Chapter 1

INTRODUCTION

URBANIZATION

Urbanization as a world-wide process has been considered not only as an index of economic development but also as an important factor of social change.

The first step towards urbanization was probably taken when Paleolithic man moved from his cave into the shelters he built with leaves and branches. The first permanent towns and villages, however, developed only when man discovered the techniques of plant cultivation and domestication of animals thus creating possessions, which in turn, brought the need for protection. Families, therefore, collected into friendly groups and formed villages in which the agrarian population enjoyed the advantage of mutual protection.

Within these primitive settlements, numerous forces probably acted one way or another leading to adjustments, changes and conflicts within humankind. Evolving from these processes the development of cities has marked the culture of the people.
More recently, in the Nineteenth century, there were two changes which had far reaching influence on human society. They are --

1. the industrial revolution

2. the proliferation and growth of cities reaching explosive proportions.

The most important prerequisite to industrialization was the emergence of market economy which was characterized by the commercialization of land and labour. As the value of land started rising, land within the urban area became scarce, leading to the acquisition of agricultural and grazing land, and intense use of the urban land. Similarly as the demand for labour started rising, people started flocking to the urban centers for a better livelihood and in due course this led to the problems of crowding and unemployment. These two processes, involving land and labour, led to the growth of cities.

As this urban-industrial revolution spread throughout the world and human society underwent major transformations, the process of urbanization became more and more complex. It was, thus, pointed out that "The city is a social consequence; it takes more than rational, economic motives to stimulate and sustain the growth of the city." (Leonard Reissman).

The city, therefore, is a complex social phenomenon that has so far resisted any simple explanation.
The city has been defined in various different terms. A commonsense definition of a city is —— A city consists of a considerable number of people living in proximity to one another, with permanent buildings and a network of streets and transportation systems.

According to legal definition —— The city (municipality) consists of a legally incorporated area whose population exceeds a specific minimum and within whose boundaries a local government exercises authority as delegated by the state.

The Natural-Social definition is —— As a natural phenomenon, the city constitutes a unit which can be marked off from neighbouring territory by such characteristics as size and density of population, typical occupations and quality of social relations.

Population concentration, more often than physical structure, has been taken to mark the presence of a city. A city is assumed to exist wherever there is a relatively large, densely settled population. According to Botero (1956) "A city is said to be an assembly of people .... And the greatness of a city is said to be, not the largeness of the site nor the circuit of the walls, but the multitude and number of inhabitants and their power."

Structurally the city has been defined as "a relatively large, dense, and permanent settlement of socially heterogeneous individuals." Louis Wirth (1938).
A locality regarded as a city is often further characterised as an "urban" place. The meaning of the word "urban" is perhaps more vague than "city". According to Fustel de Coulanges, "Urbs was the place to assembly, the dwelling place, and, above all the sanctuary of the association." Urbs has since been transformed into the adjective "urban" which denotes some one or combination of properties of life in thickly settled places. Nowadays "urban" refers to a quality of life that is typically found in a city. It, thus, follows that urbanism is a way of life and urbanization is a process leading to the establishment and growth of cities. In other words, it is a growth process characterized by movement from the simple, highly localized unit to the complex and territorially extended system.

Urbanization, therefore, is said to be taking place when the proportion of total population that is residing in places defined as urban is rising, or when urban population is growing at a faster rate than the average rate of growth of the nation. All population growth is composed of two components:

a. "reproductive change" (also called "natural increase"), which is the excess of births over deaths, and

b. net migration. If one assumes a situation wherein there is no net international migration, then the migration component for each community within that nation must be due entirely to net internal migration.
The rate of urbanization is generally slow in the early phase of development; it becomes faster, until a point is reached after which it slackens to a steady pace. As a general rule, however, it is seen that the more recently that industrialization has occurred, the faster is the rate of urbanization. In that context, it can be seen that India is in the midst of a gigantic urban increase. This is known because an increase in urbanization is closely linked with industrialization, or over-all economic development.

Understanding the city and its problems, except for legal and administrative aspects, requires use of the natural rather than the legal type of definition.

**Characteristics of Natural Cities.**

Cities are characterized by certain qualities because of which they stand apart from other human organizations. However, these qualities shade so gradually from urban to rural extremes that determination of a dividing line becomes difficult. Some such characteristics are ---

1. **Specialized function within a larger economy** --- The city serves a specialized role within the broader network of human relations of which it is a part. The basic kind of specialization that differentiates cities from farm communities is that of non-agricultural occupations. City men have a reciprocal relationship
with the farmers. City men perform a variety of specialized functions such as trading, manufacturing, professional services etc. for which the farmers are dependent upon them. The agriculturists on the other hand supply foods and fibres and other agricultural products on which the city dweller survives. Therefore, farmers and city dwellers are firmly bound together in an integrated economy wherein each performs specialized services that promote the welfare of both.

Some cities, however, are characterised by other specialized nonagricultural functions. There are the administrative cities such as the national capitals and some state capitals. There are shrine cities such as Mecca and also recreational cities or educational cities where people throng for the services available there. Most large cities perform a variety of specialized services and cannot be characterised exclusively in terms of a single kind. But every natural city, of whatever type, has this essential characteristic: it performs one or more specialised nonagricultural services within a larger division of labour economy.

2. Large, dense aggregations of people --- Urban occupations typically require less ground space per person than does farming. The total amount of land used directly by an urban family for all purposes --- work, shopping, home, school, transportation, play --- constitutes only a fraction of that needed by a farm family.
By living in relatively dense aggregations, city people can reduce the amount of time spent in daily travel between home and work, stores, school, and places of recreation. Also, by clustering they can reduce money costs of streets, sewers, water pipes, and transportation. The relatively dense clustering of urban units thus represents an attempt to find an easier and more effective way of adjusting to the material environment and to other men. Size of population also differentiates cities from rural communities, but no sharp dividing line may be found. Actually various kinds of communities --- open country, village, town, small city, metropolis --- range in an almost unbroken size series from a handful of people to several million. The population size depends, in part, on different space requirements for nonagricultural and agricultural occupations.

Size of population also aids indirectly in differentiating urban from rural areas in that it influences the character of social relations among members of the community. When the population becomes so large that most of the people are not individually known to most of the others, an impersonal social milieu tends to arise.

Three other qualities of population - mobility, permanence, and heterogeneity - also characterize urban areas, though each taken alone does not seem very useful.

a. Urban populations appear to be more mobile.

b. A city affords permanence of residence even though its
people move. The city contains elaborate material equipment — homes, stores, factories, schools, streets — which can be moved or replaced only at tremendous cost. It therefore offers permanence of utilization, even though its building structures may be occupied by a succession of people.

c. The city houses a heterogeneous population of both sexes, various ages, and possibly diverse ethnic groups and socioeconomic classes. Typically, an urban population is sufficiently heterogeneous as to age and sex that it has the potentiality of reproducing itself biologically. Socially, it is heterogeneous enough to support locally all of the major types of institutions necessary to daily satisfaction of basic human wants i.e. family, school, government, industry.

3. Distinctive Social Relations --- The size, density and mobility of urban populations greatly influence the characteristics of social relations among their inhabitants. Three characteristics of urban social relations different from those of the farm community are impersonality, complexity and role differentiation. Because of these and other qualities of urban social relations, the social life of the city contrasts sharply with that of the rural communities.

4. Internal Organization --- The city may be conceived of as something more than a large, dense aggregation of people, building, and non agricultural occupations, characterized by complex impersonal social relations. It may be viewed also as an
externally organized community. Two aspects of the internal organization of the city may be mentioned — spatial and social.

Spatially, the large city contains several kinds of subareas: a central shopping district, secondary commercial areas of different sizes, wholesale areas, areas of light and heavy industry, and a considerable variety of residential areas. Each has important relations with certain others. Each area also tends to seek that spatial location where it can perform its specialized functions most efficiently but, because of competition with more powerful areas, sometimes gets crowded out of the more efficient place. On the whole, each area affects the position of others, and all together form a more or less integrated spatial unity. Socially, the city includes a variety of institutions, classes, and groups which in spite of the high degree of segmentation of personal life become organized both into an inclusive social unit and into a number of distinctive little social worlds. Citizens also participate in carrying on local government and school; they read the same newspaper, patronize the same local recreational facilities, and enjoy city-wide celebrations. Together they share a common social life that reflects much of the general social-cultural complex of the larger society. Thus, socially, as well as spatially, the city may be conceived of as an organized community, even though there are many evidences of lack of effective organization in any specific city.
Urban Growth

It is evident that most people have congregated in cities for their mutual welfare. But, as the cities have started expanding, the people are now retreating from the congregation, because of which we now even speak of suburban areas. This movement has added another dimension to city planning.

