

REGIONALISM vs UNIVERSALISM: Architectural Imports in Developing Countries

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Issues of 'regionalism/universalism', 'traditional/modern', 'old/new' have gained new dimensions after the second half of the nineteenth century as architects experienced value dilemmas originating from the change in types of clients and the demand for new types of buildings in the process of rapid industrialization and significant social changes. The traditional role of the architect as a designer of buildings for wealthy clients with similar values and social background as themselves until the Industrial Revolution changed, and the architect now became responsible also for producing settings and objects for the daily use of masses. Consequently, instead of their one-to-one relationship with wealthy patrons, architects experienced an indirect relationship with the "user clients", who had become distinctively different from their "paying clients."¹ As the social and administrative gap between architects and their clients widened, a strong dissatisfaction arose in relation to the built environment. This dissatisfaction developed because the users no longer had choice or control over the settings and objects they used and because the emerging products were not suitable to their needs or values as many architects, who can be considered as members of the Modern Movement, believed in the universality of the application of prototypes, and thus proposed similar buildings regardless of the cultural, socio-economic or physiological differences involved with different user groups.²

It was this realization of the problems related with the universal application of prototypes which led to the criticism of the Modern Movement first by the members of Team 10 starting from the sixth CIAM Congress in 1947, and later by those architects who called themselves Post-Modernists.³ The importance given to history and its products, the interest in nature and in regional characteristics, the emphasis on collective values and identity became valued concepts for some contemporary architects, while many "... joined the ranks of the fashion designers ... [missing] the broader concerns ... with human welfare."⁴ This paper is based on the hypothesis that one of the major criteria for designing and implementing a healthy physical environment is to address the whole range of human needs, recognizing the importance of the past in a proposal for the future. In other words, the conception of a 'new' environment should comprise a respect for the values and culture of the specific society that will use that environment since values and culture are an accumulation of all the experiences, abilities and traditions of societies throughout history.

This is particularly important for developing countries, which function as periphery or semi-periphery countries in the hierarchical pattern of the world economy, where Western architectural imports have been

widely applied as a result of the attempts of the developed countries to find new markets for their mass housing production industry after the enormous social reaction against the mass housing areas built with industrialized techniques in these countries.⁵ Developing countries, on their part, have accepted the industrialized mass housing production proposals of the developed countries, in a traditional deference to authority, because they believed that industrial production could be the only solution to meet the increasing demand for housing. However, since most architectural imports in developing countries were based on the knowledge, skill and economic resources of the developed countries, they were unable to answer the needs of these countries. In fact, an observation of the housing areas and new towns shaped on the premises of Western examples in various developing countries demonstrates that these areas embody many discrepancies between the aims of their planners and the actual situation. On the other hand, vernacular buildings and squatter housing units, which may be defined as a special type and phase of vernacular architecture, and their respective settlements maintain the potentials for satisfying the interests, goals and values of the users. By giving examples of architectural imports in three developing countries, Chandigarh new town in India, Brasilia new town in Brazil, and mass housing areas which have been proposed as alternatives to squatter housing areas in Turkey,⁶ this paper aims to reveal the discrepancies between the architects' expectations and the reality, and to derive lessons for a healthy approach in architecture.

Chandigarh new town was established as the new capital of India after the bitter war between Moslems and Hindus following the freedom of India from the British colonial rule and the consequent formation of the new state of Pakistan. Since the new leaders of India wanted the new capital to be symbolic of the nation's belief in the future and to be freed from the traditions of the past, they searched for Western architects to undertake this project rather than Indian architects who were believed to be poorly trained.⁷ The first architect chosen to develop the Chandigarh master plan in 1949 was Albert Mayer from New York. However, after the unexpected death of the director of the architectural development of the Mayer proposal, which bore the influence of the neighborhood unit concept developed by Clarence Perry, the Indian officials chose four architects, Le Corbusier, Jeanneret, Fry, and Drew, who would work as a team to complete the design and construction of Chandigarh, in 1950. Le Corbusier was so confident about the universality of his urban design principles that although he had never visited India before, he created a new master plan for Chandigarh in four days during his first visit to India in February 1951. His proposal comprised the rectilinearization of the Mayer plan and the establishment of monumental symbolism through a unifying formal order (See Fig. 1). The most important difference, however, lay in the general approaches of Mayer and Le Corbusier, the first showing concern for the unique characteristics of the Indian way of life while the latter aiming to prove the validity of his theories on a universal scale. The following comment by Le Corbusier summarizes his general approach to the problem: "...the urbanistic problem of Chandigarh has been solved on doctrinal bases so obvious and unquestionable that the drawings are clear, harmonious and real. Doctrine triumphs and leads all along."⁸

