THE NEIGHBORHOOD:
A Progressive Presentation from the Traditional to the Contemporary

A Thesis Submitted to
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ABSTRACT

The built environment and its architecture is an art of habitation and a craft of the inhabitants. Along this line, this thesis presents the phenomenon of communal habitation--from a traditional scene to a contemporary vista--in terms of a historical progression. It exhibits a hypothesis that attempts to justify the reason behind the deterioration of identity, livability and of neighborliness in contemporary neighborhoods. On the one hand, this thesis acknowledges the need to humanize and balance the apathetic scale of today's built environment. What is meant by balance is the correlation between public and private, between dense and sparse, between standardization and variation, between homogeneity and heterogeneity, as well as between uniformity and diversity. On the other hand, this thesis empathizes with today's neighborless neighborhoods. Relatively speaking, in contrast to the traditional residential quarters that consolidated people of different origins, background and socio-economic status by dweller's spirit of communal-fellowship, goodwill and neighborliness, today's residential environments are virtually lethargic. What is meant by lethargic is the absence of communal fellowship that used to nourishe the bygone sense of communality and of neighborliness. Although this thesis, in accordance with some contemporary community planning theories, pronounces the relevancy and importance of physical as well as social planning, it articulates, in line with annals of contemporary urban history, their incompetency to constitute the virtues of a good living place. In other words, urbanization, according to this thesis, is neither a mere physical pattern exhibited by fellow architects and planners, nor a sole social model manifested by some social reformers. Rather, it is a communal art the beauty of which is adorned by dwellers' goodwill and their spirit--a spirit that consequentially achieves a pleasing physical milieu, and attains a pleasant social environment.

RÉSUMÉ

L' environnement bâti et son architecture est l' art de l' habitat et l' oeuvre de ses habitants. Ceci posé, cette thèse présente le phénomène de l' habitation en communauté (considérée dans ses aspects traditionnels jusque dans ses perspectives contemporaines) d' un point de vue chronologique. Elle met en valeur une hypothèse qui tente de justifier la cause de la dégradation de l' identité, de l' habitabilité et des relations de voisinage dans les quartiers actuels. D' une part, cette thèse reconnaît le besoin d' humaniser et d' équilibrer l' échelle impersonnelle de l' environnment bâti d' aujourd'hui. Par équilibre on entend la corrélation entre le public et le privé, le dense et l' épars, la standardisation et le changement, l' homogénéité et l' hétérogénéité, ainsi que l' uniformité et la diversité. D' autre part, cette thèse met l' accent sur l' absence des relations de voisinage. Généralement parlant, contrairement aux quartiers résidentiels traditionnels qui rapprochent des gens de différentes origines, cultures et status socio-économiques grâce à l' esprit sociable des habitants, grâce à leur bonne volonté et à leur esprit de voisinage, les quartiers résidentiels d' aujourd'hui sont particulièrement léthargiques. Par léthargique on veut dire absence de sociabilité, celle-là même qui donnait dans le passé leur sens profond aux termes de communauté et de voisinage. Bien que cette thèse, en accord avec quelques théories récentes concernant l' urbanisation des quartiers, déclare la pertinence et l' importance d' une urbanisation physique mais aussi sociale, elle s' articule dans ses grandes lignes avec l' histoire urbaine récente, en montrant ses incompétences à c nstituer les vertues d' un cadre de vie performant. En d' autres termes, l' urbanisation, d' après cette thèse, n' est pas plus un pur modèle physique montré par architectes et urbanistes, qu'un simple modèle social requis par quelques réformateurs sociaux. C' est plutôt un art de vivre en commun dont la beauté est encore accentuée par la bonne volonté et la mentalité des habitants; cette mentalité parvient à créer un milieu physique plaisant, qui conduit lui-même à un environnement social agréable.

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In the first place, the author is indebted to the writings of the Baha'i Faith, which edified his perception towards a global perspective.

From the global sphere to the family domain, the author cherishes the love of a passionate father and a caring mother. To their support in all aspects of life, materially, socially and morally, the author owes them many thanks.

On a personal realm, to the beautiful neighbor, to my wife Suhaila who, without her patience, encouragement and tenderness, the writing of this thesis would have been tedious; to her, the author proclaims a great appreciation and love.

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TABLE OF CONTENTS

LIST OF FIGURES*

* Credential of figures are indicated along with the captions.

Chapter III Neighborhood Streets

INTRODUCTION

What constitutes a good place to live? How can residential environments, either old or new, provide a friendly, stimulating social atmosphere so their dwellers will want to remain? To what degree can architects and planners improve urban life and thereby achieve a charming physical milieu and a living social domain?[1] These are some common thoughts that people who have an interest in urban habitation are ever pursuing.

This thesis offers an unconventional approach to the above commonplace planning concerns. It not only conveys perceptions from different regions, but from unlike periods. Through such an eccentric outlook, this thesis presents the phenomenon of communal habitation in terms of its three independent, however inter-related, constituents: physical elements, social attributes, and spiritual influences.

A Historical Background

> If one tries to visualize the life of human beings in the old stone age, one can see that only by cooperating as a unit could people ensure that they would obtain the food that they needed.[2]

Cooperative units are the precursors of communal living, which fostered residential proximity and initiated the traditional phenomenon of neighborhoods. The history of neighborhoods dates back to pre-urban primitive human settlements, which were characterized by small groups called bands, identifiable self-contained social entities.[3]

Advancing one step in the hierarchy of communal organizations of pre-urban settlements, a larger unit under the name of the tribe was formed by tribal societies. These tribal societies consisted of migrating bands unified together and acting as one body of common derivation and custom. Members of these tribal societies possessed, controlled, coordinated and maintained their own territories.[4] They were unified by their spiritual beliefs, affiliated with social interests and banded in physical territories. The dwellings of the tribes usually occurred in clusters that formed communities bound together by some unwritten regulations.

Although a review of the communal organization of pre-urban settlements is beyond the scope of this thesis, brief mention has been made in order to link the phenomenon of urban neighborhoods to the pre-urban tribal traditions of solidarity and proximity.

An Outline

The built environment of the modern world has been shaped by some urban traditions from the East as well as the West. The traditional legacy, produced urban patterns which expressed virtues based on spiritual perceptions and human regulations. By contrast, the contemporary trend places a premium on virtues based on plain physical prospects which nourished the prevailing superficial planning regulations. Along this line, this thesis reviews the progressive form of a traditional built environment, in one hand, and traces the development of some contemporary planning theories, on the other. It is a journey along the traditional residential quarters to its contemporary counterparts.

This thesis is divided into five independent, however, interlaced chapters. The first chapter pertains to a traditional urban scene of the Middle East and its residential quarters. This initiative chapter reviews the progressive formation and pattern of some ancestral urbanization and presents the medieval quarters as examples of built environments that nourished the sense of communality and neighborliness. Following this traditional progressive scene, through which it is intended to give the reader an objective paragon of communal habitation,* the central part of this thesis will be inaugurated. The theme of this part, which is composed of three subsequent chapters, concerns some prevailing thoughts in western urbanization.** In its leading chapter, namely the second chapter, several western utopian thoughts and community planning theories will be reviewed. The emphasis of contemporary planning ideologies on physical remodelling, which sought to ameliorate the overall living condition of urban habitation, is what this chapter attempts to convey.

Neighborhood streets with a particular interest on North America, is the theme of the third chapter, while the fourth chapter integrates more contemporary planning theories within the framework

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* The reader should be notified that similar analysis could be carried out for some particular provinces in the western spheres for the same period; however, because of the author's familiarity with the Middle East, this region was chosen merely as an objective traditional example of communal habitation.

** Particularly England and North America.

of size, population and residential density. By the end of the fourth chapter, the reader is acquainted with the phenomenon of neighborhoods--from the traditional East to the contemporary West--through an illustrative review. The fifth chapter, however, is primarily a sociological approach. It is an attempt to conceptualize a neighborhood in terms of an equation which integrates its diverse socio-physical constituents. In completion, a number of concluding remarks blend the major hypotheses of the preceding chapters in a metaphorical scene, by which it is intended to rationally rectify the prevailing secular outlook towards communal habitation and urbanization in general.

Endnotes

1. Langdon, P. 1988, p. 41
2. Schoenauer, N. 1981, Vol. 1, p. 2
3. Ibid.
4. Ibid.

CHAPTER I

A TRADITIONAL EXEMPLIFICATION

To study the ancestral urbanism of traditional societies, an overall understanding of the inter-relationship of a built environments' physical pattern, as well as the social structure and spiritual virtues of their inhabitants, is required. History reveals that the pattern of traditional settlements had emerged organically from an extended familial social structure, which was buttressed by the spiritual consensuses of the dwellers. Along this line, this chapter presents the progressive urbanization of the Middle East and its neighboring regions. The fact that different civilizations had evolved and people from different religions and ethnic origins were associated, makes this part of the globe an ideal *tabula-rasa* for the departure point of this thesis.

A SPIRITUAL PARENTAGE

Some urban historians have traced the origin of traditional urban settlements to the Mesopotamian communities, which gave rise to a higher form of social organization under what is called temple communities. These communities (as the ancestor of church and mosque communities) were based on a religious consensus, and it was around these temple precincts that ancestral cities emerged.[1] The foundation of these cities was not based solely on some physical configurations, nor was it established on mere social compositions, but rather on dwellers' spiritual perceptions. In fact, it was the dwellers' crave for spiritual consolidation that brought the surrounding villages into closer contact.

At the outset, based on early ancient precedents, religion established organic cohesive communities, which formerly had been scattered. Furthermore, the need for security, privacy and identity accomplished a social cohesion and a compulsory cooperation among the traditional societies. Indeed, their urbanity was greatly related to their spiritual capacity. As it pertains to the Middle East, for thousands of years and throughout ensuing religious teachings, dwellers of this sphere have been educated, province by province, on how to live with each other. For example, when the Romans and

the Persians--who occupied consecutively the western and the eastern provinces of the Middle East--were at their most prosperous, (thanks to the antecedent religions*) the Arabs were still sunk in the dark ages--and "were amongst the most savage people upon earth; ... and some tribes even considered it virtuous to bury their daughters alive."[2] Yet, within a hundred years, thanks to a subsequent religion, the dwellers of this part of the globe were to unveil one of the most advanced civilizations the world had yet witnessed.

The teachings of Islam, similar to the antecedent religions and in line with the Golden Rules, were primarily to educate people on how to live with one another:

> To God ... the best neighbors are those who are good to each other.... He who believes in God should not hurt his neighbor ... . God will not provide security to the person who sleeps with a full stomach while his adjacent neighbor is hungry ... . Do not harm others or yourself and others should not harm you or themselves.**

Through these teachings, the sense of neighborliness became the basic social force that united the dwellers into spatial units--namely, residential quarters--thereby preserving their identity, security and integrity. Whether this perception arose from family ties, common village origin, ethnicity or occupation, it had primarily a spiritual connotation. The religious consensus of dwellers not only structured the cohesion of the residential quarters but also imprinted its spirit on the marketplaces and bazaars. Indeed, residents of the traditional Middle Eastern quarters had "an obligation in concrete economic and social terms towards their neighbors."[3]

In religious terms, objection was made of any individual or group who aimed to circumvent the unity of the people in their respective quarters. The function of the selected leader of a quarter was to sustain the unity of neighbors and provide religious guidance.[4] This sense of neighborliness was not only apparent in Muslim quarters but also in the adjacent quarters of Christians and Jews throughout all major and nearby Middle Eastern cities.

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* A study of history discloses in varying degrees the social and physical progress caused by various religious manifestations. "For example, traces have been found of a Jewish civilization in Israel after Moses at the time of David and Solomon, of a Buddhist civilization in India at the time of Asoka and of a Christian civilization in Europe," not to mention a Zoroastrian civilization after Krishna and its effect on Iranian civilization. (The above quotation is from *All Things Made New*, by John Ferraby, 1987 ed , p 47.)

** From the sayings of Mohammed (see Hakim, B. 1986, pp. 142-157).

With respect to the Islamic era, "an Islamic city dweller did not see himself primarily as a citizen of a particular city nor as a citizen of a nation. ... [R]ather he felt himself to be a member of the Umma, or great community, established by the prophet."[5] The vision of a Muslim in the perception of proximity was not based on a particular city as such. Rather,

> muslim populations were organized into groups which formed sub-communities within city spaces and super-communities of religion or state which extended beyond any single city space. Cities, in this view, were simply a geographical locus of groups whose membership and activities were either smaller than or larger than themselves.[6]

From the above, it can be understood that the sense of neighborliness and proximity had two scales: a smaller scale that belonged to the quarter, or the neighborhood, and a larger scale that belonged to the Umma, or the unified communities.

Generally, religious consensus created frontiers as territorial units. These units, which were categorized into a particular context and situation, maintained the integrity and self-identity of their dwellers. The relationship of individuals in a unit was defined by a face-to-face aggregate of individuals who shared some reason for being together. Moreover, these units achieved a high degree of communal sense and accommodated heterogeneous families from different races, ethnic backgrounds and social status into homogeneous quarters of spiritual and religious beliefs.

However, concerning the traditional residential quarters, the issue of territorial religious affiliations and solidarities has often been debated in the literature dealing with social architecture, where it has been viewed as a major force in the development of hostility and social stratification. To a certain degree, due to their high level of religious solidarities, residential quarters did engage in fierce hostilities and were prejudiced of each other. History records the quarrels and battles that occurred between the quarters of a single town.[7] Unfortunately, the ironic division of people into sectarian religious affiliations--which is exactly what religion was against--created prejudice amongst themselves, in turn causing a misconception about what religion was for. Even though the interest of people in their spiritual beliefs no doubt engendered a sense of unity and neighborliness among the members of a quarter, nevertheless, how complete would this sense have been if it lacked the issue of man-made

prejudice, which basically caused diversity and intense enmity not only during the Islamic era but also throughout the history of humanity for a period of 6000 years or more.*

FORMATIVE INFLUENCE

Urban form developed simultaneously alongside socio-spiritual progress and techno-physical evolution. As technology improved and social life progressed, society cultivated varying functional classes in the population, and in turn flourished specialized housing quarters.[8] Irem Acaroglu, in his approach to the ecological evolution of the ancient urban civilization of Anatolia (Asia Minor and Northern Syria),** stated:

> With the emergence of a central power the citadel of the ruler was usually placed at the centre of the town with housing quarters around it. ... [W]hen the population increased beyond the capacity of the walled town, an outer town was added. ... [W]henever there was more than one ethnic group in the town, each lived in a quarter of its own, complete with its square, temple and fountain.[9]

Other civilizations encompassing the Nile valley, Mesopotamia and Levant have witnessed similar forms and patterns of growth. For example, cities such as Tell al-Amaranah in Egypt, Ur in Mesopotamia and Damascus in Levant (Fig. 1) had developed certain planning forms that were transferred throughout the interpenetration of successive civilizations.[10]

Fig. 1: Locations of some ancestral cities

On the one hand, prior to Islam, the consolidation of purely Greek-type urban forms (Hellenic) led to a new form known as Hellenistic, and this became the dominant feature of the Middle East and its neighboring

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* It may be of interest to note that the issue of prejudice has nothing to do with religion, as many conceive, but is the result of blind imitations, man's prejudices and adherence to forms that appeared later. In fact, "religion should unite all hearts and cause wars and disputes to vanish from the face of the earth, give birth to spirituality, and bring life and light to each heart If religion becomes a cause of dislike, hatred and division, it were better to be without it, and to withdraw from such a religion would be truly religious act. For it is clear that the purpose of remedy is to cure, but if the remedy should only aggravate the complaints it had better be left alone. Any religion which is not a cause of love and unity is no religion. All the holy Prophets were as doctors to the soul: they gave prescriptions for the healing of mankind; thus any remedy that causes disease does not come from the great and supreme Physician" (from *Paris Talks*, by Abdu'l-Baha, London, Baha'i Publishing Trust, 1972 11th ed , p. 130).

** Between 8000 B.C and 400 A D

regions. The establishment of Greek colonies, along with their *polises*, was followed by the expansion of the Roman Empire and its gridiron cities through much of the Mediterranean region.

On the other hand, Mesopotamia held to the ancient oriental city and later was confronted by a remarkable variety of civilizations, which created a distinctive assemblage of urban features.[11] Through the Persian kings to the Achaemenid state and centuries later to the Sassanid dynasty, the complex urban form of the Middle East and the neighboring regions developed even further.

Physically, the very ancient Greek city resembled to some extent the ancient oriental city with its irregular, narrow, twisted pattern that characterized the physical form of its streets and lanes. However, the Hellenistic or Greco-Roman plan bearing the name "Hippodamean" after the Architect Hippodamus* of Miletus (Fig. 2) is characterized by a chessboard system of paved streets in which all buildings were formally integrated.

After his victory over the Achaemenids, Alexander the Great** followed the Hippodamean plan in all the cities he founded. Later, the Selucids continued to build cities with the same grid plan. While the Iranian Parthians adopted similar principles, they preferred to build symmetrical, round cities*** rather than irregular ones that had preceded, where topography determined the plan. Furthermore, at the time of the Sassanids and their victory over the Romans, many Roman prisoners of war were brought to Iran to build cities, leaving imprints of Hippodamean planning and thus modifying the practised form of that era.[12]

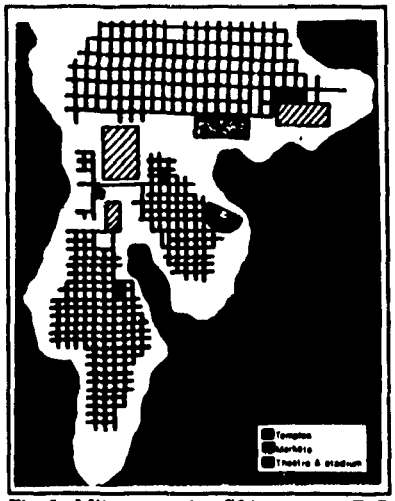

Fig. 2: Miletus in the fifth century B C (From: Heinz Gaube, 1979.)

This progressive form in city planning greatly influenced the urban pattern of the newly founded Arab-Islamic civilization. Islam incorporated the elements of assimilated non-Islamic cultures

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* In fifth century B C (see Gaube, H. 1979, p. 12; also see Ekistics 195, Feb. 1972, p. 114 for earlier gridiron city structure).

** 356-323 B C, conqueror of Greece and the Persian Empire.

*** See Ekistics 195, Feb 1972, p. 106 for earlier origin.

(either Arabs or non-Arabs before Islam), absorbing many of the architectural and urban practices of the cultures with which it came into contact.[13]

As with previous civilizations, the Arabs not only took over numerous Hellenistic and Persian cities but also built their own settlements in line with those that preceded. For example, city walls, built for defence and security purposes, were the most apparent features of almost all early urban civilizations. Similarly, Islamic-type cities followed suit, adapting fortification walls for the same purpose. In addition, all the functions of a traditional city--as the seat of government, the center of religious life, the locus of economic activity, along with the dwelling place of the population--were apparent in the succeeding cities of both the western and eastern regions of the Arab-Islamic world.[14] Ergo,

> the Islamic city became the heir of the two different types of cities: the oriental despotic city and the Hellenistic-Roman democratic city.[15]

Furthermore, In the "same era of Islamic civilization, cities developed common features regardless of when they were founded and regardless of the original plans in which they were laid out."[16] The Arab-Islamic civilization neither abandoned the form of ancient cities nor established a unique role in determining how cities should look, instead altering their functions to complement the cultural mandates of the time. The French scholar Jean Sauvaget, who studied the physical shape and, through it, the human communities of later Hellenistic cities, showed that the physical form of Middle Eastern cities in the Islamic era was that of the late Roman city but somewhat changed by the social attributes of Islamic society.[17] These cities,

> with their broad colonnaded avenues, temples, market-places and rectangles of streets, were slowly transformed but kept traces of their first state. When the Arabs came, mosques and places gradually took the place of temples and cathedrals or were built on the *agora* ... . [T]he emphasis of Islamic law on the individual led to the gradual encroachment of shops and dwellings on to the broad avenues ... . [Later] the insecurity of life caused the population to withdraw into the city-quarters, small units where the ties of neighborhood were reinforced by those of common religious allegiance or ethnic origin.[18]

Aleppo is an example of such functional alteration (Fig. 3).

The uniform grid-blocks that shaped the Hellenistic city and its residential districts had been refurbished into irregularly shaped quarters. Furthermore, in the plan of old Damascus (Fig. 4), the

Hellenistic street network can be traced over the succeeding Islamic-type maze-like lanes, which virtually replicate the ancient oriental and the early Greek examples.*

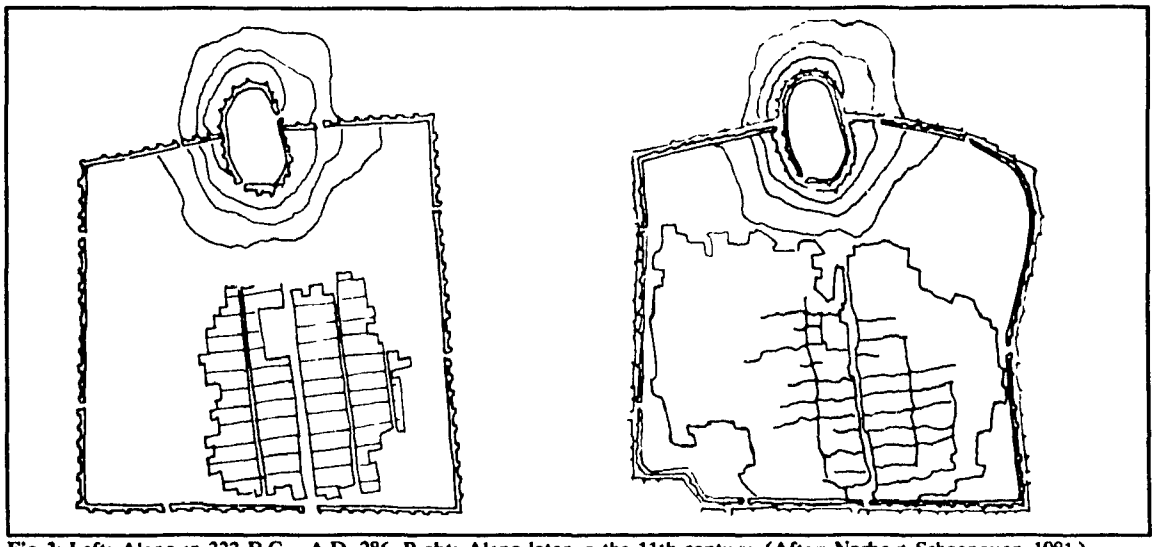

Fig. 3: Left; Alepo in 333 B.C. - A D. 286 Right; Alepo later in the 11th century. (After: Norbert Schoenauer, 1981.)

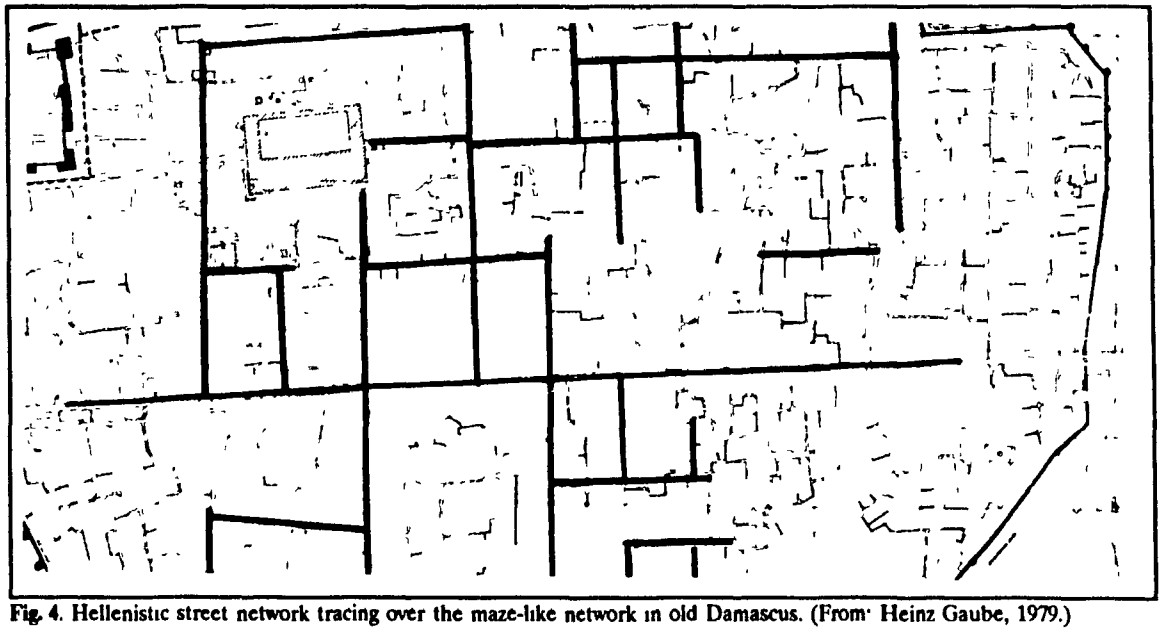

Fig. 4. Hellenistic street network tracing over the maze-like network in old Damascus. (From: Heinz Gaube, 1979.)

* The residential quarters of the pre-Hellenistic Greek cities and the pre-classical Roman cities had characteristics similar to their oriental counterparts. "These residential districts were oriental in character. The areas were densely built with a network of maze-like lanes and narrow streets ... the result of agglutinative organic growth" (Schoenauer, N. 1981, Vol 2, pp. 205-206). It would be misleading, however, to define exactly the socio-physical developments of residential quarters in the Hellenic age (pre-Hellenistic) "because for some inexplicable reason the architecture and planning of [the] residential areas [in the Hellenic age] rarely caught the interest of architectural historians" (Schoenauer, N 1981, Vol 2, p 199).

In short, the formative influence of urban civilizations progressively succeeded one another since urban form is simply a progressive influence. The forms of cities and the network of streets had a progressive cycle that developed and altered according to the period, the condition and the culture of each civilization.

THE RESIDENTIAL QUARTER

Residential quarters are specific districts within a city. As is clear from their name, they are primarily for residential purposes. However, each residential quarter has its own small local market, religious institution and often a commercial base of home industries.

In the Arabic language, the word "quarter" varies in name from place to place. In Baghdad, Mosul and Aleppo, the word is referred to as 'Mahalla.' In Cairo and Damascus, it is known as 'Harra', 'Rabea' or 'Hetta'. In Magrib, it is called 'Hawma'; in the Arabian peninsula, local residents refer to it as 'Harra', 'Haie' or 'Ferreeg'. Regardless of name or place, residential quarters act as little city clusters that together constitute the mother city. Singularly, the quarters are homogeneous units, the sum of which constitute a heterogeneous whole. The origin of the word Mahalla in Arabic is 'Mahall' or place; hence, a place defined by its dwellers that houses, protects and attracts people unified by a common interest is the Mahalla of those people.

The residential quarter was one of those urban practices that established a vernacular response to the occupants of the newly founded Islamic-type cities, who adhered to the ancient concept of closed-precinct neighborhoods.[19] The living quarters of Ur, Mesopotamia, and that of Isfahan, Iran, are examples of the ancient concept of closed-precinct neighborhoods (Fig. 5). In both, dead-end streets branch out from primary and secondary arterial streets, leading "to groups of houses, the rooms of which are built around internal courtyards."[20]

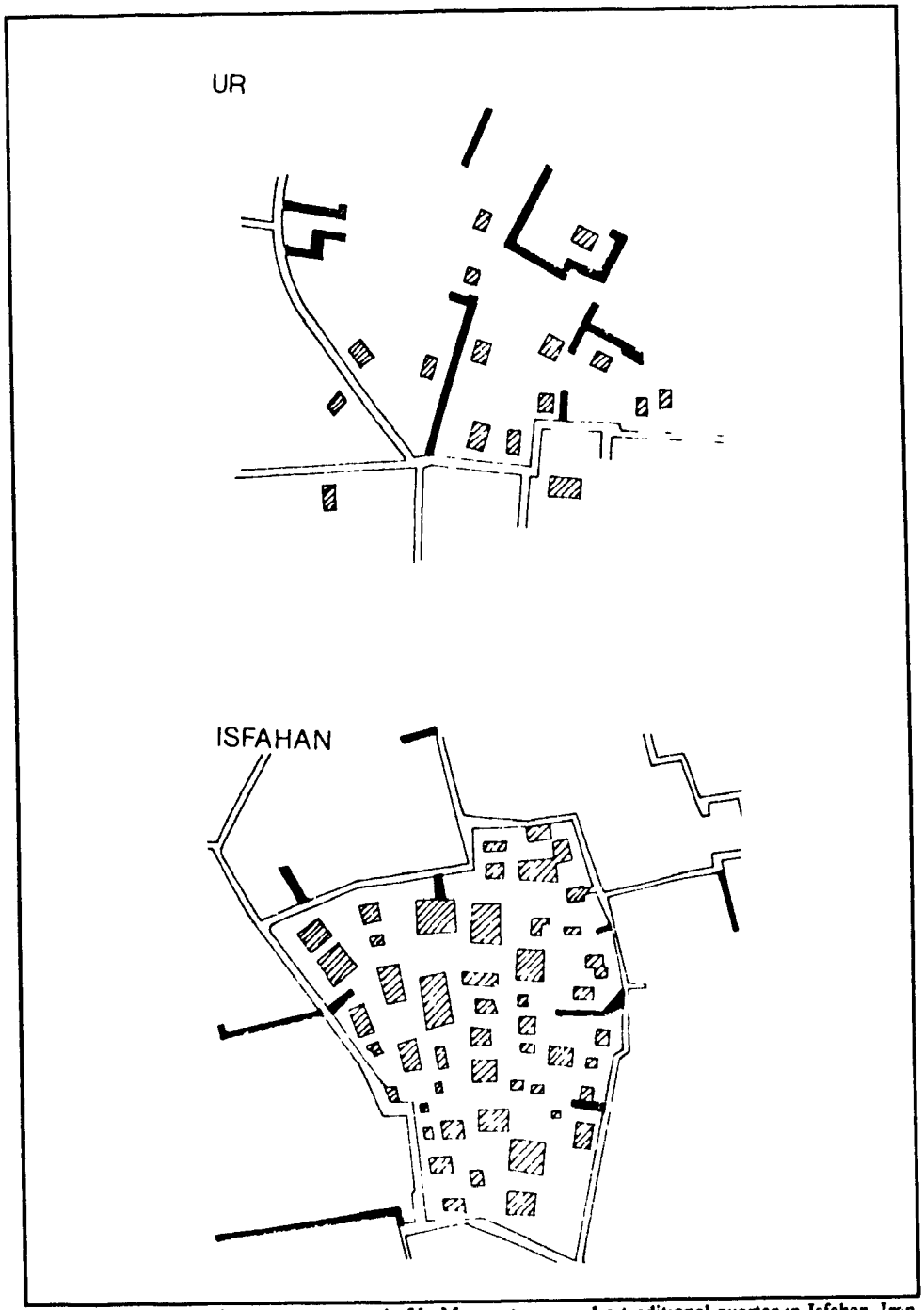

Fig. 5. A resemblance between a quarter in Ur, Mesopotamia, and a traditional quarter in Isfahan, Iran. (From: Heinz Gaube, 1979.)

A Hierarchical Definition

Residential quarters are considered intermediate elements within the scale of an urban community. They allow for spontaneous growth by increasing in numbers without dissolving into the mass. Professor Ervin Galantay, an architect with immense experience in Islamic architecture,[21] defined residential quarters as follows:

> On a somewhat larger scale of social organization we find the neighborhood completing the hierarchy of introverted cells from the room, to the courthouse, the cluster with its semi-private alley and to the MAHALLE with its mosque, school, hammam, etc., separated from other neighborhoods by streets carrying through traffic.[22]

Besim Hakim in his book *Arabic-Islamic Cities* defines quarters as the final element within the scale of the overall medina (city).[23] He described the Mahalla as "the quarter that housed people of a common ethnic or social-cultural/tribal background."[24]

Norbert Schoenauer, in his *6,000 Years of Housing*, with regard to Mahallas, stated:

> In time, the cities' residential sectors were altered into precincts called mahallahs, each composed of a closely knit and homogeneous community with its own intrinsic character. The asabiyyats, or "solidarities," such as ethnic groups, sectarian religious affiliations, occupational groups and multi-racial groups unified by association with a particular sheikh or madrasah inhabited specific mahallahs. In fact, non-Muslim citizens, namely Christians, Jews, and Maronites, also had their own mahallahs.[25]

Furthermore, Ira Lapidus in *Muslim Cities in the Later Middle Ages* described the residential quarter of Islamic-era cities in the following extract:

> The cities were divided into districts called harat, mahallat or akhtat. These were residential quarters with a small local market and perhaps workshops ... but characteristically isolated from the bustle of the main central city bazaars ... . Many of the quarters, though not everyone need have been a solidarity, were closely knit and homogeneous communities.[26]

However, as mentioned earlier, Middle Eastern cities were not single cities but composites of cities. Thus, to apply the term "quarter" to those composites would result in a vague definition. When the Arab historian Yaqut Al-Hamawi[27] observed that any one of the Baghdad quarters resembled a city, he often expressed uncertainty as to whether places were properly quarters or villages.[28] Furthermore, numerous kinds of subdivisions, including both the Hara and the Mahalla, were used in Cairo.[29] Therefore, a Mahalla in Baghdad might not exactly correspond to a Hara in Cairo.

However, in short, residential quarters should be viewed as a specific scale in the hierarchical arrangement of space. "At the largest scale is the community. It is in turn composed of several quarters which are themselves composed of several precincts. Clusters are at a still smaller scale while the lowest level in the spatial hierarchy is the house."[30]

To understand the concept of hierarchy, a scale of reference is illustrated (Fig. 6). Between the dwelling unit and the urban community, three intermediate scales are thought necessary: the cluster, the pedestrian precinct and the residential quarter.

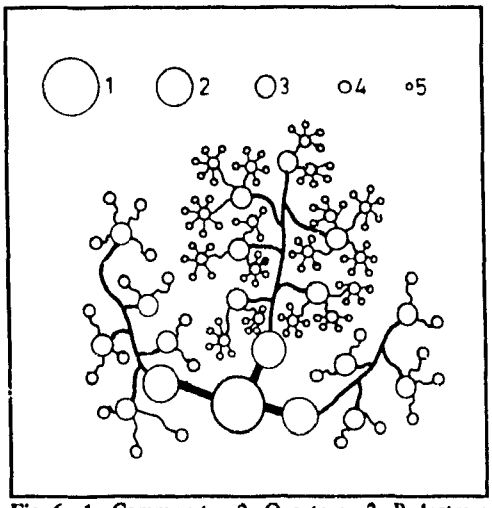

Fig. 6 1=Community, 2=Quarters, 3=Pedestrain Precincts, 4=Clusters, 5=Dwelling Units. (Generated by the author after: Bernard Delaval, 1974)

The cluster, which defines the grouping of individual dwellings into units, establishes the essential ingredients of a neighborly life. In line with Hassan Fathy, 20 to 25 units should be grouped into clusters (which makes 4 to 5 dwelling units in each cluster) and assigned to a compatible group of inhabitants.[31]

The pedestrian precinct is what circumscribes a group of people living within easy walking distance of each other who share a number of communal facilities accessible on foot.

The residential quarter should comprise several pedestrian precincts, a local market and a central religious edifice. However, one should bear in mind that there was no such distinction between quarters and pedestrian precincts in the traditional cities since, historically, all quarters were precincts based on pedestrian movements. The term "pedestrian precinct" has been used in the literature lately to classify further the urban scale for today's vehicular movement.

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[30] See *Habitat Bill of Right*, 1976, pp. 93-133

Streets and Accessibility

Whether the medieval Middle Eastern cities evolved from an ancient city, such as Damascus or, alternatively, were founded by the Muslims, such as Baghdad and Cairo, they were characterized by a hierarchical arrangement in their circulation networks.[32] On the one hand, "Through Access," with relatively wide streets, extending from one gate of the walled city to the other, served the public domain. On the other hand, "Within Access," an irregular, narrow network of maze-like streets, branching like a tree, served the residential realm.

In general, access in a traditional medieval city could be classified into six grades. In the public domain, there is access through the city gate, to access through the great street (Tarriegg), to access through the communal street (Shari). In the residential realm, it leads off from access within the quarter gate, to access within semi-private street (Darb), to access within the alley (Zogaag) or cul-de-sac (Raddb) (Figs. 7-12).

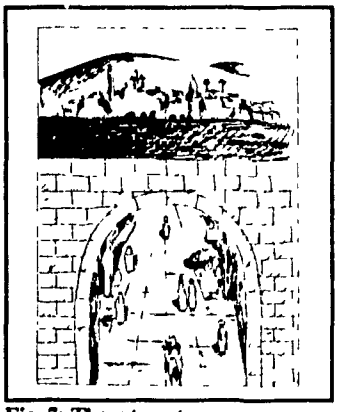

Fig. 7: The city gate.

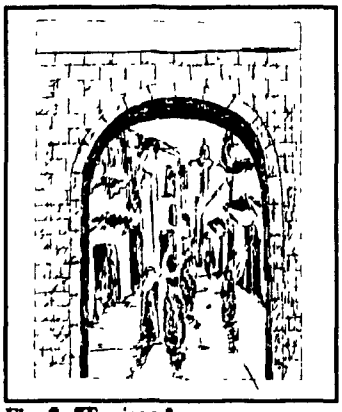

Fig. 8: "Tarriege."

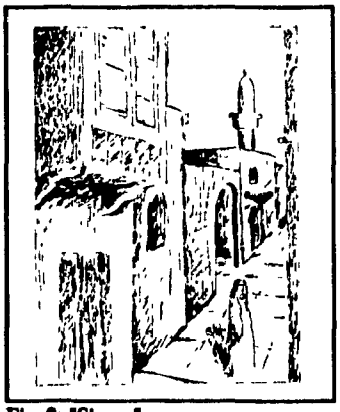

Fig. 9: "Shari."