However, few cities began with a plan. They began as free cities in which men settled by choice. Form was introduced gradually as the land was apportioned among the inhabitants and as the rate of urbanization increased. Three classical theories of urban growth have been put forward on the basis of the growth patterns. They are shown in Fig. 1.1 and are as follows —

1. Concentric Zone Theory. In the view of Ernest W. Burgess, the expansion of the urban core, or the central business district, proceeded outward, much as a pebble thrown into a pond sends out concentric rings. Each ring represents a successive zone of expansion, and each zone can be identified; for example, a zone of transition, zone of independent workingmen’s houses, better residential zone, and the commuter’s zone.

2. Sector Theory. Homer Hoyt viewed urban growth as more complex and varied, responding to or resisting topographical and transportation factors in the environment. Hence, sectors might fan out from the central business district in concentric semi circles or pie-shaped wedges, following a pattern that is unique from city to city.
FIG. 1.1. PATTERNS OF URBAN GROWTH

MULTIPLE NUCLEI
SECTOR THEORY
CONCENTRIC ZONE THEORY
3. Multiple Nuclei. A pattern of simultaneous expansion of separate and differentiated districts was proposed by Harris and Ullman. Activities of spacialized kinds tend to cluster together; others are incompatible or are unable to afford location on desirable sites. This leads to the uneven growth of certain urban areas, so that urban growth is a complex phenomenon illustrating, to different degrees, each of the classic theories.

A later development in urban planning is the imposition of zoning. Utilizing this concept of zoning, cities have passed laws and ordinances which limit activities of a certain type to within a particular zone. Thus, there may be residential, business, unrestricted zones etc. In most cities zoning is in the form of negative regulations. It can prevent the building of heavy or dangerous industry in residential neighbourhoods and restrict the type of commercial and industrial use of certain areas. However, zoning alone cannot change indiscriminate or improper land uses of the past, nor remake cities.

Problems of Urbanization.

As the rate of urbanization increases, there is a parallel growth in the urban population, which in turn leads to greater demand on the amenities and opportunities available in the city. This leads to various problems which are more evident in the poorer countries because they are unable to balance the pace of
urbanization with increased development of urban facilities. Some of these frictions incidental to urban growth are ---

1. Transportation. The problem is twofold. In the first place traffic congestion on city streets is forcing deconcentration with a resulting need for added infrastructure. Every improvement in traffic lanes seems to provoke greater traffic densities and also encourages deconcentration of industry and residences.

   The second problem is the inadequacy of the public transport system. Due to this inadequacy and also because of deconcentration, the reliance on private automobiles is increased leading to increased traffic congestion.

2. Environmental Pollution. No other form of human settlement, as the city involves so intensive a use of occupied space. Intensity of use imposes undue strains on local water resources, alters climate and surface features, and creates an enormous task of solid and liquid waste disposal. The inability to meet these demands by the existing civic amenities leads to different types of environmental pollution. The main types of pollution are water, air, noise etc. These, in turn, lead to other urban problems such as disease and other health hazards.

3. Urban Blight. The physical structure as well as the physical environment of the urban unit is subject to misuse. This misuse, referred to as blight, is a product of institutional
circumstances and processes. A blighted area is one that has lost its attractiveness for all its users; consequently, its buildings and installations have been allowed to fall into deterioration.

4. **Slums.** The population of major cities increase with urbanization causing much strains on existing systems of space for dwellings, leading to the emergence of slums. Slums are settlements of communities belonging to the lowest socioeconomic groups, managing to survive in the most ramshackle and unhygienic environment, by leading a hand to mouth existence. In such a settlement all basic civic amenities are more or less non-existent. Sanitation facilities are also missing. Slum conditions are manifestly not conducive to physical and mental health. They do, in fact, account for disproportionate amounts of delinquency, crime against person, and domestic discord.

5. **Housing.** Another problem is shortage of housing. A major factor responsible for this in urban areas is rural to urban migration of population. The urbanward migration of people seems to be generated by perception of the city as a center of opportunity, be it economic, social or political. This shortage of shelter is manifested in the form of overcrowding, proliferation of slums, unauthorised colonies, growing number of street dwellers etc.

6. **Unemployment.** Rapid industrialization led to urbanization and with industrialization the demand for labour grew. People thus
flocked to the cities in search of employment. However, as the rate of urbanization slackens to a steady pace, after an initial rapid increase, the opportunities for employment also decreases leading to unemployment. Also the urban economy demands for specialized nonagricultural services requiring certain skills. Initially, there is great need for this type of skilled services but as more people acquire these skills the city is no longer able to accommodate them all by providing employment. This again leads to unemployment.

7. Poverty. Accompanying unemployment is the problem of poverty. When a person does not earn he is poor and cannot afford to meet the basic needs of life such as food and shelter. This again has ramifications on his relationships with other people, leading to another type of poverty altogether.

8. Social Relations and Mental Health. Perhaps the most important consequence of city life are its longterm effects on social relationships and mental health. These can be most important when they extend across generations.

The sheer size, density and mobility of urban populations greatly affect the social relationship that the inhabitants have with each other. They employ various types of behaviour to deal with and adapt to the urban social milieu. Breakdown in these psychological processes is followed by setbacks in social relationships and in extreme cases also affects mental health.
Models of Urban Life.

Social scientists from different disciplines have chosen a different aspect of the city and built models of urban life around it. Some of these models are ---

1. The Human Ecological Approach. One of the earliest and still one of the most influential social science models of urban life is that of the human or urban ecologists.

The urban ecologists approached the study of a distinct environment such as the city just as they might have approached the study of a lake, a mountain, a species of animal, or any other natural unit. According to these theorists, people in the city compete for scarce economic and social resources. They also adapt their way of life to the requirements of the environment. The urban ecologists, therefore, assumed a one-way influence relationship between the structure of the environment and the behaviour of the individual. Therefore, they concluded, a person's mode of behaviour is determined by the environment, and the person either adapts or fails to survive.

This position was taken by Wirth (1938) in his highly influential essay "Urbanism as a way of life". According to him the existence of a large number of individuals implies a wide range of differentiation among them along the lines of race, ethnicity, class etc. Differentiation leads to absence or weakening of social bonds and a feeling of community. This leads
to competetiveness, indifference, even a predatory orientation toward others. These qualities are, according to Wirth, necessary for success in the city.

Another consequence of large numbers is the segmentation of human relationships. Relationships with faceless people become superficial, anonymous, and transitory. Close physical proximity, along with great social distance, gives rise to a sense of loneliness, nervous tension, and mutual irritation.

Thus, the city offers few advantages in exchange for stress, anonymity, alienation, and personal and social disorganization. This perspective has had a major influence on popular conceptions of the city.

Amos Hawley (1979, 1981), however, has taken the basic ecological perspective and developed a more positive view of the city. Harold Proshansky (1978) has also said that cities make people versatile because of the variety of people and circumstances that they will inevitably encounter. Jonathan Freedman (1975), on the other hand, points out that the city may have either a positive or a negative effect, depending upon the characteristics of the person or the requirements of the situation. Offering what he calls the density-intensity hypothesis, Freedman has argued that the effect of a variable such as urban density is to intensify or amplify the individual's typical response to a given situation. If this view is correct, then as a result of living in a large city, a lonely person would
come to be even lonlier (negative effect), but an active person would come to be even more active (positive effect).

Thus, Wirth's version of urban reality as just one view of the city. It emphasizes the negative effects of urban life and many of these effects remain part of the stereotype and folklore of the city rather than results of empirical documentation.

2. Subcultural Theory. Claude Fischer (1984) has developed the subcultural approach. Fischer's view of the urban emphasizes the similarities among groups of people rather than their differences. He points out that in the city people with certain characteristics, interests, values and skills and are more likely to find others similar to themselves than country dwellers.

