GECEKONDU/BUILT OVERNIGHT:
A Documentary on a Squatter Settlement in Istanbul

BY

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Bachelor of Architecture, University of Maryland (1977)
SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF
MASTER OF ARCHITECTURE IN ADVANCED STUDIES
at the
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
May, 1979.

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Submitted to the Department of Architecture
On May 11, 1979, in partial fulfillment of the requirements
for the degree of Master of Architecture in Advanced Studies

ABSTRACT
This study presents information on social, economic, physical
and political aspects of life in a squatter settlement in Is-
tanbul, Turkey. Additionally, a description of a film that
was made on the same settlement along with an explanation of
the filming and the editing process is presented.
The study provides data to formulate housing policies for low
income groups; especially concerning the physical and social
aspects of community planning.

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PREFACE

This research documents some aspects of the life of an ordinary family in the squatter settlement of Pinar in Istanbul, Turkey. It was prepared in conjunction with a film on the same family. An explanation of the film making process is included.

The existing situation in Pinar (the squatter settlement) is described and discussed in the light of social, political, economic and physical realities. The family presented in this study is large. This provides an opportunity to investigate different aspects of this community through individuals of different ages and sexes.

Various maps and a brief discussion of the urban context and Pinar are presented in an appendix to describe the existing situation, growth patterns and land utilization.

This research is intended to serve as a reference in formulating housing policies and in community planning. It attempts to provide an intimate look into a community undergoing transition; to explore how this transition occurs. The primary purpose of both this study and the film is to record the existing situation. Both are comprehensive, individual studies yet complementary at the same time.

The study is derived from field research done by the author during the summer of 1978. The issues introduced and discussed are based on personal observations. The basic maps are provided by the residents of Pinar and the Greater Istanbul Master Planning Office.
INTRODUCTION

Accelerated population growth in developing countries, combined with the movement to the industrially expanding urban centers in search of jobs and better living conditions, is causing urban growth of unparalleled magnitude. Pressured by the economic and political realities, public and private planning agencies have been generally ineffective in settling these large populations. Economic and social stability available only to a relatively small minority makes squatter settlements the logical alternative for low and very low income groups.

Istanbul, the largest urban and industrial area in Turkey, is much affected by the phenomenon of squatters. Almost half of the population lives in gecekondu areas. The term, gecekondu, literally means "built overnight" in Turkish. It is a description of a process whereby dwellings are constructed quickly, sometimes overnight, illegally or without a building permit. These dwellings are liable for demolition until occupied. Above all, the term is a legal definition unrelated to the physical condition of the dwellings. The gecekondu dwellings in most of the squatter settlements in Istanbul are substantial units, highly individualized to cater to the user's needs and aspirations. The dwellings are well-maintained yet the settlements lack most of the utilities, services and community facilities which are very necessary but costly to provide due to the existing inefficient layouts.

There are a number of policies for the resolution of the squatter problem, one of which focuses on the prevention of squatters by developing planned areas and/or housing options for low income groups. This policy, not yet in implementation, can accomplish appropriate dwelling environments with minimum financial burden on the government and also allows alternatives for the low income groups.

It is evident in Pinar, the squatter settlement presented in this document, that the people are capable of constructing dwellings that go far beyond makeshift shelters if the land and infrastructure issues are efficiently planned and resolved beforehand.
ÜSTANBUL

Over the ages, the Anatolian peninsula has been a bridge for many migrating cultures and armies. The Hittites, Greeks, Romans and finally the Turks have settled on this ancient land. It is rich in tradition. Today the ethnic-religious composition of its population of 42 million is 90% Turkish and 99% Moslem. Turkey is a "transitional country" with increasing industrialization and service development.

Istanbul is one of three major urban centers in Turkey. It was established by Greek colonists and the Corinthians in 659 B.C. on the peninsula bordered by the Marmara Sea, the Bosphorus and the Golden Horn. Byzantium, as it was called then, became an important economical, political and religious center. The city was conquered in 1453 A.D. by the sultan Mehmet I and became the capital of the Ottoman Empire. Its name was changed from Constantinople to Islambol meaning "plenty of Moslems". The city maintained its role as a commercial and cultural center even after Ankara was designated as the capital of the new Republic of Turkey in 1923.

During the years following World War II, Istanbul experienced rapid growth, both in size and population due to migration from rural areas to urban centers. In 1972 the city accounted for 8% of the total population; in 1975 the popula-
tion of the city was estimated at around 4 million. Over the last three decades, Istanbul experienced squatter invasions at an accelerating rate. Istanbul continues to represent employment opportunities and better future prospects for the rural population, and it continues to grow at a rate of 5% annually.

What it is that makes Istanbul attractive to this large migrating population is not difficult to formulate. Presently 75% of the national imports and 50% of the national exports are handled in Istanbul. The city has 40% of the nation's organized labor force and is the source of 50% of the total income tax revenues and 50% of the total private sector investments.

According to the definition of a law governing squatter settlements, 40% of the housing stock in Istanbul is considered squatters. Having returned to Istanbul after seven years, I could readily notice the deep extent of the city's growth: The increase in population was dramatic, as was the increase in the number of cars; apartment buildings had mushroomed, hoarding every inch of available ground. The vast highways and the Bosphorus Bridge, finally tying two continents together, appear only as cosmetics on the face of a deteriorating, congested environment. Housing the large population remains a yet unsolved problem. Squatters offer an inexpensive housing alternative for most of the newcomers. As the
older squatter settlements develop and become integrated into the urban texture, new settlements are established, randomly expanding the city boundaries in all directions. A planned development still remains to be accomplished.

The need for a planned development was realized in the first "Five Year Plan" of 1963 which was then followed by two additional "Five Year Plans". Development policies were constantly modified depending on the results of the previous plans. Primarily due to the financial problems plaguing the central and the municipal governments and various political pressures, the public sector involvement was at a minimum. The speculative nature of land, the continued trend towards luxury homes, the lack of a good credit system, and the lack of competence in cooperative management have caused the low income population to be left outside the housing market. It is conceivable that the shortage of low cost housing will continue to be compensated by squatters unless major changes in the national policies take place.
After spending seven years abroad, I went back to Istanbul to study a squatter settlement and to make a film on the life of a family living in the settlement. I had prepared basic guidelines and objectives for my study before I went to Istanbul. All family and friends were notified beforehand to help locate a squatter willing to cooperate with me so that I could do my study. This task eventually proved extremely difficult. During the first three weeks, I went to a number of settlements and was introduced to numerous people and families. The idea of being filmed and studied daily did not seem attractive and appropriate to most of these people because of their conservative beliefs, political insecurities and fear of a stranger infringing on their privacy. Some simply feared exposure which could lead to a loss of their homes.

My determination was just about to give way to panic when my father came to my rescue. One of his friends, Mr. Talat, who was working in a military hospital close to a squatter settlement, thought he could help me. To meet Mr. Talat, I took one of the privately owned buses, a new addition to Istanbul's public transportation system, from Sisli. I was planning my course of action as I watched the dense urban surroundings gradually transform into areas dotted with high-
rises and open land. The driver took the Buyukdere Asphalt, a wide highway running parallel to the Bosphorus. I got off the crowded bus when we finally arrived at Pinar. Standing on the side of the highway, I recognized the military hospital further down the road. Facing East towards the Bosphorus, on the first hill parallel to the road, stood a settlement with a mosque at its highest point; houses crowded the hillsides in an irregular pattern. Slowly I made my way to the military hospital to meet Mr. Talat. He was going to introduce me to one of the landlords in Pinar.

At the time, I did not realize the amount of influence that the landlords had in such settlements and that having them as friends would be the key factor in my stay and study in Pinar. I first met Mr. Aziz, a landlord who lived on an adjacent hill from the settlement, near the hospital. He drove us to Pinar and took us to one of the cafes where I met his brother, Islam, and his friend, Hayati. That same day I walked around the settlement with Islam to see the surroundings and to let the people know that I was not an outsider with unknown intentions. I was provided with the basics: a room in an empty house. The first few days were spent observing the settlement and occasionally I went to the cafe to meet new people and also to maintain my contacts.

The settlement is located on the European side of Istanbul, 11 kilometers from the city's center and 4 kilometers from
the Bosphorus. It is surrounded by less dense settlements to the east; by the Istinye Asphalt and the Istanbul Technical University campus grounds to the south; by the Buyukdere Asphalt and the Ataturk industrial park to the west; and the military hospital grounds to the north. A cross section taken from the Bosphorus due West reveals gradual changes in the age of the settlements, in income levels, in the legality of the settlements, and in the quality of public services and utilities. In general, a gradual decline in social and economic standards becomes apparent as one goes away from the Bosphorus. A better way of getting to Pinar, as I later found out, is to take the Istinye Asphalt, which branches out from the Buyukdere Asphalt and continues towards the Bosphorus. The main street of the settlement, Camlibel Street, connects Pinar to this major route at the southern end. As one approaches the settlement on Camlibel Street, the first building to be noticed is a white mosque with a single minaret. The mosque cost 5-7 million Turkish Liras and was donated to the village by a wealthy old man who became very religious during the later years of his life. Standing on higher grounds, the distinct wedge shape of the hill becomes more apparent. The narrow valleys below the hillsides, creeks, and planted fields give the area a total rural appearance.

