Policy and Design in Urban Social Housing:
A Reconciliation

by

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<u>ABSTRACT</u>

The objective of this thesis is to understand the term "HOUSING" as a verb. This implies that housing is a process which includes three major stages. First, the planning POLICY stage determines distributions of resources, methods of production, and programs of activities. Second, the architectural DESIGN stage transforms these objectives into physical environments through technological means and spatial articulations. Third, the INHABITATION stage involves management of the resulted environment, and its use by inhabitants. The quality of the end product and the user's satisfaction with the product depend on who is making decisions in the three stages.

In modern Western urban centers, the results of two centuries of industrialization and urbanization, housing for low-income groups is subsidized by government at federal and local levels. Urban social housing projects, with few exceptions, are products of a hierarchical structuring of the three stages of housing. This structure is possible only when it is controlled by a centralized authority.

The problems of this rigidity in urban social housing are manifested in its financial strain on public resources, management crisis, and rapid obsolescence. Also, these problems reflect a mismatch between the needs defined by public agencies and the actual needs of the people housed. Exceptional cases to this mismatch reveal conflicts and contradictions in the present system of housing production, and suggest alternatives to achieve a dialectic and productive interaction between all three stages (POLICY, DESIGN AND INHABITATION) in the housing process. Two major issues addressed in this thesis are the characteristics of alternative housing processes and the role of the architect in such processes.

Thesis Supervisor: Anne Vernez-Moudon
Title: Assistant Professor of Architecture

for my parents

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PART ONE

INTRODUCTION

A dialectic situation occurs during a state of transition, of conflict, and of uncertainty; this then entails a reconciliation of different interests, for a continuous state of conflict is destructive. Policy planning and architectural design in urban social housing are mutually supportive in a dialectic process, when contradictions and conflicts are clarified and resolved, towards a community-controlled form of inhabitation.

During the time I spent in the International Laboratory of Archi-
tecture and Urban Design (ILAUD)[1] in 1976, I had to clarify, to other
participants, my thoughts on the main theme of ILAUD, which is ARCHI-
TECTURE of PARTICIPATION. This clarification had two important effects.
First, I had to communicate my ideas across to others, and to argue for
their validity. Second, I had to examine and criticize my own value-
system, which is the basis for my actions as an architect.

The years since that traumatic experience were times when I re-
flected on the issues and questions raised then; and I began to examine
the contradiction between ideas and actions exposed both in my own
thinking and in the architecture profession.

The kind of architecture that I argue for since is an ARCHITECTURE
OF COMMON SENSE PARTICIPATION,[2] which depends on direct participation
of all the groups whose interests are at stake. It is a process where
people expose their intentions and positions on various issues. It is
a partnership where people compromise their interests in order to
establish a common strategy.

There is a schism between policy planning and architecture in the
academic environment. Certain theories proposed in architecture aca-
demia extrapolate that a good built-form would emancipate people from
Taylorized[3] routines through spontaneous responses and subsequent
changes to the shape and use of the built-form. However, in the same
academic environment, such ideas are reacted to with critical, if not
cynical, skepticism by policy-planners. They argue that architecture
is only a tool to carry out policies dictated completely beyond the
capability of architectural profession. Such conflicting and uncom-
promising positions create uncertainty in students who are pursuing an
architecture of common sense participation, which entails a collabora-
tion of policy PLANNING and architectural DESIGN.

Growing up in Hong Kong, which is one of the most densely popu-
lated areas in the world, gave me a good exposure to the problems of
housing for the less-privileged. Housing is also the most delicate and
complex issue within the domain of architecture. In urban areas, there

are groups that have different and diverse ways of living and some of
them require public assistance to house themselves. Traditional
social housing for these groups banishes their heterogeneity, and
imposes a uniform and anonymous environment on them. On the con-
trary, an architecture of common sense participation respects the dif-
ferences between those groups, for it is based on their support. There-
fore, the resulting architectural design of the housing reflects the
unique character of each group, and is responsive to the inhabitants'
needs .

This thesis is an architect's exploration into the relationship be-
tween policy planning and architectural design in urban social housing.
A dialectic process between POLICY and DESIGN is the first step towards
what Alexander Tzonis called as a non-oppressive environment,[4] and a
reconciliation between different interests in the foundation of future
collaborative actions. This dialectic process is necessary when the
goal of the process is a new social structure, where each community
controls its housing, and has the right to use scarce resources to pro-
vide more housing or to maintain existing stock. Thus, the expectation
of such inhabitation process provides the last piece of a triangular-
relationship between POLICY, DESIGN and INHABITATION.

Central to this study is a classification of the assumptions made;
this is stated in Chapter 1 along with the theoretical arguments used.
Chapter 2 offers an historical perspective on the development of POLICY,
DESIGN, and INHABITATION within the context of evolving social and
economic structures. Architects' different roles in each historic period
are documented in Chapter 3 to contrast their stated intentions with
their actions. A participatory architecture develops within specific
context; the analytical framework used in studying particular projects
thus has to acknowledge past and present conditions of each specific con-
text. This framework is presented in Chapter 4. Three projects which
evolved through a participatory process are examined using the analyti-
cal framework. They are Villa Victoria (Boston, USA), Matteoti Village
(Terni, Italy), and Molenvliet (Papendrecht, the Netherlands). They
are presented in Chapters 5, 6, and 7. Chapter 8 is the conclusion on
findings and readings of the three case-studies. Chapter 9 gives a

projection of future actions taken by architects in practicing archi-
tecture of common sense participation.

1

EXPOSITION OF ASSUMPTIONS AND VALUES

"Architecture embraces the consideration of the whole external surroundings of the life of man; we cannot escape from it if we would so long as we are part of civilization, for it means a moulding and altering to human needs of the very face of the earth itself, except in the outermost desert," William Morris.

None of these ideas is mine or new.

Policy planning and architectural design have been the causes of transformation in the urban fabric. The result varies because of different intentions behind each decision; and the satisfaction of the product depends on the balance of decision-making power among the groups involved or affected in the transformation process. This observation is true in any political system. However, in society where power equals accumulated resources (money, arms, properties, or popular support), and when public officials are elected by a voting system, the channel through which people on the street or community can express their needs and demands is collective pressuring. When groups of individuals amass enough power, governments and power-groups have to respond to changing popular demands by restructuring the distribution of resources.

Housing is a political issue when people have the right to vote on policies affecting the political, social, and economic structure that controls the supply of housing. This right usually is weakened when people act as individuals, and when there is no issue that can rally individuals together. But when such an issue does arise, collective effort in confronting the issues is more efficient and effective; especially when clarity and resolution of intentions are achieved on the individual level, the organizational level, and the political level.[1]

A community confronts local and federal government agencies when public housing policies are in conflict with the community's interests. Such conflicts exist when there is an uneven distribution of scarce resources, and when the needs of the community are defined by a centralized agency. When the community decides to gain control over the definition of its needs and the resources required, a process of confrontation and reconciliation on policy and design between the community and the agency is required. Special skills and knowledge are crucial to establish strategies of this process towards a community-controlled form of inhabitation. If such abilities are lacking in the community, it will require professional service to develop strategies; and at the same time, to train local residents to carry out future responsibilities.

The architectural profession is a service. It always has been a

service to those in power, but seldom has it been a service to the
powerless. Architectural service to communities struggling to control
the housing process is thus an acknowledgement of the need for a redis-
tribution of power. To be of service to communities requires an archi-
tect to make a commitment in time and energy: to be a member of a com-
munity; to know the social forces inherent in any production process; and
to understand differences between various value-systems. Yet the archi-
tect has to accept the limit of professional practice. Architecture
can reinforce or redefine an existing social structure, but it can
never create a new social structure.

Industrial revolution altered the structure of society. The former
one, based on agrarian and small manufacturing activities, was replaced
by a social structure that had to accommodate complex and diverse func-
tions. Prior to industrialization, urbanized areas were the market for
the peasant to sell produce; or was the trading center for merchants.
The distinction between groups of people was the kind of labor they per-
formed.

When industries began to tap the labor resources in urbanized areas,
industries transformed the distinction of labor. Individuals became
workers in an assembly line. Furthermore, economic growth and struc-
turing of production line and its management introduced new groups of
individuals separated by accumulated monetary resources.

Industrialization also caused influx of people from rural areas
or from different nations. People from homogeneous rural social struc-
ture were mixed with others of similar cohesive social structure but of
different character. Therefore, urban industrialization centers became
a place of co-existence of all these different groups. With the evo-
lution of modern social structure, a more complex set of identification
of groups is assumed. No longer are ethnicity, income and color the
only group's indicator, but also such distinctions as sex, age, religion,
social class and territorial control.

A society of multi-characteristics has been praised and condemned
throughout this century. The 'melting pot' theory failed to explain

the strong identity maintained by different ethnic groups. Similarly romanticized version of heterogeneous urban environment put forward by writer Jane Jacob disregarded the problem of conflicts between groups. On the other hand, authoritarian attempt such as urban renewal, which tried to homogenize city's social groups, met with bitter failures and social disasters.

In The Uses of Disorder, Richard Sennett discusses the advantages of heterogeneity in modern affluent society. Clarity of one's values is possible when in contrast with those of other individuals. Sennett argued that violence in cities is the result of a refusal of reconciliation of conflicts. Yet groups of people seek for a sense of community. The definitions of community of the past, based on such ideas as absolute number of people or income level, are insufficient. A sense of community evolves around a common course of action for all the individuals living in proximity to one another. Thus a community does not have any class, race or economic identity. Rather a community includes individuals of diverse identities.

A common course of action demands communication between individuals. In turn, communication requires clarification of values and objectives.

> "These new anarchic cities promised to provide an outlet for what
> men now fear to show directly. In so doing, the structure of
> the city community will take on a kind of stability, a mode of
> ongoing expression, that will be sustaining to men because it
> offers them expression outlets. Anarchy in cities, pushing men
> to say what they think about each other in order to forge some
> mutual patterns of compatibility, is thus not a compromise be-
> tween order and violence; it is a wholly different way of living,
> meaning that people will no longer be caught between these two
> polarities."[2]

Communication between groups also establishes the disposition of decision-making power. In the evolution of the man made environment, housing is the best exponent of the power structure of society. Berthaux summarized that,

> "The quantity, the quality, the status, and the form of housing
> results from the conjunction of 4 systems:
> 1/ the system of housing as a durable commodity.
> 2/ the system of social distribution of this product.

3/   the social distribution of men (the function of their place
     in production and administration).
4/   the system of correspondence between the two systems of
     distribution."[3]

A built environment existed when man felt the need for shelter.
Man used to build his own dwelling according to his needs and re-
sources. There was a direct relation between man's intention and his
action in the housing process. Such relationship between man and his
dwelling was eroded since the industrial revolution when man moved to
the cities. For these densely urbanized centers evolved through two
phenomena:

> "1/ the prior decomposition of the agrarian social structures
> and emigration towards existing urban areas, providing the
> labour force essential to industrialization. 2/ from a do-
> mestic economy to a small-scale manufacturing economy, then to
> a large scale manufacturing economy implies concentration of man
> power, the creation of a market and the constitution of an in-
> dustrial milieu."[4]

In cities, housing of the labor forces is controlled first by
industries during industrialization, and later by government and
private-market. People are taken away from getting involved in the
production of housing. Modern society thus transforms housing into
a consumer good through centralized supply and passive involvement of
the users.

By definition of consumerism, use of "housing" as an article
produced by others exhausts its exchangable value. When an article's
use value is exhausted, it will be replaced by a new article. Based
on such observation, Castells argued that urban structure is not simply
an arrangement of spatial forms, "but rather these forms use the ex-
pression of the process of collective treatment of the daily consump-
tion pattern of households."[5]

Examined within the modern context of urbanism, social housing
for lower income or less-privileged groups is a consumer good. These
groups ceased to be the producer of their own housing because of no
access to the resources. They became consumers of dwellings in hous-
ing projects, the production of which is totally at the mercy of mar-
ket economy.

Social housing should be:

"a program of organization of physical space - which implies
a relevant use of land and the investment of considerable
resources, usually public, with the principle aim of providing
lodging to social groups that are unable to obtain it on the open
market."[6]

Instead, it is used as a means to pacify the masses and to dif-
fuse their awareness of their rights to scarce resources. It suffices
to say that, historically, social housing was rarely a social con-
science. It was rather a response to urgent demand or an outlet of
surplus of private capital mortgaged by government in modern advanced
capitalistic society.

As any consumer good, social housing project has been sabotaged
or destroyed when it failed to meet the satisfaction or expectation of
the consumer, which has resulted in the waste of scarce resources and
manpower. We have witnessed many such failures in urban social housing.

The problems rest in the mismatch between the public policy and
the actual needs of the people affected. Often the mismatch is part-
ly caused by the lack of input or involvement of people in the de-
cision-making process. The government or the supplier subsequently
acts according to incorrect or insufficient information about local
conditions. Furthermore, the present responsibility of management
of housing projects by public agencies has proven to be a failure. The
reason is simple, when people in those projects have direct control
over their dwellings, the maintenance and management of their environ-
ment are social responsibilities enforced by the inherent social struc-
ture of the environment.

Too often architects blame the failure of social housing on the
design of the objects. Examples like the Prutt - Igoe project in
St. Louis, which was demolished less than ten years after its acclaim-
ation by the architecture profession, is not unusual. Yet it is reac-
tionary to criticize the design of public housing when it fails to meet
the consumer's expectations. Instead the main thrust of the criticism
should be directed to the definition of housing as a consumer object
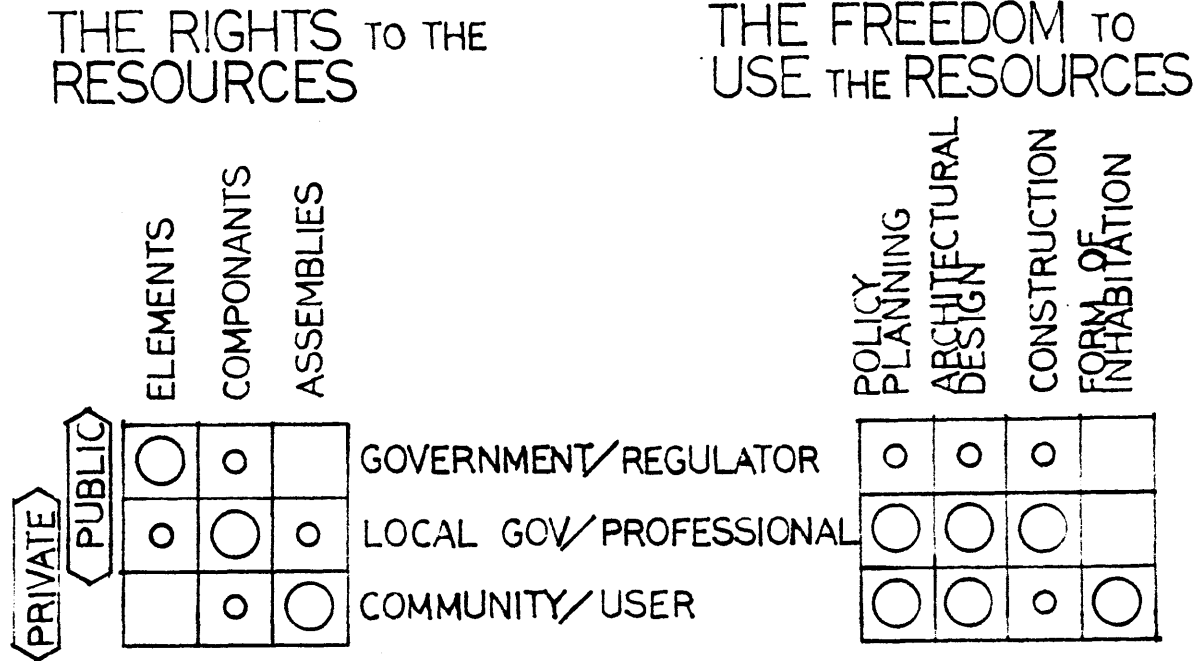and to the assumed relationship between man (the private domain) and

the government (public domain). The destruction of Prutt - Igoe
and other projects is not just the failure of design, it is the
failure of the process of consumerism and the existing power structure,
which are both objectified by architecture.