Ethnic and racial communities evolve, neighbourhoods based on occupations and social class form, and areas united by lifestyles are generated and emerge as vital subcultures. Cities often become, in Park's (1916) words, "mosaics of little worlds." Howley (1972) also states that high physical density includes the easy availability of like-minded individuals, opportunity for selective association, mutual assistance in achieving access to scarce facilities, and exposure to innovative ideas.

Though Fischer's urban reality contrasts with that of Wirth's it is equally biased but in a positive direction. The city, however, can be a lonely place. There are many people who fail to
become part of any significant community of support and then find themselves isolated and lonely.

3. The Overload Model. This urban theory was first presented by George Simmel (Simmel, 1969). Later it was modernized in terminology by Milgram (1970).

This model primarily proposes that people are active in dealing with their environment and that they develop mechanisms for coping in order to meet the city's demands. According to this view residence in a densely rather than a sparsely populated area leads to more perceptual stimulation from exposure to other humans and their byproducts (e.g. noise, pollution, buildings, and information). The large number of stimuli that compete for attention, evaluation and response tax the limited "channel capacities" of the human mind so that there is a psychic overload. Following this either or both of two consequences may follow: a series of adaptations by the individual to "screen out" less desirable inputs, and/or psychic stress from the costs of these efforts and from stimuli that leak in because of incomplete adaptations. The results at social level are high levels of pathology, while at the individual level a cultural life-style develops that serves to isolate the individual from unwanted inputs (e.g. aloofness, blaseness, and dehumanization). This theory has been confirmed in laboratory and field research and observed in real-life instances of altruistic behaviour (Krupat & Epstein, 1973; Latane & Darley, 1970).
Using this framework, Daniel Geller has proposed a different version of urban reality (Geller, 1980; Geller et al., 1982). He has suggested that it is equally important to look at people's needs for complexity, novelty, excitement, and exploration when we consider the city. If this class of human needs is emphasized, may be the city is just right and the small town is a case of "too little." For some people the real problem may be "rural underload" rather than "urban overload."

The overload model, thus, focuses mainly on intrapersonal cognitive processes rather than on interpersonal social processes. Yet, it clearly makes a link between psychological functioning and social interaction.

4. Territoriality Model. This perspective seems to lie behind Hall's (1966) discussion of cities and the personal-space research of those such as Sommer (1969) and Evans and Howard (1973). This thesis states that people "naturally" need personal territories and that frustration of these spatial "urges" is anxiety creating. Residence in highly dense areas means that there will be more such frustrations, due both to more frequent physical intrusions and to people's subjective sense of shared territories. Consequently city life leads to stress, which in turn produces a combination of aggression, withdrawal and psychic disorder. Also, various groups in dense areas are forced to compete for the use of space. To resolve these often conflicting demands, dominance, hierarchies, spatial boundaries, and the control and defence of certain neighbourhood areas by
groups develop within cities.

5. The World of Strangers Approach. According to Lyn Lofland, the key to understanding the urban experience is an acknowledgement that to live in the city is to live in a world of strangers. She also suggests that urbanites perhaps adapt to this by learning how to develop satisfying fleeting relationships as well as more long-lasting and deeper ones.

For Lofland the key issue is the problem of anonymity. Anonymity can be of two types. The first is the unknown quality of others, of the nameless, faceless nature of the strangers in the city. The second involves being anonymous to others, of being nameless to, or not cared about by the people around. The one involves not knowing, the other involves not being known. It is further suggested that the urbanite learns to relate to strangers by "ordering" of the populace on either of two dimensions. That is, clues are gained about what people are like and how they should be treated as a function of either appearances (e.g., dress, personal manners) or locations (the places and circumstances in which they are encountered).

As for the sense of personal anonymity, beyond a certain point it would be intolerable to most people. Therefore, the urbanite makes use of public settings in such a way as to develop varying degrees of personal or private relationships within them. The differing levels of urban intimacy involves the relationships of customer, patrons and residents. In the role of a customer,
one simply comes and goes. Chances of returning is low and the relationship is transient. Such fleeting encounters abound in the city. As a patron, however, one is not just a customer but a regular customer. One comes to be, thus, known and recognized but personal knowledge remains superficial. The relationship reaches a state of familiarity. Finally, by forming a relationship in which one is a resident, public territory is turned into a "home territory." Residents know not only the features of a place but also its people and patterns of use. Their relationships develop to the point of intimacy and caring, and they feel at home there among other residents.

The point, therefore, is that urban concentration has not created a race of people who have lost the capacity for close, caring relationships; rather, it offers people the skills for having satisfying fleeting relationships. Many kinds of relationships abound for the urbanite, from anonymous to fleeting to deep; and each fits into a larger whole of urban experience. Having many kinds of relationships can often be satisfying and can sometimes be frustrating, but according to Lofland it makes the experience of city living both interesting and unique.

6. Nonecological or the null hypothesis. This perspective on urban life has been most forcefully expressed by Herbert Gans (1962a,b,1967) and Oscar Lewis (1952,1965). According to them the critical factors that distinguish urban from rural life can be attributed to differences in the population inhabiting these different settings. Gans states that cities are reflections of
their people; people are not reflections of their cities.

The physical and ecological impacts of cities are, therefore, discounted and differences between urban and rural locales are described on the basis of differences in their people.

Even though what this theory states is correct, the basic physical context within which people live cannot be denied. This is a fundamental part of seeing the city as a place of multiple and contrasting realities and merely reiterates the basic position that behaviour --- in this case urban behaviour --- must be explained as a joint function of the person and the environment.

Urbanised Social Relations.

The modern city dweller pursues his daily activities within a local metropolitan community. The local community thus forms the immediate social world of customs, values, institutions and groups for the great majority of city dwellers.

The local network of social relations that characterizes a metropolitan community differs in many ways from that typical of rural communities. Distinctive features of this type of urban social world seem closely related to the characteristics of cities.
The urban world offers greater diversity as well as greater numbers of contacts. Part of this diversity stems from the ethnic and cultural heterogeneity of the urban population.

Diversity of urban contacts also arises from specialization and division of labour. A person's contacts with doctor, architect, collector, engineer, mechanic, plumber and artist are likely to differ tremendously. Thus, the average citizen in the city finds himself experiencing a great diversity of contacts, as contrasted with the agriculturist.

Groups and group relations, like individual social contacts exhibit greater diversity and complexity in the metropolis. City people not only retain the basic primary groups and fundamental institutions characteristic of rural areas --- for example, family, playgroup, religious group --- but in addition they develop elaborate networks of institutionalized relations and a wide variety of voluntary associations centered around specialized interests and roles.
2. Impermanence and Anonymity of Urban Contacts. In contrast with a stable rural community where social relations ordinarily persist throughout life and where everyone knows everyone else by name, a large portion of urban social relations take place between nameless strangers, and they last for only a limited period of time.

Neighbourhoods vary greatly in permanence of contacts, some localities having high proportions of longtime residents and others having so shifting and anonymous a population that the typical resident seldom knows by name more than a small percentage of his neighbours. The fact that most urban social relations continue for only a short time means that the person continually makes new social contacts. This speed of change of social contacts, ordinarily called social mobility together with a high degree of anonymity, promotes secondary relations and significantly influences characteristics of urban persons.

3. Preponderance of Secondary Relation. The metropolis may be characterized as a world of cold, formal impersonal secondary contacts, in contrast with the rural world of warmhearted, personal primary relations. This contrast between secondary and primary relations probably constitutes the most important single difference between the social world of the metropolis and that of the rural community.

In impersonal secondary relations each person views his associates not as direct sources of satisfaction in themselves
but as means to further ends. Thus, the urban shopper regards a sales clerk not as a source of satisfying personal contact but as a convenient aid in making purchases. A large proportion of urban relations are impersonal rather than personal, and therefore, social contacts are viewed as aids in reaching some goal.

As secondary relations are less intimate, many relations also remain highly non-intimate in character and tend to be guided by rules characteristic of formal relations. Also, because they deal less with spontaneous, intimate, personal relations, secondary contacts ordinarily exhibit a lower degree of emotional colouring. They tend to become more coldly rational and intellectual, as contrasted with warmer more emotional primary relations.