The houses cover most of the hill, which is wider at the top (where the mosque stands) and which slopes gradually towards access to Pinar

PHOTOGRAPHS, opposite page:
PINAR, Istanbul: (top) The settlement and the surroundings from the Istinye Asphalt. (bottom left) The mosque marking the entrance to the settlement on the southern end of Camlibel Street. (bottom middle) The houses on the west side of the ridge. The water pipes recently put into trenches are visible. (bottom right) Back yards of the houses with half-basements on the east side of the ridge.
the tip of the wedge to the north. The hill is relatively steep on both sides of the ridge. The houses are built in tiers on the hillsides. The narrow secondary streets, which are either short and perpendicular to Camlibel Street, or run in long parallels, form irregular blocks. Camlibel Street stretches from South to North through the whole settlement covering the ridge. All commercial activities and most other activities take place along this street. Eight of the nine grocery stores are located on this street along with clothing stores, a couple of liquid gas stores, a furniture and appliance store, a few workshops (such as auto mechanics, welders, carpenters, a construction office and a window glass cutter), and the four cafés of the village which for men are the most important public meeting places. According to Mr. Hayati who acts as the unofficial village representative, 3,000 people make up the total population of Pinar. The incomes range roughly from very low to lower middle on the national scale.

Eight years ago this settlement did not exist. The land was originally owned or claimed by four families who had migrated here forty or fifty years ago from villages on the Black Seashore. These families gradually sold the land in small parcels that were big enough for a house and a yard. Up to this day, Pinar is not accepted as a legal settlement. It is assumed as government land and on maps it appears to be a part of a larger area reserved for forest development. How-
ever, the settlement continues to grow. Agreements are made daily on the basis of a handshake and mutual trust. The residents expect the government to legalize ownership during the next two years, but any changes in the illegal status of this land would have to be directly linked to changes in national policies. Some of the occupied and most of the remaining open land is subject to much controversy and the landlords are dead-locked in their lawsuits against the municipality government and the military hospital.

Pinar is somewhat distant from the city. Air pollution, traffic jams and other such problems common to a city are nonexistent in Pinar. On the other hand, also not available are the amenities which a city has to offer. The nature of the topography, numerous hills and valleys, scarcely inhabited but largely planted, make up a pleasant environment. Unlike the city, all dwellings benefit from the cooling breezes blowing from the Bosphorus during the summer. Houses built on the hillsides provide open views. Private yards are small but still large enough to grow a few plants and raise some small animals.

transition Pinar resembles a small town in the countryside. The daily life exhibits rural, traditional patterns. It is relatively a new settlement still in transition. The effects of the city, only as far away as the highways, are hard to examine and comprehend at this point in time. The television anten-
nas on the roofs of most houses and cars contrast the rural surroundings and the humble dwellings. These elements basically different in origin and tradition form a complex and sometimes contradictory conglomeration of ideas and implications. Pinar nevertheless remains primarily rural with traditional social patterns and physical appearance.

People of Pinar have migrated primarily from villages and towns on the Black Seashore. To most of these people the city simply means employment and other opportunities. Whether these people become integrated into the city life or prefer to remain loyal to a traditional way of life yet adapting a few new artifacts to be able to survive in a changing environment is still open to debate. My observation is that some artifacts like television and cars are pragmatically incorporated into a list of priority needs by the people of Pinar. Other aspects of life, such as the role of men and women, remain as they have been traditionally defined. The majority of the women remain at home performing survival routines; however if there are economical hardships, they will go to the city for employment. The same condition applies to the older children in the family. Men are still the breadwinners and they only venture outside the settlement to go to their jobs or occasionally for purposes of entertainment. Pinar generally remains a closed community. The immediate contact with the world outside is the television. It has become a major source of entertain-
ment and means for gathering information. All four cafés and most houses have television. While playing cards, backgammon, chatting and watching television at the café are still the favorite passtime activities for men; women stay mostly at home, working, watching television; or they go for a short visit to their neighbor's home or go to the water springs and, while getting water, chat with their friends.

Access to Pinar is relatively fast and easy. Government-owned and privately-owned buses provide transportation to this area. The settlement is located fairly close to the intersection of the two major routes, the Buyukdere Asphalt and the Istinye Asphalt. A short walk on Camlibel Street provides direct access into the settlement.

Pinar lacks some basic services. There are no health facilities and people make use of the small hospital in Istinye located four kilometers away on the Bosphorus. The settlement is not provided with any fire protection or a police force. Although closely knit community ties have traditionally helped prevent most common crimes, recent national political unrest is starting to take its toll in this area.

As the name of this settlement suggests (waterspring), water is in abundance in Pinar. There are four springs around the settlement at reasonable walking distances. Two of these

PHOTOGRAPHS, opposite page:
PLACES OF GATHERING, Pinar: (top left) Men playing cards at the café. (top right) Men socializing on the street. (bottom left) Children playing with burning garbage in an empty lot. (bottom middle) Children making the best of an irrigation pool in the heat of the summer. (bottom right) Women socializing by one of the water wells.
springs are located at the foot of the hill below the houses. A government health inspection has revealed that all four of the sources are contaminated, but various beliefs and rumors circulate in the settlement about the government findings. Some believe the water to be safe, others boil the water before use. But hepatitis being more common in the area than it should be, might prove the former belief to be wrong. Water is also delivered daily in trucks. This water comes from a safe source, but a problem surfaces when the same trucks are used for transporting fuel oil and not thoroughly cleaned afterwards. During my stay in Pinar, trenches were being dug to tie the settlement to the city water system. I was told that for a nominal fee each household would be able to get water connections and meters upon completion of the main water lines.

Since there was not a storm drainage system in the settlement, each house was carefully built to avoid water running down the main street or the hillsides. All houses use closed offset ditches for sewage disposal which are periodically emptied out for a small fee.

After the settlement had started to grow, people established a village council to organize group action on issues which were beyond the capabilities of individual families. The council succeeded in building a small elementary school and later the government appointed a teacher. The council also
collected money to have the settlement surveyed and mapped, but a later attempt to have the Camlibel Street paved failed. An argument between the council and a private contractor over the financial aspects of the project left the street covered with a gravel base but without asphalt pavement. The problem of dirt blowing off these unpaved streets still remains a health hazard. All windows and doors facing the streets have to be kept shut to prevent the dirt from blowing into the houses. This gets in the way of cross-ventilation and as a result the houses become hotter.

In 1974 electricity was brought to the settlement through the joint efforts of the residents. A long line was stretched along the Camlibel Street and also perpendicular to it at reasonable intervals. The private connections are done by the residents or the local electricians. Fees to the government are collected every three months, and each household pays according to the number of people living in it since the dwellings are not provided with individual meters.

In 1970, only seven dwellings existed in Pinar. These houses belonged to the present day landlords or to their close relatives. As the landlords subdivided and sold the land, the settlement grew and the rate of settlement has since followed an ever accelerating course. The residents feel secure in their ownerships although the settlement has
not been legally accepted. Most heads of families with whom I spoke were very willing to pay their due taxes and thought that the government was losing some revenues by not recognizing their settlements and therefore not collecting taxes from them. During discussions at the café, most residents seemed very much aware of the local issues at hand, their rights, and the illegal activities that were taking place in Pinar. Equally important, they knew what could be or should have been done. Some had reasonable, viable solutions. For example, in laymen's terms, they proposed site and services projects or complained of the lack of good low cost housing alternatives. For most people, Pinar was one of the few places where they could financially afford to live. Though most families had low or very low incomes, the number of luxury cars in the settlement was somewhat surprising. As I inquired further into this questionable reality, I was told stories of landlords or other wealthy people who invested into squatter houses and participated in land speculation. The majority of these people had lived in Pinar at one time or another, but eventually moved to more traditional areas, elsewhere in Istanbul. These subjects were not often openly discussed since the community was small and very tightly knit. Most often the blame was put on a badly organized government and corruption. Though most residents complained of the lack of or inadequacy of services and utilities, the number of dwellings in Pinar increased rapidly, from seven dwellings in 1970 to approximately five hundred at the begin-
Built Overnight

ning of 1978.

