAINFALL : 19"

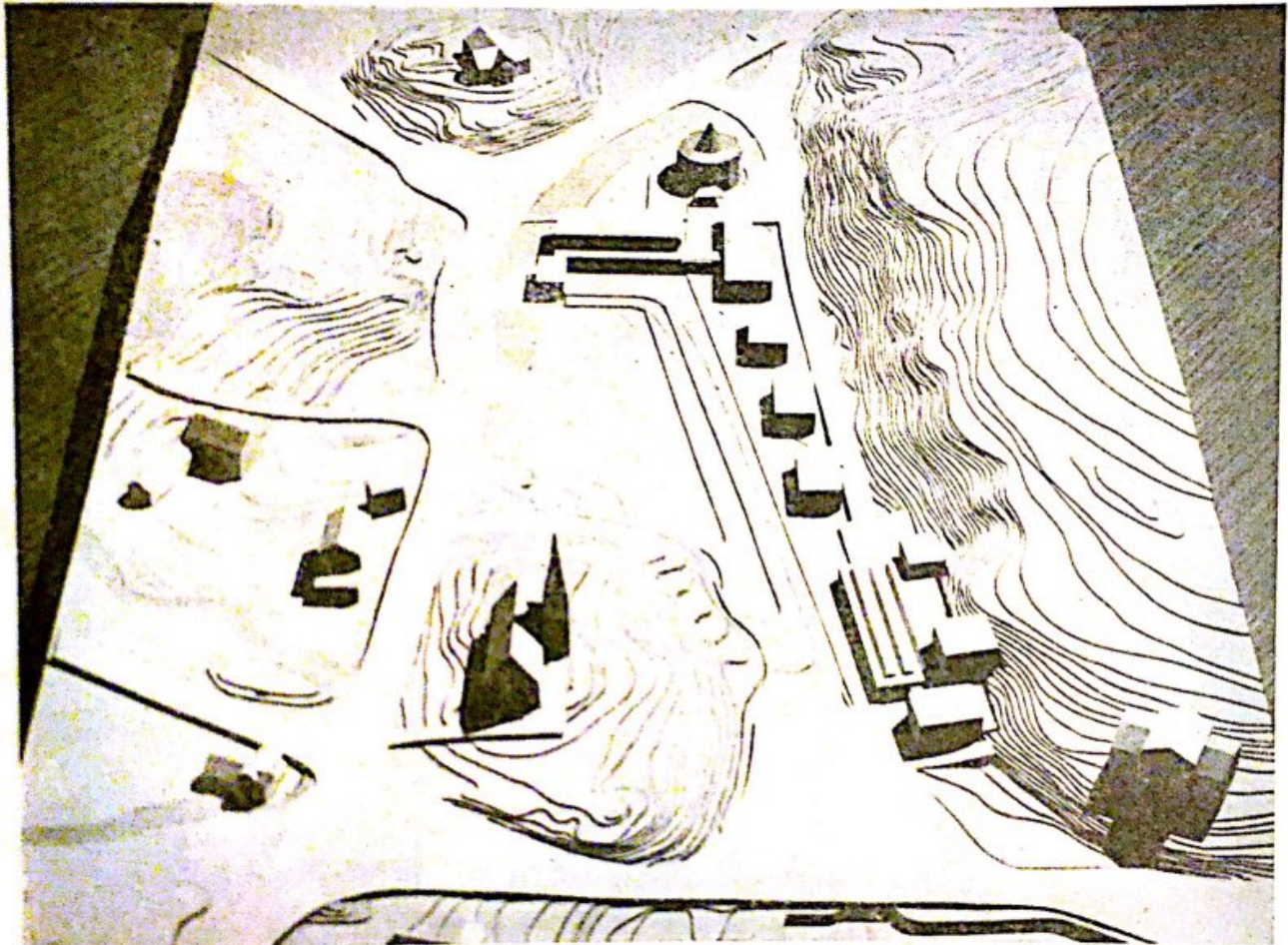


FIG. 1A: Model of the Core from the west.
FOREGROUND: An old church and inn and new co-operative store.
BACKGROUND: Recreation building and new
assembly halls, library and council chamber.

Gustavsberg is a small group-industry town (pottery, pressed steel, enamelled goods) east of Stockholm. It was run by one large firm until it was taken over by the Swedish Co-operative Union in 1937. The present population of 3700 is increasing and expected to reach 6000 by 1960. The new Core is strategically located in a little valley opening onto the bay. The buildings are strewn along one side of the valley facing upon a large green.

Gustavsberg

The town is at the head of an inlet of the sea; the country is wooded and very hilly; development is scattered and the general character is that of a 'town in a park'. It was decided that an enclosed square would be out of keeping with this character. Residential areas are shown in yellow, industry in violet, and buildings used by the community in red.



FIG.2B.

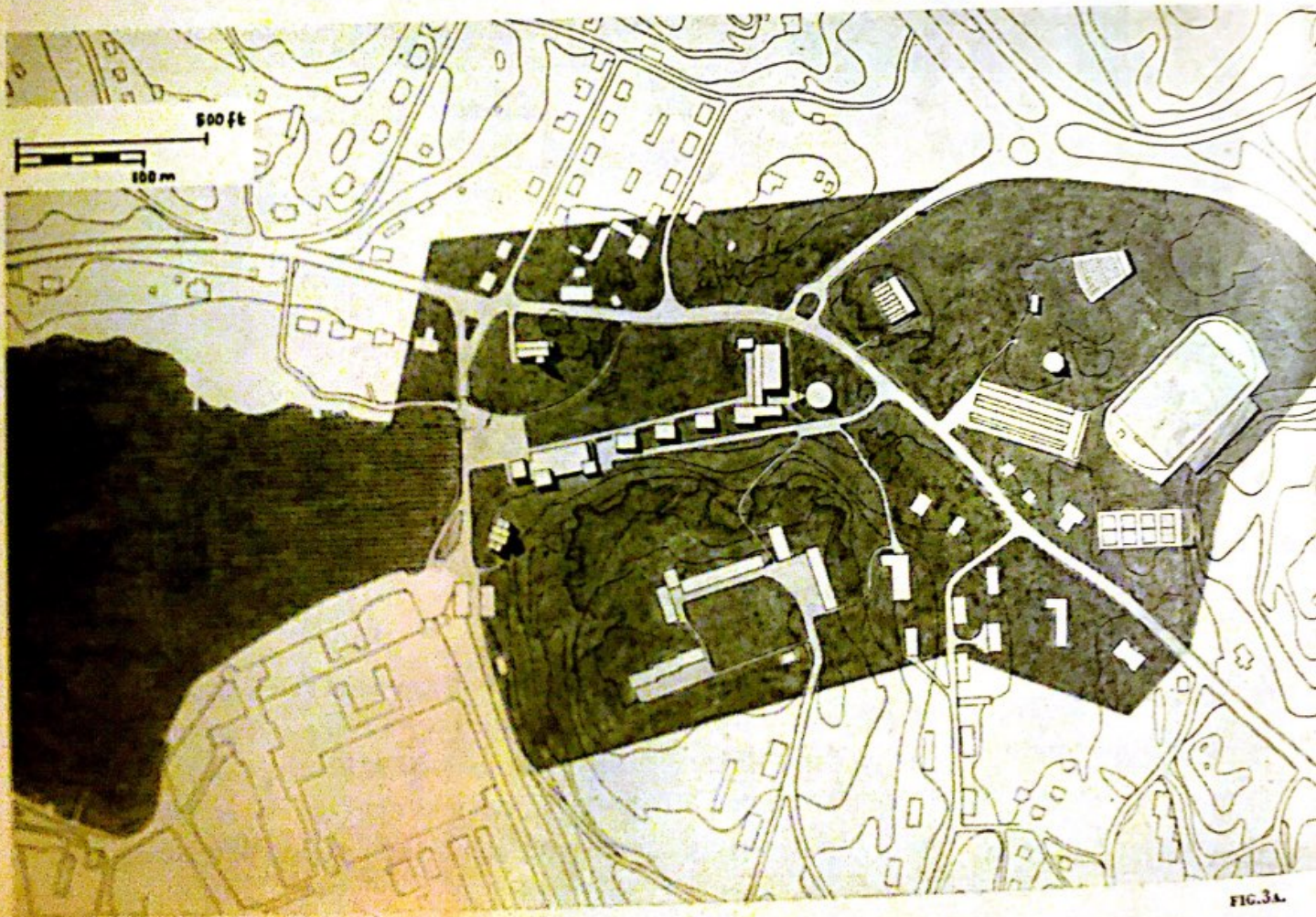


FIG.3A.

These four maps show in red the location of 'Core-making buildings in Gustavsberg, before 1920, 1920, 1950, and the plan for 1960. In the early days there was little except the large firm; but an old inn near the harbour (3), the church on a little hill (2), and the bakery by the stream in the valley (4), provided between them a kind of rallying area. Since then other 'Core-making' buildings have grown up all over the area, though a clubroom (9) and the new school (17) also ring the same valley. This valley is now drained and the new plan gathers most of the scattered 'Core-making' buildings within it.

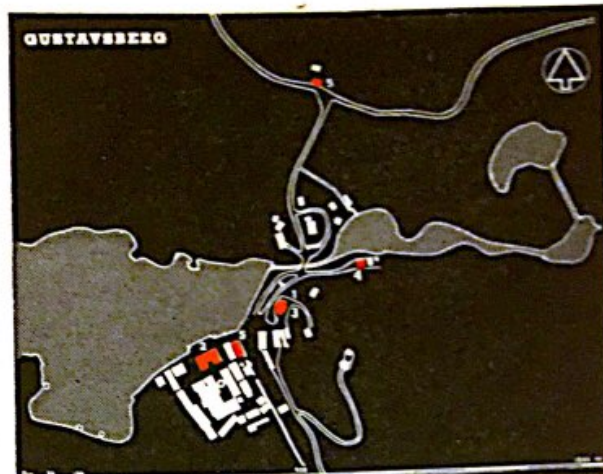


FIG. 6A.

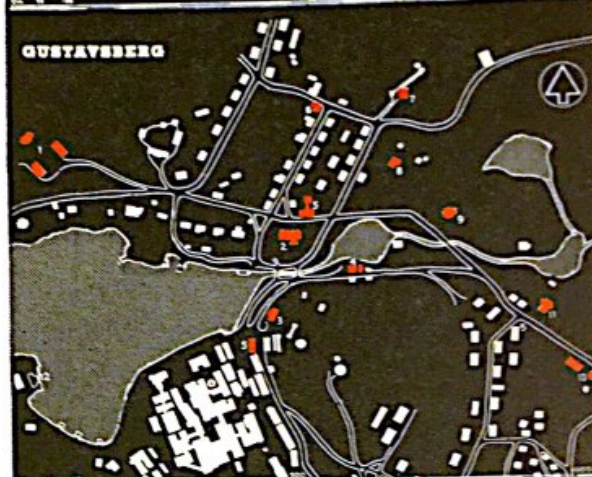


FIG. 6B.



FIG. 6C.



FIG. 6D.

U.S.A : Chicago

project for a city neighbourhood : Students of the
Institute of Design

POPULATION : 5,000

CLIMATE : 74°F SUMMER

25°F WINTER

RAINFALL : 32"

This Core was designed as a modular unit for a typical residential neighbourhood, apart from and in addition to a commercial shopping and entertainment centre. In this instance, the Neighbourhood Core is shown between the two enormous slabs of apartments, containing 1404 dwellings, which are being erected in the South Side of Chicago (see map below) by the New York Life Insurance Co. The unit, which is designed to serve the needs of small children, high school 'teen-agers', and adults, includes a nursery school and pet zoo; high school club and games room; adults' club; workshops; service shops; and post office.

FIG. 3A.

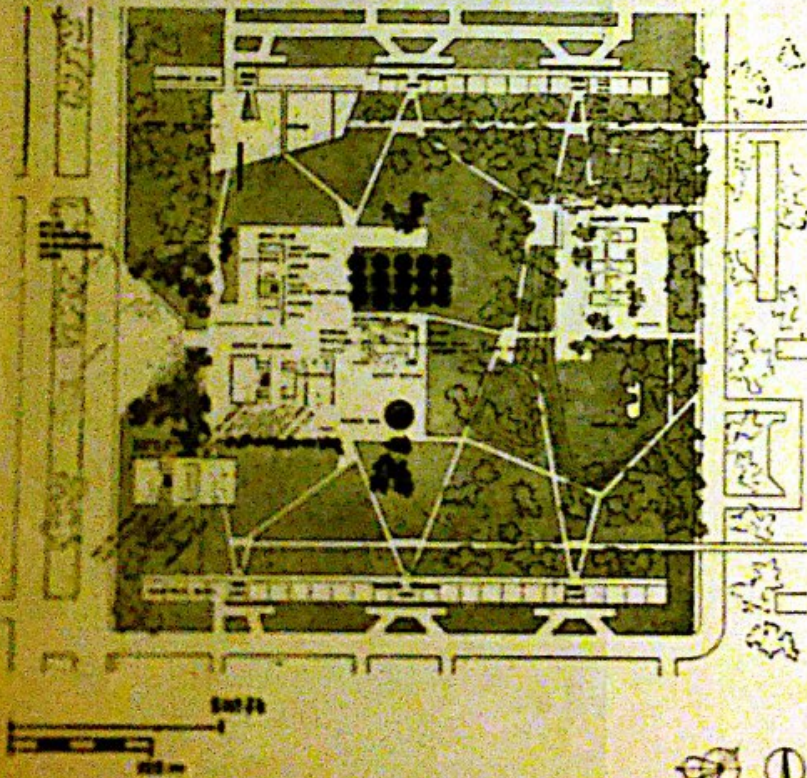


FIG. 3A. ARCHIT. PLAN OF CORE. Apartment slabs to north and south, nursery school to east, adults' club, auditorium and service shops to west. On the upper floor of the service block is the high school club (shown separately in the plan). This building group is also shown in the model (FIG. 4A), together with the ramped entrance from the street.

FIG. 4A.

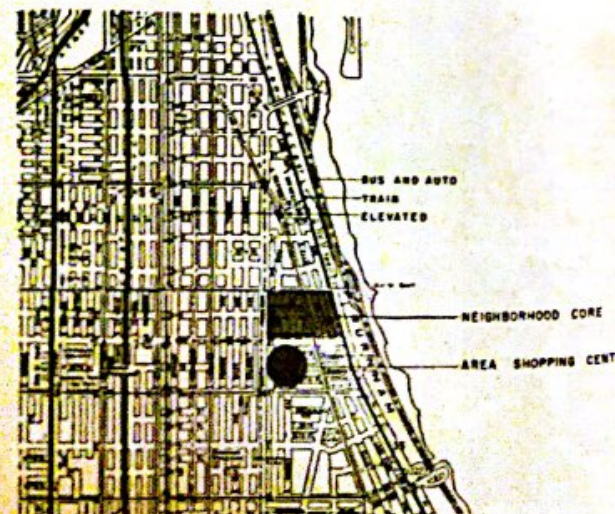
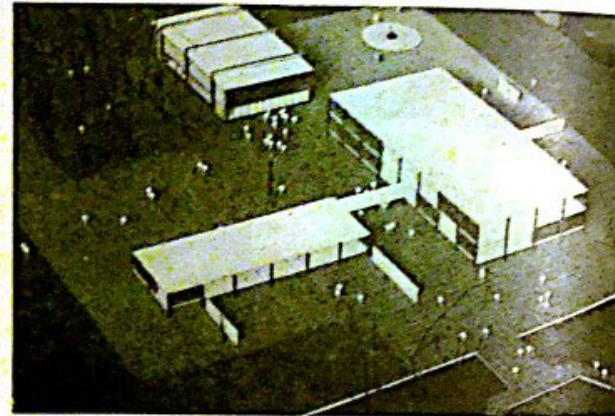


FIG. 1D.

U.S.A : New York

project for a city district replanned : Students of Pratt Institute

POPULATION : 150,000

CLIMATE : 74°F SUMMER
32°F WINTER

RAINFALL : 42"

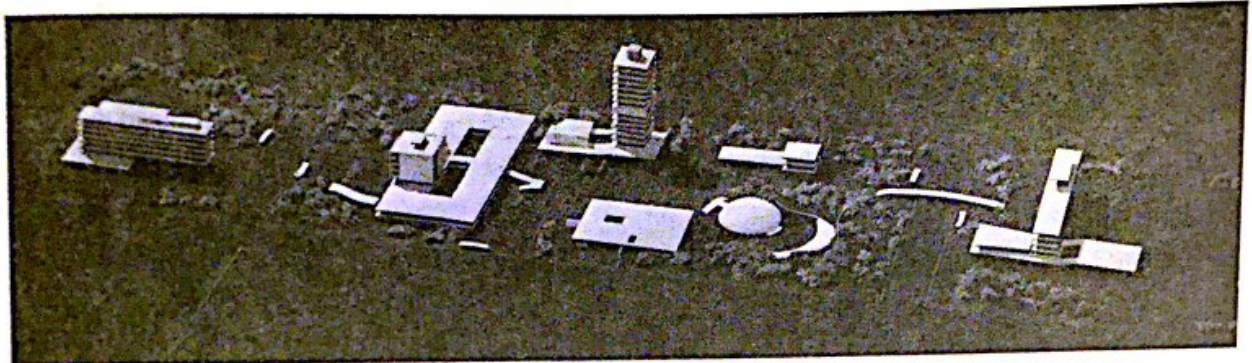


FIG. 1A.

Brooklyn, though technically a borough of the City of New York, is itself composed of a number of districts, each large enough to be a good-sized city (see map below). Yet these districts have no Cores. In them, shops, factories, commercial, and recreational facilities are dispersed haphazardly through the residential areas. In the plan, main traffic lanes flow around and not through the districts of Brooklyn. Shopping and entertainment are in the District Core around an open piazza, together with a public library, museum, and tall office block. Adjacent to the Core are the high school and the district hospital. An industrial area lies between two traffic routes, and there are fifteen Neighbourhood Cores containing local facilities.

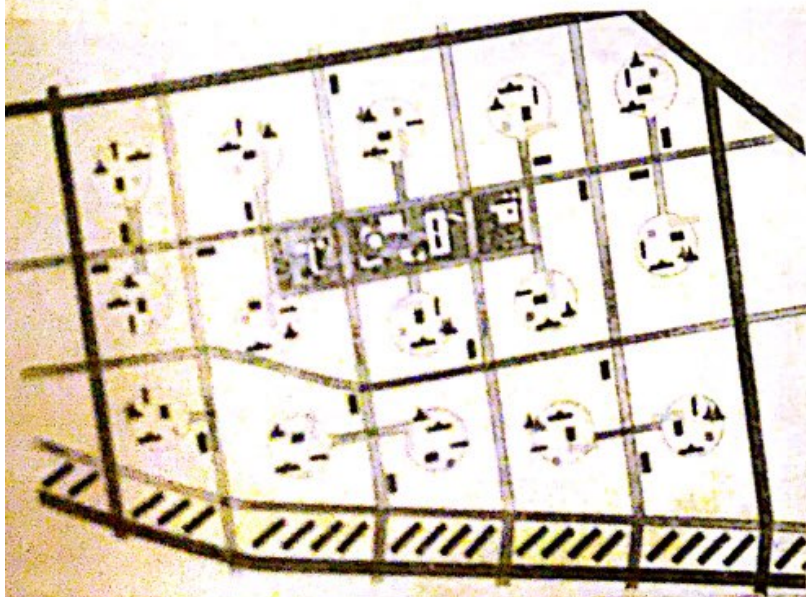


FIG. 1B.

TOP: Model of District Core seen from north.

LEFT: Diagram plan of Flatbush District and general map of Brooklyn. RIGHT: Proposed main traffic routes.

FIG. 2B.

FIG. 3B.

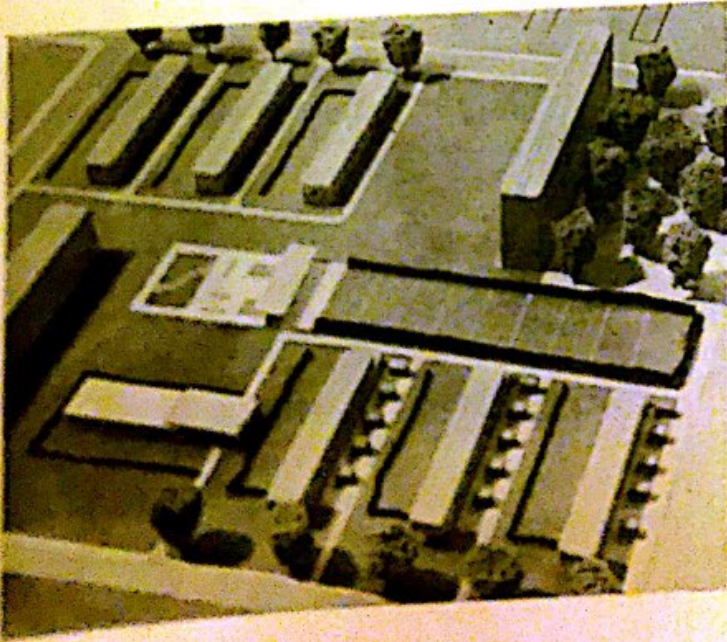
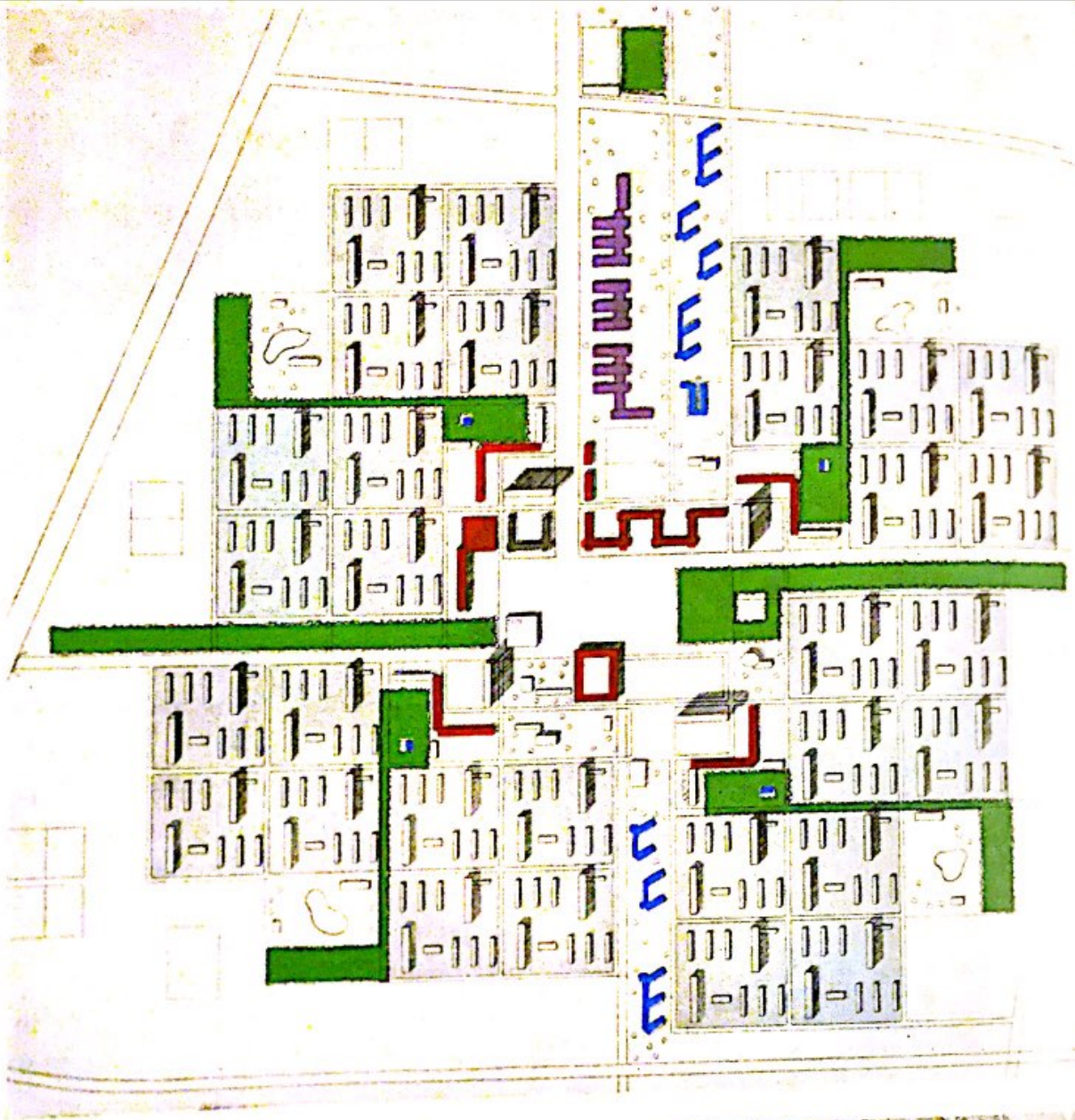
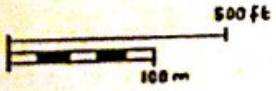


FIG. 3A.

FIG. 1C.



HOLLAND : **Rotterdam**

project for a new city neighbourhood : CIAM Group OPBOUW

POPULATION : 17,000

CLIMATE : 63°F SUMMER

37°F WINTER

RAINFALL : 28"

In this unofficial plan for a new suburb of Rotterdam (see coloured map on opposite page) the Dutch Group OPBOUW present certain principles of neighbourhood planning. The community of 17,000 people is built up from distinct units each of 500 people, and each containing row houses, walk-ups, and an apartment block, thus providing a variety of dwelling types for small and large families around a miniature local Core (see photograph of model). These units are arranged into four neighbourhood groups (each about 4000 people) which converge towards a large central square which forms the common meeting place – day and evening, weekdays and holidays. The point of convergence of each neighbourhood group is emphasised, or signalled, by a tall slab building containing small apartments for single and aged people (see also Fig.67, page 68). The central square together with the activities that surround it forms the Core, the living heart of the whole community. To the north (the top of the plan opposite) are the retail shops and some workshop industry; to the south are cultural and administrative buildings; to the east are the recreational areas – a formal pond that can be used for skating in the winter, public gardens, and a long promenade; to the west is entertainment in the shape of cafés and a bandstand. A squared up 'inner ring road' connects these activities, links the four neighbourhood groups and keeps the Core free from traffic. Outside this road and between the neighbourhood groups are those activities that only occupy a section of the population, such as the churches (Catholic and Protestant), schools, sports fields, and light industrial buildings. As pendants to the central Core, four neighbourhood recreation parks have been created, each linked to the centre by long promenades.

The intention of this scheme is to express:

1. That the Core is not one space or one activity, but an idea expressed now here, now there, now by one activity, now by another, though reaching its highest expression within a definite but not rigidly bounded space.
2. That a scale of 'Core-forming' activities can be drawn up, each of which needs to be placed in a certain relationship to the Central Core.
3. That this distinction of elements must not lead to complete separation of them from one another.
4. That the total area must express a dynamic continuity of space, giving a wider value to each of its components.