Although impersonal secondary relations characterize many aspects of the urban world, and although frequently the quality of secondaries penetrates into relationships ordinarily counted as intimate and personal, one should not conclude that urban relations are exclusively secondary. On the contrary, primary groups form an essential part of the social world of the majority of urban dwellers. Most urbanites are reared in parental families. Most city children enjoy intimate play-group experiences with other children; and most urban adults have intimate friends. Even in the work place, informal organizations in the form of cliques provide primary contacts. The generalization that "city relations are secondary" may,
FIGURE 1.2 THE MORPHOLOGY OF A MAN'S SOCIAL NETWORK SOURCE C.A. SMITH AND C.J. SMITH (1978)
therefore, be modified to read that "secondary relations predominate in the city," especially in the broader aspects of social relations that differentiate the metropolitan from the simple rural community.

4. Social network. The diversity in the social relations of an urbanite and the overlapping present in the social contacts of his various roles, makes a sort of social linkage between his various contacts, forming a social network. The wider the social network of an individual, the larger is the number of his contacts (Fig. 1.2).

Urbanization, therefore, touches every aspect of an individual's life and it is indeed correct to say that "Urbanism is a way of life."

CROWDING

The process of urbanization is related to population growth. As the population increases so does the pace of urbanization and vice versa. Population increase also increases the demand on the existing infrastructure as it is a characteristic of the city that its inhabitants cluster together in relatively dense aggregations. This leads to one of the major problems of urbanization, along with a host of others, namely crowding.

Crowding, per se, refers to the concentration of a large
number of individuals within a limited space. However, the concept of crowding can have two quite different connotations.

Physical crowding is directly equivalent to density, which is the ratio of individuals to area or area per person. Physical crowding can also be in terms of inside density and outside density (Zlutnick and Altman, 1972). Inside density is the ratio of individuals to space inside buildings, whereas outside density is the ratio of individuals to space outside buildings. Other types of density have also been identified, varying group size with the amount of space held constant is called social density. While changing space while holding group size constant is referred to as spatial density (Loo, 1972; McGrew, 1970; Zlutnick and Altman, 1972).

The subjective feeling of crowding, on the other hand, deals with the stressful subjective state associated with the perception of reduced physical and/or psychological space. Feeling of discomfort, perception of the loss of control over social interaction, encroachment on privacy, negative perception of space, etc. are considered as characteristic features of the feeling of crowding.

From the above it is clear that density and crowding mean two different things. Density refers to physical conditions associated with number of people in given amount of space. Crowding on the other hand, refers to an experience—the outcome
of appraisal of physical conditions, situational variables, personal characteristics and coping assets. Therefore, under some conditions and for some people, a given level of density in a setting will lead to crowding, while in other conditions, or for other people, it may not. Thus, according to Lazarus (1966), crowding is an outcome of evaluation of settings and density is only one of several aspects of a setting that appear to determine the outcomes of these appraisals.

Researchers have, thus, begun to deal with crowding as other than a simplistic, unitary concept. Most of them agree that crowding deals with psychological, subjective states that typically have a stress component. Some researchers reason that such feelings are associated with perceptions of too little physical or psychological space (Stokols, 1976); others emphasise feelings of loss of control over interaction and undesirable or excess contact with others (Altman, 1975; Desor, 1972; Rapaport, 1972); others discuss disharmonious psychological and biological processes (Esser, 1972).

Whatever the stance may be, many researchers have elaborated on the concept and put forward various theoretical models of crowding.
Theoretical Models of Crowding.

By borrowing from certain theoretical perspectives on urban life and also by adding to them, the following models have been proposed.

1. Stimulus Overload Model. This model proposes high density as a stressor because of its potential to provide excessive stimulation to the individual (e.g., Baum et al., 1982; Desor, 1972; Saegert, 1973; Valins and Baum, 1973). High levels of density provide additional stimuli which individuals cannot handle. They then experience crowding which may lead to confusion at the cognitive level, fatigue at the physical level, and escape and withdrawal at the behavioural level.

The feeling of crowding is, therefore, a stress experience and leads to certain behaviour which may be unhealthy or even lead to the development of various adaptive strategies. This is because high density situations are peculiar stress situations where many social and normative factors operate along with the presence of other people (Saegert, 1978).

2. Behavioural Constraints Model. Proshansky, Ittelson, and Rivlin (1970), emphasised that the feeling of crowding is a stressor because it imposes restrictions of behavioural freedom leading to behavioural and psychological reactions. Feelings of crowding are induced by violations in the use of space and frustration of goals by the physical presence of others.
Goal interference and constraint are also major elements of Stokols' theorising (Stokols, 1972, 1976). The important factor in the experience of crowding is the feeling that the inability to obtain desired or needed space will lead to unpleasant consequences. As a result, the individual makes various behavioural and psychological adjustments to increase the space. Feelings of crowding are expected to be the greatest when failure to attain space requirements represents a potential personal threat to one's security. Stokols also suggested that crowding in primary environments may have more significant effects on the individual than crowding in secondary ones, possibly because it is more difficult to avoid.

There are a number of other investigators who have emphasised behavioural constraint. Schopler and Stockdale (1977) have stated that others may be source of interference in crowded settings because they may hinder or prevent goal attainment. The degree of interference will determine the level of crowding stress experienced. Others who have supported this perspective are Sundstrom (1975), Wicker et al (1976), Heller, Groff, and Solomon (1977).

3. Attribution Model. Worchel (1978) has proposed that high density is more likely to create a condition where there is violation of personal space. In this situation if the individual attributes his arousal because of personal space encroachment to others, only then he would feel a sense of crowding, otherwise not. Thus, the feeling of crowding results from attribution.
Worchel, Brown and Webb (1983) have suggested the importance of attribution of stress to high density, as a determinant of the feeling of crowding and its negative effects. If arousal is attributed to some other factor than density, or if the attribution process is inhibited or interrupted, the experience of crowding can be reduced (Aiello, Thompson, and Brodzinsky, 1983).

4. Arousal Model. Arousal is given a central role in this model of crowding (Evans, 1978; Paulus, 1980). It is proposed that dense conditions increase arousal and in turn, affect task performance and social behaviour. Evans (1978) focuses on the arousing effects of spatial confinement and interpersonal distance. He argues that arousal will lead to attempts by the individual to minimise the arousal by minimising visual contact.

Studies of task performance and physiological arousal provide support for an arousal model of crowding, but drawbacks exist about the measurement and interpretation of measures of arousal. Also, these measures always address acute experiences and do not address the cumulative impact of chronic or episodic crowding.

Arousal, however, has always been considered as an important physiological dimension of stress. This relationship is mediated by a number of psychological and situational variables (Glass and Singer, 1972). There is also evidence of adaptation to stress. This relationship between arousal, stress and adaptation has been studied and elaborated in detail by Hans Selye with his General Adaptation Syndrome (GAS).
5. The Density-Intensity Model. Another model that focuses on density as a source of stimulation is Freedman's (1975) density-intensity hypothesis. According to this perspective, crowding is not inherently good or bad. Instead, crowding serves to intensify a person's typical reactions to situations. If the situation is a pleasant one, density should increase the pleasure experience. If the situation is basically unpleasant, density will make it more unpleasant. This intensification occurs because high density increases the importance of people or characteristics of the setting and hence intensifies the typical reaction to them.

Evidence for the density-intensity theory comes from a number of studies by Freedman and his colleagues (Freedman, 1975). While other studies have failed to support Freedman's predictions (Bundstrom, 1978).

Freedman's model differs from others in several ways. Appraisal is not typically specified but could clearly be included. Crowding is not necessarily associated with either a positive or negative judgement, but responses to the setting are determined by judgements about the intensity of spatial and social conditions and by one's typical response to the setting. Appraisal mediates the intensity of response rather than whether crowding is experienced.

6. Control. Baron and Rodin (1978) presented an extensive model in which they attempted to account for the broad range of crowding phenomena by means of the concept of personal control.
Personal control is defined as "the ability to establish correspondence between intentions and environmental consequences of one's actions," and a number of forms of control were considered. The different dimensions of control contribute to the complexity and uncertainty of high density conditions and require intense attentional monitoring. Crowding stress is experienced if control is impaired or threatened. One should be able to adapt rather easily if only overload or attention-induced arousal occurs. Additional loss of control, however, can lead to more serious long-term consequences. Crowding stress in such a case would be associated with negative mood states, stress, and disruption of task performance and social behaviour.