Similarly, architecture responded to the crisis by offering new
housing types as solution, which turned out to be a misguided attempt.
For the failure of housing rests in the problem of the goal and means
of resource distribution. It is also caused by mismanagement when
housing is treated as passive consumerism.

Observations begun in developing countries prompted John Turner
to argue that the word "HOUSING" should be a verb.[7] It is a process
in which people have the choice to fulfill their needs through self-
initiative and control over appropriate amount of resources. This
argument proves to be valid in other countries as well, for it sug-
gests an alternative to the present mode of social housing supply and
production. When government controls not only the supply of resources
but also the production, conflicts and contradictions are generated on
three levels. First, the mismatch of official policy and the actual
needs and interests of the community; second, the rigidity of the
design solution (arrangement, sizes, distribution, and services of
the dwelling) does not satisfy the particular demands of the community;
third, the lack of personal involvement in the management and main-
tenance of the environment creates a dependence on public service, and
finally leads to dissatisfaction with the inefficiency and ineffective-
ness of public bureaucracies.

Turned pointed out that "who decides, and who provides what for
whom is clearly the political issue of power and authority." To
affect the established system demands political pressure generated from
collective concensus in the community. The goal of community actions
is to obtain "the rights to the resources, and the freedom to use the
resources."[8] In order to gain control over the housing, the community
has to take an active part in a dialectic process with public agencies
to define the problems, the objectives, and the strategies. This
process will then provide acceptable answers to the questions on housing
resources and means of administration. To summarize the argument,

modifications of two diagrams by Turner show the strategy towards what
Habraken calls a "natural relationship"[9] between the public and the
private realms of housing.

THE RIGHTS TO THE RESOURCES

THE FREEDOM TO USE THE RESOURCES

	ELEMENTS	COMPONANTS	ASSEMBLIES	
PUBLIC	◯	o		GOVERNMENT/REGULATOR
	o	◯	o	LOCAL GOV/PROFESSIONAL
PRIVATE		o	◯	COMMUNITY/USER

	POLICY PLANNING	ARCHITECTURAL DESIGN	CONSTRUCTION	FORM OF INHABITATION
GOVERNMENT/REGULATOR	o	o	o	
LOCAL GOV/PROFESSIONAL	◯	◯	◯	
COMMUNITY/USER	◯	◯	o	◯

Giancarlo de Carlo identified 10 stages of decision making of or-
ganization of physical spaces:

    1) determination of purpose - 2) choice of siting -3) collection
and investment of resources
    4) definition of the organizational system - 5) form-giving -
6) technological solutions
    7) use - 8) management - 9) recycling for change -
10) demolition.[10]

Architects are traditionally confined to stages 4,5, and 6, which coin-
cide with their specialization and training. Whereas users are kept
within the limits of stage 7 and are not allowed to trespass either on
the stages belonging to public control or on the stages assigned to
architects. The user's actions are further restricted by decisions which
were made by architects or by the program. They are in fact not allowed
to express themselves through changing or modifying the product. Thus,

    "Relationships between architects and users are destroyed by the
    overwhelming pressure of power holders: consequently architects
    tend to side with the latter and to forget the users are the only

legitimate receivers of their action."

The architect has to accept the limitation of professional practice, since the architect cannot extend his/her expertise to all ten stages of decision-making. Yet he/she has to define architecture in a broader sense to include the awareness and comprehension of all stages of decision-making. In the housing process, the actual design stages are just short-term activities. The value of housing becomes clear when it is inhabitated; the value either increases or decreases during the period of use. This stage of inhabitation is often de-emphasized in the architecture profession, which assumes that the architect is not responsible for the product once it is constructed. This attitude corresponds to the rigid structuring of the public management of the housing.

On the other hand, there are examples in the world that show stable and satisfying conditions in those housing environments that are managed and controlled by the inhabitants, who also participated in the production process. The more the dwellers are involved in the housing production process, the higher the value of the dwellings to them. The logical induction is that participatory (open-ended) design is more responsive to the inhabitant's needs than the close-ended design, which is endorsed by government and is practiced by the majority of architects.

An open-ended design doesn't imply a weakening of the architect's skill and expertise, instead the architect has to be fully competent in exercising his/her capability. All the three cases discussed in Part III show a high level of competence in the architects involved; they all had to satisfy the demands of the user through innovations in communication technique and construction technology.

The definition of the quality of an open-ended design reveals the limitation of the professional definition of architectural quality, which is confined to the evaluation of the aesthetic aspect of the freshly finished product. In an open-ended design, quality is a characteristic not only of the product, but also of the process of production and of the product's performance. De-emphasizing the quality of the product does not mean that the product lacks any significant aesthetic significance or any contribution to the state of the art, only that these concerns are not the goals of the process. If quality is achieved with

the structure of the process, then the quality of the product and of its
performance could be brought out by the users. An architecture of qual-
ity is one that is appreciated by the people and is responsive to their
needs.

Design is a means in the architectural production process and is
not the goal of architecture. A close-ended design is a personalized
and subjective exploration in creating spaces and physical organizations
either with an elitist and esoteric code, or with a blind faith in the
client's program. An open-ended design cannot be dominated by the design-
er's personal meanings because it has to answer the user's needs; and
the meaning and value of the product are determined by the user. How-
ever, an open-ended design is not a search for new housing types, for
as Habraken points out,

> "It no longer makes sense to look for new dwelling types to pro-
> vide the answer, but then one must look for new process forms,
> new management forms, new financing forms, and new production
> methods. But above all, it is then time to speak soundly and
> openly about the necessity of the complementary, relative power.
> About the introduction of the fine grained power which is neces-
> sary for that."[12]

A fine grained power structure is where communities and local
groups can have a say in their future. In the context of housing, these
groups will have the choice to control their housing processes and the
products. Moreover, when communities have stable equities, they can
then provide other services and assistances to local residents. The
three housing processes examined in this thesis have all achieved dif-
ferent levels of success in attaining the above goal.

PART TWO

2

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HISTORICAL DEVELOPMENT OF URBAN SOCIAL HOUSING

"The definitions of 'design' and 'environment' of course vary
through the history of architecture. They depend on the values
and goals, on the methods of reasoning and on the body of facts
that have been taken into consideration by a society and by the
architect in the course of practicing his profession."[1]
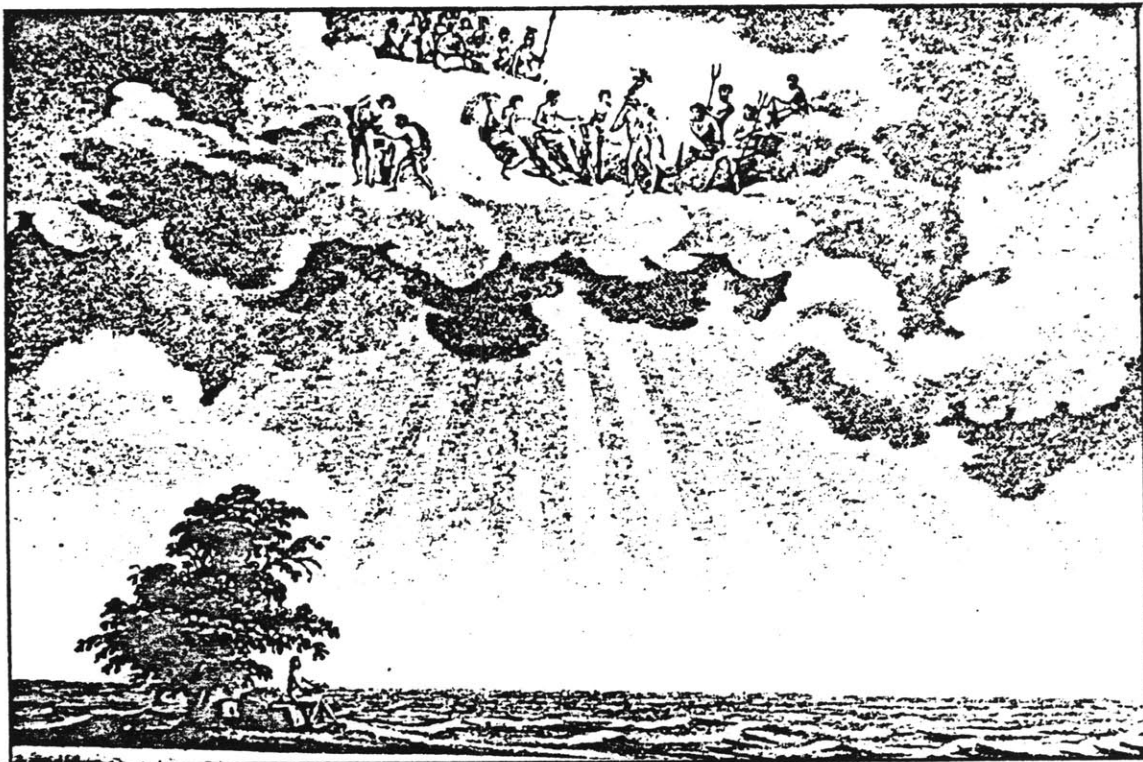
*The poor man's house, engraving by C.N. Ledoux, L'Architecture considérée sous le rapport de l'art des
moeurs et de la législation, 1806. 'This vast universe that amazes you is the poor man's house, the house of
the rich man who has been despoiled. For his ceiling he has the vault of the sky and he is in communication with
the assembly of the gods. The poor man asks for a house without any of the decorations used in the houses of
the modern Pluto. Art must interpret his needs and submit them to proportion.'*

Investigation of policy and design in housing demands a historical perspective: history presents different ideas generated and implemented within each stage of the changing social structure.

Social housing in urban centers evolved through industrialization and urbanization in the past three centuries. Thus, a historical analysis of housing process provides the architect a means to understand the present housing issues. These include the necessary procurement of resources (political power, social support, and economic means) and the suitable method of design and construction which will satisfy both the users and the clients. Moreover, the answers to these issues have to be part of a continuous reality, and must bear responsibility for future development; for our present effort is a reaction to previous actions, which were reactions to earlier contradictions in the production process of housing.

Understanding the dimension and complexity of the housing situation in modern society is incomplete without the inclusion of the political, economic, and social development of the present context. This entails examining the past. But to place contemporary, social housing and design in perspective meant looking further back over the period of industrialization, when the issue of social housing was first identified and defined.

The following historical analysis is an attempt to evaluate the impact of Western (European and American) market economy on the development of social structure and its housing policies, and to show how architecture responds to changing realities. The analytical framework used here is based on the examination of three parallel developments.

a) MARKET ECONOMY/SOCIAL STRUCTURE - the development of the forms of inhabitation in Western cities at different periods of social, economical, and political changes.

b) HOUSING POLICY - the development of the intentions and consequences of different urban social housing policies in different eras.

c) ARCHITECTURE - the development of the character of architectural practice and theory within different social, economic, and political contexts.

These three issues are separated for the benefit of analysis, but they interact with each other and redefine each other. However, it should be stated that architecture historically is incapable of generating new social structure; it can either reinforce or expose social contradictions and inequalities.

1200-1400

The feudal system of land ownership and religious faith formed the basis of the medieval society. Based on agrarian production, the economy was a close-market system with its center in the medieval city. In its ideal state, the city was a free and independent state controlled by the bourgeois (merchant) and dominated the surrounding land. In reality, the feudal magnates owned the land through military power, and the city became a market place for the merchant. Thus,

> "The interests of the princes and the bourgeois were in contradiction even when this did not involve open conflict. The feudal magnates were neither artisans nor merchants. They were subject to a different law than the bourgeois. Thus their existence in and value to the city was necessarily a marginal one."[2]

There exists, between medieval man and his dwelling, a direct relationship, which was based on the balance between his needs and his resources; man had the freedom to modify his dwelling to suit his changing status. In the medieval city, man lived adjacent to his work; and his dwelling functioned as an independent living unit.

Architecture, as the art of building, was only valued by the feudal magnates when they constructed their residences or religious buildings. Oppression suffered by the surf was defined by the power class not as materialistic, but as spiritual deprivation. Cathedrals were thus built on the belief in "The divine model, the truth, through the manifestation in the man made environment, has the power to liberate man." (Tzonis, p. 20).

1400-1600

Increased communication between principalities was established through joint ventures in war and trade. Along with the diminished

independence of the cities, the power of the prince and new urban
nobility was solidified. Thus by the Renaissance,

> "There were at least three major strata of bourgeois within
> the urban walls: a small upper class oligarchy of wealthy
> merchants and an urban nobility living on income from pro-
> perties and investments; a middle class of small traders and
> artisans; and a large but economically and politically weak
> lower class of laborers living on the margin of urban society."[3]

The development of town palaces and villas for the power class
within the city changed the urban housing fabric. Due to the crowded
environment around the central markets, the merchants and the urban
nobility built their residences at the periphery of the city, anti-
cipating the separation of work (production) and habitation (con-
sumption) for the bourgeois. As for the laborer, they remained in
the crowded centers and became tenants in buildings owned by the
bourgeois.[4]

Intellectual theories elevated the status of the architectural
profession into the Renaissance Humanist School.

> "Three influences, in combination turned Renaissance architecture
> to an academic art. They were the revival of scholarship, the
> invention of printing, the discovery of Vitruvius . Scholar-
> ship set up the ideal of an exact and textual subservience to
> the antique; Vitruvius provided the code: printing disseminated
> it."[5]

Thus, aesthetic norms were used to form the basis of rational design,
which was necessary

> "To define a new set of criteria to be met by the design product,
> while disregarding the design process itself, the means...
> Design products, as pleasing objects, express the form of the
> new society of individual concentration of power. As signi-
> fiers of power grasped" (Tzonis, p. 50).

1600-1700

Formation of open-market economic system followed the inten-
sification of trades between different urban centers. Population
movement from rural to urban areas provided the source of labor for
the secondary and manufacturing industries, signalling the beginning
of the decomposition of the medieval agrarian social structure.

Stratification of economic classes in the cities was reinforced
by segregated housing location and by architectural symbols and forms.

Economic consideration based on monetary exchange became important

when the laborers decided the location and quality of their dwellings.

Proximity of housing to place of production and available monetary

resources were incentives for the laborers to stay in overcrowded

urban centers.

With architecture institutionalized as a profession, architectural

education (apprenticeship) ensued. Furthermore, rationalist archi-

tecture defined a clear and logical process of thinking. Theories of

design were necessary with the emergence of a new organization of

power in the urban centers. Along with "the end of the period when

theories of architecture considered the design of a building to be

determined by a set of independent objectives," there arose a concern

with "the mechanical stability (change in the production process)

and physical efficiency of a building fabric, reflecting the law of

Nature" (Tzonis, p. 66).

1700-1800

Industrialization, occurred first in England in the mid eight-

eenth century, transformed the small scale manufacturing economy to

a large scale operation. In Europe, concentration of manpower and

development of economic market became crucial to the industrial revo-

lution, characterized by increase in population, in industrial pro-

duction, and in mechanization or productive systems.[6] Different

economic classes, based on control over production process, were

labelled later by Marxism as the capitalist, the bourgeois, and the

proletariat. The differences between these three classes gave rise

to conflicts that became inherent in urban society. In the eighteenth

century, as Benevolo pointed out,

> "Words as used by politicians, employers and workers did not
> have the same meaning: freedom for the first meant a program
> one devised from the philosophers of the Enlightenment, for
> the second a slackening of state controls on their activites,
> for the third the right to a reasonable standard of living.
> Yet all used the same conventional phrases and allowed dis-
> cussion to take place in metaphorical terms, through habit or
> calculation."[7]

Housing policy developed by the capitalist system became an

issue of control: who controlled what and why. The reason why was

to secure a stable labor force, with minimum investment and with
maximum control over the structure of the environment, through con-
trolling the market economy. Without direct involvement, the capital-
ist opened up the housing market to the bourgeois. Motivated by
monetary gains, the bourgeois (land owner) provided overcrowded rent-
al housing to the proletariat. Industrialization improved the hygiene,
yet it provided the means and skills to build high-density environ-
ment: the urban proletariat was packed into multi-story houses
equipped with centralized plumbing. They lost forever their control
over their own dwelling involvement.