As Chandigarh got completed, many discrepancies appeared between the goals and expectations of the planners/architects and the actual situation in the town. Proceeding from the more general aspects of the plan to the individual house units, the following discussion aims to reveal these discrepancies which have arisen from a belief in the universality of the application of prototypes and in architectural determinism, i.e. the belief that built environment is a major determinant of social life.⁹ Le Corbusier claimed that his plan for Chandigarh, which provided a green belt around the city, would prevent uncontrolled peripheral growth. In his words, which reflect his belief in architectural determinism, "To build on open ground, of easy topography, filled with natural beauty, Chandigarh, thanks to its urban and architectural layout, will be sheltered from base speculation and its disastrous corollaries: the suburbs. No suburb is possible at Chandigarh."¹⁰ However, the green belt lost its original form due to various intrusions in time. Not only were a factory and a military compound established within the belt, but also squatter settlements have spread in the same area.¹¹ Other open spaces within the sectors also experienced unplanned and unanticipated usage. Because individual market-stall holders who were too poor to rent or buy a shop in the planned shopping areas, "rehri markets"¹² have spontaneously developed in the open areas within many sectors as an extension to the existing local shopping center. One of the major reasons for the spread of these semi-permanent rehri markets in Chandigarh was related to the rigid application of established concepts by the planners irrelevant to the Indian way of living. The basic approach of the planning team can be summarized in the following question by Le Corbusier: "What is the meaning of Indian style in the world

today once you accept machines, trousers and democracy?"¹³ In accordance with this approach, the planners did not consider the traditional pattern of bazaar trade in India which depends on the grouping together of shops selling similar goods, but rather they projected different shops in each sector. The eventual grouping of similar types of stores in many sectors of Chandigarh¹⁴, and the setting up of semi-permanent carts or shops by illegal vendors to provide the residents with other alternatives demonstrates that planning has limits.

Corbusier's claim that "a city made for speed is made for success"¹⁵ is also contradicted by the actual situation in Chandigarh. The hierarchical separation of all traffic, based on the planners' assumption that Chandigarh would develop the same density of traffic as Paris and New York in the near future, was totally irrelevant to the realities of India where only a few can afford a private car and the majority of even white collar workers either walk or use bicycles, scooters or the bus to go to work. Thus, the streets proposed for auto traffic are used by pedestrians or bikers because these provide more direct routes to work or services rather than the V8's reserved for two wheeled vehicles along the green belts. Furthermore, when compared with the colorful streets of traditional Indian streets, the streets in Chandigarh which are wider than necessary and which lack community facilities are lifeless channels for traffic flow.¹⁶ The existing situation in Chandigarh demonstrates that a city made for speed does not always enhance success.

Another discrepancy between the planners' aims and the actual situation has arisen in the literal application of the neighborhood unit concept as developed in the West both in the Mayer plan and in the Le Corbusier plan. While one of the basic expectations behind the neighborhood idea is the creation of community feeling through the attendance of the elementary school within the neighborhood by neighborhood children, the results of a study done in the Sociology Department of Punjab University show that 98% of the school children in a given sector of Chandigarh attended private schools outside that sector, based on their family's "social status, religious beliefs, and/or economic status."¹⁷ Since the sectors in Chandigarh have been formed according to a general similarity of income, while they lack social homogeneity based on the unity of language, caste and religion, often seen in the neighborhood quarters of old Indian towns, there is limited incentive for social contacts.¹⁸ Discrepancies have appeared not only in the general planning of Chandigarh, but also in the development of the housing units. Out of the fourteen different types of housing designed for various categories of government employees in Chandigarh, even Type 14, which was the lowest category, was not affordable for a large group of Indians. Thus, the squatter settlements established in unexpected areas by the people engaged in the building of the city were later inhabited by the lowest paid government employees and service-sector workers.¹⁹ Therefore, Le Corbusier's claim that "Chandigarh is a city offering all amenities to the poorest of the poor of its citizens to lead a dignified life"²⁰ loses its meaning in the light of the spreading non-plan settlements in and around Chandigarh. The satisfaction with the housing units themselves increased as the social status of the residents increased. However, even in the case of high-income families, certain rooms were not used as intended by the architects. Discrepancies arose particularly in relation to the use of bathrooms and kitchens. According to a survey undertaken after people moved to Chandigarh in 1958, only 64.4% of the people living in units provided with the Western type of toilet were satisfied with it while 95.3% of those given the Asian type of toilet were pleased. In the kitchens of higher income houses, the architects raised the cooking hearths to counter level, while placing them at floor level in all houses upto Type 11, respecting the Indian tradition of preparing and cooking food at floor level. The same survey showed that 94.1% of the families living in houses with the traditional type of hearth were satisfied, while only 51% of the families with raised counters were pleased.²¹