Crowding is associated with a range of anticipatory and corrective coping responses designed to reassert cognitive or behavioural control. If such coping is unsuccessful or very intense, the individual will evidence various residual costs. Different aspects of highly dense environments — diminished space, social stimulation in dyadic situations, and increased number of people — can instigate crampedness stress, privacy stress, and numerosity stress, each with its unique intervening control processes and coping mechanisms. Initial reactions to these crowding stressors may involve reactance or aggression. However, failure of these and other coping mechanisms will lead to apathy and learned helplessness (Seligman, 1975). Although Baron and Rodin (1978) recognise three different sources of stress, they propose that the numerosity-based one is more likely to be a source of negative consequences because of the
greater control-related problems with larger groups in confined spaces.

7. Ecological Model. The ecological approach of Roger Barker (1968) and Allan Wicker (1979) emphasises the physical as well as the social aspects of the human environment. Ecological theorists state resource shortages as a key element of crowding. They use the terminology "overstaffing" for this. To control crowding, access to a few available resources must be restricted, leading to line ups, priority rankings, waiting lists, and restrictions of entry to the setting. Space itself may be in short supply, in which case overstaffing is similar to high density. However, shortages of space are just one kind of resource shortage that may cause crowding.

The other side of a resource shortage is an excess of people. Whether shortage of resource or an excess of people is the focus of attention depends on which of the two is more easily altered. When the problem is viewed as an excess of people, the distinction between physical and social antecedents of crowding blurs.

It is evident that all these theoretical approaches are essentially complimentary and a complete perspective of crowding may require inclusion of the major elements of these differing approaches. But there is agreement on one point in all the major models, and that is that whatever the consequence, crowding is a stressor resulting in a stress response which shares many
similarities with responses to non-social stressors such as noise etc. but a number of unique factors are also involved in the human response to and coping with the stress of dealing with people in crowded settings.

The stress of crowding.

What is apparent from the above is the fact that a variety of influences (physical, social, and personal) leads, via perceptual-cognitive and physiological mechanisms to a stressful state labeled "crowding". This stress is more specifically defined by psychological processes such as perceived lack of control, stimulus overload, and behavioural constraint. These crowding processes, in turn, lead to a variety of consequences. Successful coping will lead to adaptation, while ineffective coping will lead to continued stress which in the long term will lead to behavioural breakdown. Figure 1.3 illustrates a summary model of crowding stress (Baum and Paulus 1987).

This leads to the question of what exactly is stress. The connotation of the word 'stress' varies considerably according to the ways in which people use it. Definitions given by different individuals accentuate different aspects of 'stress' and are not all-inclusive.

According to Hans Selye (1956), "Stress is the state manifested by a specific syndrome which consists of all the
FIGURE 1.3 SUMMARY MODEL OF CROWDING STRESS
(BAUM & PAULUS 1987)
nonspecifically induced changes within a biologic system." While Eastwood Atwater (1979) defines it as "any adjustive demand, external or internal, that requires an adaptive response."

Review of the different opinions show that there are three approaches to the definition of stress. The first approach describes stress in terms of an individual's response to a disturbing environment and thus treats it as a dependent variable. The second approach treats stress as an independent variable and describes it as a stimulus characteristic of the disturbing environment. While the third approach views stress as the reflection of a 'lack of "fit" ' between the person and his environment.

Influences on crowding.

Research has shown that many situations lead some individuals to feel crowded and others not to feel crowded. That is, certain personal characteristics are associated with a lower tolerance for proximity to others. In addition, for any given individual, certain situations lead to the experience of crowding while others do not.

This implies that certain personal and situational variables lead individuals to label an experience as crowded. However, according to most environmental psychologists, personal and
situational factors interact to produce the crowding experience. But, some personal and situational influences may be so strong that they produce the crowding experience regardless of other influences. These variables are –

1. **Personal Variables**: One factor which influences the feeling of crowding is the personality, preferences and expectations of the individual.

   (a) One personality variable is **locus of control**. Individuals with the belief that they exercise considerable influence over their own lives (internals), might be expected to be able to handle the stress of crowding better than those without it (externals). Most researches support the idea that internal locus of control eases stress (McCallum et al., 1979) but some do not.

   (b) **Sociability**. Individuals who generally like to be with others seem to have a high tolerance for dense situations than individuals who are not very affiliative. In two studies, Stuart Miller and his colleagues have shown that this tendency does mediate the crowding experience (Miller and Nardini, 1977; Miller, Rossbach & Munson, 1981).

   (c) **Stimulus screening** was studied (Baum et al., 1982) and it was found that screeners could cope with the social overload inherent in high density situations better than non-screeners could. Stimulus screening (Mehrabian, 1976a) is the tendency to be able to focus on desired stimuli while successfully tuning out
unwanted stimuli.

(d) **Preferences and expectations** have also been found to influence the perceptions of crowding. Those who preferred high densities felt less crowded; those who expected higher densities than they found, felt less crowded (Baum and Greenberg, 1975; Womble and Studebaker, 1981).

(e) **Past experience** with dense situations is another personal factor. Past experience with high density can modify crowding experience in the present. This past experience may be a lifelong characteristic in the culture or a short term experience such as living in shared quarters. Sex differences in response to crowding may also result from differential socialization.

Studies of crowding experience of different cultures do show some effect (Nasar & Min, 1984; Walden, Nelson & Smith, 1981; Gove & Hughes, 1983) but are inconsistent.

Personal experience with high-density situations or with a behaviour setting where crowding occurs may affect the degree of distress that is experienced. Several studies support an adaptation effect, that is, persons with a history of exposure to high density tolerate it better in new settings (Sundstrom, 1978). Rohe (1982), however, does not confirm it.

(f) **Gender**, probably through differential socialization of the sexes, also predisposes men and women to react differently to high density. Research in laboratory settings usually find that men respond to high density more negatively than women (Aiello,
Thompson & Brodzinsky, 1983). In some field studies, these sex differences are often reversed (Aiello, Baum & Gromley, 1981; Walden, Nelson & Smith, 1981; Aiello, Thompson & Baum, 1981a).

Two other important personal factors which influence crowding are the need for privacy of a person and the personal space of a person.

(g) The concept of privacy as held by any group reflects its cultural moorings. It differs from group to group and from situation to situation. According to Thomas Rapaport (1977), privacy is "the ability to control interactions, to have options and to achieve desired interactions."

There are several kinds of privacy, each of which serves a different purpose. Westin (1970) identifies four types: solitude, the state of being free from the observation of others; intimacy, the state of being with another person but free from the outside world; anonymity, the state of being unknown even in a crowd; and reserve, the state in which a person employs psychological barriers to control unwanted intrusion.

Westin also identifies four purposes served by privacy: it provides for personal autonomy, it allows for the release of emotions, it helps self evaluation, and it limits and protects communication. Thus, privacy is important in terms of the relationship between an individual or a group and the rest of society. The type and degree of privacy desired depends on the standing pattern of behaviour, on the cultural context, and on
the personality and aspirations of the individual involved. The strength of this need for privacy may affect how an individual perceives the presence of others and thereby influence feelings of crowding.

\[(h) \textbf{Personal space}, \text{ on the other hand, has been defined as "an area with invisible boundaries surrounding a person's body into which intruders may not come" (Sommer, 1969). Hall (1966) has developed an approach, based on this concept, concerning human management of space that he calls proxemics.}\]

Most environmental psychologists believe personal space is culturally acquired. However, it would be more appropriate to say that personal space is subject to cultural differences as personal space is something that all humans have. Thus, personal space is not culturally acquired, but acquired as part of the genetic inheritance of human beings even though differences exist between cultures and even between subcultures (Baxter, 1970). Differences in personal space may often lead to differences in the experience of crowding.

\[2. \textbf{Social variables.} \text{ Individuals are predisposed to experience more or less crowding in any given setting owing to characteristics they bring to it, but the influence of others also can either worsen or ameliorate crowding stress.}\]

The presence and behaviour of others may intensify crowding or not, depending on what those others are doing. Schiffenbauer (1979) reports that dormitory residents felt crowded in
proportion to the number of visitors they had.