The squatters in Turkey or gecekondu (meaning "built overnight" in Turkish) is a more substantial, constantly improving and highly adaptable dwelling compared to its counterparts in most other developing countries. All houses in Pinar appeared well-maintained and the owners were generally satisfied and proud of their shelters. Owning a house generated a feeling of responsibility and a desire for self-improvement.

The demand for more houses in Pinar is ever increasing, but due to the changes in the national government, the building activity has come to a halt, leaving many residents unemployed. The newly appointed official in this municipality is a strong believer in the government's policies and not a single dwelling has been built since the January of 1978, though numerous attempts have been made. Constant visits by the local officials left many dwellings halfway built or totally destroyed.

The landlords play a crucial role in the growth of settlements such as Pinar. An initial contact with the landlords through friends or relatives is essential to acquire a plot of land. If such contact is not readily available, moving into the settlement as a tenant is pretty much necessary to establish the prerequisite link in order to eventually be-

PHOTOGRAPHS, opposite page:

CONSTRUCTION ACTIVITY, Pinar: (top left) Man building a concrete frame around an existing dwelling; an ingenious way of gradually improving the existing condition, while escaping demolition.
(top right) A dwelling waiting for more favorable circumstances to be completed.
(bottom row) Construction activity brought to a halt by the local officials and demolition.
come a homeowner. A parcel of land measuring anywhere from 150 square meters to 225 square meters costs between 80,000 to 100,000 Turkish Liras ($1.00=30.00TL). The landlords are directly involved in all phases of the process. They will sell the land, sometimes take part in the construction and also offer long-term credit. This allows them to have some leverage on most of the residents. After the land is selected, the landlord will arrange an "unofficial" permit from the local officials which requires additional fees.

Over the years, simple and pragmatic methods have been devised to build squatter dwellings. It requires self-help, involves both sexes working continuously and very quickly. The building process happens in a few rapid phases. Usually the trenches are dug and the foundation is poured much earlier than the actual construction. Inside the foundation boundaries, rocks the size of a fist are laid and packed. When it is thought appropriate, a large crew of men and women will gather early in the morning to build the house. I had the opportunity to observe and photograph the building process during my stay in Pinar. The crew of the construction I had observed gathered at 9:30 A.M. due to poor organization. All the material had been carried to the site previously and the crew included skilled local masons as well as totally unskilled men and women. A basic job division was quickly made. The mortar was being mixed as men and women brought water from the closest spring and as the masons
designed the house on the site according to the local standards. The rooms were measured and marked with full strides of a man, and as soon as the mortar was ready, the concrete block walls started taking shape. By 6:00 P.M. the walls had reached full height and all windows were in place. Due to a mishap, however, the lumber and tiles for the roof did not arrive in time and the construction was left unfinished. Theoretically, they would have worked through the late hours to finish the roof. The floor slab would have been poured after all the exterior work was finished. The inside work would have had to have been done gradually after the owner moved in. But the following day, Sunday, the walls were knocked down by the officials. I was told that it usually takes two or three attempts until one is allowed to keep the building, unless one is lucky. The total cost of such a house ranged from 200,000 TL to 250,000 TL during the summer of 1978. This sum includes the cost of the land. Other necessary fees totalled between 5,000 TL to 15,000 TL, depending on the paying capacity of the owner.

Note: The building process and the subsequent demolition is illustrated on the cover.
THE ERKAN FAMILY

My primary contact in Pinar was Mr. Islam. At first I was introduced to a number of his relatives and business associates. Eventually a number of these people were willing to allow me to study their families. I searched for an ordinary family. My criteria was simple and flexible. It was based on a family consisting of a middle-aged couple with a number of children and a few close relatives. I felt that this family should not be new in this settlement, and that they should also be living in a house which they themselves built and owned. There were some tenants in the settlement, but the majority of the families were homeowners.

During my first few days at Pinar, most of my time was spent at a café. I would sit at a table with Mr. Islam and get involved in discussions which concerned recent political issues or the problems of the settlement. During this time it became customary for me to explain exactly what I was doing to anybody who happened to sit down at our table. In this manner I was introduced to Mr. Cavit Erkan, a man with a good sense of humor and moderate beliefs. After I expressed my interest in his family, I was invited to his home for afternoon tea. During the following days, I inquired about his background and how he came to live in Pinar. I established a more specific framework for the film based on this
information and started filming.

The Erkan family lives on Camlibel Street in a well-maintained house. It is located on the eastern slope of the hill about three hundred feet downhill from the main shopping area. Mr. Erkan, 47, and his wife Esma, 44, have seven children; two daughters and five sons. Their oldest daughter, Hatice, 21, is married to one of Mr. Islam's distant relatives and lives in a house further down the hillside. Vedat, 20, their oldest son, and second oldest among their children, married Saynur in November of 1977. Saynur lives with the Erkan family and was pregnant with her very first child, who was born in late August, a few days prior to my departure.

Mr. Erkan was born in the village of Mesudiye on the Black Seashore. He spent some time in Istanbul during his military service and later went back to his village to marry Esma. He had decided to live in Istanbul for the usual reasons: opportunities for better employment and a better future. He then returned to Istanbul alone so that he could establish himself. His wife joined him later and they rented dwellings in Pasabahce and Gultepe. At the time, these areas were either totally or partially occupied by squatters. Eventually they moved into a squatter house in a much smaller settlement near Pinar. However, he could not get along with his landlord because of some financial reasons and he decided
Mr. Erkan's move to Pinar

Mr. Erkan's move to Pinar to build his own house in Pinar. He contacted the landlords and they sold him a piece of land without much of a problem. The fact that he was from the same general area as the landlords in Pinar made buying property easier for him. As a rule, the people tend to be more helpful to others who come from the same regions of Anatolia, as they themselves, especially in squatter settlements. As a result, the majority of the people living in squatter settlements have their roots in the same towns or even the same villages. The people of Pinar come from various villages of the cities on the Black Seashore (Ordu, Trabzon, Rize) or from villages and towns in eastern Anatolia (Sivas, Malatya, Hakkari). The latter formed a small and very tightly knit minority group. The others referred to this group as Kurds, which is not altogether true, although most of the Kurdish minority in Turkey is located in that general area of Anatolia.

In 1971, Mr. Erkan bought a relatively large piece of land from Islam's family. He built his first house together with another family. They built a joint shell and a roof in 18 hours, over one night and a part of the next day. His part of the house had two rooms and it was large enough for his family at the time. It was also the best he could afford. Eventually, though, the house became inadequate to meet the Erkan family's needs, and as their income increased, thanks to the older children having joined the work force, Mr. Erkan built a bigger house adjacent to his first one. He rents his
old house to a younger couple for 700 TL per month, which, considering the rental fees in Istanbul today, is truly a nominal amount. The new house had five rooms, and it was designed by Mr. Erkan's wife, Esma. All rooms are used for sleeping except the guest room which is the first room off the entrance hall and therefore somewhat less private. The most important room in the house is the living room. It serves as a place to eat, to sleep, to work, to watch television and to entertain everyday guests. Most of the house chores ranging from laundry work to the preparation of meals are done on the floor of the multipurpose living room. Among the thirty houses I surveyed in the neighborhood, each had a similar room that served the same purpose. The most private room belongs to the newly married couple, Vedat and Saynur.

Furniture mainly consists of beds, which are converted into sofas during the day, and chairs. The guest room again presented an exception. Its furniture is more formal and may contain, for instance, armchairs, a sofa and coffee tables. It is the smallest room in the house and is mostly used on special occasions.

The kitchen opens into the continuation of the hallway and is easily entered from the living room. It is large enough for a tiled counter, a refrigerator and some work space. Later, Vedat built some shelves which cover the walls of the kitchen.
The only bathroom is located next to the kitchen and is made accessible by a short corridor which can be closed off by a door from the more public parts of the house. Like the rest of the houses in Pinar, they have no water connections. They boil their water which they get from one of the springs, and they use the water delivered by trucks only for laundry and cleaning purposes. The back patio is used often during the summer for relaxing and eating. It overlooks a yard crowded with small fruit trees and vegetable plants. A half basement with window and door openings is used for storing coal. All houses located on the hillsides utilize this type of half or full basement arrangement built with rocks obtained from the nearby quarries.

Mr. Erkan worked in the plastics industry during his first years in Istanbul. His wife worked as a cook in the Facit factory which manufactures small electronic equipment. Later Mr. Erkan was employed by the same factory as a watchman. He still works there on a weekly or biweekly rotating schedule for twelve hours a day, seven days a week. Mr. Erkan spends most of his leisure time on his back porch with friends or at his favorite local café. He does not venture outside the settlement except to go to work, which takes him to an industrial area in an older section of the city close to the Golden Horn. Having paid into the social security system for twenty-seven years, in order to make himself eligible for retirement benefits, Mr. Erkan hopes he will be able to re-
tire soon. He is considering to open a business in the neighborhood with the money he will receive upon his retirement. In the future, he is planning to replace his homes with a multistory house if the financial and legal circumstances are favorable.