Architecture survived through the turmoils by changing its em-
phasis to the scientific development of styles or "working concepts."
To guarantee the separation of status, building typologies were cate-
gorized.

> "It was expected by minimizing unnecessary construction costs,
> it would be possible to increase the amount of material avail-
> able to man. Affluence would thus lead to a liberating environ-
> ment" (Tzonis, p. 72).

This became

> "A justification not only for those who benefited power but
> also for the oppressed, allowing the architects the image
> that they operated on principles which benefit the totality
> of society, in other words, an ideology" (Tzonis, p. 74).

1800-1900

The conservative political system of the Western world was
overtaken by the capitalist economy in determining society's func-
tions. Dominance of the laissez-faire economy, together with the
advancement of industrialized production, created a belief

> "that one need only concern oneself with the single element -
> the single enterprise, the single invention, the single profit -
> for a balance to reassert itself automatically throughout the
> whole. Man believed that they were moving towards a 'natural'
> order of economics and society, which could be known a priori
> from the analysis of its elements, like Newton's physical world.
> The structures of traditional society...appeared as artificial
> obstacles, which could be removed so that the world could move
> forward into the imagined natural order."[8]

New machines and improved production efficiency stimulated in-
dustrial progress and further alienated the workers from any control

over production. The workers were silently transformed into consumers.
The spirit of this period is best summarized by Charles Dickens when
he said in 1859 that

> "It was the best of times, it was the worst of times, it was
> the age of wisdom, it was the age of foolishness, it was
> the epoch of belief, it was the epoch of incredulity, it was
> the season of light, it was the season of darkness, it was the
> Spring of hope, it was the Winter of despair, we had everything
> before us, we had nothing before us...."[9]

Direct involvement of the capitalist in housing production began when
the first worker's housing was built by a mining company in the Franco-
Belgium border in 1810.[10] Yet government actions were limited to
sanitary regulations, enforced to control the periodic spread of epi-
demic, originated from the over-crowded working-class slums, that
threatened the bourgeois. Along with these regulations was the estab-
lishment of public bureaucracies. Furthermore, exploitation of the
housing market by the capitalist (locational theory and control of
labor supply), by the bourgeois (monetary gains), and by the govern-
ment (political stability) led to standardization of dwelling for the
workers in its design and utility services.

At the same time, utopian communities were founded by philan-
thropists and social communitarians.[11] As reactions to the deterio-
rating urban environment and to the political system, these instances
exposed social contradictions and conflicts generated from the incom-
patibility between a desired humane environment and the exploitative
planning policies of government and capitalist.

In 1872, Frederick Engels published "The Housing Question,"[12]
and successfully put the housing issue in a proper political and
economic perspective. In 1885, the Royal Commission on Worker's
Housing of England institutionalized the word "housing" to represent
a particular type of environment for the working class.

For the architect, there was an urge of utility in the design
of objects. Pursuing a sense of pleasure and beauty derived from the
machine products, a design product was acceptable when it was "com-
fortable to the principle of utility" (Jeremy Betham). The functional
efficiency theorists

"were interested in the 'individual' user of the environment,

the individual as abstracted from society. They referred
to what they considered the individual's social needs but
not to those needs of the individual which were imposed on
him, dictated by society" (Tzonis, p. 78).

The contradiction between a rationalized design process based on
utility and the irrational pursuit of harmony and beauty resulted in
the belief that "visual form has to find a way to reconcile ob-
jectives of consumption with the objective of efficient production"
(Tzonis, p. 82). This task of reconciliation, began by William
Morris, was taken on with conviction by the Modern Movement in the
next century.

1900-World War I

Prosperity resulting from expansion of international trade and
technological advancement was limited to the bourgeois and the cap-
italist. Increasingly, control over resources and territories was
concentrated into smaller numbers of people, who had powers to change
the course of history. Meanwhile, progressive experiments in liberal
arts were sanctioned by regressive political and economic system. Con-
flicts of interest among the advanced capitalist states finally led
to war in 1914.

The industrial capitalists relinquished their share of the respon-
sibility in the worker's housing production. Instead, the State began
to increase the economic incentive for private investment of the
bourgeoisie in the social housing market. Thus, speculative market
economy gained control over the production of social housing. Con-
ditions in congested urban centers worsen with increasing population
due to higher birth rate, lower death rate, and influx of workers
from rural areas and from less-developed countries.

The European avant-garde, with their new found freedom in pro-
gressive experiments, took on different enterprises which

"began by asserting their own freedom and originality
in relation to all preceding ones, and were promoted by
single people or small groups who could retain their inde-
pendence from the rest of society while putting forward
theories supposedly valid for all." [13]

The Art Nouveau and the Arts and Crafts Movement exemplified such

avant-garde movements through their search for "a new visual (order)
vocabulary for a language that now had a new purpose, the temporary
abandonment of power to the producer of rapidly obsolescing pro-
ducts" (Tzonis, p. 87).

Inter-War Period

A new power structure was evolving. Indeed, the destruction of
the environment, and more importantly, the loss of faith in the exist-
ing social structure led to different experiments with new political
and economic systems. There was a sense of urgency to create a virgin
social order inspired by a new spirit (Zeitgeist). Such attempts were
typified by the Weimar Republic and the early Russian revolution.
Large scale rebuilding of destroyed urban centers was carried out by
private sectors, and for the first time, by government. Industries
recovered and moved ahead with even greater pace, and were ultimately
incorporated into the war production machinery when the economy in
America and European countries suffered severely from inflation. In
the United States, the Great Depression didn't come to an end until
the U.S. entry into the Second World War. In Germany, the collapse of
the Weimar Republic and the breakdown of the economy paved the way to
the ascent of power of the Third Reich. Similarly, the Italian
Facist Party gained control after a period of chaos.

In Europe, the destruction of the urban fabric by the first war
created massive housing shortages. Government policies became in-
creasingly involved in social housing production. Social housing,
built either directly by public agencies or through public subsidies
to private enterprise, was used as a means to fight declining economy
and high unemployment. Economic interest, and not social responsi-
bility, was the intention behind housing policies. The situation in
Germany best described the resulting chaos.[14]

Immediately after the first war, under the Provisional Housing
Act, heavy government subsidies were available. Subsequently, housing
societies (Siedlungen) fluorished to provide non-profit housing for
workers. Then in 1923, under pressure from the capitalist, there was
no more government subsidized housing because the profitability of

housing to the private sector reappeared. Later in 1927, heavy
foreign (mainly American) investment in the German housing market
began when the government allowed high-interest loans. Thus, the
interest on foreign loans rose to 11.5% in 1928, and the direct con-
sequences were the construction of the smallest size dwelling with the
most economical layout in the 1930's.

Architecture's response to the period's demand was one of naive
optimism. The Bauhaus, the pinnacle of rational design, struggled
to develop a design methodology reflecting the "Zeitgeist" and the
machine aesthetic, and yet one which was naked from any political im-
plication. First, there was "the cultivation of the fantasy that the
appearance of lifeless objects could gratify man and relieve him from
the anxiety and terror of oppression" (Tzonis, p. 87). Later there
was the urgency to communicate the change of political/social orders
of the 1930's. The avant garde failed in this respect, partly be-
cause of the conformist-trend in the Modern Movement. Thus, the
totalitarian governments turned to Neo-Classical movement for the
State and the Volkisch style for the general public. Meanwhile, the
Congres Internationaux d'Architecture Moderne (CIAM) was formed to
exchange informations on the design of low-income housing environment
and also the state of the Modern Movement. The following list of
CIAM meetings before the next war reflected clearly not the state of
the Art, but rather the state of political and economic demands.

1927 CIAM 1 - La Surrez declaration, with statements on "Archi-
               tecture and the Public Opinion" and "Architecture
               and the State."

1929 CIAM 2 - Der Wohnung fur Das Existenzminimum (Dwelling for
               Lowest Income ((Giedon)), or Minimum Standard
               Housing).

1930 CIAM 3 - Rationalle Bebauungsweissen (Rational Lot-Division
               ((Giedon))).

1933 CIAM 4 - The Athens Chapter on principles of city planning.

Post-War Period

After the war, the social, economic, and political development
was different from one country to another. Nevertheless, one common
phenomenon among the advanced capitalist countries is the advancement

of physical science, which stimulates innovations in industrial pro-
duction, technology, building science, and social behavioral studies.
In the analysis of the three case studies, an account of the develop-
ment of each particular context after the 1940's is included to give
the background to those problems that each project had to tackle.

Public organizations and bigger bureaucracies were formed to
collect resources, define policies, and implement strategies in the
name of scientific process and efficiency. The illusion of efficiency
based on a pyramidal structure of power provided the logic for mas-
sive-scale productions of social housing. To further put people into
a purely consumer role, public bureaucracies took over the management
of the housing projects, leaving no power of inhabitation to the in-
habitants. As a reaction to such oppressive nature of government
intervention in housing, and partly influenced by squatter movement
in both developing and under-developed countries, there emerged an
anarchist approach to housing. For the theorist of the latter, a
fundamental contradiction existed when "never in urban history did
so many of the poor do so much with so little; and never did so few
of the rich do so little with so much."[15] Similar to the anarchist,
the Marxist urban economist exposed the fallacy of present capitalist
housing market with equal conviction (see dia. 1).

Following societal belief in scientific reasoning,

"The basic principle was commonly accepted that designers and
planners would be better able to solve their problems, and would
be better able to form their discipline into a science, if they
were to deal with the process that were contained in spatial
arrangements rather than with spatial arrangements which acci-
dentally contained process. This reversal of priorities in-
deed marked a major breakthrough in the methodology of design"
(Tzonis, p. 96).

One consequence of the emphasis on efficiency was the rationale for
slum clearance and urban renewal that occurred all over the Western
world. For architects, this gave them the chance to replace visual
squalor by a new set of highly ordered objects, a new consumer pro-
duct based on science and logic.

1960's-Present

The 1960's brought along major changes in the thinking of how

The housing shortage as explained by the Neo-Marxist econmist,
Manuel Castells.

Production process of the housing crisis
in the capalist economy
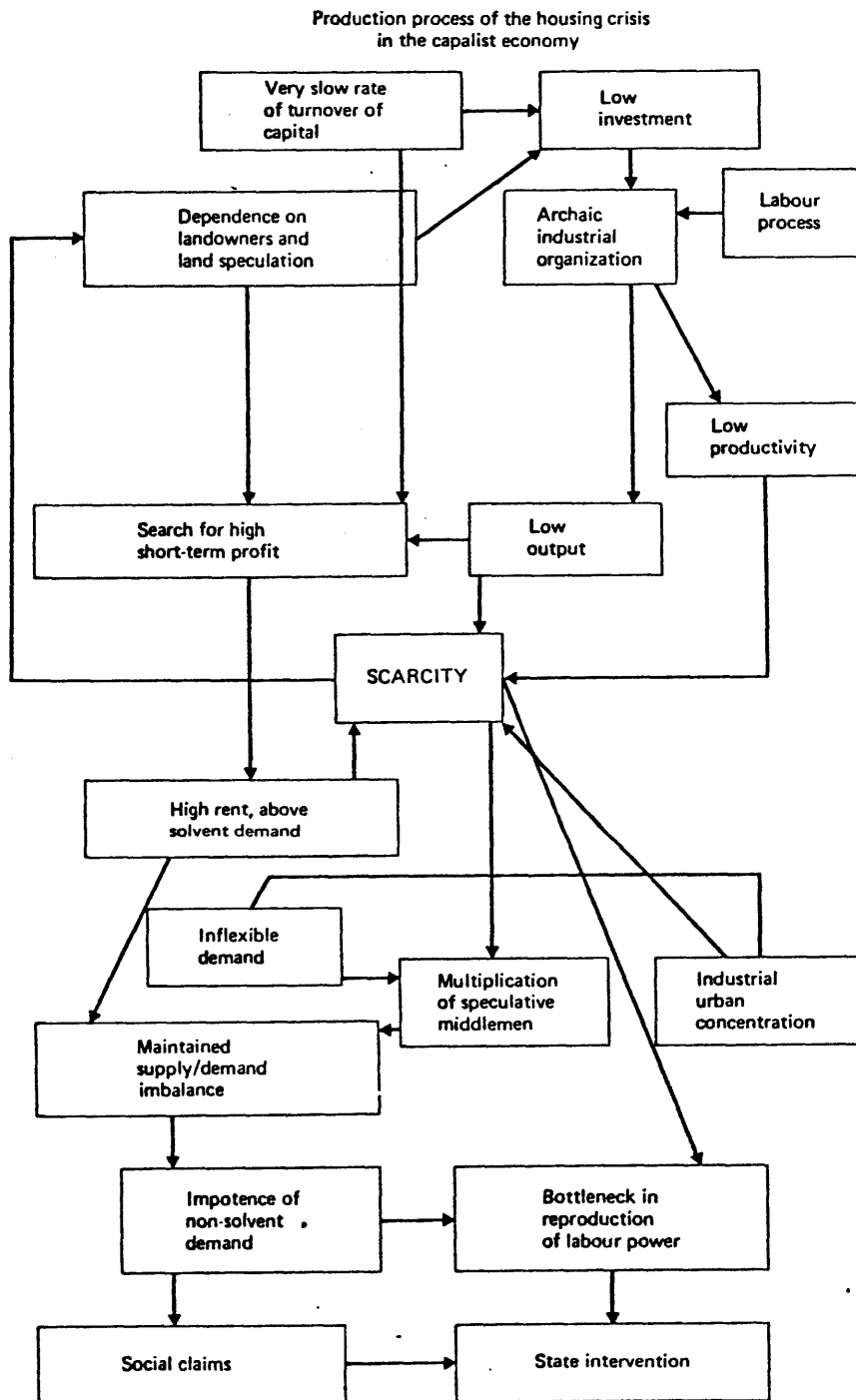
dia. 1

society functions. Advanced capitalist societies had to explain the urban crisis (racial violence, worker's strike, rapid deterioration of social housing stocks) and the inequality of man in his share of power and resources. The 60's student movements in America and Europe generated new strategies to pressure reform in public policies. Castells insisted that "the urban crisis is a particular form of the more general crisis linked to the contradiction between production forces and the relations of production."[16]

One issue that stood out in the urban crisis is the housing issue. It became the focus of actions across a broad spectrum of the population. Social housing comes into public attention when its financial structure based on taxation proves to be unsound, and when tenants and community groups demand control over their housing environment.

The majority of architects, being the apologist of capitalism, disguised their social negligence by either practicing accepted functional efficient model and corporate architecture, or by regressing into Neo - Formalism, Post - Modernism, and the "Architecture for Fun." The latter category, ironically, was then perceived as a new consumer object, and was greatly welcome by the power class and the market. The evils of the materialistic society "are supposed to be cured by the consumption of new products." Similar remarks could be made on the Populist Movement in the 60's and 70's. Originated from a sincere attempt to allow people to participate in the decision-making process, the Populist Movement failed to make real changes in the political and economic structure. It failed because as an esoteric and elitist movement, without the input from the people it vowed to serve, it lost the clarity of its goals, and the context of its strategies.[16]

Changes in the existing system occur when there is a combined effort of architects, communities, and other professionals. Changes are based on collective power, possible only through a process of common sense participation. And such changes are realities in the three case studies discussed in this thesis.