BELGIUM : Liège

a new suburban development : Groupe L'Equerre

POPULATION : 20,000

CLIMATE : 64°F SUMMER

33°F WINTER

RAINFALL : 29"

Flemelle Haute is a new suburb of Liège that is being built up of four neighbourhoods, each consisting of several primary housing groups. Instead of providing each of the four with a 'self-sufficient' neighbourhood centre, this plan provides a Spinal Core along which all the facilities required by the whole area are distributed. This pedestrian spine is linked by footways to Local Cores which contain an open space – a 'carnival area' – surrounded by a few local shops, a community hall, and a nursery school. Once the area of such a Spinal Core has been reserved by the planners, it can be gradually developed with schools, shops, churches, offices, an open-air market, and all other communal buildings; some erected by private enterprise, some from the public funds. In this plan for Flemelle Haute, the Spinal Core leads in one direction towards the city of Liège; in the other it terminates in a large sports area, with swimming pool, restaurants, etc. The development of a Spinal Core requires the establishment of a system of pedestrian ways threading through the district quite independently from the traffic routes.

FIG.3C.



NORWAY : Oslo

a new centre for several suburbs : CIAM Group

POPULATION : 25,000

CLIMATE : 63°F SUMMER

24°F WINTER

RAINFALL : 23"

Tvetan is a developing suburb of Oslo. Apartment blocks are to be built near the new Core, with row houses and single family houses further out. The new Core will serve three folk-school districts, each of about 8000 persons. It is to be situated on the slope of a wooded hill and is planned as a pedestrian island, approached by traffic on three sides and backed, on the fourth side, by the trees of the forest. Footways will lead from the surrounding residential units through large playing fields to the pedestrian island of the Core.

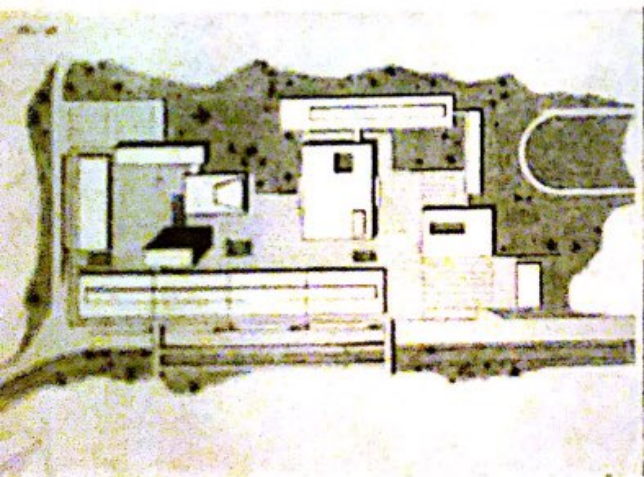


FIG.3A.



FIG.2B.

The new Core FIG.3A will contain a secondary school;
swimming bath; community hall and cinema;
a large covered market;
a tall block with offices and small apartments;
and a number of car parks.

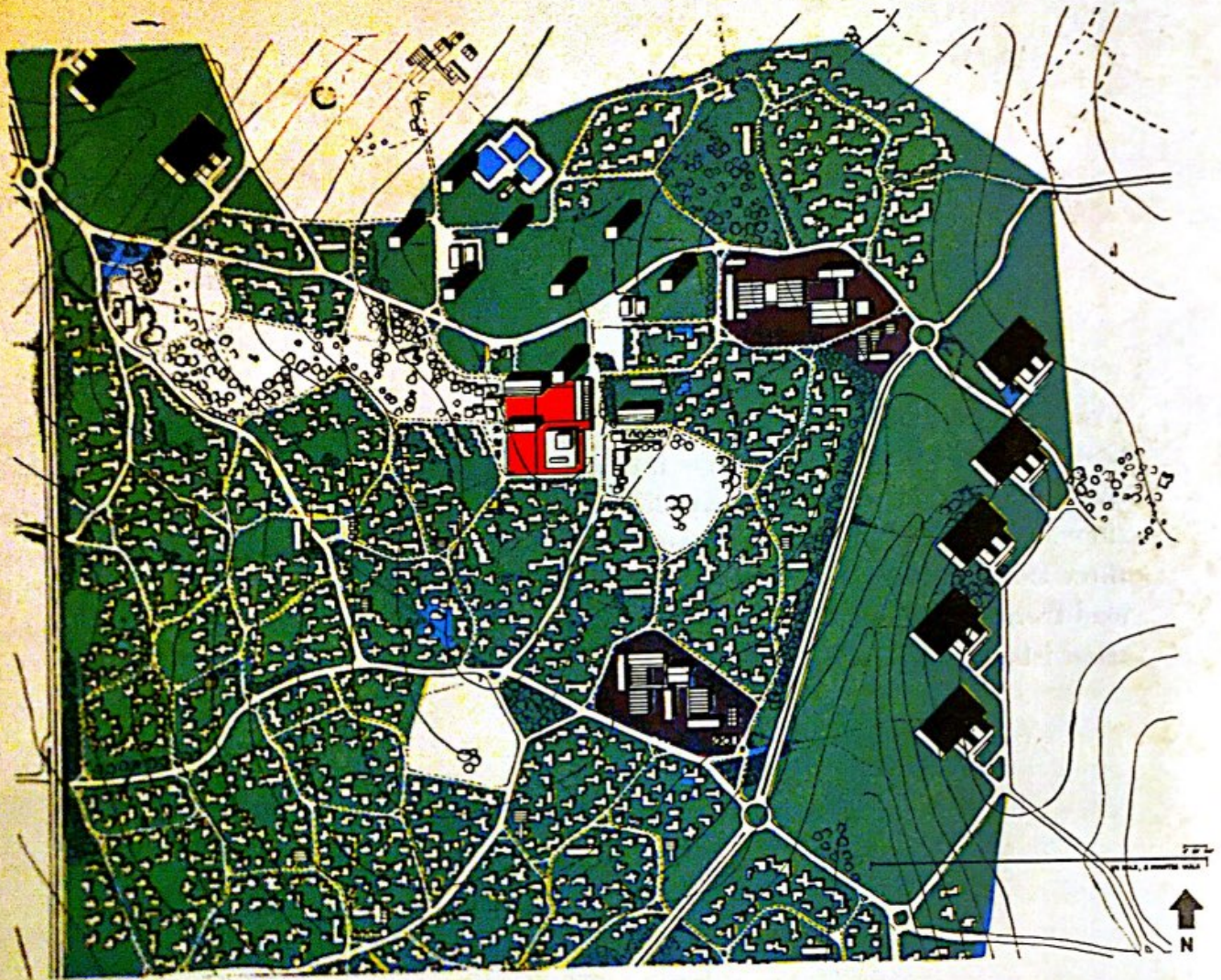


FIG. 3c.

FIG. 1a.



FIG. 1c: ABOVE Plan of the northern third of the New Town, showing single-story houses and apartment blocks, service industry (violet) and one of the three Local Cores (red).

FIG. 1a: ABOVE An air view of the model from the west.



FIG. 2b.

ENGLAND : Stevenage

project for a residential sector of a new town : Students of the
Architectural Association

POPULATION : 60,000

CLIMATE : 64°F SUMMER

38°F WINTER

RAINFALL : 25"

The principal contrast of this student scheme with the official plan for the New Town of Stevenage (overleaf) lies in the reduction by one half of the overall size of the town. This was done in order to achieve a greater sense of coherence and urbanity, and so that both the Core and country should be within easy walking distance of all. A considerable acreage of agricultural land has thus been freed – enough to supply all the fresh vegetables and most of the dairy products for the whole town. About half the households (*i.e.* about a third of the population) are in apartments; some of them thirteen-story, grouped near Local Cores; some of them twenty-six-story with a Local Core within each block (see Fig.3c). The other half of the households (mostly families with small children) are in single-story houses at eight to the acre, grouped round small greens. The town of 60,000 is conceived as a single organism, with a Central Core closely linked to the industrial zone, and three Sub-Cores. The Sub-Cores only serve the most immediate day-to-day needs since as many services as possible are concentrated at the town centre to make it as busy and lively a place as possible.

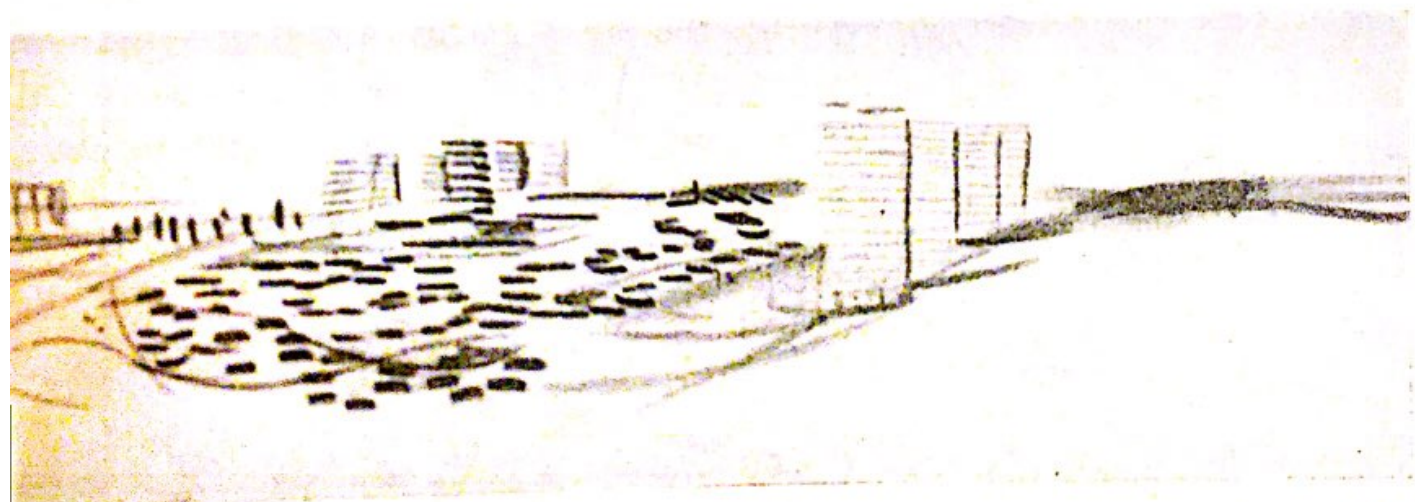


FIG.4C.

FIG.4C: ABOVE An impression of the residential areas.

FIG.2a: LEFT The New Town plan to the same scale as the official plan overleaf.
The existing small town of Stevenage is to the north-west of the site.

FIG. 28: RIGHT The official plan for the New Town of Stevenage, with five Neighbourhood Units (shown yellow), each with a Local Core, separated from one another by green swaths (shown white) containing most of the school sites.

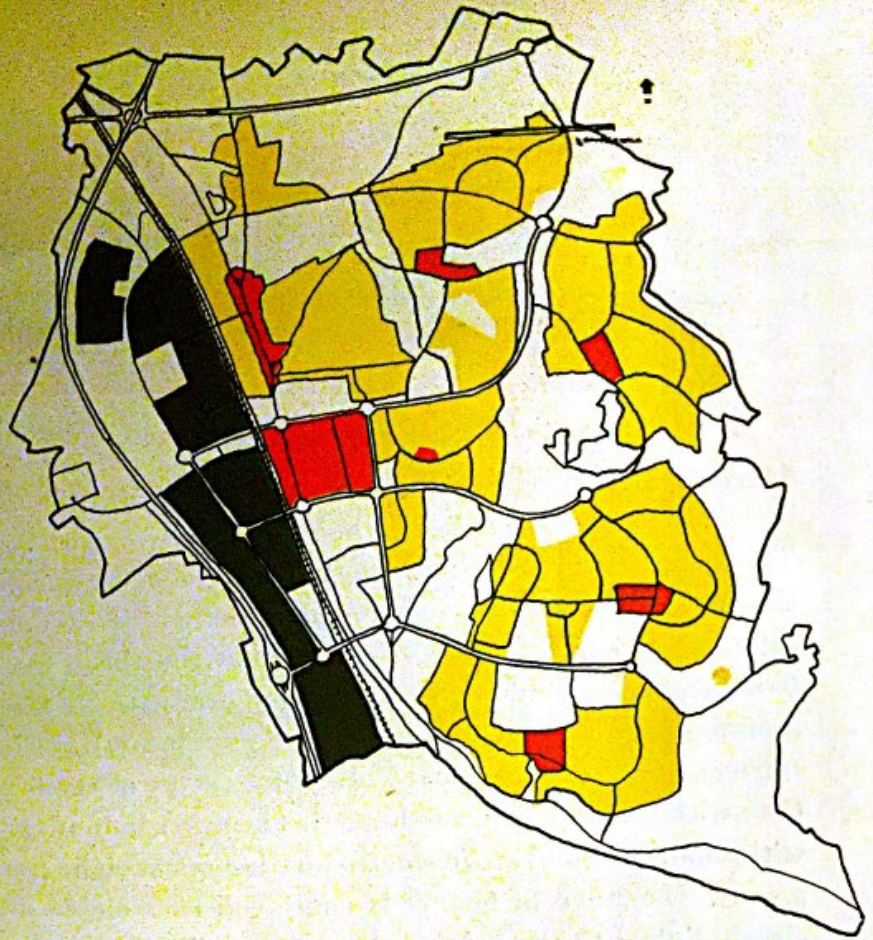
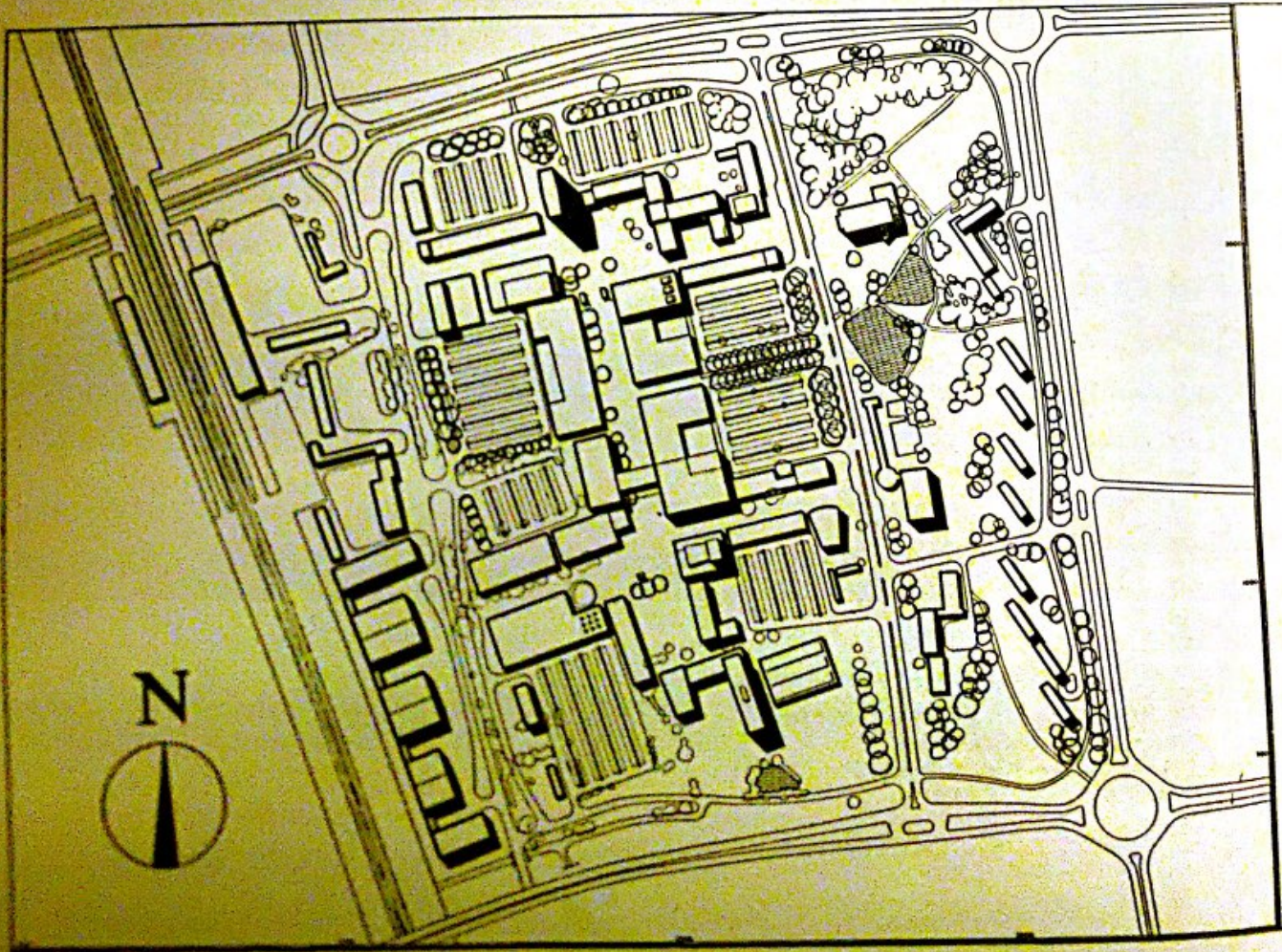


FIG. 3A: BELOW The new Main Core, described opposite.



ENGLAND : Stevenage

plan for a new town : Gordon Stephenson *et al*

POPULATION : 60,000

CLIMATE : 64°F SUMMER
38°F WINTER

RAINFALL : 25"

Stevenage was the first town to be scheduled to receive industry and population from London under the New Towns Act (1946). The existing small town of 6000 is being expanded to 60,000. It is on the main rail and road connection between London and the North, and its present centre is along an eighteenth-century high street. The new Core is being built just to the south of this, on level land with many fine trees, which lies between the main roads of the new town. The interior of the new *shopping centre* is entirely free of traffic: the shops, grouped with cinemas, restaurants, and public houses, face onto a garden promenade. They are compactly grouped to minimise walking, and have arcades to give protection from rain. Bus access is safe and easy to all points of entry, and car-parking is within short direct access of shops and public buildings. The *cultural centre* is around the South Square, at one end of the shopping promenade, and has the County College as its nucleus: also an auditorium, art gallery, library, museum, meeting rooms, and theatre. The *administrative centre* is developed around the North Square. It is planned for gatherings on public occasions and includes a block of private offices as well as the administrative buildings. East of this Core is a pleasure park with swimming pool, restaurants, outdoor theatre, and facilities for open-air dancing, fireworks, etc.

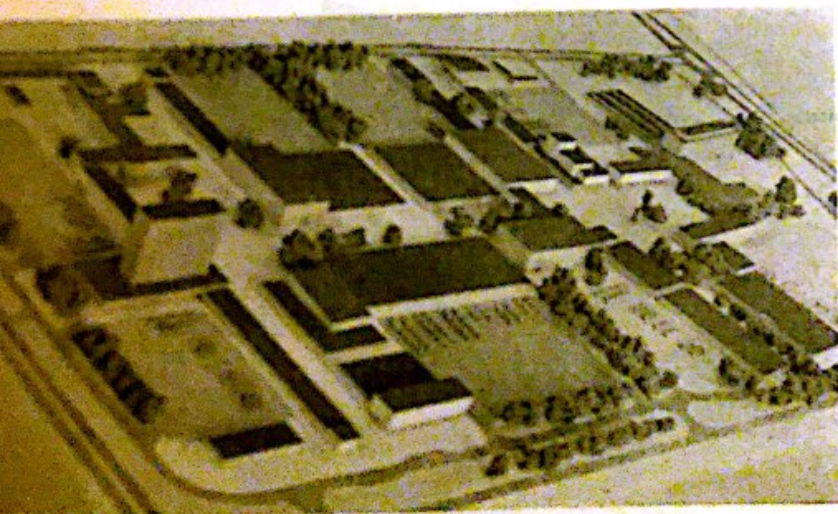
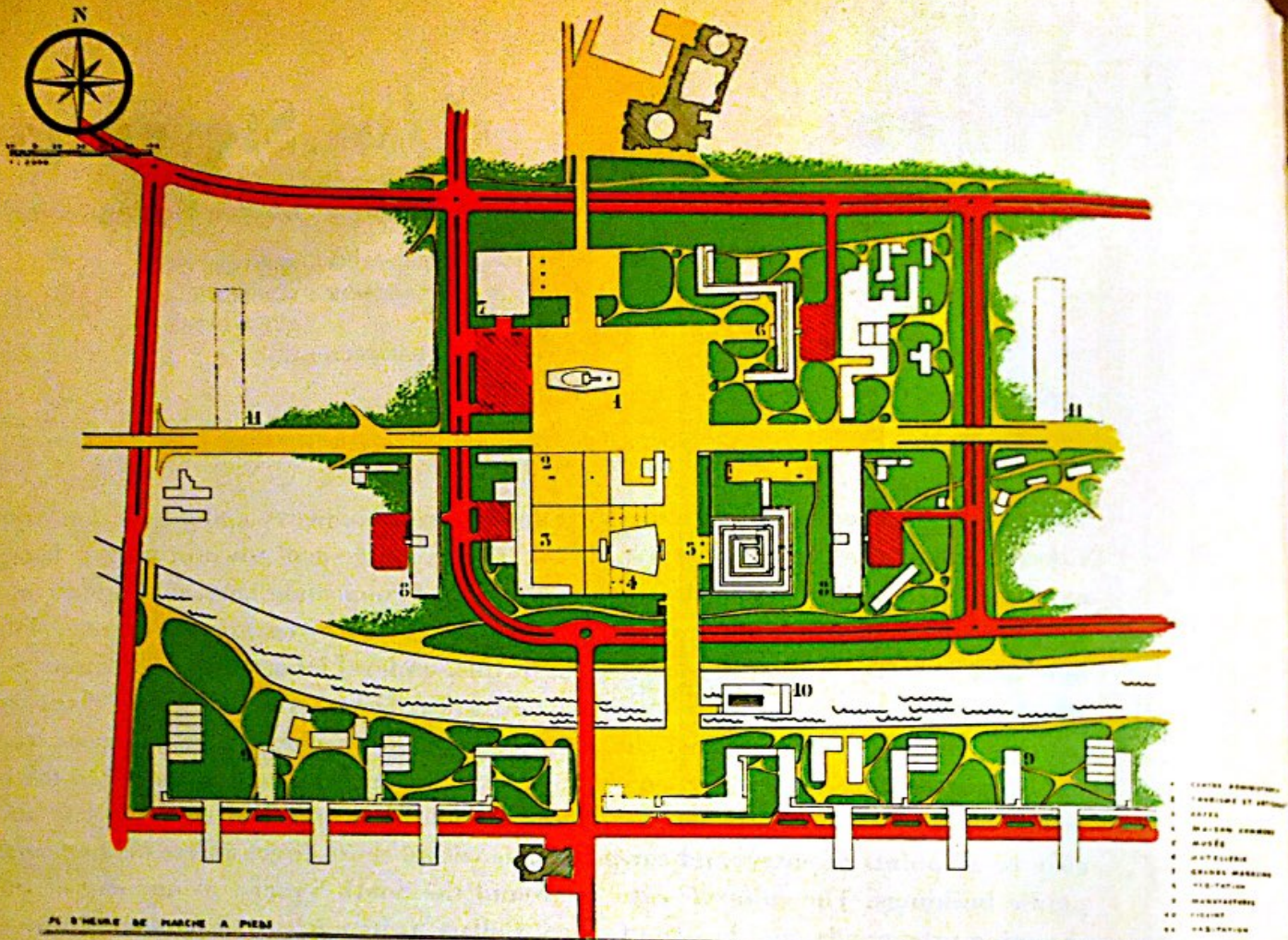
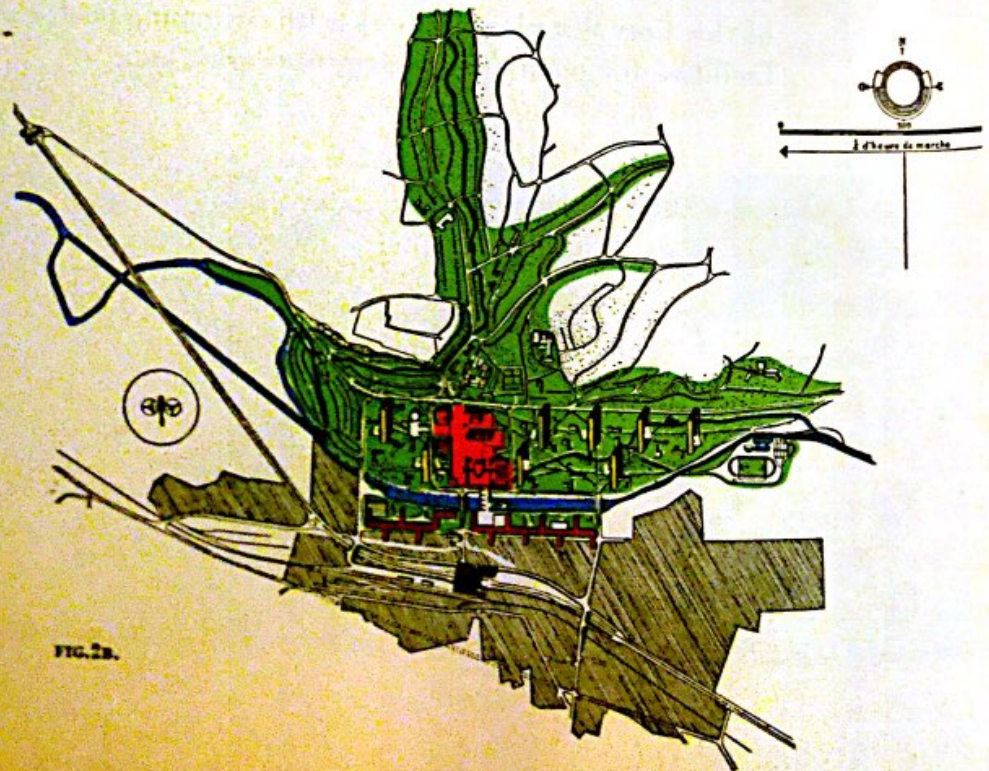


FIG.4C: Model of the new Main Core from the north west.



The eight apartment blocks would have been similar to the Unité d'Habitation at Marseilles, each containing a Local Core in four parts: a shopping street in the centre of each block; a children's club on each floor; a centre for games and exercise on the roof, and an open park around the pilotis that form the base of each block.