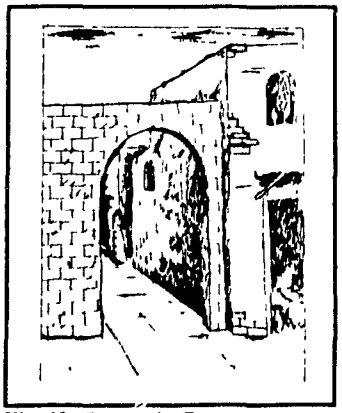

Fig. 10: Quarter's Gate.

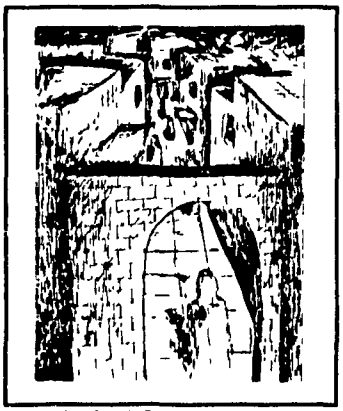

Fig. 11: "Darb."

Fig. 12: "Zogaag" or "Raddb."

The communal street (Shari) serves several quarters along its length. At the entrance to a residential quarter, a gate that was usually closed at night and could be barricaded in time of crises[33] physically and symbolically transports the public domain into a semi-private one. Usually, a residential quarter has more than one gate due to intermixed networks and access ways. In Fig. (13) a schematic diagram representing the possibilities for the location and number of quarter's gates is outlined. Number 1 and 2 in the former Figure symbolizes the location of a quarter's main gate. Number 3, 4, and 5 are possible locations to erect a secondary gate. However, usually both no. 4 and no. 5 are common walls for two bordering dwelling units separating two quarters.

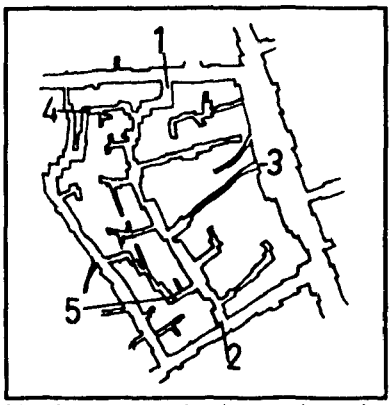

Fig. 13: A schematic diagram indicating the possibilities for the location and number of gates in a traditional residential quarter.

Following the gate(s), access within the quarter serves a small local market, a religious edifice, a public bath (hammam) and dwelling units in a hierarchical order starting from the "darb" (quarter's main street) to the alleys and lanes and ending in the cul-de-sacs. Along with the gate(s) of a quarter, the significance of cul-de-sacs is quite remarkable in fostering self-identity and self-policing (Fig. 14).

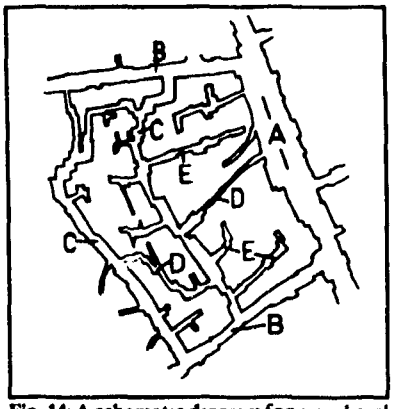

Fig. 14: A schematic diagram for a medieval Middle Eastern city indicating the hierarchy of street networks. (A=The great street, B=Communal streets, C=Semi-private Streets, D=Alleys, E=Lanes/Cul-de-sacs.)

In conclusion, a descriptive extract from the literature of Middle Eastern Islamic-type cities will further describe this distinctive concept of access ways that marvellously established a hierarchical transformation of the urban fabric from public to private:

> On entering the Islamic town, through one of the main gates, a major thoroughfare would lead to the centre ... . The commercial areas of the town were usually to be found on either side of the main thoroughfares, because of the ready access which they afforded ... . The main streets were frequently only 8 to 10 meters wide and with so much concentrated activity ... [t]he bustle and intensity of activity on the main thoroughfares were a notable feature of the Islamic town [Fig.15]. ... Turning away from the main thoroughfares, a further contrast was encountered as the traveller ventured into the residential quarters on either side. Here the streets were much narrower, with walls often within touching distance on either side. The intimacy and semi-private atmosphere of these streets were borne in on the visitor as the shade provided by the dense building pattern created cool conditions in which to linger. The

noise of the main streets was quickly cut to a distant murmur as the traveller moved further into the quarter [Fig. 16].[34]

Fig. 15: A thoroughfare (Shari) in Cairo. (From: André Raymond, 1984.)

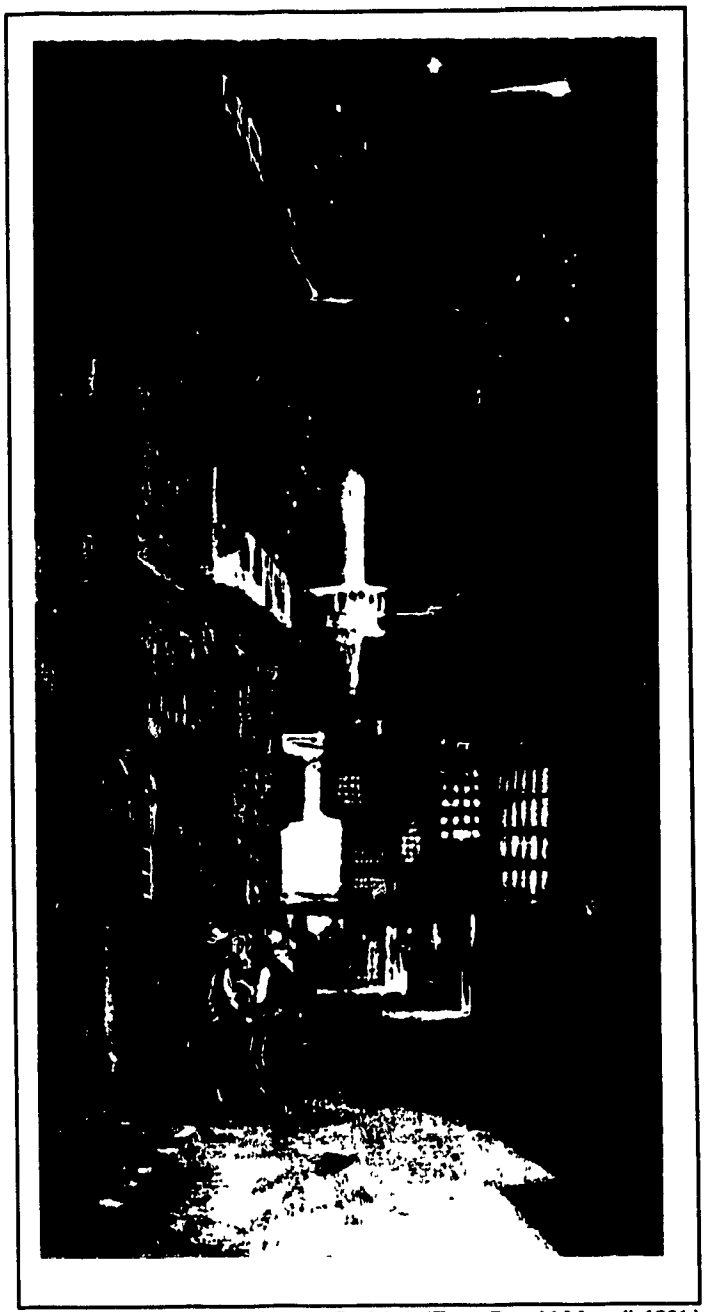

Fig. 16: A "Darb" in Al-Kazimiyah, Baghdad. (From Donald Maxwell, 1921.)

Size, Population and Density

Many socio-physical elements have greatly influenced the size and density of residential quarters. The layout of the city, the gates, the main streets, the citadel, along with the solidarities of tribal tradition, religious affiliation, origin and family, have all contributed to structuring the number, size and population of residential quarters. Furthermore, economic elements, such as the specializing of a trade and workshop to a particular quarter, also determined their character and density.

The old walled city of Cairo (Al-Qahira), founded by the first ruler of Egypt in the Fatimid dynasty,* had a rectangular plan surrounded by 10 to 15 quarters, each of which was built to house an ethnic military unit.[35] In time, the original rectangular plan was lost, but residential quarters continued to integrate themselves to the growth of the city and retained more or less their typical street hierarchical and circulation pattern. As the population increased, residential quarters flourished, so that by the end of the 19th century 37 quarters along with some small precincts and specific lanes and alleys were described for old Cairo.[36]

A recent study of a specific Hara in the old section of Cairo** showed that different houses ranging from one to six storeys*** and housing 107 households in an area approximately 3.2 acres**** resulted in an overall density of 33 dwelling units per acre (Figs. 17-18).

Unlike Cairo, Damascus was a classical Arab city that succeeded a Roman one. The Hellenistic influence on its urban form lasted for almost a thousand years.[37] Upon the rise of Islam, its grid-block street pattern no longer satisfied the socio-spatial requirements of that era. Due to the increase in population, buildings became extended and streets gradually spread into an irregular pattern.[38] Residential sectors were altered into quarters, and streets branched into cul-de-sacs.

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* His name was Al-Moizz Li Din Allah Al-Fatimi in 969 A.D.

** This study has been conducted by Mohammed M. Al-Sioufi in 1981 for one specific Fatimid Hara known as Harat Al-Darb Al-Asfar (the quarter of the Yellow Lane). The name probably reflects the occupational speciality of the dwellers in the 19th century as assemblers of Belgian crystal and copper frames to make huge chandeliers for palaces and mosques.

*** The building-height plan shows 48% one to two storeys, 40% three to four storeys, and 12% as high as five or six.

**** In Al-Sioufi's study the total area was not given; however, by the plan and its scale the author approximately estimated the area.

Lists compiled before the middle of the 16th century assigned about 70 Haras to Damascus.[39] Each Hara was integrated as a small community and was characterized by quasi-physical isolation.[40] "They were analogous of village communities inside the urban agglomeration [*sic*]."[41] The size of the Hara was about the size of a small village.[42] A plan of a traditional Hara in Damascus (Figs. 19-20) shows 95 dwelling units, one hammam, one mosque and some shops. They were integrated along with hierarchical streets in an area approximating 2.5 acres,* reaching a density of 38 dwelling units per acre.

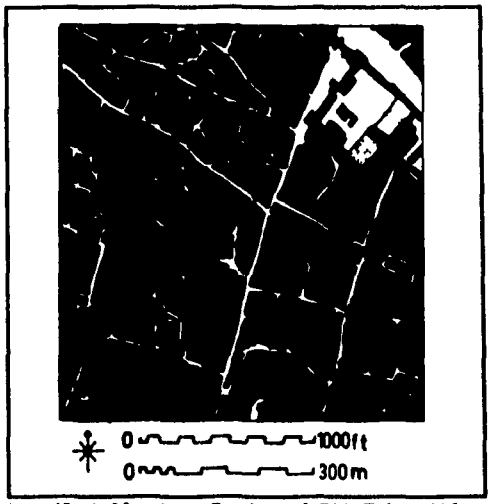

Fig. 17: A Northern Section of Old Cairo. (After: Mohammed Al-Sioufi, 1981.)

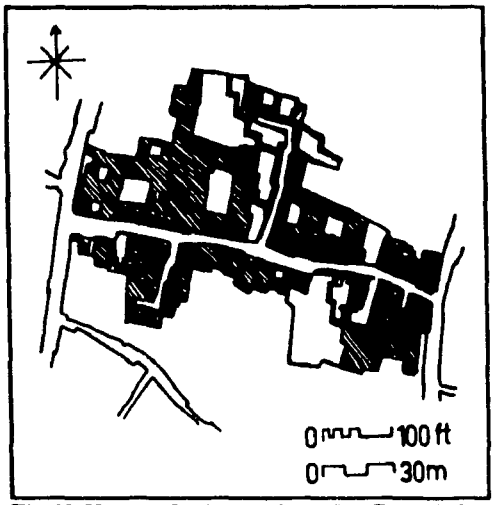

Fig. 18: Harat Al-Darb Al-Asfar in Old Cairo. (After Mohammed Al-Sioufi, 1981.)

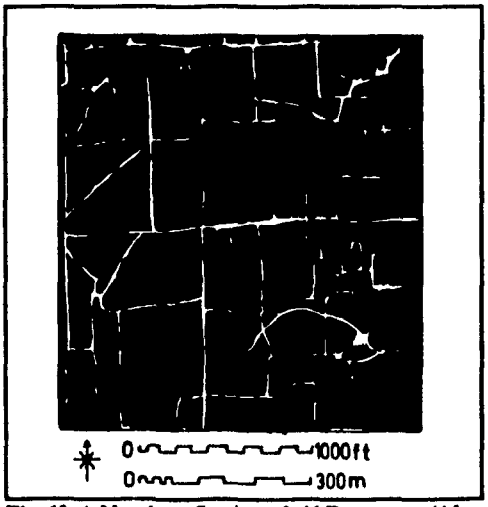

Fig. 19: A Northern Section of old Damascus. (After Jean Sauvaget, 1941.)

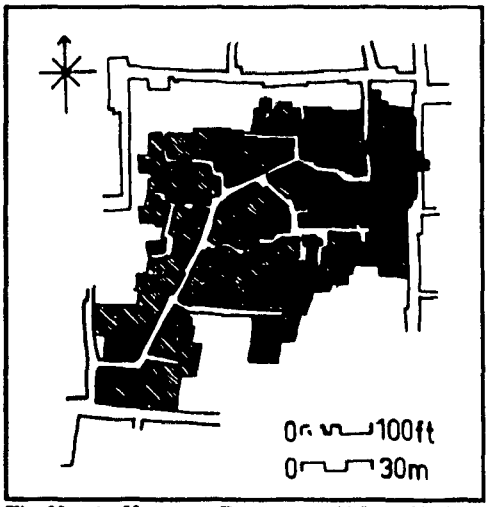

Fig. 20. A Hara in Damascus. (After Norbert Schoenauer, 1981)

* This observation is according to the plan and its scale.

Baghdad, the city of the Arabian nights, first built by the Abbasid ruler (Abu Jafer Al-Mansur in 762 A.D., Fig. 21) and later completely destroyed by the Mongolians (in 1528 A.D., Fig. 22), was divided into four residential sectors:[43]

> The residential zone was divided into four quadrants by the vaulted commercial galleries which linked the four city gates to the central palace area. These residential quadrants were bounded on both their outer and inner perimeters by parallel ring streets which at certain intervals were linked to each other by spoke-like connecting streets; the latter were the spines of the residential quarters and were protected at either end by strong gates.[44]

Although the city was rebuilt, it did not trace its original circular plan. However, Mahallas continued to evolve, and until the beginning of this century Baghdad was divided into 76 Mahallas.[45]

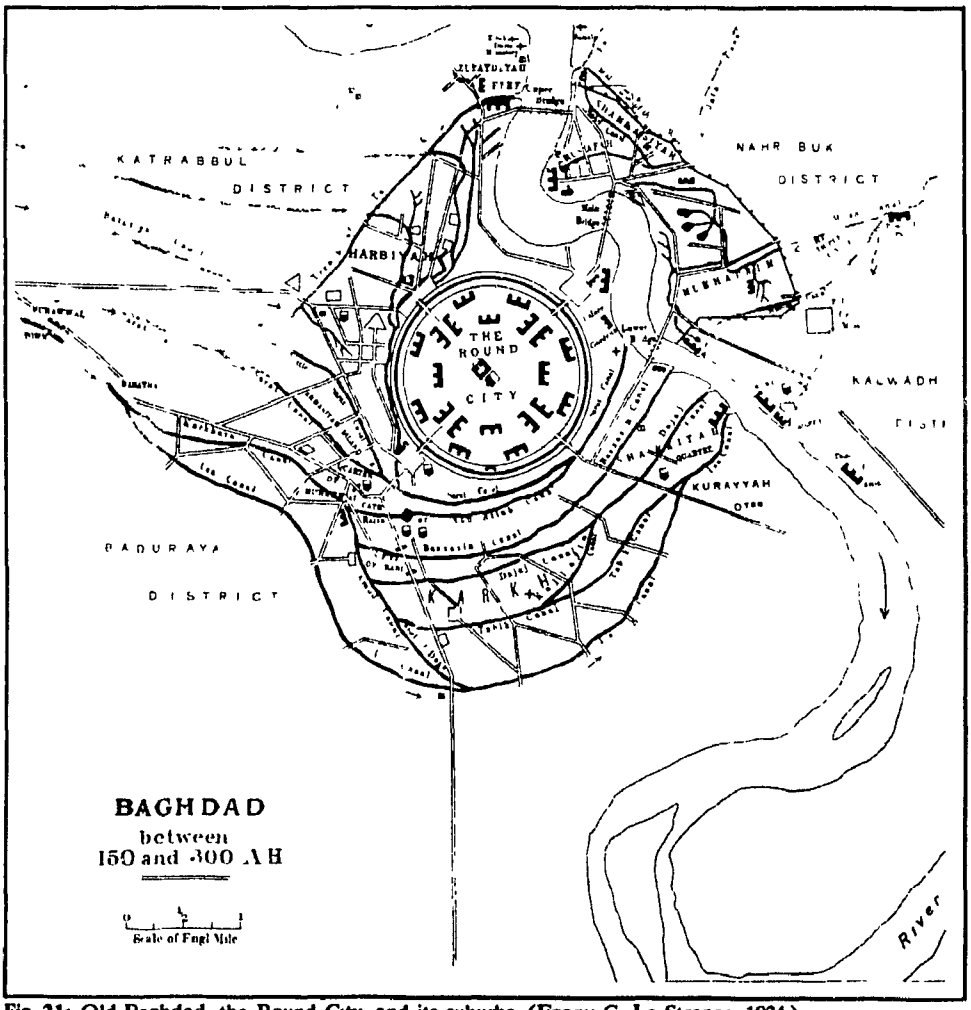

Fig. 21: Old Baghdad--the Round City--and its suburbs. (From: G. Le Strange, 1924.)

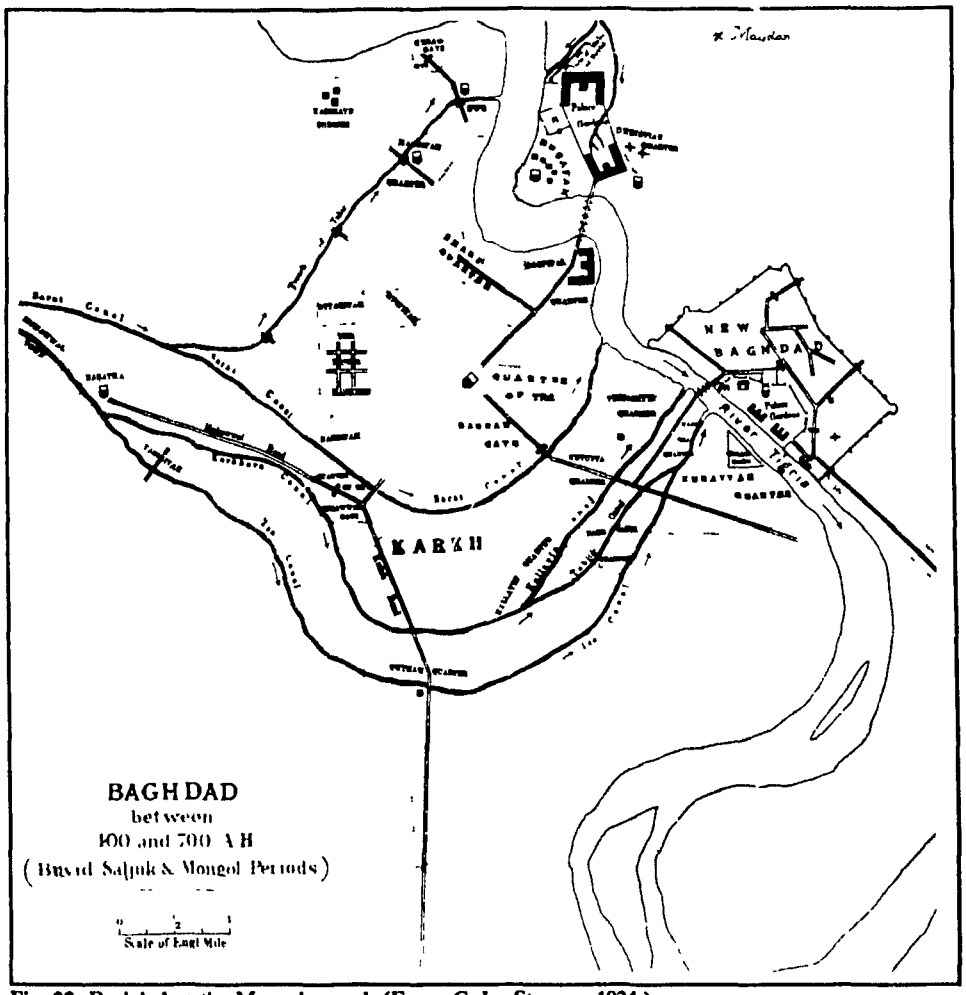

Fig. 22 Baghdad in the Mongol period. (From: G. La Strange, 1924.)

Al-Kazimiyah, a former separate Shiite district that now constitutes a section of Baghdad, is an excellent example of a traditional Middle Eastern Islamic-type urban settlement.[46] In line with the antecedent temple communities, Al-Kazimiyah houses many shiite dwellers who settled around two mausoleums. The appellation of Al-Kazimiyah is emanated from the term Kázimayn, representing two former Shiite Imáms*.

* The tombs of "the two Kázims," the seventh Imám Músá Kázim and the ninth Imám Muhammad-Taqí, about three miles north of Baghdad. Around them has grown up a considerable town, inhabited cheifly by Persians, known as "Kázimayn," and later vocalized as Al-Kazimyah. (*The Dawn-Breakers*, p. 42.)

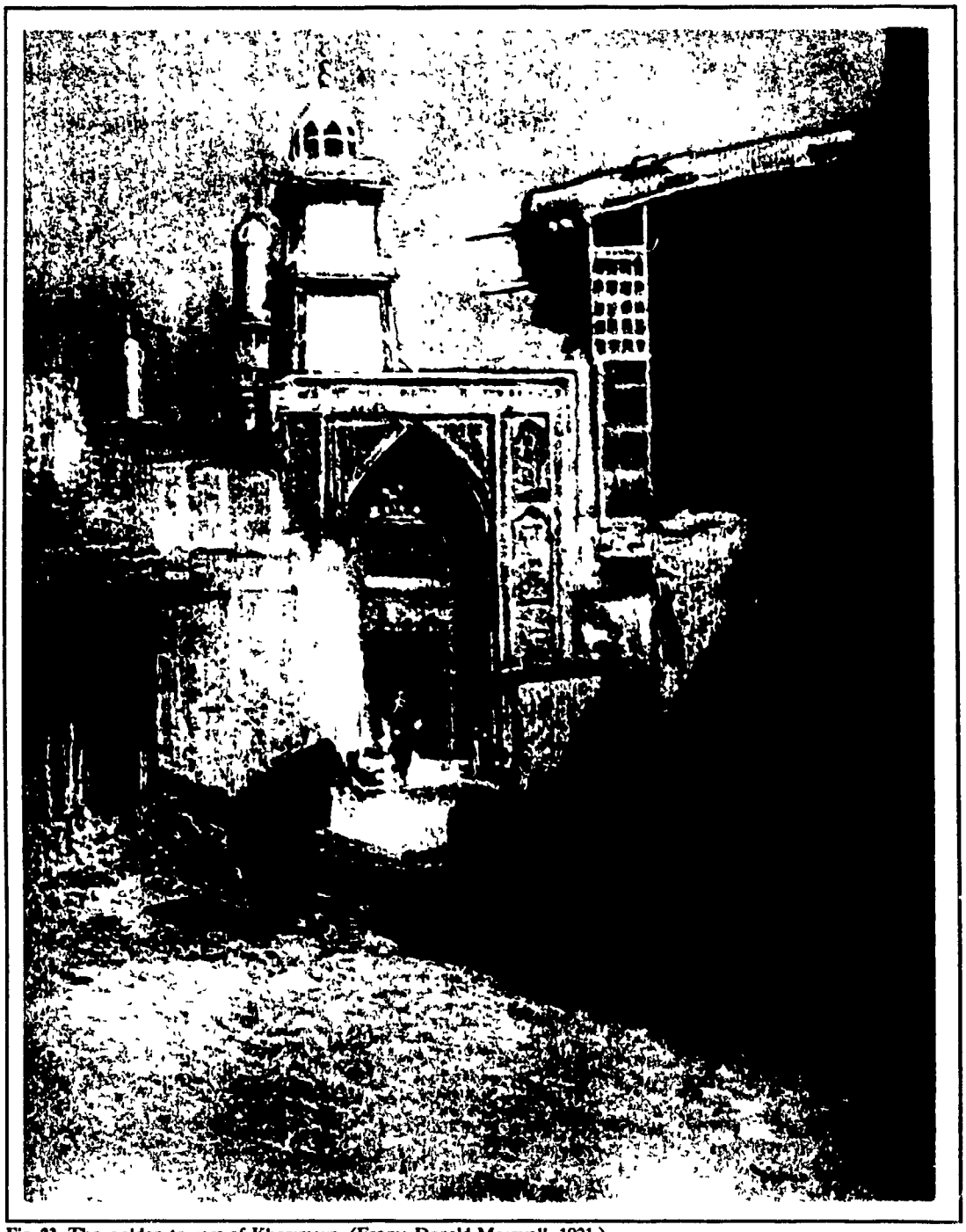

Fig. 23. The golden towers of Khazimayn. (From: Donald Maxwell, 1921)

Concerning its urban pattern, "the medieval ... pattern of a myriad of narrow, twisted and shaded alleyways and cul-de-sacs still predominates in most of Al-Kazimiyah."[47] A centeral section of Al-Kazimyah is mapped in figure (24) and from it a residential sector is depicted (Fig. 25). The latter can be classified into one main Mahalla along the lacal thoroughfare, "Darb", and some individual clusters and lanes. From the plan and its scale, the overall area of the sector is approximately three acres and comprises around 117 private court-yards. Whether the complete sector consists of one or different Mahallas, the overall density averages 38 dwelling units per net acre.

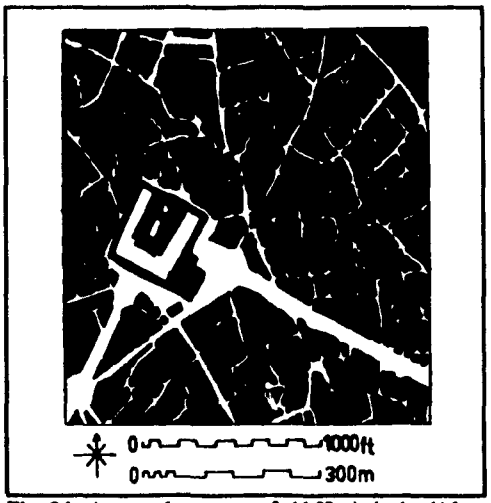

Fig. 24: A central section of Al-Kazimiyah. (After: Norbert Schoenauer, 1981.)

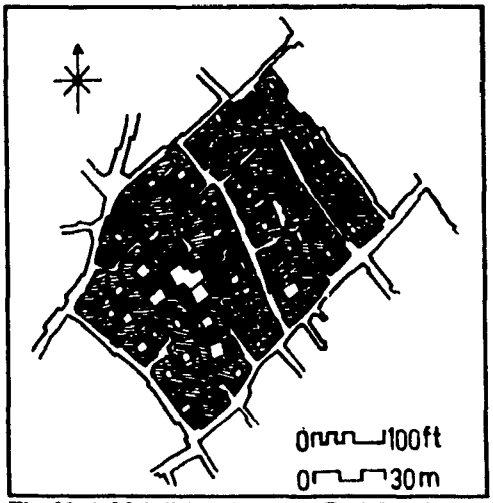

Fig. 25. A Mahallah– along the "Darb,"–and some other small clusters in Al-Kazimiyah (After: Norbert Schoenauer, 1981.)

In Tunis, Besim Hakim, making reference to Jacques Revault, studied an island of housing in a traditional Hawma of Tunis, of which the Hawma has an area of 2.94 acres with a total of 33 dwelling units, resulting in a density of 11 dwelling units per acre (Figs. 26-27).[48] The lower density of this particular district in Tunis is a result of the homes and their courtyards being larger than those in Baghdad, Damascus or Cairo.[49]

From Cairo through Damascus, Baghdad and Tunis, it seems apparent that the residential quarters had a similar pattern of land use. A range of between 10 and 40 dwelling units per acre seems to be the density that maintains social cohesion, a feeling of security, a sense of belonging, proximity and neighborliness among the dwellers.

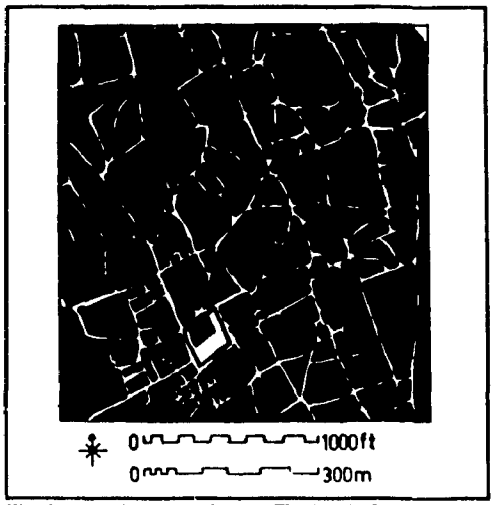

Fig. 26: A Section of old Tunis. (After: Jacques Revault, 1971.)

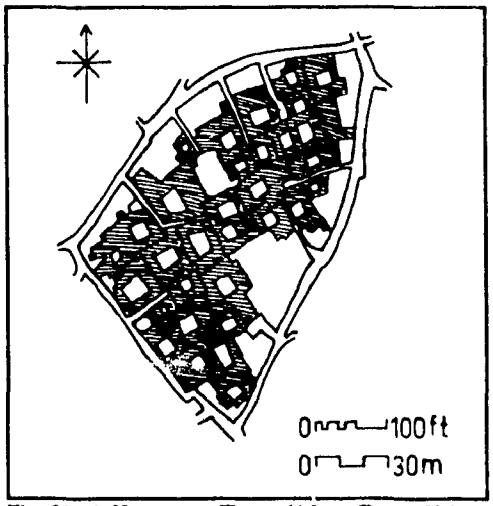

Fig. 27: A Hawma in Tunis. (After: Besim Hakim, 1986.)

Relatively speaking, the size and density of residential quarters in the Middle East and its neighboring regions varied from one period to another.* Thus, any size and population that was based on general historical description should be considered only tentative and subject to further study and substantiation. In conclusion, traditional quarters were neighborhoods within the urban whole. Their sizes varied according to time, function and identity. Usually a larger unit, which contained several quarters, constituted the unit of effective social action, spiritual function and physical identity (Fig. 28).

* In the late 15th century, sources report some 50 odd quarters in Aleppo indicating an average size of between 1,000 and 1,200 people for each. Before the middle of the 16th century, Damascus had an average size of 500 to 600 people per quarter. Furthermore, between the 16th and 18th centuries, in describing the residential quarters of Arab cities, André Raymond portrayed a maximum size of 4 to 6 hectares (9.8 to 14.8 acres), and often much less, with a population of between 1,000 and 2,000 inhabitants per quarter. (See Ira Lapidus, 1984, p. 85 and André Raymond, 1984, p. 15.)

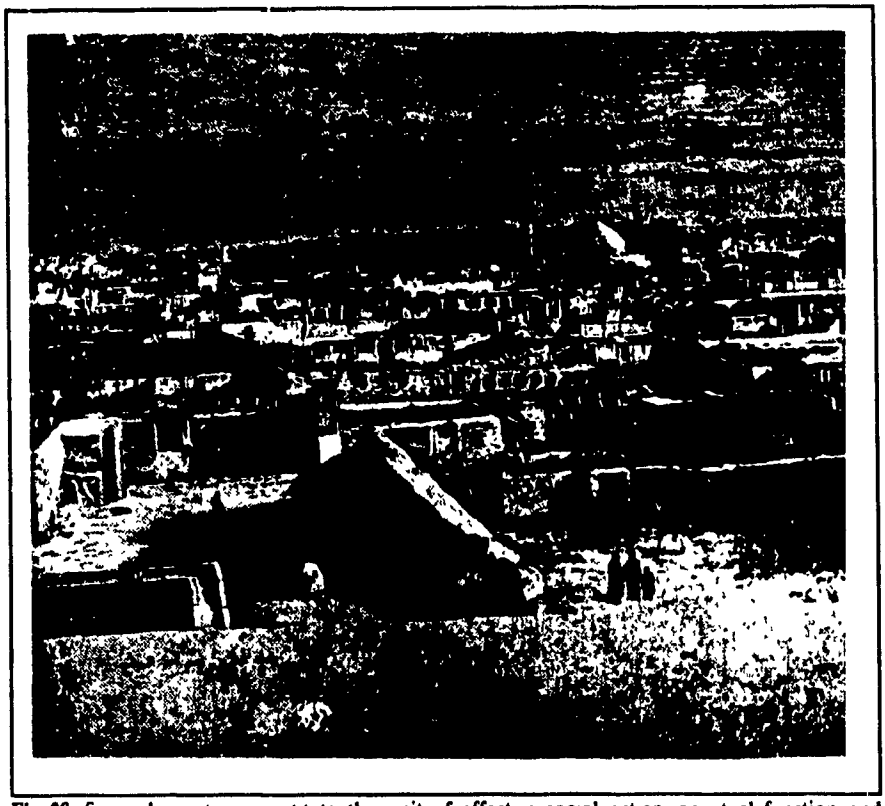

Fig. 28. Several quarters constitute the unit of effective social action, spiritual function and physical identity· 19th century Baghdad. (From: *al-Iraq fi al-tarikh*, 1983.)

Endnotes

1. Lapidus, I. 1984, pp ix-x
2. Ferraby, J. 1987, p. 47
3. Saqqaf, A. 1987, p 43
4. Nour, A 1979, p. 207
5. Schoenauer, N. 1981, Vol 2, p. 33
6. Lapidus, I 1969, p. 73
7. Lapidus, I. 1984, p. 87
8. Acaroglu, I. 1972, p. 105
9. Ibid. p. 106
10. Ismail, A. 1972, p. 113
11. Gaube, H. 1979, p 12
12. Ibid. p. 16
13. Skidmore et al. 1978, p. 6
14. Ibid. p. 11
15. Ibid. p. 16
16. Ibid.
17. Hourani, A.H. and Stern, S.M. 1970, p. 12
18. Ibid. p. 13
19. Schoenauer, N. 1981, Vol. 2, p. 33
20 Gaube, H. 1979, pp 12-13
21. Saqqaf, A. 1987, p. 4
22. Galanty, E. 1987, p. 10
23. Hakim, B. 1986, p. 64
24. Ibid.
25. Schoenauer, N. 1981, Vol. 2, p. 34
26. Ibid. p. 85
27. Lapidus, I. 1969, p. 65, footnote no. 19
28. Ibid.

29. Ibid.

30. Skidmore, et al. 1978, p 36

31. Galantay, E. 1987, p. 19

32. Raymond, A. 1984, p. 10

33. Lapidus, I. 1984, p 95

34. Roberts, Hugh. 1979, pp 37-39

35. El Sioufi, M. 1981, p. 9

36. From the Arab historian Al-Makrizy, as quoted in Nour, A. 1979, p. 204

37. Schoenauer, N 1981, Vol. 2, p. 23

38. Ibid. p. 27

39. Lapidus, I. 1984, p. 85

40. Ibid. p. 95

41. Ibid.

42. Ibid. p. 85

43. Schoenauer, N. 1981, Vol. 2, p. 41

44. Ibid.

45. Nour, A. 1979, p. 204

46. Schoenauer, N. 1981, Vol. 2, p. 49

47. Ibid.

48 Hakim, B. 1986, p. 129

49. Schoenauer, N. 1981, Vol. 2, p. 141

CHAPTER II

A CONTEMPORAY OUTLOOK

While an analysis was made in the previous chapter of the traditional urban forms that led to an emphasis on the residential quarters of the Near and Middle East, in this chapter a review is made of the evolution of late 19th- and early 20th-century urban theories and their application to contemporary western urbanization. Our journey takes us from an exploration of the utopian tradition, to the City Beautiful movement, to the Garden City movement, to the Neighborhood Unit movement, and to contemporary approaches in neighborhood planning that incorporated the automobile.

THE UTOPIAN TRADITION

The search for an ideal residential environment that fosters social cohesion and neighborliness has been a major occupation for western social reformers. Toward the late 19th century, some of these reformers pronounced that the way to attain social perfection was by transfiguring the physical environment. For example, Sir Thomas More's famous island (Fig. 29), which enjoyed an environmental perfection, was named Utopia, a word that has its origin in the Greek *ou,* meaning "not," and *topos,* meaning "place." Thus, Utopia refers to nowhere. More's choice of title was ingenious because he combined the idea of Utopia (no place) with that of Etopia (good place).[1] Historically, the evolution of western utopian scholars, in some fashion or other, has existed since the time of the ancient Greeks.

Figure 29: More's Island of Utopia. (From: Joseph Lupton, 1895.)

It is interesting to append that religion, which was rooted in the East, played an important role in the evolutionary process of western utopian thoughts too. Just as religion fostered the progress of humanity toward an ideal "Golden Age," the utopian tradition envisioned the progress of urbanity toward an ideal "Golden Place."