Esma came to Istanbul from Mesudiye 18 years ago following her marriage. She is a hefty woman, energetic and authoritative. She is the supervisor and the figure of authority in the house when her husband is not there. For ten years she has worked at Facit. The original factory manager had conveniently provided the Facit workers in Pinar with transportation to and from work. When he died, though, the new manager discontinued this fringe benefit, and Mrs. Erkan decided to quit her job. Despite a healthy appearance, she complains of hypertension, stomach problems and backpains which have been plaguing her since she had hepatitis two years ago.

Hatice, their first born, was married and moved out. She has two young children who were suffering from whooping cough during the summer. One of the children was hospitalized, and Hatice was busy taking care of him. The few times she came by the house was to check on her other baby who, not ill enough to be hospitalized, was left with her mother.

Vedat, Mr. Erkan's oldest son, works as a painter in the
nearby neighborhoods. He was not encouraged to continue with his education after he finished elementary school. The family needed more income to build a bigger and better house at the time, and Vedat started working. Although his work requires him to go outside the neighborhood, he prefers to spend his free time at a friend's home or at a café in Pinar. He was scheduled to report for the mandatory military service in October, 1978. Afterwards he plans either to go into business with his father or to open a store for electrical equipment on his own.

Saynur, 18, was born and raised in Adapazari, a town on the Black Seashore. There she finished elementary school. While Vedat was on a visit to Adapazari, he met Saynur and arranged for her to leave home without her parents' consent. This created an undesirable condition with her family. After some time had passed, the two families reconciled their differences and the couple was forgiven. During the summer, she was pregnant with her first child. A cheerful and hardworking woman, she has assumed the responsibility of doing most of the housework under the supervision of her mother-in-law.

Ahmet, 19, completed his compulsory elementary education in Pinar and decided to become an electrician. He worked at various places for short periods of time. Unfortunately, most of the summer he was unemployed. He spent his time with his friends listening to music or playing soccer. He was at
home primarily when he needed to eat or sleep.

Sedat, 15, finished elementary school in 1977 and decided not to continue with his education. He enjoys working on cars, but during the time that I was there, he did not have a job. His home responsibilities include minor shopping or errand running. He spends his leisure time playing outside.

Hudaver, 14, recently graduated from Pinar Elementary School. He is probably the hardest working child in the family. He works in the nearby industrial park as an auto painter, leaves very early in the morning and comes home very late.

Hursit, 11, is the youngest boy in the family. He is still in elementary school. He has the same responsibilities as Sedat, minor shopping and errand running. However, he carefully avoids both by remaining outside playing.

Sultan, 8, the youngest child in the family, recently started going to school. As a female, her responsibilities around the house are more than those of her brothers. She spends her day inside the house, helping with the daily chores. She occasionally goes out to get water or to buy supplies from one of the local grocery stores. These trips eventually turn into playtime. Under her mother's supervision, Sultan is learning her responsibilities so that she may eventually assume the customary role of the female, still unchanged and
practiced in the rural areas of Turkey.

The Erkan family can be considered to have an above-average income relative to others in the settlement. They have succeeded in building their own house, which is the top priority of any family in squatter settlements. Mr. Erkan's sons, when employed, contribute a great deal to the overall income of the family. The women in the family have taken charge of the survival routines in the home and the men are free to use their spare time as they wish until, of course, they decide to take a job or until they are advised to do so. With the exception of Vedat, most of the children do not have much interest in continuing with their formal education after they complete their elementary school training. Almost all of the children expressed an interest in working in the automotive industry. If tradition bears out, they will likely be apprenticed in a small establishment. Eventually, however, all of them hope to own their own businesses.

The women spend their days doing the household chores. This work is very time consuming since few modern appliances are used. In fact, the most important additions to their traditional household are the small stove that operates on bottled gas which is sold at the local gas store and the refrigerator. They do not use a vacuum cleaner, or a more substantial stove or a sink in the kitchen, although they could afford these appliances. Esma, Saynur and Sultan take care of the
back yard, the chickens, the cooking, cleaning and laundry, and the serving of the men. Even the younger boys in the family are generally spared from the housework. They will occasionally set a table or serve tea for their father or for the guests. The social order in the family is directly related to sex and age. After the parents, the older male children, Vedat and Ahmet follow in importance in the family hierarchy. The younger boys and the other female members of the family are placed at the bottom of the social scale. Saynur, or the bride, as she is often called, has a precarious role. As an outsider, she has acquired a flexible position anywhere after Vedat and Ahmet. She deals mostly with Esma, avoiding possible conflicts with the younger boys.

It is customary in a traditional Turkish family to have a bride or a relative live under the same roof. These extended families are very common in the rural areas and this tradition is adapted to the life in the urban environments whereby a number of families closely related to each other occupy various apartment units in the same building.

In the Erkan family, it is also practical to have Saynur living in the same house. Mrs. Erkan is a strong and capable woman, but she is getting older and she needs Saynur's help to take care of the household. In the future, Vedat and Saynur might decide to move into a nearby house if they have the financial means or if the next older boy, Ahmet, decides to
get married.

The traditional roles and customs are strongly observed in the Erkan family. One is overwhelmed with their hospitality from the moment one enters their household. Guests are offered food or at least tea which are ready to be served at any time of the day. The social order is disrupted as one is offered the best seat around the dinner table, which belongs to the head of the family, and is served before anyone else. Life in their home appears comparatively humble yet rich within the well-defined traditional patterns.
THE FILM PROCESS

PREPARATIONS

An important part of my work was to make a film presenting a number of issues in the Urbanization process. Specifically, the film was to focus on the existing physical, social and economic realities confronting the individuals and/or families in a squatter settlement. Several preparations and decisions had to be made for me to pursue my work. I had to formulate the specific topic of the film, decide on my audience, and plan the approach to aid me in my fieldwork. Finally, I selected a number of alternative topics which included: (1) documenting the life of a squatter family; (2) comparing settlements different in development mode, proximity to the city, and other such aspects; (3) recording the building process of a squatter dwelling; and (4) tracing migration to urban centers. After some initial research, I decided to concentrate my study on the life of a family in a squatter settlement. The human element incorporated into the film would allow me to deal with issues of common interest with the general public. I did not want the film to be geared strictly to the expert in the urban development field. Rather my target audience would include any interested individual or institution. The film could be used for educational purposes and/or for entertainment.
I did not have any previous arrangements with a family or a squatter settlement. To write a script with specific characters and localities was impossible. The approach to the filming process had to be flexible. Within the boundaries of a loose outline, the film would be allowed to take its course. This necessitated a constant restructuring of guidelines to integrate new ideas and topics as the opportunities arose.

In anticipation of probable locations and activities, I prepared a number of charts. These charts were arranged to include actors, activities, and the time of day. I assumed that I would be filming a family with an unknown amount of children and a relative or relatives living in the same house. The charts were instrumental in understanding how important localities could be identified through different activities or individuals and vice versa. Most of the basic assumptions indicated on these charts were correct; others proved unnecessary. For example, the list of locations included "outside the neighborhood" and "the city", but these people hardly ever ventured outside the settlement. I had also made some incorrect assumptions concerning socialization and entertainment patterns.

The charts were later used to record the activities of the characters already filmed. This allowed me to budget the limited amount of film I had and also to make a more specific
THE BASIC PREPARATION CHART

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</tbody>
</table>
framework for the film. Nevertheless, there were a number of difficulties. The first few days I had a hard time filming anything. The people were very camera shy. To avoid wasting valuable film, I used a common technique. I decided to hold the camera as if I was constantly filming, hoping that the people would eventually tire and continue with their activities. Not only did the people not tire, but they also knew exactly when they were being filmed by the noise of the camera. I decided to be patient and after a week of being filmed, the novelty wore off.

Many of my other difficulties were technical. The equipment was somewhat primitive. I used a Kodak Super-8 Ekta sound camera. This earlier model could not be focused through the viewer. Some film was wasted before I learned to estimate distances and to focus without looking at the distance indications on the lens.