3

THE ARCHITECT

"Architecture made its claim for a place in industrial society by
arguing that the way in which buildings were designed could improve
the quality of life. Clients and users responded to this argument
and sought out architects to help them provide housing, communities,
schools, hospitals, parks, and other public amenities. Many of the
designs which the architect proposed did not fulfill either the
architect's promises or the user's expectations. This was a typical
outcome in the field of housing and has led many public authorities
in both the U.S. and Europe to become disenchanted with concepts put
forth by the profession." (Robert Gutman, 1978)

Architecture and Morality

INTRODUCTION

Once again the architectural profession is in crisis. To the architectural theorists, this means conflict between evolving styles. However, to the outsiders and some architects and historians, the crisis arises whenever the economy is unfavorable to the architect's activity.

Most architects try not to believe in the fact that architecture is an entrepreneurial profession. The risk that architect takes is not the controversy of certain "style," rather it is whether the "style" is of economical value to the client. Robert Gutman explained the present crisis as

> "When the industrial state is in a fragile condition, the concern of architects for building form and social benefit tends to be passed over in favor of an emphasis on the contribution of building to the increase in economic productivity. When the government fiscal situation is more relaxed and when corporations regain confidence in their survival, the skills which are unique to architecture among the design professions generally receive more attention."[1]

In the last chapter, the development of housing policy is discussed within a framework of market economy and political movement, which in turn affects the changing attitudes of the architectural profession.

Housing, as emphasized here, is an economic and political action that transforms into a design issue. Historically, architects ignored the non-architectural aspect of housing in their statements and writings. Yet all the architectural manifestos and treaties on housing reflected political and economic ideologies of the era. Presented here is an exposition of architectural statements on housing in general, and in particular, those on social housing since the industrial revolution. It is important to put these statements into the contemporary ideological framework, formulated within changing social, and political reality.

PRE-INDUSTRIAL ERAS

When the Latin text of Leone Battista Alberti's "Ten Books on
Architecture" was first printed in Florence in 1485, the Renaissance
had the first complete treaty on the art of architecture. Since the
reintroduction of Vitruvius Treaties in 1414 by Foggio Bracciolini,
images of the Roman Antiquity were called the "correct" style and
formed the basis of evaluating architecture. This "correct" style
was then used in the design of urban palaces and villas to symbolize
the power of the residents. Such distinction for the power-holders
was reinforced by the location of their residences, placed at the
periphery of the town so as to gain ample space. However, Alberti
explained such a phenomenon by beginning his treatise on city form
on the necessity of segregating the citizens by their capacity of
"Reason," "the knowledge of useful Arts," and "Prosperity of For-
tune."[2] Such Renaissance coding system was epitomized later by
Andrea Palladio's Four Books of Architecture, published in 1570
in Venice.

At the eve of the century of the Enlightenment, the French
architect, Claude Perrault (1613-88), looked towards Nature to pro-
vide a rational and logical thinking for design. In his book, A
Treatise of the Five Orders in Architecture, 1683, Perrault con-
cluded that the laws of nature were the basis for "Positive" ob-
jectives, which were free of human mind or senses. Thus a design
with "Positive" objectives could be justified by a rational system;
thus "His arguments associate built form with material objectives
in such a way that they can be subjected to experimentation and veri-
fication."[3]

Rational design dominated the eighteenth century architectural
theories. Reacting to the arbitrariness and peculiarities of the
past styles, theoreticians such as Carlo Lodoli (1690-1761) and
M.A. Laugier (1713-70) argued for nobleness in the simplicity of
design, in particular, in its "structural efficiency." These
theoreticians believed that if culture was free of the chaotis de-
velopment of the past, man would return to essential yet sufficient

conditions of primitive survival. Thus Laugier would say in his
"Essai sur L'Architecture" (1755) that "The little rustic hut is the
model on which one had projected all the magnificence of architecture.
It is in coming close to the simplicity of execution of this first
model that one avoids the essential faults and seizes upon the true
perfections."[4] However, such exhortation, when put into the proper
economic and political perspective, is explained by Tzonis as

> "What seems to be able to multiply power at least in the reality
> of the eighteenth and nineteenth centuries is accumulated power,
> and one basic means for creating it is saving...And what seems
> to be expressing the activity of saving is the application of
> the methods of structural efficiency."[5]

In the mid eighteenth century, while G.B. Piranesi (1720-78)
was working on his influential "Carceri," raw iron was processed into
cast iron in the English industrial North. Soon after, in 1779, with
the completion of the first iron bridge at Coalbrookdale, in England,
the industrial revolution transformed architecture and the construc-
tion process.

1750-1900

> "The Architecture prepares the way for commerce: she builds
> ships, with ports and piers for their reception and secu-
> rity; forms roads...levels mountains, fills up vallies, throws
> bridges over deep and rapid rivers...facilitating by these
> means the conveyance of Merchandise...Commerce brings wealth
> and wealth introduces luxury. Pride and pleasure give birth
> to thousand refinements; the greater part of which cannot
> subsist without the assistance of Architecture."[6]

Such enthusiastic prophecy reflected the spirit of the first
period of industrialization; and this was shared by others. In
response to the advancement of logical thinking and efficiency,
architects began the scientific classification of functions and acti-
vities with appropriate building prototypes. The culmination of a
century of rationalist theory was celebrated with the publication of
"Precis des lecons d'architecture dennees a L'Ecole Polytechnique" in
1802. Written by J.N.L. Durand (1760-1834), an engineer with the
Ecole, the book became the bible of the structural rationalism.

Earlier in 1791, the architect and philosopher Jeremy Bertham published his design for the Panopticon, a model prison which symbolized the fanaticism of functional efficiency with the design of a circular building with a central point of surveillance. At the same period, another trend in architecture attempted to reconcile a romantic architectonic image with the rational thinking of the era. Visionaries such as L.E. Boullee (1728-99) and C.N. Ledoux (1735-1806) provided visual documents on their interpretations of function into built form.

The first half of the nineteenth century, as Charles Dickens observed, was a time of contradictions and turmoils; similarly, architectural theories and practices were diversified and ecclectic. In England, the successful architect John Nash (1752-1835) incorporated exotic ecclecticism in his Royal Pavilion (1818) in Brighton as well as practiced popular bourgeois development around the Regent Street area (1812-25) in London. Nash's Neo-Classical language of the latter became the prominant public style, while others began to seek identity and difference in the rustic romantic style practiced by architects such as Norman Shaw and Robert Adams. Beyond the difference of styles lay the fact that there was a separation between the bourgeois in the urban centers and those who suceeded to escape from the dense environment in the country. Henceforth, the split between town and country would dominate the arguments of the urban theorists of later age.

Meantime, technological advances opened up new architectonic potentials. The Bibliotheque Sainte-Genevieve (1843-50) by Henri Labrouste (1801-75) was noticed for its gracious use of exposed cast-iron construction in the interior rather than its austere but correct classical exterior. However, the Bibliotheque fame was later overshadowed with the completion of the Crystal Palace in London in 1850. Built by the gardener Joseph Paxton, this greenhouse-like structure which housed the 1850 World's Exposition was completely built in iron frame and glass, which historians of later generations credited as the first "Modern" building. The World's Fairs in the following decades provided the chances for architects and engineers

to experiment with new ideas and styles to suit the fluctuating
demands of the bourgeois taste.

In his book Conditions of the Working Class in England (1845),
Engels gave a summary of the chaotic urban environment:

> "Single rows of houses or groups of streets stand here and
> there, like little villages on the naked, not even grass-
> grown, clay soil...the lanes are neither paved nor supplied
> with sewers but harbour numerous colonies of swine penned
> in small sties or wandering unrestrained through the neigh-
> borhood...(In the old centre) confusion is at its height,
> because wherever the building programme of the previous age
> had left a scrap of space, other buildings have been added,
> so that there is no longer an inch of spare ground between
> the houses. (In the new districts the situation is even
> worse because) whereas before it had been a question of
> single houses, now every courtyard and alleyway was added
> as the builder wished, without any concern for any other."[7]

This urban stigma, caused by the raping of the environment
by speculative market economy, was seized upon by many intellec-
tuals as the evil of industrialization, but also by others as a
symptom that could be cured by more advanced technological means
and rational thinking. The first group – the social utopians –
abandoned the city for the country, where they could built collec-
tive commune. The latter group remained in the city and proposed
modern planning and design as a remedy to the urban chaos.

Among the social utopians, Robert Owen (1771-1851) and Charles
Fourier (1772-1837) were most influential on their contemporaries.
Acknowledging the pillage of industrialization on the environment and
hence the living conditions of the workers, they sought to correct
the wrongs by material means rather than reforming the social struc-
ture that was the origin of the wrongs. Both Owen and Fourier be-
lieved that communal facilities were equal to wealth; that through
the sharing of household activities and equipments, the workers
were allowed the possibility of having the experience of the bour-
geois. Indeed, these social utopians created environment where "one
has to create collectively the comfort that they (the workers) can-
not achieve individually."[8]

While Owen envisioned separate accommodations for the inhabi-

tants in the phalanstery, Fourier proposed to have communal living in big buildings. Owen founded the settlement in Harmony, Indiana (USA) around the 1820's, which became the model for other settlements of the social communitarians.[9] In France, J.B. Godin (1817-89) founded the familistere in Guise following Fourier's plan, but based the enterprise on a milling industry and abolished communal life by putting each family in separate apartments in a large building.

Contrary to the utopian's model, the small houses and cottages were the prototypes of housing for the workers built by philanthropic industrialists. The reasons for this chosen style were both economic and functional,

> "On the one hand, the 'small house' was the type that could be sold most easily. Moreover, it was the favourite form of housing of the big philanthropic industrialists, who were attracted to it by virtue of that romantic, naturalistic vision innate in the nordic spirit (Howard, Owen, Fourier), and by the fact that their big industries which sponsored enterprises in which the 'small house' was a principal feature, were mainly situated in the countryside, or on the extreme outskirts of towns, where the price of land did not bear too heavily on the costs of construction. Besides, it was wholly in the interests of these men to 'secure' for themselves a healthy, well-housed, and hence more productive labour force (health=productivity, an equation that was later taken up by Henry Ford).

> On the other hand, the small single or multi-family house was the answer to the sanitary problems which gave rise to the waves of epidemics that decimated the proletarian populations of the towns through-out England in the first half of the 19th century."[10]

The control of private enterprise over urban social housing was supported not only by the capitalists, but by intellectuals of different ideologies. Engels approved housing by speculators and philanthropists as a necessity before power could be attained by the working class. Others opposed the idea of State interventions as an intrusion of public authorities into the laissez-faire economy. For the architects, the demands of the market set them searching for typological designs for worker's housing.

The British architect Henry Roberts (1802-1870's) developed

influential schemes of worker's housing in London. The housing
at Streatham Street, famous for its density and efficiency, had
three bedroom flats served by single-loaded corridors connected by
several staircases. Moreover, the plan showed a separation of
children's room from the parents' room, reflecting the emerging
Victorian morals and the contemporary emphasis on hygiene.

In Europe, numerous designs of worker's housing appeared in the
nineteenth century, as well as international conferences on large-
scale "cheap" housing. Large-scale development was feasible because
of the concentrated capital of private enterprise, and provided the
chance for large-scale architectural intervention. The work of the
Englishman Thomas Cubitt (1788-1855) gave a good idea of such ac-
tivity. More a builder than an architect, Cubitt began the practice
of 'contract in gross,' introduced industrialized site operations,
and tied building production with land speculation.

However, no design of worker's housing could deny that "even
choices of design (topagraphic and typological) became metaphors by
which the ruling class controls the distribution of the various
social classes in the big industrial towns."[11] The Hausmann's plan
of Paris in the 1840's and 50's, and the Cite Napoleon were symbols
of control and oppression over the workers. Likewise, the develop-
ment of the tenement housing in New York, which developed as a cor-
rective measure of unsanitary housing later turned into ghettos of
working class. Begun with the model developed by Post and Dresser
in 1879, numerous models of tenement housing were proposed to pro-
vide adequate light and air to every room through internal set back
and courtyard. Despite the good intentions, but under capitalist
economy, such typology was exploited by speculative enterprise to
pack even higher density of the poor, mostly immigrants, into tighter
space.

1900-1945

Standardization of housing was seen as the means by architects

and their clients to fight the deteriorating urban environment.
Liberated by the new available materials and construction methods,
architects approached the design of worker's housing with a myopic
and vigorous concern over style. Instead of being critical of the
social system which produced uniformity, architects occupied them-
selves in how to make uniformity less uniform by applying the cos-
metic of style.

The housing shortage created by the First World War added an
emergency to the architect's search for housing types. Nonetheless,
their efforts were not always appreciated. In 1918, the Dutch
architect, H.P. Berlange, exclaimed:

> "The workers...see in the dreadful monotony of endless rows
> of identical houses and bungalows an assault upon their
> personality, upon their freedom, upon their humanity; this
> kind of housing turns one into a herd-animal, a serf, a de-
> pendent. And this is understandable. For after the long
> period of guardianship and distribution systems imposed on them
> from above, they fear that they will again be cut off from
> any say and initiative which they had slowly gained in the
> manner of their dwelling. And now this proposed form of
> housing, which has already been drastically characterized in
> a revolutionary organ as 'one uniform, one fodder, one ken-
> nel,' means to them being stacked away in some sort of cellu-
> lar prison."[12]

The new proposed form of housing referred to by Berlage was
the multi-family structure developed to a new potential of highest
density. The architectural avant-garde provided numerous models
to the multi-family structure: the tenement housing block in America,
the perimeter block model in Europe, Le Corbusier's courtyard block
of the 1920's, and Walter Groupius's open row model of the 1930's.[13]
Orial Bohigas, an architect of the later generation, explained the
position of the avant-garde in housing.

> "The planning of low cost housing enjoys a certain methodological
> autonomy thanks to the character of urgent necessity connected
> with it and also to the primary importance of its economic and
> social implications. This autonomy conflicts with a certain
> attitude of the avant-garde and of experimentalism on at least
> two points: industrialization and the repetition of patterns."[14]

Unfortunately, the experimental attitude of the avant-garde was
scandalously separated from reality. Walter Gropius wrote in 1923 on
the theories of the Bauhaus:

"Architecture during the last few generations has become
weakly sentimental, esthetic and decorative...the architect
was engulfed in academic estheticism, a slave to narrow con-
ventions, and the planning of cities was no longer his job.
This kind of architecture we disown...we want an architecture
adopted to our world of machines, radios and fast motor cars,
an architecture whose function is clearly recognizable in the
relation of its forms...the Bauhaus has set itself the task
of creating a center of experimentation where it will try to
assemble the achievements of economic, technical and formal
research and to apply them to problems of domestic architecture
in an effort to combine the greatest possible standardization
with the greatest possible variation of form."[15]

Led by slogans of Le Corbusier such as "we have succeeded in
transforming the inhabitants of garden-cities into a handful of
human dust scattered to the four corners of the urban horizon. Here
one is deprived of one's collective potentials."[16] The avant-garde
of the CIAM set off to propose urban utopia of high-rise buildings
with green pasture around. Gropius wrote: "In a ten or twelve story
high rise apartment even the ground floor can see the sky...the windows
face landscaped areas with trees which are 100 meters wide and help to
purify the air as well as providing playgrounds for children." Thus
in one sentence, he listed the four essential elements of the naive
concept of housing of the avant-garde: light, air, open space, and
the resulting well-being of the inhabitants.

However, in the 1930's, it was clear that these housing failed to
live up to the architect's prophecy, because they failed to satisfy the
profit-making private enterprise. Instead of green space of 100m.
wide, ten or twelve story high-rise buildings were separated by 20m.
of emptiness. Similarly, the Siedlung such as the Weissenhof (1927)
of Stuttgart was turned into model housing for upper-class, who could
afford the expanse of new material and open spaces.

With naive bluntness, the Modern Movement also accepted the
State and the capitalist system as its legitimate masters. In 1928,
the La Sarraz declaration included the chapter on "Architecture and
its relations with the State," which declared:

"Modern architects having the firm intention of working accord-
ing to the new principles can only regard the official aca-
demies and their methods tending towards aestheticism and
formalism as institutions standing in the way of progress.