The concern for communal habitation on the part of utopian-minded urban reformers have their roots in various movements. In North America, for example, such concern evolved from Bostonian Edward Bellamy's ideal cooperative and brotherhood city utopia (1888). The figure on the right, is a representation of Bellamy's concern for the contemporary industrial age urban living condition. It shows a factory-lined street crammed with workers marching with hands uplifted towards the rising sun.[2] Subsequently, the former concern, has been somehow materialized into a City Beautiful movement exhibited by the Chicagoan architect Daniel Burnham (1893), (Fig. 31). The latter was a reaction on the part of architects and *urbanists* to overcrowded living conditions, which characterized urban habitation at the time.[3]

Figure 30: Bellamy's vision of the contemporary urban living condition– portrayed by J. K. Kari on the front cover of his *Vuonna 2000.* (From. Sylvia Bowman, et al., 1962)

Prior to Burnham's movement, simple street improvement schemes and the establishment of small parks and play spaces in the cramped sections of urban residential districts did take place. However, in contrast to earlier small-scale schemes, the City Beautiful movement assumed a comprehensive city-wide scale that followed the prototypes of the French Haussmann's tree-lined boulevards of Paris (1853) (Fig. 32).[4]

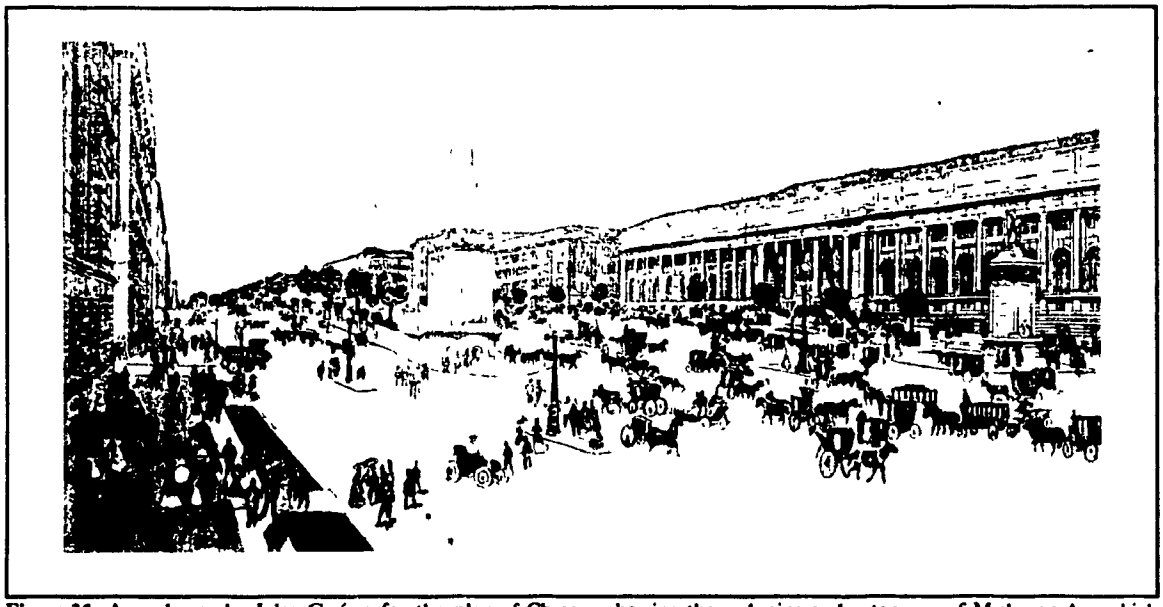

Figure 31: A rendering by Jules Guérin for the plan of Chicago showing the widening and extension of Michigan Av., which illustrates Burnham's City Beautiful movement. (From: Charles Moore, 1968.)

Figure 32: Baron Haussmann, the boulevard Saint Michel: planned as the great crossing of Paris. (From: *On Streets*, 1978.)

At the outset, though the City Beautiful movement produced few noteworthy changes in the built environment and urban habitation,[5] it virtually transfigured--in line with Haussmann's ideology--the ethics of urbanization to some superficial physical refinements and measures.

THE GARDEN CITY

"Towns and country must be married, and out of this joyous union will spring a new hope, a new life, a new civilization,"[6] wrote Ebenezer Howard, the British social reformer--who attempted to offer mankind an "Etopia" based on justice, unity and physical grace--(Fig. 33). When his *Tomorrow: A Peaceful Path to Real Reform* was published (1898), *Times Magazine* had this to say:

> Mr. Howard is not content with half measures like Sir Thomas More, he builds an utopia --a charming "Garden City" of 32,000 people in the midst of a little territory, all owned, planned, built and generally directed by the community itself ... [t]he details of administration, taxation, etc., worked out to perfection. ... The only difficulty is to create it; but that is small matter to utopians.[7]

In a reply to *The Times*, Howard contended: "By *The Times*' own showing, I am no Utopian; for me the building of a city is what I have long set my mind upon, and it is with me no 'small matter'."[8]

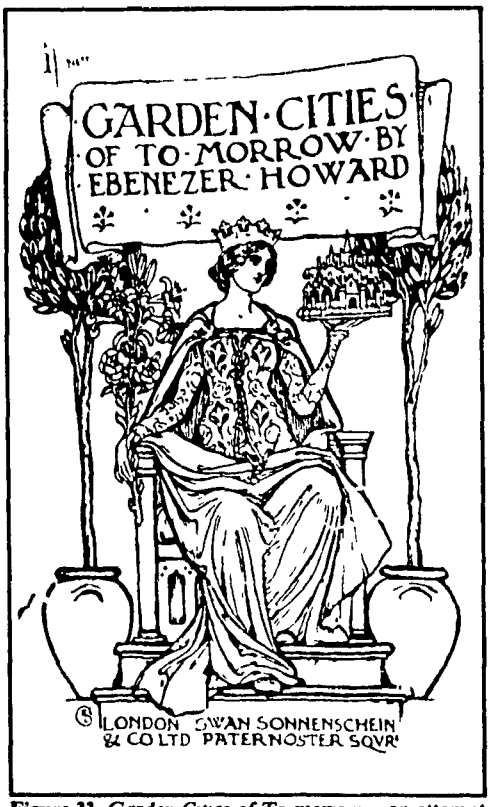

Figure 33. *Garden Cities of To-morrow,* --an attempt to offer mankind a city built on justice, unity and neighborliness. (From· Robert Beevers, 1988.)

The Garden City as a Social City

On the one hand, the idea of a Garden City that combines city living with country life (Fig. 34) is similar to Sir Thomas More's combination of a none place with a good place. On the other hand, Edward Bellamy's ideal cooperative and brotherhood city, envisaged in his book *Looking Backward* as miles of broad streets, shaded by trees and lined with fine buildings, scattered in discontinuous blocks into small or large clusters with residential quarters that contained large, green, open squares, is where Howard possibly pictured the physical paradigm of his Garden City.[9]

Moreover, similar notions between the City Beautiful movement and the Garden City concept can be found. The former was dominated by a "make no little plan" spirit, while the latter advised architects against restricting themselves to the small building site and to considering a larger entity than

the single building structure.[10] Nevertheless, unlike the former ideologies and utopias, the Garden City concept revolutionized its underlying theory into a planning practice through its first model, which bears the name Letchworth Garden City.

As a social reformer who was primarily concerned with the refinement of urbanization and the welfare of communal habitation, Howard's blueprint of the physical environment was based on a social prophecy. "I went," wrote Howard, "into some of the crowded parts of London [Fig. 35], and as I passed through the narrow streets, saw the wretched dwellings in which the majority of the people lived, observed on every hand the manifestations of a self-seeking order of society and reflected on the absolute unsoundness of our economic system, there came to me an overpowering sense of the temporary nature of all I saw, and of its entire unsuitability for the working life of the new order--the order of justice, unity and friendliness."[11] To establish such a social order, unity and friendliness, Howard thought in terms of physical grace, greenery, openness and garden-like cities. He pictured his Garden City being built neighborhood by neighborhood where the basic unit in each "is the family living in its own home surrounded by a garden."[12] Each neighborhood or ward, as envisaged by Howard, should have a "Grand Avenue" in the middle of which the school (the

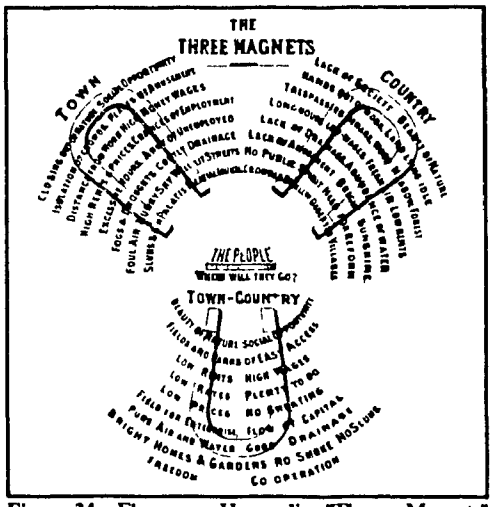

Figure 34 Ebenezer Howard's "Three Magnets" through which he attempted to attract dwellers to the one which combines city living with country life. (From Ebenezer Howard, 1902)

Figure 35: London street scene, 1872 (From: Gustave Doré and Blanchard Jerrold, 1968.)

contemporary counterpart of temples, churches and moques) "serves as a library, a meeting hall and a site for religious worship."[13] (Fig. 36).

In ecological terms, Howard believed in human progress and that mankind was evolving toward a higher stage of social organization--the cooperative commonwealth--where brotherhood would become the basis of daily life.[14] To develop such a cooperative civilization, Howard thought that building a green city would regulate the inhabitants, foster neighborliness and a communal fellowship that will draw mankind eventually to its cause. A number of such garden cities would form together a cluster, namely, the social city, which "would become the base for a still higher stage of evolution that Howard never ventured to describe."[15]

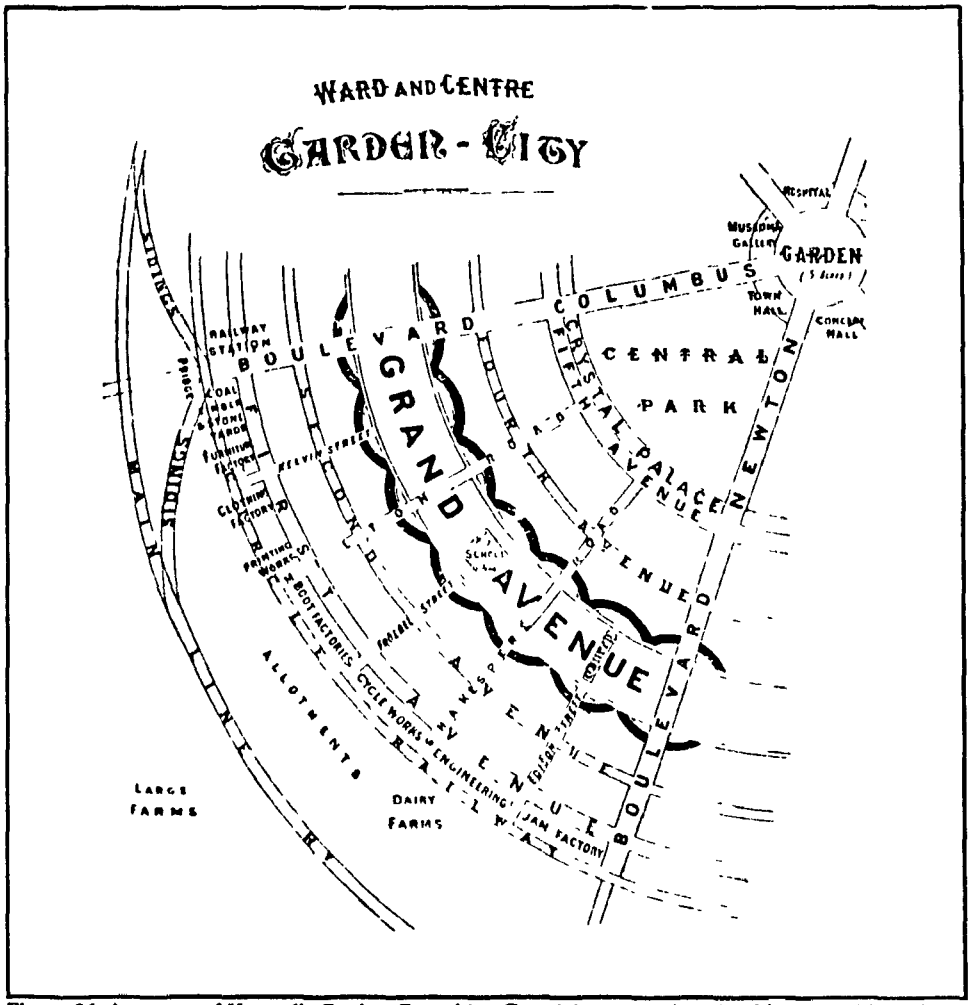

Figure 36: A section of Howard's Garden City with a Grand Avenue and a school in the middle. (From: Ebenezer Howard, 1904.)

The Garden City as a Medieval Village

Howard's thoughts so influenced the social-minded spirit of his time that a Garden City Association was eventually formed. Having successfully won a competition sponsored by the newly created association, Raymond Unwin and Barry Parker were appointed as consultant architects to develop a full-scale prototype for a garden city based on Howard's model.[16] The site of the development was chosen to be in Letchworth, England, "a tract of over 3,800 acres in Hertfordshire, 34 miles northeast of London."[17]

Although both Unwin and Parker sympathized with Howard's social green city concept, they were under the influence of the utopian William Morris and his *News from Nowhere* (1890) (Fig. 37), in which a city greatly beautiful was envisioned.[18] Morris's "Nowhere", in line with More's "Utopia," derived its aspiration from the traditional medieval village, with its system of life founded on solidarity, communality and fellowship.[19]

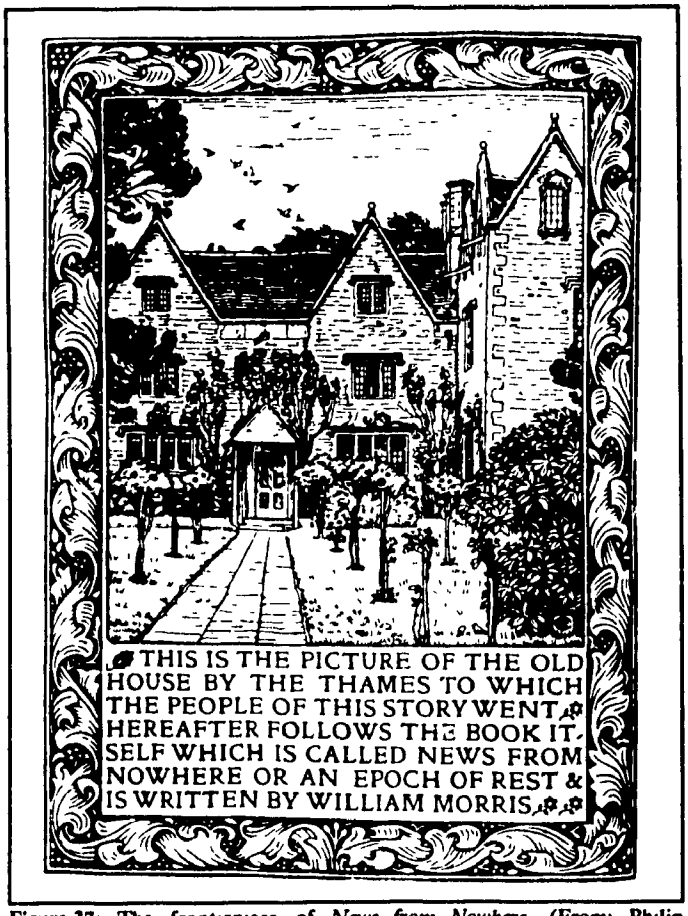

Figure 37: The frontispiece of *News from Nowhere.* (From: Philip Henderson, 1967.)

It is interesting to note that while Howard expressed the built environment of his social order in terms of an architectural symmetry, Parker and Unwin sought instead an organic congruity.[20] They visualized through the eyes of William Morris the garden city as an old, charming medieval village, with a consistent style and traditional design that would foster unity of cooperation and neighborliness in an organized contemporary community (Fig. 38). Both Parker and Unwin portrayed Howard's Garden City as a medieval garden village:

> The village [said Unwin] was the expression of a small corporate life in which all the different units were personally in touch with each other ... . It is this crystallisation of the elements of the village ... which gives the appearance of being an organic whole, the home of a community ... .[21]

Figure 38: Unwin's image of the medieval village and its organic unity. (From: Robert Fishman, 1989.)

Architecturally, the initial model that Unwin anticipated as the basic unit in their design of the Letchworth Garden City was a quadrangle hamlet of homes. This complex would consist of three sides, which would be used for private apartments, and a fourth side, for use as a common dining room, recreation and nursery.[22] The common green space in the middle was to be the basic element that would animate face-to-face associations and hence foster a sense of neighborliness. Regarding this common green space, Unwin explained:

> In the squares and quadrangles [Fig. 39] of our Garden City dwellings [referring to Letchworth], the spirit of cooperation will find a congenial ground from which to spring, for their association in the enjoyment of open spaces or large gardens will replace the exclusiveness of the individual position of backyards or petty garden-plots, and will no doubt soon be followed by further association, [such as cooperative housekeeping, catering, etc.] to which the arrangement so admirably lends itself.[23]

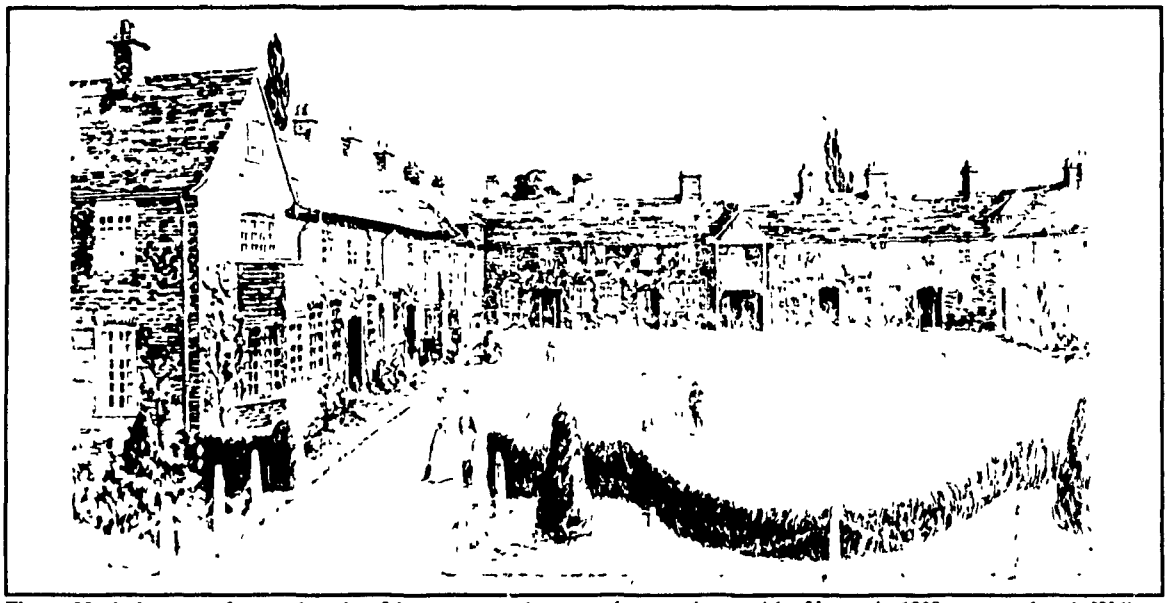

Figure 39. A drawing of a quadrangle of houses around a central green designed by Unwin in 1909 in accord with William Morris's ideals of communal living (From: Frank Jackson, 1985.)

However, with its cooperative housekeeping, communal catering (a feature of Bellamy's cooperative city) and other common facilities, Unwin's model was too idealistic for the contemporary "private-minded" dwellers and had failed in practice to be self-supportive financially.* Thus,

> looser forms ranging from single rows of cottages to cul-de-sacs of detached and semi-detached houses, each with its own private garden, [were] arranged to make up a kind of close. Fences, hedges and even gates were frowned upon as symbols of isolationism, ... [and] slowly they appeared to add to the suburban features of the residential scene.[24]

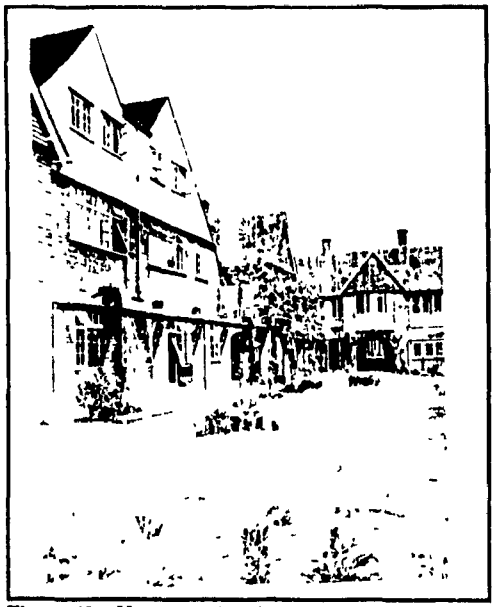

Figure 40. Homesgrath: the only quadrangle in Letchworth Garden City. (From: Charles Purdom, 1913.)

* Only one unit was built in letchworth under the name of Homesgrath (Fig. 40 above), and later the communal side of it was abandoned and the name changed to Sollershot Hall (see Beevers, R. 1988, pp. 110-113).

The Garden City as a Residential Suburb

The Garden City of Letchworth gave the appearance not of a city but rather of a suburban community characterized, however, by a spatial hierarchy of dwelling units, housing clusters and residential wards. Architecturally speaking, Unwin arranged Letchworth's dwelling units so that main rooms face an open space open to neighbors (Fig. 41). This neighborly precept had in a sense "defined the spirit of the place in its architecture."[25]

Figure 41: Letchworth's suburban community sense drawn by T. Friedensen. (From: Charles Purdom, 1913.)

However, as it pertains to self-containment, Howard's ideology of a self-sufficient Garden City with its own supply of industry and agriculture, has proved to be a quixotic utopia for 20th-century interdependence. The Letchworth Garden City became virtually a residential suburban housing district for middle-class residents commuting to work in London.[26] For his part, Unwin transferred the Garden City model to a residential suburban scheme, as exemplified by his Hampstead Garden suburb, which emulated the physical rudiment and communal sense of the earlier Letchworth Garden City* (Fig. 42).

Figure 42: Unwin's precept of community and hamlet-type layout is patterned in his Hampstead garden suburb which in line with the former Letchworth, united a traditional style with the small scale and intimate character. (From: Frank Jackson, 1985.)

Though acknowledging the usefulness of garden suburbs, Howard detected them as being antithetical to the built environment and life worth living. For Howard, a garden suburb, even though attempting to regulate and distribute urban population wisely, increases the distance between work and the dwelling place, "for they are rather dormitory districts ... and tend to diffuse the corporate sense over so wide an area that in its diffusion that sense is apt to become largely lost."[27]

As Howard's Garden City theory was not intended to be solely based on building residential suburbs but rather on building green, self sufficient and smokeless cities, two decades after the

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* The Garden City planning concept had no connection to the evolution of suburban residential development schemes. Planned suburban towns, such as the industrial community of Port Sunlight and Bournville in England, as well as the residential suburb of Riverside, Illinois, in the United States, are some suburban schemes which were built before the inauguration of Howard's Garden City concept.

construction of Letchworth, a second attempt was made to build another Garden City model in Welwyn, England.* However, once again the latter offered no more than a green, suburban residential environment (Fig. 43).

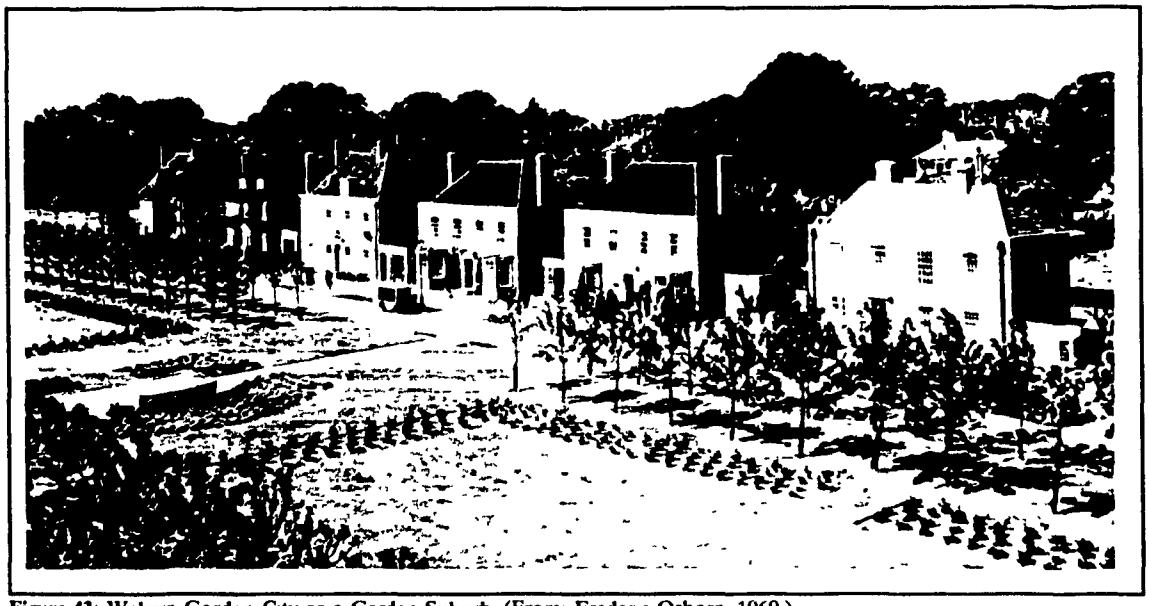

Figure 43: Welwyn Garden City as a Garden Suburb (From: Frederic Osborn, 1969)

All in all, though "the Garden City was succeeding not as a social movement but as a planning movement,"[28] Howard's foresight of the gradual diminishing of communal life, dwellers' goodwill and neighborliness should be greatly acknowledged. The advance of a spiritless, individualistic contemporary society induced Howard to apply his social theory physically in the form of a garden-type refined city.

A Critical Panorama

Advocates of the Garden City concept sympathized with its cause. Lewis Mumford, to mention one, in his *Culture of Cities*, was supportive. However, the Garden City as a planning concept had its share of critics. For example, in her book *The Death and Life of Great American Cities*, Jane Jacobs referred to Howard's Garden City as a harmful planning measure that set emphatic and city-destroying ideas in motion.[29] She traced Howard's influence on American planning by referring to some residential

* The architect, Louis de Soissons, who was the architect for the Welwyn Garden City, "followed Parker and Unwin's lead at Letchworth, but he took advantage of their experience ... to design a more efficient and consistent lay-out." Nevertheless, the excessive uniformity that he adapted in the style of the Welwyn houses, the neo-Georgian style, made it less interesting architecturally than the former Garden City. (For the quotation and note, see Fishman, R. 1989, p 79.)

schemes, such as the Radburn plan,* and argued that the Garden City concept demonstrated such paradoxical ideas as the following: houses should be turned away from the streets and face inwards towards sheltered green; the basic unit of urban design is not the street, but the ward; and the planned community must be islanded off as a self-contained unit that must resist further change. In short, as Jacobs pointed out, for the Garden City ideology, good planning was project planning.[30]

In social terms, although Howard's commonwealth-type green city had to do with project planning, he was more concerned with social planning, communal cooperation, family life and contact with nature.[31] As a social reformer, Howard wanted to alter the welfare of humanity before it led to calamity. Large-scale industry, land speculation and accumulations of power were what Howard attempted to regulate.[32] In short, Howard was concerned with the social welfare of society and promoting an air of cooperation and brotherhood, toward which mankind was evolving However, the irony began when Howard envisioned that social amelioration can be directly achieved through sole physical remodelling and that creating a commonwealth civilization can be accomplished by building clusters of some self-contained garden cities.

THE NEIGHBORHOOD UNIT

On tracing the evolution of the Neighborhood Unit theory, the socialist Charles Cooley, one of the early pioneers of this theory (1909), advocated that human personality is the product of a formative association.[33] Such an association is a face-to-face affiliation that is regulated by a local entity, namely, the neighborhood. In *Social Organization: A Study of the Larger Mind*, Cooley wrote:

> The most important spheres of this intimate association and cooperation--though by no means the only one--are the family, the play groups of the children and the neighborhood or community groups of elders. ... Of the neighborhood group it may be said, in general, that from the time men formed permanent settlements upon the land, down, at least, to the rise of the modern industrial cities, it has played a main part in the primarily heart-to-heart life of the people.[34]

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* Across the Hudson River from New York City, Radburn in the State of New Jersey is the site of a cluster development designed by Clarence Stein and Henry Wright (1929). It evolved originally from an earlier smaller development by the same architects, namely, Sunnyside Gardens. However, Radburn was conceived as a garden city on the Ebenezer Howard model. Its objectives were based on promoting a pleasant, safe, healthy and neighborly oriented environment in a well-developed physical setting.

Predecessors

An early precedent of the Neighborhood Unit theory--one that originated in Europe and quickly spread to North America--is the Settlement House movement which begun in Toynbee Hall, London, around 1884 (Fig. 44). Interestingly, this movement promoted spiritual perception, rather than physical ones, as a means of improving the spirit and welfare of urban dwellers. The basic principle of this movement was to develop community life, family ties and communal fellowship by providing a community center for urbanites.[35] Indeed, the Settlement House movement was an attempt to address the problems of urban poverty, illiteracy and criminal behavior through spiritual remedies and humanitarian goodwill.[36] An approach that put into practice a religious principle of compassion and universal fellowship, "it was [designed] to teach local residents ... to develop fellowship with their neighbors and faith in God."[37] In this regard, Marry Simkhovitch wrote:

> Only through fellowship ... can the kingdom of God be possible. And fellowship means bringing together men of every class and group in the interest of life worth living. ... The settlement group [referring to the Settlement House Movement], no matter how variously constituted, through its common life is working towards a common faith and in so far is adding to the religious experiences of the world.[38]

As the former movement was primarily eager to enrich urban life through some ethical human virtues, it was succeeded by the Community Center movement (around 1904), which, in line with the former, focused on creating a sense of neighborliness in residential environments while allocating local community centers as means of invigorating cultural, recreational and social activities (Fig. 45). In describing the latter, Lewis Mumford wrote:

> [T]he ... [Community Center movement] sought to animate civic life by providing a forum for discussion and to serve as a basis for community activities that otherwise nad no local habitation.[39]

Through a central community structure, both the Settlement House and the Community Center movements virtually replicated the conventional concept of ancestral communities in allocating their temples, churches and mosques as the center of communal consolidation. Just as religion traditionally conceived a centrally located edifice as an element for communal consolidation, some contemporary social-minded reformers conceived the well-being of communal habitation and urbanism in a similar fashion.

Figure 44: Toynbee Hall in London (1885), England, as the outcome of the Settlement House movement. (From: Assa Briggs, et al. 1984.)

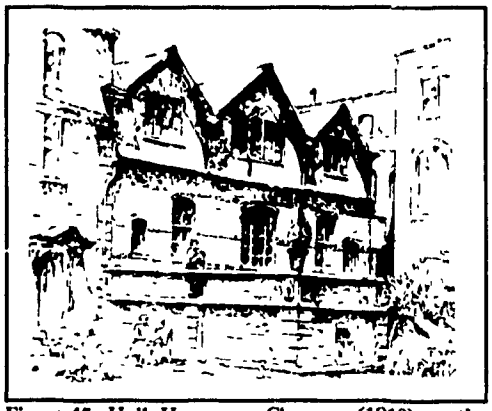

Figure 45: Hull House in Chicago, (1910) as the outcome of the Community Center movement (From: Jane Addams, 1910.)

In line with the above movements, the succeeding Neighborhood Unit theory incorporated a central building (in this case, an elementary school) as the focal point of neighbourhoods and the center for dwellers' incorporation. However, it should not be left unmentioned that prior to the Neighborhood Unit "school" premise, New York police reporter Jacob Riis, who described in his book *How the Other Half Lives* (1890) the degradation of life in residential areas (particularly New York's indigenous neighborhoods), advocated that every neighborhood or district use its public school as a social center.[40]

In addition, some residential development schemes from England and North America* (Figs. 46 - 57)--not to mention France or Germany--also reflect ideas and concepts that led to the progression of the latter (Neighborhood Unit) theory. The Neighborhood Unit theory was a design approach for a familial community, which was submitted by Clarence Perry** (1929), who pulled together the ideas and concepts that preceded his time to present them as a series of planning principles.

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* In England, the author recalls the industrial community of Saltaire, near Skipton (1852), Bedford Park in West London (1870), Bournville (1894) and Port Sunlight's industrial suburbs (1888) and the earlier-mentioned Letchworth (1903), Hampstead (1905) and Welwyn Gardens (1919); in the United States, examples such as the residential suburb of Riverside, Illinois (1869), Sunnyside Gardens (1924), Radburn--even though it overlaps in dates with the Neighborhood Unit theory (1929) and the most influential Forest Hill Gardens (1910)

** As a resident of Forest Hills Gardens in Queens, New York, Clarence Perry, to some extent, emulated the environment he lived in for his Neighborhood Unit concept (see Rohe, W. M. and Gates, L. B. 1985, p. 24)

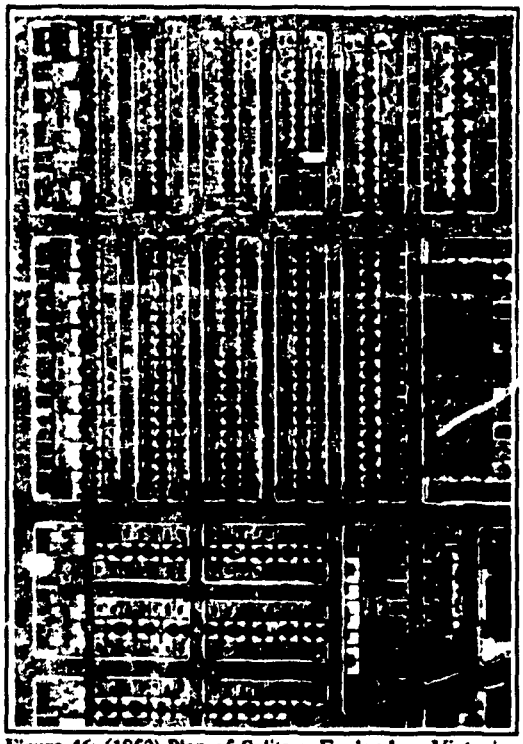

Figure 46: (1852) Plan of Salitare, England,- a Victorian model town-. (From: *Country Life,* March 1972.)

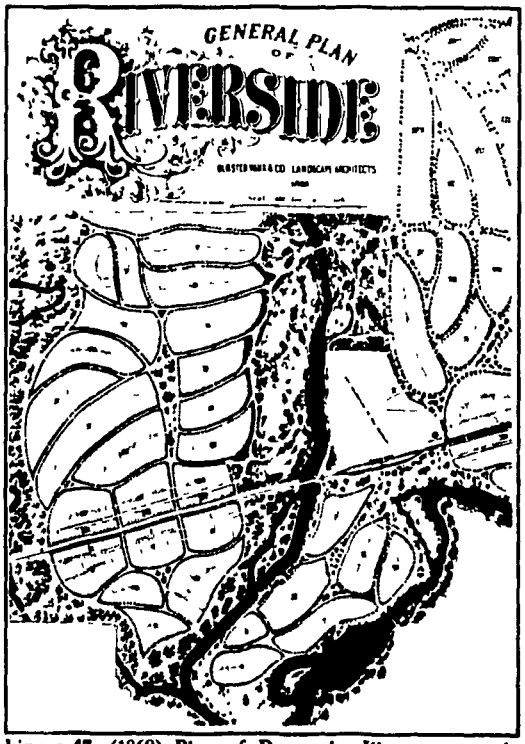

Figure 47. (1869) Plan of Riverside, Illinois, an early planned residential suburb. (From· Julius Fabos, et al. 1968)

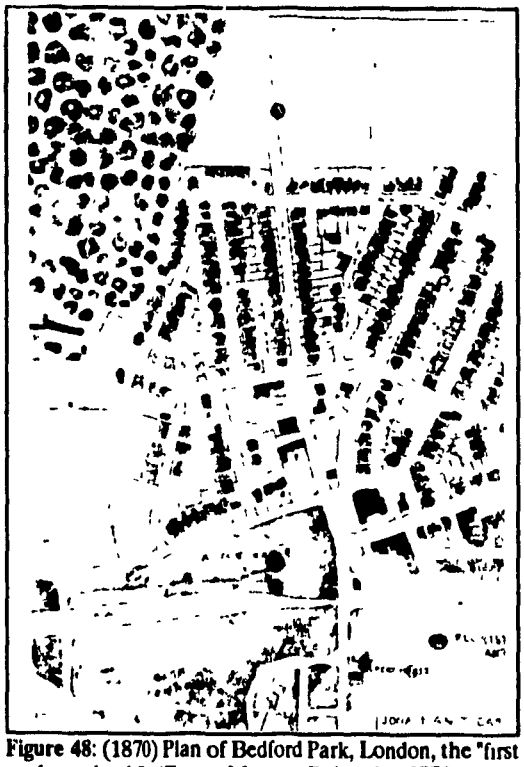

Figure 48: (1870) Plan of Bedford Park, London, the "first garden suburb". (From: Magaret Bolsterli, 1977.)

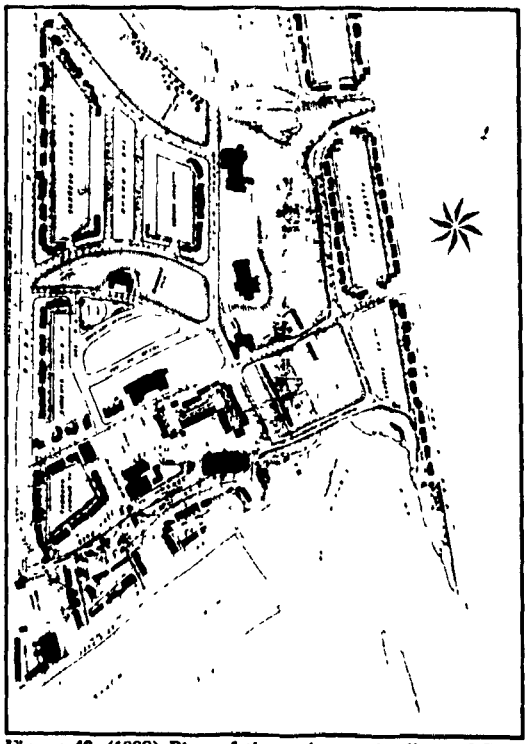

Figure 49. (1889) Plan of the industreial village of Port Sunlight, England. (From: Edward Hubbard, et al. 1988.)