In summary, although there is a general contentment over the improved sanitary conditions in Chandigarh, there is much dissatisfaction about both the layout of the town and the individual housing units. The unanticipated activity patterns and the changes made in the physical environment by the inhabitants of Chandigarh demonstrate that the "effective environment"²² in Chandigarh is quite different from the expectations of the planners. Chandigarh capital city suffers not only from the literal application of the planning concepts developed in the West to India where socio-economic, cultural and climatic conditions are significantly different from the West, but also from a belief in architectural determinism. The existing situation in Chandigarh demonstrates that forms cannot mould life, rather they can afford the potentials for certain life patterns.

The second example which aims to reveal the discrepancies between the planners' aims and the actual situation in the case of an architectural import in a developing country is Brasilia capital city in Brazil. In accordance with President Kubitschek's desire to build a new capital city inland because of economic and defensive reasons, a site was chosen and a competition for the selection of the master plan for Brasilia was organized in 1956.²³ As a result of this competition, Lucio Costa's plan which was dominated by monumentality and symbolism was chosen in 1957 (See Fig.2). The plan had the form of a cross, with the residential axis, which extended from north to south, and the monumental axis with political-administrative functions laid out in the east-west direction, crossing each other in a multi-level highway interchange comprising the bus station. Costa, who is known to be a pioneer of modern architecture in Brazil and a great admirer of Le Corbusier, applied many features of Le Corbusier's Contemporary City proposal in Brasilia. Similar to the Contemporary City, Brasilia's shape is based on the separation of different transportation systems. A multi-level transportation terminal, placed below a cultural and entertainment center at the intersection of two main traffic arteries, marks the center of each city. Another common characteristic is the superblock idea consisting of uniform-height, high-rise apartment blocks set in wide park areas. Separation of functions, i.e. residential, work and recreation, is yet another aspect common to these administrative cities.

As in the case of Chandigarh, various discrepancies appeared between the goals and expectations of the planner and the actual situation after the completion of Brasilia. The major discrepancy in Brasilia is related to the social stratification in the city. Costa had claimed that the proposed organization of the residential area in Brasilia on the basis of neighborhood units would prevent undesirable social stratification. The neighborhood units comprised four superblocks, each of which had a size of 240 m. by 240 m. and was surrounded by a belt of trees.²⁴ The superblocks, each containing nine apartment buildings with uniform heights, shared facilities such as shops, offices, a church, a school and a cinema. Costa claimed that,

"...the four-by-four grouping of the super-blocks will, while favoring co-existence of social groups, avoid any undue and undesirable stratification of society. And, in any case, variations in the standard of living from one super-block to another will be offset by the organization of the urban scheme itself...growth of slums, whether on the city outskirts or in the surrounding countryside, should at all costs be prevented. The Development Company should, within the scope of the proposed outline plan, make provision for decent and economical accommodation for the entire population"²⁵