"Academicism causes States to spend considerable sums on the erection of monumental buildings, contrary to the efficient utilization of resources, making a display of outmoded luxury at the expense of the most urgent tasks of town planning and housing...

"Within the same order of ideas, all the prescriptions of the State which, in one form or another, tend to influence architecture by giving it a purely aesthetic direction are an obstacle to its development and must be vigorously combated...

"Architecture's new attitude, according to which it aims of its own volition to re-situate itself within economic reality, renders all claim to official patronage superfluous...

"If States were to adopt an attitude opposite to their present one they would bring about a veritable architectural renaissance that would take its place quite naturally within the general orientation of the country's economic and social development..."[17]

Therefore, when the State rejected the Modern Movement, despite passionate pleas from Corbusier and Gropius, one can argue, like Giancarlo, that the Modern Movement is dead since then.

Nevertheless, there were architects in the 20's and 30's who took on a more radical course towards housing production, usually when the government was progressive and sympathetic to social changes.

Between 1915-1923, in Amsterdam, the Social Democratic Worker's Party challenged architects to new political and architectural directions, to involve in "the struggle of the working class" and to create "beautiful worker's dwellings, the monuments to the struggle."[18] Younger architects responded to the call and offered their service at lower fees: subsequently, a number of impressive projects for non-profit housing society were built which remain as a model of social architecture.

In Frankfurt, the radical German architect Ernst May wrote:

"The architects of New Building are united, across the borders of their countries, by their concern for all needy men; without this social concern, they are unimaginable. We can properly say that they put this aspect of social concern in the foreground of New Building. They refuse, therefore, the urban imperialism which seeks to parade ever greater dimensions. They believe...that it is not the number of people who live in a city that is important but rather the standard of living which can be offered to all of them. They emphasize: 'to all of the people,' for they feel that no settlement of any kind

has the right to exist so long as it offers a satisfactory standard of living only for the few rich and well-to-do. They fight for improving conditions of the poorest man.

"World War I ripped off the mask of our culture. For those who wanted to see, they suddenly realized that even in times of peace things happened which were no less brutal than what occurred on the battlefields. They began to think about the conditions of the millions of people who languish in the seas of stone which make up our big cities. They saw the countless children who grow up in these unhealthy caves -- in the paved back yards between the towering walls of the rear buildings, among vice and crime. They understood that tuberculosis and other signs of deterioration were caused by such misery, and were witnesses to a war going on in times of peace; it is not a war which spreads death with thundering canons, but rather a silent, slow and incessant war. They understood the meaning of the fact that in Berlin there were 24,000 dwellings in which 6 or more people lived in one heatable room (to give but one number). They understood that these people would necessarily come to revile a social order which refused them even the satisfaction of a necessity as basic as food and clothing -- namely, a decent dwelling. If we read in a newspaper that in some large city a man assaulted his fellow-man and was sent to prison for it, then we need to remind ourselves of those statistics which prove the connection between crime and the milieu in which criminals grow up; and instead of despising these people, we have to ask ourselves: would we not have done the same if we had grown up as they did?

"The architects of New Building therefore mistrust the one word which is the slogan of the present, written in large letters: economy. They know that this word has caused a large part of the misery. For reasons of economy, people from the rural regions were drawn to the big cities; and for these same reasons, land prices skyrocketed and therefore increasingly higher tenement houses were built. For reasons of economy, the sun was expelled from the deserts of stone which our big cities are.

"As architects of New Building, we fight such economy with all our means, and we fight its representatives . . . . What we understand by a new economy is to build healthy dwellings for the people at somewhat higher costs rather than having to spend the seeming savings of building unhealthy dwellings on the care of the ill and the criminals."[19]

The Siedlungen, which Bruno Taut hailed as "the Cathedral of Socialism," remained as testaments to the effort of the progressive group of German architects in creating a "non-oppressive" environment.

Another political view was expressed by Hans Meyer, who became the director of the Bauhaus after Gropius for only one year, before

he was forced out because of his ideology. For Meyer, architecture
was not art, but a building. He wrote in 1928 that:

> "building   is the deliberate organization of the processes of
>   life.
>   building   as a technical process is therefore only one part
>   of the whole process. the functional diagram and the
>   economic programme are the determining principles
>   of the building project.
>   building   is no longer an individual task for the realization
>   of architectural ambitions.
>   building   is the communal effort of craftsmen and inventors.
>   only he who, as a master in the working community
>   of others, masters life itself...is a master builder.
>   building   then grows from being an individual affair of in-
>   dividuals (promoted by unemployment and the housing
>   shortage) into a collective affair of the whole
>   nation.
>   building   is nothing but organization:
>   social, technical, economic, psychological organiza-
>   tion."[20]

Although Meyer didn't succeed in transforming his ideology into
built realities, others in Europe did. The Karl Marx Hof, a council
housing built by the socialist controlled Vienna City Council (1922-
1934), was a symbol of worker's power and a bastion during the worker's
uprising against the Facist Party.[21] Similarly, in Russia, the
avant-garde struggled with success and failure to infuse housing with
the spirit of the Marxist Revolution.[22]

1945-PRESENT

The naive utopianism of CIAM was shattered by the second war,
as well as the belief in the power of architecture. Architects either
moved with the trend without questioning the goal of their effort, or
proceeded to function while questioning the intention of their actions
at every step. The latter and minor group is represented by the
Team 10, which replaced CIAM in the 50's to examine the social res-
ponsibility of architecture. Ironically, the members of Team 10 agree
that architecture should represent "total life," but none of them can
elucidate what that means.[23] Meanwhile, the majority of architects
practice different styles and present various theories along with the

ups and downs of economic demand. Charles Jencks classifies the
activities of architects in a chart, which shows the origin and
concern of different ideology groups (dia. 2).[24]

In America, the Modern Movement stripped of its social and
political conviction was accepted since the 1930's. Housing, the
essence of the European Modern Movement, was publicized as a design
style without any social and political content. This unfortunate
cross-cultural transplant of architectural concept, with its image of
high-rise buildings and open spaces, resulted in the many scandalized
public housing projects littered throughout the U.S.

Massive shortage of housing after the war, and subsequent
government policies and interventions reveal the contradictions in
the housing production process.[25] Government involvement, direct
through construction or indirect through subsidies to private enter-
prise, gives rise to numerous problems in housing management and
supply, and creates standardized and anonymous housing environment.
Diagram 3 summarizes the various reactions of architects to the
housing problem.
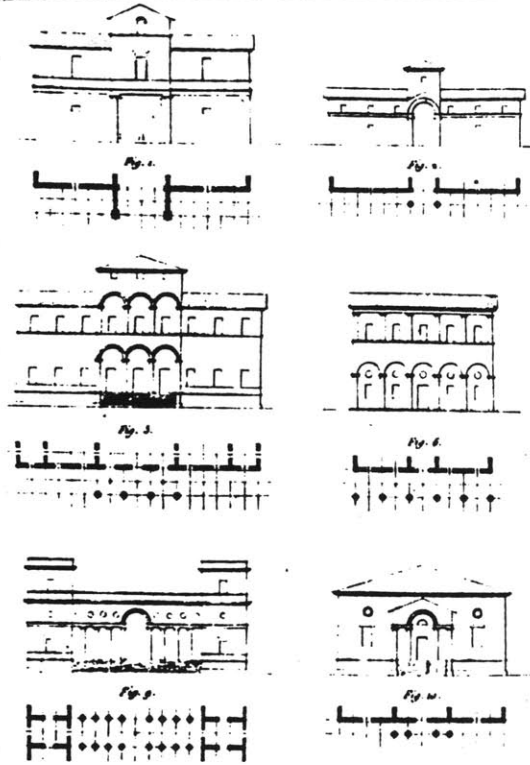
J.N.L. Durand, 1809

Laugier: The Natural Model

A Cow's Stable
1780

dia. 1

Typologies of Worker's Housing, the 19th Century.

MAISONS MODÈLES DE BROOKLYN

GROUPES DE DEUX MAISONS DISPOSÉES EN LIGNES

GROUPE DE MAISONS A FARRINGDON ROAD

GROUPE DE DEUX MAISONS

Berlin, 1900
Courtyard Tenement
Development.

New York, 1896
Ernest Flagg's
Model Tenement.
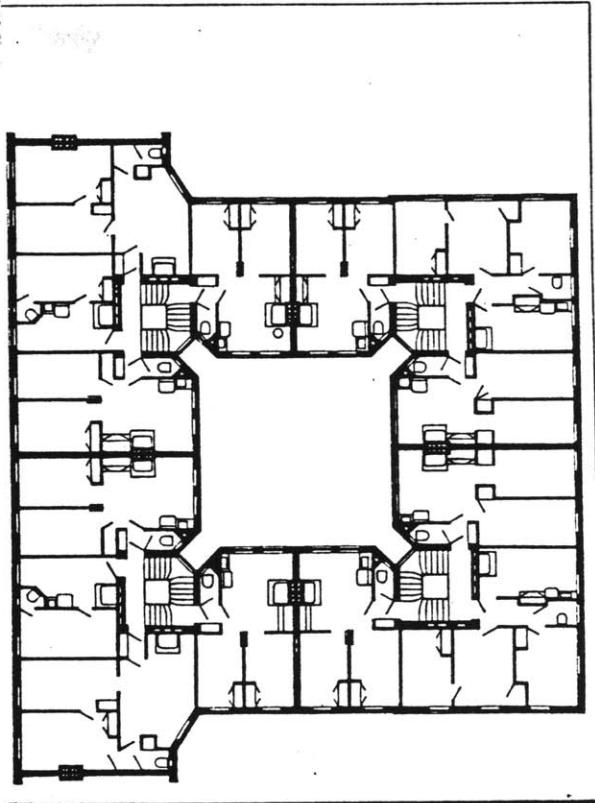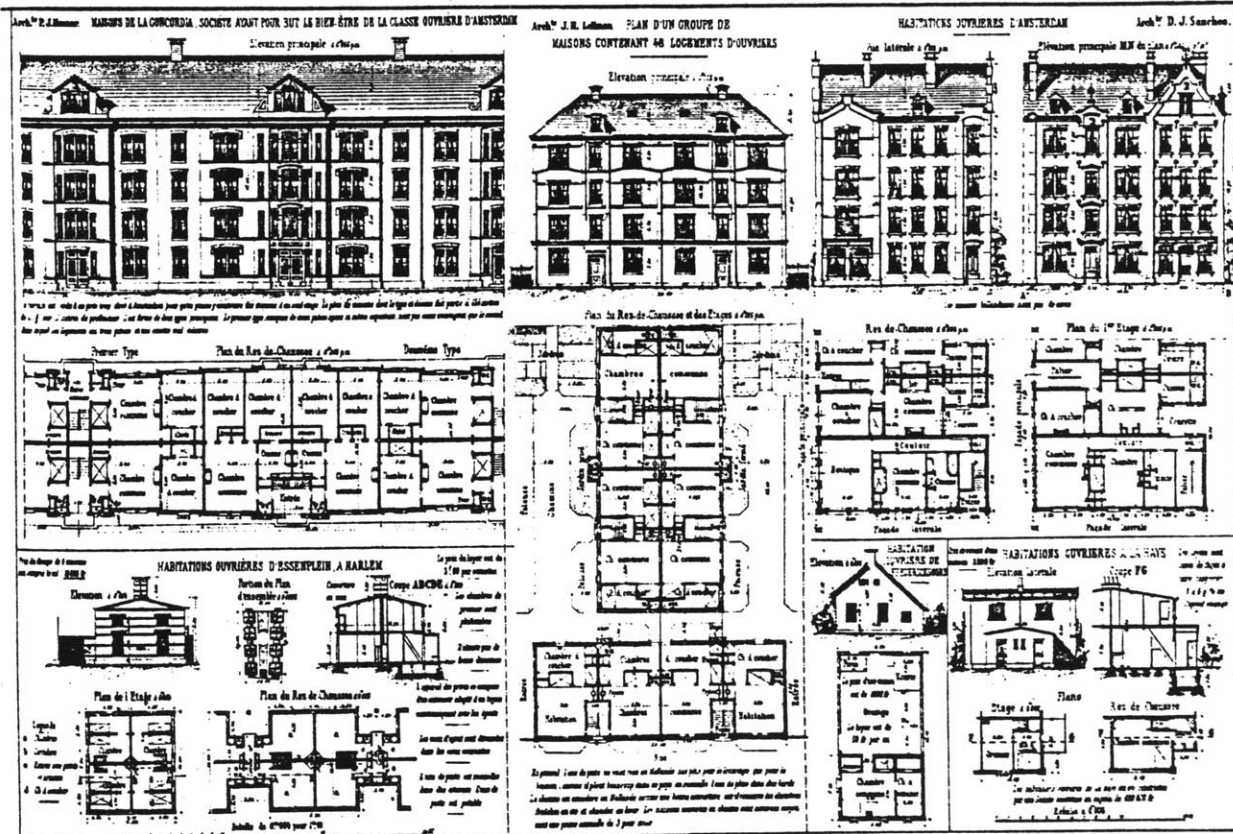
Typologies of Worker's Housing, the 18 th Century.
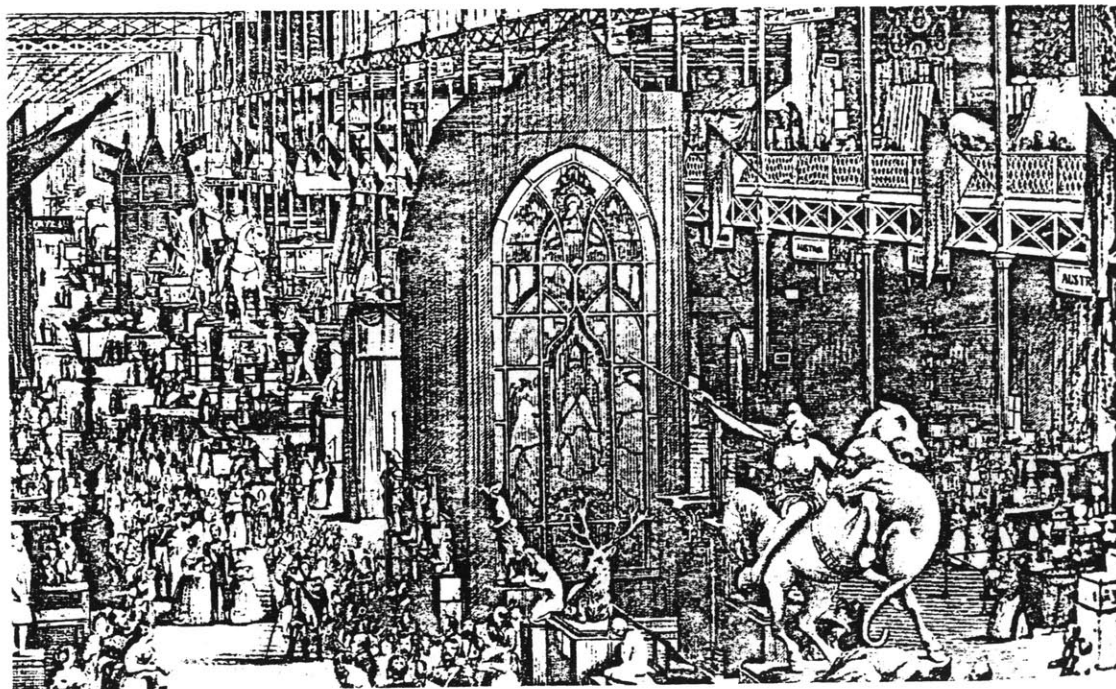
The Crystal Palace, during the 1850 World's Exposition.
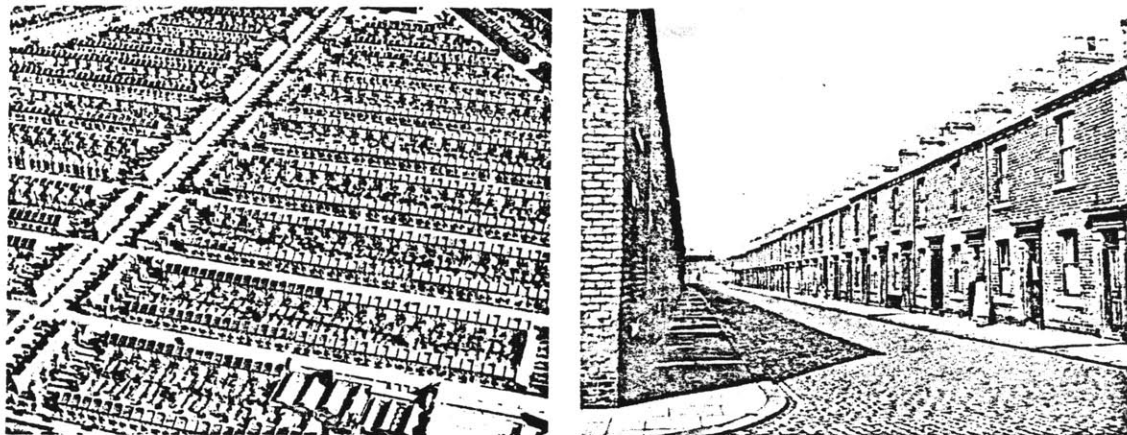
English Working Class Neighborhood, the 19 th Century.