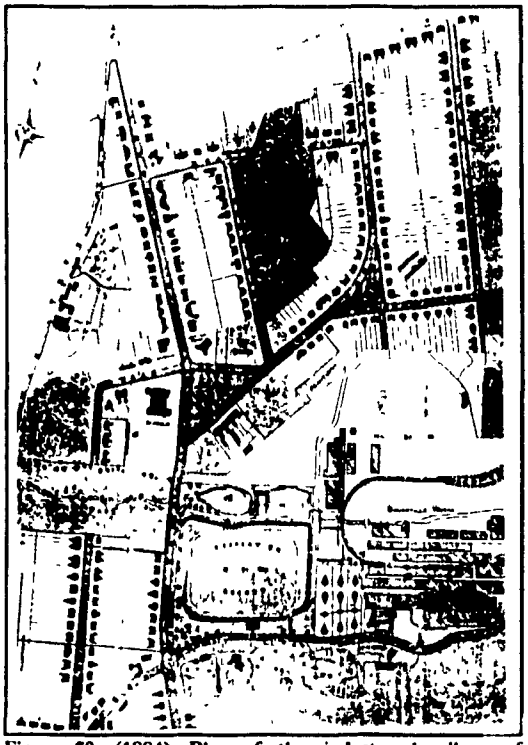

Figure 50. (1894) Plan of the industrial village of Bournville, England (From Frank Jackson, 1985)

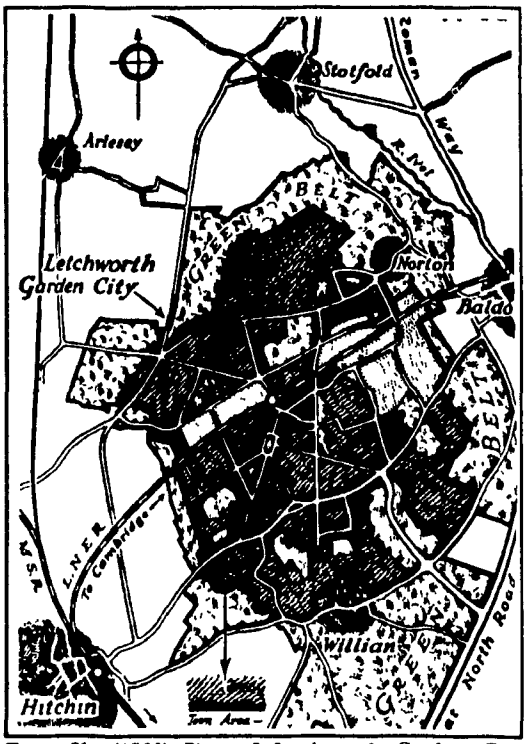

Figure 51. (1903) Plan of Letchworth Garden City, England (From: Frederic Osborn, 1969)

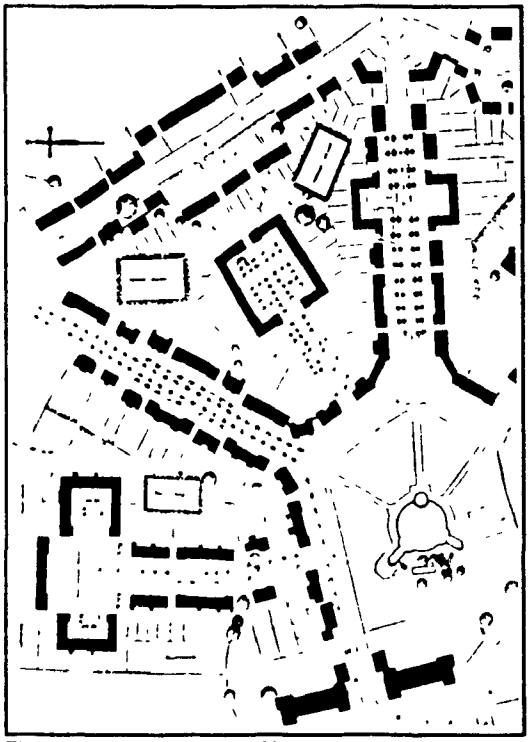

Figure 52: (1905) Plan of Hampstead Garden Suburb, England (From. Frank Jackson, 1985.)

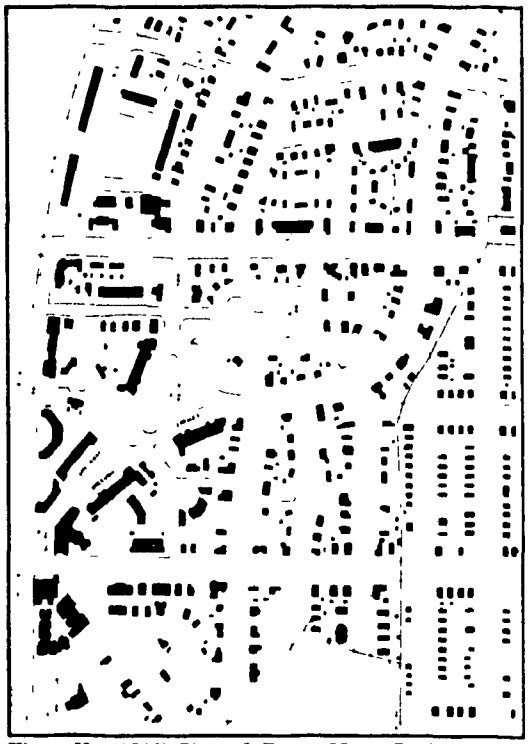

Figure 53. (1910) Plan of Forest Hills Gardens, N.Y. (From. Mel Scott, 1971.)

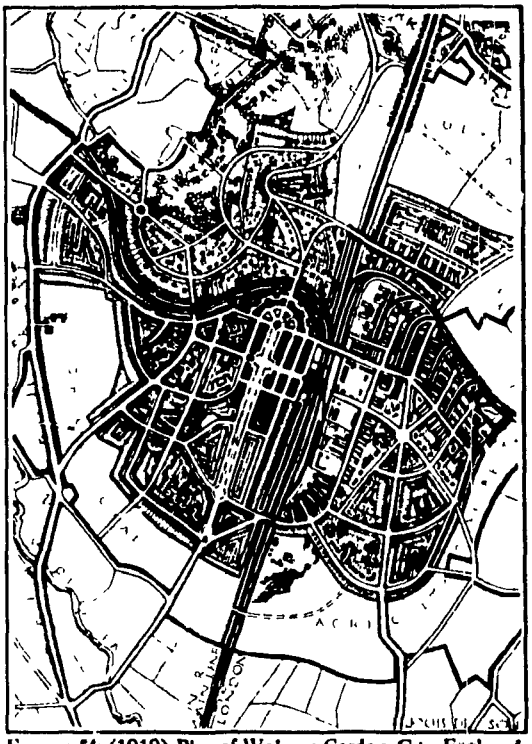

Figure 54: (1919) Plan of Welwyn Garden City, England (From. *New Towns The British Experience,* 1972)

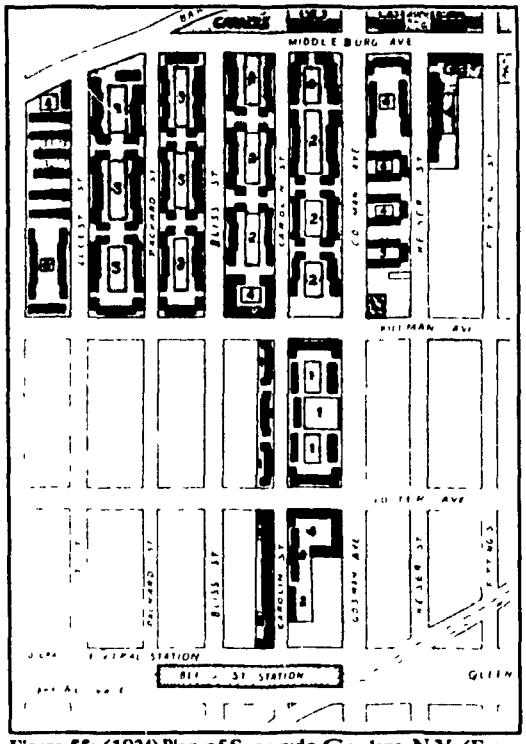

Figure 55: (1924) Plan of Sunnyside Gardens, N Y (From. Clarence Stein, 1966)

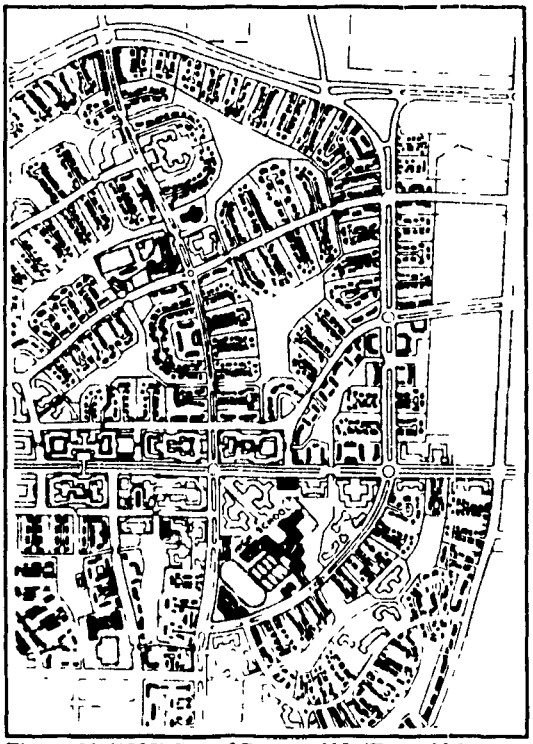

Figure 56. (1929) Plan of Raburn, NJ. (From: Mel Scott, 1971)

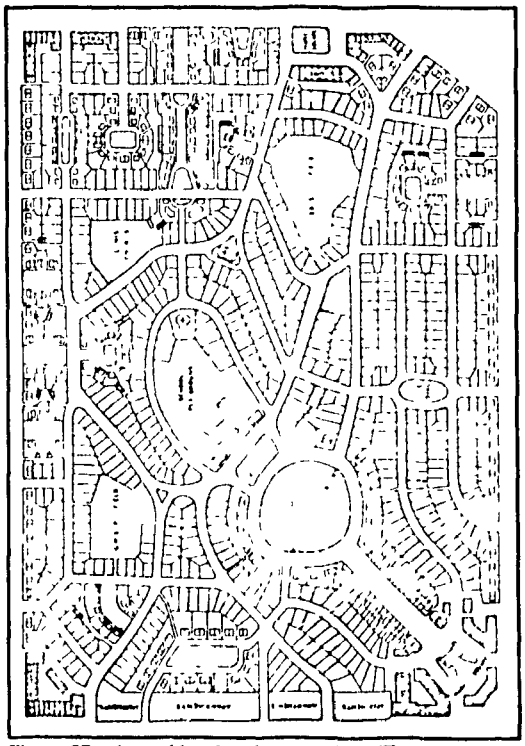

Figure 57: A neighborhood unit plan (From. Melville Branch, 1975.)

Physical Measures

In *Housing for the Machine Age*, Clarence Perry conceived that the lack of children's proximity to play spaces and lack of conditions that create neighborliness were the two dominant shortcomings of urban residential environments. As a measure, Perry advocated smallness and human scale for neighborhood planning. He was also critical of architects and *urbanists* who were concerned primarily with large-scale perceptions, which have their inauguration in the City Beautiful movement's concept of elaborate city parks. Perry stated that "students of crime have often speculated on why it is that large cities with elaborate parks and playground systems still show a high delinquency rate."[41] Some of this, Perry predicted, is "due to the wide, unprotected gulf that lies between the apartment home and the play field."[42] He contended, "When the youngster tells his mother he is going to the public playground, how can she be certain that he actually reaches it?"[43] In this regard, Perry was ethical in fostering human scale as a planning measure for residential environments.

However, with regard to the conditions that provide neighborliness and ethics in neighborhood planning, Perry suggested the following:

1. a centrally located elementary school ... ;
2. scattered, small neighborhood parks and playgrounds ... ;
3. local shops to meet daily needs, grouped together at accessible points on the periphery of the neighborhood ... ; [and]
4. a residential environment that is a community-created resultant, the product in part of a harmonious architecture, careful planting, centrally located community buildings and a special internal street system with deflection of all through traffic, preferably on thoroughfares that bound and clearly set off the neighborhood.[44]

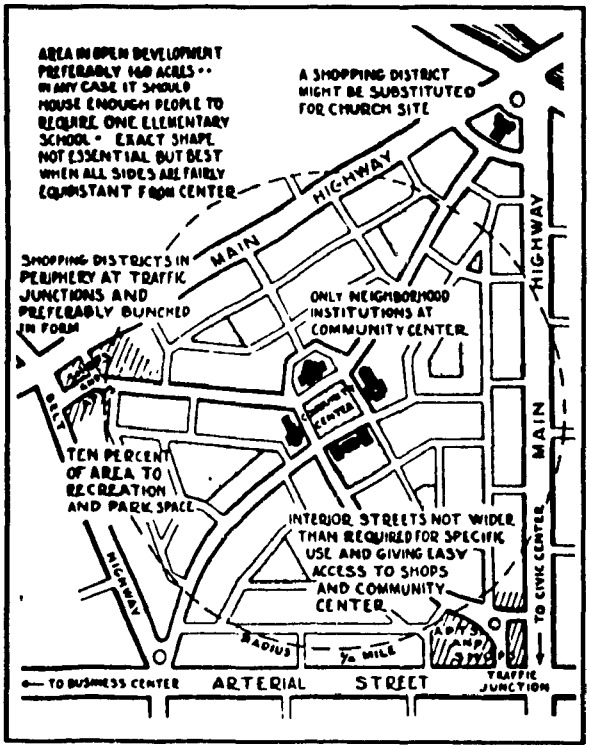

Figure 58: Neighborhood Unit principles. (From: New York Regional Plan, vol. 7, 1929.)

Through these physical measures (Fig. 58) Perry anticipated to nourich social livability and to create what he called the ethical measures for

neighborhood planning. The lack of these measures, according to Perry, was the condition that created social anonymity and neighborless neighborhoods.

Social Motives

Before the Neighborhood Unit theory was accepted, architects concerned themselves with the well-being of habitation through large-scale city beautification efforts. As mentioned earlier, the planning profession in North America was dominated by the City Beautiful movement's forefather Daniel Burnham. However, once the Neighborhood Unit theory succeeded, attention was altered from "city beautiful" to "neighborhood beautiful" concerns:

> A new, more socially conscious generation was growing in strength, motivated by ... smaller-scale site-planning concerns.[45]

Ergo, Perry's Neighborhood Unit came to be the basic constituent for community planning. It symbolized a planning template for architects and planners to develop residential communities. As these "unit-based" planned communities evolved, several social as well as urban critics realized that the Neighborhood Unit theory worked against its ethical planning ideology and became the seed for social stratification.[46] Suzanne Keller, in her book *The Urban Neighborhood*, noted that residential environments that followed the principles of the Neighborhood Unit theory failed because of segregation by income and family composition.[47] Even though the principal motivation of the Neighborhood Unit theory, in line with the Garden City concept, was to foster livability as well as communality in territorially-bounded, organic-type cellular neighborhoods, many architects and urban planners justified the living conditions of the contemporary society to push against such a principle. Conditions such as the mobility of residents and the scattering of friends over a metropolitan region rather than concentrating in a residential precinct became the catalyst for the decomposition of neighborliness.

A Polemical Tableau

Reginald Isaacs analyzed the Neighborhood Unit theory, emphasizing its inadequacy for creating socially as well as physically sound contemporary living environments. Isaacs considered the Neighborhood Unit plan a physical magnet that attracts social segregation rather than integration. He

further addressed the subject of the old village community, which, as mentioned earlier, framed the precept of the Garden City and subsequently influenced Perry's Unit concept as an irrelevancy for contemporary society:

> "In colonial days," said Isaacs, "neighborhoods were the fundamental areas of association ... . In those days before good transportation, communication, industrial developments and the growth of large cities ... neighboring did take place within limits of pedestrian distances. The families in the neighborhoods possessed so many traits in common that they constituted a cumulative social group of a higher order of cohesion. Frequently, the families of a neighborhood were all related to one another. Nearly always they had known each other a lifetime."[48]

However, in today's society, "people," said Isaacs (in 1948), "become members of groups larger than neighborhoods and merely 'reside' in residential areas,"[49] in contrast to living in village-type self-contained communities. Thus, any aspirations of fostering a cumulative social grouping by using the Neighborhood Unit as a planning formula for contemporary society would "not only illustrate a sense of morbid sentimentality but would result in failure,"[50] he concluded. In his hypothesis "Towards a New Basis for Planning,"[51] Isaacs stated that if the neighborhood as a socio-spatial unit is incapable of stabilizing urban population, then the only alternative is to plan "modern cities in accord with the dynamics of city expansion and population movement."[52] In his opinion, the goals of such planning should foster the growth of voluntary neighboring, intimate accessibility, political fit, racial and ethnic integration and prevention of blight.[53]

In line with Charles Herrik, Isaacs's planning goals virtually coincide with Perry's theory.[54] In its perception of livable, residential streets and elementary schools that are open for community use, the Neighborhood Unit concept was aiming to nourish neighborliness and to foster that kind of "voluntary neighboring growth," which Isaacs advocated. Furthermore, Isaacs's "intimate accessibility" is another criteria that the Neighborhood Unit theory aimed to achieve. Theoretically, Perry's Neighborhood Units planned to be in intimate contact with the transportation system of the entire city through its hierarchical street network. Moreover, the Neighborhood Unit, through its school administration, initiated a political impulse, which Isaacs called "political fit", into its structure. Concerning racial and ethnic integration, one cannot deny that they were the principal ethics of Perry's planning movement. Furthermore, with its incorporation of different types of dwelling units ranging from single-family to walk-up apartments and commerce along its arterial streets, the Neighborhood

Unit aimed at creating a diversity in the living environment, and hence preventing the "blight" that Isaacs addressed. In short, Isaacs's design principles are fundamentally the same as Perry's, although the terminology is different.

Leaving this juncture of terminologies and going back to the topic of this discussion, one can conclude that, although the Neighborhood Unit theory, in line with the Garden City utopia, supported, albeit ironically, a faith in achieving social perfection in residential environments through some physical means, it provided, however, a widely accepted normative template for guiding the developments of neighborhoods and for offering the promise of "physically" sound residential environments.[55]

SUCCEEDING THEORIES

With the advent of technology and the gradual increase and dominance of vehicular traffic in the streets and alleys of neighborhoods, the livability of residential environments has been adversely affected.* At the onset, vehicular traffic was not a concern of contemporary planning thoughts during the era of the Garden City movement. However, due to increased automobile production, it was not long before neighborhood planning took into account the new demands made by private motor traffic.[56] Although the Neighborhood Unit theory (not to mention the super-blocks of Clarence Stein, which virtually ran parallel with Perry's Neighborhood Units), was an early pioneer in North American neighborhood planning movements to integrate the private car with urban design, its concern was directed "more to the question of creating livable social units than to traffic control [schemes]."[57]
In the following subsections, some of the urban theories that later followed the Garden City concept and the Neighborhood Unit theory--and that attempted to integrate the automobile into neighborhood planning and community development--are reviewed.

* It is interesting to note that street livability and traffic regulation has been a subject of concern since early times. For example, during the Roman Empire, the movement of carts had been prohibited in the daylight hours as a means of regulating and fostering livability and safety in residential streets (from Jerome Carcopino in his book *Daily Life in Ancient Rome*, p. 49).

The Precinct Theory

It was not until the British Precinct theory, recognized by Sir Herbert Alker Tripp (1945), that neighborhood planning took into acount the private automobile and considered access regulation and traffic control (Fig. 59). The focus on the elementary school as the central constituent in neighborhood planning has been shifted and directed to traffic regulation schemes. However, in line with the Neighborhood Unit theory, the Precinct theory prescribed residential environments as territorial, identifiable units, characterized by a hierarchical street network. It is relevant at this stage of development, to correlate the biological image of Patrick Geddes and his organic urban structure in which he transmitted a hierarchial network similar to the trunk, twig, limbs and branches of a tree to that of Alker Tripp's hierarchy of arterial, sub-arterial and local roads. Mentioning Patrick Geddes, one of the leading scholars in the subject of urban planning, the reader should bear in mind that Geddes's organic image in urban planning influenced and structured the ideologies of both the Garden City and the Neighborhood Unit theories.

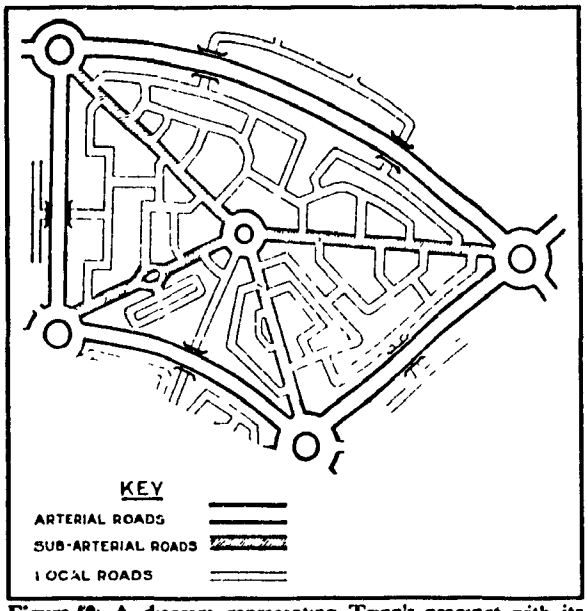

Figure 59: A diagram representing Tripp's precinct with its hierarchy of netwoks. (From: H. Alker Tripp, 1942.)

Focusing back to Sir Alker Tripp, the sense of community and neighborliness for his Precinct theory was to be recreated by establishing a series of traffic-controlled precincts. An existing example of this type of arrangement can be seen in the arrangements of the "Inns of Court"* in England[58] (Figs. 60-64).

* The Inns of Court are four collegiate precincts of buildings housing four legal societies in England. These "societies were founded about the beginning of the 14th century, consisting of Gray's Inn, Lincoln's Inn, the Inner Temple, and the Middle Temple, which have the exclusive right to confer the degree of barrister on law students." (From: the American Heritage Dictionary.)

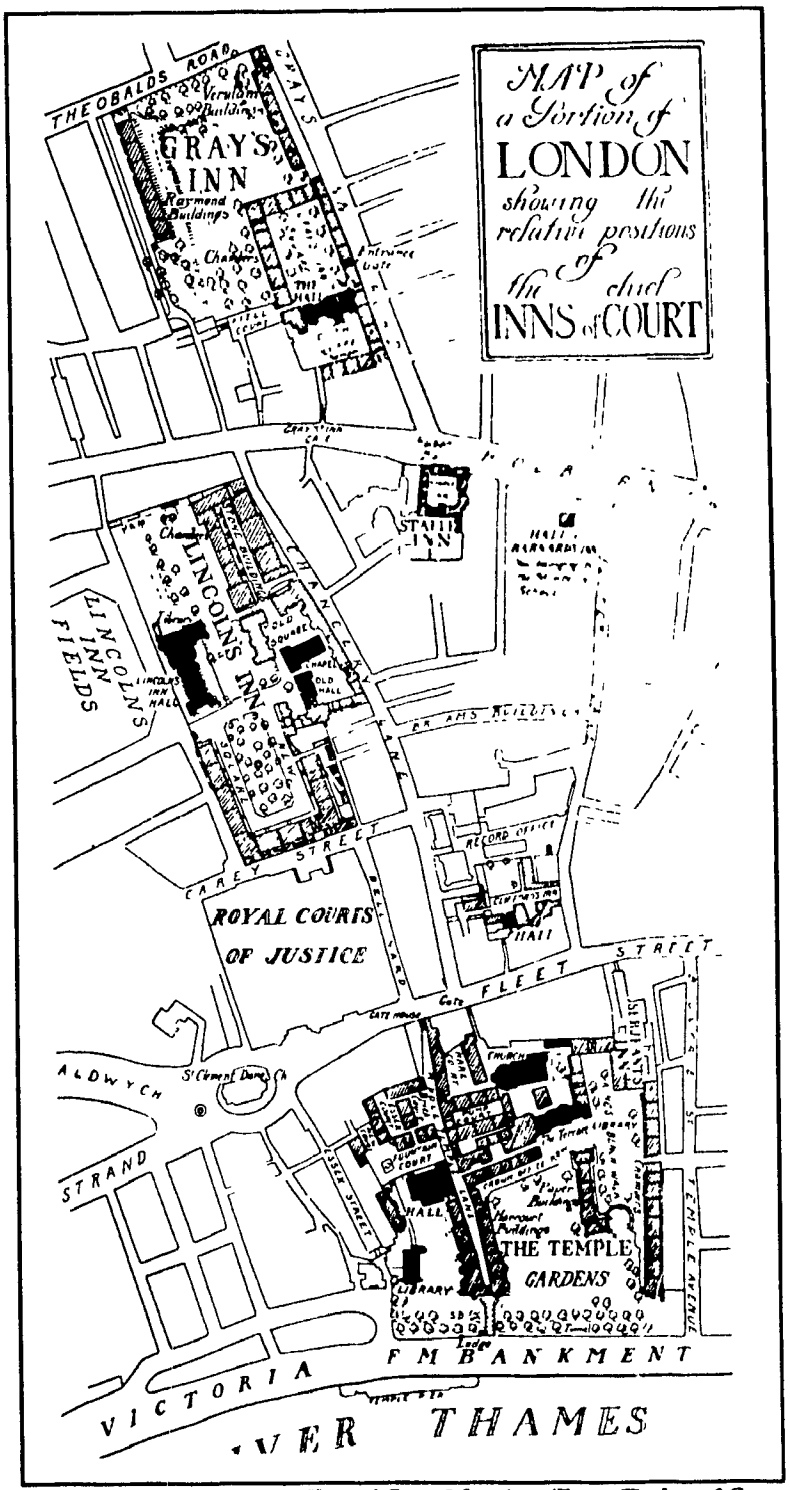

Figure 60· Map accompanying "Inns of Court," London. (From: *The Inns of Court*, 1909.)

Figure 61: A view to one of the "Inns of Court" and its arterial road. (From: *The Inns of Court*, 1909, painted by Gorden Home.)

Figure 62: ... a sub-arterial road (Ibid.)

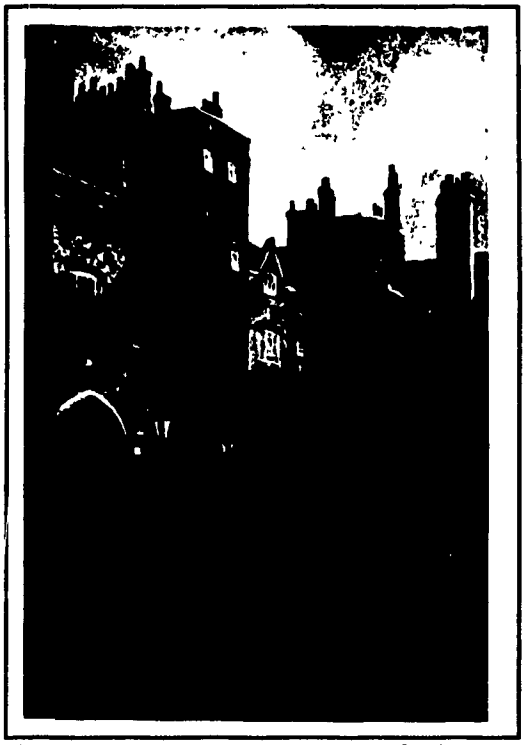

Figure 63: ... an entrance to a local road (Ibid.)

Figure 64. ... a local road, (Ibid.)

The Environmental Areas

Succeeding the former theory, the Environmental Area concept addressed by Sir Collin Buchanan (1963) conceptualized a more detailed and comprehensive planning measures in contemporary residential environments. It dealt primarily with the traffic dilemma and the ungoverned access of neighborhood streets.[59] Buchanan explained the central issue of his preccpt as follows:

> to contrive the efficient distribution, or accessibility, of large numbers of vehicles to large numbers of buildings, and to do it in such a way that a satisfactory standard of environment is achieved.[60]

In *Traffic in Towns*, Buchanan attempted to balance the issue of through traffic in residential areas with that of accessibility and environmental quality. He suggested that "accessibility and environmental quality are two contradicting elements in directing the issue of traffic control."[61] To achieve a balance, Buchanan introduced the phenomenon of urban rooms and urban corridors:

> There must be areas of good environment--urban rooms--where people can live, work, shop, look about and move around on foot in reasonable freedom from the hazards of motor traffic, and there must be a complementary network of roads--urban corridors--for effecting the primary distribution of traffic to the environmental areas.[62]

Ergo, similar to the traditional "Inns of Court" precincts, and in line with Neighborhood Unit's and Radburn's planning concepts (Fig. 65), the "urban room" is an area free from all through traffic, and within it environmental contemplations dominate over traffic considerations (Fig. 66).[63]

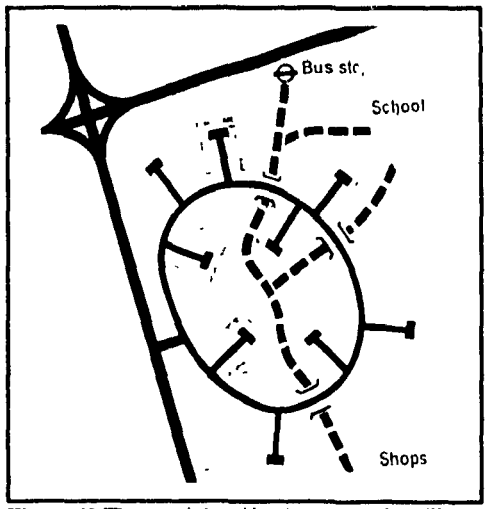

Figure 65: The principle of Radburn planning. (From: *Traffic in Towns*, 1963.)

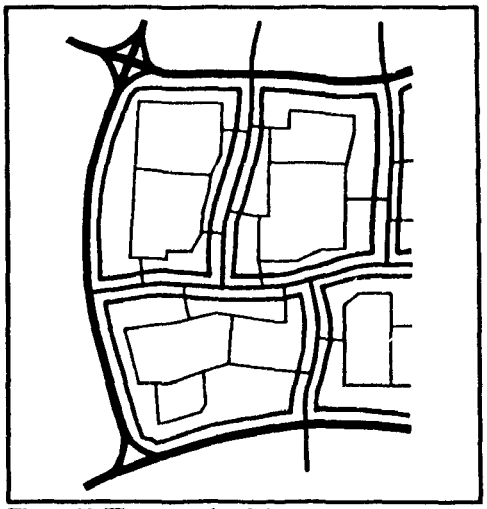

Figure 66: The principle of the environmental areas (From. *Traffic in Towns*, 1963)

In short, Buchanan's and Tripp's theories* were primarily physically oriented perceptions that pondered solely on physical remodelling of the urban tissue.[64] They envisaged accessibility and traffic regulation as the entity through which the quality of urban living can be improved.

On the one hand, treating a neighborhood by purely physical impressions in the absence of social bearings, even though enhancing the physical quality of an environment, will ignore and many times decrease the overall quality of urban habitation. Donald Appleyard, a scholar on issues of livability, identity and of people's perception of the urban environment, studied the applications of Buchanan's concept,** and concluded that the Environmental Area theory, due to its subjective concern to physical remodelling and neglect of social effects, failed to achieve its ethical planning measures in residential environments.[65] On the other hand, it should not be denied, however, that Buchanan's concept, in particular, as the outcome of many foregoing thoughts, was more focused and was relatively more modest than some contemporary automobile-age urban theories, such as Frank Lloyd Wright's Broadacre City*** and Le Corbusier's Radiant City.**** Furthermore, in planning terms and according to Buchannan's concept, the scale of Perry's Neighborhood Unit was to be subdivided into a number of smaller sub-units, while both pedestrians and vehicles should be integrated together rather than separated from each other.[66] Buchanan urged that such an integration between pedestrians and vehicular traffic is only possible if dwelling units and access ways are conceived together.[67] Accordingly, buildings, lots and streets can be moulded and combined in a variety of ways, that are more advantageous than the conventional separation between them.

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* For the sake of interest, the difference between the Environmental Area concept and the Precinct theory lies in terms of geometrical shape. Tripp's Precinct theory emphasized a radial pattern while Buchanan's Environmental Area concept is shaped according to the amount of traffic an area possesses; it might or might not turn out to comply with a geometrical pattern (see Plowden, S 1972, p. 32).

** Bransbury, as an example, which is a neighborhood characterized by three-storey Georgian houses, in London, England, when Buchanan's theory was applied as a traffic control scheme, resulted in an overall dissatisfaction for its residence (see Appleyard, D. 1981, pp. 157-159).

*** A machine-age utopia, or preferably "dystopia," which flourished around 1935 and shaped Frank Lloyd Wright's "automobiles and super-highways" decentralized city.

**** Charles-Edouard Le Corbusier's vision of a centralized machine-age city (1922-35), where he designed an elaborate coordinated as well as amalgamated system of accessibility and circulation, including airplane runways, super-highways, subways, access roads, even bicycle paths and pedestrian walks (see Fishman, R. 1989, p. 191).

Figure 67: Building, lots and streets can be moulded and combined in a varaity of ways! (From: Christopher Alexander, et al. 1977.)

Endnotes

1. Afnan, E. 1989, p 3
2. Bowman, S. 1962, p. 256, (Fig. 10).
3. Goodman, W. 1965, p. 4
4. Scott, M. 1971, p. 80
5. Ibid.
6. Howard, E 1902, p. 18
7. *The Times*, October 19, 1898 (quoted in Beevers, R. 1988, p. 1)
8. Beevers, R. 1988, p. 1
9. Ibid. p. 29
10. Ibid. p 98
11. In an article entitled "Spiritual Influence Towards Social Progress," published in 1910 (as quoted in Fishman, R. 1989, p. 33.)
12. Fishman, R. 1989, p. 43
13. Ibid.
14. Ibid. p. 31
15. Ibid. p. 51
16. Patterson, T. W. 1988, p. 2
17. Fishman, R. 1989, p. 63
18. Ibid. p. 67
19. See Morris, W in Asa Briggs ed. 1980, pp. 295, 301
20. Fishman, R. 1989, p 70
21. Beevers, R. 1988, p. 100
22. Fishman, R. 1989, p. 70
23. Beevers, R. 1988 p. 110
24. Ibid. p. 113
25. Ibid. p. 116
26. Ibid. p. 129
27. Ibid. p 134

28. Fishman, R. 1989, p. 62
29. Jacobs, J. 1961, p. 18
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31. Fishman, R. 1989, p. 270
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35. Rohe, W.M. and Gates, L.B. 1985, p. 19
36. Rohe, W.M. and Gates, L.B. 1985, p. 14
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40. Scott, M. 1971, p. 72
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45. Ibid.
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47. Keller, S. 1968, p. 132
48 Isaacs, R. 1948, p. 16
49. Ibid. p. 18
50. Ibid. p. 19
51. Ibid. p. 22
52. Ibid.
53. Ibid.
54. Herrick, C. 1948, p. 39
55. Rohe, W.M. and Gates L.B., 1985, p. 23
56. Kirchenmann, J. and Muschalek, C. 1977, p. 39
57. Appleyard, D. 1981, p. 152

58. Tripp H.A. 1942, p 76

59. Appleyard, D 1981, p 152

60. Buchanan, C. 1964, p. 40

61. Ibid p. 57

62. Ibid. p 59

63. Plowden, S 1972, p. 32

64. Appleyard, D 1981, p. 152

65. Appleyard, D 1981, p. 152

66. Buchanan, C. 1964, p. 67

67. Ibid.

CHAPTER III

NEIGHBORHOOD STREETS

Streets are physical entities which govern the accessibility and the "environmental quality" of neighborhoods. Traditionally, residential streets were the vicinities in which community life prospered. Today's neighborhood streets, however, are the channels in which vehicular traffic flows. This chapter contemplates the pattern, function and nature of contemporary residential streets with a particular intrest on the streets of North America. In addition, some further contemporaneous planning measures concerning street privatization and neighborhood pedestrianisation are reviewed and analyzed.

A DEFINITION

In accordance with Le Corbusier's account that "a city made for access [is] made for success,"* streets as fundamental design elements of accessibility have been regulating urban form since the dawn of urbanization.** "Streets are the life-line of the cities,"[1] "the settings for architecture ... and the backbone of the everyday surroundings for many people."[2] They are the fibbers of social life that interweave the physical settings of the built environment. By travelling along the streets of any neighborhood within any city, one can discern much of the residents' perception, vision and lifestyle;[3] in other words, streets, as Anne Moudon defined them, reflect the societies that created them.[4] According to Amos Rapoport, residential streets "are the more or less narrow spaces lined by buildings found in settlements and used for circulation and sometimes other activities."[5] With regard to the

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* Mentioning Le Corbusier, the author would like to draw the reader's attention to the fact that, according to several references, Le Corbusier's phenomenon of accessibility was far too idealistic to emanate "success." Although his school of thought was considered to be more destructive than constructive to urban ecology, his utopia (the Radiant City) was able to manifest full-scale models through which today's architects and planners can, with no excuse, conceive the diverse proportions and scales of urban form, including the amplitudes of access and its role in regulating residential livability.