If others are touching you, crowding is worse than if they are not, even though density is unchanged (Nicosia, Hyman, Karlin, Epstein & Aiello, 1979).

According to Stokols (1975), an important aspect of social behaviour is whether the interference with others' activities is intentional or not. Stokols calls interference that is believed to be directed at one's self as personal thwarting; and interference believed as not directed to one's self personally as neutral thwarting. Personal thwarting, according to Stokols, produces more stressful crowding than neutral thwarting.

Another social factor that also mediates crowding is the quality of relationships among those who must share space. This is supported by the laboratory findings of Schaeffer and Patterson (1980).

3. Physical variables. Physical setting can also increase or decrease crowding stress. Physical factors associated with crowding include what scale is under consideration (room, building, neighbourhood, city) and architectural variations.

Schmidt et al (1979) and Loo and Ong (1984) have found that crowding does depend on which geographical scale is being considered and also on the different factors at each scale that leads individuals to conclude that they are crowded.
Crowding is also affected by the arrangement of space in rooms and buildings. In high-rise dormitories, when the design involves long corridors, residents experience more crowding and stress accompanied by greater competitiveness and social withdrawal and by reduced cooperativeness and lower feelings of personal control (Baum et al, 1978; Baum et al, 1979; Baum and Valins, 1977).

McCarty and Saegert (1979), also found that living in a high-rise building (compared to a low-rise building) may lead to greater feeling of crowdedness and other negatively toned attitudes such as less perceived control, safety, privacy, building satisfaction, and lower quality of relationships with other residents.

Some other architectural features such as room brightness, ceiling height, furniture arrangement etc. also seem to affect crowding (Schiffenbauer, 1977; Mandel, Barrow & Fischer, 1980; Nasar & Min, 1984; Savinar, 1975; Wenner, 1977).

There exists a complex relationship between culture and physical environment. The natural environment (eg. landscape or geographical features like mountains or rivers) often influences the development of cultural practices within any given society. In adapting to the natural environment, people attempt to control or alter the physical setting by constructing man-made or built environments (eg. homes, offices, cities, towns etc.). These built environments are constantly being modified to meet human
needs and to reflect the prevailing attitudes, life-styles and customs. Thus, cultural values influence people's perception and views about the environment which in turn affect environmental design. These perceptions and designs, in turn, often lead to different definitions of what constitutes crowded conditions.

Thus, it is clear that high density alone is not sufficient to produce a feeling of crowding. Many other factors also influence whether a particular setting will lead to the experience of crowding.

HOUSING

Apart from crowding, perhaps the most important aspect of urban life is the homes which the city provides for its citizens. After all, the family is the very core of society; and the circumstances under which the family's members live determine to a very large degree the values and habits that people will develop.

Man's early house was essentially an enclosure he had managed to erect to meet his simple needs, i.e. a place for mating, a repository for his belongings and a protection against weather. He made it of mud, stone, wood, grass or bamboo that he could extract himself from the land around.

Benjamin Disraeli has said --- "The best security for civilization is the dwelling, and upon proper and becoming
dwellings depends more than anything else the improvement of mankind."

Housing can also be simply described as a place to live in peace, safety and dignity; as such it is recognized as a human right. This definition implies security, privacy, access to a means of making a livelihood and a base from which to develop. Safety also implies a clean and healthy environment. To many, housing represents an investment, a source of income and a sense of permanence and security.

Historically, the early houses were single unit independent dwellings with open space all around. This type of house was, therefore, the type preferred in early times. However, with the passage of time, as the pace of urbanization increased with an equally great increase in population size, cities have been faced with a scarcity of urban land which in turn has led to the shortage of housing. Because of this scarcity of land and space for independent dwellings, it became necessary to look for other alternate forms of housing.

The demand for urban land is high because city dwellers prefer to live near the business zone of the city so that they can save in terms of time and transport and also because inner city areas enjoy most infrastructural facilities.

Due to such urban needs of the city dweller, different types of housing have developed. These dwellings have evolved as a
consequence of changes in human needs due to the urbanization process.

**Types of housing.**

Housing of many types and styles are available. Of whatever type, housing should provide air, sunlight, privacy and safety.

1. **The freestanding house.** The single-family detached home, separated from others and surrounded by its own land has long been preferred by most people. As such a house is usually custom built to a family's requirements, it seems to be the perfect solution to the housing needs of the family.

2. **The row house.** The row house is any house in a continuous row of three or more dwellings separated by walls. In cities and towns the row house has been increasingly common in comparison to the detached single-family house. It has provided a practical shelter for low income families.

Historically, the early row houses were narrow and long structures and this concept then served as an efficient vertical use of scarce urban space.

3. **Town houses.** This is a suburban development; where clusters of row houses are built on open plots with common utilities and an allocation of larger portions of space to the houses as a group. This is a development in the west which has been gaining popularity. It's presence in Indian cities is still
4. Apartments \ Flats. The apartment unit is separated from others both vertically and horizontally. Multiple unit housing usually make use of the concept of apartments. These buildings vary from the low-rise to the high-rise buildings, the number of apartments varying correspondingly.

The apartment is primarily a type of dwelling for urban development, for crowded areas and for expensive sites. The tendency for it to increase in popularity is due to various causes, the most important of which is the desire to live in cities and, therefore, close to centres of work and business thus avoiding loss of time in travelling from suburban houses. Another important factor is the reduction of responsibilities and labour which apartments provide.

Apartment living, thus, has certain advantages over the detached house. Since the dwellings are more concentrated, communal facilities such as water and refuse disposal can be more efficiently and economically supplied. Such housing are attractive for singles, young couples, retirees and families of dual career couples as maintenance and other amenities (lifts, doormen, telephone service etc.) are dealt with by the management and these problems do not trouble the residents as they do in single-family detached houses.

Though apartment living was popularised by middle-class
families, any type of lifestyle can be attained in apartment living. These vary from the one-room efficiency apartment to the high-luxury penthouse (the top floor apartment).

Even though there are many housing alternatives to select from, a man in general selects his place of residence at whatever cost level he is able and willing to pay, so as to gain what appears to him the greatest sum of values he can obtain from that dwelling.

The Psychology of Housing.

Individuals spend more time in their houses than in any other place, and they return to them, usually daily, to restore their bodies and minds. Houses are the places where one can be most content, where people can get away from the business of the world and just be themselves.

An individual and his house, therefore, are intimately related to one another within the theoretical perspective of man—environment relations. People act on their environments and their environments in turn help determine behaviour.

Human needs and housing. Houses meet many different human needs. Need suggests something that cannot be done without, and human needs are those human requirements without which life would not be maintained.
By combining the efforts of psychologists such as Freud, Maslow, Murry, Horney, Adler and Fromm, Peterson (1969) has categorised human needs into six areas: semiphysiological, social stabilizing, individual, self-expression, and enrichment. All these needs are satisfied in some degree or the other by the house that one resides in.

The need for self-expression finds a special place in the relationship of man with his house as it brings into focus a number of concepts such as identity, exhibition need, privacy, territoriality etc.

Cooper (1979) explored the concept of self as it relates to the house. Based on Jungian concepts, Cooper articulates the notion that houses are just symbols, linking man to a primitive past, because they are the basic protection of the self of our inner beings. The house symbolises oneself. High-rise buildings are rejected for family living primarily for the reason that the house as a symbol is seen as a single-family detached dwelling on the ground. There seems to be a "universal need for a house form in which the self and family can be seen as separate, unique, and protected." However, even though everyone wants to have their own personal identity to be unique, they do not want to be thought of as non-conformist either.

The housing types associated with alternative lifestyles are supportive of the house as a symbol of self-concept. Most individuals are resistant to unusual housing forms for the reason
that they need a familiar, solid, static way of viewing themselves. One needs to surround the self with a symbol that is unchanging. To live in an unfamiliar form of housing is threatening because it threatens the self-concept.

Self expression and self identity also fulfill a need for exhibition. It is evident that most people select housing and then furnish it with the hope of bringing attention to themselves, at least among their family and friends. A house reflects the creativity and achievements of its residents. It is not only a place where achievements are exhibited obviously in terms of trophies, photographs etc. but dominant family roles are also exhibited, more subtly, through the arrangement of furniture, house space, etc. The house also is a reflection of all the needs, achievements and dreams or expectations of a person as it is the life-time goal of most individuals to own a house and once a house is acquired, all his desires and personality characteristics are exhibited for approval and also as a means of self-satisfaction. The house also exhibits the status of the individual.