London 1870.
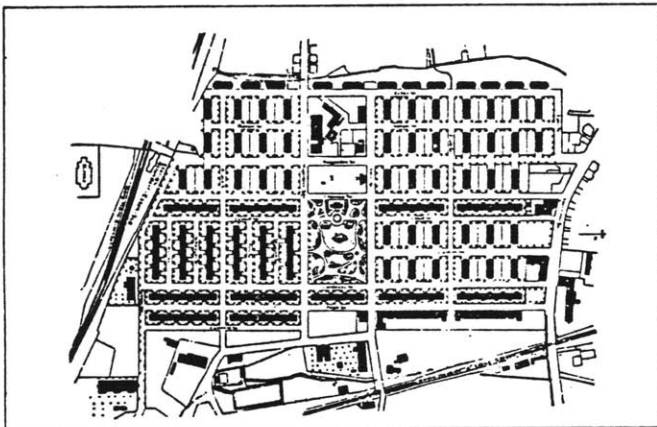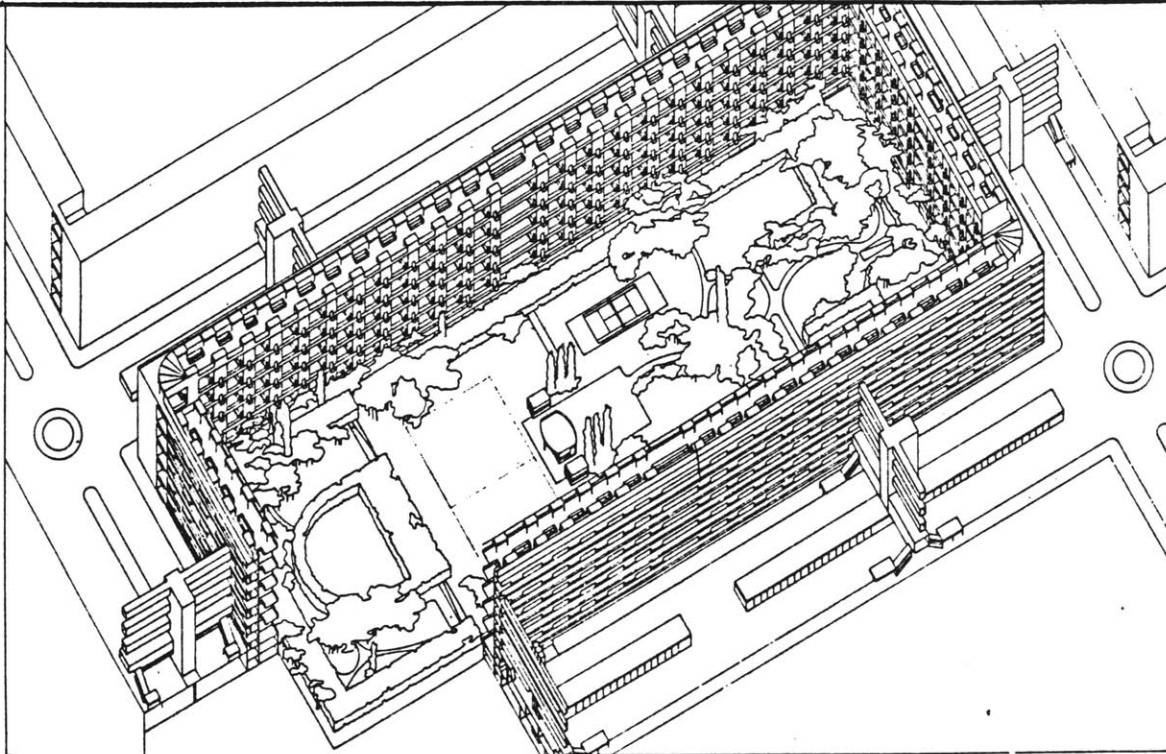
Le Corbusier's peripheral
Courtyard Block, 1922.

Walter Gropius, height and
open-space study, 1930.

Le Corbusier, L'Esprit Nouveau
1920.

AUTOMOBILES

THE PARTHENON, 447-434 B.C.

the run of the whole thing and in all the details. Thus we get
the study of minute points pushed to its limits. Progress.
A standard is necessary for order in human effort.

DELAGE, "GRAND-SPORT," 1921
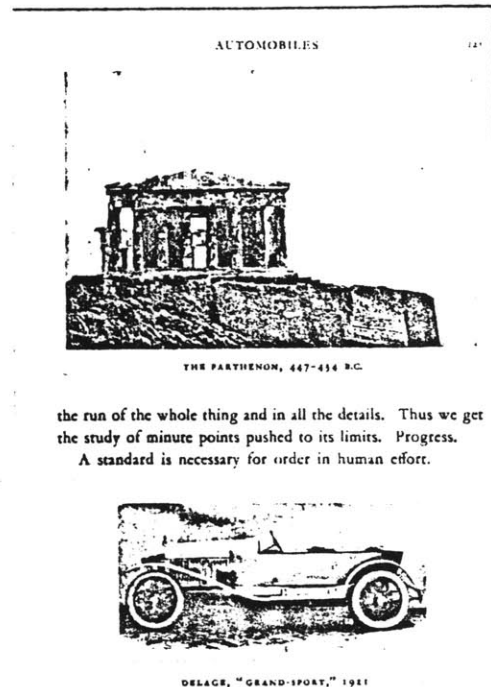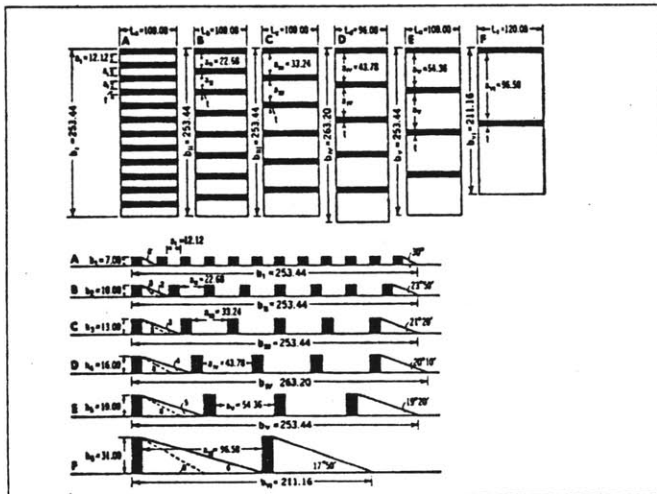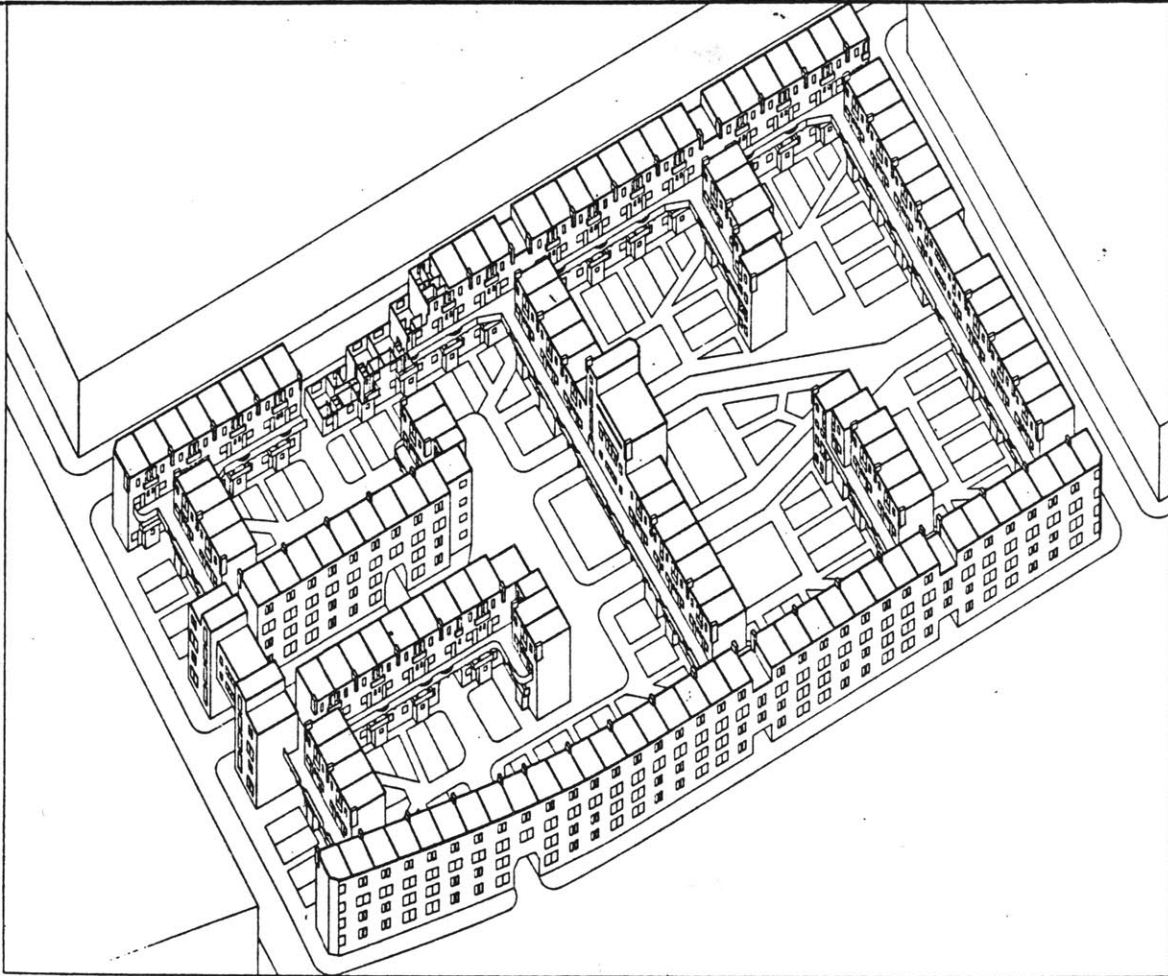
" Spangen " Housing, Micheal Brinkman, Rotterdam, 1921.

Karl Marx Hof
Vienna, 1925.
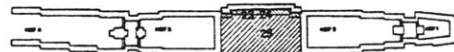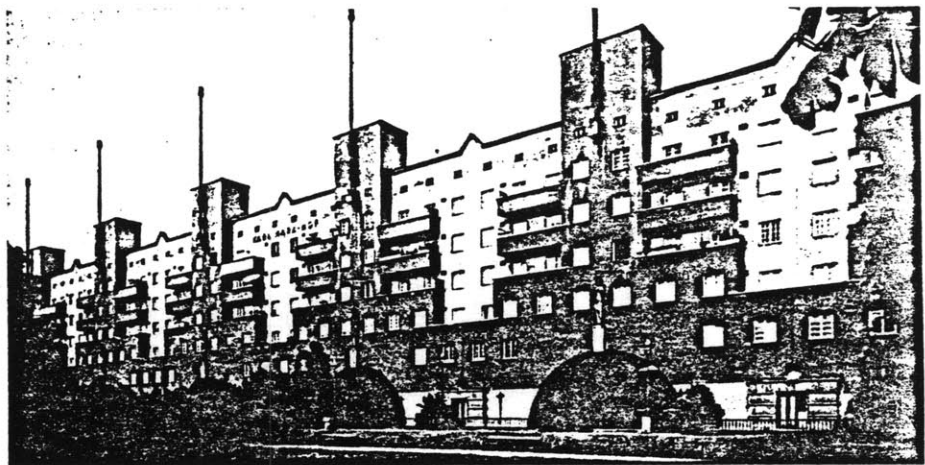
Bruno Taut
Siedlung Berlin
Zehlendorf
1926 - 31

Color as a means
for the worker to
get involved in
the environment.
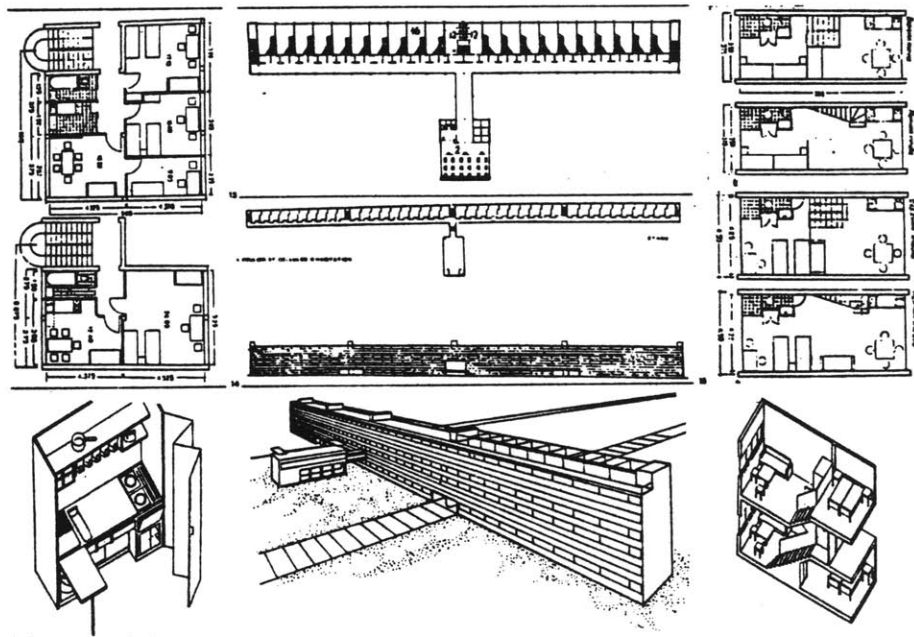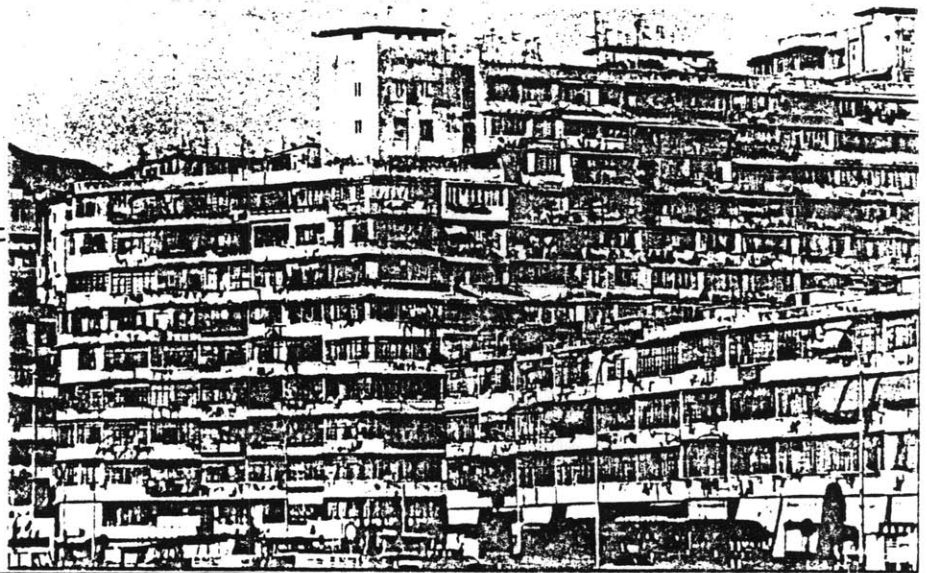

M.Ja. Ginzburg, Moscow, 1928.