** Irem Ayse Acaroglu, in his study of the evolution of urbanization in Anatolia (8000 B.C.-400 A.D.), stated "Urban form evolved parallel to social and technological changes. The first classless communities were a single unit. There were no streets and traffic was carried over the roofs of houses. ... Streets emerged when technology improved and towns became the center of hinterlands" (see Ekistics 195, Feb. 1972, p. 106)

activities that take place on residential streets, Rapoport related them to two sets of variables. One set concerns the sociability of the street users (its dwellers); the other entails the physical and the perceptual characteristics of the street itself.[6] Both sets depend on and influence each other: for example, if the dwellers of a residential street are socially- and neighborly-oriented, then appropriate physical remedies will act as supportive elements to further augment the livability of the vicinity; nevertheless, if the dwellers are characterized by anonymity, then proper physical exertions may animate face-to-face associations and neighborly affiliations.[7]

THE FORMATIVE JUSTIFICATION

As mentioned earlier, contemporary urban theories conceived urbanization in terms of some "ideal" physical models. In the 19th century, attempts to bestow greenery and openness on residential environments characterized the intellectual, reform-minded spirit of that era. Such an obsession for embodying greenery and openness into the built environment was the result of the congested urban milieu that characterized the streets of major cities of the time.[8] As a result, physical measures were set to give open space, greenery and light back to the congested urban fabric. At the outset, the egotistical Haussmann's wide, tree-lined boulevards, which cut through the residential quarters* (Fig. 68) and the maze-like street networks of medieval Paris, were an attempt to infuse "nature" on the urban milieu. Such revelations, as mentioned earlier, cultivated the spirit of elaborate boulevards and City Beautiful movement in North

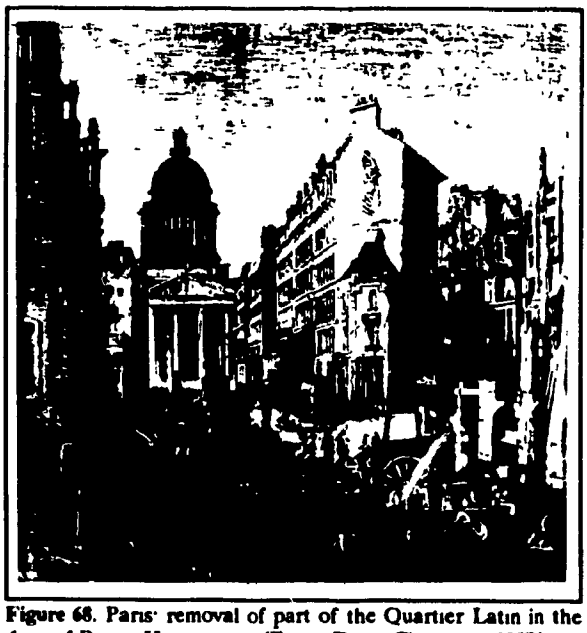

Figure 68. Paris: removal of part of the Quartier Latin in the days of Baron Haussmann. (From: Brian Chapman, 1957)

* Although this scheme was initially aimed at facilitating military control of the urban masses, Kirschenmann and Muschalek in *Residential Districts* (1980, p. 41), with regard to Haussmann's reconstruction work, stated the following: "The last fortification [walls] of the city [Paris] were blown up and the old wall roads were converted into Boulevards. ... Almost half (27,000) of all the houses in the city of Paris were torn down and around one third of the population (370,000) were housed in new apartment buildings, generally consisting of six storeys ... ."

America.[9] However, as a result of the inhuman imprint manifested by the former planning measures, the British garden city architect, Raymond Unwin, attempted to combine the former drive for wide tree-lined boulevards with an organic-type nature of the bygone medieval maze-like street networks.

On the one hand, architects and planners of the time, justified the decline of livability in residential areas to the lack of open spaces. On the other hand, the lack of open spaces was rationalized in terms of street patterns. In line with Unwin's organic precept in street patterns (Fig. 69), the grid-iron pattern that shaped most of North American traditional urban landscapes came to be "unaesthetic"[10] and somehow determining the regression of residential livability. As the former pattern has been presumed to prevent the development of a sound livable place,[11] curvilinear streets were favoured as a facsimile of the traditional medieval maze-like pattern. Such a perception was at the base of the ideology of succeeding neighborhood and community planning thoughts.[12] (Fig. 70.)

Figure 69. Unwin's organic precept is apparent in Letchworth's curvilinear street pattern. (From: *New Towns: The British Experience,* 1972.)

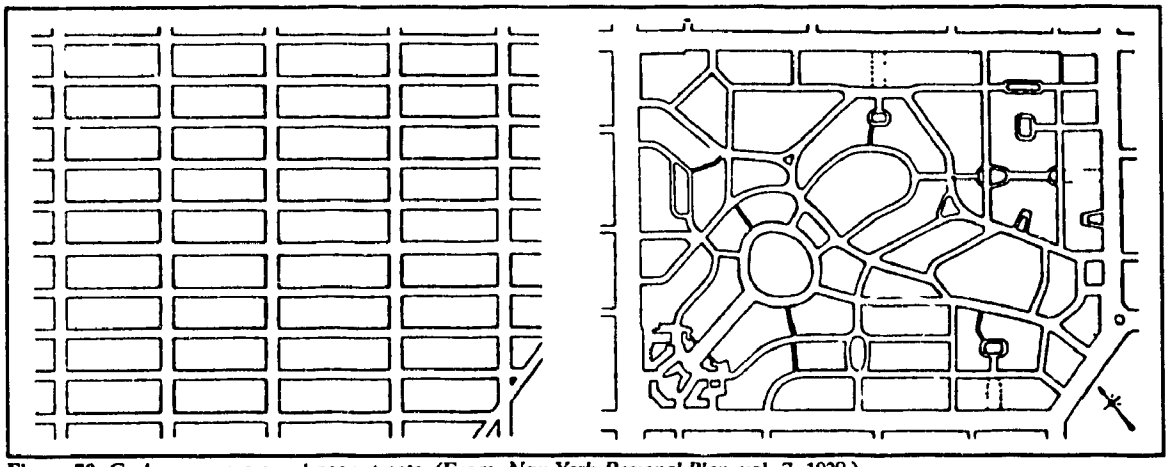

Figure 70 Gridiron versus curvilinear streets (From. *New York Regional Plan*, vol 7, 1929)

In line with Frederick Law Olmsted, Sr., the designer of Central Park, New York, and of Riverside, Illinois (Fig. 47, Ch. II), the American landscape architect Frederick Law Olmsted, Jr. exemplified a "medievalistic" residential street pattern in his plan for the Forest Hills Gardens in New York (Fig. 53, Ch. II). "Probably the most notable characteristics of Forest Hills Gardens," said Olmsted, Jr. in 1911, "will be the cozy, domestic character of [its] local streets, where the monotony of straight wind-swept thoroughfares [referring to the grid layout], which are the New York conception of streets, will give place to short, quiet, self-contained and garden-like neighborhoods."[13] Such a formative impression further induced a justification to relate the well-being of habitation and residential livability in terms of a street pattern. Both Clarence Perry's Neighborhood Unit and Clarence Stein's Super-Blocks are examples of such an impression (Figs. 71 & 72).

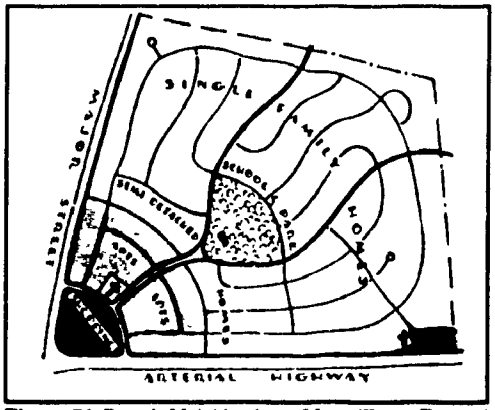

Figure 71: Perry's Neighborhood Unit. (From: Donald Appleyard, 1981)

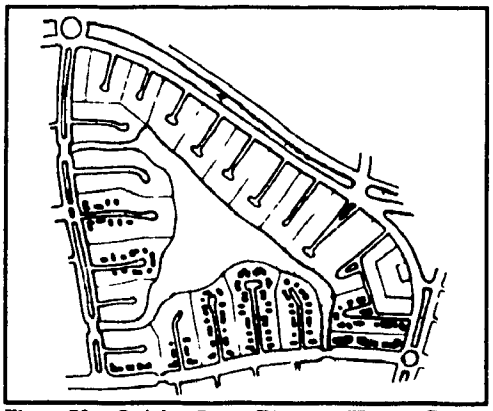

Figure 72 Stein's Super-Blocks (From: Danial Schaffer, 1982.)

Ergo, platting curvilinear streets portrayed, in a sense, a return to an organic nature--or more explicitly, as the author prefers to call it, "a phoney organic nature"--in the ideology of a growing planning practice. In fact, there is a profound difference between the irregular maze-like medieval streets and the curvilinear streets, which has been shaping the contemporary suburban landscape in most North American residential districts. The traditional medieval maze-like streets, unlike their contemporary facsimile, were organic in character and based on incremental growth. However, the geometrically-curved street layouts are reasoned-platting schemes, not organically grown ones, "which makes them as arbitrary as the grids themselves."[14] (Figs. 73 & 74.)

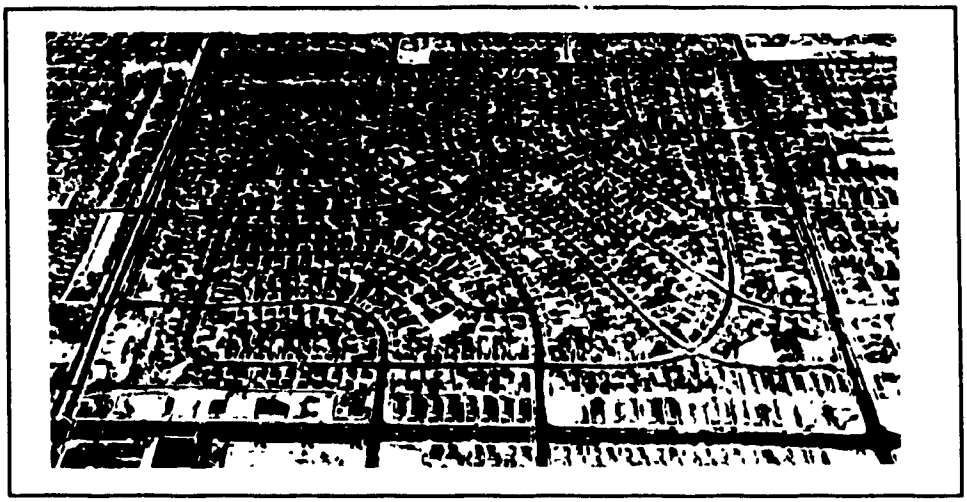

Figure 73: An example of curvilinear platting in Los Angeles. (From Donald Appleyard, 1982.)

Figure 74: An example of grid-iron platting in Long Beach. (From. Donald Appleyard, 1982.)

A FUNCTIONAL REALIZATION

In line with Jane Jacobs's "self-governed" neighborhood streets,[15] Mark Francis defines neighborhood streets, regardless of their pattern, as "that [which] have meaning for people, invite access for all ... [and] encourage use and participation."[16] In addition, Donald Appleyard portrayed livable streets as integrating the channel for vehicular movements, as well as the place for social actions, face-to-face interactions and playgrounds for children. Furthermore, Anders Duanny, the architect/planner of the recent residential development of Seaside, Florida (Fig. 75), refers to residential streets as public rooms. Each residential street, said Duanny, is "a semi-enclosed outdoor area that feels properly delineated and seems to be a place in its own right, not just a void between buildings."[17]

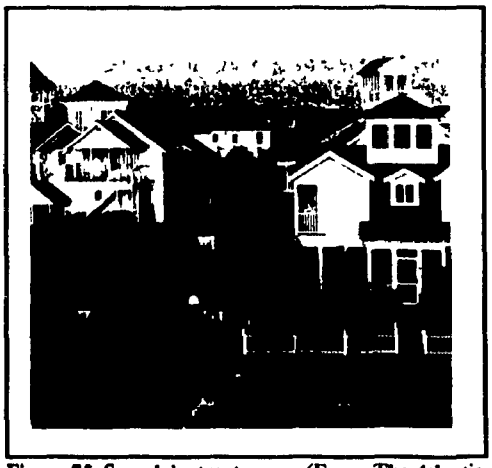

Figure 75: Seaside's street sense. (From: *The Atlantic*, March 1988)

Thus, in functional terms, neighborhood streets are public rooms that should foster multi-functionalism. However, there is little doubt that most contemporary residential streets in North America, regardless of their pattern, openness, wideness or "physical" grace, are anything but multi-functional. They represent solely channels for vehicular traffic, and inasmuch as acknowledging an important function for the contemporary "mobile society," they are devoid of pedestrian life--unsafe, bleak and antisocial (Fig. 76).

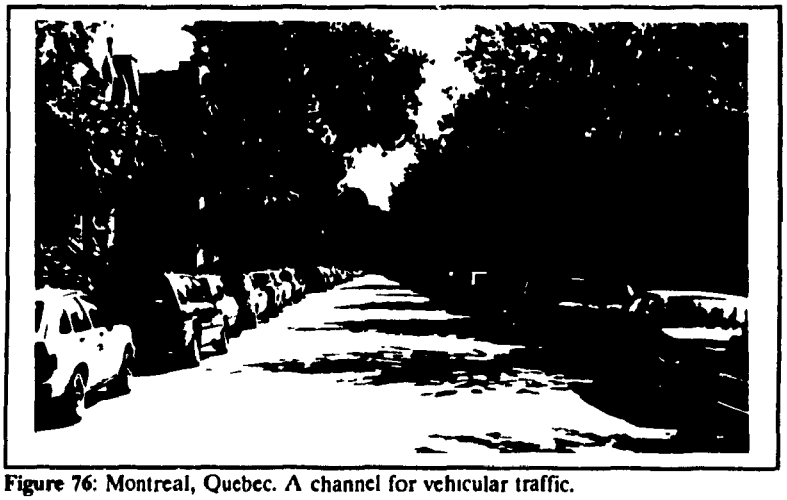

Figure 76: Montreal, Quebec. A channel for vehicular traffic.

The Genesis of the Automobile

When "the early immigrants brought memories of lively European streets [to] ... urban centers such as New York City and Boston,"[18] they conveyed on them a lively character. "While dirty, overcrowded and often dangerous, they were the center of public life, having been accessible to and used by all types of people."[19] (Fig. 77.)

Figure 77: An urban scene of New York city in the late 19th century (From: Julius Fabos, et al 1968)

By the advent of the industrial age, the centralization of the work-place in urban centers on the one hand (Fig. 78) and decentralization of the dwelling place in suburban rims on the other (Fig. 79), the automobile became an inseparable component in the lives of most contemporary bread-winner families. Ergo, "not only did the automobile," said Mark Francis, "provide the means for people to move away from heavily trafficked [and] ... dirty, overcrowded ... [urban] streets to the suburbs, but it took people away from direct involvement with the streets themselves."[20]

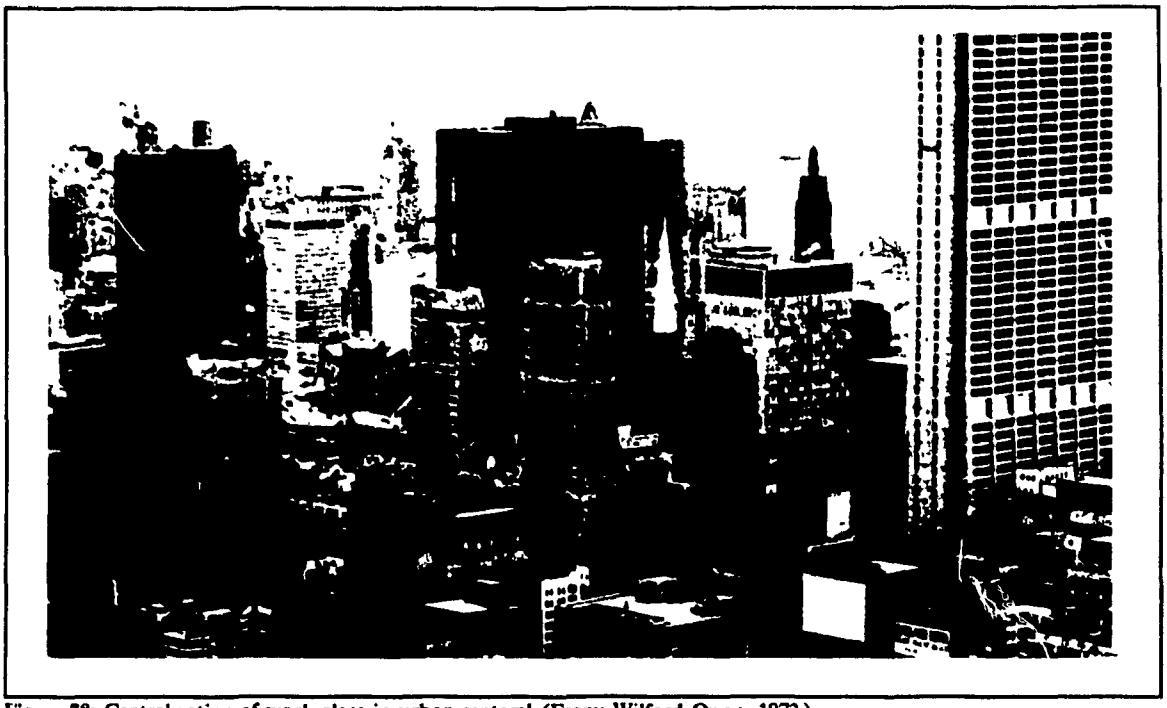

Figure 78. Centralization of work place in urban centers! (From: Wilferd Owen, 1972.)

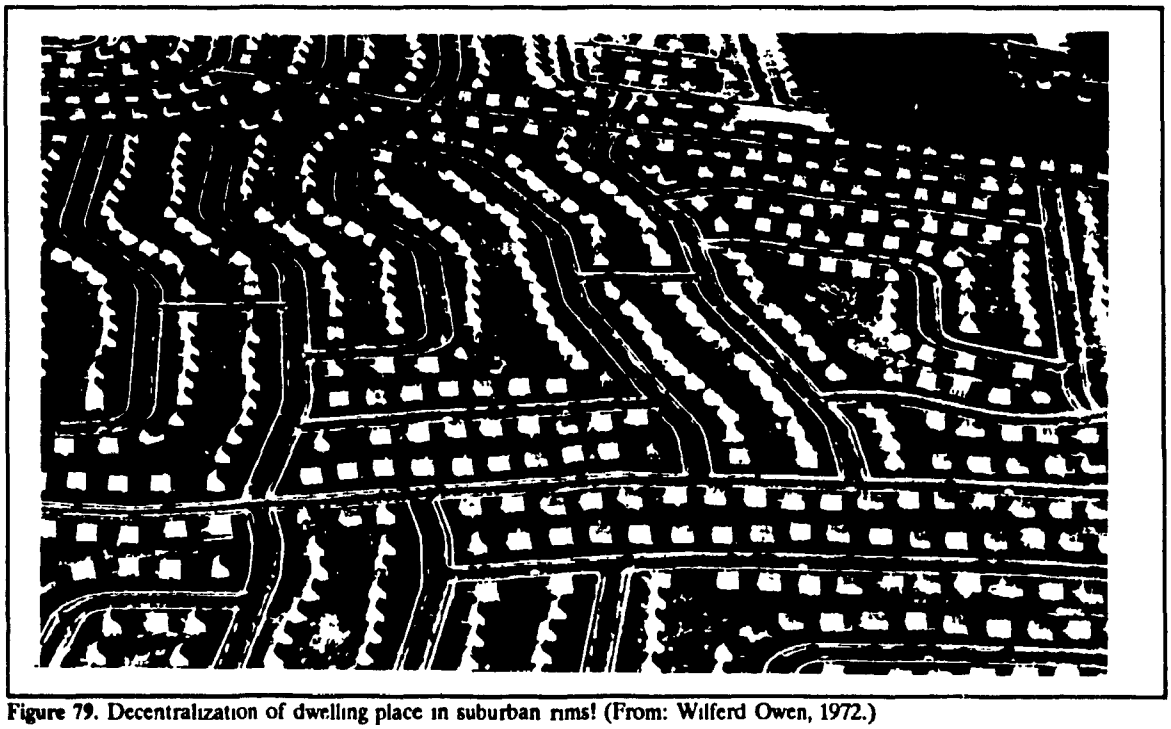

Figure 79. Decentralization of dwelling place in suburban rims! (From: Wilferd Owen, 1972.)

The Fall of the Front Porch

The regression of livability in neighborhood streets as the result of vehicular encroachment can be correlated to the decline of some physical components that nourished social life in traditional neighborhoods of North America. This is best illustrated with the decline of the front porch in the American street-scape. Porch life, as Pamela West described it, was a welcome diversion for street life:[21]

> [The porch was] an American symbol for friendliness and prosperity ... . The family rocked there, enjoying the cool evening, gazing down the road hoping for unexpected guests. When friends stopped by ... [they] enjoyed just passing the time in a friendly atmosphere [Fig. 80].[22]

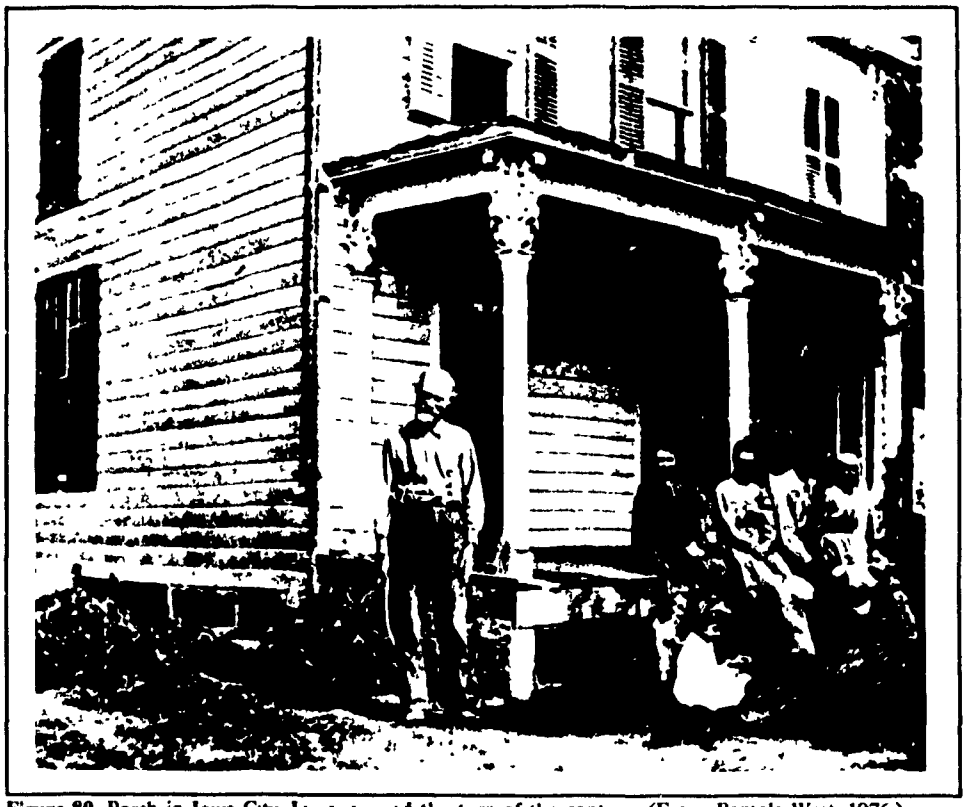

Figure 80 Porch in Iowa City, Iowa, around the turn of the century (From Pamela West, 1976)

However, with the breakthrough of the automobile, sitting on the front porch became no longer a pleasant occupation. The porch moved to the side or the back of the house, adults enjoyed peace and privacy (in their air-conditioned T.V. rooms), children played in the backyard to be safe from vehicular traffic and family activities gradually no longer involved the community.[23] Hence, with the demise of the porch, street life vanished, neighborliness declined and the contemporary anonymous life flourished.

THE NATURE OF RESIDENTIAL STREETS

The spirit of neighborliness found on the streets and in the neighborhoods of pre- automobile society was there because of a reliance on walking as the commuting mode to the work-place and for the fulfillment of other daily needs. This simple notion inevitably fostered a sense of human scale in the environment that the traditional society built (Fig. 81).

Figure 81 Guarada, Switzerland, street scene : "Life takes place on foot." (From· Jan Gehl, 1987.)

Once industrialization augmented, urban core refurbished in to a central business district, and residential areas that once were integrated in the urban core were dislocated and forced to relocate in suburbia. As towns expanded, suburbia unfolded and the distance between the work-place and the dwelling place lengthened, the need for efficient convey ance means became vital to facilitate accessibility and transportation. By the turn of the 20th century, technology came up with the private automobile. It did not take very long before the automobile became a prominent, inseparable aspect for most contemporary bread-winner families (Fig. 82). As mentioned previously, although the private automobile enhances accessibility and fulfills the needs of the contemporary mobile society, it makes it almost impossible, thanks to today's rampant subdivisions, "for many activities to take place on the streets as they did in the bygone age."[24]

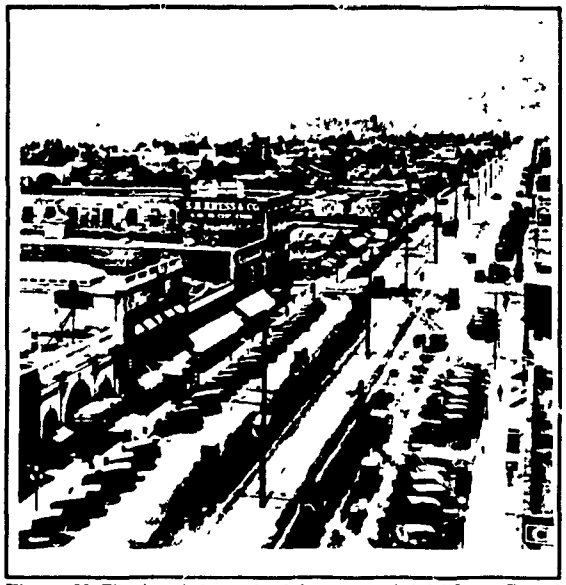

Figure 82. The breakthrough of the automobile! (From David Brodsly, 1981)

In line with Frank Lloyd Wright's aesthetics of individualism--perceiving contemporary urbanites as free individuals living in a free society and free to burn as much fuel as each desires--the automobile casts a new template for building communities. It fosters a dramatic contemporary urban scale and introduces an unprecedented freedom in designing environments where people need not be clustered into compact and walking distance areas.[25] Ergo, for the contemporary city to house its "free mobile citizens" it had to provide the means to support the performance of such a freedom. Thus, neighborhood streets, which functioned originally as play spaces for children, informal gathering places for adults and collective retreats for the wise, were widened and flattened to accommodate the automobile, (Fig. 83).

Figure 83: Owing to automobiles, an entire neighborhood was divided "The photo shows construction of the Harbor freeway in 1956, through a . residential district just south of Santa Barbara Boulevard, [L.A.]" (From David Brodsly, 1981.)

In this respect, residential streets served as channels for vehicular traffic, and pedestrians were relegated to narrow sidewalks. On the one hand, this prevailing planning practice not only favoured the unrestricted use of the automobile but virtually made traversing within a neighborhood more efficient (in terms of time as well as distance) and safer by car than simply by walking or even biking. On the other hand, the generosity of the contemporary dwellers to the automobile excluded that of all other activities that used to take place along their residential street. It became almost unappealing for adults

to socialize and children to play in the streets in the immediate vicinity of their homes. Their safety, especially those of children crossing the streets, was jeopardized.*

The domination of the automobile in the street is the fundamental shortcoming to the contemporary approach of neighborhood design and planning; "what is required is to organize residential areas so that all potential users can use the available space effectively, the users including the driver, the pedestrian and children at play."[26] In neighborhoods where streets represent the public space and are the most, if not the only, likely places that can be directly associated with the development of children's image and adults' interaction, if they are to be solely restricted to channels for vehicular traffic, then where can neighborliness flourish and community life prosper? Even when well-developed schemes of grand public parks and pedestrian as well as bicycle routes are available, children and adults enjoy more if they could spend their free time safely alongside an immediate vicinity, (Fig. 84).

Figure 84: Even when well-developed systems of parks and pedestrian routes are available, children, teenagers, and adults enjoy more spending their free time alongside their immediate street (From Jan Gehl, 1987)

* More than 80% of the accidents in which a child is killed occur in the immediate vicinity of the home, that is to say, on the street where he or she lives (see the Royal Dutch Touring Club, 1977, p 4)

The Private Streets of St. Louis

Oscar Newman, an architect/urban planner and founder of the Institute for Community Design Analysis, studied the private streets of St. Louis, Missouri, in *Community of Interest.* In his work, he depicts St. Louis as having developed a unique street life in some of its private residential streets in the urban core. The private streets of St. Louis are a series of access ways where the residents have "turfed" these in order to identify, control and self-police their immediate vicinity. These private streets have been deeded back by the city to its residents and are legally owned and maintained by the latter.

Historically, the concept of private residential streets was brought to St. Louis from Europe and was applied in housing estates for wealthy families.[27] At the outset, these communities were developed at the periphery of the city, but as the city expanded, the original owners moved to suburbia searching more secluded green space. As a result, their abandoned buildings were occupied by a middle-income populace.[28]

Even though the primary concern to create private streets, in the first place, was for exclusivity, the concept attracted more families as a means of enhancing residential security, identity and stability.[29] As a result, more families living on conventional city-owned streets demanded privatization for their neighborhood streets. This privatization of residential streets was well adapted to solving the problem of the contemporary and changing city. The private streets of St. Louis function as small independent sub-cities where residents have legal rights to control and protect their homes, their community and the pattern of land use policy. The residents of such streets claim that the physical closure of their streets and their legal control of them were the keys to providing a neighborly cohesive, secure and stable environment reminiscent of the traditional Mahallahs.

Basically, two characteristics dominate the residential streets of St. Louis: one, the physical character, which is simply to create a cul-de-sac situation, that is, to block off one end of the street to prevent through traffic; two, to relocate control and ownership of the streets to its residents.[30] The physical closure of these streets provided a symbolic demarkation point and separated it from the surrounding public streets. Some of these private streets were originally created with elaborate gates,

and at times they had watchmen around the clock at these entrances.* "Those gates are not so much barriers as they are signs," said one of the residents, "... we have need for ... symbols, signs and arches which say our street is different."[31]

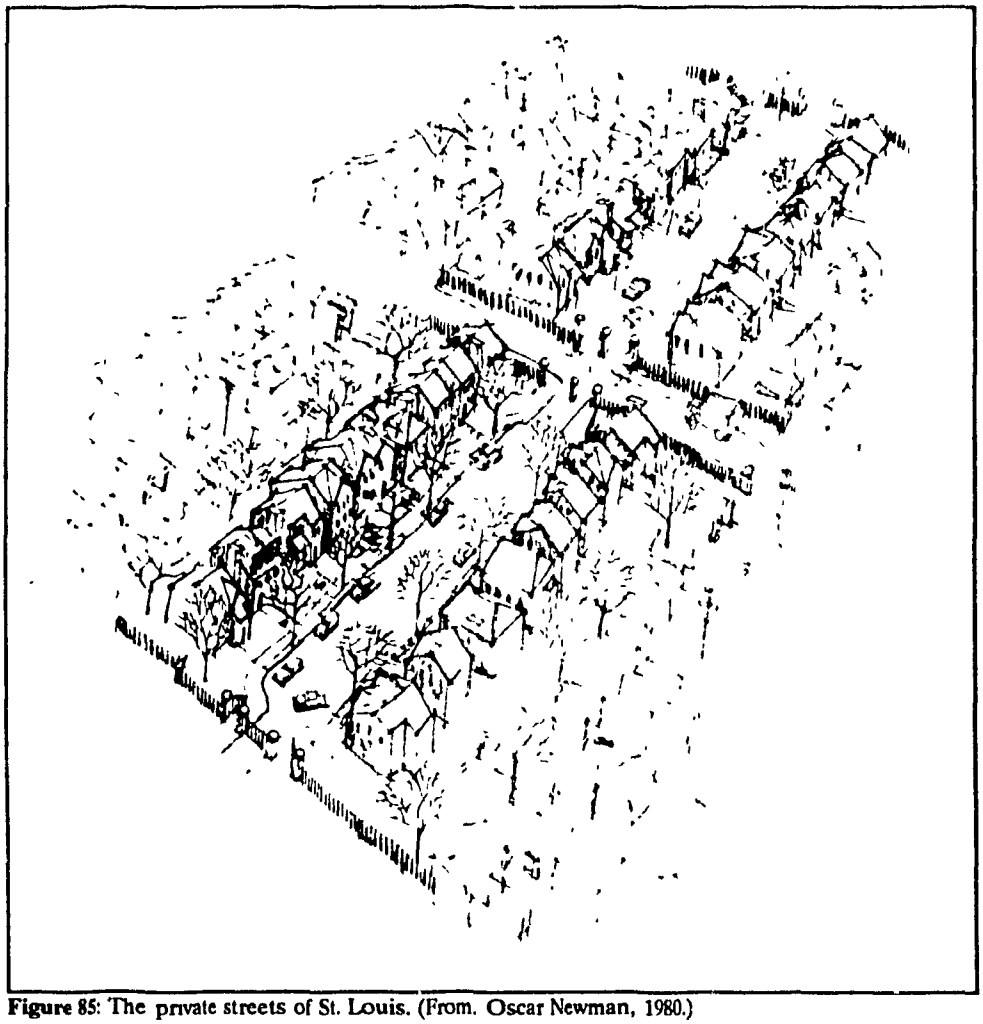

Figure 85: The private streets of St. Louis. (From. Oscar Newman, 1980.)

* How similar to traditional medieval residential quarters!

The Dutch Woonerf

Figure 86 Delf, Holland A Woonerf (From Donnald Applyard, 1981)

From the Garden City to the Neighborhood Unit to Environmental Areas, and following the progressive chain of urbanization and commmunity planning thoughts, the Dutch Woonerf represented a set of design regulations that amalgamates the demands of contemporary mobile dwellers and their automobile with the traditional bygone life of pedestrian-dominated residental quarters. It restores the visual and functional elements necessary to support a living environment which animates human scale, safety, and neighbourly association. Woonerf (or the residential precinct in English) is a design approach that originated in the Netherlands and represents the latest stage in the evolution of contemporary neighborhood planning ideology.* It is "an area within which the residential function quite clearly predominates over any provisions for traffic and in which this is emphasized through the design of public areas."[32]

---

* "After more than six years of experiments and studies in the Netherlands, a number of new traffic regulations came into effect in September 1976 These apply to specially designated areas described as 'woonerven' [plural form] in which an ideal as possible integration of all different types of traffic is sought" The Royal Dutch Touring Club conceptualized the Woonerf, as standard legislation for municipalities, as a new development in traffic engineering and urban planning In their trilingual booklet (Dutch, French and English), the concept of Woonerf has been clearly illustrated (For a general overview, see Ekistics 273, Nov /Dec 1978, pp 417-423) (The above quotation is from the Royal Dutch Touring Club, 1977, p 31)

Such public areas--namely, the residential streets--must offer a mixture of spaces that satisfies the diversified needs and cravings of the child, the family, the adults and the community. Woonerf is not a traffic-free area nor a pedestrian precinct but rather a multi-functional communal room that regulates all potential uses. Indeed, all types of vehicles are allowed within a Woonerf."[33] The Woonerf, similar to its ancestor, the medieval residential quarter, possesses some physical characteristics that make the role of pedestrians and the sense of human scale absolutely apparent and dominant over the contemporary vehicular dominated neighborhoods.[34] (Figs. 87 & 88.)

Figure 87 A residential street before conversion to a Woonerf (From Jan Gehl, 1987)

Figure 88 .. the residential street after conversion (From Jan Gehl, 1987)

In the vernacular of Donald Appleyard, the Woonerf is virtually a protected neighborhood, the streets of which perform important functions for those who live on them. "The design philosophy of the Woonerf is to create a kind of 'gestalt' message that the street belongs to the residents."[35] Appleyard's inquest into the qualities of a livable street "on which children are brought up, adults live and old people spend their ... [memorable] days"[36] has been acknowledged virtually by the concept of the Woonerf. A street as a safe sanctuary, as a livable, healthy environment, as a community, as a neighborly territory, as a place for play and learning, as a green and pleasant space and as a unique historical place[37]--all have been integrated in the Dutch Woonerf, which incorporated physical regulations and minimum design standards that embodied the concept of multi-functionalism in planning ideology.