However, it was clear from the start that the thousands of low-income groups migrating to Brasilia with the hope of finding jobs first in the construction of the new capital, but later in the service sector as well, would not be able to live within the planned housing areas. In contrast to the planner's claims, four major settlement areas developed in Brasilia by 1967: the central planned area known as the Pilot Plan where upper-middle and high income groups resided; satellite towns which were permanent and legal settlements for low-income groups established by the administration at some distance from the central area as an alternative to squatter settlements in spite of their contradiction to the original plan, and which consisted of both low-cost public housing units and self-built houses; construction camps which were built and administered by private companies and official agencies for housing construction workers near construction sites with the permission of authorities and which were considered temporary by the government; and squatter settlements which were established by construction workers and their families illegally and thus were under constant threat of demolition by the government.²⁶ Not only the development of different types of settlements in Brasilia, but also the fact that the majority of the population lives in these settlements²⁷ is a major contradiction to the expectations of Costa who had claimed that a decent and economical accommodation for the entire population would be possible within the scope of his proposed plan. Epstein shows that in 1964 only 33% of the total population of 270,000 lived in the Pilot Plan while the remaining population resided in satellite towns, squatter settlements, encampments and rural areas. The situation was not much different in 1976, after the demolition of the squatter settlements by the authorities in 1971, when 40% of the population of 1,000,000 people, consisting of upper income groups, lived in the Pilot Plan while the remaining 60% lived in satellite towns which were developed between five to thirty kilometers from the Pilot Plan and which lacked sufficient water supply, electricity and sewage disposal systems.²⁸ Thus, Costa's belief that social stratification could be prevented by means of the physical plan of Brasilia has been realized ironically in the sense that the Pilot Plan is not socially

stratified because it houses only the upper income groups while throwing outside its limits the low-income groups on whom its survival depends.

Other discrepancies arising from the misfit between the goals of the planner and the actual situation can be observed in the planning of traffic. Brasilia was planned for the automobile in a country where the family car is unaffordable for the majority of the population. The long distances and dispersed sectors, which are results of the emphasis given to auto traffic, create many difficulties for the low-income groups who have to either walk, ride a bicycle, or take a bus to be able to use the city.

Kubitschek wrote that Brasilia is:

"... a protest against poverty, a cry against underdevelopment and at the same time against noise, pollution and confusion of large 'unplanned' cities and their human toll in terms of lost time and efficiency, alienation, dehumanization and mental and physical diseases."²⁹

And Costa claimed that the neighborhood units, which would consist of housing units of different standards, would eliminate the division of the city into "rich neighborhoods" and "poor neighborhoods".³⁰ However, the realities of Brazil have become manifest in the development process of Brasilia, with low-income, middle and upper-income and elite groups residing in different areas. Once again the case of Brasilia demonstrates that planning has limits, and that the social, economic and physical resources of societies have to be evaluated in planning.

The third example in this paper revealing the problems related with the application of prototypes on a universal scale is the mass housing areas in Turkey. Similar to other developing countries, Turkey experienced an extensive migration from rural areas to urban areas after the Second World War when developed countries decided to control and direct the economy of these countries.³¹ According to the division of labor proposed by the developed countries, developing countries would produce agricultural goods and raw materials while the developed countries would reestablish and strengthen their industries which had suffered from the war. With the widespread application of mechanization in agriculture of developing countries which became possible with the aid programs of developed countries, masses that were out of work in the rural areas migrated into large urban centers with the expectation of finding jobs. In fact, the growth of urban population in Turkey which was 20.1% between 1940 and 1950 reached 80.2% in the next decade.³² Thus, as in other developing countries, housing became a quantitative and qualitative problem in Turkey after the 1950's as the urban housing demand surpassed the supply.

The newly urbanizing masses in Turkey who could not compete in the urban market, had to use their own financial and social resources to house themselves in the urban areas. Thus, the first squatter housing settlements, namely 'gecekondu' areas,³³ began to appear on the fringes of large urban centers and continued to expand as the migration from rural areas to urban areas prevailed, in spite of all the preventive measures taken by the state against their development. As these urbanization and housing problems accumulated in Turkey, certain proposals were made with the purpose of replacing the squatter housing areas which were believed to 'debase' the urban scene through their 'ugly' appearance.³⁴ These proposals, developed by some of the foreign experts invited to Turkey in the 1950's with the purpose of solving the housing problem,³⁵ were based on the belief that the adoption of Western techniques and models would provide the best solution to the housing problem in Turkey. Mass housing areas were built as a result of this approach.³⁶ After the 1950's, Emlak Kred Bank established by the state, workers' cooperatives, OYAK (Saving and Investment Society for Military Personnel), some municipalities and certain private companies, such as OR-AN and MESA, undertook mass housing projects in various cities in Turkey (See Fig.3). However, in most cases, these areas proved to be both quantitatively deficient and qualitatively inadequate for the values and needs of their users. In fact, because of the insufficient resources of the state, the mass housing schemes which were proposed as alternatives for squatter housing settlements could be realized in a limited amount and could not meet the demands of the newly urbanizing masses for housing in Turkey. Moreover, the ones that were materialized were neither accessible nor suitable for the masses who needed them the most because of the insecure and unorganized occupational status of these masses,³⁷ and because of the higher expenses needed for living in these units. In addition to these economic problems, many social problems arose in the mass housing areas after people moved in since these areas were in