The sound recording was done with a directional "shure" microphone. Due to a bad connection, which I did not detect at the time, a good part of the recorded sound was weak, full of static or totally lost. These problems could have been avoided if the film could have been developed while I was still shooting. Unfortunately, this was not possible, and I had to continue my work based on assumptions and anticipations.
I assumed that a lot of the filming would be done under low light conditions and therefore used Kodak 7242 Tungsten film which has a high ASA rating. The total length of the film used amounted to 155 minutes. It was distributed among the various localities as follows:

<table>
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<tr>
<th>Location</th>
<th>Footage (minutes)</th>
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<tr>
<td>At home</td>
<td>67.5</td>
</tr>
<tr>
<td>At the café</td>
<td>20.0</td>
</tr>
<tr>
<td>At the office</td>
<td>7.5</td>
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<tr>
<td>At the store</td>
<td>5.0</td>
</tr>
<tr>
<td>In the neighborhood</td>
<td>40.0</td>
</tr>
<tr>
<td>At work</td>
<td>10.0</td>
</tr>
<tr>
<td>In Istanbul</td>
<td>5.0</td>
</tr>
</tbody>
</table>
EDlITING PROCESS

Before I started editing, I made an assessment of what I had filmed. The shots included:

Various activities at home
Discussions and other activities at the cafe'
Discussions at the office and at the store
Various activities in the neighborhood:
  Construction
  Children playing
  Getting water
Pan shots of the neighborhood
On the way to Pinar
Pan shots of Istanbul

There is not a specific process that one follows in editing. Every individual creates his own technique. The process and the equipment used in editing affects the end product greatly. One of the most significant factors in my editing process was the equipment that was available at the M.I.T. Film Department. After the film was developed, it was all transferred onto 3/4" video cassettes. All subsequent work was done on a 3/4" editing system. This sophisticated equipment more than compensated for my losses caused by some inappropriate equipment I had used for filming. The video editing made it possible for me to prepare edited sequences without cutting the original film. This technique offers numerous
advantages; for example, comparing two diversely edited versions of the same film.

The edited film, like most other edited media, is the editor's subjective response to a body of raw material in the light of his apprehension. Selective exposure and background, among other factors, can hinder the individual's perception. An innate duality exists in a film. The observations, ideas and conclusions one encounters while filming do not necessarily correspond to those in the already exposed film. An objective analysis and organization of the film before editing is therefore a must in order to extract and relay a clear message to the viewers. They might or might not have previous background on the specific issues presented. I had the invaluable advice and objective guidance of Professor H. Caminos in clarifying the theme of the film and the process.

My initial work consisted mostly of analyzing the individual shots so that I could categorize them in terms of technical quality, filming quality, length, content, and so on. Charts containing this information were prepared and used throughout the editing process. After this somewhat laborious task of categorizing was completed, I tried to perceive the most obvious ideas and impressions contained in the film. I made comparisons between these impressions and my observations during my stay in Pinar only to find out that a number of
compromises were necessary. Many things had happened in Pinar which seem to have escaped my camera. The Erkan family was large. All individuals of the family and also others outside the family were interesting and worthwhile. Nevertheless, the film was to be short and to the point while remaining loyal to reality. This made it impossible for me to introduce and develop all the characters involved.

The majority of the footage contained information on activities at home and at the café. The preliminary assumptions I had made were correct as far as the activities at home were concerned. I had filmed mostly daily routines performed by the women. This allowed me to select the dominant characters of the film. Outside the home, the café was the most important location. The initial observations contained contrasts and parallels between the home and the café. This in itself presented a social commentary. It presented information on the behavior patterns and the roles of men and women in this society. Other impressions consisted of factual data either on the physical environment or the construction process. What I had seen in Pinar and what I wanted to say in the film remained to be integrated into the film through the meaningful sequencing of events.

Pinar was a rural settlement in an urbanized environment. In Pinar, men and women performed their traditional duties. While there were men that worked hard, others remained idle
at the café. People were politically sensitive. They were well aware of current issues. A constant progress and growth was evident. A seemingly quiet neighborhood was full of activities. The remainders of destroyed dwellings presented evidence that there were constant attempts to build. Cars and televisions contrasted with chickens in the back yard and men selling goods on horseback. Only men ventured outside the settlement and the women hardly ventured beyond the boundaries of their back yards. And for the children, the whole settlement was a playground.

The first editing chart contained a number of these ideas. The home remained as the point of reference, as I had originally intended. The sixty-two minute film represented everything I wanted to include into the final production, yet it was complex and unclear. My gain from this first edit was in the basic organization of the sequences. Further study of this film helped me to develop the idea of a dialogue between the café and the home. The chart and the film went through four extensive modifications. The final script contains four café sequences, four sequences at home and one sequence at the office. The first café sequence precedes the pan shots of Istanbul, the trip to Pınar and pan shots of the settlement. The following café sequence provides a continuity and the start of the story after the previous introduction. This part gives further insight into what goes on at the café, and it also commences the construction of a
dwellings. The construction activity combined with the repeated discussions at the café, placed at critical intervals, provide the primary structure of the film. The activities at the café change from playing cards to talking or watching television, as simultaneously the construction advances. This combination is intended to symbolize the contrasting activities of men and also to indicate progress in the settlement. The advancement of the construction activity provides, too, a pattern or rhythm which gradually builds up to the eventual destruction of the dwelling under construction. The discussions at the café revolve around the political aspects of building squatter dwellings, landlords, corruption, and the evolution of a squatter settlement. Unfortunately, all verbal information is meaningless to the non-Turkish speaking audience. Subtitles could not be used due to financial constraints. A short narrative during the introduction is presented to provide the viewer with supplementary information so that he may understand the content of the conversations in the film if they are not self-explanatory.

The first home sequence starts on the patio as Mr. Erkan tells the story of his move to Pinar. Immediately afterwards, the women are introduced while they are cleaning the house. Subsequent home sequences illustrate the absence of men at home and the various survival routines being performed. In some aspects, it is an exaggeration. The activities are condensed and many. On the other hand, it is the reality,
since the routines are real and performed daily by the women. The degree of marginality of life in Pinar is ever present for the discriminate viewer. For others, I have placed contrasting objects, activities and ideas immediately next to each other to emphasize that fact. The degree of marginality is relative to the city, the settlement and the home. The dialogue between the café and the home advances as a number of contrasts and parallels between the activities at the two locations and the two sexes are made. Finally, the repetition in activities are there to stress these contrasts and parallels.

The first day comes to an end at the café while the men at the construction site are still working. The similar activities that take place afterwards symbolize the repetitive nature of the day to day life in Pinar. The destruction of the dwelling, which was last seen as the walls were reaching full height, starts the last sequence. The women continue working at home and Mr. Erkan walks out of the settlement, indicating the end.
Café: Discussion on services in Pinar
Panoramic shots of Istanbul
The trip to Pinar
Panoramic shots of the settlement
Café: Various activities, beginning of the discussion on
building a squatter dwelling and the beginning of
the construction
Home: Mr. Erkan on the patio talking about his move to
Pinar and women cleaning the house
Water delivered by truck
Mrs. Erkan preparing dinner
Café: Mr. Erkan playing cards
Previous discussion continues as construction ad-
vances
Home: Women at work
Watching television during dinner
Café: Men watching television
Same discussion and construction continue
Home: Mr. Erkan waking up as women continue work
Office: Mr. Erkan and his friends discussing local politics
Demolition of the squatter dwelling
Home: Eating lunch
Mrs. Erkan and Saynur doing laundry
End: Mr. Erkan on the way to work walks up Camlibel Street
The appendix consists of detailed information on the urban context and various maps of Istanbul, Pinar and the Erkan dwelling.

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**THE ERKAN DWELLING** 65
ISTANBUL, TURKEY

URBAN CONTEXT

1. PRIMARY INFORMATION: Divided by the Bosphorus which links the Sea of Marmara to the Black Sea, Istanbul, the Country’s largest city, principal port and tourism center, is a city belonging to both Europe and Asia. A bridge across the Bosphorus, the fourth longest suspension bridge in the world, was completed in 1973. A narrow inlet, known as the Golden Horn (Halic), divides the European side of Istanbul. The first bridge on the Golden Horn was built in 1845 between Eminonu, the historic peninsula and old city, and Galata, the modern section of the city. The Bosphorus is over 25 km. in length and averages 1.5 km. in width. Both banks rise steeply from the water forming a succession of cliffs, coves and nearly land locked bays. At the present time, the metropolitan area of Istanbul lies between Kucuk Cekmece Lake on the West and to the provincial boundary near Tusa in the East. The urbanization sector, which is expanding rapidly, presently covers an area of 40,000 hectares. Istanbul is located at latitude 41° North, longitude 29° East. Summers are moderately hot, winters are mild with average temperatures ranging from 27 to -5 degrees Centigrade. Summers are generally the wettest months. 10 to 19 rainy days per month occur from October through May. Total annual rainfall is 666 mm. Snowy days average 9 per year.