In line with the convictions of the Woonerf, the multi-functional nature of design should be the tool in planners' perception, where, for example, a tree is a part of greenery but also an obstacle for diverting traffic (Fig. 89); a space in the middle of a residential street, which can be used for

parking and also to cut its length into shorter viewing segments, has an effect on reducing traffic speed (Fig. 90); a pillar in front of a dwelling door can prevent cars from parking, marks the entrance of the dwelling, and bicycles can be easily put up against it (Fig. 91); and curb elimination between the sidewalk and the street pavement shares the street space between vehicles and pedestrians, thus broadening the path walk and fostering the sense of a pedestrian vicinity (Fig. 92).[38]

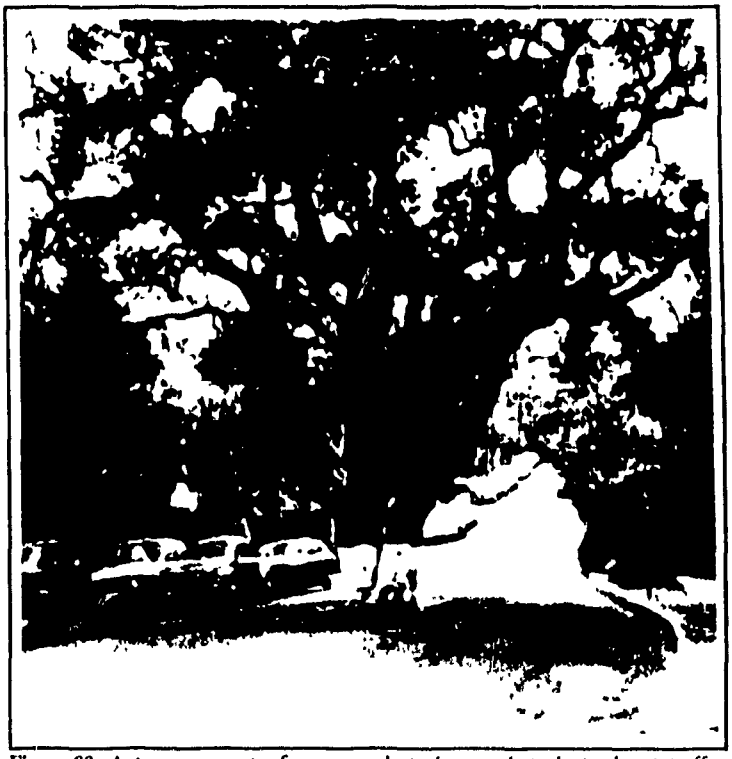

Figure 89 A tree is a part of greenery but also an obstacle to divert traffic (From: Donald Appleyard, 1981)

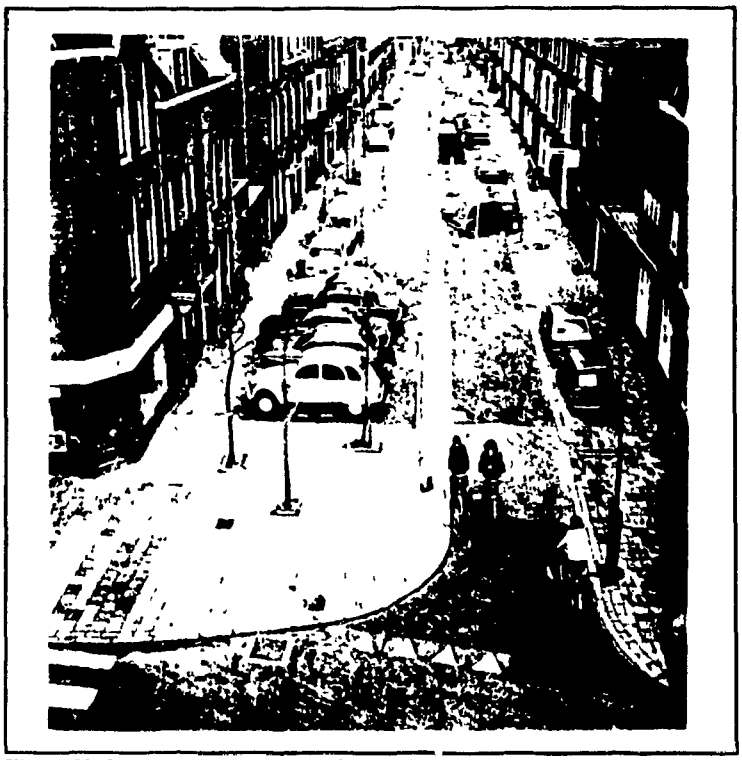

Figure 90 Parking in the middle of a residential street to slow traffic. (From *Woonerf*, 1977)

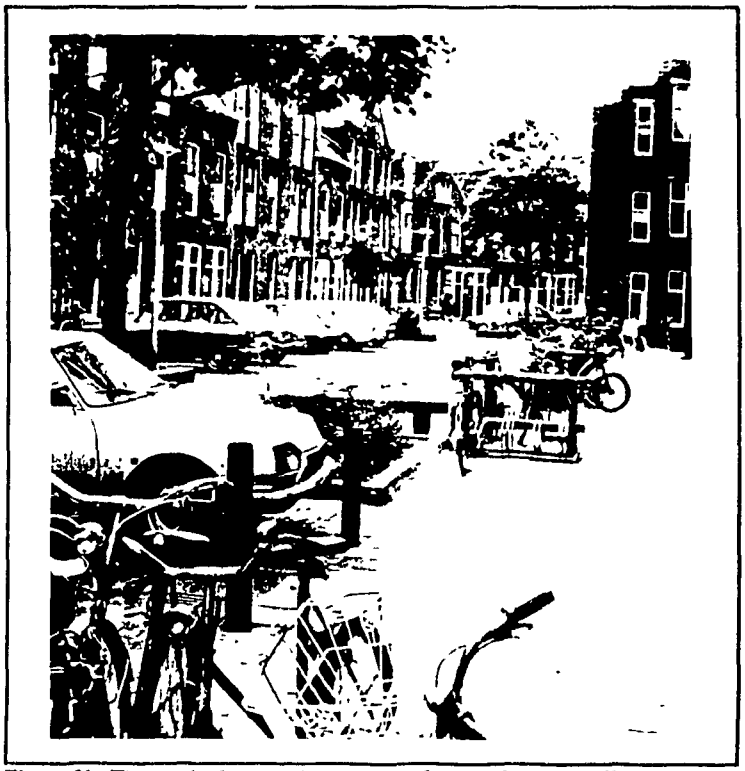

Figure 91 The multi-functional purpose of a single pillar. (From Donald Appleyard, 1981.)

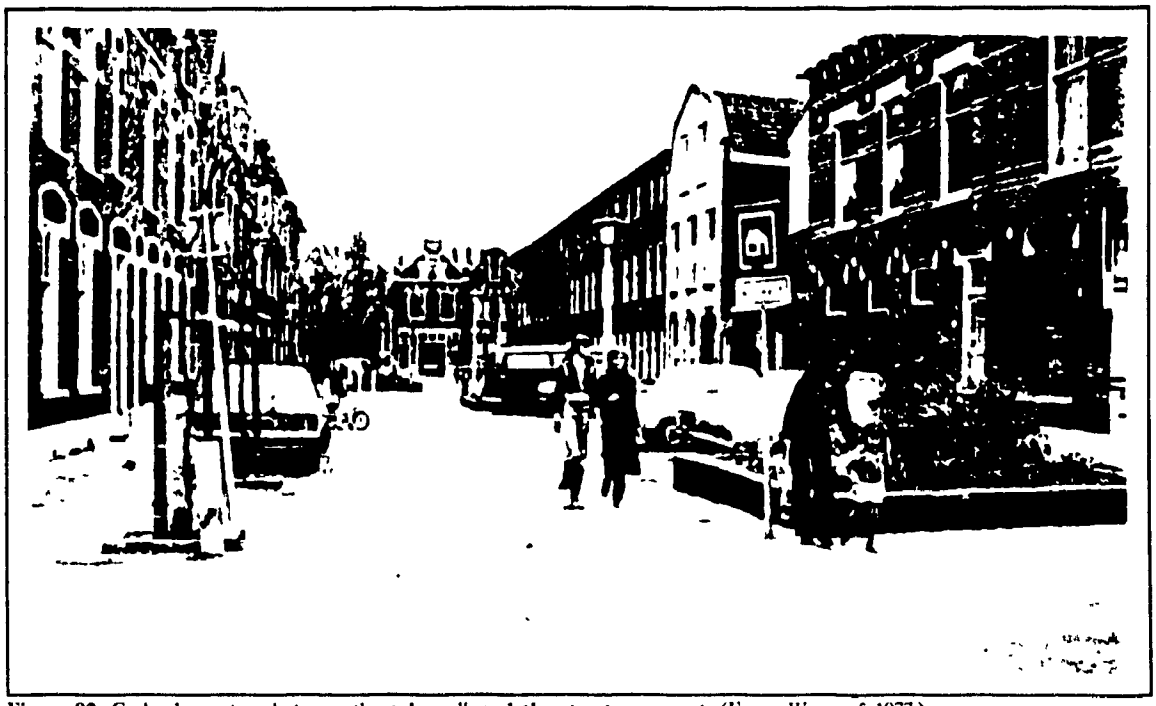

Figure 92 Curb elimination between the side walk and the street pavement (From *Woonerf*, 1977)

In summary, it is indisputable that open space is a scarce resource in the urban tissue. "Cities cannot continue to expand spatially and consume what little undeveloped land is left,"[39] that is to say, efforts must be made to compact suburban expansions and enhance urban living However, to do so, regaining nature and openness in urban residential environments is a prerequisite, not necessarily through elaborate tree-lined boulevards or "Beautiful" big city parks but through some functional, worthwhile, human-scale measures.

The principal flaw of urban living, especially for families with children, are the lack of a safe vicinity, the absence of a pleasant open space and the hazard caused by congested vehicular traffic in the streets of urban neighborhoods.[40] Thus, if traffic management can be combined with the availability of a pleasant open space near the vicinity of dwellings, then urban neighborhoods can retain livability as well as safety The Woonerf responded to the above condition and converted--similar to the private streets of St. Louis--local streets into livable urban vicinities available for use by its residents. However, unlike the private streets of St. Louis, the Woonerf is a more extensive plan that involves detailed physical remodelling, including elevated intersections, narrowing traffic lanes, humps and bumps, changing pavement material, and street furnishings, such as plant pots, benches, children's play grounds, pillars, lightings and signs (Fig. 93)

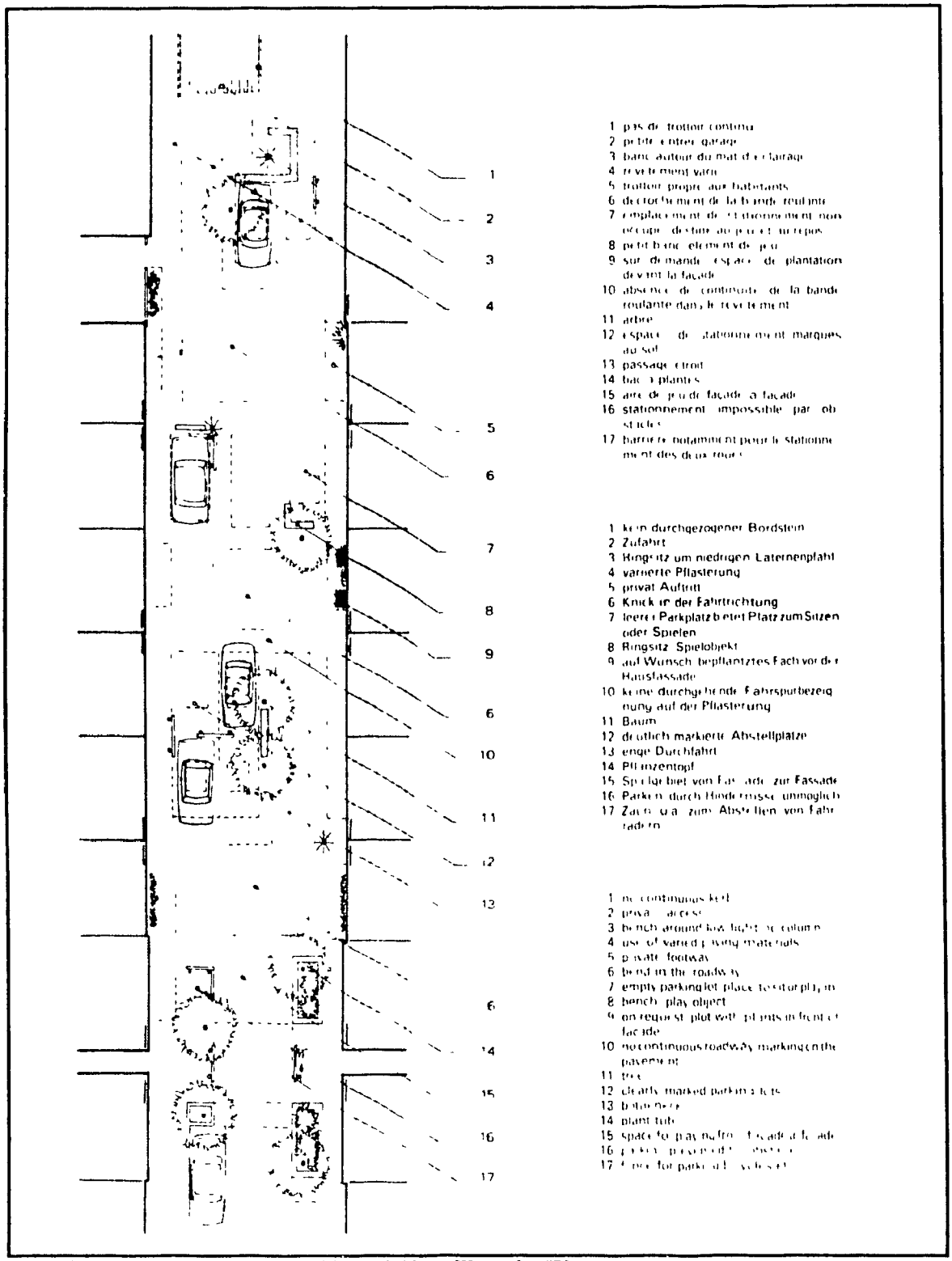

Figure 93: The planning measures of the Woonerf. (From: *Woonerf*, 1977.)

The Woonerf in North America

The concept of the Woonerf has been imported to North America as a land subdivision scheme to be used in residential developments. Burke-Gilman Place (1985), a Seattle subdivision made up primarily of townhouses is one example of using the Dutch concept (Fig. 94). This subdivision is characterized by a network of short streets laid out at right angles, with sharp turns, no curbs, frequent changes of pavement material, texture and color, granite bollards, pedestrian tone street lights and street benches.[41] According to its architects,* it is "an area where the pedestrian is central and the car is the intruder."[42]

Figure 94 A Woonerf in Seattle (From Philip Langdon, 1986)

However, for the automobile to be an intruder, especially in North America, it makes it questionable whether woonerven or private streets is a planning measure or a provocation for the contemporary mobile dwellers. Philip Langdon, an urban critic in *The Atlantic* and the author of *Urban Excellence*, commented that the Dutch Woonerf challenges Americans' basic notions of what a street is for.[43]

In a country where "an inordinate amount of urban land--from 30 to as much 60 percent--is allocated to streets, not including freeways or other designated high-speed roads,"[44] lined with garage doors and blank walls, housing a generation of dwellers born to use their toys (the automobile)--or according to Richard Untermann, their "Environmental Blinders"**--and to traverse between a series of "mini-environments"[45] for playing, socializing, shopping and living, it makes the author question how

---

* Mithun Bowman Emrich Group of Bellevue, Washington, and SWA Group of Sausalito, California

** People tend to travel from one point to another in the isolation of their cars, "putting on their environmental blinders because the street-scape often is too unsightly [and dull] to warrant any sort of inspection" (see Untermann, R. 1987, p. 124)

would it be possible to regulate such a "societal bias."[46] In such a realm, where residential streets nullified its human scale, revoked its social life and reverted its neighborly spirit, it is no wonder Langdon stated that "when people start gathering in the streets [of North America], it's not usually taken as a good sign."[47]

A SUMMARY AND A RESOLUTION

This chapter presented residential streets as a phenomenon in regulating the livability of contemporary neighborhoods. It disclosed that the spirit and sense of neighborliness in residential environments are far more associated with street functions rather than their grid or curvilinear pattern. Furthermore, this chapter revealed some contemporary planning regulations, such as street privatization and neighborhood "Woonerfization." Though such planning measures ameliorated safer environments for children to play, adults to enjoy and cars to slow down, nevertheless, the enrichment in social life, community spirit and neighborliness through such remedies is controversial. Brenda Eubank-Ahrens, who studied and analyzed neighborhood's ecology and the effects of Woonerven on its users, concluded:

> If interaction and verbal communication are extremely important in [residential] streets, their occurrence and intensity may not be directly influenced by design. One can argue that the willingness of adults to interact beyond spontaneous contacts depends too much on common interests for street design and furnishings to make a difference.[48]

On the one hand, one can conclude that the decline of neighborliness and livability in most contemporary residential neighborhoods is the result of the "uni-functional" objective of their streets as channels for vehicular traffic. On the other hand, one should bear in mind that, although architects and planners for their part can abet to define neighborhoods by some physical measures, they are nevertheless incompetent at bringing about neighborliness and social life.

Endnotes

1. Schoenauer, N. 1963, p 38
2. Buchanan, C. 1964, p. 73
3. Moudon, A.V. and Unterman, R.K. 1987, p 13
4. Ibid.
5. Rapoport, A. 1987, p. 81
6. Ibid.
7. Ibid. p. 82
8. Francis, M. 1987, p. 23
9. Wolfe, C.R. 1987, p. 113
10. Vance, J.E. 1977, p. 45
11. Groth, P. 1981, p. 69
12. Wolf, C.R. 1987, p. 113
13. Robinson, C.M 1916, p. 171
14. Moudon, A.V. and Untermann, R.K. 1987, p. 134
15. Jacobs, J. 1961, p. 119
16. Francis, M. 1987, p. 23
17. Langdon, P. 1988, p. 43
18. Francis, M 1987, p. 23
19. Ibid.
20. Francis, M. 1987, p. 23
21. Ibid. p. 44
22. Ibid. p. 44
23. Ibid.
24. Royal Dutch Touring Club, 1977, p. 4
25. Fishman, R. 1989, p. 93
26. Royal Dutch Touring Club, 1977, pp. 5-6
27. Newman, O 1980, p. 125
28. Ibid p. 126
29 Ibid

30. Ibid.

31. Ibid. p. 132

32. Royal Dutch Touring Club, 1977, p. 8

33 Ibid p. 8

34. Ibid. pp. 8-9

35. Appleyard, D. 1978, pp 414-415

36. Ibid. p. 412

37. Appleyard, D. 1981, pp. 243-245

38. Ibid. p. 306

39. Eubank-Ahrens, B. 1987, p. 63

40. Ibid.

41. Langdon, P. 1986, p. 31

42. Ibid.

43. Ibid.

44. Mouden, A.V. 1987, p. 17

45. Untermann, R.K. 1987, p. 123

46. Moudon, A.V. 1987, p. 16

47. Langdon, P. 1986, p. 31

48. Eubank-Ahrens, B. 1987, p. 78

CHAPTER IV

PHYSICAL SIZE AND SOCIAL DIMENSION

> The neighborhood-in-the-city must be of a size and character that will not dwarf its inhabitance in to anonymity, but will provide a stage of sufficiently intimate scale so that the citizen can master it and play his [or her] role with satisfaction.[1]

In the former chapter, neighborhood streets as entities regulating the accessibility and nourishing livability of residential environments have been briefly presented. In this chapter, the author reviews a commonplace planning concern--the enigma of urban size and population--and assimilates it within the scale of urban neighborhoods.

A TRADITIONAL RECORD

The search for an ideal city size and optimum population was commonplace in early urban utopias; indeed, today's planning theorists continue to puzzle over this. It was in Plato's Republic, as one of the most famous and influential of early utopias, that a definitive population of 5,040 people was proposed for a town where neighborliness and good life can be maintained.[2] This explicit population was based on a factorial digit* that could be divided into various equal groups and that symbolized the traditional urban scale of that period. Likewise, however unexact, Aristotle in his *Politics*, had stated that "ten people would not make a city, and with a hundred thousand it is a city no longer."[3] Aristotle's perception envisaged the good life in terms of a self-sufficient political community where residents can live and work together in harmony and communal fellowship.

In Aristotle's time, the total population of Athens, as cited by Kenin Lynch, may have been about 250,000 people including both free and slave, of whom perhaps 40,000 were free citizens.[4] Subsequently, as technology improved, as urban population increased and as cities expanded, the optimum theoretical digit for urban living increased from Plato's 5,040 persons to somewhere in the range of 500,000 persons, and even more.[5]

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* Plato's population of 5,040 people is a factorial 7, which is 1x2x3x4x5x6x7 (see Lynch, K 1987, p 239)

FROM AN ORGANIC QUALITY TO A CHAOTIC QUANTITY

As of the 19th century, the phenomenon of urban size and population was conceived as an integral progressive image, namely, the organic model. The organic model acknowledged the irrelevancy of a single size optimum, suggesting that a city similar to an organ should be made up of a series of cells or units "whose sizes are distributed in some optimum way."[6] Each cell or unit, according to the organic model, is confined symbolically by a mesh of relative webs and grains interweaving cultural as well as spatial considerations (not to mention political or economical ones) of Man's collective habitation.

Several architects, planners and social reformers, for their part, endorsed the organic model as the median for planning neighborhoods and building communities. They envisaged the built habitational environment as a multiple of cells, delineating the various socio-physical entities that constitute the phenomenon of communal habitation. Metaphorically, each cell defines and maintains a number of dwelling units that together make up the torsos of various homogeneous cells, namely residential clusters, and where the latter collectively structure the trunk of a unified heterogeneous community.

However, in contrast to an organic structure, which is a relative qualitative schema, prevailing urbanization conceptualized and transfigured the former model to some quantitative planning measures. The following review pulls together some contemporary planning theories that perceived the issue of size and population as an organic, however quantitative model.

The Garden City Neighborhood

The Garden City's quantitative organic model proposed a unit population of 32,000 people divided into smaller wards or sub-units, each with 5,000 residents or about 1,000 households.[7] The physical orb that houses the overall population assimilates 1,000 acres in the middle of a 5,000-acre tract reserved for farms and forests acting as a belt to prevent further expansion and sprawl (Fig. 95).

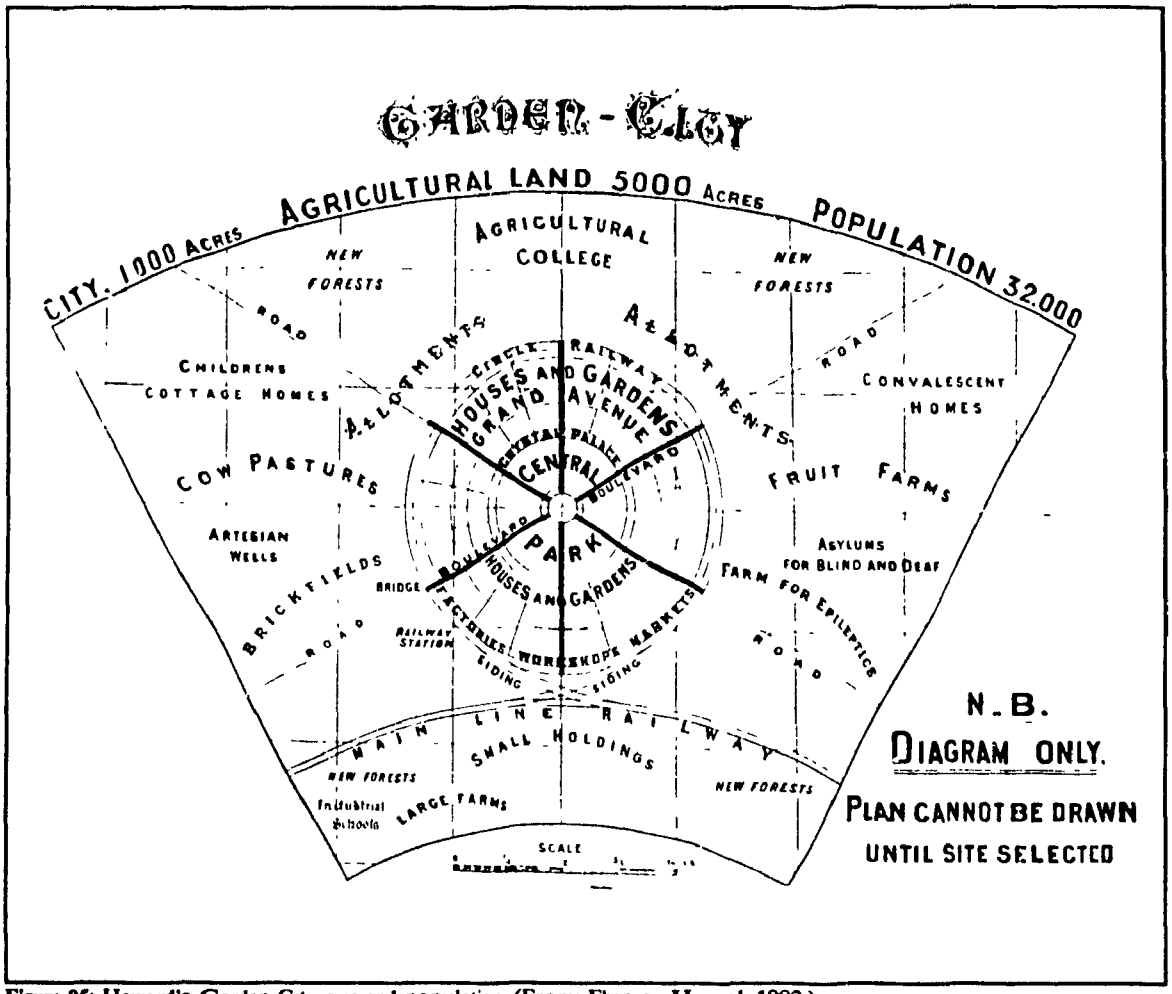

Figure 95: Howard's Garden City size and population. (From: Ebenzer Howard, 1902.)

Ebenezer Howard's Garden City size and population, which was based on spatial standards relating to dwellers' health and hygiene, was expressed in the book *Hygeia: A City of Health*, published some 20 years prior to Howard's concept.[8] Written by Dr. Benjamin Richardson, a physician, it "prescribed a population density of twenty-five people per acre, a series of wide, tree-shaded avenues, and homes and public gardens surrounded by greenery."[9] Howard incorporated this hygienic density figure* in his own Garden City plan.[10] "One of the first essential needs of society and of the individual," said Howard, "is that every man, every women, every child should have ample space in which to live, to move and to develop."[11](Fig. 96.)

* Unwin and Parker reduced this density to 12 dwelling units per acre since Howard's original 125 persons per acre (bearing in mind that the average size of what Howard proposed for his Garden City family, and which was derived from Victorian working-class London, was five to six persons) living in building plots averaging from 20 to 16 feet in frontage and 130 to 125 feet in depth, left no room for access roads and service areas (see Beevers, R. 1988, pp. 108-109).

Figure 96: ".. every man, every woman, every child should have ample space in which to live, to move and to develop " Houses in Letchworth drawn by T Friedenson (From· Charles Purdom, 1913.)

Qualitatively, a garden city as an organic unit should not grow by expansion or augmentation but rather through duplication into sister units (similar to the traditional residential quarters), each of which clusters beyond the periphery of the other. Howard envisaged the duplicated units would organize themselves eventually into clusters where the whole forms one large "Social City" that would become the basis for yet a higher echelon of a progressive organic formation.[12] Each Social City demonstrates the concept of a defined cellular organic growth (Fig. 97). In this fashion, the Garden City--as it merged the country to the town--coupled the qualities of an organic model with an abstract hygienic, quantitative size and population.

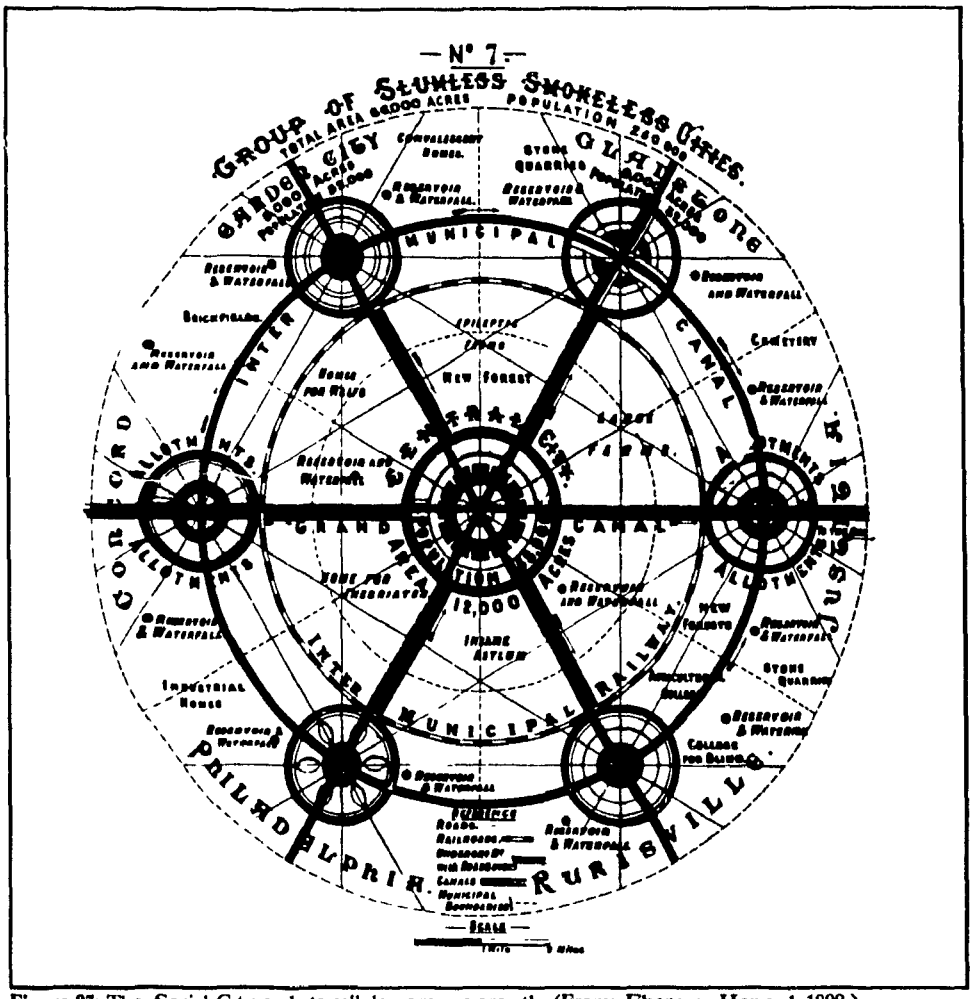

Figure 97: The Social City and its cellular organic growth. (From: Ebenezer Howard, 1898.)

The School Neighborhood

Likewise, the Neighborhood Unit concept considered the organic ideology in terms of an abstract quantitative model. However, unlike the former "hygienic" prototype, the Neighborhood Unit's size and population was idealized on residential areas that would sustain a typical elementary school. Clarence Perry was influenced by a report titled "Public Education and School Building Facilities," which was submitted to the Regional Plan of New York. The report, as summarized by James Dahir in his bibliography for the Neighborhood Unit plan, stated that gradeschool children should not have to walk more than one-half mile to school and advised that a school be provided for every 1,000 or 1,200 children. "This would call for an overall population of between 5,000 and 6,000 and, presuming

about ten families to the acre, an area of about 160 acres A school central in such a neighborhood would then be only one-half mile from the farthest house"[13] (Fig 98)

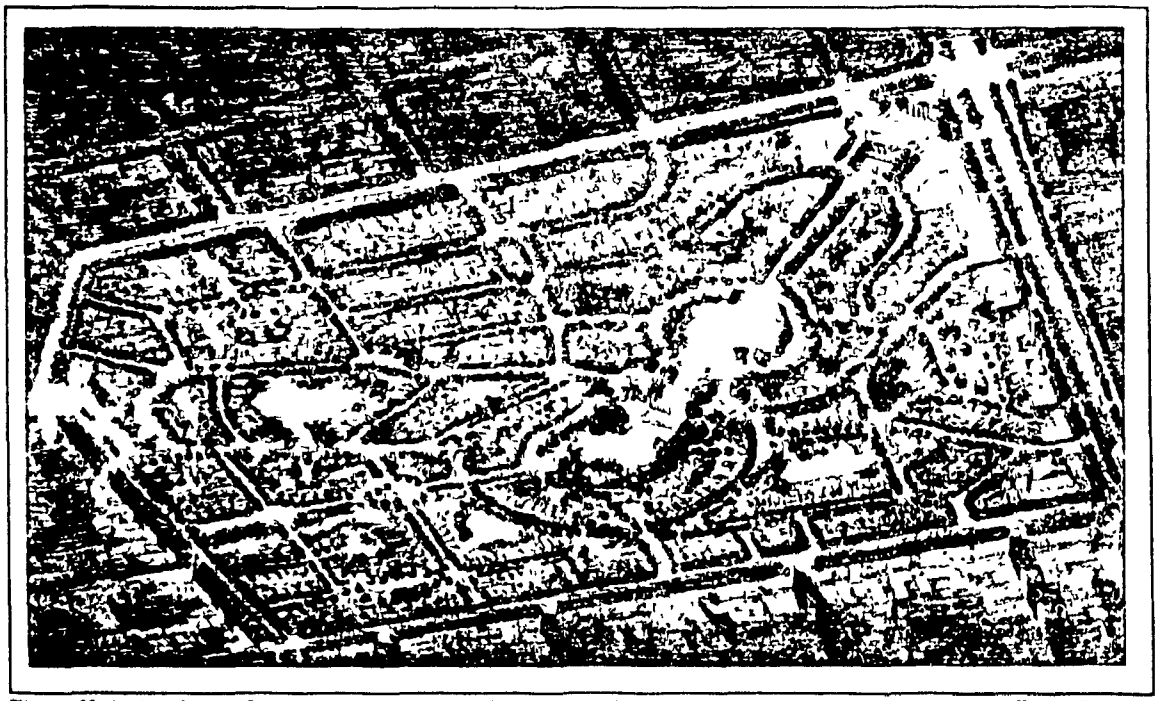

Figure 98 A plan for a 160-acre tract, with dwelling for 6,000 people and an elementary school in the middle (From Clarence Perry, 1929)

Henceforth, the elementary school became the urban measure for optimum and ideal population size. Accordingly, neighborhoods throughout North America--not to mention Europe--emphasized the school as being the determining factor in a neighborhood's overall population, a neighborhood where children go to school and that could serve its inhabitants as a community center. The function of the schools as a social center, according to an article published in *Architectural Record*, is explained in the following extract:

> School buildings [should] be designed for and must serve as neighborhood social and welfare centers. They can fill a definite neighborhood need during the evenings and summer months when ordinarily they are locked up.[14]

Ergo, the "school" in the Neighborhood Unit, similar to "hygiene" in the Garden City, sought to manifest a source of pride as well as a magnetic and unifying factor in determining neighborhoods size and population.

The Super-Block Neighborhood

Clarence Stein equated the city to a factory that should be changed or rebuilt if new dimensions are to be transformed and incorporated. He considered the "neighborhood" and the "region" as fundamental components to such transformations. In an article discussing the past and the future of city growth, Stein revealed that in the past "the basis of design and operation was the lot and the city;"[15] however, in contemporary planning, the basis must be justified to the "neighborhood and the region."[16] The size of such a neighborhood is rendered in the following quotation:

> New communities [said Clarence Stein] should be small enough to permit neighborliness and participation of all members in common concerns, but large enough to allow a rich and varied community life.[17]

Stein, in collaboration with Henry Wright, designed a planned community named Radburn, which proceeded an earlier residential community called Sunnyside Gardens, a smaller development by the same architects (Fig. 99). Radburn (Fig. 100), in the State of New Jersey (1929), which was referred to in an earlier chapter, was conceived to be a garden city on Ebenezer Howard's model: "a particularly built, planned settlement [that] represents the influence of English Garden City theories."[18] Its objective was to promote a pleasant, safe, healthy and neighborly oriented environment in a well-developed physical setting. Radburn framed the concepts of both the Garden City and the Neighborhood Unit within a single structure (Fig. 101). Scholars, urban critics and architects, including the British architect Raymond Unwin and the social reformer Ebenezer Howard,* were all in a position to promote its plan.