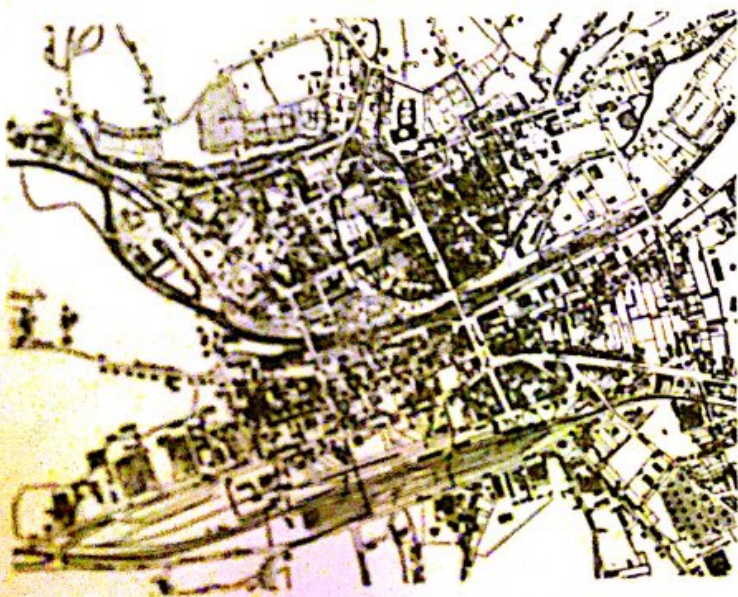


FRANCE : **St Dié**

project for a new town centre : Le Corbusier

POPULATION : 20,000
CLIMATE : 66°F SUMMER
31°F WINTER
RAINFALL : 26"

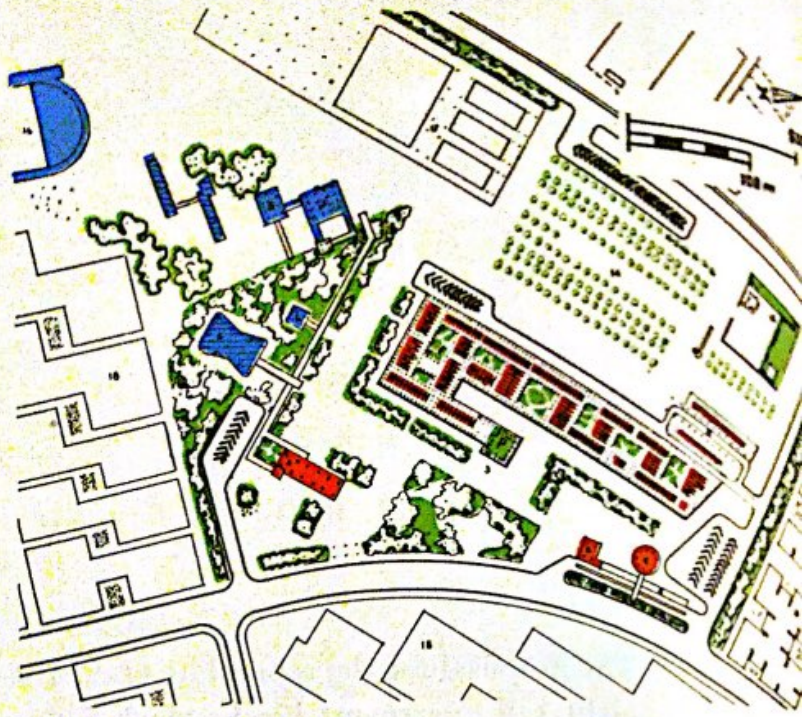
The proposal for the rebuilding of St Dié reassembled the bombed-out population in eight tall apartment blocks, each fully equipped with communal services. By this means a consciousness of the magnificent mountain scenery would have penetrated the heart of the town and would have entered into the daily home-life of its people. Within the proposed new Core of St Dié are a tall administrative building (1 on plan opposite); a tourist centre and trades union hall (2); shops and cafés (3); a community hall (4); a museum of knowledge (5). To the north, a large hotel (6), the department stores (7), and the old cathedral enter into the Core; and to the south, by making use of a river barrage, the Core is brought into immediate relation with the far bank, which is reserved exclusively for industry, together with a school for apprentices.



The whole of the central part of St Dié was systematically demolished by the retreating German army, street by street and house by house. Only the cathedral was left standing.

FIG. 6A.

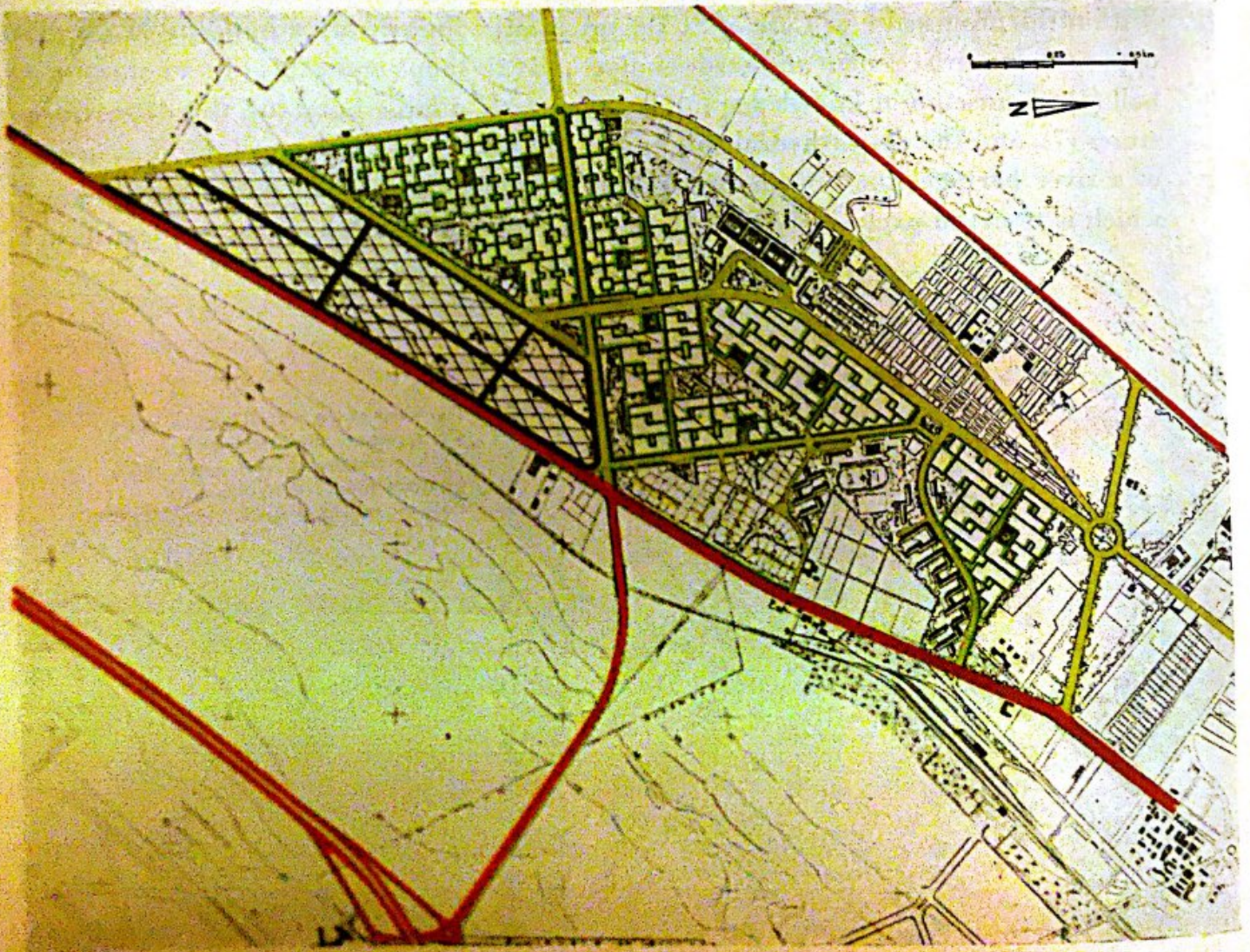
FIG.3B.



The new Core (RIGHT) contains a covered market (centre), mosque, Turkish bath, and administration building (left), and public assembly area shaded by trees.

In the new Town Plan (BELOW) the pattern of the pedestrian ways that open out into little courts is clearly seen. These are marked in green and the local roads in yellow.

FIG.2C.



MOROCCO : Rabat Sale

a new satellite town : CIAM Group of Morocco

POPULATION : 40,000

CLIMATE : 71°F SUMMER

53°F WINTER

RAINFALL : 21"

Rabat Sale is a town that has trebled its size in one generation, and is now 250,000. The increase is mainly due to recent industrialisation and the influx of country people with a low standard of living. A sub-standard camp of newcomers along the seashore (see below) is being replaced by a new satellite town to house 40,000 (see opposite). Through traffic is being carefully segregated; footways lead from each residential section both to schools and to the Central Core; a number of Neighbourhood Cores are being provided to meet local needs.



FIG. 3A.



FIG. 4A.

ABOVE: Native huts and a cinema in the new town.

BELOW RIGHT: Map, showing by a broken line the limits of the new town (see OPPOSITE) and in a solid line the boundaries of the air photo (BELOW). The circle marks the Core. The air photo is from the west.



FIG. 2B.

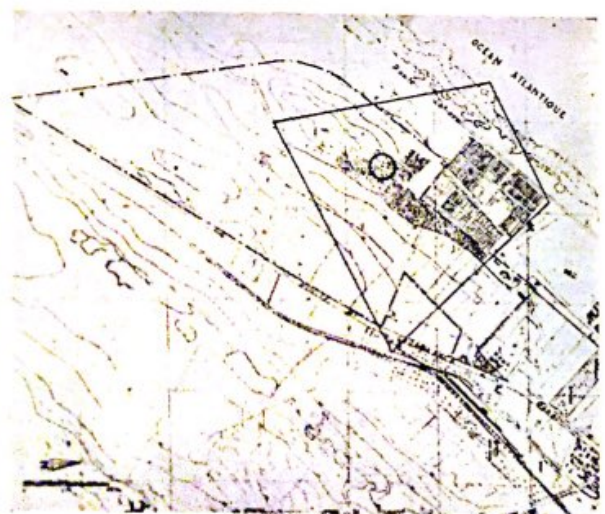
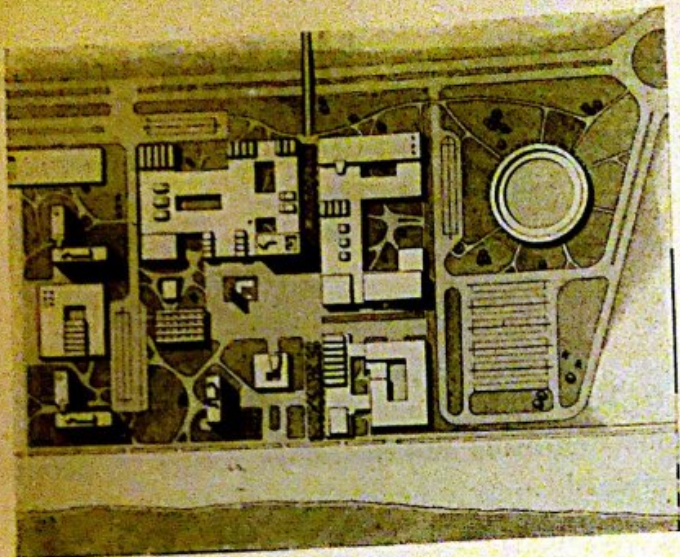


FIG. 1D.

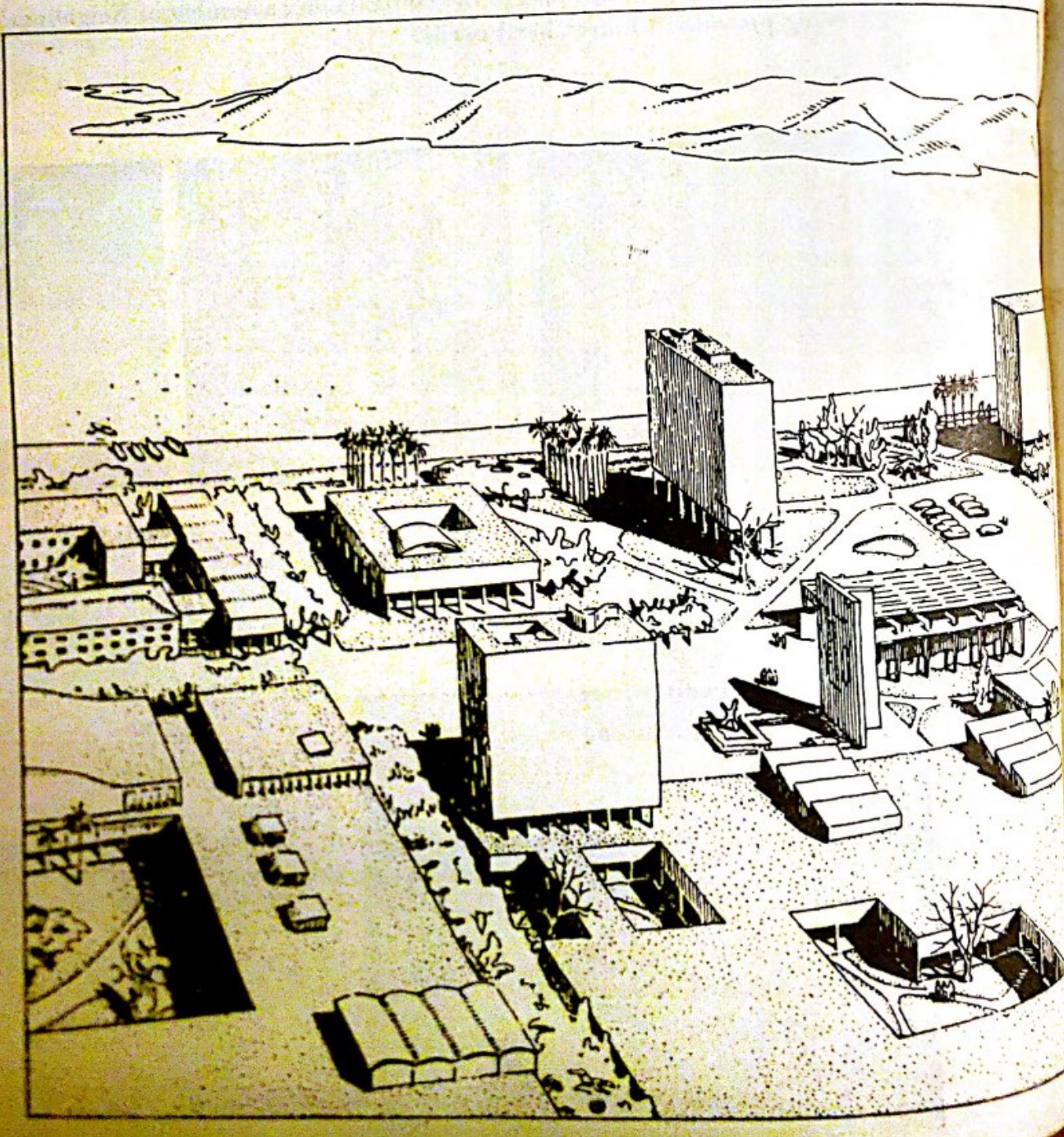


500 ft
100 m

Concrete slabs on posts act as a parasol and protection from the sun. Shops and cafés are freely grouped under this continuous parasol construction. The church has a *brise-soleil* on the roof. Two office and two apartment buildings are the only high structures in the city, which has also an hotel and a bull ring.

FIG. 3A.

FIG. 4A.



PERU : **Chimbote**

a new industrial town : Wiener and Sert

POPULATION : 40,000

CLIMATE : 64°F SUMMER

77°F WINTER

RAINFALL : 2"

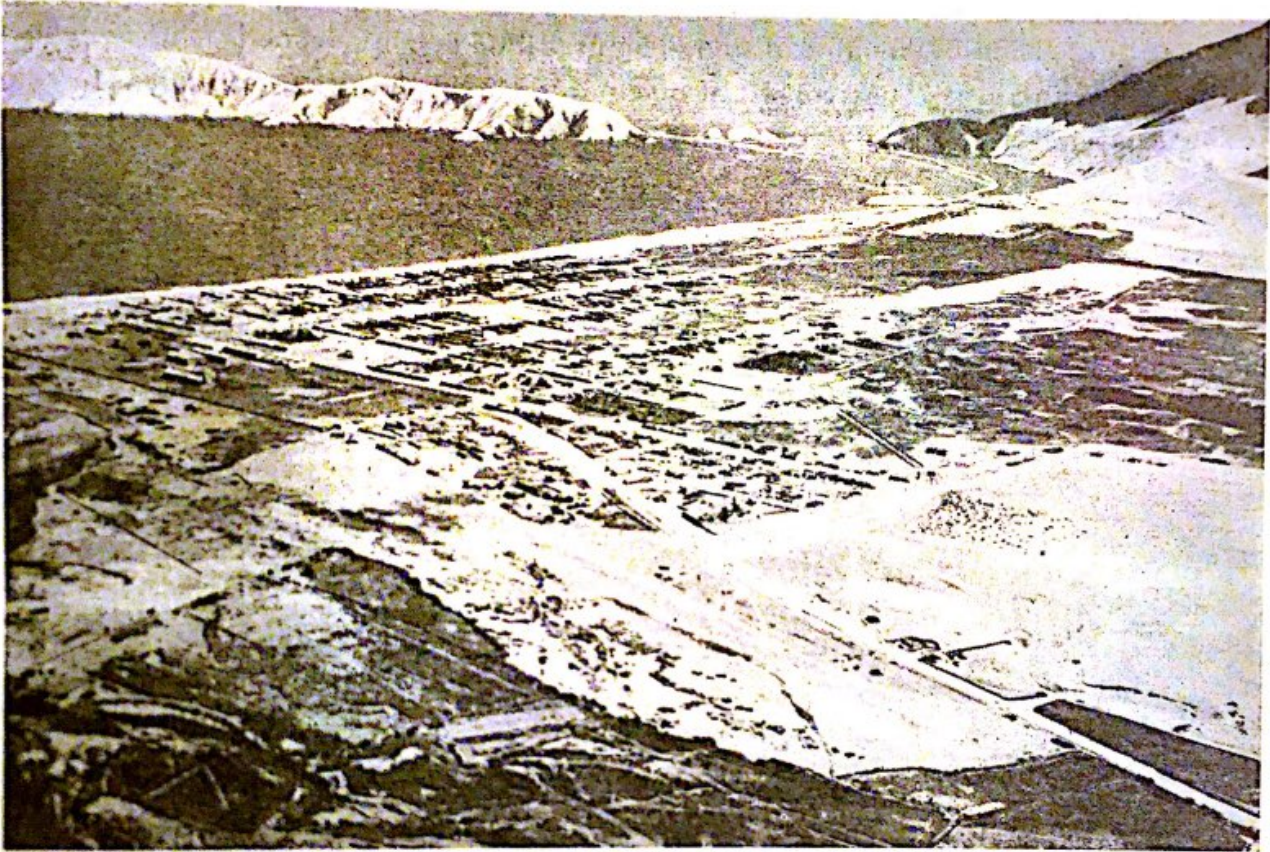


FIG.2D. Air view across the bay.

Chimbote is at present a small industrial seaport in the rainless region of the Peruvian coast with a population of about 12,000. It has been chosen as the outlet for the whole development of the Valle del Santa (TVA of Peru) because of its natural bay which will make it, in the future, the most important harbour on that section of the Pacific coast. The present standard of living of the population is very low. The majority of its inhabitants are Indians coming from the nearby mountain regions. The valleys around Chimbote have been irrigated from the time of the Incas and a vast irrigation project, which will give the new city the needed agricultural facilities, is now under way. The developed town will contain ten neighbourhoods; the first four (which are shown overleaf) being developed by the Government Housing Agencies and

Chimbote

the Corporación del Santa. A small stream has been conducted through the centre of the city and branches out into different directions for irrigation purposes, following the Arab tradition and that of the Incas. This is an essential element for the rainless city, for to have water is to transform the desert into an oasis. The stream will run through the Core and main piazza into the bay. The Core itself attempts to provide a modern extension of an old tradition. The first four neighbourhoods (shown below) are grouped around it. They consist of one and two-story houses, every house having its own patio. The industrial area is in the north west.

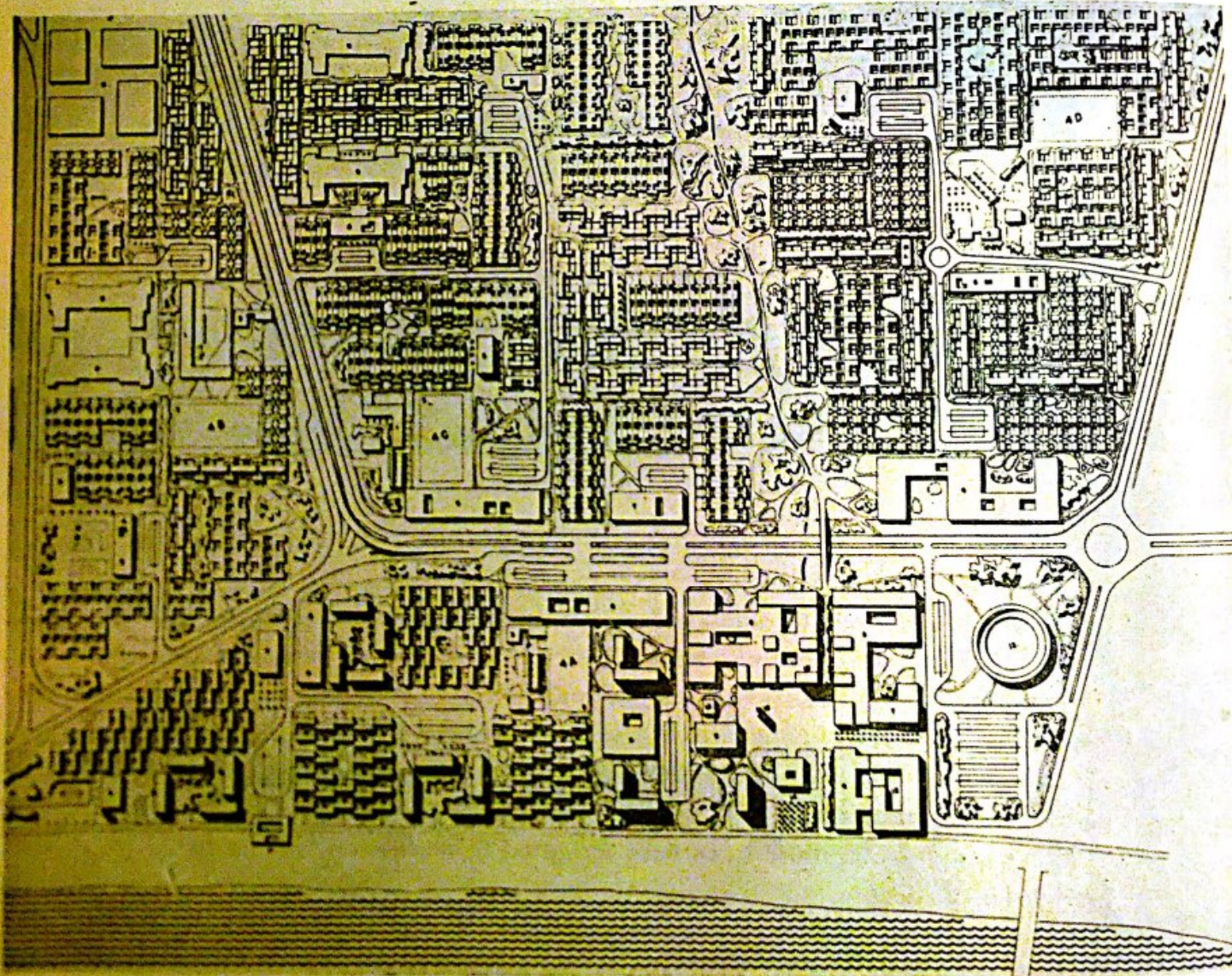


FIG. 24.

FRANCE: Paris

search for the Core of a city : J. Laurent

POPULATION : 3,000,000

CLIMATE : 66°F SUMMER

38°F WINTER

RAINFALL : 23"

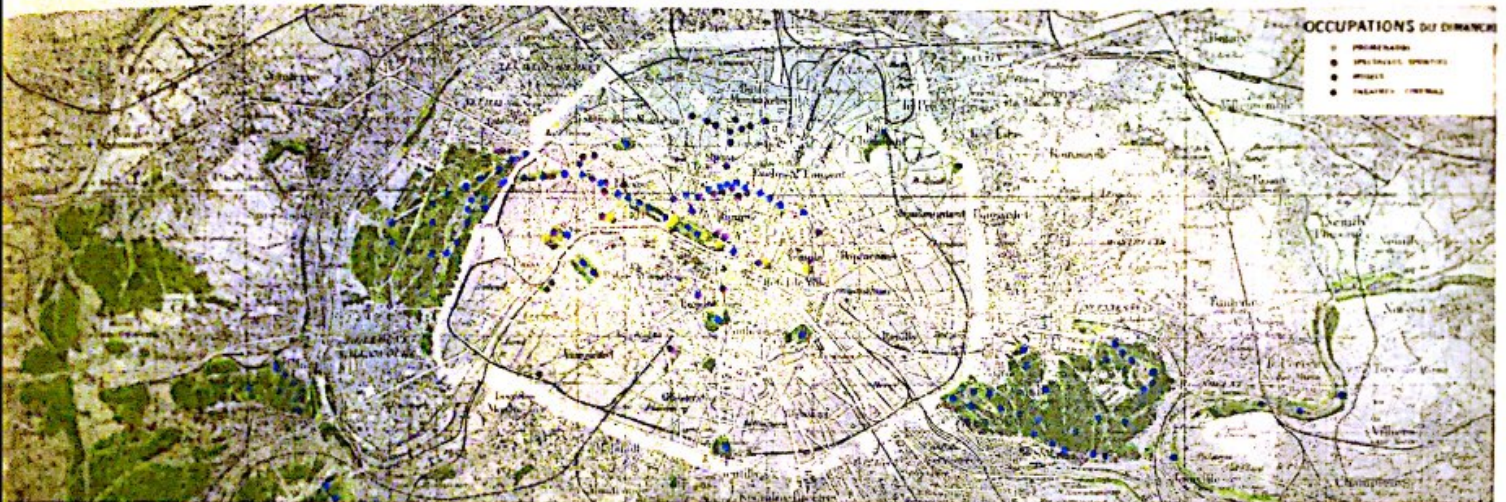


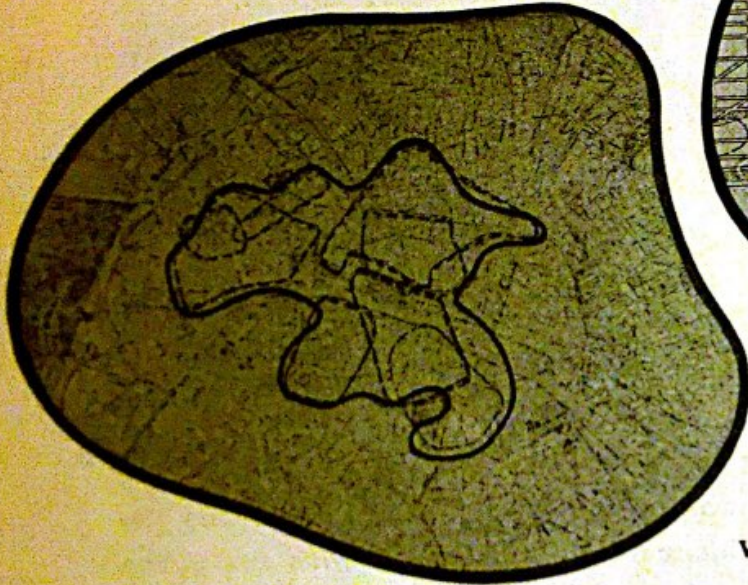
FIG.5C: The pattern of the Sunday Promenade.