Aldo Rossi, 1976.
Architecture is Dead.
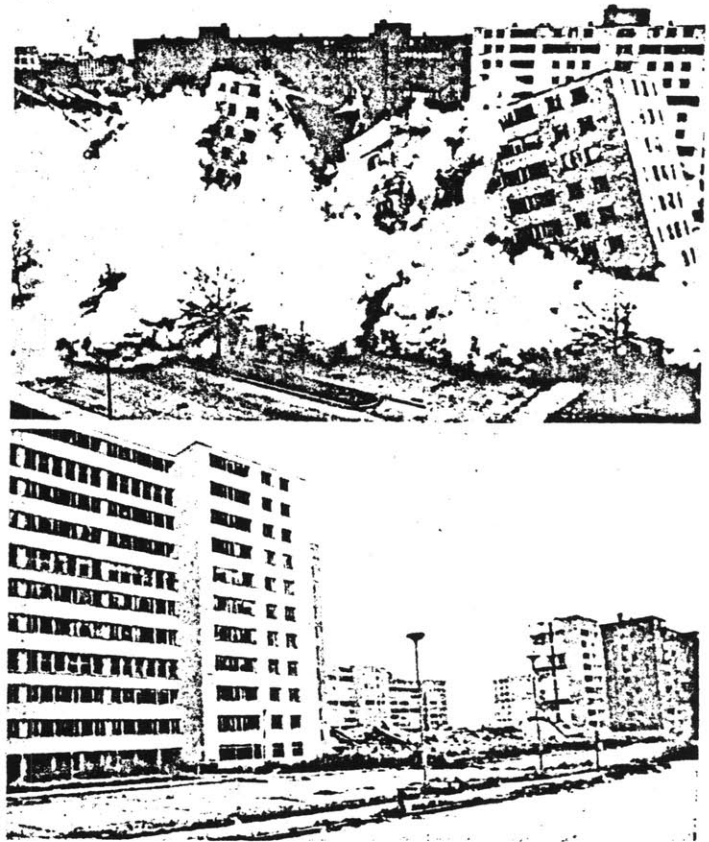
Prutt - Igoe, St. Louis, USA
Built- 1954, Demolished- 1972.

Hong Kong
Housing development
by private market.

CONCLUSION

The death of Modern Movement is now officially accepted by the architectural establishment. Nevertheless, the death is only one of style; for the social responsibility of the Modern Movement was long buried since the 1930's. Several historians point out the fate of modern architecture lies not in the cosmetic change of styles, but in the economic and political expedience of architecture. As Tafuri explained,

> "Modern architecture has marked out its own fate by making it-self, within an autonomous political strategy, the bearer of ideals of rationalization by which the working class is affected only in the second instance. The historical inevitability of this phenomenon can be recognized. But having been so, it is no longer possible to hide the ultimate reality which renders uselessly painful the choices of architects desperately attached to disciplinary ideologies.

> "'Uselessly painful' because it is useless to struggle for escape when completely enclosed and confined without an exit. Indeed, the crisis of modern architecture is not the result of 'tiredness' or 'dissipation.' It is rather a crisis of the ideological function of architecture. The 'fall' of modern art is the final testimony of bourgeois ambiguity, torn between 'positive' objectives and the pitiless self-exploration of its own objective commercialization. No 'salvation' is any longer to be found within it: neither wandering restlessly in laby-rinths of images so multivalent they end in muteness, nor en-closed in the stubborn silence of geometry content with its own perfection.

> "For this reason it is useless to propose purely architectural alternatives. The search for an alternative within the struc-tures that condition the very character of architectural design is indeed an obvious contradiction of terms."26

On the other hand, one cannot be over-optimistic about archi-tecture's ability to change the social structure. Indeed, the position prescribed by Jencks is too simplistic:
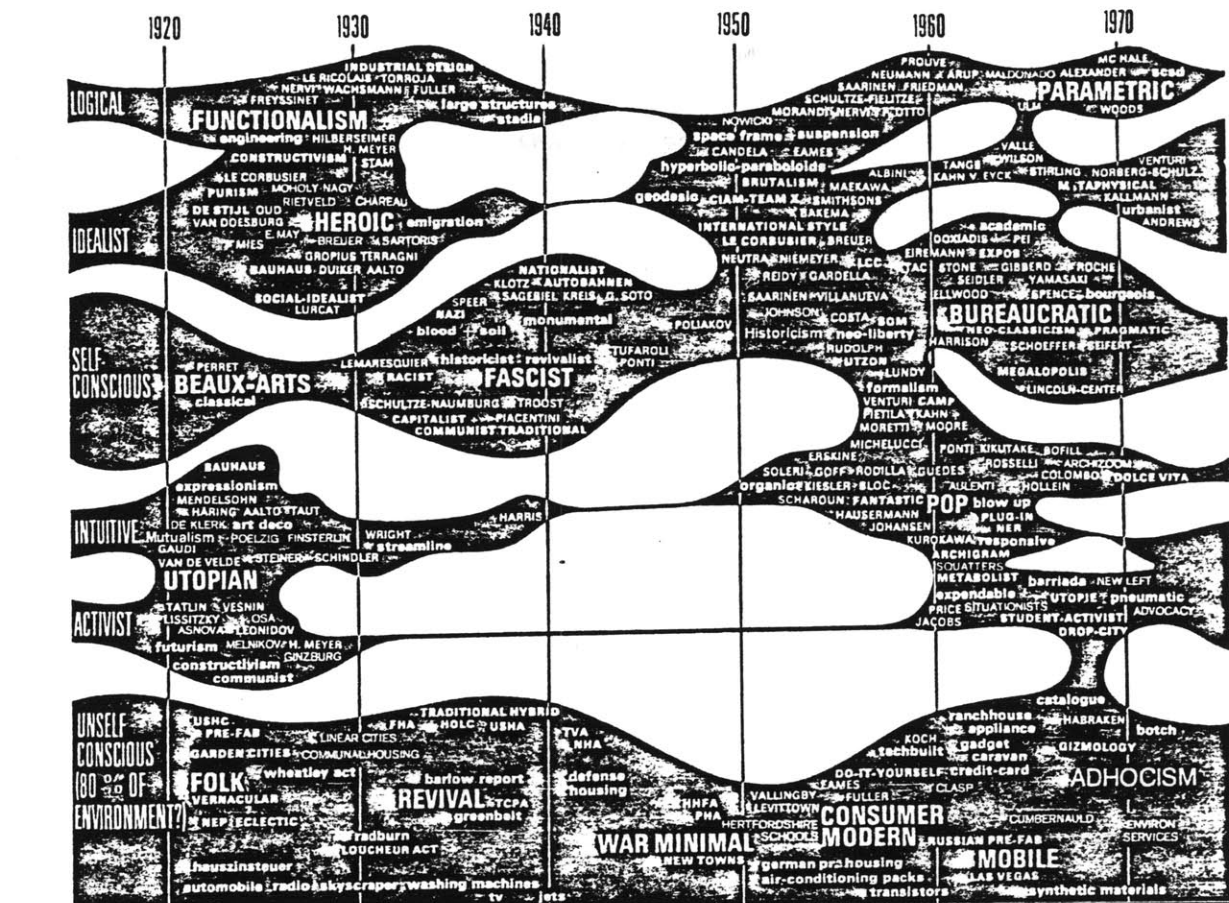
> "If architecture concretizes the public realm and if that realm has lost its credibility because it is founded on a false idea of what allows men to govern themselves, then its whole expressive nature, and therefore its essence, is thrown into doubt. In that situation all the architect can do is clarify the situation theoretically, design dissenting build-ings for the system, provide alternative models and wait for the propitious moment. Le Corbusier ended his polemic with

the alternative 'Architecture or Revolution. Revolution can
be avoided.' But today if we are to have a credible archi-
tecture, it must be supported by a popular revolution that ends
in a credible public realm, the council system. Architecture
and revolution.[26]

Architecture for social housing explicitly demands its economic
and political expedience. The avant-garde of the Modern Movement
failed because they naively believed that pure design could elicit
economic and political changes. The following three social housing
projects examined here map out a possible course for architecture to
utilize its potential to be part of a process, one that could change
the social and political structure slowly and patiently.

dia. 2

from Charles Jencks, Modern Movements in Achitecture.

	1950's	1960's	1970's
CRITICISM	Giancarlo de Carlo	"Architecture of Participation".	Matteoti Village at Terni. International Laboratory of Architecture and Urban Design.
	Team 10		Byker Housing by Ralph Erskines.
	Anarchist approach Third World experiences	John Turner Colin Ward	Self-help housing. Tenant's take over.
MODIFICATION		Student revolution community actions	Advocacy planning and design: ARAU "Fighting a profession that is profoundly reaction-ary, so as to force it to take part in decisions of a politi-cal nature". Urban Planning Aid. John Sharratt and IBA. Community Design Workshop.
		N.J. Habraken and SAR	Frans van der Werf and Molenvliet in Papendrecht. Lucian Kroll and others in Europe.
		Christopher Alexander	The Pattern Language.
		Institutionalized participation.	

ALTERNATIVE HOUSING PROCESS   dia. 3

PART THREE

4

THE ANALYTICAL FRAMEWORK

The method of examining three housing projects is presented. These projects are examples where a participatory process involving all interest groups resulted in a responsive environment controlled by the inhabitants. The three are:

  1. Villa Victoria, Boston, USA.
  2. The New Matteotti Village, Terni, Italy.
  3. Molenvliet, Papendrecht, The Netherlands.

Housing is an universal concern and has direct impact on man's existence. In societies where government officials are elected by popular vote, housing issues become pressing political issues. Housing, as a process of production and use, can either increase or decrease the political power of communities.

Historically, power-holders have used social housing for the less-privileged as an ad-hoc remedy of social unrest, as a control over labor supply, or as a stimulant to a sagging economy. People's awareness of their rights to housing that satisfied their needs is intimidated by threats of eviction, by poor housing services, and by a complex web of regulations established for the functioning of bureaucracies.

Consciousness of one's right can be provoked by a process of participation, through which individual becomes aware of his/her values and recognizes the potential power of collective actions. An educational experience happens when each participant has to clarify his/her values, bias, and objectives; and to understand those of others. Such a communication makes possible an agreement on objectives and strategies of the group. Political power based on group's concensus is then exercised to bargain with the holder of resources.

An understanding of the distribution and relation of different powers in the individual level, the community level, and the public level[1] was common in the three processes of housing presented in the following chapters. These three housing projects are chosen because of their common achievement: control of the housing environment by the inhabitants.

There are two main themes in the analysis of the three projects:

A. to understand the process through which each of the three communities gained control over the management, design and financial investment of its housing.

B. to understand how each of the three architects participated in each process.

Examining each of the three projects in its own context does not
imply that one is more successful than the others. Nor is the intent
of this comparative study to suggest that any one of the three housing
processes can be applied in any context. The intention here is to open
up new ways of addressing the problems common to existing social housing
process; subsequently, elements of an alternative housing process for
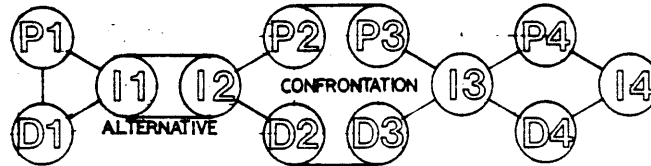the less-privileged are identified.

Therefore, although the context in each of the three projects is
different and unique, three common stages of the housing process are
examined. They are POLICY planning, architectural DESIGN, and form of
INHABITATION. Using de Carlo's 10 stages of decisions making,[2] the
three stages of housing process can have the following structure:

POLICY planning: 1. Determination of purpose
                         2. Choice of siting
                         3. Collection and investment of resources

Architectural DESIGN: 4. Definition of the organizational system
                         5. Form giving
                         6. Technological solutions

Form of INHABITATION: 7. Use
                         8. Management
                         9. Reuse
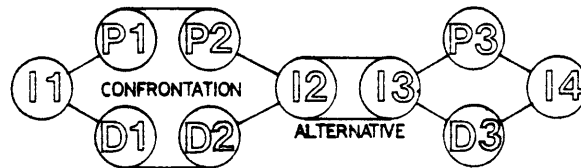   10. Demolition

The three stages are common in all social housing process. In
traditional practice, however, the form of INHABITATION is determined
by the centralized public authority, and POLICY and DESIGN are just
means to achieve the official goal (Dia. 1). In the following analysis
of the three projects, emphasis is on the integration of POLICY and
DESIGN strategies in achieving a form of INHABITATION controlled by the
inhabitants (Dia. 2).

The analysis of the three case studies are structured into successive stages of development. A process diagram, shown below, accompanies each stage to show the evolution of the form of INHABITATION (I), the POLICY planning (P), and the architectural DESIGN (D).
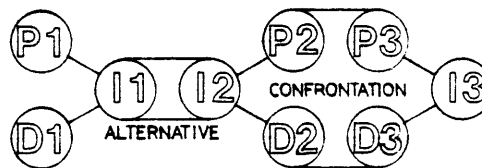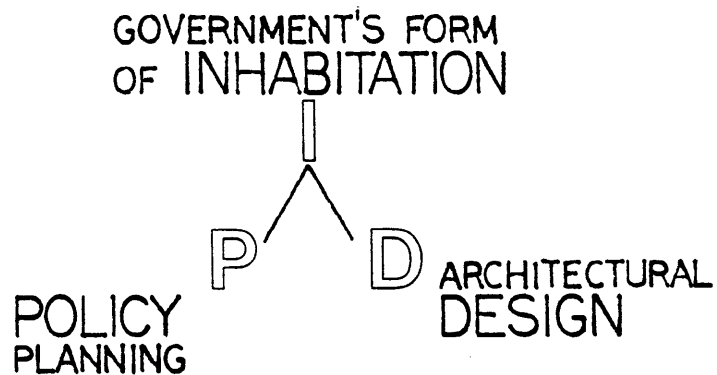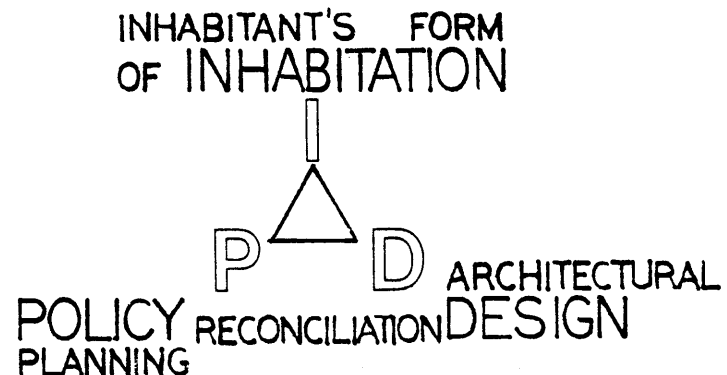

VILLA VICTORIA

MATTEOTI VILLAGE

MOLENVLIET

dia. 1

GOVERNMENT'S FORM OF INHABITATION

P POLICY PLANNING

D ARCHITECTURAL DESIGN

dia. 2

INHABITANT'S FORM OF INHABITATION

P POLICY PLANNING

RECONCILIATION

D ARCHITECTURAL DESIGN

THEME B

Three qualities or characteristics are essential to architect's effort. These are first, the understanding of the CONTEXT; second, the IDEOLOGY of practice; and third, the COMPETENCE of an architect.