Privacy is another need fulfilled in the house. Altman (1976) has defined privacy as "selective control of access to the self or to one's group." In the house, privacy is controlled in physical ways. The mere separation of one house from another by means of a space achieves privacy for residents of most detached houses. Within the house, walls separate spaces so that privacy
is achieved for individual family members. The importance of doors to psychological well-being also cannot be ignored. Not only does shutting a door increase privacy, but by banging a door one can also give vent to pent up feelings. These privacy mechanisms help define limits and boundaries of the self.

One common way to lay claim to private space is to mark out territory for one's exclusive use. Such behaviour reflects territoriality needs of the person. Pieces of property are territories for persons, the edges of which are very important to them. Fences or hedges are erected, because they want to identify what is theirs for the outside world to see.

Territoriality, therefore, is a manifestation of self identity and place identity. According to Becker (1977), "The occupent can develop a 'place' with which to identify and from which he or she can send messages about status, class, prestige, values, political ideology and taste with the knowledge that the conditions he or she places on behaviour within the territory will be recognized and respected."

Territoriality is more difficult to accommodate in multi-family housing than in single-family housing. Apartment dwellers are usually restricted to make personal statements about themselves within their dwellings.

The concept of home. A house or dwelling also has another dimension. A house is a physical entity which can become a home
but only when it leads to psychological satisfaction of the dwellers who use the shelter and share the space in a meaningful way. According to Hayward (1975), "home is a label applied voluntarily and selectively to one or more environments to which a person feels some attachment." He has categorised different meanings of home reflecting different psychological themes. They are ——

1. Home as intimate others. A sense of belonging or togetherness, of caring, of warmth and security are embodied in the concept of home. Home is the place of the most intense emotional experiences.

2. Home as self-identity. Home is a symbol of how one sees himself/herself as well as how they wish to be seen by others. Their values are reflected in their home.

3. Home as place of privacy and refuge. Home is where one goes to get away from the outside world. Home is freedom from pressure, a place to relax, a place to peace. A place where one is also safe and secure.

4. Home as continuity. Home towns or permanent family homes embody this concept. Returning home after an absence is the essence of a feeling of continuity.

5. Home as personalized space. Being able to create a personally satisfying home is the meaning of home as personalized space. Control of the space, surfaces, and furnishings to reflect personal tastes is an important aspect of housing satisfaction.

6. Home as centre of a social network. The home is where relationships start. A person starts relating to others as
members of a family and gradually forms a network with others in the neighbourhood, school, place of work etc. and thus builds up a social network which not only meets one's social needs but also provides support when one needs it.

Housing, therefore, is a complex human response to environmental and social conditions. The concentration of housing units in and around the cities creates problems on a mass scale, for the use of land and space in the urban setting has far-reaching implications for the quality of modern life. Shelter remains the juncture of man/environment inter/action. But that interaction has become more complex with the interplay of neighbourhood, community and cultural forces. All these forces through their influence on the spatial behaviour of individuals affect the life and psychological well-being of the individuals.

**The Human Dimension in Housing Design.**

Investigations in the field of environment and behaviour assume a systematic interrelationship between architecture and patterns of human behaviour. Izumi (1965) offers a diagram useful in understanding the human and non-human components in architectural design (Figure 1.4).

Environmental design as related to buildings is represented by a rectangle with a diagonal separating the human and non-human factors. At left are buildings designed essentially to contain objects, machinery, equipment and other inanimate objects. At the
right are buildings solely to contain human beings e.g. nursing homes, psychiatric hospitals, and housing in general. Between these two extremes are buildings used to contain both people and objects in varying proportions. These include libraries, laboratories, stores and offices. As one moves from left to right in the diagram, the evaluation of buildings becomes progressively more weighted toward performance as a social setting and against visually aesthetic properties (Deasy, 1970; Sommer, 1969).

Proshansky et al. (1970) affirm that each particular architectural setting has associated with it characteristic patterns of behaviour. These activity patterns are consistent and enduring over time regardless of the particular individuals involved in the setting. They also state that even when people are dramatically affected by the physical settings in which they live, they remain unaware of and insensitive to such environmental influences. According to Sommer (1972) many contemporary buildings fail to achieve behavioural requirements because of such insensitivity, and of all the types of information on which architectural decisions rely, the category of activity is often the most neglected (Watson, 1970). In fact, Bouterline (1970) says, "The dominant situation in modern life is individuals living in a setting which was not built for them."

As the high-rise building projects are replacing the old neighbourhood, social isolation is replacing the old robust social life. This is because, many design strategies, in the name of simplicity of form and visual aesthetics, have screened off
diversified activities from one another by allocating different activities to different planned spaces. This impedes the rich informal social exchange characteristic of the small neighbourhood because social functions such as communication and group support in neighbourhoods are met through informal and largely accidental social contact between people pursuing diversified tasks in public open spaces.

The physical design of high-rise apartment buildings, in particular, blocks many of the avenues of social exchange. They are characterized by a minimum of semipublic space between apartments and seem to encourage social isolation. However, there is no empirical data to support this contention. From a few studies it appears that the fault lies more in badly designed outdoor space rather than in high-rise living per se (Gans, 1962).

Thus, design seems to be an important factor in urban housing. With innovative and human-factor oriented designing of housing, many maladies of urban living can be ameliorated because the key characteristic that set humans off from other species is their ability to manipulate the environment and make changes. But the relationship of person to design is not a direct cause-and-effect one as other factors are also involved. Thus, as Broady (1972) has stated - "Architectures.......has no kind of magic by which men can be redeemed or society transformed. Its primary social function is to facilitate people's doing what they wish, or are obliged to do."

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SOCIAL BEHAVIOUR.

Social behaviour is the behaviour of individuals in relation to social stimulus situations, or to his social environment. Such stimulus situations essentially involve other people, either as individuals, or collectively as groups, or as a product of other people (culture). Such a relationship is also reciprocal where each person is a respondent and also a stimulus for the other.

Social behaviour, as is the case with all human behaviour, is highly complex. The individuals not only bring their own personal characteristics to the stimulus situation but are also acted upon by various environmental factors, which include the urban milieu, crowding, housing etc.

Social Behaviour in the Dense Urban Situation.

Social behaviour in the city arise from the type of social relations that urbanites have with each other. A popular stereotype of the urbanite is that of a cold, self-centered, superficial individual. Even though the picture is not so bleak, urban social behaviour does tend to be more "unsocial" than that of the ruralite. Urbanized social relations, as was seen earlier, are highly complex and diverse. Social relations are also impermanent and anonymous because of the high mobility and large number of the urban population. Because of these two characteristics of impermanence and anonymity, the urbanites behaviour seems to be free of outside censure and because of this
there seems to be a high incidence of crime, vandalism and other anti-social behaviour.

Also, because secondary relations are more prevalent in urban society, the urbanite is seen to be cold and impersonal in their behaviour as they do not involve themselves in things which do not concern them or give very little time to others. They tend to remain aloof. But, city people are not always busy, they are not in a hurry for everyone. In fact, they set priorities and deal with the important people and activities first or longest and those that are unimportant are handled last, least, or not at all. The general picture projected of an urbanite, however, is that of a cold, busy, impersonal individual. But, such behaviour could be an adaptation strategy.

High density can affect social behaviour through the mediation of crowding. High density and crowding are part of an integrated and complex process. High density along with other factors can lead to crowding (subjective). This feeling of crowding can, in turn, affect social behaviour. But, high density can have a variety of effects; some even positive, sometimes even with no apparent crowding effect.

The effect of high density on social behaviour depends upon various factors, the two most important being scale (room density to community density) and type of social relations. High density has been shown to affect many aspects of social behaviour.
Particularly when high density is undesirable (it isn't by choice or it occurs in an unpleasant place), social outcomes are generally negative — others in the situation seem less attractive; there is more aggression and less cooperation (Lee and Kenelly, 1979; Jorgenson and Dukes, 1976). If high density creates negative attitudes toward others, it can be predicted that antisocial or asocial behaviour will follow.