The main purpose of this study of Paris was to find a method of establishing the actual limits of its Core – which it was evident did not correspond with any of the administrative boundaries. First, all the functions of the Core were mapped to a scale of 1 : 10,000. These included all activities characteristic of the life of a great metropolis: economic, social, intellectual, and artistic – and they were analysed from the point of view of the inhabitants of Paris as well as from the point of view of visitors from the country and from foreign lands. When all these functional areas were displayed on maps, they were seen to be very different in character – ranging from districts concentrated upon politics or finance, to luxury areas of apparent utter futility.

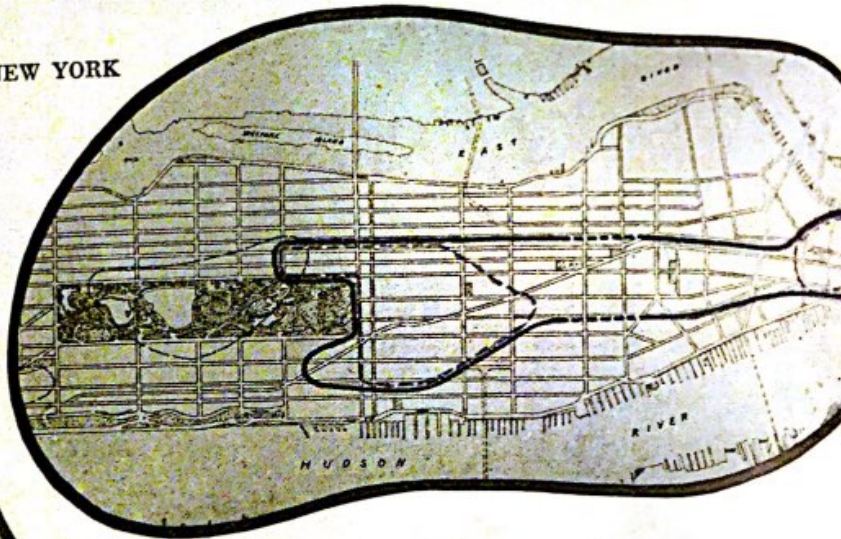
A second major survey was then undertaken covering the density of buildings, both by their land coverage and their number of stories. These were mapped to a scale of 1 : 2000 and enabled one to pick out at once the areas of greatest saturation. A supplementary survey showed the consistency of both the soil and sub-soil, so that costly errors could be avoided when making future plans for redevelopment.

The superimposition of the 'positive' maps of functions and of buildings in good condition over the 'negative' map of sub-standard buildings and congested areas gave an immediate picture – block by block – of the possibilities actually open to the architect and town planner at the present time, without risk of serious objections being raised to their redevelopment by economists, artists, or even the present owners.

PARIS



NEW YORK

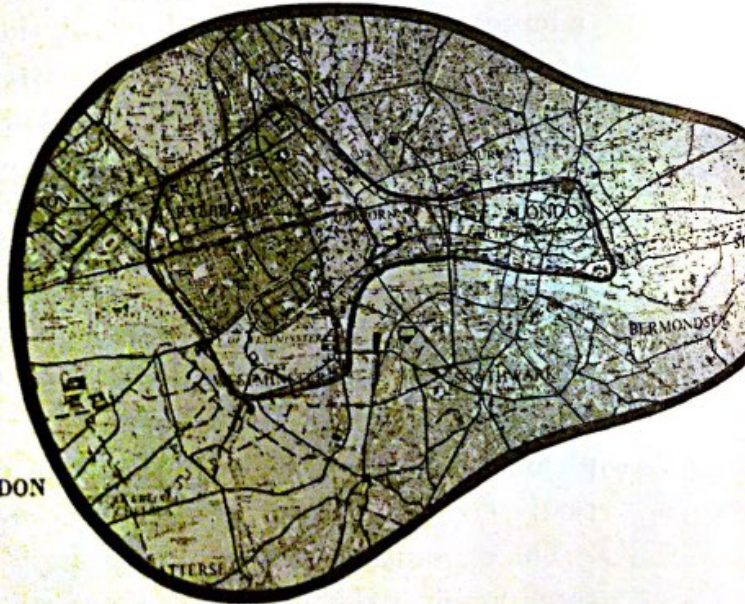


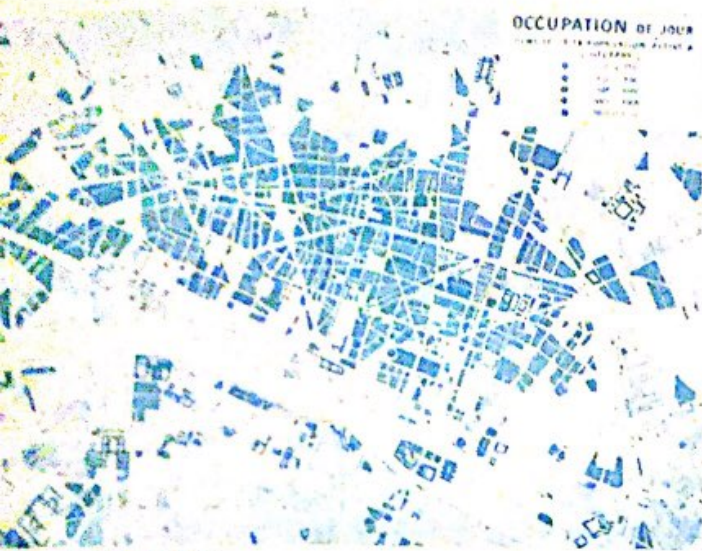
VENICE



Paris	c.	3,000,000
France	c.	40,000,000
New York	c.	8,000,000
U.S.A.	c.	150,000,000
London	c.	8,000,000
Britain	c.	50,000,000
Venice	c.	300,000

LONDON





focus of daily activity.

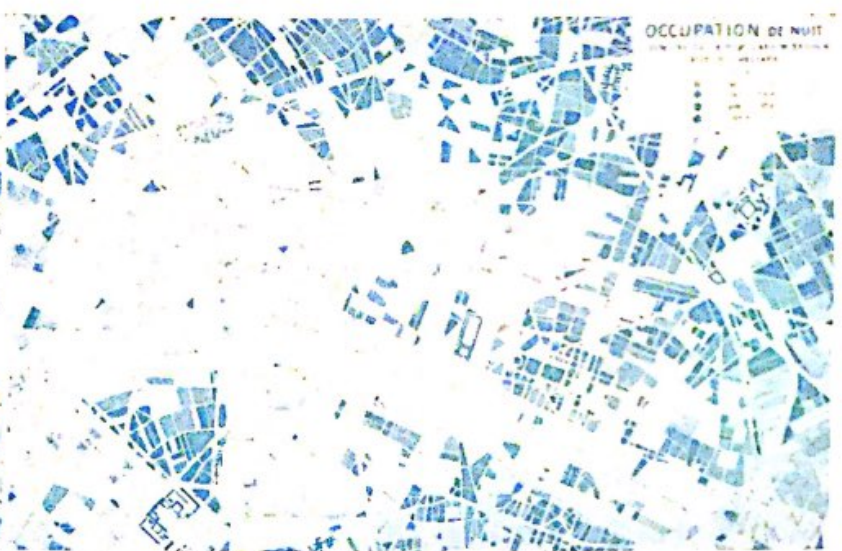


FIG.5B. The same area is empty at night.

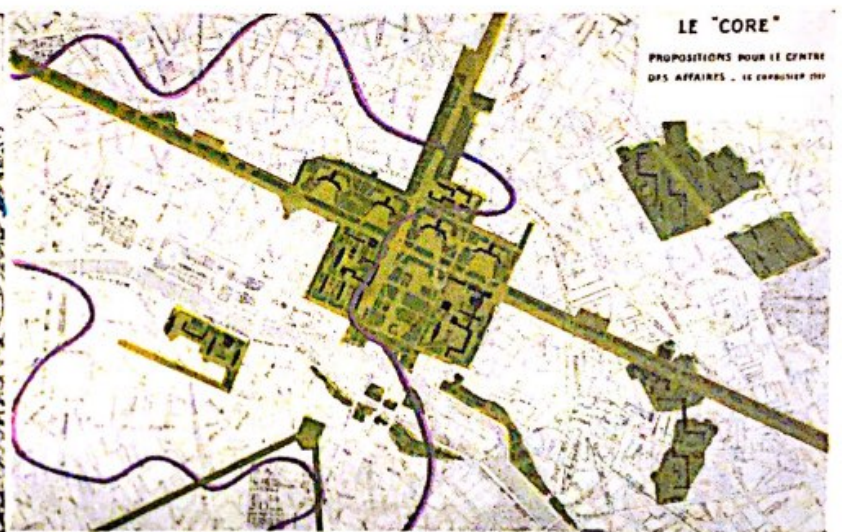
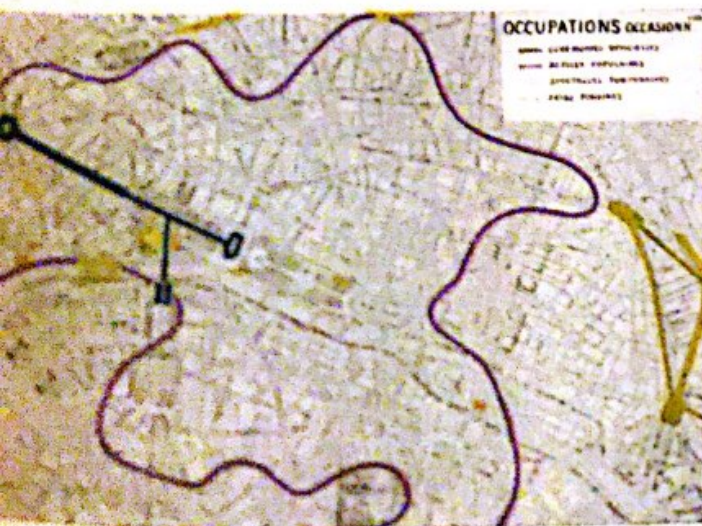


FIG.6D.



OPPOSITE: Parallel with the study of Paris, similar surveys were made of London, New York and Venice. 'We were astounded to realise that the heart of the commercial centre of eighteenth-century Venice was roughly the same in extent as those of Paris and New York.'

TOP: The total perimeter of the Core of Paris determined by the functional survey coincided to an astonishing degree with the zone of high day and low night population.

FIG.5B: The areas of activity on special occasions.

FIG.6A: The limits of the Core in the past.

FIG.6D: Le Corbusier's 1927 plan for the redevelopment of central Paris which approximates to the area found by the survey to be ripe for reconstruction.

FIG. 4A.

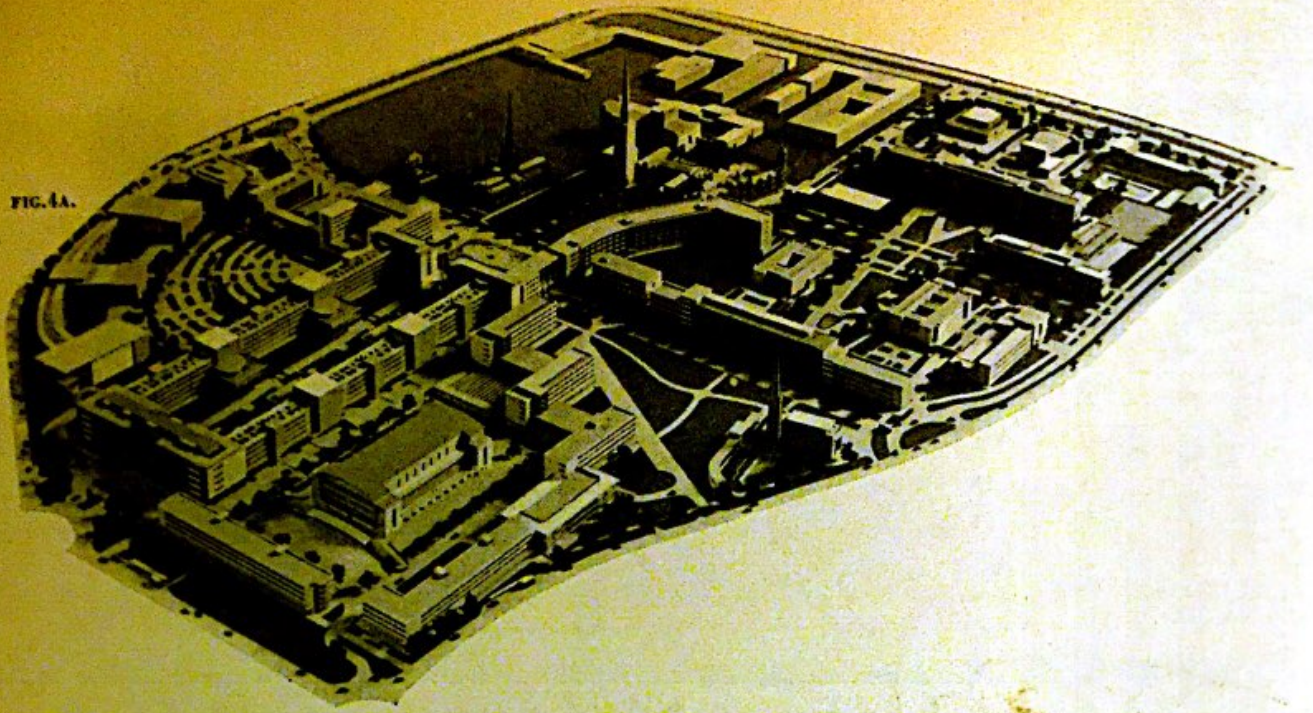


FIG. 3A.



ENGLAND : **Coventry**

a new centre for a bombed city : D. E. E. Gibson *et al*

POPULATION : 260,000

CLIMATE : 62°F SUMMER

38°F WINTER

RAINFALL : 25"

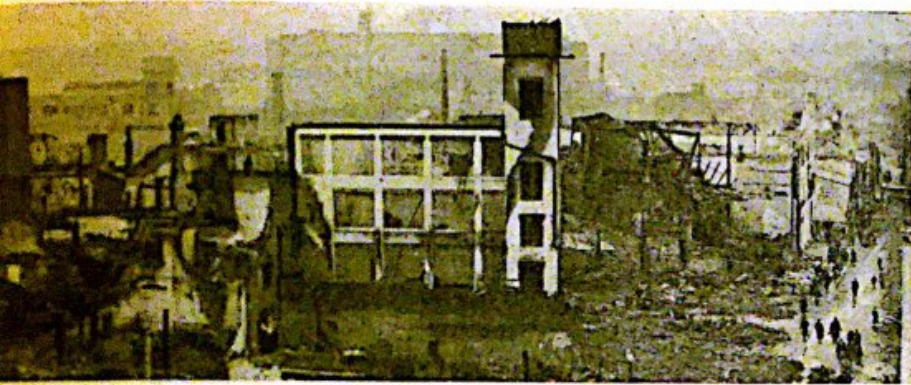


FIG. 6c.

After the Great Blitz of November 1940, the Minister of Reconstruction advised Coventry to plan boldly, and the City Council asked the City Engineer and the City Architect to collaborate in the preparation of a reconstruction plan for the Core, which was completely destroyed. The two officials, however, submitted separate schemes, and the Council chose that of the City Architect (see model, Fig. 4A).

The significance of this scheme as a contribution to city planning lies in the following points: (1) It was the first time that a central area was analysed in its main uses and a plan drawn up which retained only those necessary to its correct functioning: both industry and housing were excluded. (2) In zoning; well-shaped sites and adequate space were allowed so that the architects would be able to design each building without having to distort its natural form because of bad site conditions. (3) A new experiment was put forward for the shopping area, in the form of a complete pedestrian shopping precinct, served by traffic all around, but free and safe for the shoppers within. (4) A small central park was proposed in the heart of the former congested centre. (5) All the various buildings and groups of buildings were carefully related to each other throughout the scheme. (6) The whole plan was phased in a number of five-year periods.

During the next five years a number of modifications were made to the plan after consultations with various bodies, such as chambers of commerce, government departments, etc, and the present plan (see Fig. 3A) received official approval in 1945. Since then a considerable part has been completed, though there have been delays caused by the general economic situation of the country and government financial restrictions on capital expenditure.

FIG. 2a.

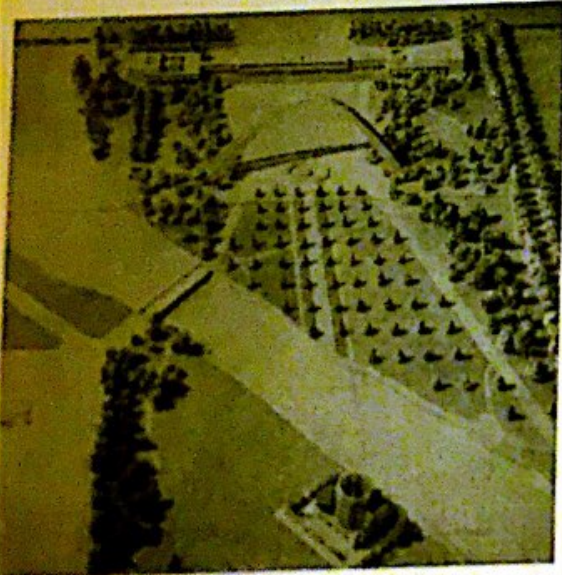
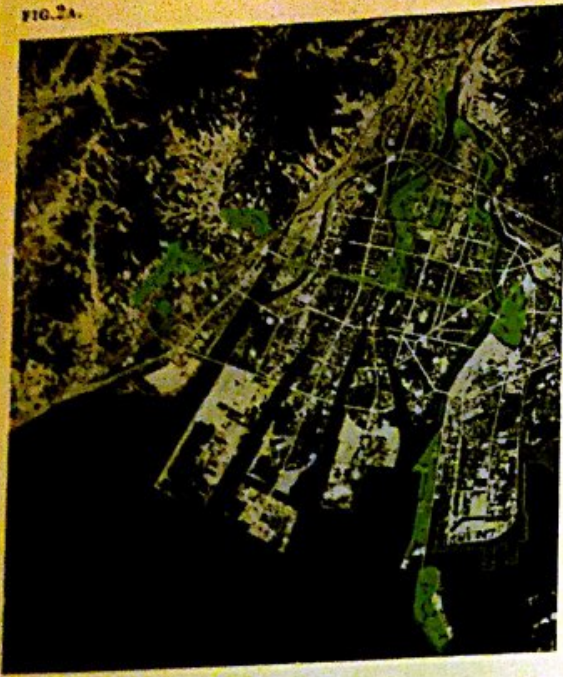


FIG. 2b.

FIG. 2a: The new plan for Hiroshima. Areas colored green mark 'Peace City' projects to be carried out over the next fifteen years.

FIG. 2b: Bird's-eye view of a model of the Peace Hall from the north.

FIG. 2c: The Peace Park project - Peace Hall and the Peace Boulevard at the base.

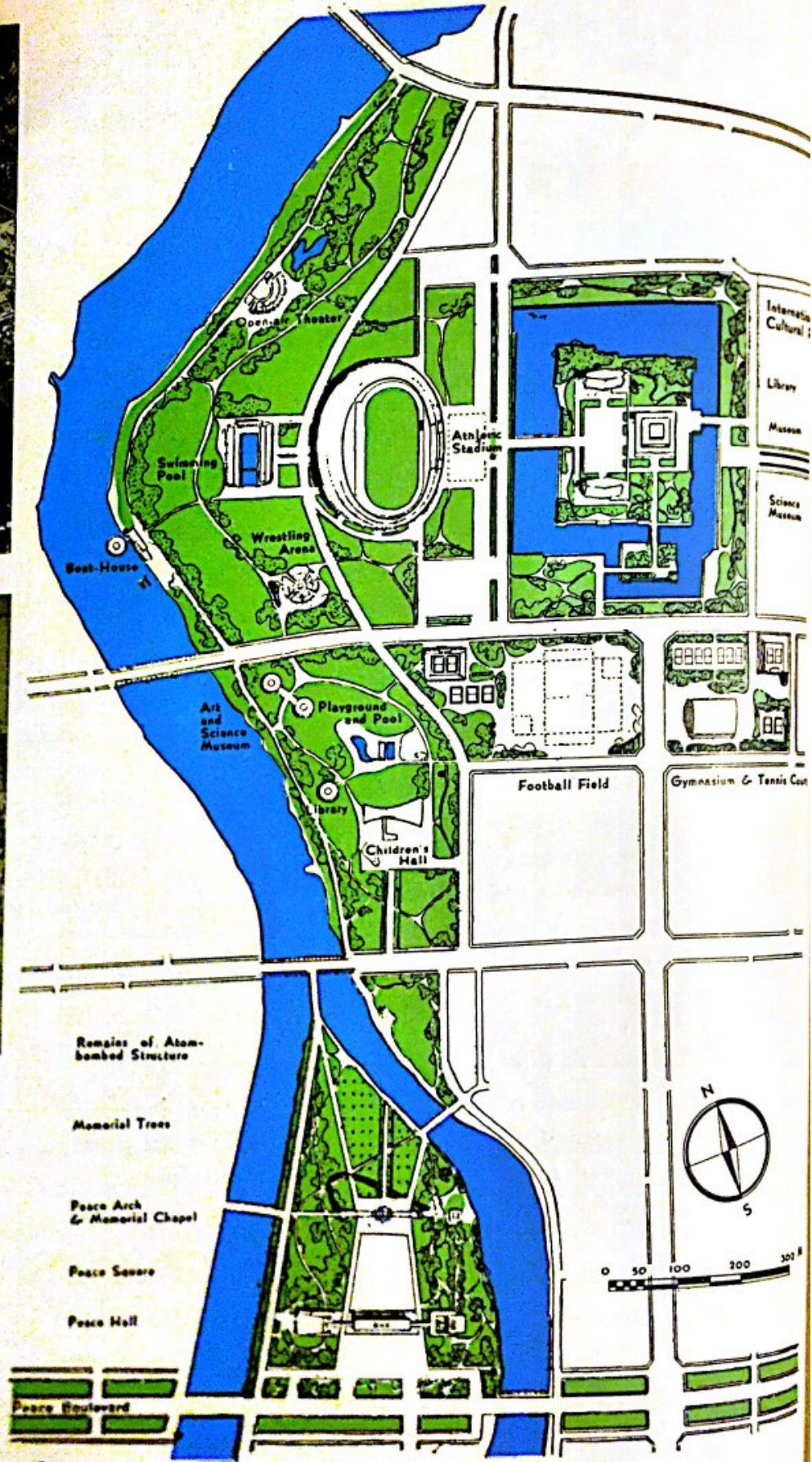


FIG. 2c.

JAPAN : **Hiroshima**

a new recreational centre : K. Tange et al

POPULATION : 400,000

TEMPERATURE : 77°F SUMMER
40°F WINTER

RAINFALL : 44"

Until 1945 Hiroshima was an industrial city and military headquarters with a population of 400,000. It then fell to 136,000 but has since been rising steadily. 'On August 6, 1945, the City of Hiroshima experienced the most extraordinary man-made disaster that has ever been witnessed. It gradually dawned upon the minds of those who survived this ordeal that the world is faced with a problem transcending all others. The release of atomic energy may either further human well-being by great strides; or it may utterly destroy everything that exists on this earth. One thing will decide which alternative shall prevail, and that is whether we shall have peace or war. The people of Hiroshima decided definitely to stand for peace and want to demonstrate it to the world by moulding their ruined community into a monument of permanent peace. Their earnest desire has been heard by the National Diet which passed the "Law for the Construction of Hiroshima Peace Commemorating City" on August 6, 1949, the fourth anniversary of that fateful day' (*Mayor of Hiroshima*). The fifteen-year programme of construction for the Peace City includes: (1) *The Peace Hall project*: a Peace Hall for 2500 persons, Peace Square holding 20,000 persons, a Peace Arch with bells, a Memorial Chapel, the preserved remains of the atom-blasted Dome Building (Figs. 4A and 6c). (2) *The Peace Park project*: a Children's Centre (hall for 1500, library, museum, club house, swimming pool, etc), and an International Cultural and Recreational Centre (library, museum of science and fine arts, stadium, swimming pool, games area, etc). (3) *The Peace Boulevard* and several Peace Bridges: this great boulevard, 100m wide (325ft) will be the most impressive parkway in Japan; and bridges in Hiroshima, which is traversed by seven rivers, symbolise more than a mere link between two separate pieces of land. (4) *International Hotels and Dormitories*: these are being planned on noted beauty spots. 'This Hiroshima Peace Project is not that ideal city Core that we cherish in our minds; but it is a rare and happy case in Japan for the various elements under various governmental jurisdictions to have been willing to organise into a single body so that a civic scheme can in fact be realised. There are still two opinions in Hiroshima: one believes that such a project should not be built until all the people are re-housed; the other that both types of construction should proceed parallel. We believe that the special condition in which Hiroshima is placed in the world justifies the execution of this Peace Project parallel with the rebuilding of houses.' (K. Tange.)