conflict with the values and needs of the masses inhabiting them. A study of mass housing examples in Turkey will reveal that these consist of a collection of individual units which create a suitable milieu for alienated, consumptive and individualistic patterns of behavior. On the other hand, it can be observed that the inhabitants in such housing areas still possess a longing for a different life style.³⁸ This longing is sometimes manifested in the raising of plants and vegetables such as tomatoes and the breeding of chickens in the narrow balconies of the mass housing units. Since these production activities are individualistic and unorganized, they cannot become a means of materializing neighborhood integration which is so common in traditional Turkish settlements. The lack of social relations among neighbors as a result of a withdrawal into nuclear families, the lack of productivity and organization around common goals cause the inhabitants of these mass housing units to feel alienated in their private dwellings. As a result, these housing areas enter into an unproductive, unhealthy decaying process in conflict both with the natural environment and with the interests and values of their users.

In contrast to the planned environments in the three developing countries discussed above, vernacular and squatter housing areas, in general, reflect an accumulation of the experience, abilities and traditions of the related societies. In fact, since vernacular and squatter housing units are products of a building process which uses the knowledge and abilities of the inhabitants or builders, who are the inhabitants of the same region and who share an accepted image of life with the clients, these units are ingenious and functional solutions which have been shaped according to regional culture, values and needs, and which embody the potentiality of improvement in time. The settlement patterns also reflect this accumulation of culture and values since they have been formed according to the social, natural and physical factors of each region,³⁹ not according to "...the institutionalization of controls through codes, regulations, zoning, requirements of banks and other mortgage authorities, insurance companies, and planning bodies..."⁴⁰ which is one of the major determinants of many contemporary examples of house forms and settlement patterns proposed by architects or planners. In other words, vernacular and squatter housing areas are interesting examples of the harmonious relationship between nature and man, techniques and socio-cultural values. In a sense, a cultural web entwines the inhabitants of these areas "...with its values, methods of learning and the pride of belonging to a social component that enjoys recognition through its work and the fruits of its work."⁴¹ In short, vernacular architecture bears lessons for contemporary architects who care about the livability of the environments they create in various regions of the world.

In the light of the preceding discussion, it can be stated that architects need to change their traditional approach toward their clients and the public to create healthy environments. They must be aware that

"[Architects] have been trying to build a picture of human settlements by studying one case, the industrialized cities of the twentieth century in the Western World. This is very much like trying to conceive the evolution of species by studying one species of animals."⁴²

This does not imply that the changed approach of the architect will ensure a significant change in people's lives. In fact, design can only provide the potentials for desired patterns of behavior and can reduce the affordances for the undesired ones. In other words, while the architect can only provide the "potential environment", the "effective environment" will be defined by the users according to their competence levels, predispositions, values and interests. In this context, architects need to enrich and expand the inventiveness inherent in popular culture⁴³ if they wish to create environments which will provide the potentials for desired patterns of behavior and for a mode of living that is in harmony with the interests and values of the users. The materialization of this end demands a mutually trusting relationship between the architect, sponsor and user client, which, in return, necessitates an understanding and evaluation of concepts such as 'participation' and 'citizen involvement'.⁴⁴ It is here that the basic lesson to be learnt from vernacular and squatter housing units and settlements lies as these embody hints for "... an architecture made one with people"⁴⁵. This does not imply that architects should literally copy the past, but rather it is an invitation to perceive "prototypes which make individual interpretations of the collective patterns possible."⁴⁶

Notes

¹See, Zeisel, J (1981), pp. 34-35.