Individuals subjected to high density often respond by withdrawing from social interaction. Social withdrawal is manifested in various ways: leaving the scene, choosing less personal topics to talk about (Sundstrom, 1973), making remarks about leaving, adopting a defensive posture (Evans, 1979a), turning away, avoiding eye contact, or increasing interpersonal distance (Baum and Greenberg, 1975).

High density also leads to negative affect. This has been demonstrated both in lab studies (Epstein, Woolfolk & Lehrer, 1981; Evans, 1979a) and in field studies (Aiello, Baum & Gromley, 1981). It produces tension, annoyance, physical discomfort and hostility. When crowding occurs, coping strategies appear. If no physical escape is possible, then non-verbal behaviour is used and individuals look away, talk less and generally signal unwillingness to socialize.

High density usually leads to less helpfulness (Bickman et al, 1973; Jorgenson and Dukes, 1976). As is evident people are capable of great generosity and kindness, as well as cold...
indifference and unconcern. Many factors are responsible for which of these reactions will result in a given situation. Research has shown that high density is one factor that affects helping and altruism. As compared to rural dwellers, urbanites in general, are seen to be less helpful. High density leads to less altruism because individuals in a dense situation tend to avoid contact with others in order to reduce crowding stress.

The huge amount of physical and social stimulation present in the city also leads to perceptual overload. In adapting to the urban environment individuals develop many types of behaviour, one of which is alienated behaviour. This is because in screening through the numerous stimuli only some aspects of city life can be attended to at the expense of alienation from others. Thus, though alienation has a negative connotation, it is adaptive too, and therefore serves to promote psychological well being.

On the community scale, early studies have reported positive correlation between population density and various forms of social pathology such as crime, divorce, suicide and mental illness (Galle et al, 1972; Booth & Welch, 1974). Studies have also showed that long-term exposure to high community density was associated with social withdrawal (Sundstrom, 1978). This led to the belief that cities by their very nature as densely populated areas, were bad places to live.

Later research, however, has shown that other factors such as poverty and scale are important in the relationship between high
density and social behaviour. In general, density measured at small scales (such as room density) correlates more highly with the existence of social pathology than does density measured at larger scales. Also, generally, poor people live in high indoor densities, whereas middle class or upper class people may live in low indoor densities in the midst of a high-density community.

Thus, the relationship between high density and social behaviour is not simple, as it is mediated by various factors, many of which have been considered earlier such as need for privacy, territoriality etc. Differences in privacy behaviour, beliefs, values, preferences and expectations originate with differences in situations; some people require more privacy or express their privacy need differently from others. Some situations, regardless of who is in them, engender greater or lesser privacy need. This in turn can affect one's social relation with the many others who are present in that situation.

Culture is also an important mediator determining the social behaviour of a person. But, culture is not static and as humans adapt to their changing environments, culture of that community changes too, because culture is the residue of human behaviour. It has been seen that as urbanization is a world-wide process, it is characterised by the evolution of a world-wide urban culture which follows a definite path. Different stages of urbanization, therefore, exhibit different characteristics of an urban culture varying from the warm small town to the alienated megalopolis.
Urbanization and its various ramifications can, therefore, influence social behaviour. Such influence can be both positive and negative, depending on the situation. In many instances the individual behaves in a particular manner unknowingly as that behaviour has become a part of his behaviour repertoire through adaptation to the urban milieu and as such is essential for his psychological well being. Thus, though the popular stereotype of the urbanite is highly negative, it is possible that the apparently negative behaviour of the city dweller is adaptive for himself and that like all human beings the city dweller too enjoys a warm social life but it is restricted to a group which may not include neighbours. The group may be so diversified that each member may not be known to each of the others. As such, the social life of an urbanite appears to be more interesting and stimulating than a non-city dweller.

THE PRESENT STUDY.

Since there is some evidence, from studies conducted in the West, that type of residence is related to feeling of crowding and social behavior, it is likely that such a relationship may be obtained in the Indian context too. Some other variables which have been found to have some bearing on feeling of crowding and social behaviour are density and income level. Unfortunately, so far, most studies concerning these variables have studied them in isolation excluding many of the other variables. Also, such research have been conducted in the developed countries.
Viewing these two facts, the need for a more comprehensive research on these factors, as they affect feeling of crowding and social behaviour, seems pertinent. This would lead to a better understanding of environment and behaviour in different cultural settings.

Based on a review of related literature, the present study was conceived. The main problem of the present study is to investigate whether type of residence, density and income level differentially affect feeling of crowding, dispositions toward the environment and social behaviour, either individually or interactively.

Disposition toward the environment included factors such as environmental adaptation, urbanism, stimulus seeking, environmental trust and need privacy.

Two other characteristics which were also investigated were alienation and altruism as exhibited by the subjects differentiated on the basis of their residence, the density of their dwellings and their income levels.

The approach is essentially that of a field study with intensive interviewing. In all, five measurement tools were used related to the variables under study.

The following hypotheses were proposed ——

I. Residents of apartments will experience greater feeling of crowding than residents of independent houses.
II. Residents of high density dwellings will experience greater feeling of crowding than residents of low density dwellings.

III. Subjects of high income level and subjects of low income level will not differ in the feeling of crowding experienced by them.

IV. The residents of independent houses and the residents of apartments will differ in their dispositions toward the environment. ie.
   ( a ) residents of apartments will score higher on urbanism scale than residents of independent houses.
   ( b ) residents of both types of housing will not differ in their scores on environmental adaptation.
   ( c ) residents of independent houses will score higher on stimulus seeking scale than residents of apartments.
   ( d ) residents of both types of housing will not differ in their scores on environmental trust.
   ( e ) residents of apartments will score higher on need privacy scale than residents of independent houses.

V. The residents of high density dwellings and the residents of low density dwellings will differ in their dispositions toward the environment. ie.
   ( a ) residents of both levels of density will not differ in their scores on urbanism.
   ( b ) residents of both levels of density will not differ in their scores on environmental adaptation.
(c) residents of low density will score higher on stimulus seeking scale than residents of high density.
(d) residents of both levels of density will not differ in their scores on environmental trust.
(e) residents of high density dwellings will score higher on need privacy than residents of low density.

VI. Subjects of high income level and subjects of low income level will differ in their dispositions toward the environment, i.e.
(a) subjects of both income levels will not differ in their scores on urbanism.
(b) subjects of both income levels will not differ in their scores on environmental adaptation.
(c) subjects of both income levels will not differ in their scores on stimulus seeking.
(d) subjects of low income level will score higher on the environmental trust scale than subjects of high income level.
(e) subjects of high income level will score higher on need privacy than subjects of low income level.

VII. Residents of apartments will experience greater alienation than residents of independent houses.

VIII. High density dwellers will experience greater alienation than the low density dwellers.
IX. Subjects of high income level and subjects of low income level will not differ in their scores on the alienation scale.

X. Independent house dwellers will score higher on the altruism test than the apartment dwellers.

XI. Residents of high density will score lower on the altruism test than residents of low density.

XII. Subjects of high income level and subjects of low income level will not differ in their scores on the altruism test.

XIII. Residents of independent houses and residents of apartments will exhibit different social behaviours with neighbours. ie.
( a ) residents of both types of housing will not differ in their interaction with neighbours.
( b ) residents of independent houses will show higher neighbourhood cooperation than residents of apartments.
( c ) residents of independent houses will show greater friendship with neighbours than residents of apartments.
( d ) residents of independent houses will show greater trust on neighbours than residents of apartments.

XIV. High density residents will show a lower level of social behaviour with neighbours than the low density residents. ie.
(a) High density and low density residents will not differ in their interaction with neighbours.

(b) High density dwellers will show lower neighbourhood cooperation than the low density dwellers.

(c) High density dwellers will report less friendship with neighbours than the low density dwellers.

(d) High density dwellers will report less trust on neighbours than low density dwellers.

XV. Subjects of high income level and subjects of low income level will not differ in their social behaviour with neighbours, i.e.

(a) Subjects of both income levels will not differ in their interaction with neighbours.

(b) Subjects of both income levels will not differ in their friendship with neighbours.

(c) Subjects of both income levels will not differ in their trust on neighbours.

Details of methodology are given in chapter 3.