Hiroshima

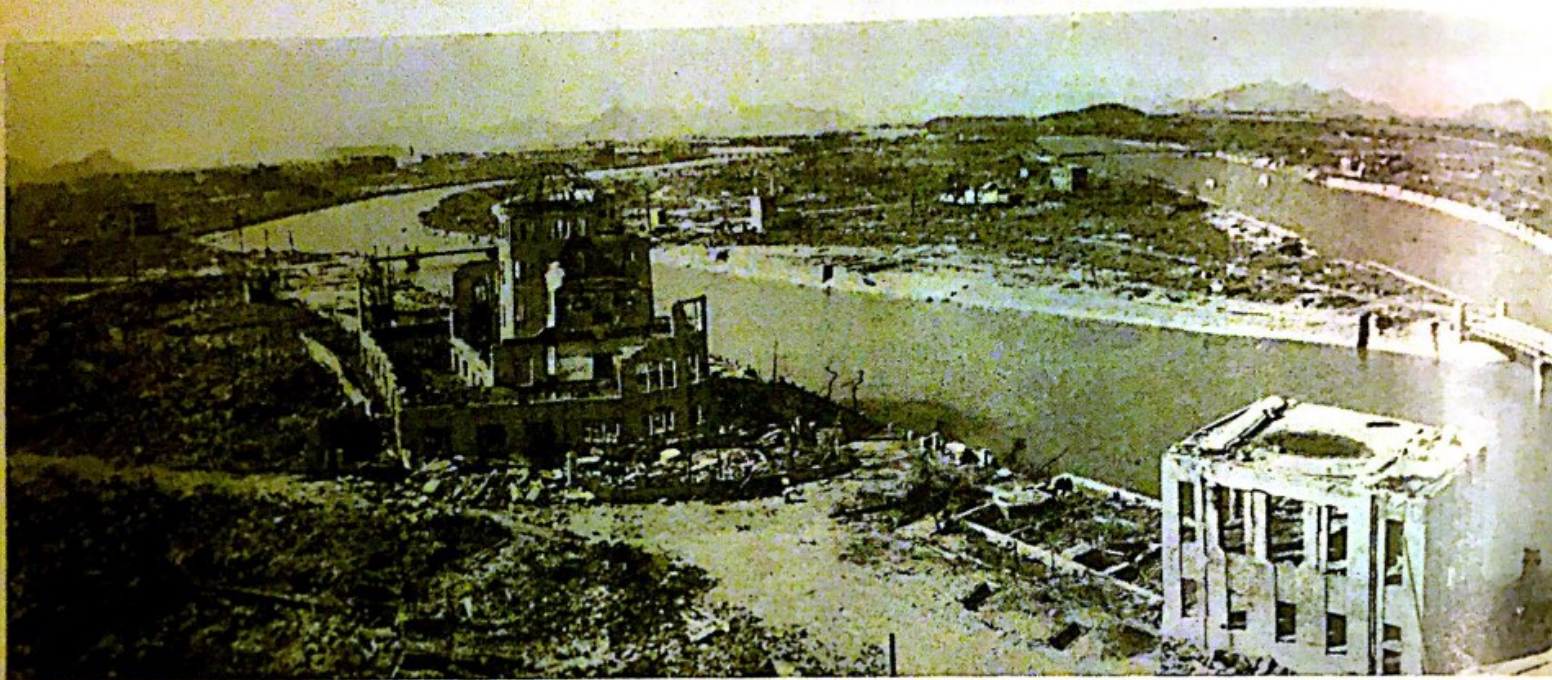
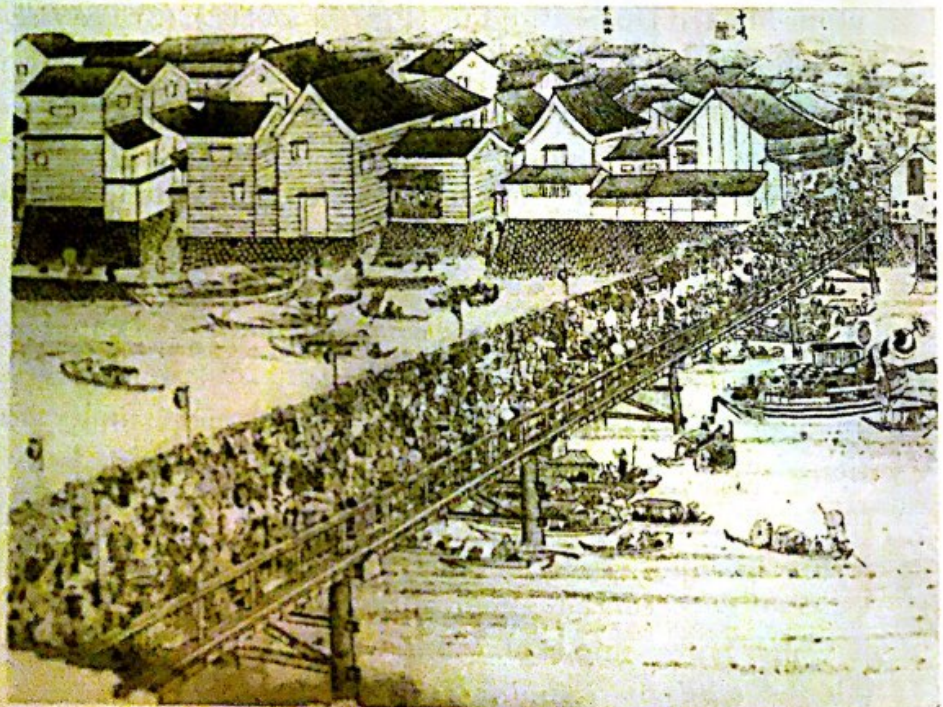


FIG.6C: ABOVE The Peace Park site after the atomic blast. Left centre is the Dome Building, to be preserved in this condition as a memorial.

FIG.6A: BELOW The Peace Hall site as it was 150 years ago.



SWITZERLAND : Basle

a new centre for an old city : O.Senn et al

POPULATION : 200,000

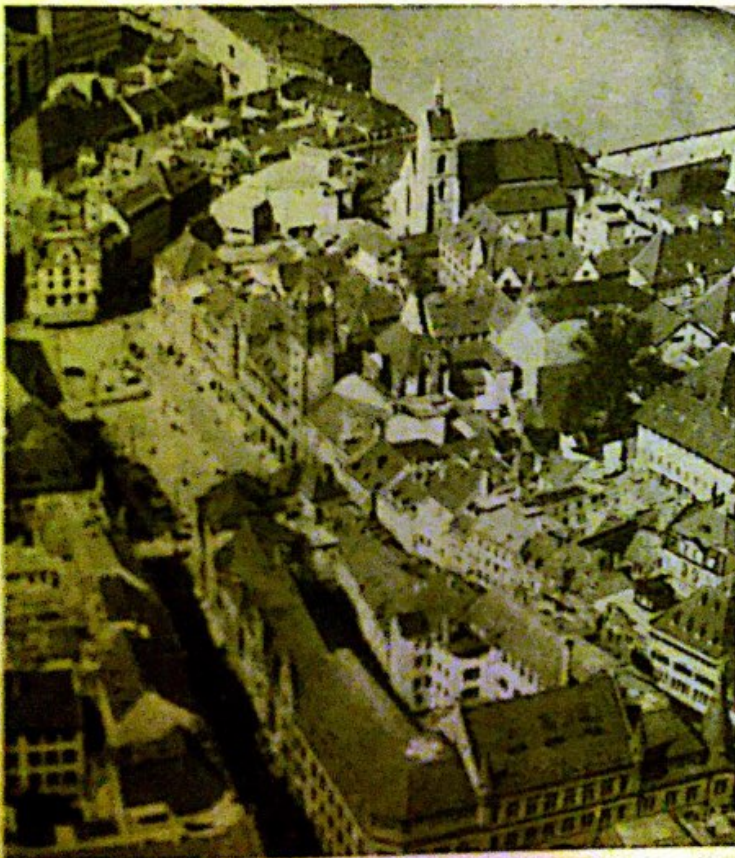
TEMPERATURE : 66°F SUMMER

32°F WINTER

RAINFALL : 23"

Basle is an ancient fortified city, sloping down to the old market place and bridge across the river. The old centre is now greatly congested: business, cultural life, entertainment, and public administration have become concentrated in adjoining areas which partially overlap and are everywhere penetrated by shopping frontages (see Fig.2A). As part of a general development scheme for the whole central area, it is proposed to replan the area before the main railway station, which is already used as a secondary focus for shopping, etc. Here a spacious new Core has been planned by clearing away obsolete buildings, covering part of the railway yards, creating a pedestrian gathering place and a park, erecting hotels, shops, offices, and entertainment buildings.

FIG.2B: BELOW The old market place of Basle used mornings for market, evenings as car park.
RIGHT BASE: Typical road widening scheme.



Basle (city centre)

FIG.2A.

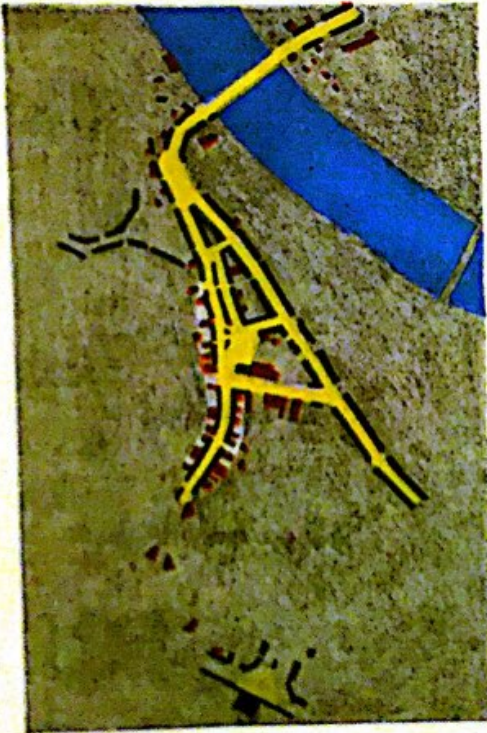


FIG.6C.



FIG.4C.

FIG.2A: The ancient congested Core of Basle, showing differentiation of land uses and at base, the location of main railway station.

ABOVE LEFT: Model of new secondary Core built over railway tracks from east; below it, same site today.

FIG.4C: Model from west.

BELOW: Plan for new station Core.

FIG.5B: Bright light areas of evening activity.

FIG.3B: Pedestrian areas in yellow.

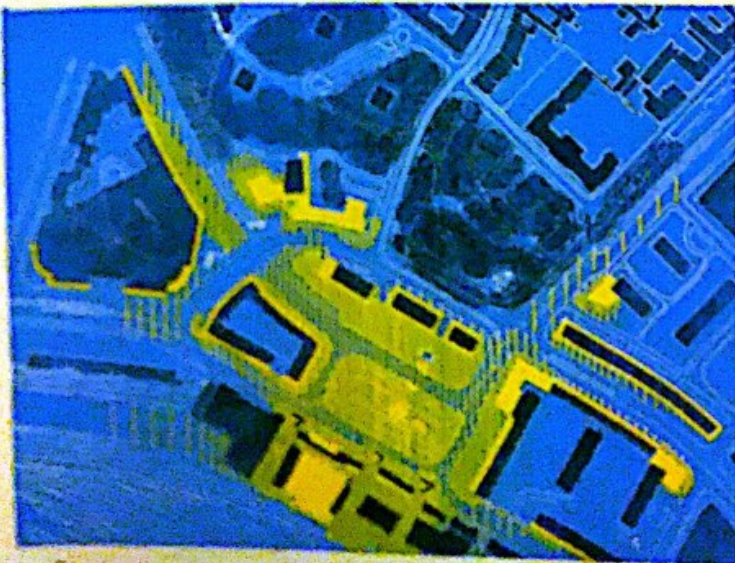


FIG.5B.

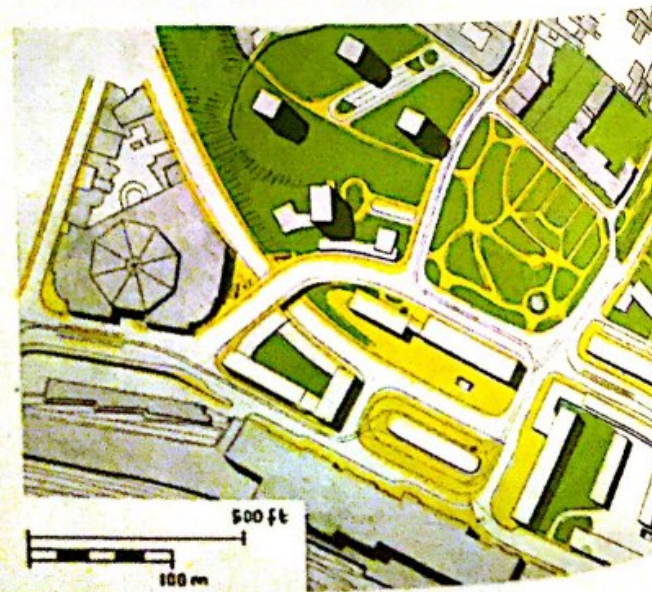


FIG.3B.

Basle

a new city neighbourhood : O.Senn et al

POPULATION : 12,000

A new Neighbourhood Core is designed to integrate scattered housing on the southern fringe of Basle by linking an existing school and local shops with a new church and apartment blocks. All through traffic is kept out of the new Core: six thirteen-story towers of small apartments give it visual emphasis and relate the development to the city and to the local topography. Sinuous lines of five-story apartments contrast both with the towers and with short straight terraces of row houses.



FIG.2D: Air view of site from south.



FIG.4D: Model of Neighbourhood Core from east. Existing buildings shown with dark roofs. The new hexagonal church is in the centre with the existing school buildings just above it to the right.

U.S.A : Providence

project for a replanned city centre : Students of Harvard
University

POPULATION : 250,000
TEMPERATURE : 72°F SUMMER
29°F WINTER
RAINFALL : 39"

A student scheme for the reconstruction of the centre of Providence as a pedestrian island, half a mile by three-quarters, containing shops and offices, a circular department store, administration buildings, hotels, meeting places, and open spaces. Car parks are provided beneath most of the buildings.

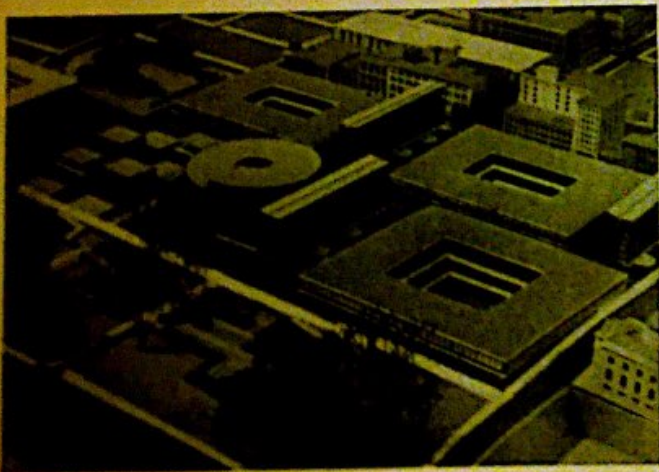


FIG. 4A.

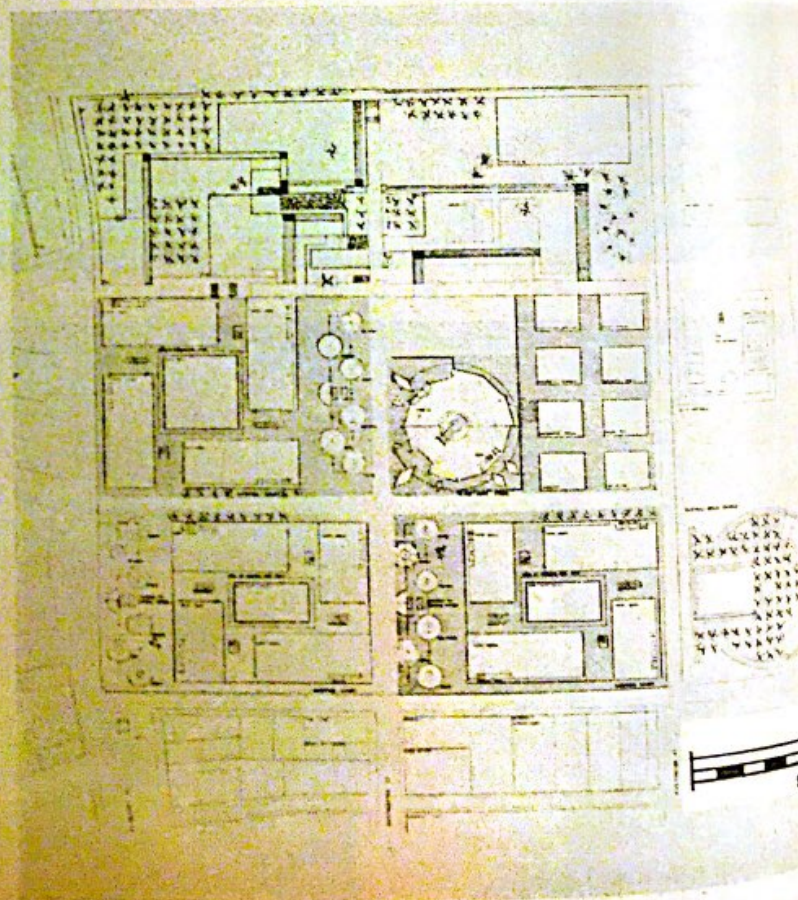


FIG. 3A.

SWITZERLAND : **Lausanne**

a new centre for an old city : W. Vetter

POPULATION : 120,000

TEMPERATURE : 65°F SUMMER
41°F WINTER

RAINFALL : 39"

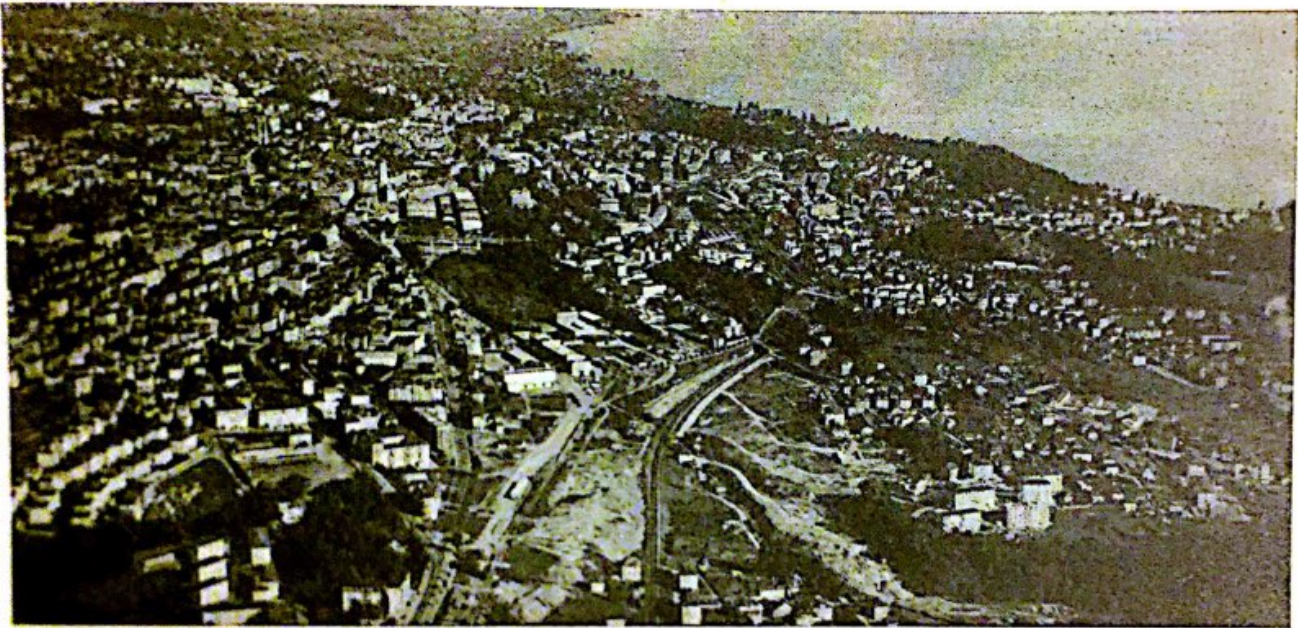
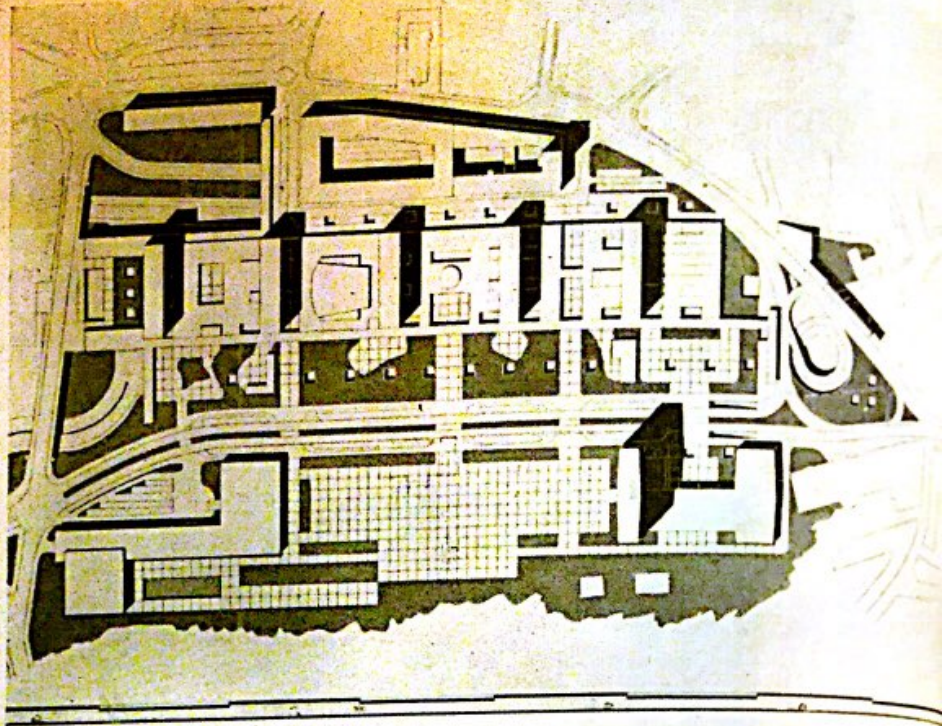


FIG. 2D: Lausanne from the west.
The rail tracks lead to the main station in a ravine that separates it from the Place St François.

Lausanne, which is rapidly expanding on a steeply sloping site, has no adequate Core. A deep ravine slices east-west across the town between the main station and the Place St François. This is filled with warehouses that lie 12m (40ft) below the level of the surrounding streets. The plan proposes to retain the warehouses but roof them over with a platform on which will stand a new town hall (twenty stories); an arts centre (concert hall, museum, library); a commercial centre with cafés, shops, and theatre at and below street level, surmounted by ten-story office buildings. A new town square and esplanade on the platform will command a magnificent panorama of the lake of Geneva and mountains, which are now barely visible from within the crowded city. To the east a new intersection for trolley buses and suburban railways is reached by circular ramps. This plan makes use of the special topography of Lausanne to superimpose the multiple functions of the Core. It can be carried out in stages; offers little interference with existing properties, and will undoubtedly augment their value.

Lausanne

FIG.3A.

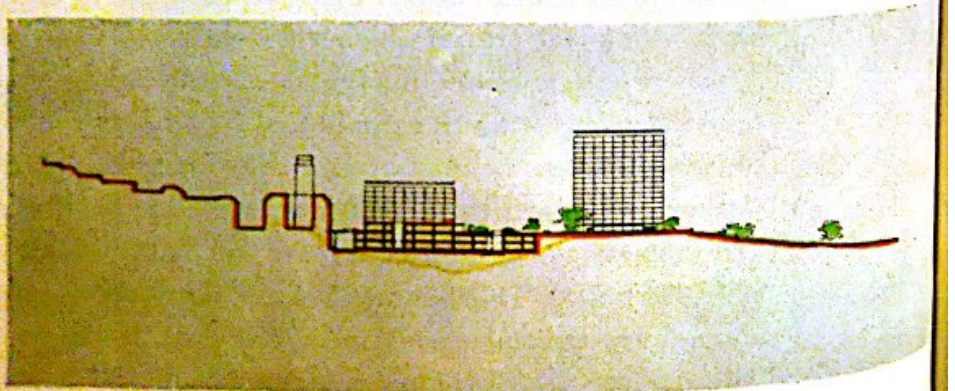
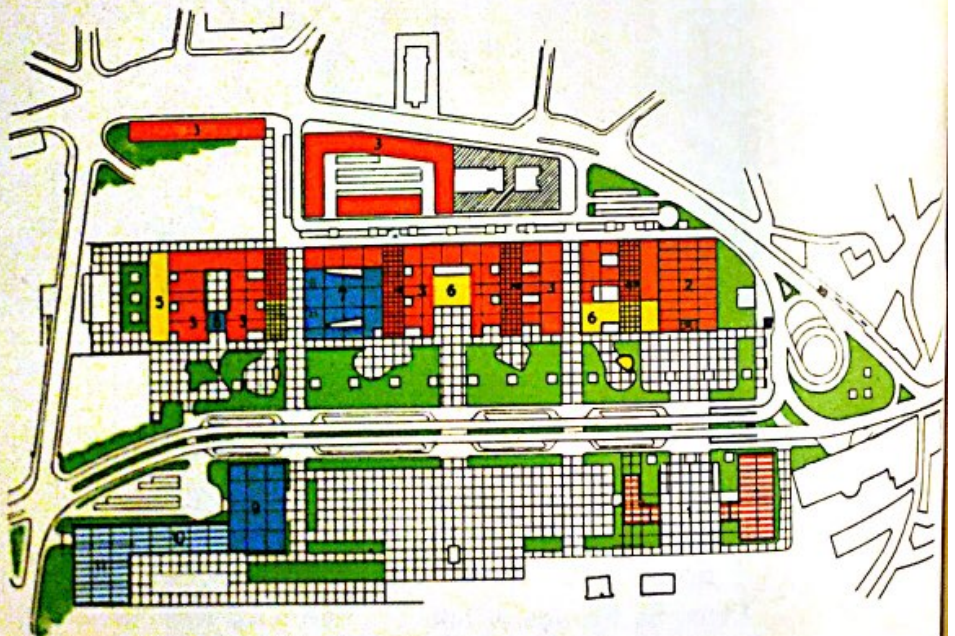


Three-dimensional plan, land use plan, and section of the new Core for Lausanne. The Place St François is to the extreme right, beyond the circular bus and rail intersection.

KEY:

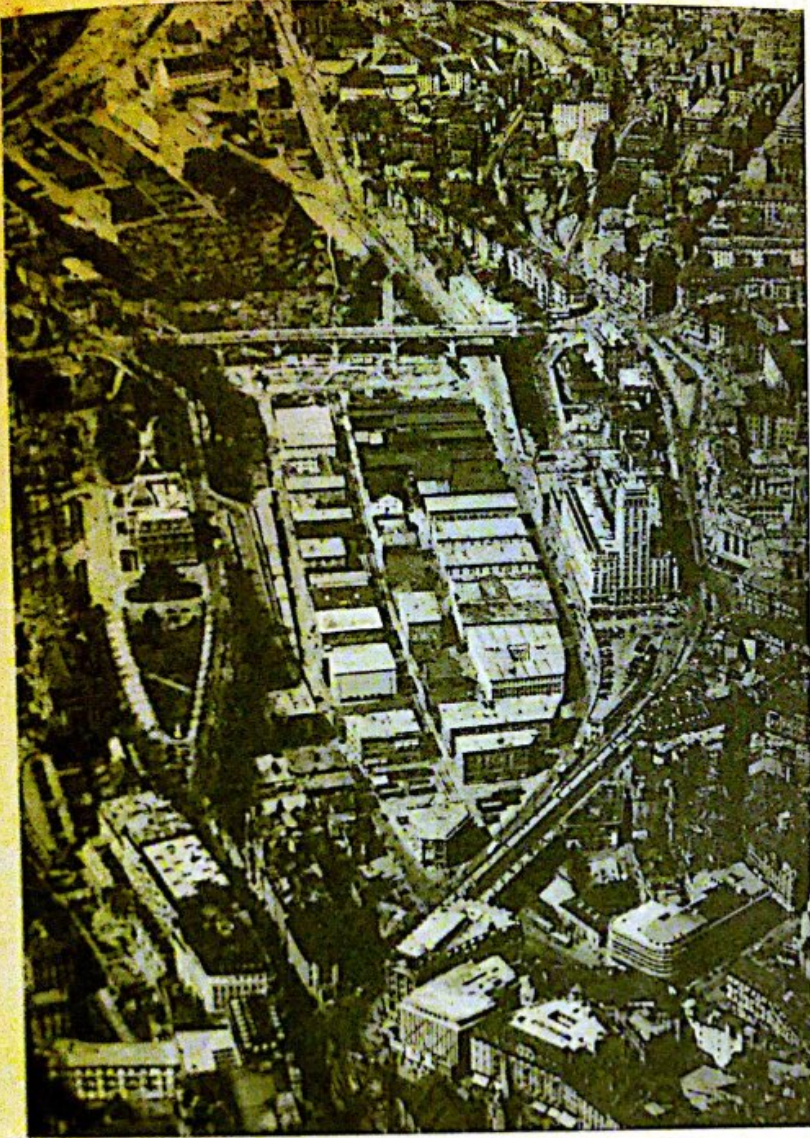
- 1 Town hall.
- 2 Covered market.
- 3 Shops.
- 4 Offices.
- 5 Hotels.
- 6 Cafés.
- 7 Cinema.
- 8 Gymnasium (entrance).
- 9 Concert hall.
- 10 Library.
- 11. Museum.