²A utopian and positivist belief in universal solutions for architectural and planning problems was one of the basic principles of the Modern Movement. In fact, the name of the book written by Hitchcock and Johnson as a supplement to the exhibition of modern architecture organized in New York in 1932 was *International Style*. This book aimed to publicize the myth of Modern Movement which was claimed to be valid on an international scale.

³The term 'Post-Modern' was used in the title of an architectural article in 1949. However, it was in 1966 that the two main critical attitudes toward Modern Movement emerged. These attitudes were manifested in two books published during that year: Venturi's *Complexity and Contradiction in Architecture* in the United States and Rossi's *The Architecture of the City* in Italy.

⁴See Lang, J (1989), p.11.

⁵For example in France, this reaction was manifested in suicides and the destruction of the mass housing areas after the second half of the 1960's. As a result, these areas had to be protected by the police. In 1977, the planning of housing areas exceeding 200 units was prohibited in France. After similar incidents in Britain, these areas were evacuated and some were demolished. See Adam, M (1978), p.29.

⁶The squatter housing areas discussed in this paper are the products of the first phase of the urbanization process in Turkey when these embodied informal social organizations in the process of achieving common goals, before the influence of market forces was pronounced.

⁷See Evenson, N (1966), pp.6-9.

⁸See, Le Corbusier (1951), quoted in Sarin, M (1982), p.45.

⁹For a discussion of the differences among environmental, physical and architectural determinism, see Lang, J (1980), pp.146-153.

¹⁰See Le Corbusier (1951), quoted in Sarin, M (1982), p.54.

¹¹See Gethin, C (1973), p.292.

¹²Schmetzer and Wakely describe a "rehri" as "...a simple wooden platform of about 1x2 m. mounted on four bicycle wheels." See Schmetzer, H and Wakely, P. I (1974), p.357.

¹³Le Corbusier quoted in Frampton, K (1980a), p.159.

¹⁴Brolin gives examples of several sectors which specialize in only one type of service, such as auto and motorcycle repair, furniture, etc. See Brolin, C. B (1976), p.96.

¹⁵See Le Corbusier, (1971), p.179.

¹⁶See Jacobs, A. B (1967), p.24.

¹⁷See Brolin, C. B (1976), p.95.

¹⁸See Evenson, N (1966), p.61.

¹⁹See Schmetzer, H and Wakely, P. I (1974), p.353 and 355.

²⁰See Le Corbusier (1959), quoted in Sarin, M (1982), p.51.

²¹Evenson, N (1966), p.59.

²²Gens has used the term "potential environment" to refer to the physical environment, and the term "effective environment" to specify "that version of the potential environment that is manifestly or latently adopted by users". See Gens, H. J (1968), p.6.

²³See Benevolo, L (1971), p.758.

²⁴See Snyder, D. E (1964), p.330.

²⁵See Costa, L (1959), p.38.

²⁶See Epstein, D. G (1973), p. 10.

²⁷See Epstein, D. G (1973), p.69.

²⁸See Gosling, D (1979), p.47.

²⁹See Kubitschek, J (1969), p.43.

³⁰See Costa, L (1962) as quoted in Epstein, D. G (1973), pp.83-84.

³¹Before the 1950's the market explorations of developed countries had caused the disintegration of traditional modes of production in rural areas of developing countries, but had not brought about an extensive migration into urban areas. See Yerasimos, S (1979), p.12.

³²Keleş, R (1978), p.26.

³³'Gecekondu' is the special name given to squatter housing in Turkey. It has been defined in the law numbered 775, which was passed in 1966, as the illegal housing which has been constructed on land which does not belong to the builder, without the permission of the owner and without any correlation to the Building Codes and Regulations. See Keleş, R (1972), p.176. 'Gecekondu' literally means 'built overnight'. This name describes the process of the first phase of squatting in Turkey. Since such kind of housing was considered illegal by law, the people migrating from rural to urban areas had to construct these houses overnight in order to benefit from a law which states that such unpermitted construction can be torn down immediately during the construction period; however, after completion, the demolition requires decisions from the court and the municipality. This process has changed in Turkey after the 1960's with the distribution of title-deeds to the 'gecekondu's which legalizes the existing 'gecekondu's before each election period.

³⁴See Yörükan, T. (1968), pp.44-69.

³⁵Among the experts preparing reports on housing in Turkey were Skidmore, Owings and Merrill, Charles Abrams, Holmes Perkins and experts from the Productivity Agency of the OECD. See Sey, Y (1984), p.167.