2. HISTORY: The origins of Istanbul date back to 658 B.C. when Greek colonists and Corinthians established Byzantium on the peninsula bordered by the Marmara Sea, the Bosphorus and the Golden Horn. In 330 A.D. Roman Emperor Constantine shifted his capital to Byzantium and thus named it Constantinople. The Byzantine Empire (East Roman Empire) continued until 1453 when the city was conquered by Ottoman Emperor Sultan Mehmet I and named Ismabul (plenty of mosques) which later became Istanbul. Istanbul was the capital of the Ottoman Empire until 1923, when Ankara was designated the capital of the new Republic of Turkey. The City's population was 60,000 in 1453; 500,000 in the 1800's and 990,000 in 1940. The population and area has doubled since the 1950's, but in the early 1970's more than 70% of the population lived in the Istanbul municipality. A cosmopolitan, multi-ethnic city with a population in 1972 of 2.8 million, Istanbul has lost the political importance it had during the Ottoman Empire, but it has maintained a major role in the Nation's commercial and cultural life.

3. ECONOMY: Istanbul is an important industrial, commercial, transactional center and a major transshipping and railroad point handling 75% of the national imports and 50% of the national exports. Istanbul represents 35 to 40% of the nation's organized industrial labor force, 50% of the total income tax revenues and 50% of total private sector investments. The private sector makes up 80 to 90% of the total investments in industry and housing. In 1964, Istanbul contributed 18.3% of the total Gross National Product. Per capita annual GNP was $416 in Istanbul versus $157 for the Country. In 1972 Istanbul, which accounted for 8% of the total national population, produced 22% of the total GNP. GNP per capita (at current prices) was $1045 for Istanbul and $864 for Turkey. The economic growth rate was 11% for Istanbul and 7% for Turkey. In 1975, 8% of Istanbul's organized industrial labor force was employed on the European side, 17% on the Asian side. Small area consumption industries such as food canning, bottling, printing, textiles, chemistry, metal, furniture, take place on the European side to the north and west. Large area capital industries such as oil refineries, car and home appliance factories, machinery, stone and soil products industries are concentrated along the Istanbul-Izmit Highway on the Asian side.
Since the beginning of the Ottoman Empire, the administrative organization of Istanbul has gone through many changes. The combined provincial and municipal government which was established in 1930 was separated in 1953 for purposes of efficiency. The chief provincial official is the governor who is appointed by the President on the recommendation of the Minister of Interior. There are 18 districts in the Province of Istanbul and 15 within the Istanbul metropolitan area. The Province is divided into municipalities. According to the Lausanne Treaty of 1923, the borders of the Istanbul municipality, established in 1853, cannot be changed. There are 32 other smaller municipalities located within the Province, 18 of which are in the Istanbul metropolitan area. The Municipal Administration consists of an assembly, a council and a mayor. The assembly is elected by popular vote. The organization and functions of municipal governments are prescribed in detail by national law. All Municipalities are required to draw up development plans and submit them for approval to the governor, or in the case of larger cities such as Istanbul, to the Ministry of Interior. Upon approval, the municipalities are required to conform to that plan. In 1965, the Greater Istanbul Master Plan Office was established to prepare the master plan of Istanbul to be approved by the Ministry of Reconstruction and Resettlement. The municipalities must prepare their plans according to the planning offices' goals.
5. DEMOGRAPHY: Metropolitan Istanbul represents 8% of the total national population and 20% of the urban population of Turkey. Istanbul metropolitan population has more than doubled since 1955. In 1970, 2,247,630 of the 2,995,191 metropolitan population lived within the Istanbul Municipality; the growth rates are 5.2% and 3.5% respectively, 2.7% for Turkey and 7% for Ankara. 36.6% of the population growth was inborn and 63.4% was due to migration. In 1955, 45.5% of the population was born in Istanbul. The illiteracy rate above six years of age was 19.2% compared to a national figure of 45.2% in 1970 in a ratio of 1 to 3 between males and females. 46.4% of Istanbul's population was female. 10% of the population above six years of age had completed high school and 3% higher education.

6. SOCIO-CULTURAL: Despite the continued dominance of the educated elite, changing circumstances such as economic growth and diversification have substantially altered the composition and therefore the interests of the powerful national elite. Since World War II, increased economic opportunities have greatly expanded the size and power of the middle class based in commerce, industry, technocracy, education, and private practice of the learned professions. However, wealth, occupation, family heritage and place of residence still distinguish the different social classes. The social hierarchy moves upward from unskilled workers to industrial workers and service employees to salaried people and small businessmen to the middle class and finally to the traditional elite. Istanbul's population is the most heterogeneous in Turkey. In 1965, 28.4% of Turkey's minority population accounted for 5.1% of the population of Metropolitan Istanbul.

7. SOCIO-ECONOMIC: According to the 1966 Survey of Consumer Expenditures in Istanbul, 51.1% of the population had annual incomes under $850, 21.7% between $850-$1285, 19.8% between $1285-$2571 and 7.3% above $2571. In the last two decades Istanbul's industries have tripled and the urbanized area doubled. In 1965, 38% of the population was employed. Low income settlements are scattered around the periphery of Istanbul and in pockets of the city's historical core. The middle in-
come areas are concentrated in the historic peninsula. The remaining middle and high income areas are spread along the shores of the Sea of Marmara, the Bosphorus and to the northeast of the historical core.

R. HOUSING: In 1963, 660,000 people were living in 120,000 squatter dwellings (gecekondu - literally built at night) which made up 40% of the dwelling stock and 45% of the population in the metropolitan area. 19% of the squatters in Turkey lived in Istanbul. By 1972 there were 200,000 squatter dwellings housing 30-40% of the population in 50% of the built up area. 30,000 housing units are needed each year in Istanbul. 17,000 are provided by the private sector, 3,000 by the public sector and 10,000 by squatter settlers. In 1972, there were an estimated 80,000 registered squatter dwellings. 10,000 unregistered squatter dwellings were being built every year at a rate of 20 to 30 per day. Of the total housing investments, only 5.1% are from the public sector. 51% of public sector housing investments are allocated for squatter settlement improvements. Construction tax laws discourage construction of dwelling units in excess of 100 m². According to No. 1118 Financing Law, dwellings not exceeding 100 m² are exempt from building construction taxes. By public housing standards, 30.5 to 63 m² is minimum and 40 to 100 m² is the average dwelling size, range being relative to family size. Urban dwelling stock statistics show a decrease from 2.17 persons per room in 1955 to 1.87 persons per room and 2.7 rooms per household in 1972. In 1970, 41% of the urban dwelling stock was in good condition, 33% in fair and 26% in poor condition. The percentages for squatter dwellings were 30%, 40% and 30% respectively. The average dwelling areas for high income families is 24.3 m² per person as opposed to 7.2 m² per person for squatter families. The densities average 250 persons per hectare in high income areas and 320 persons per hectare in squatter settlements.

The Urban Context has been obtained from a thesis that was prepared at the Urban Settlement Design in Developing Countries program: URBAN DWELLING ENVIRONMENTS: ISTANBUL, TURKEY, Butler, M. and N., M.I.T. Thesis, Cambridge, 1976.
LOCALITY CIRCULATION PATTERN

TO CITY CENTER

TO BOSPORUS

1:10000
LOCALITY SEGMENT PLAN

LAND UTILIZATION DIAGRAMS

- Public: streets/walkways
- Semi-Public: playgrounds
- Semi-Private: cluster courts
- Private: lots

PERCENTAGES
- Streets/Walkways: 23%
- Playgrounds: 14%
- Cluster Courts: 5%
- Dwellings/Lots: 56%

DENSITY
- 20 Persons/1 Hectare

SCALE: 1:2500
**LOCALITY CONSTRUCTION TYPES**

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<th></th>
<th>%</th>
<th>Semi-Hole</th>
<th>Shot</th>
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The chart shows (1) approximate percentage of each construction type within the total number of dwellings and (2) buildings that generally produces each type.

Quality of information:

**LOCALITY UTILITIES AND SERVICES**

- WATER SUPPLY
- SANITARY SEWERAGE
- STORM DRAINAGE
- ELECTRICITY
- GAS
- REFUSE COLLECTION
- PUBLIC TRANSPORTATION
- PAVED ROADS, WALKWAYS
- TELEPHONE
- STREET LIGHTING

**LOCALITY COMMUNITY FACILITIES**

- POLICE
- FIRE PROTECTION
- HEALTH
- SCHOOLS, PLAYGROUNDS
- RECREATION, OPEN SPACES

The chart illustrates the approximate availability of utilities, services, and community facilities at three levels: NONE, LIMITED, ADEQUATE.