FIG.3B.



SECTION: Section from north to south showing town hall in elevation.

FIG.6C.



LEFT: The ravine from the east as it is today, filled with warehouses. The Place St François is at the base of the picture.

BELOW: Model of the new Core from the south.

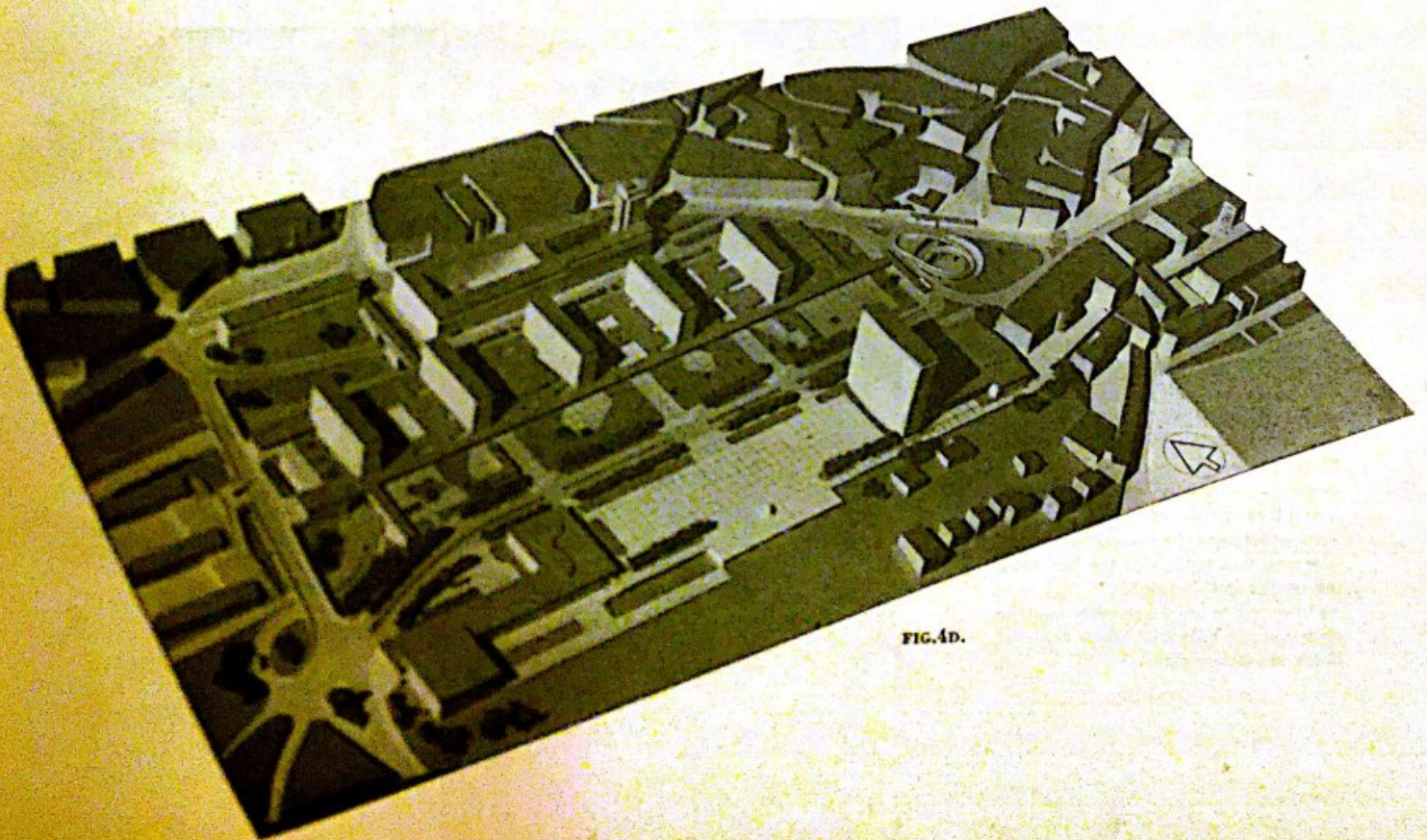


FIG.4D.

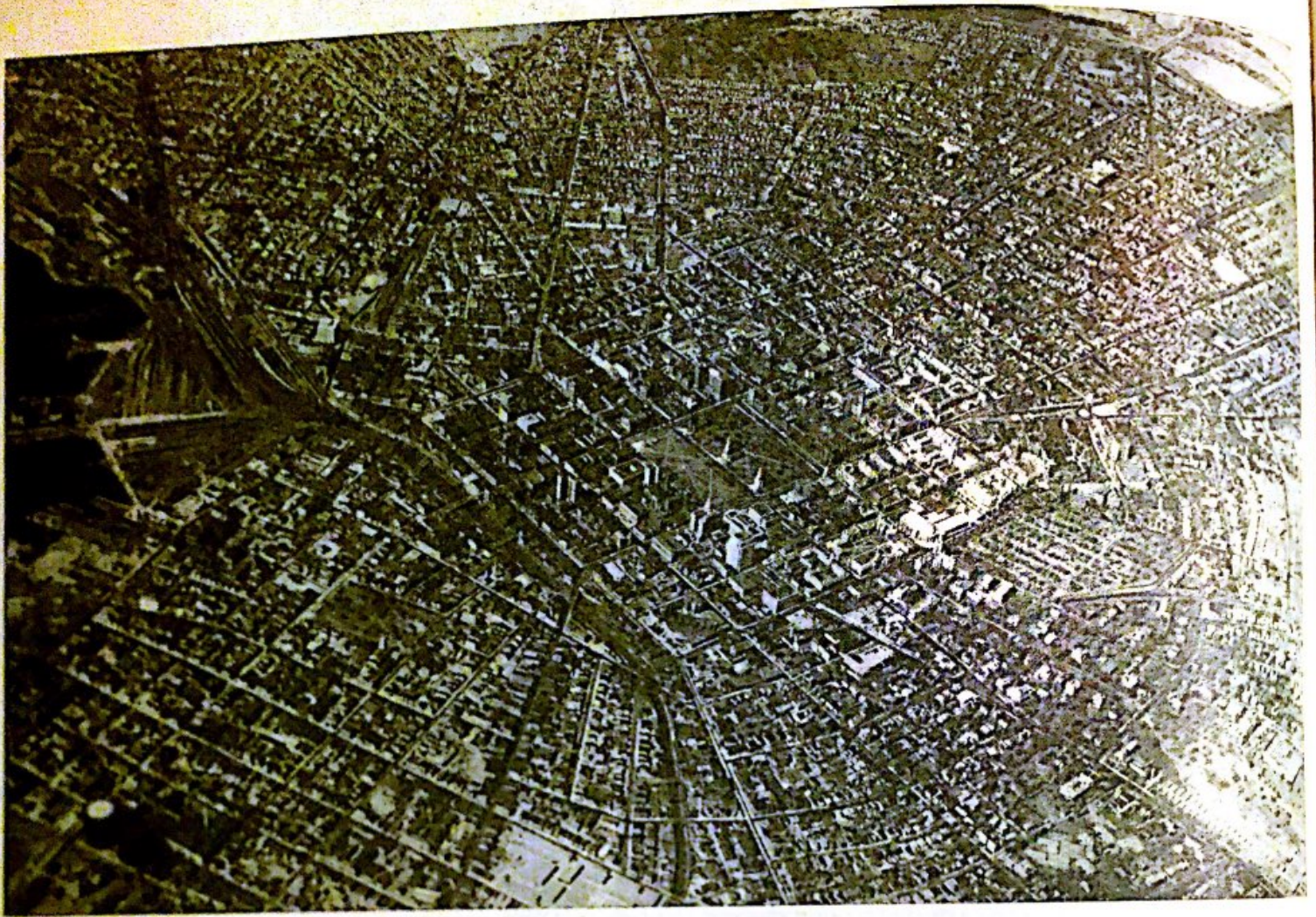
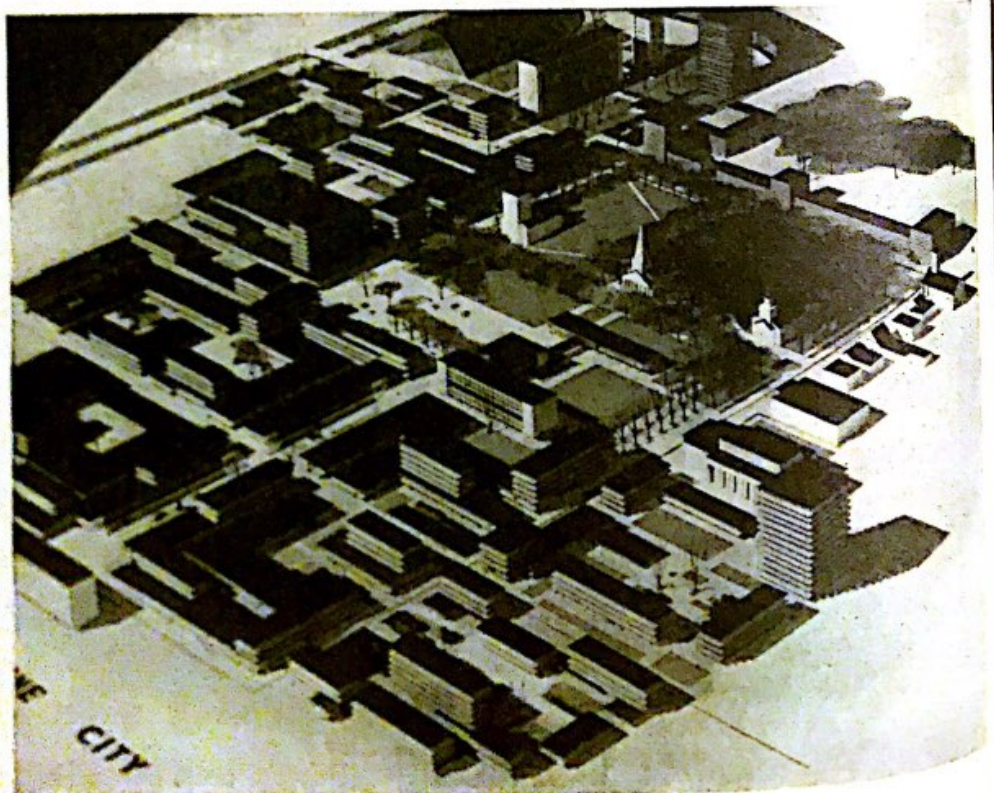


FIG.2D.

FIG.4B.

above: Air view of the expanding city of New Haven from the north.

below: Model of students' plan for Core subdeveloped as a pedestrian island. To left, shopping courts and new shopping promenade opening up view of Campus from relocated railway station with underground access to tracks. The new ring road is on the far side of the tracks at this point. At base, office buildings with 'rest home' open spaces. Yale University occupies block across to right.



U.S.A : New Haven

project for a replanned city centre : Students of Yale University

POPULATION : 160,000

TEMPERATURE : 73°F SUMMER
30°F WINTER

RAINFALL : 44"

The New England town of New Haven was one of the first planned towns of North America. It was laid out in nine squares in 1638, the centre one being communal land. This has remained a public open space, now traversed and surrounded by heavy traffic streets. It is bounded around one corner by Yale University and around the opposite corner by the traffic-strangled business centre. A student plan proposes elimination of all traffic from the nine squares, except for a system of slow-moving 'shuttle buses'; large car-parking areas are provided outside a depressed ring road; the Green (sixteen acres) is redeveloped for more complete use than it now receives or encourages; the best of Old New Haven is preserved (eighteenth-century houses facing the Green, three churches on the Green, and some other buildings); no one is ever more than 150 yards (140 metres) from a 'shuttle bus' route; and twenty per cent more commercial and ten per cent more office space is provided. The skyline, by U.S standards, is low. The new Core is above all a place for pedestrians, with the new buildings grouped around shopping courts and green spaces.

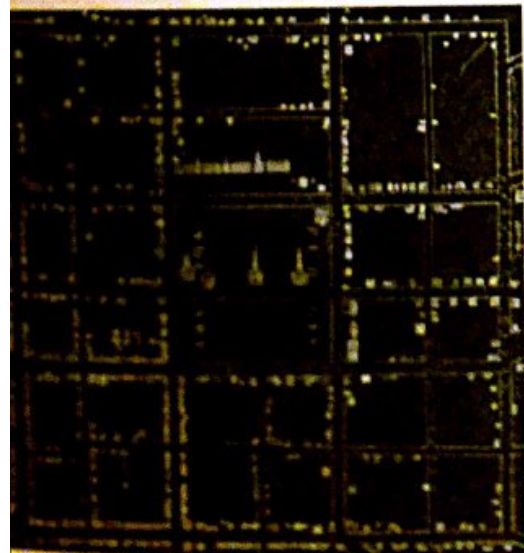
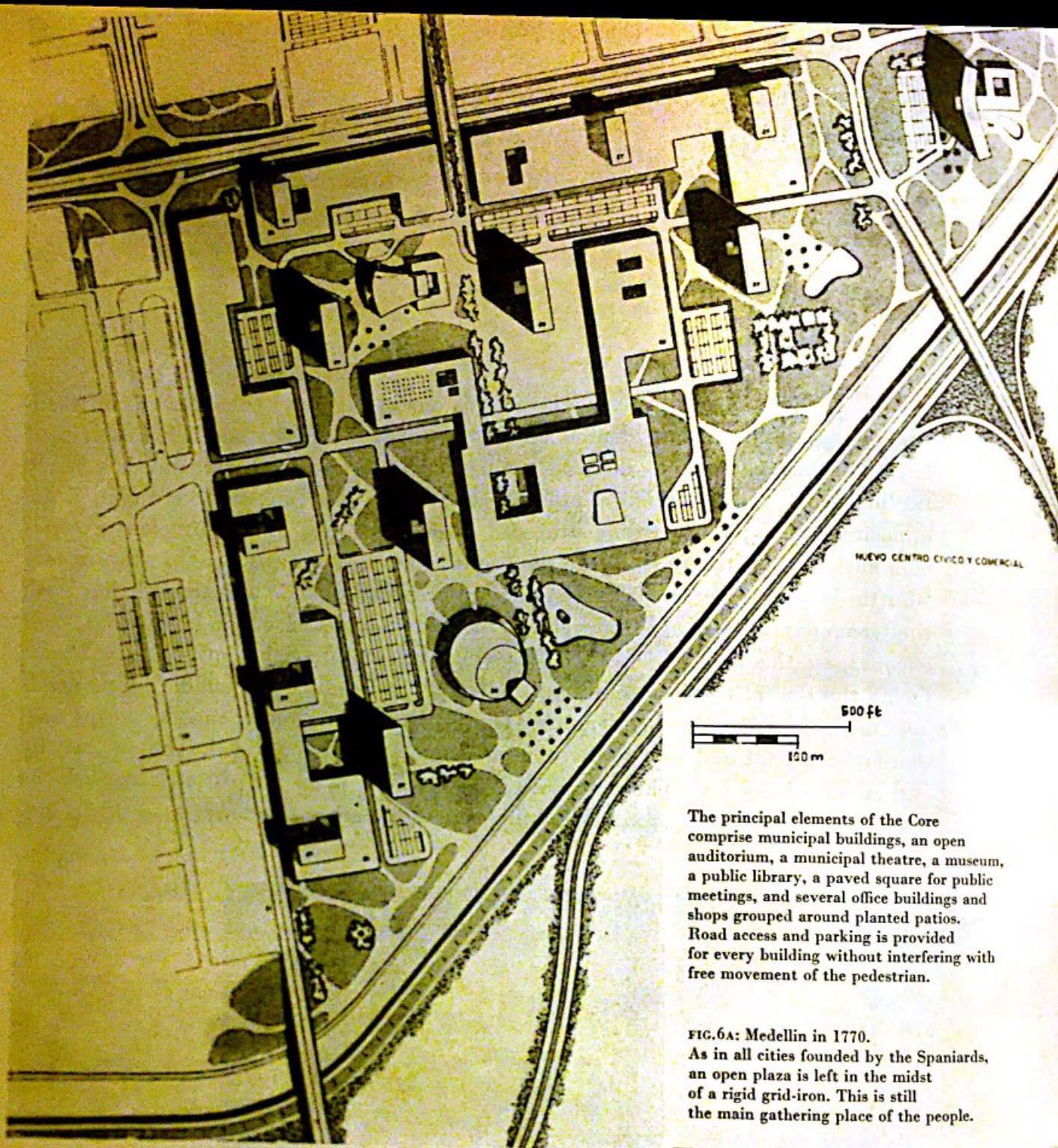


FIG. 6B.



FIG. 6C.

The nine squares of New Haven in 1736 and at the present time.

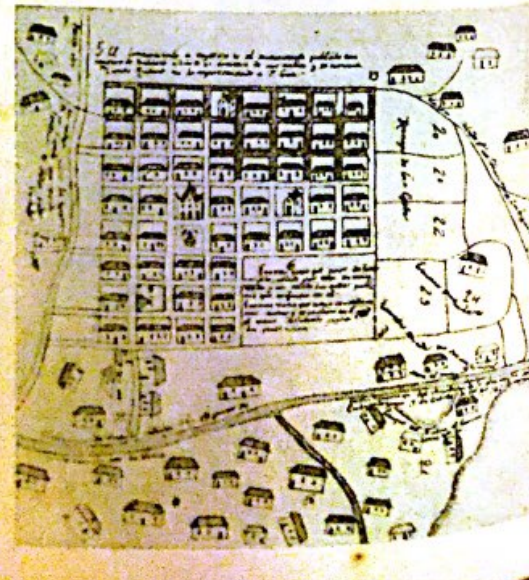


The principal elements of the Core comprise municipal buildings, an open auditorium, a municipal theatre, a museum, a public library, a paved square for public meetings, and several office buildings and shops grouped around planted patios. Road access and parking is provided for every building without interfering with free movement of the pedestrian.

FIG.6A: Medellín in 1770. As in all cities founded by the Spaniards, an open plaza is left in the midst of a rigid grid-iron. This is still the main gathering place of the people.

FIG.3A.

FIG.6A.



COLOMBIA : **Medellin**

a new city centre : Wiener and Sert

POPULATION : 700,000

TEMPERATURE : 71°F SUMMER
70°F WINTER

RAINFALL : 59"

Medellin is the largest industrial city in the equatorial republic of Colombia. Its present population is 360,000 and it is growing rapidly. The city lies in a narrow valley between two ranges of high mountains and, due to its height, has a moderate climate. A new plan for Medellin is now being carried out. Its old centre has become greatly congested and is insufficient for the needs of the growing city, so the decision has been taken to move it to nearby open land which is at present occupied by railway yards, a station and depots alongside the river Medellin. The city owns large areas of land along the river and the land owned by the railroad will be made available as soon as the station has been moved to another location. The plan provides for both public and private buildings to be erected on this new park site, and private builders can buy sites that will be surrounded by public lands.



FIG. 2C.



FIG. 2D.

ABOVE, LEFT: In the plan for Medellin, now under way, a system of Cores of different sizes has been planned to form a network covering the whole city. Embankments of streams are being landscaped to avoid erosion, and sites along these parks have been selected for the new Cores.

RIGHT: Air view of Medellin. The new main Core will be built on the foreground triangle.

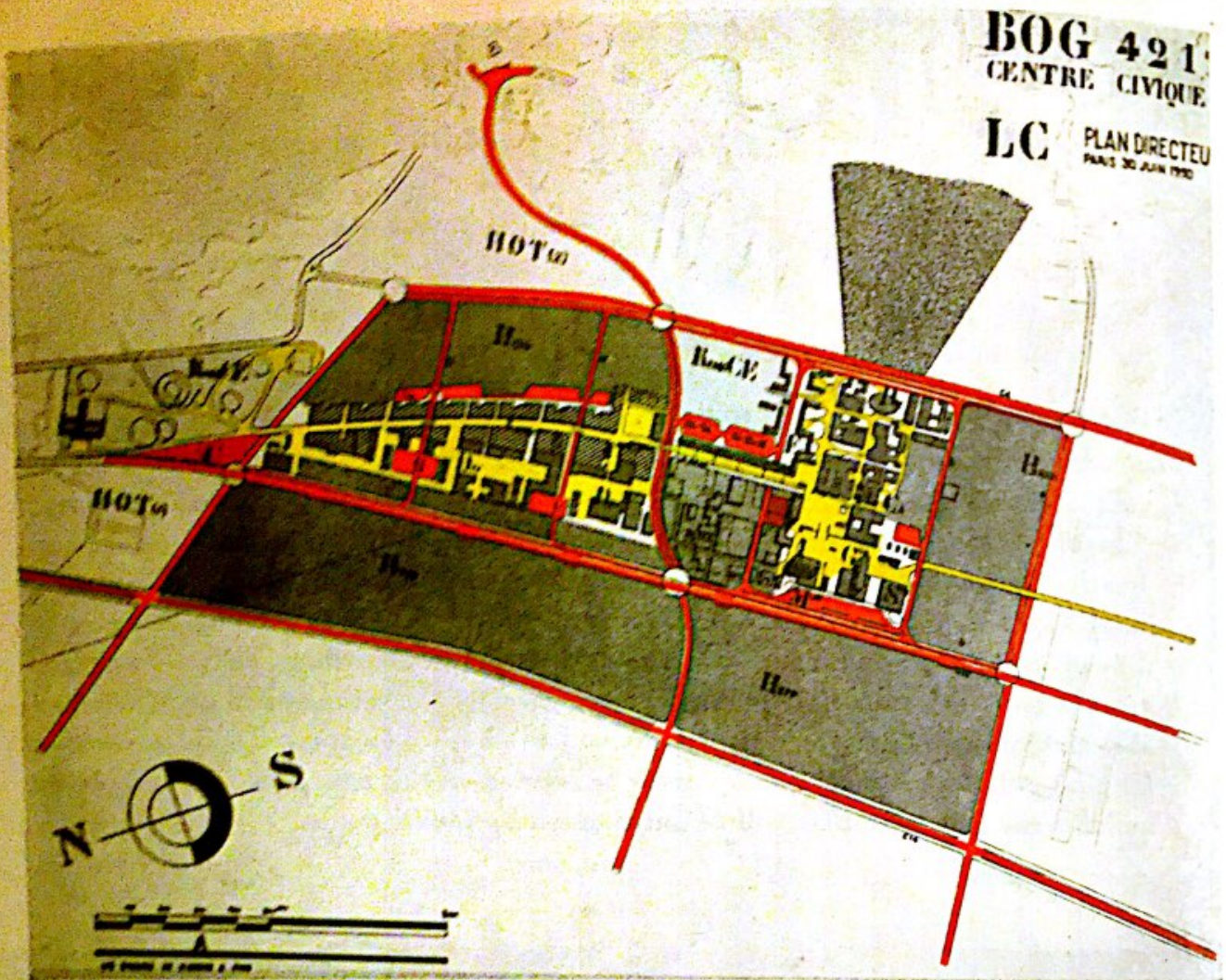
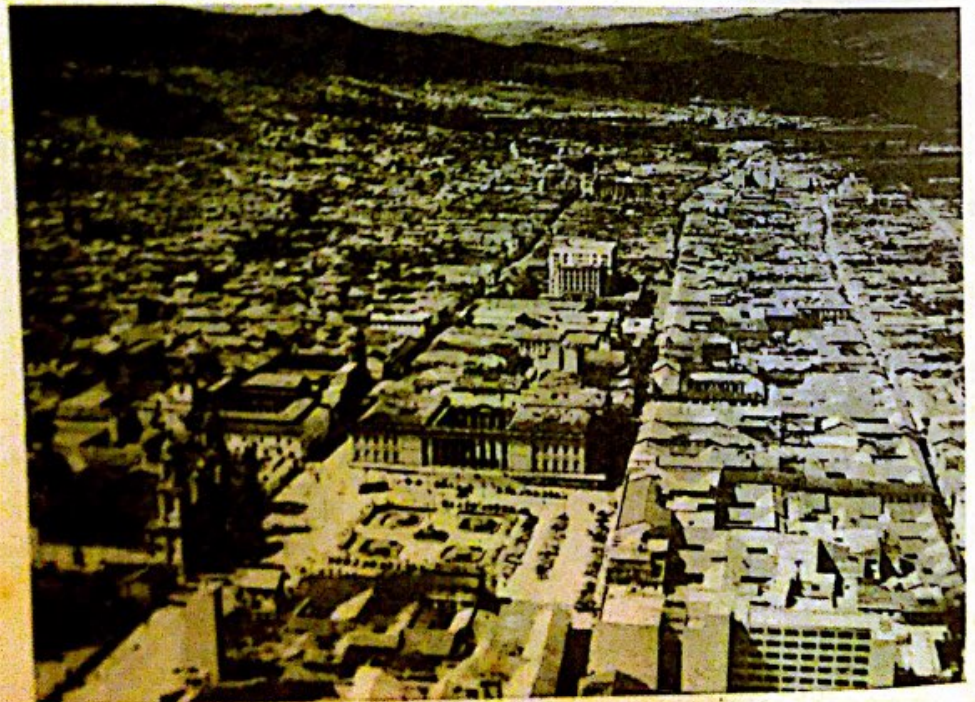


FIG.2C

ABOVE: General plan for the central area.
Pedestrian areas shown in yellow; traffic routes in red.

BELOW: The Core at present facing south
towards the Parliament Building across the Plaza Bolivar.
On the left is the old Cathedral.

FIG.6C



COLOMBIA : **Bogota**

a replanned government centre : Pilot Plan:

Le Corbusier

Consultants : Wiener and Sert

POPULATION : 1,500,000

CLIMATE : 58°F SUMMER

57°F WINTER

RAINFALL : 42"

Bogota is the capital city of Colombia. It is not an industrial city, nor is it one that has developed on a crossroads, nor is it a strategic centre of international commerce. Bogota has developed as the Administrative Capital – a centre of government, a university centre, and a cultural centre of political and private affairs. It is now considered one of the centres of culture of the whole of Latin America. The Civic Core, as developed in the new plan, comprises:

- (1) Administrative buildings for the country and the city (see page 152).
- (2) The old Plaza Bolivar with its extension along the Carrera 7, which will become a promenade for pedestrians only with porticos on both sides, following the old Latin-American tradition of colonial days.
- (3) The northern extension of this promenade developed as a shopping street.
- (4) The business and commercial centre of the city.
- (5) The amusement centre, with cafés, restaurants, museums and other cultural institutions, bull ring, public park, etc.