³⁶As Sey has stated, organized residential development, which can be considered mass housing, began in major metropolitan areas in Turkey, especially in Istanbul, during the second half of the nineteenth century under the influence of Western models. These housing complexes built during the last period of the Ottoman Empire were either for small merchants, petty bureaucrats, or fire victims. After the declaration of the Republic, the limited resources of the country which had just come out of the war prevented funds from being allocated to housing production. In the 1930's, some banks and public sector companies built housing for their staff, and some workers' residences were built in the vicinity of newly established industrial complexes. In the 1940's a few examples of mass housing for civil servants and low-cost post-disaster housing were built. The wide application of mass housing projects, however, started after the 1950's. See Sey, Y (1984), pp.153-177.

³⁷For detailed information on the loan policies of the organizations dealing with housing issues in Turkey, see İnkaya, Y. (1972), pp.60-62.

³⁸For example, İmamoğlu has stated that according to general findings, traditional houses are identified as more beautiful than contemporary ones, and that the houses with trees are preferred instead of the ones without trees in Turkey. See İmamoğlu, O (1979), p.345.

³⁹For example, the settlement pattern, the formation of spaces, the choice and use of construction materials and techniques in the vernacular housing areas of the Black Sea region in Turkey are quite different from the ones in the Central Anatolian region and even more different from those in the squatter housing areas in Ankara due to the specific conditions of each area.

⁴⁰See Rapoport, A (1969), p.59.

⁴¹See Colombo, U and Lanzavecchia, G (1977), p.15.

⁴²Quoted in "The Remarkable Dr. Doxiadis" (1961), p.113.

⁴³See Kroll, L (1980) in Byron, M. (ed), pp.162-170.

⁴⁴Mitchell, H. E (1974), pp.15-22.

⁴⁵Fathy, H (1973), p.45.

⁴⁶Hertzberger, H quoted in Frampton, K (1980b), p.293.

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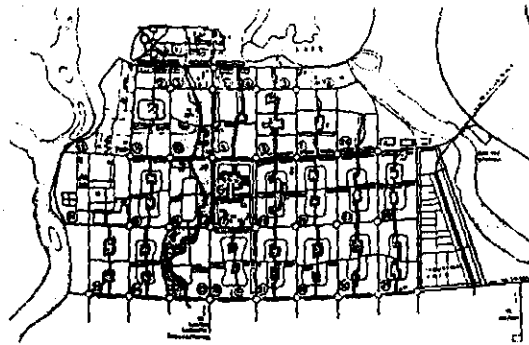
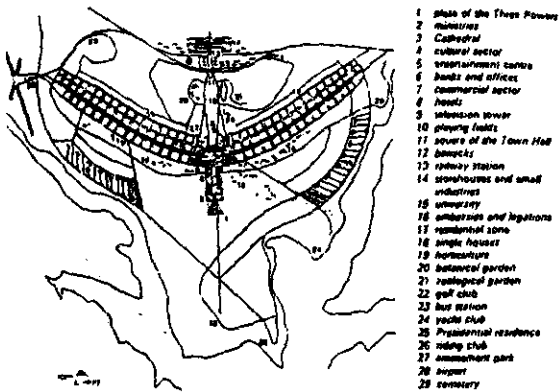


Fig.1 Plan of Chandigarh
[Brolin, B (1976), p.89]



- 1 place of the Three Powers
- 2 ministries
- 3 Cathedral
- 4 cultural sector
- 5 entertainment centre
- 6 banks and offices
- 7 commercial sector
- 8 hotels
- 9 television tower
- 10 playing fields
- 11 square of the Town Hall
- 12 barracks
- 13 railway station
- 14 storehouses and small industries
- 15 university
- 16 embassies and legations
- 17 residential zone
- 18 single houses
- 19 horticulture
- 20 botanical garden
- 21 zoological garden
- 22 golf club
- 23 bus station
- 24 yacht club
- 25 Presidential residence
- 26 riding club
- 27 amusement park
- 28 airport
- 29 cemetery

Fig.2 Plan of Brasilia
[Benevolo (1971), p.758]



Fig.3 Two mass housing examples in Ankara
[Tekeli, I, Gülöksüz, Y, Okyay, T(1976) *Şehir*, p.277]