Quality of information: ACCURATE

---

**LOCALITY BLOCK LAND UTILIZATION DATA**

<table>
<thead>
<tr>
<th></th>
<th>Total Number</th>
<th>Area Hectares</th>
<th>Density N/Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOOTS</td>
<td>30</td>
<td>1.14</td>
<td>39</td>
</tr>
<tr>
<td>DWELLING UNITS</td>
<td>22</td>
<td>1.14</td>
<td>29</td>
</tr>
<tr>
<td>PEOPLE</td>
<td>115</td>
<td>1.14</td>
<td>101</td>
</tr>
</tbody>
</table>

**AREAS**

<table>
<thead>
<tr>
<th>Areas</th>
<th>Hectares</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC (streets, walkways)</td>
<td>.37</td>
<td>32.5</td>
</tr>
<tr>
<td>SEMI-PUBLIC (open spaces, schools, community centers)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PRIVATE (dwellings, shops, factories, lots)</td>
<td>.77</td>
<td>67.5</td>
</tr>
<tr>
<td>SEMI-PRIVATE (cluster courts)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.14</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**NETWORK EFFICIENCY**

- Network length (streets, walkways) = 654m/Ha
- Areas served (total area)
- LOTS
  - Average area, dimensions = 300m², 15m X 20m

**LOCATION OF THE ERKAN DWELLING**
GLOSSARY

The criteria for the preparation of the definitions have been as follows:


-SECOND PREFERENCE: definitions from technical dictionaries, reference manuals.

-THIRD PREFERENCE: definitions from the Urban Settlement Design Program (U.S.D.P.) Files. They are usable where existing sources were not quite appropriate/satisfactory.

Words included for specificity and to focus on a particular context are indicated in parenthesis.

New, or modified definitions are indicated in parenthesis. (See also: REFERENCES.)

ACCESSORIES. The pedestrian/vehicular linkages from/to the site to/from existing or planned approaches (urban streets, limited access highways, public transportation systems, and other systems such as: waterways, airlines, etc.) (U.S.D.P.)

ACTUAL LAND COST. "The cost of land is...set solely by the level of demand. The price of land is not a function of any cost conditions: it is set by the users themselves in competition." (Turner, 1971)

AD VALOREM (TAX). A tax based on a property's value; the local authorities may set tax rates but not above or even usually the market value, but only a valuation for tax purposes. (U.S.D.P.)

AIRPORT DISTURBANCE. The set or process of destroying the rest, tranquility, or settled state of (the site by the annoyance of airport noise, vibration, hazards, etc.) (Merriam-Webster, 1971)

AIRPORT ZONING RESTRICTIONS. The regulation of the height or type of structures in the path of moving air at an airport. (U.S.D.P.)

ALTERNATING CURRENT (A.C.) (an electric) current that reverses its direction of flow at regular intervals. (N.O.T. ST 45-7, 1953)

AMENITY. Something that conduces to physical or mental comfort or convenience, or which contributes satisfaction rather than money income to its owner. (Merriam-Webster, 1971)

AMPERES. Amperes (amp) are a measure of the rate of flow of electricity. It is somewhat comparable to the rate of flow of water (quantity/time). A steady current produced by a well equipped across a resistance of one ohm. (N.O.T. ST 45-7, 1953)

ANNUITY. An estimate and opinion of value, especially one fitted to judge. (Merriam-Webster, 1971)

APPRAISAL. The main routes external to the site (pedestrian/vehicular) by which the site can be reached or from other parts of the urban context. (G.S.D.P.)

ASSIGNED VALUE. A valuation placed upon property by a public officer or board as a basis for taxation. (Keys, 1971)

ASSESSMENT. The valuation of property for the purpose of levying a tax or the amount of the tax levied. (Keys, 1971)

BACKFILL. Earth or other material used to replace material removed during construction, such as in culvert, sewage, pipeline trenches, and behind bridge abutments and retaining walls or between an old structure and new paving. (Defina, 1972)

BARRIER. (A boundary) as a topographic feature or a physical or psychological quality that tends to separate or prevent the free movement (to and from the site). (Merriam-Webster, 1971)

BETTERMENT (TAX). A tax on the increment in value accruing to an owner because of development and improvement work carried out by local authorities. (U.S.D.P.)

BINDER COURSE. A transitional layer of bituminous paving between the crushed stone base and the surface course of a pavement between base and surface courses. (Defina, 1972)

BITUMINOUS. A coating of or containing bitumen; as asphalt or tar. (Defina, 1971)

BLOCK. A block is a portion of land bounded and served by lines of public streets. (U.S.D.P.)

BOUNDARY. Anything (a line or area) that fixes or indicates a limit or extent of (the site). (Merriam-Webster, 1971)

BUILDING CODE. "A body of legislative regulations or by-laws that provide minimum standards to safeguard life or limb, or to prevent waste or abuse of property, by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of essential service and safety structures within the city, and certain equipment specifically regulated therein." (DePina, 1971)

BUILDING DRAIN. Lowest horizontal piping of the building drainage system receiving discharge from soil, waste, and other drainage pipes. It is connected to the building sewer. (N.O.T. ST 45-7, 1953)

BUILDING MAIN. Water-supply pipe and fittings from the water main or other source of supply to the first branch of the water-distribution system of a building. (N.O.T. ST 45-7, 1953)

CCESSPOOL. An underground catch basin that is used to receive rainwater, sewer, and into which household sewage or other liquid waste is drained to permit leaching of the liquid into the surrounding soil. (Merriam-Webster, 1971)

CIRCULATION. System(s) of movement/passage of people, goods from place to place: streets, walkways, parking areas. (U.S.D.P.)

CLAY. A lustrous colloidal substance, plastic when moist (crystalline grains less than 0.002mm in diameter). (U.S.D.P.)

CLEMMENT. A plug or similar fitting to permit access to traps or sewer lines. Clemments are usually used at turn and other points of collection. (N.O.T. ST 45-7, 1953)

CLIMATE. The average condition of the weather at a particular place over a period of years as exhibited by temperature, humidity, wind, sun energy, extreme temperature fluctuations, air energy, humidity, etc. (Merriam-Webster, 1971)

COLLECTION SYSTEM. The system of pipes in a sewage network, comprised of house service, collection lines, manholes, etc. (Merriam-Webster, 1971)

COMBINED SEWER. A sewer that carries both storm water and sanitary or industrial wastes. (Defina, 1972)

COMMUNITY. The people living in a particular place or region and usually linked by common interests; the region itself, any population cluster. (U.S.D.P.)/SERVICES. Facilities/services used in common by a number of people. It may include: educational, recreational, cultural, health, transportation, community center, etc. (U.S.D.P.)

COMMUNITY FACILITY. Facilities for active recreation or for passive recreation: parks, playgrounds, fitness, exercise, self-expression, or release from boredom, worry, or tension. (U.S.D.P.)

COMPONENT. A constituent part of the utility network. (U.S.D.P.)

CONDOMINIUM. The legal title to the unit and a proportionate interest in the common land and areas. (U.S.D.P.)

CONTACT. A contact is an apparatus used when existing sources were not quite satisfactory. (U.S.D.P.)

CONSTRUCTION BARRIER. A barrier or restriction the free movement (to and from the site). (Merriam-Webster, 1971)

CONVERSION FACTOR. The price of land is one fitted to judge. (Merriam-Webster, 1971)

COORDINATION. The regulation of the supply of dwellings: the housing process (promotion, financing, construction, operation) is carried out by the Popular Sector generally for 'self use' and sometimes for profit. PUBLIC SECTOR.
Glossary:

A device to measure flow of water.

FIDW METER:

A device to measure flow of water.

PRIVATE SECTOR:

Non-profit or subsidized housing.

PRIVATE/PUBLIC

ECONOMIC.

TUR:

The urban layouts with grid blocks.

FOOT:

1971)

I.:

45-7

568

296

348

1971)

Dwelling Units grouped in five or more stories with stairs and lifts for vertical circulation.

HYDRAULICS:

That branch of science or engineering that deals with water or other fluid in motion.

Pavement:

A layer of material placed upon the earth's crust, generally the subgrade and depends upon aggregate interlock, and maintenance without deviation.

U.S.D.P.

FLOODWAY FRINGE:

The floodplain area landward of the natural floodway which would be inundated.

FLOODING:

The rising and overflowing of a body of water.

FLOODWAY:

That part of the earth's crust that is covered by water not usually under water.

FLOODWATER:

A raised and overflowing body of water which may or may not be saline.

FLOODFREDDY:

A device to measure flow of water.

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A raised and overflowing body of water which may or may not be saline.
HYDROLOGY. A vertical pipe or shaft leading from the surface of the ground to a sewer, for admitting light for purposes of inspection. (U.S.D.P.)

LAND COST. Price of the property. (U.S.D.P.)

LAND DEVELOPMENT COSTS. The costs of making raw land ready for development through the provision of utility services, roads, sidewalks, etc. (U.S.D.P.)

LAND LEASE. The renting of a land for a term of years for an agreed sum; leases of land may run as long as 99 years. (U.S.D.P.)

LAND-MARKET VALUE. Refers to: 1) the present monetary value that the land would bring if sold for best use; 2) the present value of land based on the tax base of the land; or 3) the present comprehensive value of land. (U.S.D.P.)

LAND OWNERSHIP. The exclusive right of control and possession of a parcel of land. (U.S.D.P.)