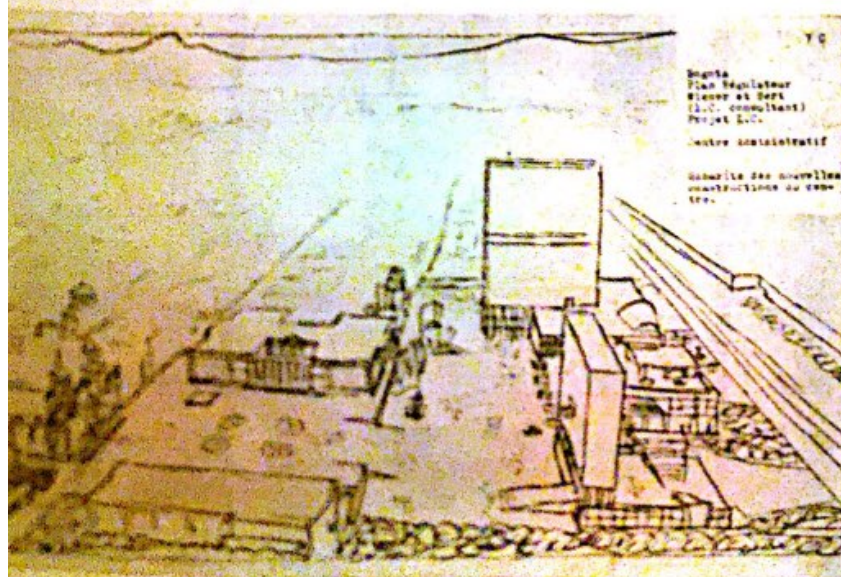


FIG.6D: The same view as on the opposite page after the new plan is completed, showing the enlarged Plaza Bolivar, the new Municipal Building and, beyond it, the new Government offices.

INDIA : Chandigarh

a new government centre : Le Corbusier with Jeanneret,
Fry, Drew

POPULATION : 150,000

CLIMATE : 84°F SUMMER

55°F WINTER

RAINFALL : 30"

The erection of Chandigarh, new capital of the Punjab, was begun in 1951. The city is expected to grow to 500,000, but the first plan is for 150,000. The site is a magnificent agricultural plateau at the foot of the Himalayas. Here, for the first time, Le Corbusier's theory of the Seven Routes has been fully employed. These are V1: Express highways. V2: Civic avenues of monumental character. V3: Fast traffic roads from which entrances to buildings, sidewalks and pedestrians are excluded. V4: Shopping streets. V5: Distributor streets from shops to neighbourhoods. V6: Service streets to houses. V7: Footpaths and green ways.

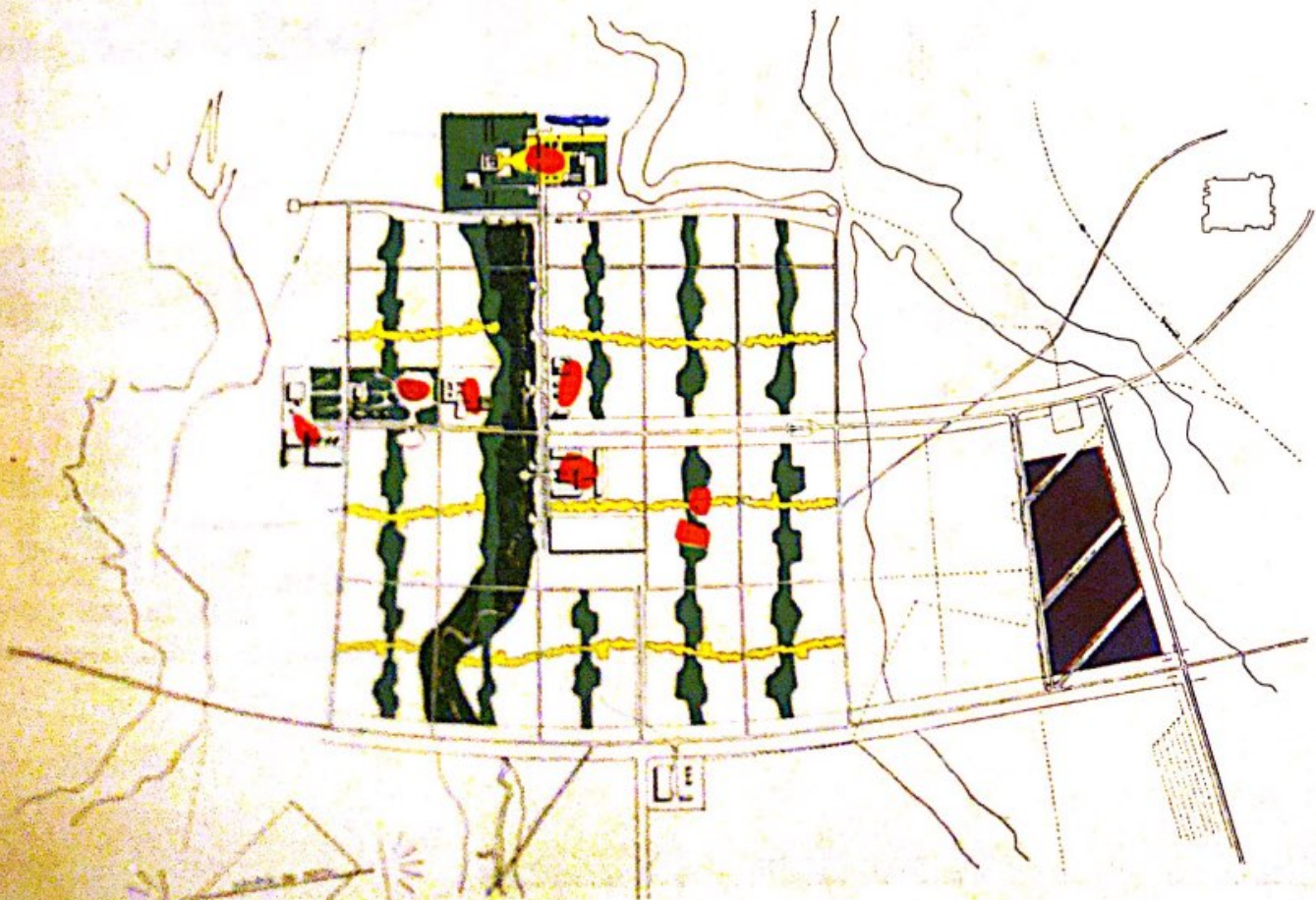


FIG. 2a: General Plan of Chandigarh (see also p.51). City Cores shown in red and the 'cure valley' in dark green. V1, 2 and 3 are in white; V4 in yellow and V7 in green.

Bogota

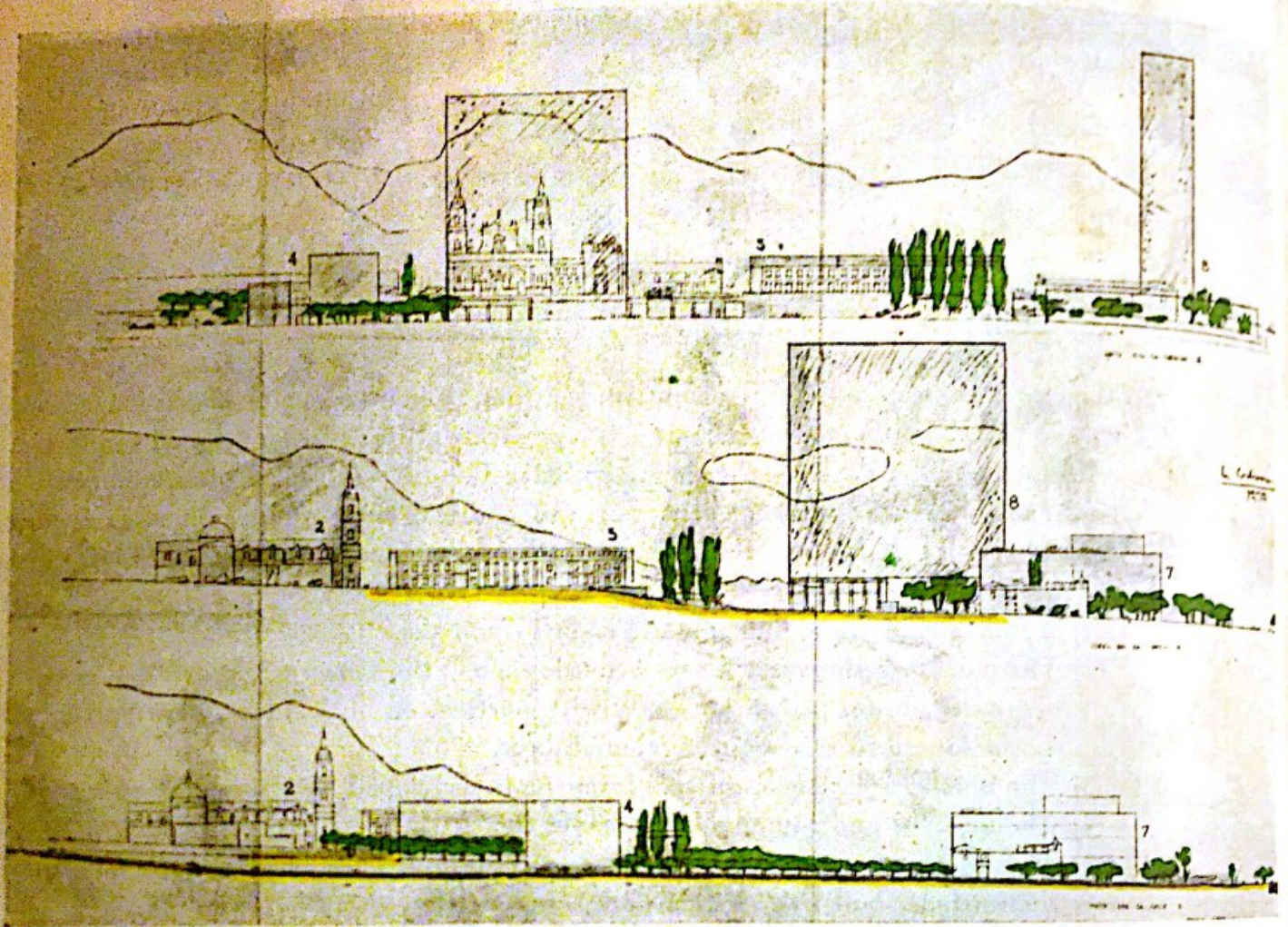


FIG. 1A.

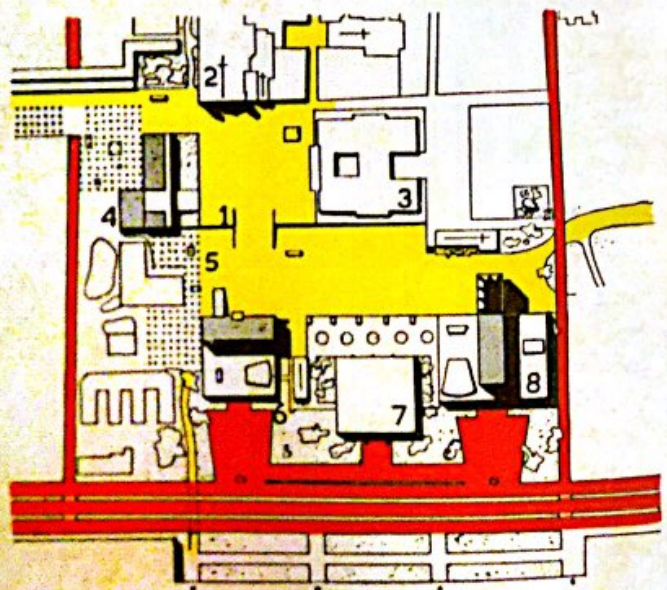


FIG. 3C.

Sections and plan of the new administrative Core of Bogota which will develop around the present one. The old Plaza Bolivar, now a setting for the Cathedral (2) and Parliament Building (3) will be enlarged, and around it will be placed a new Municipal Building (6), the Government Ministries grouped in one big skyscraper (8) and the Palace of the President (7). The new square will have several levels connected by ramps and will be reserved exclusively for pedestrians.

Chandigarh

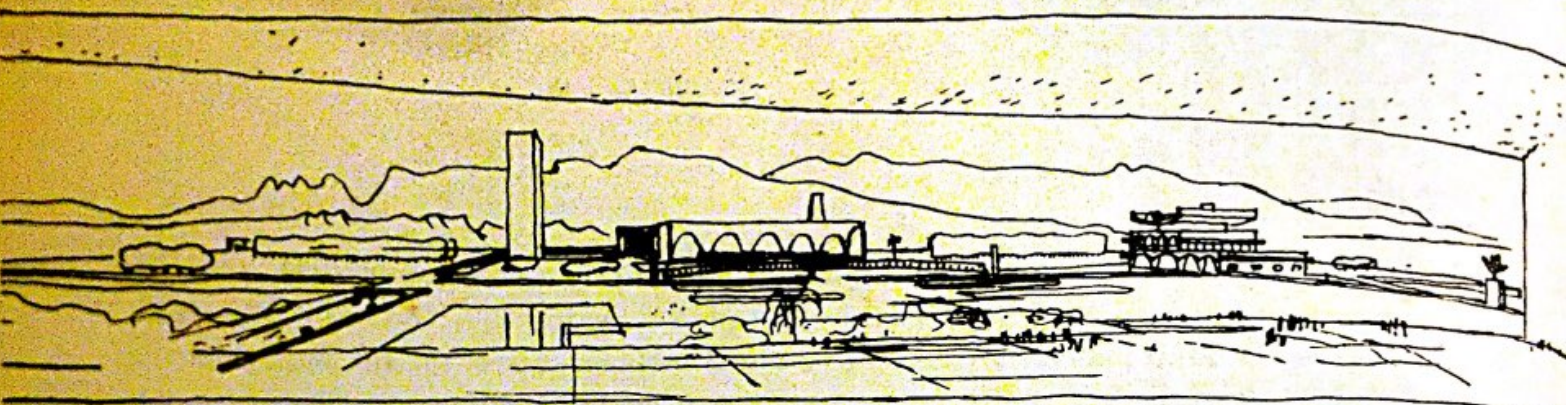
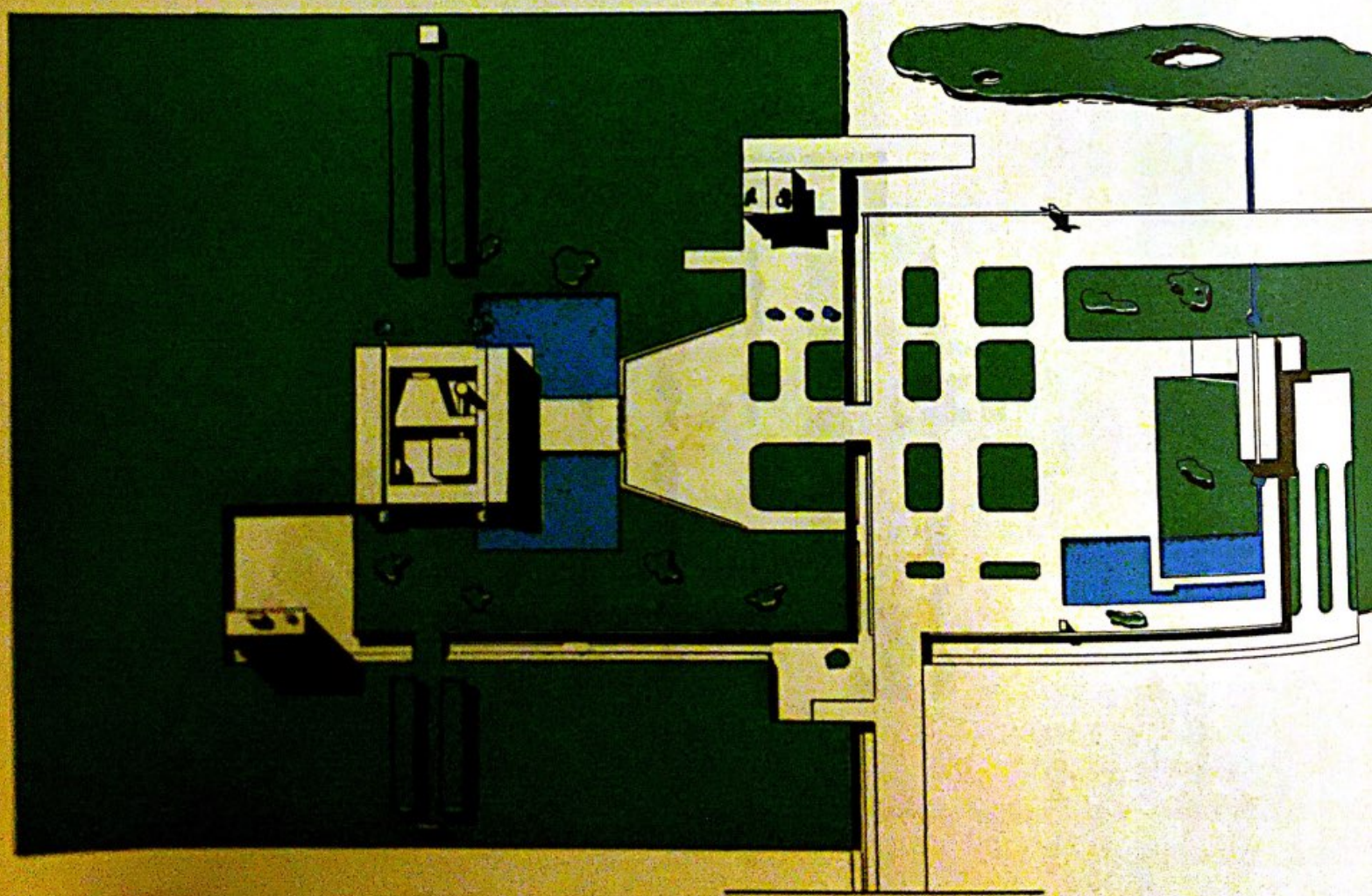


FIG.4A: Panorama of the Government Centre from the High Court of Justice.

FIG.3A: The Government Centre plan.
Left to right: The Secretariat, Assembly Chambers,
Palace of the Governor, High Court of Justice.

FIG.3A.



1 KM

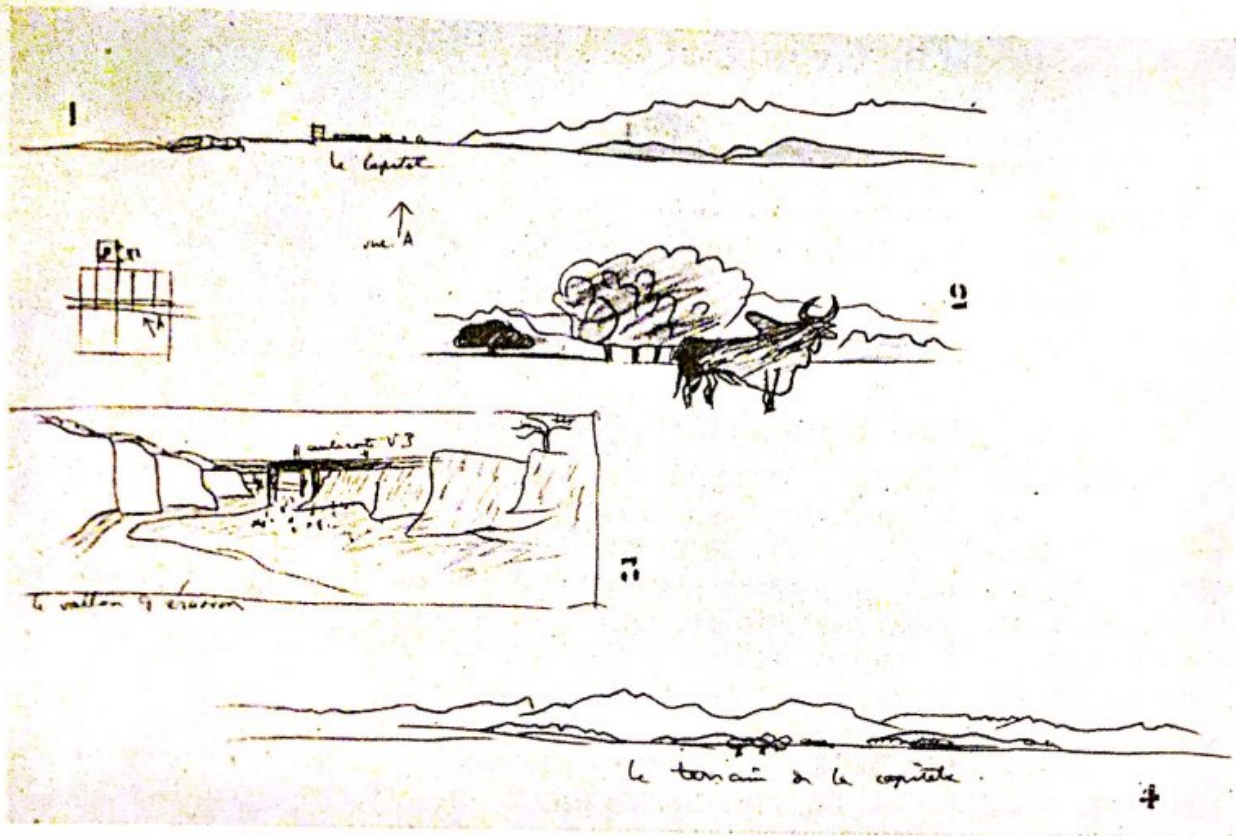


FIG.3D.



FIG.1C.

Sketches by Le Corbusier:

- (1) The Government Centre flanked by the Himalayas.
- (2) The countryside.
- (3) The great gorge whose floor level will be used for spontaneous leisure - dancing, singing and poetry - in little amphitheatres and open stages.
- (4) The site of the city of Chandigarh.

In Chandigarh two V2s traverse the city. One contains commercial buildings until, in the west, it enters the Intellectual Core. The other is the Capital Avenue, leading to the Government Centre, at the extreme northern limit of the city. V3s divide Chandigarh into large rectangles, each approximately $\frac{1}{2}$ by $\frac{3}{4}$ mile ($800 \times 1200\text{m}$) and each housing up to 20,000 people. Fast bus service along these roads will minimise the need for private cars within the city. V4s cross these sectors, each with a Core containing market, cinemas, library, police and fire services. Shops and cafés are on the shady side of wide sidewalks planted with trees. Within each sector people live undisturbed by traffic, and the schools are located near V7s that run longitudinally through the sectors and cross beneath the V3s.

The Groups of CIAM, 1952

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Groups under Reorganisation

- Argentina, Colombia (Bogota), Czechoslovakia, Hungary, Jugoslavia, Poland.

Groups in Formation

- Brazil, Canada (Vancouver), Colombia (Medellin), India (MARG), Ireland, Israel, Peru, Uruguay.

Outline of the Core: a summary of CIAM 8

The Heart of the City: a summing-up S.Giedion

A short outline of the Core: *extracts from Statements prepared during the 8th Congress*

Summary of Needs at the Core

The Hierarchy of Urban Cores

The Realm of the Pedestrian

Attributes of the Core: the Human Scale

Attributes of the Core: Spontaneity

The Core as a Centre of the Arts

Conclusions

KEEP LEFT

PLEASE CROSS HERE

NO ENTRY

STOP

X

NO RIGHT TURN

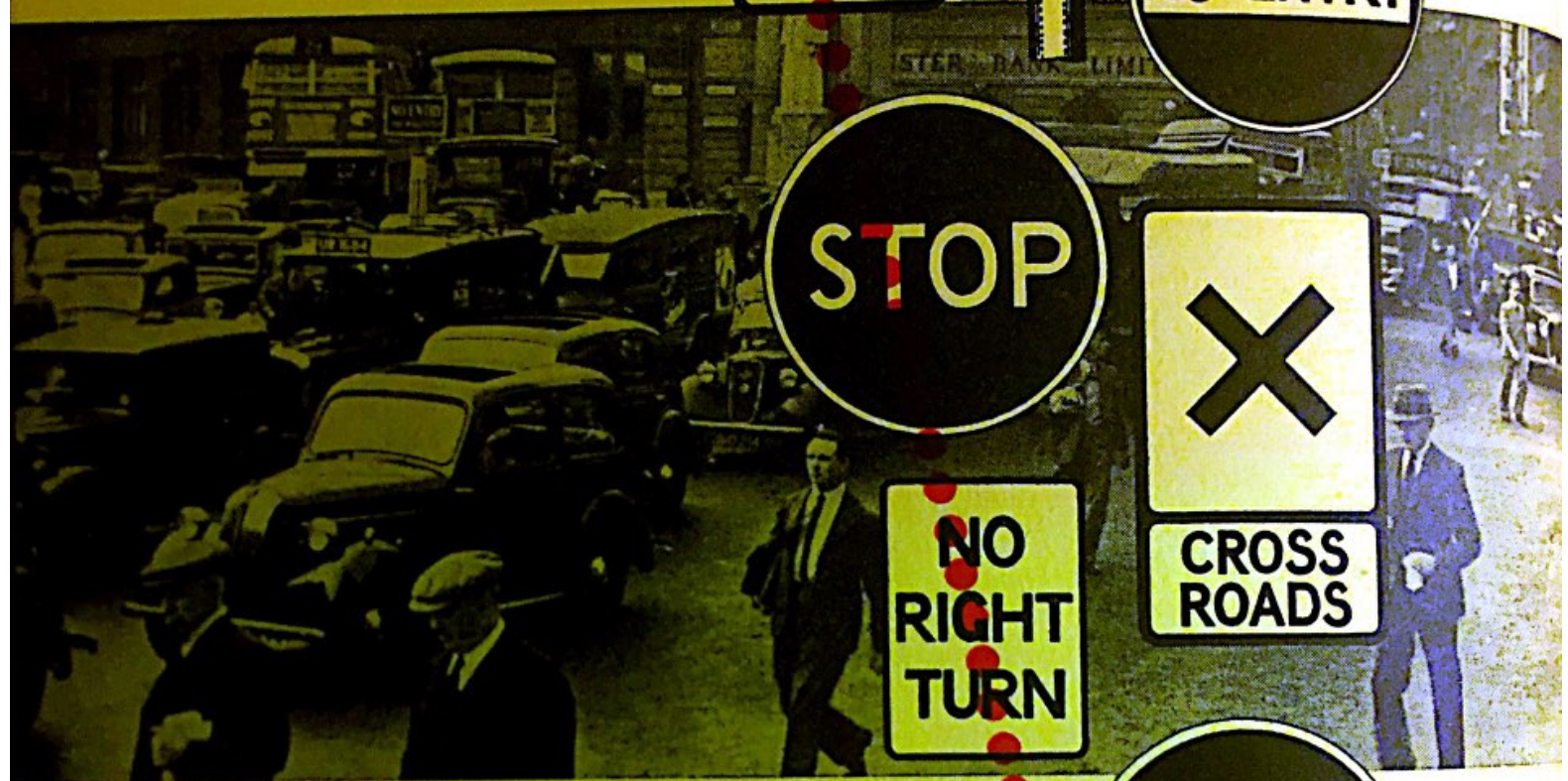
CROSS ROADS


CYCLISTS ONLY

GO


ROUND-ABOUT

NO THROUGH ROAD



At the present time, despite all appearances and amid all destructive tendencies, a humanising process is evident; an uprising of the human spirit against the oppressions of those close brothers – mechanisation and bureaucracy. Among the coming generation, this uprising has sometimes taken the form of escapism. Distrust of the machinery of politics can be observed everywhere. This goes together with an awakening of new moral and religious feelings, not bound to any specific creed but linked to a deep respect for the dignity of human life. This rejection of the cynical worldliness that dominates the contemporary scene – in capitalist as well as in communist areas – is a kind of self-protection, a longing for '*Ganzheit*' – wholeness – a desire for universality and for the integration of the different facets of human experience.

During this century architecture has sometimes been able to anticipate developments and it is already tackling this problem of wholeness. If we trace the route travelled by architecture since the turn of the century, from a human point of view, we can perceive two important steps.