Figure 99 A typical block in Sunnyside Gardens with a common interior courtyard put to many uses (From: Daniel Schaffer, 1982)

* Even though Howard was in England, he had followed with close interest the planning project of Radburn In a letter to the chair of the U.S City Housing Corporation, he wrote, "I often felt I should like to come to America to aid in ... [the Radburn] result " (Quoted in Beevers, R 1988, p 179)

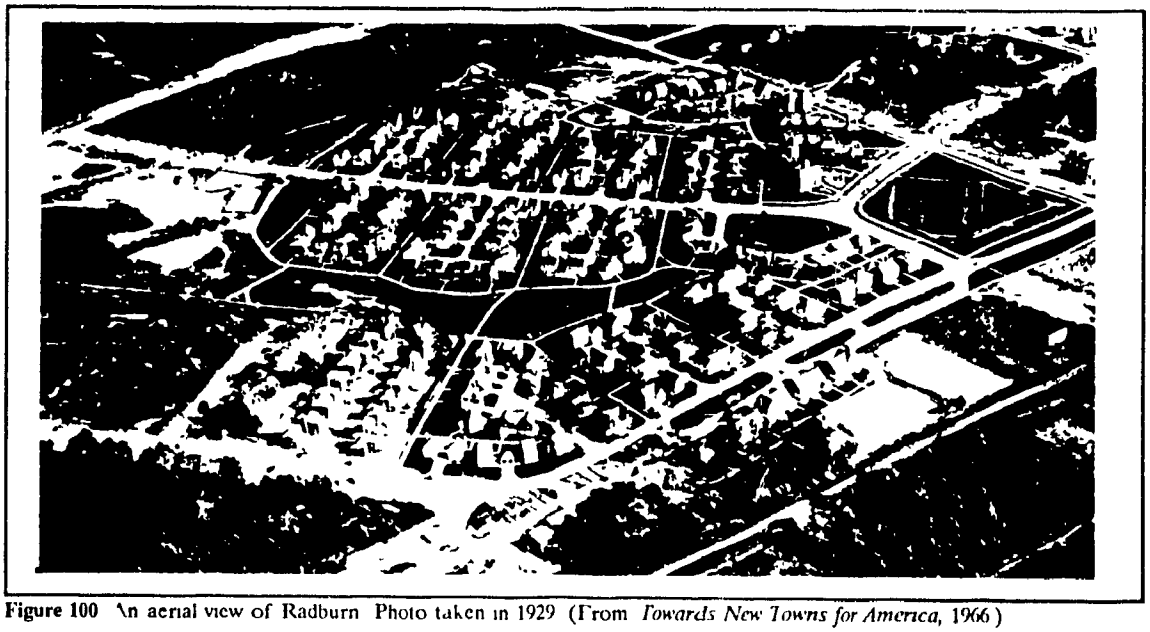

Figure 100 An aerial view of Radburn Photo taken in 1929 (From *Towards New Towns for America*, 1966)

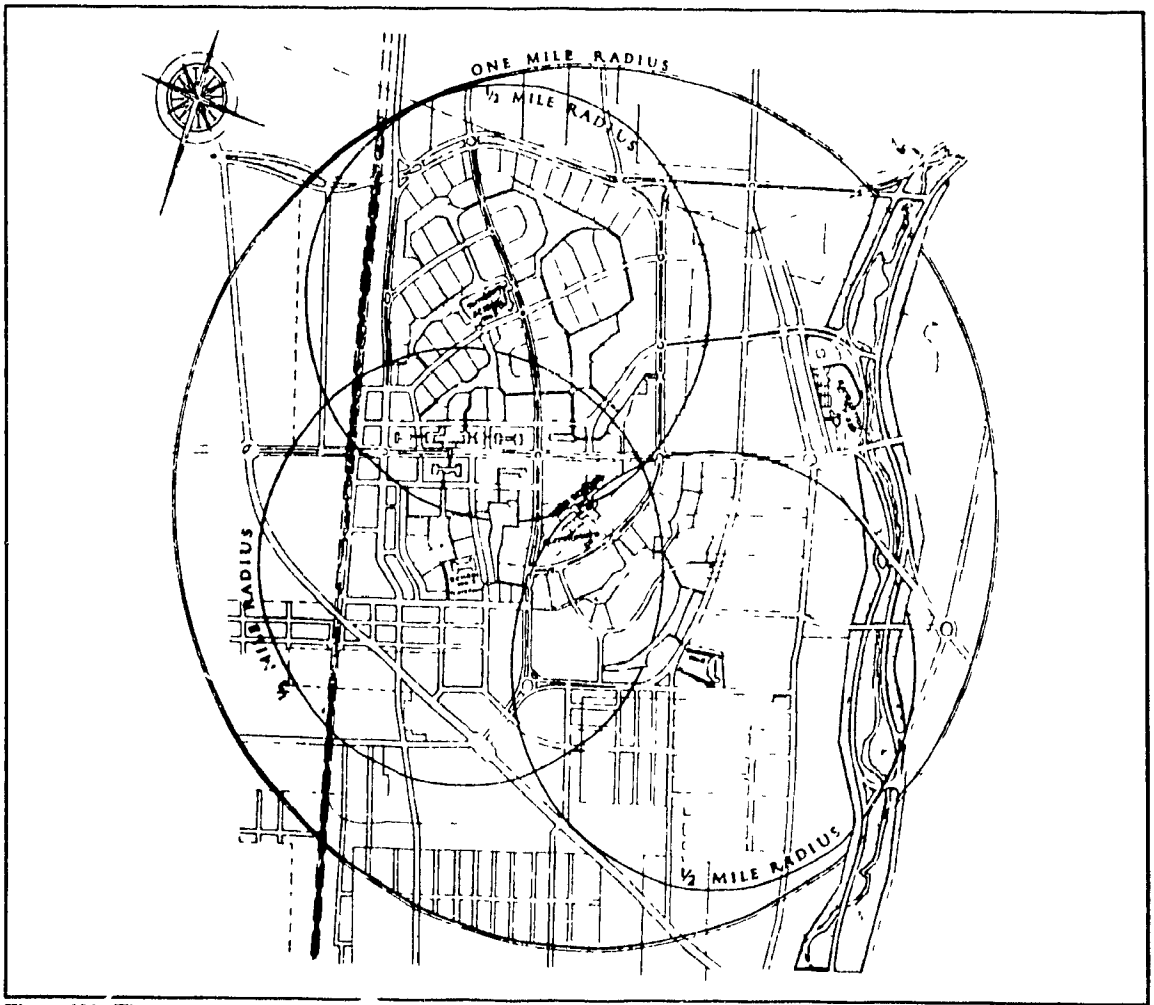

Figure 101. The general concept of Radburn which supported the organic ideologies of both the Garden City and the Neighborhood Unit (From *Towards New Towns for America*, 1966)

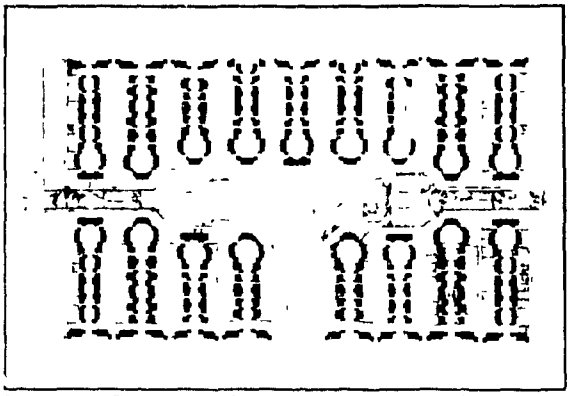

Figure 102 The Birth of Radburn's Super-Blocks See footnote ** bellow (From Daniel Schafer 1982)

Radburn was originally planned for a residential community of between 25,000 and 30,000 people divided into neighborhoods ranging in size from 5,000 and 10,000 residents* Similar to the Neighborhood Unit concept, the size of Radburn's neighborhoods was determined on the basis of a school within walking distance An average-sized school determines the number of pupils, hence, the average number of families and consequently the neighborhood's population Furthermore, each neighborhood was to be basically divided into internal sub-units, namely, Super-Blocks**, within which numbers of clusters were served by cul-de-sacs that would complete the pattern of its spatial hierarchy (Fig 103).

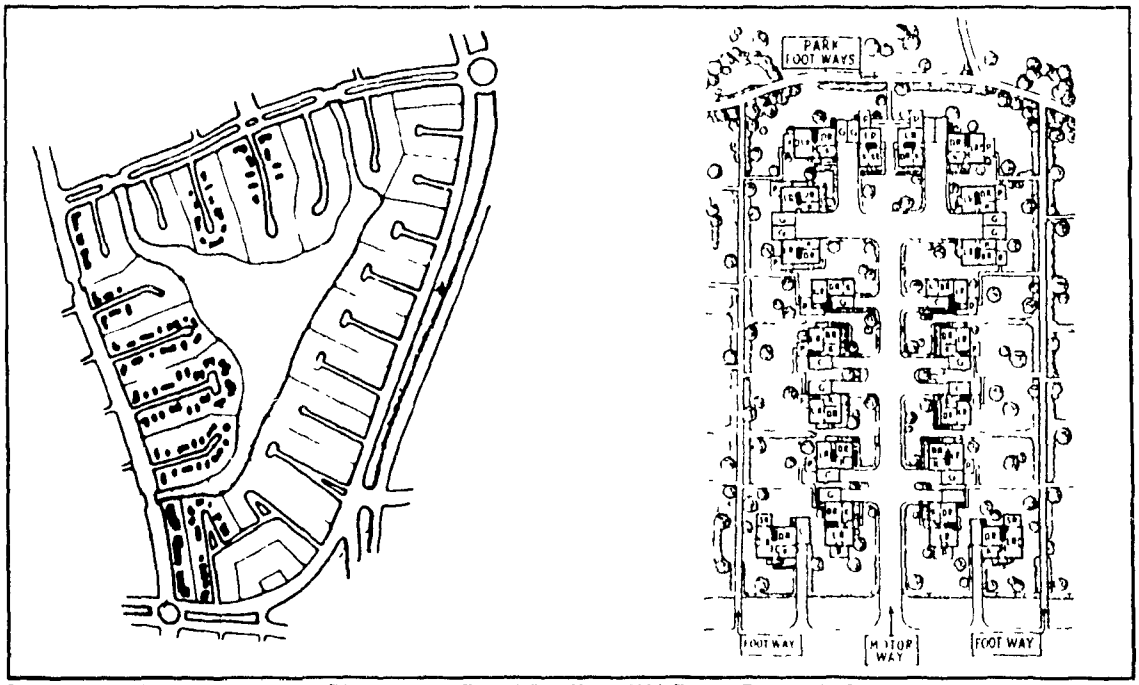

Figure 103 Left Radburn's Super-Block (From Danial Schaffer, 1982) Right· Radburn's Clusters with cul-de-sacs (From *Towards New Towns for America,* 1966)

* Since the Great Depression (1929) weighed heavily upon the entire housing industry in America, it aborted the growth of Radburn at one-tenth its proposed size Only a small fraction housing 3,000 people with a commercial center had been executed (Schaffer, D 1979, p 59, and Brich, E 1980, p 427)

** "Stein credited the baisc element of the Radburn plan, the Super Block, to Herbert Emmerich, a City Housing Corporation adminstrator, who rough-sketched a town plan with common parkland and cul-de-sacs on the back of an enevelop [Fig 102]" (From Daniel Schaffer, 1982)

Regadless of size or population, Radburn's planning ideology assimilated the organic model in a contemporaneous plan which amalgamated the school unit to that of greenery and hygiene. Through allocating internal parks as pathways for dwellers interaction, Radburn differentiated the human scale from the contemporary automobile scale. On the one hand, the Radburn plan was the earliest residential development that considered the automobile in neighborhood design.[19] It attempted to answer the enigma of how to live with the automobile or, more precisely, "how to live in spite of it."[20] On the other hand, Radburn was the humble inauguration of a planning idea that has been augmented to the point where the separation of cars and people (Fig. 104) has become the predominant practice in proceeding neighborhood planning thoughts.

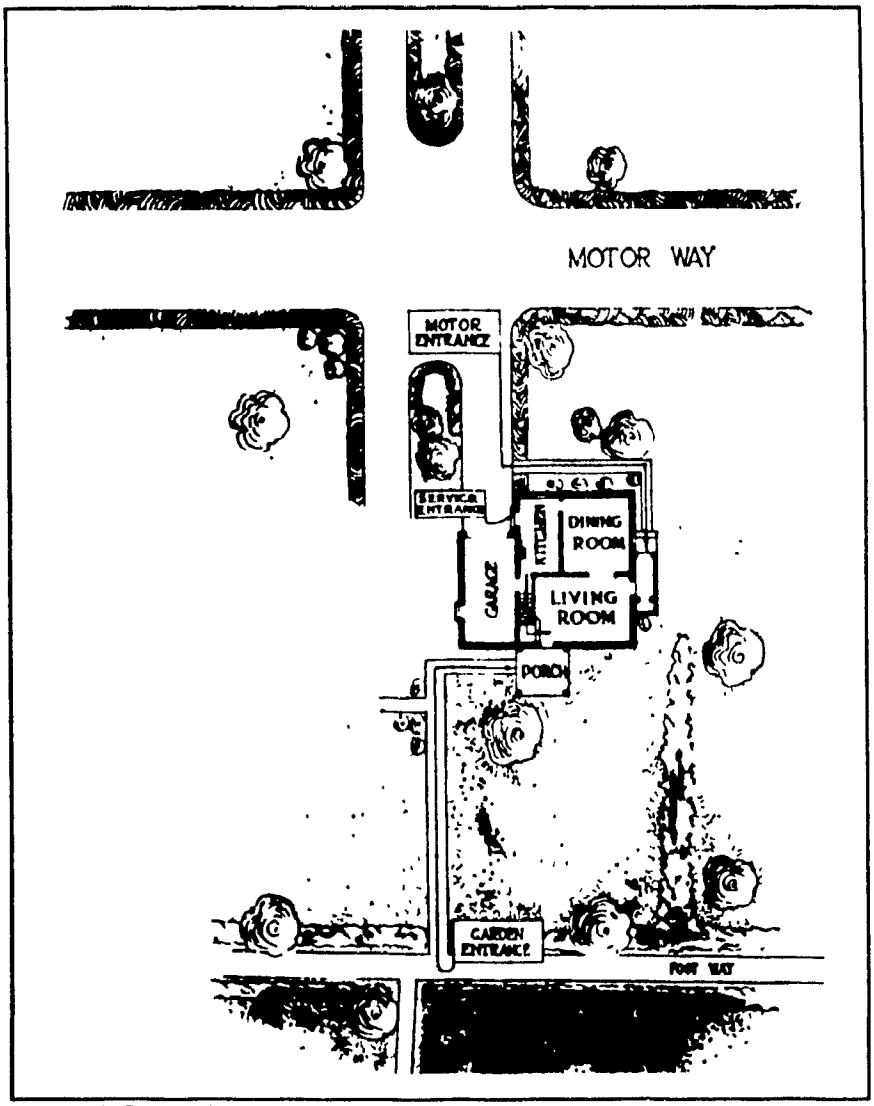

Figure 104: Radburn's ideology in separating the street from its traditional function and alocating it for motor way (From Danial Schaffer, 1982)

The "Broadacre" Neighborhood

With the breakthrough of the automobile, the ideology of a pedestrian confined neighborhood was considered somehow old-fashioned. As the trend in neighborhood design came to incorporate the private automobile, the neighborhoods' size was set according to "driving distance," as exemplified by Frank Lloyd Wright and his "Broadacre City" utopia. On the one hand, in line with Perry's Neighborhood Unit, Wright allocated a centrally located school in the middle of his Broadacre unit (Fig 105). However, as opposed to walking, the Broadacre City child, can be taken to his or her school by an automobile. On the other hand, in line with Howard's concept of merging the town and country together by some confined clusters of garden cities, Wright unified the town and the country by various highways and numerous exitways. The private automobile became the primary element in urban design, providing a new mastery of time and space on which a "modern" kind of environment can be built. "Travelling at 60 miles per hour," as envisaged by Wright, "the motorized citizen can cross Broadacre City as rapidly as Howard's pedestrian can traverse the Garden City."[21] In this trend, there was no place for a spatially confined neighborhood. The traditional walking distance community made no reason in Wright's planning ideology since the size of his "Broadacre" unit was determined by the number of cars per household. In other words, the size of a Broadacre neighborhood was a factor of one-car to five-car houses, (Figs. 106 & 107).[22]

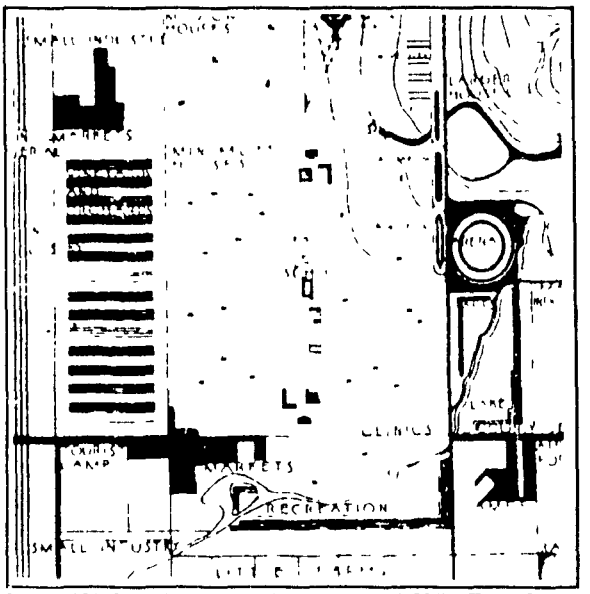

Figure 105 Broadacre City schematic plan (1934) (From Bruce Pfeiffer, 1982)

As it pertains to the organic quality, Frank Lloyd Wright's organic perception looked more at individuality than communality. In this regard, Robert Fishman, in his comparative study of Wright's Broadacre utopia, stated that although Wright applied the term "organic architecture" to his Broadacre City, his use of the word "organic" had little to do with the conventional organic model, which refers to a "society whose members are as subordinated to the whole as the individual organ is to the body."[23]

Conceivably, Wright's organic image was that every single entity (whether an individual or a commodity) has a place and shape all its own [24] Each dweller, according to Wright's "Broadacre" organicism, has the right to as much land as he or she can use that fulfils his or her individual commodity, with a minimum of one acre per household Interestingly, using the prescription of an acre of land per household, the entire population of the United States (around the time when Wright proposed his utopia) could have fitted comfortably inside the State of Texas [25] In short, one can elucidate that although Wright envisaged communal habitation as an "organic reconciliation of individualisim,"[26] he conceived urbansim as an integral whole He neither aimed to separate urbanity from rurality nor city concentration from country dispersion. However, Wright virtually, casted a built habitational environment that is molded by an endless, monotonous sphere and which is typified by the current suburban chaotic expansion.

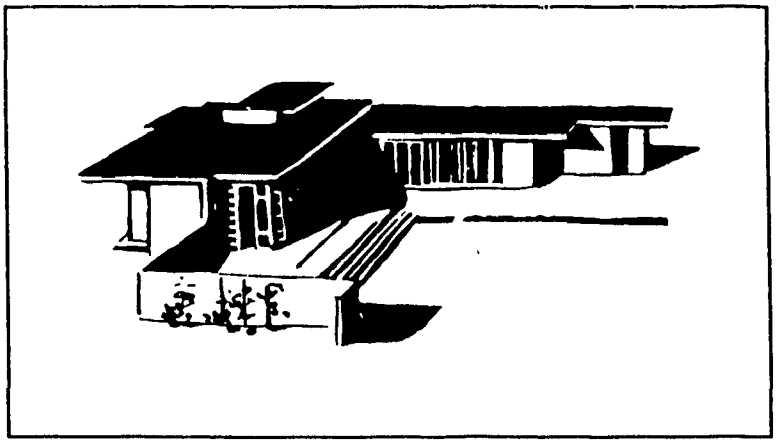

Figure 106: Broadacre one car house (From Perecival and Paul Goodman, 1947)

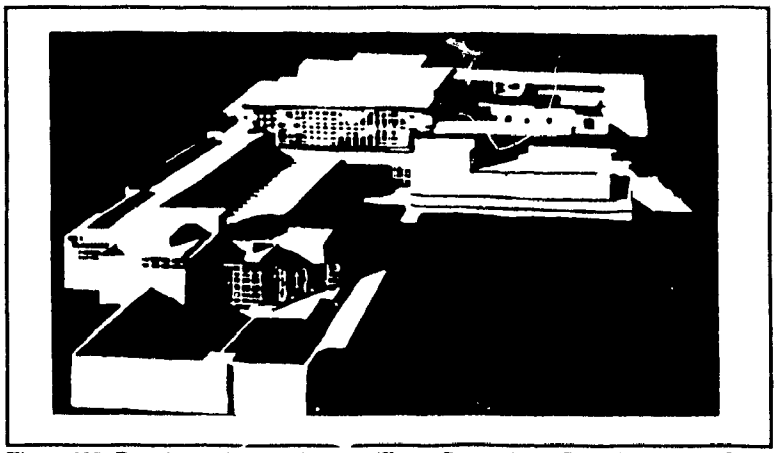

Figure 107 Broadacre five car houses. (From Percival and Paul Goodman, 1947.)

The "Radiant" Neighborhood

In tandem with the ideology and dogma of Frank Lloyd Wright, which advocated "uncompromising individualism"[27] and nourished the rampant suburban isolation, the advent of the automobile age saw the emergence of another way of thinking At the opposite spectrum to Wright's view, this philosophy advocated the revelation of modern architecture, namely, Le Corbusier's Radiant City for three million people. For Le Corbusier, architecture or planning was the art of creating a new physical composition coupled with a social harmony. His new composition and harmony were expressed in the form of symmetry and verticality as opposed to Howard's ideology, which represented architecture in terms of symmetry and horizontality.

One skyscraper (24 storeys), as Le Corbusier argued, might have more usable space than the area of an entire neighborhood unit.[28] Although 500,000 to 800,0000 people could live, work and shop in a number of such skyscrapers, these towers would cover less than 15 percent of the ground as opposed to the area of a garden-city type neighborhood.[29] His vision was based on lifting and hanging from lifted streets, suspended buildings and hanging gardens to a lofty density of 1,200 inhabitants to the acre, in which 95 percent of the acre is an open park--no more close-knit neighborhoods and no more human scale; only high-rises and elevators (Fig. 108).

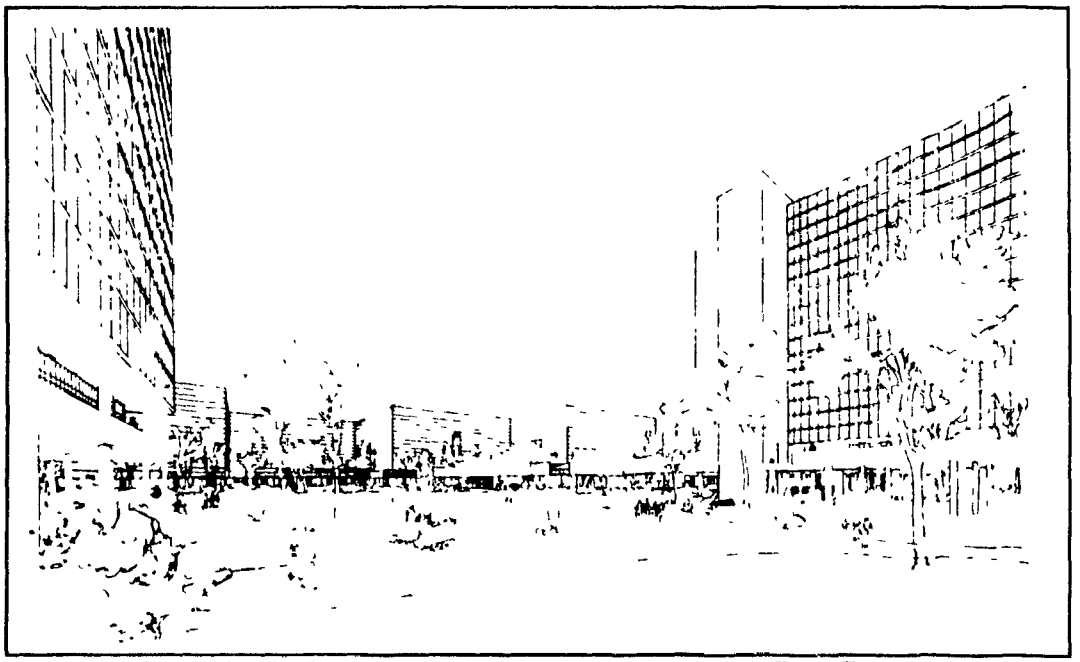

Figure 108 A Radiant City Le Corbusier's plan for Antwerp (1933), never built. (From: *The Radiant City,* 1967)

Quoting from Jane Jacobs, Le Corbusier wrote:

> Suppose we are entering the city [referring to his Radiant City] our fast car takes the special elevated motor track between the majestic skyscrapers as we approach nearer, there is seen the repetition against the sky of the twenty-four skyscrapers; to our left and right on the outskirts of each particular area are the municipal and administrative buildings; and enclosing the space are the museums and university buildings The whole city is a Park [30]

AN OVERVIEW

As a result of the machine-age and its inhuman imprint, by curing the disease of excessive decentralism and extreme centralism, ecology intervened in an attempt to regulate the phantasm of modern urbansim. The Bauhaus architect Walter Gropius, in *Rebuilding our Communities*, pronounced the need to rejuvenate modern architecture--the art and craft of habitation--and its techno-functionalism with a vernacular human scale. He restored the traditional concept of "pedestrian distance," into community planning. The intention was to make man and not his machine the fundamental scale in community size and planning axiom. Gropius urged architects and planners to slim urban scale down to human proportions and to let the human elements become the dominant factor in building (or rebuilding) communities.[31]. By doing so, as he hypothesized, neighborhoods would foster a scale "small enough to serve as organisms for reactivating normal social intercourse."[32] The physical area of such a neighborhood should be "no greater than one in which all points of interest in the neighborhood ... [are] within a ten or fifteen minute walk--or a radius of one-half mile,"[33] that is to say, back to Howard's as well as Perry's measures.

However, a British urban critic, Jaqueline Tyrwhitt asserted that the measures of neither the Garden City nor the Neighborhood Unit supplied any rational answer to issue of size and population and its relation to social livability. The organic model, in her perception, was the model of a bygone age where each dweller

> lived near his work and near his food (much of which he grew himself), and had immediately around and about himself an active social and cultural life in which he was intimately bound up. ... Then came the dismal era of centralised power; ... which robbed man of his personal pride in his work and fed him with canned and lucrative entertainments; which, with its ceaseless mobility, broke up localities and severed the home from its close links with the community.[34]

According to Tyrwhitt, a self-contained garden city of 32,000 people, on the one hand, is inadequate to provide a culturally diverse and most imprtant, an economically sound urban unit for the contemporary interdependent urbanism;[35] if the population of Howard's Garden City was a model of an organic "medieval" village, one should bear in mind that the population of the latter was closely associated to the social and economical capacities of its period, "and to the method by which that period expressed its highest form of culture."[36] On the other hand, the idea of a neighborhood unit housing a population of 5,000 people although fostered some planning benefits--such as children's proximity to schools, eliminating through traffic, localizing shopping activities and providing minimum standards for designing open spaces and neighborhood parks--it is practically too large "for a stratified human concentration."[37] Though Tyrwhitt dropped the two ambiguous phrases of a "5,000-people elementary school unit" and a "32,000-people garden-city unit," she enigmatically replaced them with similar idioms: a "Social-Unit of 1,000 to 2,000 people," within a "High School Urban-Unit of 30,000 to 70,000 people," schemed in a *Garden-Broadacre-Radiant Metropolis* of three million people[38]. (Author's italics.)

Though the school persisted in being the factor for determining neighborhoods' size and population, today's urban theories are awake to the fact that a school-centered-neighborhood-unit dose not interweave the fibers of social intreractions, face to face associations, and neighborliness. At the outset, the concept of a "School" neighborhood unit gained wide acceptance among many architects, planners, social reformers and urban critics due to its ethical intention of creating social units housing a neighborly community:

> One of the most pleasant memories old-timers have is of the friendly community spirit that used to be so strong years ago. This plan [referring to the Neighborhood Unit theory] aims to confirm and re-create that congenial feeling in modern garb through the organization of the town into neighborhood units of 1,500 families (5,000 people) each. By living in a compact community environment, children will develop a sense of security and belonging, while adults will feel themselves closely integrated into a personal social unit.[39]

However, "in modern grab," a neighborhood's school did not become the nucleus of community life nor the center of neighbors alliance.* Concerned about this, Kevin Lynch stated the following:

> The social assumption of this idea [referring to the neighborhood unit and the typical elementary school] was thoroughly debunked. It did not correspond to conditions in most North American cities, where social contacts might be territorially based at the smallest scale (such as within a single block), but were otherwise dispersed across large sectors of the city. These connections were based on kinship, or work, or interests, rather than on place ... . The bounded spatial unit did not fit the network of social interaction ... . [And] adults' friendships were not based on children's attendance at the elementary school, and the administratively efficient sizes of these schools distorted the urban fabric, if they were taken as a fundamental measure.[40]

Nevertheless, it should not be denied or repudiated that the neighborhood-unit concept, in general, regardless of size, population or the function of its school, proved a useful canon "for control"[41] and an effective political canvas for solidarity. Today, neighborhoods or perhaps "residential districts"** may no longer be the intimate vicinity in which dwellers socialize. Yet, they are "an essential piece of ... [dwellers'] mental equipment."[42]

Terence Lee, in regard to the subject of a neighborhood's social map, substantiated that all social acquaintances among the residents of an area take place within an area "substantially less than a half-mile radius."[43] Accordingly, Lee redefined the neighborhood unit as a socio-spatial unit with an area less than one-fourth of a mile in walking distance, as opposed to Perry's Neighborhood Unit, which is a one-half mile walking distance.[44]

However, regardless of distance, Kevin Lynch advocated that a true social acquainted neighborhood is an area that houses a number of dwellers that is far below the 5,000-figure population. It is an area that houses a homogeneous population more likely between 15 and 30 families. "Building small, defined and homogeneous clusters of dwellings," said Lynch, "may in cases support a true social neighborhood."[45]

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* In contrast to a quarter's temple, church or mosque (literally a chapel or a masjid) which did interweave the fibers of social interactions and functioned as the edifice for schooling, the nucleus of community life and the center of dwellers consolidation in the bygone traditional residential quarters.

** This term has been used by Kevin Lynch to replace the common planning nomenclature "neighborhood." The word neighborhood is directly associated with its origin "neighbor," or the one who lives near or next to another. Thus, Kevin Lynch reserved the word "neighborhood" for that "very small area within which people are acquainted simply because they live next door" (see Lynch, K. 1987, pp 249).

In summary, defining an average size for a neighborhood that acts as a modulus for social planning is no doubt imperative. As the dimensions of a chair take the average human body and incorporate it as a modulus, the dimensions of a true social neighborhood should be somehow enumerated. Although, according to Christopher Alexander, the dwellers of an area have no effective voice in any residential district of more than 7,000 persons,[46] this large population, which is based on a political reference, should not be evinced as the principal numerical "figure" for social definition and physical delineation. In his pattern of "identifiable neighborhood," Alexander demarcated his political community of 7,000 people into 10 or 20 independent small neighborhoods, each of which houses no more than 500 inhabitants encircling an area of no more than one-sixth of a mile* walking distance.[47] Furthermore, each "identifiable neighborhood", according to Alexander, is patterned by a number of pedestrian housing clusters that group eight to 12 households around some common courts and pathways.[48] That is to roughly pronounce a residential density similar to the traditional residential quarters that was briefly analyzed in the leading chapter of this thesis.

However, concerning the ambivalent planning idiom of residential densities, Kevin Lynch in *Good City Form,* argued that there is no such thing as a general optimum residential density. "No good city," said Lynch, "could ever be total suburbia, like Wright's Broadacre City, or entirely high-rise, as in Le Corbusier's model, or even be built all at 'twelve to the acre,' which was [or more accurately, came to be] the garden city dogma."[49]

Whereas a general figure representing residential density is a consequential factor that affects a neighborhood's entire living pattern, one should bear in mind that true residential density--density that fosters the sense of neighborliness--does not adhere to the commonplace planning measure of X number of dwelling units per net acre. The density figure itself is only one of many factors that make up the true density grain.[50] Some "hidden dimensions," as well as eclectic socio-physical factors, such as family type, social activity pattern, neighbor's culture, number of children, neighbor's noise, dwelling type, street sense, the space across the street or behind the houses, neighborhood's size, the density of the immediate neighborhood, the configuration of spatial hierarchy and the clustering sense, the degree

* Alexander's pattern of "Identifiable Neighborhood" has a maximum diameter of 300 yards. (See *A Pattern Language,* 1977, p. 85.)

of physical monotony of look-alike rows, the length of rows, vehicular traffic and parked cars--to mention but a few--play an important role in shaping the true texture of residential density. In short, density in all its various dimensions "is a complex but substantial issue ... which must be traced out in any given situation."[51]

On the one hand, the issue of residential density should be differentiated from overcrowding. Jane Jacobs stated that planners often misconceive high densities with overcrowding. "High densities," said Jacobs, "mean large numbers of dwelling units per acre of land. Overcrowding means too many people in a dwelling for the number of rooms it contains."[52] Jacobs referred to this misconception by pointing to Raymond Unwin's ironic title *Nothing Gained by Overcrowding* and its irrelevancy to the subject of overcrowding. Unwin's interest, as Jacobs explained, was on cluster arrangements and low-density dwellings, not on overcrowding. Similarly, when Ebenezer Howard was walking in some sections of London (see chapter II) and noticed the overcrowded condition of its urban fabric, he ironically related it to the subject of dwelling units per acre.

On the other hand, the condition for the well-being of urban habitation is that a residential "district must have a sufficiently dense concentration of people."[53] It is this dense concentration that enhances the kind of diversity, and hence livability, that urban habitation needs. As it pertains to density figure (X number of dwelling units per net acre) Jane Jacobs classified it under three ranks: *the suburban density* of six dwellings or fewer to the net acre, which with "cleaver site planning, good design, and genuine suburban location, can yield a suburb or a reasonable facsimile;"[54] *the semi-suburb density* of 10 to 20 or more dwellings to the acre, which (according to Jacobs) are functional if secluded from city life and lie towards the outer edge of a big city;[55] and, *the urban density* that "hover[s] at about 200 dwellings to the net acre."[56]

Though Jacobs's density classification is useful as a silhouette to portray today's density variegation, it presents residential densities from a superficial point of view. For example, concerning the semi-suburb density which is particularly what intrests the author, Jacobs argued (in the author's mind, somewhat unconvincingly) that "densities of this kind ringing a city are a bad long-term bet, destined to become grey areas"[57] since (as she explained) dwellers who live near each other in such densities are geographically strangers to one another and always will be strangers.[58] These "in between

densities," said Jacobs, "are fit neither for suburban life nor for city life. They are fit, generally, for nothing but trouble."[59] The former statement, according to the author, is incongruous to the congenial paradigm of traditional residential quarters. In fact, it was this "in between densities" of 10 to 20 or more dwelling units per acre that physically constituted the density grain of the traditional residential quarters.

Regardless, Jacobs's perception of true residential densities has been wisely explained in terms of four related elements: ground coverage, socio-physical diversity, number of dwelling units per net acre and moderate standardization. In other words, increasing the percentage of ground coverage--that is to say, less "Corbusierian" no man's parks and less "Frank-Lloydian" individual reserves--and creating an ample diversity in dwelling types, from single-family units to high-rise apartments, without repetitive standardization; and through gradual, organic growth rather than a "sudden, cataclysmic upheaval,"[60] would foster an urban augmentation that conforms with the need of the contemporary urbanization, in one hand, and would promote a wide range of dwelling choices, hence, social diversity, on the other.

AN AMALGAMATED IMAGE

After having reviewed several urban theories, from More's Island to Bellamy's cooperative city; from Howard's Garden City to Perry's Neighborhood Unit; from Haussmann's tree-lined boulevards to the Dutch *Woonerven;* from Frank Lloyd Wright's Broadacre utopia to Le Corbusier's Radiant one; and following the works of Kevin Lynch, Christophor Alexander, and last but not least, Jane Jacobs, this thesis approaches its completion. From the foregoing analyses, either in terms of urban history or urban design; patterns or functions; sizes or densities, the reader can virtually envisage each of the former theories or planning practices and relate them to at least a built example in today's built environment. There would be little doubt that one can find neighborhoods based on the principles of the garden city or the neighborhood unit; neighborhoods planned according to the Radburn plan; neighborhoods of suburbia with one- to more-garage houses; neighborhoods of few elevator towers; and, perhaps, neighborhoods with a pedestrian-type ambience with walking paths and human-scale dimensions. Though each archetype has a varying range of sizes and populations, acres

and dwelling units, however, regardless of their type, size, population or density, there is little doubt the majority of today's neighborhoods are virtually neighborless. If neighborliness and face-to-face affiliation can be accomplished through sole physical planning exertions, then, how easy planning would have been if that was the case. No matter how physically sound as well as socially ethical an architect's or an *urbanist's* scheme is, once urban dwellers lack a communal spirit, ethical ambitions will inevitably transfigure to unethical repercussions. Of all the North American residential environments that flowed from the ethics of the prevailing neighborhood theories, how many are ethical neighborhoods, how many are neighborly neighborhoods or how many are social neighborhoods? Although they are utterly livable environments--clean, green and healthy--to the unbiased observer the majority of such neighborhoods appear to share one central theme--the theme of social anonymity.

What is missing, wherefore, is not solely related to some physical measures, such as street patterns, neighborhood sizes, or density-figures. Nor can it be merely described in terms of some social planning idioms, including residential mobility, social diversity and dwellers' scattered interests. Rather, it is fundamentally the communal spirit which used to reveal the bygone traditional sense of neighborliness, that is missing. A spirit which has lost its virtue in the modern, individualistic society, including that of the Middle East.

Endnotes

1. From Charles Ascher, quoted in Dahir, J. 1947, p. 48
2. Lynch, K. 1987, p. 239
3. Ibid
4. Ibid.
5. Ibid. p. 240
6. Ibid. p. 242
7. Howard, E. 1902, pp. 20-23
8. Beevers, R. 1988, p. 30
9. Fishman, R. 1989, p. 42
10. Ibid.
11. Howard's papers, *Common Sense Socialism*, quoted in Fishman, R. 1989, p. 45
12. Fishman, R. 1989, pp. 50-51
13. Dahir, J. 1947, p. 24
14. Mackesey, W.T. and Clark, D.G. 1943, pp. 78
15. Stein, C. 1942, p. 52
16. Dahir, J. 1947, p. 30
17. As quoted in James Dahir, 1947, p. 30
18. Birch, E.L. October 1980, *APA Journal*, p. 424
19. Schaffer, D May 1979, *Town and Country Planning*, p. 57
20. *Towards New Towns for America*, 1971 (ed.), p. 41
21. Fishman, R. 1989, p. 93
22. Ibid. p. 131
23. Ibid. p. 133
24. Ibid. p. 133
25. Ibid. p. 127
26. Ibid. p. 133
27. Ibid. p. 160
28. Ibid. p. 192
29. Ibid.

30. Jacobs, J. 1961, p. 21
31. Gropius, W. 1945, p. 16
32 Ibid. p 18
33. Dahir, J 1947, p 33
34. Tyrwhitt, J Summer 1948, p. 11
35 Ibid. pp. 13-15
36. Ibid. p. 14
37. Ibid. p. 16
38. Ibid. pp. 16-17.
39. As quoted in Isaacs, R. 1948, p. 15
40. Lynch, K. 1987, pp. 246-247
41. Ibid. p. 247
42. Ibid.
43. Lee, T. 1970, p. 123
44. Ibid.
45. Lynch, K. 1987, p. 250
46. Alexander, C. 1977, p. 76
47. Ibid. p. 84
48. Ibid. p. 202
49. Lynch, K. 1987, p. 263
50. Norcross, C. 1973, p. 4
51. Lynch, K. 1987, p. 265
52. Jacobs, J. 1961, p. 205
53. Ibid. p. 200
54. Ibid. p. 209
55. Ibid.
56. Ibid. p. 217
57. Ibid. p. 209
58. Ibid. p. 210
59. Ibid.
60. Ibid. p. 216

CHAPTER V

NEIGHBORHOOD'S EQUATION: A CONCEPTUAL APPROACH

A neighborhood is a multifarious phenomenon. Its study and analysis persists a challenge for scholars including architects and *urbanists* to understand the correlation between its physical elements and social attributes. Such a challenge has been fostered by the elusiveness of the neighborhood as a meaning and concept.[1] The following remarks attempts to formulate an equation that interweaves together the multi-dimensional attributes and elements of such an urban phenomenon.

A SOCIO-PHYSICAL OUTLINE

A multitude of inter-related variables constitute the equation of neighborhoods. Exclusively capturing the neighborhood in the net of either social or physical entities will inevitably imbalance its equation. In one perspective, the neighborhood has been conceived as a social entity, a group of personal contacts regardless of physical or spatial definitions. Nomenclatures such as "communality,"* and "contact clusters"** are examples that perceived the neighborhood accordingly. Furthermore, according to an architect and planner Henry Churchill, "a neighborhood, in the strict sense of the word, is a social entity."[2] His argument implies that a neighborhood is an area that delimits by its dwellers' attributes rather its physical configuration.[3] Ergo, in planning neighborhoods, as Churchill advocated, planners should not concern themselves about some specific configurations as long as they provide plenty of housing so that there are variety of choices for dwellers. "Put the housing" said Churchill, "... in a physical environment that is open, pleasant, healthful and safe, and I don't give a damn about the specific pattern, because people can then work out their own social groupings."[4]

Though, the above reasoning holds a modicum of sense and logic, yet, what Churchill advocated is practically a "ditto" of some forerunner planning measures. Providing an ample range of housing in

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* Addressed by Bessie McClenahan, (1929).