LAND SUBDIVISION. The division of the land into blocks, lots and laying out streets. (U.S.D.P.)

LAND TENANCY. The temporary holding or mode of holding a parcel of land by one who may lawfully use, the strip of land devoted by virtue of an agreement to the growth and development of a city, town, city or region, expressing official contemplations on the course its transportation, housing and community facilities should take, and making proposals for industrial, commercial, or other aspects of growth and development. (Abrams, 1972.)

MANUFACTURE. An access hole sized for a man to enter, particularly in sewer and storm drainage systems for cleaning, maintenance and inspection. (U.S.D.P.)

MATERIAL (OF BASIC REFERENCE MODELS). A set of models of urban land layouts arranged in rows and columns. (U.S.D.P.)

MASTER PLAN. A comprehensive, long range plan intended to guide the growth and development of a city, town or region, expressing official contemplations on the course its transportation, housing and community facilities should take, and making proposals for industrial, commercial, or other aspects of growth and development. (Abrams, 1972.)

MEDIAN BARRIER. A double-faced guard rail in the median of an island dividing two adjacent roadways. (Def. 1972.)

MESSING BOUNDARIES. Characterized by continuous, homogeneous land uses or topography, expressed as: LENS: productive land; politico-municipal formations, main streets, etc.; AREA: similar residential uses, contiguous uses (as parks with residential). (U.S.D.P.)

MICROCLIMATE. The local climate of a given site or habitat varying in size from a tiny crevice to a large land area, but being usually characterized by considerable uniformity of climate. (Merriam-Webster, 1971)

MODE OF TRAVEL. Manner of moving from one place to another (other parts of the urban context). (U.S.D.P.)

MODEL (OF URBAN LAYOUT). A representation of an urban residential area that takes into consideration, land utilization, land subdivision, and utility network of a specific layout and lot. (U.S.D.P.)

MUTUAL OWNERSHIP. Private land ownership shared by two or more persons and their heir under mutual agreement. (U.S.D.P.)

NEAREST FEATURES. Prominent objects in or produced by nature. (U.S.D.P.)

NET UNDISTurbed SOILS. Soils that have not been disturbed by artificial process. Although natural soils, they depend greatly on local conditions, environment, and past geological history of the formations. (U.S.D.P.)

NEIGHBORHOOD. A section lived in by neighbors and having distinguishing characteristics. (U.S.D.P.)

NEW GENERATION (LAYOUT EFFICIENCY). The ratio of the length of the network to the area(s) contained within; or tangent to it. (U.S.D.P.)

NEUTRAL WIRE. Wire carrying no voltage between itself and a ground. (NOTC 45-7, 1953)

NOISE. Any sound (affecting the site) that is undesirable (such as that produced by: traffic, airports, industry, etc.). (Merriam-Webster, 1971)

OCCUPANCY. The quality/state of being occupied, currently occupied. (U.S.D.P.)

ORGANIC SOILS. Soils composed mostly of plant material. (U.S.D.P.)

OXIDATION REACTORS. A device that raises, transfers, or compresses fluids or that attenuates gases, especially for disposal of human excreta. (U.S.D.P.)

PIT PRIVY/LATRINE. A device or machine that raises, transfers, or compresses fluids or that attenuates gases, especially for disposal of human excreta. (U.S.D.P.)

PERCENT RENT/NET RENT. The percentage of income allocated for dwelling rental or dwelling mortgage payments. (U.S.D.P.)

PIT PRIVY/LATRINE. A simple hole in the ground, usually hand dug, covered with slab and protective superstructure; for disposal of human excreta. (U.S.D.P.)

PLANNING. The establishment of goals, policies, and procedures for a social or economic unit, i.e. city. (U.S.D.P.)

PLAT/LOT. A measured parcel of land having fixed boundaries and access to public circulation. (U.S.D.P.)

POLICE PROTECTION. Police force: a body of trained men and women employed by the local government with the maintenance of public peace and order, enforcement of laws, prevention and detection of crime. (Merriam-Webster, 1971)

POPULATION DENSITY. It is the ratio between the population of a given area and the area. It is expressed in people per hectare. It can be: CROSSED DENSITY: includes any kind of land utilization, residential, circulation, public facilities, etc. NET DENSITY: includes only the residential land and does not include land for other uses. (U.S.D.P.)

POSITION. The point or area in space actually occupied by a physical object (the site). (Merriam-Webster, 1971)

PRIMER. A small introductory book on a specific subject. (U.S.D.P.)

PRIVATE LAND OWNERSHIP. The absolute tenure of land to a person and his heirs without restriction of time. (U.S.D.P.)

PRIVY. A small, often detached building having a bench or several round or oval holes through which the user may defecate or urinate (as into a pit or tub) and ordinarily lacking any means of automatic discharge of the material deposited. (Merriam-Webster, 1971)

PROJECT. A plan undertaken; a specific plan or design. (U.S.D.P.)

PUBLIC CIRCULATION. The circulation network which is owned, controlled, and maintained by public agencies and is accessible to all members of a community. (U.S.D.P.)

PUBLIC FACILITIES. Facilities such as schools, playgrounds, parks, other facilities accessible to all members of a community which are owned, controlled, and maintained by public agencies. (U.S.D.P.)

PUBLIC SERVICES AND COMMUNITY FACILITIES. Includes: public transportation, police protection, fire protection, public water supply, sewage collection systems, public schools, recreational and open spaces, other community facilities, business, commercial, small industries, markets. (U.S.D.P.)

PUBLIC SYSTEM (general). A system which is owned and operated by a local governmental authority or by an established public utility company which is controlled and regulated by a governmental authority. (U.S.D.P.)

PUBLIC UTILITIES. Includes: water supply, sanitary sewerage, storm drainage, electricity, street lighting, telephone, circulation networks. (U.S.D.P.)

PUMP. A device or machine that raises, transfers, or compresses fluids or that attenuates gases. (Merriam-Webster, 1971)

REFUSE COLLECTION. The service for collection and disposal of all the solid wastes from a community. (U.S.D.P.)

RESERVOIR. Large-scale storage of water; also functions to control fluctuations in supply and pressure. (U.S.D.P.)

RESIDENTIAL AREA. An area containing the basic needs/requirements for daily life activities; housing, shopping, recreation, socializing, education. (U.S.D.P.)

RESISTANCE. The ability to sustain a flow. Resistance increases as the length of wires is increased and decreases as the cross-sectional area of wires is increased. (NOTC 45-7, 1951)

RIGHt-OF-WAY. A legal right of passage over another person's ground (land); the area or way over which a right-of-way exists such as a path or thoroughfare which one may lawfully use, the strip of land devoted to or over which is built a public road, the land...
EXPLANATORY NOTES

QUALITY OF INFORMATION
The quality of information given in the drawings, charts, and descriptions have been qualified in the following manner:

Approximate: when deducted from different and/or not completely reliable sources.

Accurate: when taken from reliable or actual sources.

Tentative: when based upon rough estimates of limited sources.

QUALITY OF SERVICES, FACILITIES AND UTILITIES
None: when the existence of services, facilities and utilities are unavailable to a locality.

Limited: when the existence of services, facilities and utilities are available in a limited manner due to proximity.

Adequate: when the existence of services, facilities and utilities are available in/to a locality.

METRIC SYSTEM EQUIVALENTS

Linear Measures

<table>
<thead>
<tr>
<th>Metric</th>
<th>Equivalent</th>
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<tbody>
<tr>
<td>1 Centimeter</td>
<td>0.3937 inches</td>
</tr>
<tr>
<td>1 Meter (100 centimeters) = 1.0936 yards</td>
<td></td>
</tr>
<tr>
<td>1 Kilometer (1,000 meters) = 0.62137 miles</td>
<td></td>
</tr>
<tr>
<td>1 Inch</td>
<td>2.54 centimeters</td>
</tr>
<tr>
<td>1 Foot (12 inches) = 0.3048 meters</td>
<td></td>
</tr>
<tr>
<td>1 Mile (5,280 feet) = 1.60934 kilometers</td>
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</tr>
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Square Measures

<table>
<thead>
<tr>
<th>Metric</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Square Meter</td>
<td>1.550 square meters</td>
</tr>
<tr>
<td>1 Hectare (10,000 sq. meters) = 0.0247 acres</td>
<td></td>
</tr>
<tr>
<td>1 Square Foot</td>
<td>0.0929 square meters</td>
</tr>
<tr>
<td>1 Acre (43,560 sq. feet) = 0.4047 hectares</td>
<td></td>
</tr>
</tbody>
</table>

DOLLAR EQUIVALENTS

All income, cost and rent/mortgage data have been expressed in terms of the U.S. equivalent: 1 U.S. dollar = 3.00 Turkish Lira (TL), (August 1978).

REFERENCES