The first development, which began far back in the nineteenth century, was a fight against the poisoned atmosphere of the time and a moral revolt against the deformation of forms. A purification of the immediate human environment has been evident since William Morris. Around 1900 it sprang across to the single family dwelling (F. L. Wright), and since about 1920 it has been concerned with multi-apartment buildings. These are still in the process of development, though a number of varied solutions have already been arrived at.

The second step in development of contemporary architecture was its effort to tackle the humanisation of urban life. In the forefront strode the relationship of the part to the whole, the reinstatement of the connection between the individual and the community. This is why town and country planning has gained in importance since the '30s. Now a special problem has arisen from the matrix – the reinvigoration of the City Centre, the heart of the city, the place where men can move about freely under heaven, undistracted by warning signs of 'STOP' and 'WALK NOW'.

Concern about the restoration of balance between individual and collective spheres of behaviour is evident everywhere today. This was the underlying reason for the selection of **THE CORE OF THE CITY** as the main theme for the 8th Congress of CIAM. Instead of the over-employed term 'civic centre' the old English word **CORE** was selected, which the *Oxford English Dictionary* defines as the 'central innermost part, the heart of all'. The

It is already apparent that the new urban landscape will be greatly differentiated, and this applies equally to the Core. There are evidences of a tendency to separate out the recreation centre, the shopping centre, and the administration centre from one another. An example of this was shown in Le Corbusier's new capital city for the Punjab, Chandigarh, which will have a preliminary population of 150,000.

Most of the architects and planners who were consulting one another about the directions of future development were themselves in the throes of realising their projects. A large garage building stood in the grounds of the country mansion of Hoddesdon, and here groups sat until midnight listening to descriptions of schemes from the four corners of the world. Here we had evidence of a feature of our present cultural development that, more than any other, distinguishes it from former periods. Normally there has been one cultural centre from which everything has radiated. Today evolution is no longer confined to one nucleus - to Europe or the U.S.A. Today it emerges from the furthest regions: in Finland and Brazil the level of creative architecture is higher than in England, Switzerland or Sweden. We are disturbed almost daily by news of political unrest in Asia, Africa, or South America. No one can tell how this will end. But there is another aspect of this emerging consciousness of remote peoples which is their more courageous and less prejudiced views of construction. This does not mean that the old world rests in idleness. There were several interesting plans that seemed bold to us, accustomed to a European scale, such as W. Vetter's proposal to roof over the Warehouses, which lie in a sort of gully beside Lausanne Railway Station, with a great slab of concrete, and to use this area to create a modern Core; also Le Corbusier's famous *Unite d'Habitation* at Marseilles, the most interesting experiment in an extension of the way of living. But these appear puny when compared with extra-European projects, some of which are already realised, such as work on the Gold Coast of Africa (by Maxwell Fry and Jane Drew); some under construction, such as the towns Wiener and Sert are building in Peru (Chimbote) and Colombia (Medellin), or Le Corbusier's Chandigarh installations in India, whose government centre with its fantastic designs for sun protection demonstrates how even concrete can speak with the language of fairy tales. The city of Hiroshima is being transformed into a 'Peace City' following a decision of the Japanese Parliament and the Japanese architect explained how, instead of monuments, a new Core is being designed as a 'Peace Centre'.

The altered position of Cause and Effort

Nothing is more remarkable at the present time than our change of attitude towards the past and the coming generation. Ever since Bergson we have realised that history is not something static and dead, but something that ceaselessly 'gnaws into the future'. Therefore, it serves not only as a store house in which one can find forms to imitate, but as a priceless container of human knowledge and experience. The Core of a city is an expression of the intimate relationship between man and man, between the spheres of the

individual and the community. This is a problem that changes constantly and yet is continuous through time. So I, as an historian, must answer the question, 'What was the attitude of the past – of antiquity or the middle ages – to the problem of the Core of the city?'

There is a changed attitude towards the future generation. The reason why the Futurists wished to burn the museums and German dramatic literature around 1914 adopted the theme of patricide as its symbol, was the revolt of youth against an authority which had become rigid and oppressive. This authority, to escape from its own inner insecurity, seized upon every opportunity to play the despot, as father, employer, or even schoolmaster. By this means authority devaluated not only itself but also its memory. This relationship has now changed completely. Indeed, the attitudes of our time have totally altered. Today there is no need for the sort of spring cleaning that was necessary at the time of William Morris or around 1920. Today we look for the coming generation to continue the work that has been begun and to develop it with their own imagination. Among the most talented members of this coming generation one finds an ever stronger rejection of rationalism and narrow specialisation. It is in line with the character of CIAM that it regards the coming generation as an aid and not as a threat. This has been given expression by the inclusion of two students within its somewhat limited Council (the United Nations' definition has been accepted that the term 'student' includes those who have completed their studies less than two years ago). The theme of architectural education, which has occupied CIAM for a long time, was again taken up at Hoddesdon. Nobody could have given this nobler expression than Walter Gropius, whose universal outlook can be summed up in a few words as follows: 'The supreme law of education is the suppression of over-specialisation in favour of all-roundedness. The accumulation of formulas and detailed facts must give place to the knowledge of method.'

A Short Outline of the Core

Extracts from statements prepared during the 8th Congress of CIAM

Summary of needs at The Core

- 1 That there should be only one main Core in each city.
- 2 That the Core is an artifact – a man-made thing.
- 3 That the Core should be a place secure from traffic – where the pedestrian can move about freely.
- 4 That cars should arrive and park on the periphery of the Core, but not cross it.
- 5 That uncontrolled commercial advertising – such as appears in the Cores of many cities today – should be organised and controlled.
- 6 That varying (mobile) elements can make an important contribution to animation at the Core, and that the architectural setting should be planned to allow for the inclusion of such elements.
- 7 That in planning the Core the architect should employ contemporary means of expression and – whenever possible – should work in co-operation with painters and sculptors.

The Hierarchy of Urban Cores

The Core is the expression of general factors of human nature and organic life. It varies according to the particular factors of an especial culture or place.

The scale of the community and the size of the city itself, together with the human environment of which it is the centre, give quite different values and proportions to the Core and its functions. Its physical elements differ both in quantity and quality from village to metropolis, but one measurement remains constant – the human scale – and the Core of the largest city still has something in common with its rustic forebear; its nodal quality and the echoes of history that sound across its characteristic combination of space and structures.

Having agreed that Cores must vary greatly in size and in nature, and be spread through the districts of the city as well as through the country towns and villages, it is necessary to take steps to create them wherever needed and put them at the disposition of their users.

To ensure the vitality of a Core – its continued substance and sustenance – the creation of very small communities must be avoided, save in very exceptional circumstances; and, in any small agglomeration, very close contact between the dwellings and the Core is always necessary to maintain its liveliness.

In the larger cities which possess secondary centres, it is important to liberate and integrate in the central Core the greatest number of those diverse functions that encompass the sum of the needs, preoccupations, and activities of the inhabitants. All the possibilities of modern techniques should be employed without prejudice. The vitality of the Core depends upon the attraction it can exert; no possibility can be neglected without fear of depriving the Core of that intensity of life that is its right.

Certain common dimensions may determine the general disposition of constituent elements. It is, however, important to watch that these normal dimensions allow for frequent or exceptional modifications. *These dimensions constitute in fact a complete programme; they cover the whole range of Cores distributed through the urban districts and find their natural efflorescence in the Core of the city, which should radiate a full expression of the spirit of that city.* The Cores which arise sporadically within the city districts should not be left to live in isolation but should be animated and linked to one another by elements of the urban landscape.

The realm of the Pedestrian

Man today observes, listens, and suffers – but he has no longer the means to be a participant.

The most important role of the Core is to enable people to meet one another to exchange ideas. The Core must, therefore, be attractive to all types of people in the region it serves.

The word 'Core', in the sense we are using it, does

not mean merely the centre of the urban agglomeration, nor the busy heart of the city traffic or economic activity; sometimes it may be united with these areas, but the Core includes other elements, often of an imponderable nature.

The essence of the Core is that it is a rendezvous. Its situation and contents may be planned or spontaneous; drawn from history or from some isolated accident; derived from the convergence of activities or as a refuge against such activities. Whatever the cause the Core should give both an impression of freedom of movement and also a release from loneliness or boredom; an atmosphere of general relaxation, of participation in a spontaneous and impartial performance, a touch of the warmth of human kindness, a possibility of new encounters and – at the same time – a recovery of *civic consciousness*.

The Core is a place where people may gather for leisurely intercourse and contemplation, whether in a small community space or in the largest city centre.

It is in this meeting place for pedestrians that the human scale and values may be re-established within the public domain.

The problem is to name and state the group of conditions that will give rise to complete and *harmonious action*, and to state these in such a form that they will be readily understood. It is immediately apparent that a whole series of activities need to find their outlet here, activities that are divergent in time as well as in space.

To establish a place – a Core – where all elements can come effectively into play, both concentration and co-ordination are necessary.

It is essential that all mechanised traffic is forbidden to enter the Core, which must remain above all else the domain of the pedestrian.

The Core is a civic landscape, it enhances contemporary life by providing unlimited recourses of enjoyment of the interplay of emotion and intelligence.

Many old cities have lost their former Cores through changes in the location of activities or people; some newer cities have never had Cores of any consequence; if new towns are built without Cores they will never become more than camps.

Attributes of The Core: The Human Scale

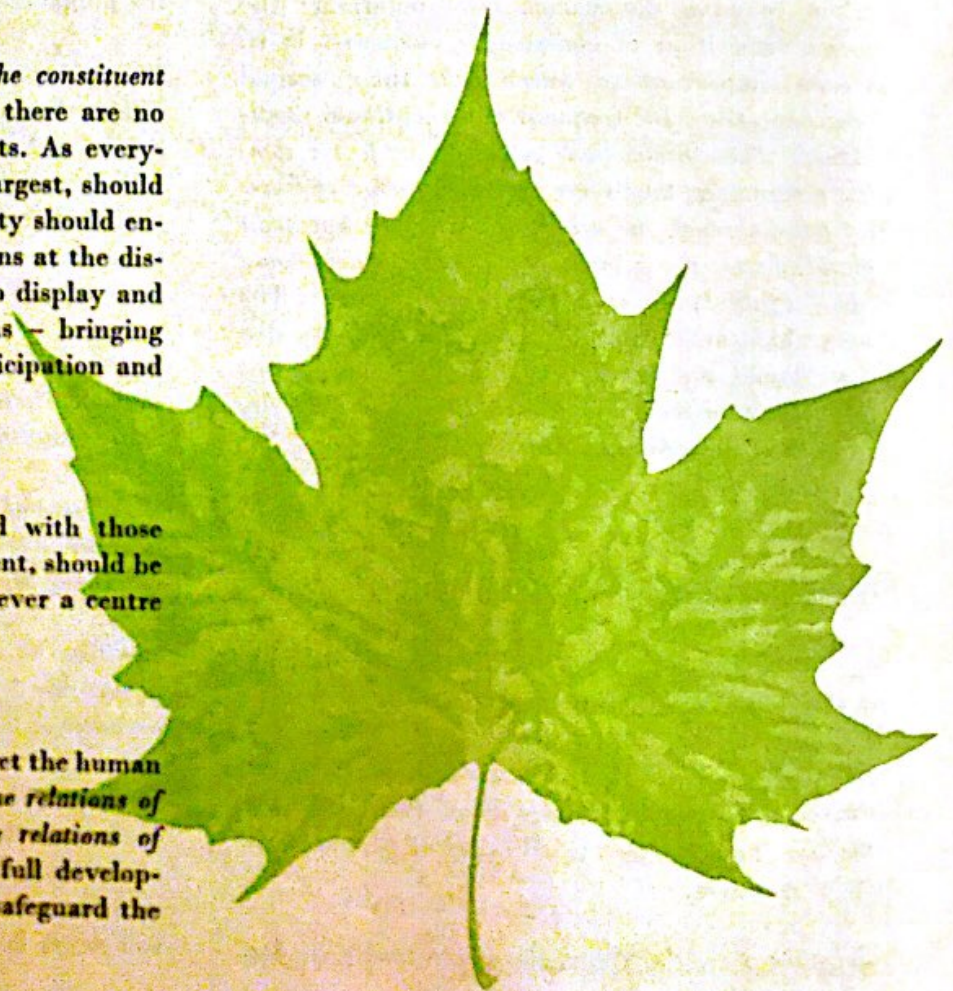
We believe that CIAM can fulfil a useful role by showing modern society how it can equip itself with means to activate its members; means that must always retain the human scale and simultaneously be multi-form in character, accessible to all, and widespread throughout the community.

Attention must be paid to the physical, intellectual, and also the sentimental needs of human nature, and places and buildings must be created that are equipped with everything necessary and sufficient for these ends. These words necessary and sufficient do not mean that it is sufficient simply to present the material elements of modern technical skill, nor that it is necessary to assemble the most advanced mechanical marvels – which are often out of reach on account of their cost. The words necessary and sufficient imply that common sense must be exercised in the selection of the equipment.

The human scale should pervade all the constituent elements of the Core. Apart from this there are no standard dimensions for these elements. As everything, from the smallest scale to the largest, should be able to take place here, the authority should endeavour to put sufficient material means at the disposal of the citizens to enable them to display and to declare their spontaneous reactions – bringing into play their powers of action, participation and invention.

These places and buildings, equipped with those elements that are necessary and sufficient, should be distributed in town and country wherever a centre of vitality occurs.

The expression of the Core must interpret the human activities that take place there: *both the relations of individuals with one another, and the relations of individuals with the community.* Only full development of both these relationships can safeguard the dignity of individual life.





Attributes of The Core: Spontaneity

The Core must express a human geographical focus – either already in being or desiring an outlet. *Its function is to provide opportunities – in an impartial way – for spontaneous manifestations of social life. It is the meeting place of the people and the enclosed stage for their manifestations.* It is also the safety valve for any emergent expressions. Here spontaneous activities, whether momentary or expressing a decisive outpouring of emotion, again become possible.

The people must be given a means by which they can express their feelings or give vent to spontaneous reactions. It is these spontaneous expressions that will give a vitality to modern society. It will not find this in universities or professional organisations, but here in the Core; where an idea can suddenly gush forth – free, independent, creative; large or small, the visible and touching witness of a new society which has begun to balance what it is with what it might become.

The plastic and spatial expression of the Core will be complex; its various parts may sometimes be separated or even isolated, and some may well be vanquished by alterations in the centre of gravity

and other changes in time and space. *But certain fixed points will always remain which hold their value because of certain symbols or monuments.*

A new Core, as a physical framework for human intercourse, must be flexible enough to accommodate changing social needs and varying activities, and yet always be sufficiently articulate – in itself and in its approaches – to remain part of the city's spatial continuity.

In small towns and in remote districts that suffer from cultural isolation, the use of open-air radio and television can make the Core into a window opening upon the outside world. Here, where man meets both his fellow citizen and newcomers to the district, spontaneous discussions can take place upon world events at the very moment of their occurrence.

Though collective and individual personality often becomes lost in the rapid growth of a city, even harder problems are posed by the abrupt contact of two very different modes of life, such as the sudden introduction of the machine age into a peasant, feudal, or primitive structure of society. The greater part of the world is suffering from this convulsion, which is often accompanied by the juxtaposition or the social superposition of an alien race. In such cases the Core, while acknowledging the valuable contribution of the more developed civilisation, must take every opportunity to safeguard local values.

The Core as a centre of The Arts

The Core is an artefact: a man-made essential element of city planning. It is the expression of the collective mind and spirit of the community, which humanises and gives meaning and form to the city itself.

Within the framework of such Cores, signs of the humanising process of our time, the natural condition exists for the organic synthesis of modern technology and the plastic arts as instruments and expression of society.

Urbanism is the framework within which architecture and other plastic arts must be integrated to perform once more a social function. This integration will be achieved through a synthesis of effort contributed by architects, painters, and sculptors working in co-operation in the true communion of a single team.

Many obstacles will have to be overcome before this communion may be achieved, for the existing structure of society tends to produce narrow specialisation followed by professional and artistic degeneracy.

CIAM, in full agreement with the above principles, considers that the synthesis of the plastic arts can be most effectively accomplished within City Cores.

A synthesis of the plastic arts will only be achieved through fidelity to principles of CIAM and through the means of expression peculiar to our times.

Conclusions

After twenty-five years CIAM has returned to the same point on the cycle that was the motive for their formation in 1928 – the need to replace man himself in the centre, face to face with his fellows.

For each country CIAM has one supreme aim, which is to resolve those problems in the fields of architecture and town planning that can assist the improvement of the conditions of life for the great mass of the people and those who are in the greatest need. It is the duty of CIAM to interpret these needs and to present possible solutions to the authorities, technical directors, ministries, and organisations of all kinds that direct public affairs. CIAM's authority now permits, and indeed obliges it to fulfil this duty, if necessary in the face of opposition from these organisations.

CIAM does not ignore the great movement of social renewal that under different aspects occupies all the peoples of the world. Despite many differences which appear contradictory, the movement always emerges from the same universal and basic uneasiness: it comes from the need to give expression to the dignity of the human individual: to give him the opportunity of self-expression through the employment of every possible architectural means that may assist him to realise himself.

This animation of spontaneous nature, made possible by a means – the Core – which members of CIAM can understand and include in their own plans, seems a heritage that our group, after twenty years' work, can now hand on to the next generation. Our task has been to resolve the first cycle of the work of CIAM by finding a means to transform the passive individual in society into an active participant of social life.

PART **4**

Appendix

Le Corbusier: Description of the CIAM Grid, Bergamo 1949

Index

LE CORBUSIER: Description of the CIAM Grid, Bergamo 1949

I am going to talk to you about a sort of poetry – the poetry of classification! When I was at Bridgwater (CIAM 6, 1947) I found myself confronted with a stack of hundreds of proposals for our 7th Congress. These mountains of paper impede the progress of the town planner. They are his Enemy No.1! Architect and town planner stand before their work with no tool to help them clear the ground and think properly. The experience I had at Bridgwater made me determined to find some visual method that could do away with these mountains of paper; for though the eye can register exceedingly quickly, the reading of reports is an exceedingly slow job.

Construction of the Grid by Ascoral

Ascoral (a French Group of CIAM) was accordingly given the job of designing a Grid. The crossings of the vertical and horizontal lattice of a Grid throw up useful points for debate... *Town planning is the crucial centre of all our problems. When modern town planning started to develop forty years ago one could never have imagined it would have such a future...* After my return to Paris in 1947, Ascoral set up first one committee and then a second. People were called in who were likely to be helpful in building up the framework of a useful system. The principles of the Grid were debated and discussed in the first committee. Then the secretary of Ascoral had the idea of exhibiting a sample Grid at Vienna (Fig.103). This was created in our studio within six days. This experience proved the rapidity with which the work could be carried out, its low cost and, in addition, the great effect it had on the public. I opened this exhibition myself with General Bethouard and I asked him whether he thought the town planning battle could be won with the use of this strategic weapon. The General realised immediately that the Grid enabled the essential points of debate to be clearly exposed.

After fourteen months of work we have achieved what you see here. And today I am able to state that the Grid has been launched throughout the world, and not a single person has been unable to understand it! Yesterday twenty-eight completed Grids arrived here at Bergamo from all parts of the world between ten in the morning and three in the

		TITRE I											
		10.			11.			12.			13.		
LES 4 FONCTIONS	HABITER						113-1						
	TRAVAILLER							121-2	122-2			132-2	
	CULTIVER LE CORPS ET L'ESPRIT	3	101-3										141-2
	CIRCULER					111-4							
	DIVERS	d											

afternoon. Among the examples shown here there are, as always, a few from those rebels who like to advertise themselves by being different.

It is well known that colour printing is costly, and CIAM Groups are poor (happily because it's brainwork that we are after). We had to find some way to print all the work we had done on the Grid within a budget of 800,000 francs (about 3000 dollars). A few good people set to work and sorted the matter out. I would here particularly like to thank two of them - one of whom is Bouxin, the secretary of Ascoral. He found a way to get 3000 copies of the Grid printed, and arranged for us to have 500 copies free for distribution to CIAM members.

Limitations of the Grid

The creation of a tool - this had been the problem. But a tool of itself can make no fine plans, though it can simplify the work. It can help one to set down thoughts more rapidly or with greater precision, but it can never make fools intelligent.

The Grid does not pretend to make fine town planning schemes of itself. All we ask of the Grid is that it shall bring the intelligent points of a scheme immediately before the eyes, and that foolishness shall be as quickly apparent.

Use of the Grid as a 'thinking tool'

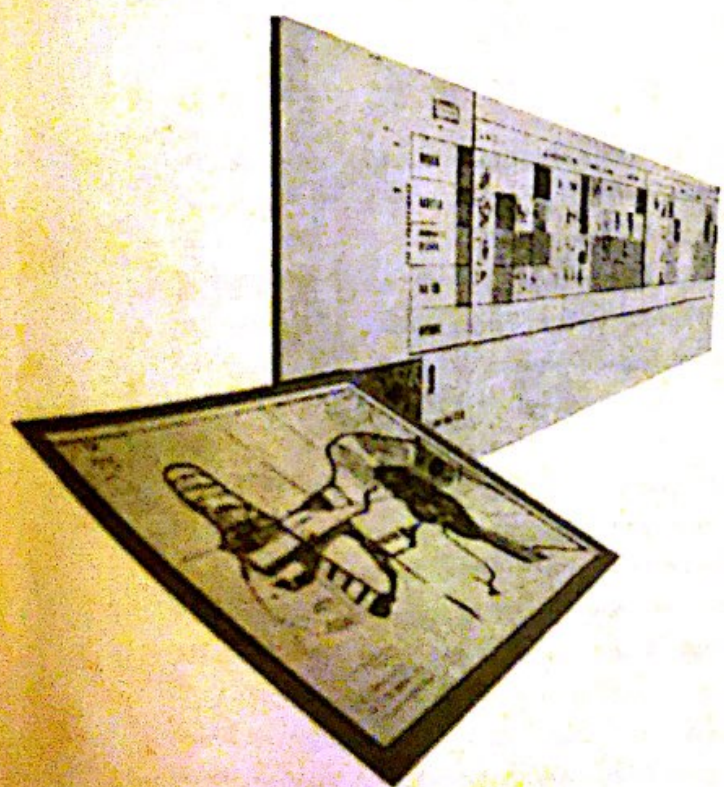
The Grid is but a tool, but it has several different possibilities. First it is an instrument for thinking (a 'thinking tool'). It is composed of several distinct parts. For example, the yellow band (4, communications) allows one to ponder over one whole range of problems. When one is face to face with an actual town planning problem, the mass of material is very complicated. One has to put this in order, and therefore one proceeds to construct a mental architecture amid the chaos. This is difficult.

Now take the Grid! Your silent problems lie displayed immediately before your eyes, and their environment is spread out before you . . .
There are different kinds of environment. There is the environment of a kitchen and the

						TITRE II	
15.	16.	17.	18.	19.	20.	21.	
1942							

FIG.104: The CIAM Grid with four horizontal bands: Living, Working, Development of Mind and Body, Communication; and twelve main vertical divisions, listed on right.

FIG.105: The first CIAM Grid displayed at Vienna in 1948.



classé classification	TITRE I : LE THEME. HEADING 1 : THE THEME.	
	10	LE MILIEU (données naturelles, données géographiques et démographiques). ENVIRONMENT (natural conditions, geographic and demographic data).
11	OCCUPATION DU TERRITOIRE, Zonage et tracés à 2 dimensions. OCCUPATION OF THE LAND, Zoning and two dimensional plans.	rural rural industriel industrial échanges, pensée et administration trading, education administration
12	VOLUME BÂTI ET UTILISATION DES ESPACES AMBIANTS, urbanisme à 3 dimensions. VOLUME CONSTRUCTED AND USE OF AMBIANT SPACES planning in three dimensions.	villes urban campagnes rural
13	EQUIPEMENT. EQUIPMENT	du territoire of the territory du volume bâti of the volume constructed
14	ETHIQUE ET ESTHETIQUE, avec étude éventuelle des rapports de l'ancien et du moderne. ETHIC AND AESTHETIC with the contingent study of the relationship between ancient and modern.	
15	INCIDENCES ECONOMIQUES ET SOCIALES. ECONOMIC AND SOCIAL INFLUENCES.	
16	LEGISLATION. LEGISLATION.	
17	FINANCEMENT. FINANCE.	
18	ETAPES DE-REALISATION. STAGES OF REALISATION.	
19	DIVERS. MISCELLANEOUS.	
classé classification	TITRE 2 : REACTIONS AUX THEMES. HEADING 2 : REACTION TO THE THEME.	
	20	REACTIONS D'ORDRE RATIONNEL. RATIONAL REACTION.
21	REACTIONS D'ORDRE AFFECTIF. REACTION OF SENTIMENT.	usagers the client opinion general public autorité the authority

environment of a continent. But the environment affects the organisation of a kitchen just as much as it does the organisation of Europe, or even of the world . . . Your problem lies before you and demands 'Look at these points here. This is the position. This is the environment that you must handle in relation to the four functions of town planning.' These functions (living, working, development of mind and body, communications) are the fourfold classification that we put forward in 1933 (CIAM 4) in the Athens Town Planning Charter – a classification that has already enormously clarified general discussions on town planning.

You are here in the presence of an attempt to make town planning a present of a measuring rod – indeed a *metrologie* (science of measurement)!

First, then, the Grid is an instrument for thinking. The problem lies exposed before us. The Grid tells of the LAND UTILISATION (two dimensional planning) on the ground, and we must reply to the questions posed here. But it also shows us the VOLUME OF BUILDING (three dimensional planning) which poses other questions to which we are certainly obliged to find an answer. Next comes EQUIPMENT – a word that does not mean quite the same thing in all languages. Here there will be a bit of confusion! Then come the ETHICAL AND AESTHETIC PROBLEMS which weigh heavily with those who are already sympathetically aware of them – and everyone should be aware of them. Then here are the ECONOMIC AND SOCIAL INFLUENCES and here LEGISLATION. Legislation, you notice, is included in the Grid, but the legal bell does not peal until the moment when it can serve a useful purpose. Finally comes reflection, the REACTION OF PUBLIC OPINION, both rational and sentimental.

This, then, is our 'thinking tool', ready for the use of the town planner.

Use of the Grid for Exhibition purposes

Now another aspect. You have to give instructions to your draughtsmen. Your scheme, you decide, must be accompanied by such and such drawings; you will need such and such material to complete the case for presentation to your client.

Here, therefore, is another use of the tool: a scheme of exhibition – an exhibition panel or scheme of presentation. This is the solution for the disorder I spoke of earlier (in connection with Bridgwater). This exhibition panel enables the eye to read the essential information quickly. The general planning scheme for the area can be added as well as the Grid to demonstrate your analysis.

The Grid therefore provides both a tool for thinking and a tool for transmitting thought. Instead of reading one sees. The eye is guided by colour signals to certain points of interest (colours that are explained in a key, which itself takes up very little space).

The Grid makes it possible to present one's thoughts very clearly, very precisely, and very briefly. And when you can present your thoughts briefly you prove that they have developed a certain maturity.

The Grid can also be used as an instrument for private demonstration. You have a town plan to display to the minister, the mayor, an official body of some sort. No one has time

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