** Conceptualized by Svend Riemer, (1951).

a physical environment that is open, pleasant, healthful and safe is precisely what most contemporary urban theories attempted to render. Did not the Garden City concept or the Neighborhood Unit plan (not to mention the Broadacre "Suburb." the Radiant "high-rise environment," or even the Environmental Areas) provide housing in physical environments that are open, pleasant and healthful? There is no doubt that they did. However, did such environments nourish social groupings? There is little doubt that they did not. What they did rather was to foster dissemination and nourish social stratification.

In another panorama, the neighborhood has been viewed as a socially and physically separate but inter-related entity. Ruth Glass demarcated the neighborhood as a physical area with specific social characteristics, on the one hand, and as a territorial group of common ground social contacts, on the other.[5] Although both entities share some common social aspects, neither the physical area nor the territorial group coincide or disjoint. They overlap.[6]

In addition, in his study of urban neighborhoods, Terence Lee structured a different approach by relating both the social and physical entities of a neighborhood to the common element of "space." Lee expounded that "the space is affected by what fills it, the social relationships are influenced by the space and the physical objects are closely identified with the people who live in them or make use of them."[7] Through such a postulate, Lee integrated social and physical entities of a neighborhood in a unit, namely, "socio-spatial schema."[8] In other words, Lee's neighborhood unit schema is a framework that combines both the social and physical components of a neighborhood.

Similarly, in his phenomenon of "Social Interconnections," John Habraken conceived the neighborhood as a complex of social and physical entities interwoven by the medium of space. "The way to interact," said Habraken, "is through the control of space,"[9] that is, by controlling spatial configurations, social relations can be conceived.[10] Architecturally speaking, physical boundaries, such as streets, gates and doorways, and social boundaries that are best exemplified by Edward Hall's individual and group bubbles* both structure the intrinsic order of the space where people dwell.

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* The famous anthropologist Edward T Hall is mainly concerned about how culture plays an important role in the function of personal space His concern led him to develop the phenomenon of the "silent language " This silent language is characterized by non-verbal communication, which varies from culture to culture and from person to person. The notion of "space-speaks" that can be realized–for example, by the distance two individuals take when talking to each other and that conveys information about the nature of their relationship–is developed in greater detail in his book *The Hidden Dimension*

Architect Francis Hendricks suggested that a neighborhood should have a life-space closely associated with the life-style of it's dwellers.[11] A dweller's life-style corresponds to the social entities that a neighborhood possesses, and a neighborhood's life-space conforms to the physical cycle that it undergoes. The former manifests and structures the physical elements of a neighborhood while the latter regulates and defines the social attributes of the dwellers.[12] However, due to the large variety of life-styles in contemporary society and in order to obtain a balanced equation, the range of life spaces should be broadened:

> To broaden the range of variety means that the life space variety must be obtained by dispersal of residential enclaves with distinguishing qualities--a sort of mosaic pattern of cells of relatively fine grain. Each of the life space cells should fit the lifestyle of a particular type of a household. When the household lifestyle changes there will always be an available cell in close proximity with a life space whose characteristics match the emerging means, tastes and needs of the mobile household.[13]

In other words, a neighborhood according to Hendricks, is a multitude of various cells which fit specific lifestyles. This social fit can be obtained by arranging a neighborhood's space into small, homogeneous clusters. It is of intrest to mention that Hendricks's concept of the neighborhood resembles Perry's Neighborhood Unit "because such units," said Hendricks, "were conceived and built to serve few of the existing lifestyle[s]."[14]

The physical elements and social attributes that together formulate the equation of a neighborhood are diverse and myriad. Physically a neighborhood can be rendered from its "macro-set," such as the overall layout of a neighborhood; the type of houses it contains; the arrangement of its dwellings with relation to streets and public spaces; view; microclimate; density; greenery; landscape; topography; open spaces; integrity of dwellings; streets accessibility and their hierarchy, to its "micro-set," which entails street dimensions and furnishings, children's play spaces; the dwellings' materials and facade coolers; windows and balconies, to many more. With respect to the social attributes of a neighborhood, its set consists of countless entities some of which are the type and nature of dwellers; their culture and degree of friendliness; compatibility of neighbors; crime and safety; social and racial compositions; mobility and stability; neighbor's origion, language, and religion; neighborhood's reputation; and age of the inhabitants.

The physical set (both macro and micro) generates physical spaces while social set generates social spaces. It is when both physical and social spaces coincide that the identity of an area can be clearly defined.[15] To examine the elements and attributes of each set independently is not the objective of this chapter. Studies on these aspects are many and diverse.* Yet, to place the review in perspective, it seems relevant to integrate both sets with all their diverse physical as well as social constituents and embrace them in a single schema, namely, the schema of homogeneity and heterogeneity The following section ventures to do so, and attempt to conceptualize the above schema in a rational, as well as, metaphorical fashion.

THE "HOMO-HETRO-SCHEMA"

People move into the neighborhood that appears likely to be the most congenial for them. As a result, different neighborhoods end up with distinct populations and divergent social characters In his article "The Social Identity of Evolving Neighborhoods," Christopher Winters classified North American contemporary neighborhoods into various social classes. The following is a recapitulation of some of them:

* Economic and ethnic diversity is what theoretically typifies the *self-consciously heterogeneous neighborhood.*[16] However, according to Winters's study,

> these self-consciously heterogeneous neighborhoods are not as functionally diverse as their propagandists dream. Within them much segregation presists. The separate communities often have their own shops, schools, and sections of parks ... .[17]

* *Chic neighborhoods* house the "rich and famous." Examples of such neighborhoods are many. Ethically, there should be no misgivings, that dwellers should dwell in areas that satisfy their living standards; however, if the evolution of chic neighborhoods displaces the conventional subordinate ones, it is when it fosters negative impacts on collective urbanization and becomes the offspring of unethical urban rejuvenation. Although chic neighborhoods often are not considered examples of urban rejuvenation, however, once some "dollar-based" developers with the assistance of some lay architects and planners tear down and replace traditional older neighborhoods with districts of a much

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* See Rapoport, A 1977, *Human Aspects of Urban Form*, pp. 65-80, where he summarized more than 50 sources, analyzing the physical and social components of neighborhoods.

higher status, then the latter would be an example of unethical urbanity.[18] Today, any unbiased observer can remark examples of such developments, not only in the urban centres of North American cities but virtually in most cities of the globe.

* In *Family neighborhoods,* nuclear families with children are common. Such neighborhoods are often located far from the city center, where population density is low and the lifestyle is compatible with automobile ownership.[19] These neighborhoods portray, in a sense, Garden Cities and Neighborhood Units (not to mention the Broadacre "Suburbs").

* *Black neighborhoods* house black families. Although no clear boundaries separate such "human-race colored" neighborhoods from others, nevertheless, neighborhoods of black families tend to be less integrated with (if not segregated from) other "color-based" neighborhoods. Needless to mention, examples of black neighborhoods are numerous and can be observed in parts of various cities. (Alas, that our current civilization is still way behind in terms of racial integration*).

Terence Lee, on a socio-spatial ground, classified the contemporary urban neighborhood into three non-exclusive, co-related types: the *social acquaintance neighborhood;* the *homogeneous neighborhood;* and the *unit neighborhood.*** The first type is a small physical area, "perhaps half a dozen of streets containing only houses, apart from the few corner shops,"[20] where the residents know each other but are hardly friends and have a very little sense of neighborliness. The second type is where the physical boundaries are set by size, price, condition of houses and the types of people living there. "The level of social interaction is relatively low and cognitive factors play a large part."[21] Both types foster a homogeneous character, with some degree of mutual awareness by the residents. However, the third type, namely, the unit neighborhood--today known as P.U.D. (Planned Unit Development)--tends to be heterogeneous in its population (social), as well as the type of dwelling units

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* With regard to racial integration, Abdu'l-Baha, a teacher of humanity, in a speech at Howard University (1912), stated the following: "The world of humanity is like a garden and the various races are the flowers which constitute its adornment and decoration. In the animal kingdom also we find variety of color. See how the doves differ in beauty yet they live together in perfect peace, and love each other They do not make difference of color a cause of discord and strife They view each other as the same species and kind They know they are one in kind. Often a white dove soars aloft with a black one. Throughout the animal kingdom we do not find the creatures separated because of color They recognize unity of species and oneness of kind If we do not find color distinction drawn in a kingdom of lower intelligence and reason, how can it be justified among human beings, especially when we know that all have come from the same source and belong to the same household?" (see *Foundations of World Unity*, 1972 ed , p 34)

** Referring to the Planned Unit Development, which (according to the author) is an up-to-date version of the conventional Neighborhood Unit Plan

it incorporates (physical).[22] The degree of social interaction in such neighborhoods tends to be relatively higher than the first two types mentioned.

Having mentioned the above socio-physical "taxonomy" and being acquainted with some of neighborhoods multifarious classifications, it seems appropriate at this stage of development to direct and focus the scope of this review to the issue in hand, namely, the schema of homogeneity versus heterogeneity.

On the one hand, in his book *A Pattern Language*, Christopher Alexander, defined an area where its dwellers are relatively homogeneous as "one where individual selves are not strongly differentiated."[23] He linked his definition to both the physical environment where "adjacent houses are identical"[24] and to the social environment where "superficial uniformity"[25] between the dwellers embody somehow a weakness in their identity.

On the other hand, Alexander asserted that profound heterogeneity creates diffusion. "When many colors are mixed," explained Alexander, "in many tiny scrambled bits and pieces, the overall effect is grey. This greyness helps to create weak character in its own way."[26] A number of architects, *urbanists*, as well as urban sociologists have initiated similar tenets. The hypotheses of both Amos Rapoport and Barrie Greenbie, are in accord with Alexander's: the greater the mixture of types of persons in a local urban area and the more unpredictable the strangers near someone's house, the more insecure one will become.[27]

In *The Meaning of the Built Environment* Amos Rapoport, a distinguished scholar in the field of "Environmental Behaviour Studies," asserted, "if people can be located in social space, and hence in a likely context and situation, that is, if they can be categorized, this makes things more predictable."[28] In other words, a dweller is more likely to interact and communicate whith a neighbor who share similar interests than to interact with a "stranger."[29] Thus, by locating people in a particular setting with a defined context and situation, categorization will occur and, hence, territoriality will define its space within which specific kinds of social relationships should take place. Albeit, according to Rapoport, by grouping people in a particular context, interaction and communication among different segmented groups will be limited, with some even being excluded, nevertheless, "if there is no categorization,"

contended Rapoport, "interaction is likely to become even less since one does not interact with strangers."[30]

Rapoport's argument is in line with Hassan Fathy's, who suggested that "units should be grouped into clusters and assigned into compatible groups of inhabitants selected on the basis of common regional background, kinship or other social bounding force."[31] Moreover, in his *Design for Diversity*, Barrie Greenbie suggested that territorial homogeneity must not be interpreted negatively, which is to repulse something out, but rather positively, which is to attract something in.[32]

Accordingly, social homogeneity can foster a sense of security and identity in residential environments. People with similar interests not only need to be internally identified but also spatially clustered. The identifiable clusters, however, should not be galvanized by stratification, rather they should be reinforced through amalgamation. That is to say, the sum of all homogeneous clusters should represent a wholesome, heterogeneously balanced and spatially identified neighborhood.[33]

To what scale the above argument is to be proportioned? is what the ensuing remarks attempt to pursue. The concept of homogeneity and its correlation with neighborhood's physical as well as social identity reflects an "Inverted-U"* type of relationship. This hypothetical relationship suggests that the sense of identity in an area (referring to social as well as physical idetity) increases as the degree of homogeneity (social as well as physical) raises. Nonetheless, identity tends to decrease once homogeneity is overly saturated (Fig. 109). Socially, an example of an overly saturated homogeneous area can be virtually depicted in the ghettos, which, although possessing a high source of identity internally, do not allow for a significant variety of lifestyle to emerge.[34] Ghetto dwellers are usually compelled to live there, "isolated from the rest of the society, unable to evolve their way of life and often intolerant of ways of life different from their own."[35]

* The term "Inverted U" is widely referred to in the literature of organizational physiology.

To envisage the above hypothesis objectively, it is imperative to couple it with the element of space and its hierarchy of scales. In other words, a sense of identity in an area and among its dwellers tends to increase if that area is socio-physically homogeneous and lies within a small-scale spatial formation, such as a cluster of few houses. In a larger spatial formation, however, such as a community of several clusters, further homogeneity tends to lessen the sense of identity. This latter corresponds to the monotonous paradigm of most North American look-alike, suburban expantion.

Likewise, since a high level of homogeneity reflects a low level of heterogeneity, and vice versa (Fig. 110), by tracing Fig. (109) over the latter, the Inverted-U hypothesis of homogeneity would be transposed to an Upward-U assumption concerning heterogeneity (Fig. 111). By merging both concepts of homogeneity and heterogeneity--the Inverted-U and the Upward-U--and associating them with the phenomenon of space and its hierarchial formation, the following theorem can be relatively assumed:

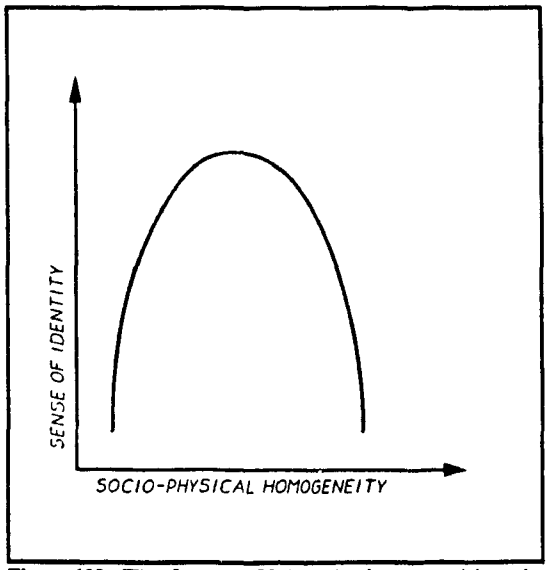

Figure 109: The Inverted-U hypothesis schematizing the relationship between "socio-physical identity" and "socio-physical homogeneity."

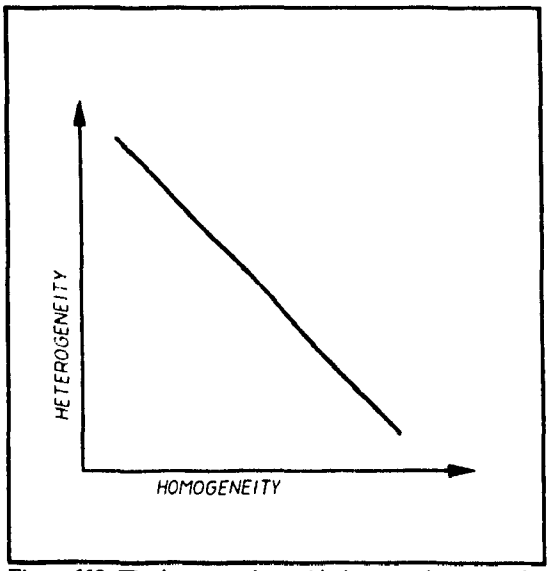

Figure 110: The inverse relationship between homogeneity and heterogeneity.

- a sense of identity and hence neighborliness in residential areas is proportional to the degree of socio-physical homogeneity of that area, only if homogeneity is applied within a hierarchy of scale not larger than a single cluster.

- a sense of identity and hence neighborliness in a residential area is proportional to the degree of socio-physical heterogeneity of that area, only if heterogeneity is applied within a hierarchy of scale larger than a cluster.

- cluster scale homogeneity in residential environments is an integral means towards achieving neighborly, attractive, identifiable, heterogeneously balanced neighborhoods.

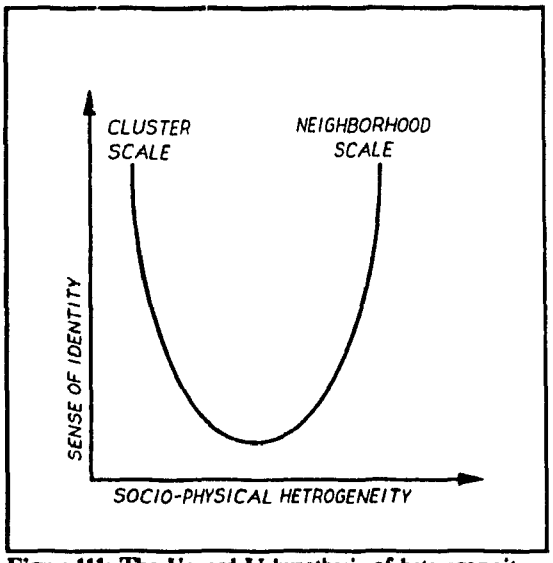

Figure 111: The Upward-U hypothesis of heterogeneity.

These findings corroborate Francis Hendricks's *Homogeneous Mosaic Cells* and Christopher Alexander's *Mosaic of Subcultures*:

> "While many planners" Hendricks stated "favor the social ideal of heterogeneity and integration of lifestyles in residential areas. The chaos of complete heterogeneity is the identifying character of pathological urban communities, incapable of a common ... or ... collective ... expression. For households sharing common lifestyles [homogeneous in character] the cell-mosaic idea is an attempt to find physical expression by finding necessarily security, identification and mass. The size of this socio-cultural life space unit is purposely smaller than a physical ghetto. [Thus] differentiation of urban space into small homogeneous settings ... may facilitate self-ordering and provide the attraction and sensitivity of requisite variety and adaptive consumption in residential living environments."[36]

On parallel thoughts but on a larger urban scale, Alexander explained:

> In the heterogeneous city, people are mixed together irrespective of their lifestyles or culture. This seems rich. Actually it dampens all significant variety, arrests most possibility for differentiation and encourages conformity. It tends to reduce all lifestyles to a common denominator. What appears heterogeneous turns out to be homogeneous and dull. [Thus] in a city made of large numbers of sub-cultures relatively small in size each occupying an identifiable place and separated from other cultures ... new ways of life can develop.[37]

In short, relatively speaking, a number of clusters where each contains analogous dwelling types which house a compatibale group of dwellers is a prerequisite to achieving an amalgamated, heterogeneously wholesome neighborhood. In other words, unity in uniformity (at a cluster scale) is an imperative to achieving unity in diversity (at a neighborhood scale).

Endnotes

1. Lee, T. 1970, p. 119
2. Churchill, H. 1948, p. 41
3. Ibid.
4. Ibid. p. 42
5. Ibid.
6. Alexander, C. 1965, p. 58
7. Lee, T. 1970, p. 122
8. Ibid.
9. Habraken, J. 1985, slide presentation
10. Ibid.
11. Hendricks, F. and MacNair, M. 1970, p. 139
12. Ibid.
13. Ibid.
14. Ibid. p. 140
15. Rapoport A. 1977, p. 158
16. Winters, C. 1979, pp. 9-11
17. Ibid. p. 11
18. Ibid. p. 12
19. Ibid. p. 14
20. Lee, T. 1970, p. 122
21. Ibid.
22. Lee, T. 1970, p. 177
23. Alexander, C. 1977, p. 45
24. Ibid. p. 47
25. Ibid.
26. Ibid.
27. Ibid. p. 48
28. Rapoport, A. 1982, p. 185

29. Ibid.

30. Ibid. p. 19.

31. Galantay, E. 1987, p. 19

32. Grennbie, B. 1976, p. 9

33. Alexander, C. 1977, p. 49

34. Ibid. p. 44

35. Ibid.

36. Hendricks, F. 1970, pp. 139, 140, 142

37. Alexander, C. 1977, pp. 43-44

CONCLUDING REMARKS

Physically, the pattern of a traditional residential quarter has been interwoven by the social fibers of its dwellers. As these fibers were symbolically organic and hierarchically organized, traditional societies embodied an organic type hierarchy in the spatial structure of their built environment. Organic hierarchy has been a prominent phenomenon throughout the tradition of urbanization. Although a brief reference to the organic model and its spatial hierarchy has been made in an earlier chapter, the following subsection elaborates somewhat on the aforesaid.

A METAPHOR FOR HABITATION

The dogma of "progress," which can be referred to as the fount of an organic organization, revolutionized a metaphorical phenomenon for communal habitation, and conceptualized Man's relationship with the built environment. In a western contemporary sense, it was in Herbert Spencer's *Social Static* (1865) that "progress," in general, was defined as being a necessity rather than an accident.[1] The progressive evolution of human habitation from tribal societies, village communities, to city states and nation building supports such a definition. The organic model, henceforth, became an ideal figurative representation of communal habitation. For their part, several western organic-minded scholars--such as Patrick Geddes, Ebenezer Howard, Raymond Unwin, Lewis Mumford, Clarence Perry, and Clarence Stein, to mention but a few--conceived the built environment as an organic metaphor. Their images, writings and schemes portrayed the built environment as a multiple of communities with distinct characteristics. Each community is composed of several internal parts which are highly interdependent: "the form and function of each internal part should be fused together, while each part is itself clearly differentiated from other internal parts with other functions."[2] In concise, a neighborhood (similar to the trunk, limbs, branches and leaves of a tree) represents a hierarchy of units that include sub-units, which themselves include sub-sub-units, and so on.[3]

In architectural terms, having evolved from the traditional residential quarters (whether in the East or the West), the organic hierarchy shaped the physical paradigm of many contemporary planned

residential communities. Leading with the Bedford Park planned development in England and the succeeding developments of Letchworth Garden City, Hampstead Garden Suburb, to Forest Hills Gardens and Radburn in the U.S., the model of an organic hierarchy in their plans was apparent. Even though these communities have been built mainly in suburban settings or at the fringe of cities, they were to be the archetypes for planning contemporary communities that mirror the traditional organic-type communities, literally, the medieval quarters.

However, upon the expansion of industrialization, several industrial-age architects and *urbanists* conceptualized the above archetypes in terms of molds to "manufacture" communities. Whereafter, as "mold" replaced "progress" and "stamp" displaced "hierarchy," planned communities became monotonous and contemporary neighborhoods demoralized the merits of an organic image. Subsequently, the practice of neighborhood and regional planning, or what Jane Jacobs labeled as "project planning,"[4] initiated a solid argument for some urban critics--including Jacobs herself--which not only denigrated neighborhoods' contemporary "orthodox" planning origins (referring to the Garden City, Neighborhood Unit, and Super-Block planning ideologies) but also vilified there fount, namely, the organic model.

In his profound book *Good City Form,* Kevin Lynch argued that the hierarchical organic-type organization as well as the organic autonomous configuration, are antithetical concepts and are no longer competent to fit the structure of contemporary multifarious as well as interrelated neighborhoods.[5] On the one hand, Lynch asserted that the concept of an organic hierarchy, which can be pictured in some pattern of trees, limits human interactions and suggests in its essence a vertical classification of high and low ends. On the other hand, "lacking alternative conceptual schemes," said Lynch, "we find it difficult to discard this 'obvious' model.[6]

There is little doubt that contemporary neighborhoods (residential districts) are not autonomous configurations and can not be comprehensibly connoted as sets of hierarchical organizations similar to that of the traditional residential quarters. Today's neighborhoods, their physical scale and social diversity, portray a pattern that can no longer be intelligible. They can no longer function as the bygone "medievalistic", unified, consolidated, and self-governed quarters.

However, there should be no misgivings that neither organic hierarchy nor organic autonomy are antithetical concepts. What is antithetical is to delineate contemporary residential environments to

that of the traditional ones in a similar metaphorical allegory. In other words, if the pattern of organization and configuration in traditional built residential environments was similar metaphorically to that of a "tree,"* perceiving the contemporary ones accordingly, contradicts with the principal axiom of an organic model, which is the principle of progress. Hence, in line with the organic progress, the hierarchy and autonomy in contemporary habitational environments should not be delineated as a metaphor analogous to that of a tree, rather it should be contemplated as an analogy succeeding the progressive echelon of a tree, that is, a garden. Unlike an autonomous tree, a garden is an interdependent mosaic of diversified forms, as well as kinds and shapes of trees that corresponds the diversity as well as the variety of contemporary urbansim.

On another spectrum, the reader should bear in mind that an organic-type hierarchy does not solely suggest a vetrtical classification of high and low ends. Metaphorically, once more, taking the alphabetical order of a language as an example, it starts with a letter and ends with another; however, such an order did not impose any limitation on the construction of words and phrases. There are no high or low ends in the alphabetical order of a langauge nor is there a rule that imposes a sort of order on the combination of alphabets because such a rule would only restrict the choice of words as well as phrases, and hence language's vitality. Besides, it was only through a language's alphabetical order, or what the author prefers to call "the horizontal hierarchy," that classification, categorization as well as indexation were possible and, hence, enhancing language's communicability. Nevertheless, it should not be misconceived that a language, which is constituted by its horizontal alphabetical order, has no sets of vertical classification. A Language in a vertical sense has sets of alphapits, words and sentences, where the alphapits occupy the lower ends and sentences the higher ones.

* A tree by it self is an autonomous configuration, while its trunk, limbs, branches and leaves constitute together its hierarchical organization.

NEIGHBORHOOD'S SPATIAL MATRIX

In line with the above metaphorical justifications, the alphabets that constitute a neighborhood's language are the lots, streets and dwellings. In relative terms, a neighborhood should be symbolized as an equitable coordination between its lots, streets and dwellings. In line with the role of "horizontal hierarchy," no order of priority should exist among these three elements. Along these lines, Norbert Schoenauer, in an article entitled "Site and Scale," wrote:

> Separated, these three elements [referring to the street, the lot and the building] are nonentities in great contrast to their potential symbiotic sum of an ideal place to dwell. However, this nobel aim can be reached only when through co-relative design, the whole becomes much more than the sum of its parts.[7]

Accordingly, an ideal place to dwell is that having a wholeness of parts, where streets, lots and buildings together constitute the vernacular for the built habitation. As hierarchy pertains to the "vertical order," one can envisage it as representing the organization of a neighborhood into hierarchial classification, from a house to a cluster and, consequently, to the neighborhood (Fig. 112).

However, in most contemporary neighborhoods (residential districts), neither the alphabets (lots, buildings and streets) nor the words and sentences (houses and clusters) constitute a congenial, friendly and meaningful language. The pattern of contemporary residential environments, whether in North America or virtually elsewhere, follows the ideology of separating lots from streets from dwelling units. With one design for streets and another for buildings, residential areas are planned as continuous, undifferentiated arrangements that offer no transition in scale between a house, a cluster or a neighborhood (Fig. 113).

The ironic standardized "subdivision controls"--with standard streets that encourage fast and through traffic, with buildings that are monotonous in use, type and shape and with lots that are classified and categorized with reds, yellows, greens and blues on some planners drawing boards--is creating an apathetic, *laissez-faire* urban trend that constructs the unsoundness of contemporary built environment. The present regulations and requirements in planning ordinances inevitably seem to lead to the usual monotonous uniformity of neighborhood developments "where every house has to have precisely the same amenities: the same garden size, the same style, the same road width in front of it and so on."[8]

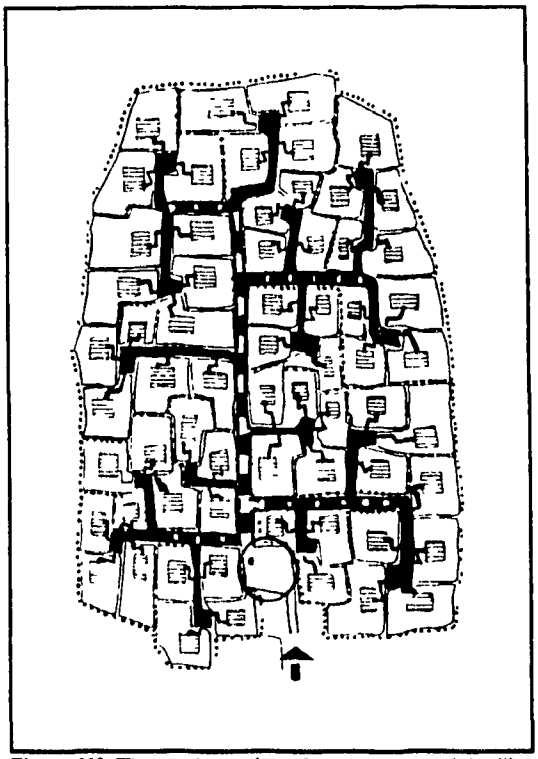

Figure 112: The amalgamation of lots, streets and dwelling units. (From: Bernard Delaval, 1977.)

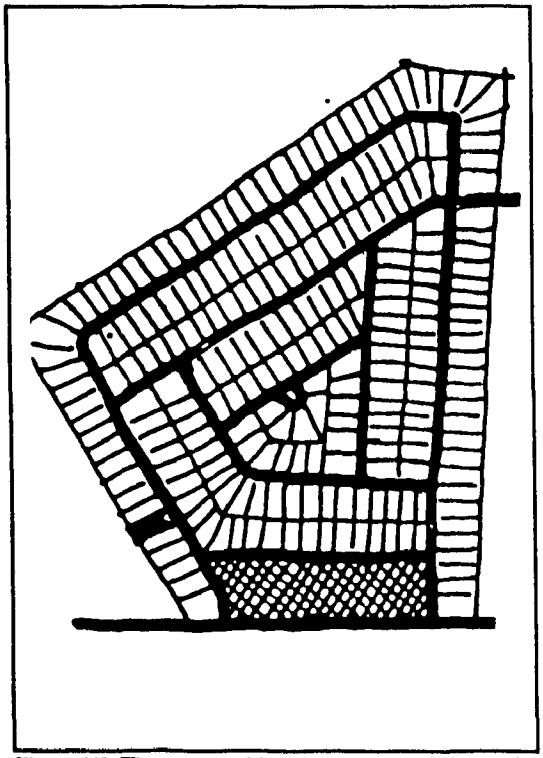

Figure 113: The separated lots, streets, and dwelling units. (From. Norbert Schoenauer, 1981.)

Furthermore, the lack of an appropriate and congruous hierarchical order in the built habitational environment, both in terms of streets, lots and dwelling units, and in terms of houses, clusters and neighborhoods, gives little opportunity for cohesive social groupings and active social life to form.

Contemporary neighborhoods, even though related to the environmental needs of individuals and the spatial needs of families, ignore the communal needs, requirements and benefits of community life. A sense of identity, although essential at the individual and family, is far more important at the community level. For defining this sense of communal identity, hierarchical organization of the space is a prerequisite. Current standard land subdivisions seldom consider hierarchy as a component in planning residential environments. Absence of hierarchy in its spatial sense has led, to a great degree, to the loss of cooperative interests, indifference, neglect and vandalism. Furthermore. it caused alienation, anonymity of individuals, lack of social contacts and of mutual assistance among neighbors.[9]

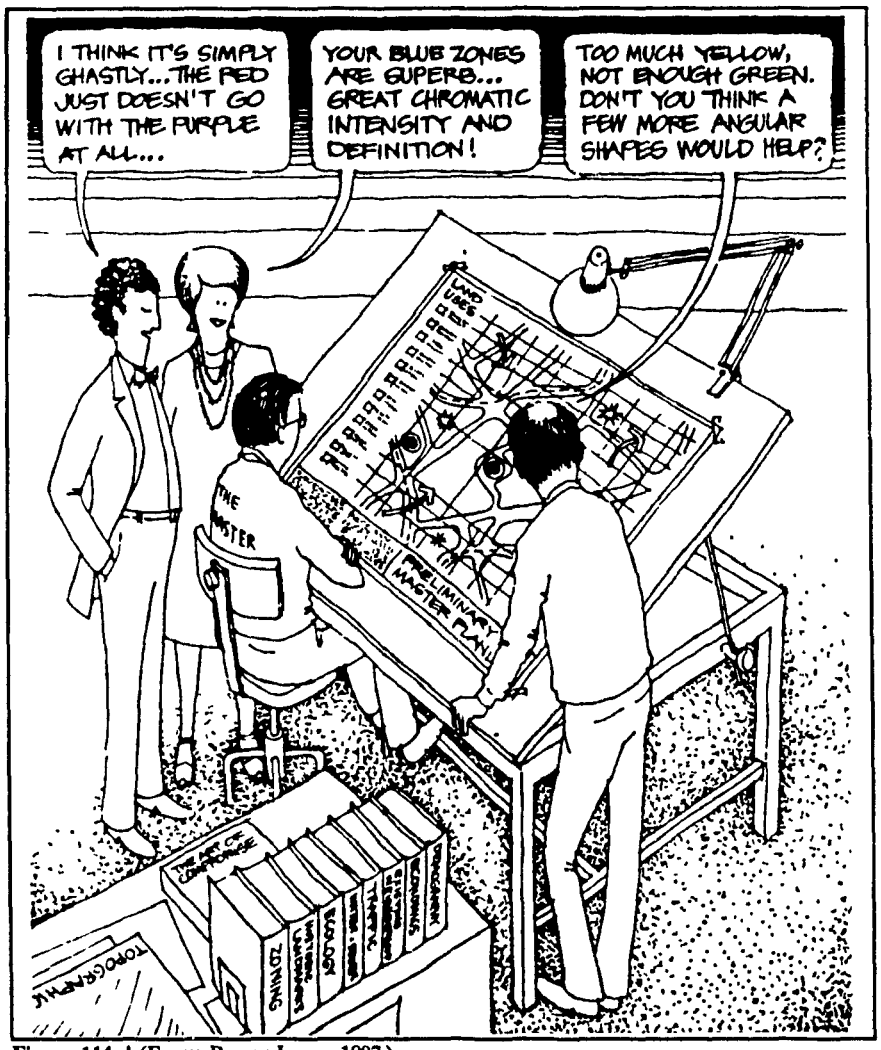

Figure 114: ! (From: Roger Lewis, 1987.)

In line with the principles of traditional quarters and of the organic paragon, the Garden City and later the Neighborhood Unit took the initial lead in advocating a hierarchical organization in the built habitational environment. Regardless of their ideologies, perceptions or scales, these community development schemes attempted to be an integral part of a coordinated procedure for building environments that were both contemporary and organic. The aim was coordination rather than disorganization, building rather than delineation, integral communities rather than separate lots, streets and dwellings and hierarchy rather than continuous, endless monotony.[10] Their theme focused on the epitome of traditional communities, and traditional communalities. As the ancestral phenomenon of clustering was the basis that structured the parts of a wholesome community, both the Garden City and

the Neighborhood Unit theories suggested that residential environments are to be composed of dwelling units within clusters within neighborhoods--a kind of hierarchy similar to the traditional medieval quarters.

AN EPILOGUE

Having presented an urban phenomenon namely the phenomenon of communal habitation, or literally according to the title of this thesis "the neighborhood," from the traditional to the contemporary, it should be conveyed that the anonymity that fashions contemporary neighborhoods can not be solely rationalized in terms of some physical means such as street patterns or density figures. Nor can it be reasoned in terms of some social bearings such as inhabitants' diversity or dwellers' mobility. The former justifications virtually promoted monotony in design, while the latter suggested stratification and ungoverned urban expansion. Along the journey of this thesis, the reader was intermittently informed that neither physical regulations nor social recommendations in neighborhood planning are entirely capable of fostering a sense of neighborliness and a spirit of a good place. Although architects, *urbanists*, as well as urbanites collectivelly acknowledge the need to humanize the scale of their perception of the built environment, the author ventures to call on the need to spiritualize it.

From the view point of history, there is little doubt that traditional urban communities, their social fellowship and their physical wholeness, have been created, fundamentally, around spiritual and religious beliefs. In his widely-read study, *The City in History,* Lewis Mumford said of the earliest forms of human settlemnts:

> [They] have to do with sacred things, not just with physical survival: they related to a more valuable and meaningful kind of life, with a consciousness that entertains past and future, apprehending the primal mystery of sexual generation and the ultimate mystery of death and what may lie beyond death. As the city takes form, much more will be added: but these central concerns abide as the very reason for the city's existence, inseparable from the economic substance that makes it possible. In the earliest gathering about a grave or a painted symbol, a great stone or a sacred grove, one has the beginning of succession of civic institutions that range from the temple to the astronomical observatory, from the theatre to the university.[11]

Wherefore, if contemporary habitation excludes the spiritual conduct from its social and physical mandates, the built environment's equation of balance is then in the phase of instability. Scholars who

would treat the canvass against environmental and human degradation only in terms of physical and/or social facilities see only a small part of the problem. According to Mumford's closing paragraph of his cogent *The Pentagon of Power,* today's urbanism and the modern "way of life" is becoming a lifeless desert, and nothing less than a profound re-orientation of our way of thinking will save it.[12] "For its effective salvation," asserted Mumford, "mankind will need to undergo something like a spontaneous religious conversion: one that will replace the mechanical world picture with an organic world picture ... ."[13] A picture that yet has to represent order, embody balance, and variegate the canon of unity in diversity:

> Consider the flowers of a garden. Though differing in kind, color, form and shape, yet, inasmuch as they are refreshed by the waters of one spring, revived by the breath of one wind, invigorated by the rays of one sun, this diversity increaseth their charm, and addeth unto their beauty. How unpleasing to the eye if all the flowers and plants, the leaves and blossoms, the fruit, the branches and the trees of that garden were all of the same shape and color![14]

Figure 115: "THE END .." (A water-colour drawing by Arther Severn, see *The Gardens of England,* 1911.)

Endnotes

1. Beever, R. 1985, p 19
2. Lynch, K. 1987, p. 91
3. Ibid
4 Jacobs, J. 1961, p. 20
5. Ibid. p. 97
6. Ibid. p. 96
7. Schoenauer, N. 1964, p 36
8. Charles, Prince of Wales. 1989, p. 15
9. *Habitat Bill of Rights,* 1976, p. 55
10. *Towards New Towns for America,* 1971, p. 221
11. Mumford, L. 1961, p. 9
12. Mumford, L. 1970, p. 413
13. Ibid.
14. *Selections from the Writings of Abdu'l-Baha.* 1978. p. 291

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