Although one might be critical of the following harsh statement made, it is still valid to expose the submissive nature of conventional architectural practice in social housing production. Too often, the CONTEXT for architectural practice is that of the client, in this case the public agencies, and the program handed to the architect. An IDEOLOGY of "how" to produce, and not "why" the project is valuable to the users, further separates the architect from seeking the intentions behind the program and its consequences. In the eye of the public agencies, the COMPETENCE of the architect is then based on how fast and economical the production process is carried out; and in the eye of architecture profession, the COMPETENCE is judged solely on the appearance of the newly built object.

A new set of definitions on the CONTEXT, IDEOLOGY, and COMPETENCE is evident in the three projects analyzed. Each of these three studies is used to highlight and elucidate one of the three qualities of architect's involvement in the participation process. The struggle of the Boston Puerto Rican community to determine its future illuminated the complexity of the CONTEXT which John Sharratt had to tackle. Rhetorics and statements of Giancarlo de Carlo on his IDEOLOGY in the past twenty years gave him the motivation to investigate a process of participation of the workers in Terni. In Papendrecht, the SAR method provided Frans Van der Werf the means to satisfy the needs of each of the 123 different families.

CONTEXT

POLICY planning

architectural DESIGN

< IDEOLOGY >

form of INHABITATION

1. PURPOSE
2. SITING
3. RESOURCES

4. ORGANIZATIONAL
   SYSTEM
5. FORM GIVING
6. TECHNOLOGICAL
   SOLUTION

7. USE
8. MANAGEMENT
9. REUSE
10. DEMOLITION

COMPETENCE

identification of issue
diagnosis of problem
projection of objective
prescription of strstegy

FRAMEWORK OF INVESTIGATION

dia. 3

5

VILLA VICTORIA, BOSTON, MASS. U.S.A.

Villa Victoria, a housing project of 625 units, is controlled by a
Puerto Rican community called Inquilinos Boricuas en Accion (IBA).
This is possible through continuous struggles since 1967, and IBA
is now one of the most successful community organizations in Boston.
The development of IBA's context is emphasized in this study, as well
as how the architect, John Sharratt, functions as a member of IBA's
housing team.
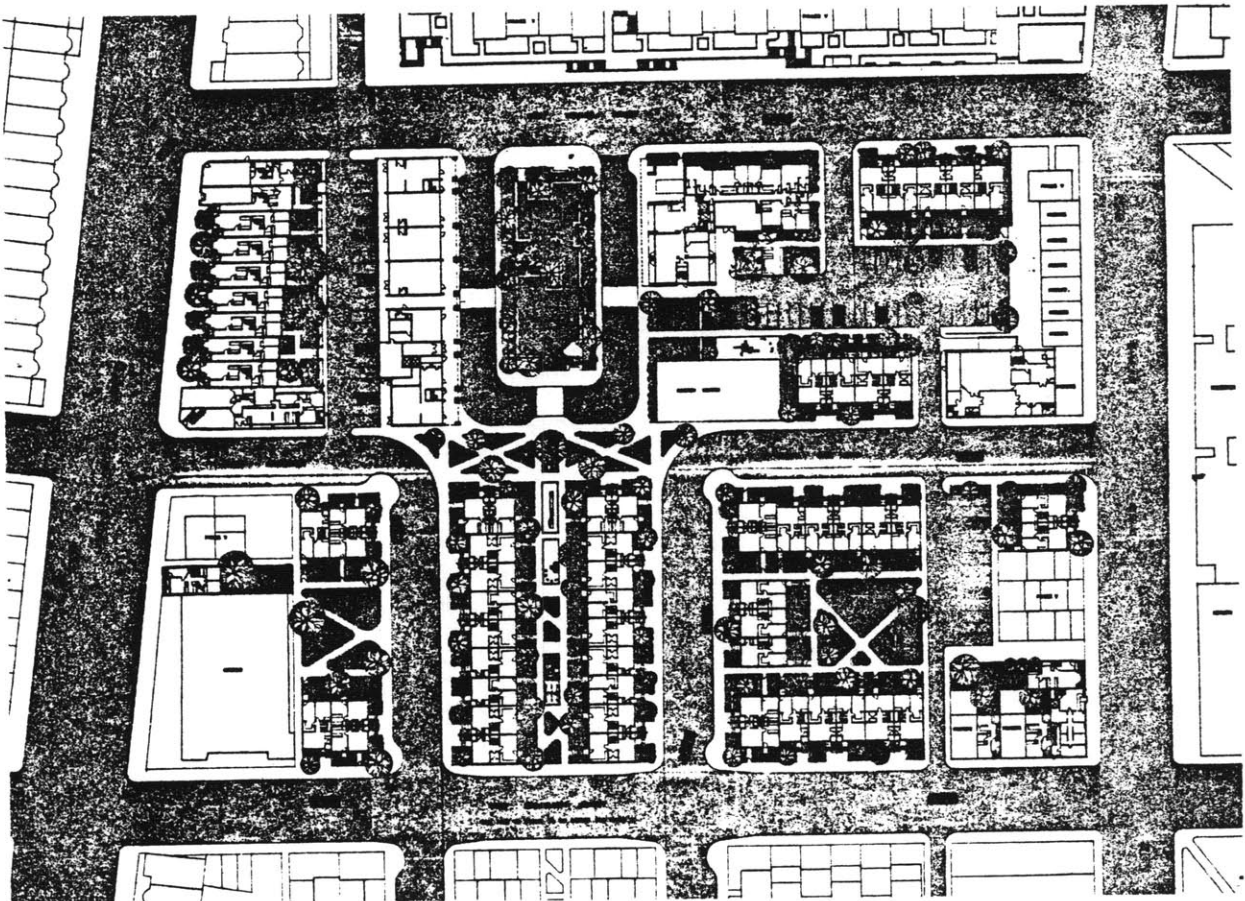
A federal program providing housing for the military and
certain civilian workers had been in practice since late 19th cen-
tury. However, a broader program of housing for other groups was
needed during two emergency and temporary situations. The first
occasion was during World War I,[1] and the second occasion was at the
Depression years. The U.S. Government, up till 1932, depended on pri-
vate capital to bear the responsibility of housing.[2] Two considera-
tions finally led the government into the housing market. First, it
was believed that a housing program for the urban poor[3] could stimu-
late the economy, and second, temporary, social housing was urgently
needed to satisfy the unemployed working class.

The United States Housing Act of 1937 stated:

> "It is hereby declared to be the policy of the United States
> to promote the general welfare of the Nation by employing its
> funds and credits, as provided in this Act, to assist the
> several States and their political subsidiaries to alleviate
> present and recurring unemployment and to remedy the unsafe
> and unsanitary housing conditions and the acute shortage of
> decent, safe, and sanitary dwellings for families of low
> income, in urban and rural nonfarm areas, that are injurious
> to the health, safety, and morals of the citizens of the
> Nation."[4]

The operative arm of the Act was the United States Housing
Authority, established on the same year to make loans or grants
to "help in developing or administrating low-rent housing and slum-
clearance projects."[5]

Dwellings of moderate standard built at minimum cost was speci-
fied in the Act. This was interpreted to mean construction of mini-
mum-standard housing during the program's implementation. Local
authorities designed public housing austerely, simple in appearance
and without any amenities for the urban poor.

Similarly, mismanagement of the public housing program resulted
in economic and social segregation. Many low-income families living
in sub-standard housing were disqualified for public housing because
of the rent ratio.[6] On the other hand, families in low-rent public
housing were forced to vacate when their incomes exceeded the legal

limit, yet their incomes were insufficient to put them in the private market. Having no alternative, they returned to the slums.

Twenty years after the program began, in 1959, Congress eliminated the rent-income ratio, and gave local authorities some flexibility in determining the objectives of local housing programs. However, as one observer remarked later,

> "By that time irrepairable damage had been done. Too many authorities had created images of public housing in their community that did not permit them to utilize the increase eligibility units. In many places even as early as the 1960's the upper income segment of the eligible families were unwilling to move into public housing, because of the stigma attached to such housing as well as its poor site placement and type of architecture."[7]

After the Second World War, the government housing program had grown beyond expectation. The temporary nature of the original housing program with an expectation of steady turnover rate of available units, was shattered by sequence of events. Returning veterans, people displaced by slum clearance and highway programs in the 50's, and the elderly are increasingly in need of some forms of social housing. In 1970 one percent of the U.S. population lived in federally aided public housing.

In the 50's and 60's, there was accelerated movement of middle and upper classes from city into suburb. This happened when there were economic incentives (Federal subsidies, tax write-off and investment, etc.) and social pressure (status of a suburban house and the mobility possible with cars). Consequently, the poor from the south and rural areas moved in to fill the void left in the inner city. Slums were developed not so much because the poor had no social aspiration; rather, they were surviving at minimum cost, and decent housing was the least of their day to day worries.

Beginning with the Housing Act of 1949, the official reaction to the inner city slums was a removal and clearance process. The intentions behind urban renewal were clear. It was assumed that available land could boost the city's tax base; new development would attract suburbanites to return; and highway network built on cleared land would connect the business district with the suburbs. Moral obligation, that of relocating the poor in standard and sanitary

However, as Herbert Gans pointed out, urban renewal "has provided local renewal agencies with federal funds and the power of eminent domain to condemn slum neighborhoods, tear down the buildings, and resell the cleared land to private developers at a reduced price."[8]

Beginning in the mid 1960's, urban renewal came under increasing criticism because of its multitude of problems and failures:

- the civil rights movement backed the protesting slum-dwellers, whose houses were destroyed by urban renewal;
- city planners and housing experts argued that urban renewal was not achieving its assumed objectives;
- social scientists documented the distressing social conditions in number of renewal projects;
- intellectuals, such as Jane Jacob,[9] criticized the removal of a romanticized heterogeneous urban environment;
- suspicion of the middle and upper income taxpayers in using public funds to subsidized profit-making private developers.

Finally, the government theorized that urban renewal, with direct involvement of the poor in the renewal process, could become "the part of strategic intervention to break the generational cycle of poverty."[10] Thus an officially sanctioned "citizen participation" was introduced, but limited often to rehabilitation, which was legislatively introduced in 1954 as an alternative to slum clearance.

> "The process of rehabilitation clearly assumes considerable neighborhood cooperation in undertaking the actual physical renovation. Moreover, the goal of a socially coherent neighborhood requires the generation of continuing resident interest and involvement in the renewal program; without such activity, the redeveloped neighborhood is likely to remain vulnerable to the same forces of apathy and anomie which were responsible for its initial decay. Thus, effective citizen participation is crucial to the full success of rehabilitation as a method of residential redevelopment."[11]

Under the Johnson administration, the Economic Opportunity Act of 1967 became the legislative vehicle for the "unconditional war on poverty in America." This act included a "community action program," which must be "developed, conducted, and administered with the maximum feasible participation of residents of the areas and members of the groups served."[12] Before federal money was loaned or granted for an authorized purpose to a local public agency, the recipient must demonstrate that the federal aid was used for projects undertaken as

part of a "workable program" for community improvement. One of the
seven criteria of a "workable program" was to "encourage citizen par-
ticipation through the establishment of a citizen advisory committee to
examine constructively the workable program goals."[13]

STAGE I:

South End Urban Renewal Plan
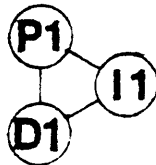
Boston, like other big American cities, has had an urban renewal
program since the 1950's. However, the scale of the program increased
within the area of "big ideas" in various fiscal, transportation and
social policies. In the late 50's, the impact of the highway extension
on the West End in Boston was condemned by both the neighborhoods and,
for the first time, the professionals.[14] Two stages of the renewal
process were severely criticized. One was the ruthless use of
eminant domain to force people out of their social environment with-
out fair reimbursement. The other was the relocation of the affected
residents, who were placed in public housing far from their friends and
jobs.

On September 22 1960, John F. Collins, then Mayor of Boston,
announced a program of "A 90 Million Dollar Development Program for
Boston." This was at the time the largest urban renewal program in
the U.S. Rehabilitation was emphasized in the official statement on
the program, with individual home improvement as the base for new or
improved public facilities. Ten areas covering 25% of the city were
chosen; one of these was South End.

South End was created out of land fill in the late 1800's. It
began as a high income area with elegant townhouses. This image soon
was lost. Since the 1940's, South End has served at least three
functions:

"1/   it has been a direct port of entry for successive wave of
      immigrants, offering them a cheap place to live and a con-
      venient location from which to try to find work.
 2/   it has provided a haven for those already in the City, who,
      for many different reasons, just 'haven't made it,'
      economically and socially.

3/   it has provided jobs for around 17,000 workers, most of them
     unskilled or semi-skilled and many of them South End resi-
     dents."[15]

Population in South End declined 40% between 1950 and 1960, and

another 25% between 1960 and 1966. In 1966, there were roughly 35-

40,000 residents, made up of immigrant communities, newly-arrived

Puerto Ricans and Blacks from the South, college students, Brahmins,

blue collar workers, professionals, transients and alcoholics. Within

such a mixed social environment at that time, there were neighborhood

committees made up mostly of home owners, which together with the local

churches, represented the interest of South End.

A "workable program," for urban renewal as defined by legislature,

required neighborhood participation. In 1967, Ed Logue, then re-

tiring director of Boston Redevelopment Authority, stated that:

> "The keystone to the South End Project is indeed 'Planning
> with people.' The 5-year survey and planning period from
> 1961 to 1966 was spent working closely with community organi-
> zations and neighborhood groups evolving a plan closely tailored
> to local needs. I believe that the South End Project had more
> actual planning with the community than any other project in
> this country."[16]

What happened was quite different from Logue's version. BRA

was formed in 1960 to carry out Mayor Collins' dream. By 1962,

renewal plans were prepared by BRA without clear input from the

established South End neighborhood groups.[17] The plan called for

major clearance, and replacement of existing housing fabric with com-

mercial, institutional and industrial uses. These were then connected

by a ceremonial park and road network. Low-income housing was sub-

stantially reduced in the plan, and no comprehensive relocation

strategy was developed by BRA.

The 1962 plan was opposed by community groups such as USES

(United South End Settlements), which was the oldest organization and

unifying force in South End neighborhoods. Subsequently the plan was

revised with input from the 16 neighborhood organizations, and was

adopted in 1965 by the City Council.

Though the second plan was the product of block-by-block meetings,

the plan had serious problems from the beginning. Most of the people

involved in the planning were home owners or landlords. The tenants,

made up of minority vicinity groups and transients, were not con-
sulted. Neither did they protest the plan nor participate in the re-
drafting. The reason simply was that the poor could not afford the time
and energy for numerous meetings. Keyes concluded that 90% of those in-
volved were ethnic home owners, boarding house operators, or urbanites;
and about 300 of the 2,500 people (less than 10% of South End population)
involved had enough knowledge to understand the plan's implications.[18]

With only 45% of the acquired land designated as residential area,
net reduction of housing stock was 1,115 units in the proposed plan.
Around 3,550 households (7,500 persons) would be displaced. All these
were done in order:

> "to eliminate severe conditions of blight, deterioration,
> obsolescence, traffic congestion and incompatible land uses
> in order thereby to facilitate orderly growth and to achieve
> neighborhood, industrial, commercial and institutional stability."[19]

During 1965 and 1966 BRA began demolition in the poorest part of
South End. Displacement of tenants, without adequate relocation,
created severe uncertainty among tenants and property owners. The
Community Assembly for a United South End (CAUSE) began to fight for
control over the renewal plan's implementation seeing that an all out
confrontation with BRA was fruitless, different tenant groups were
formed to gain control over smaller turf. One of these groups was the
Emergency Tenants Council (ETC).[20]

STAGE 2
ETC

P1 — I1 I2
D1 ALTERNATIVE
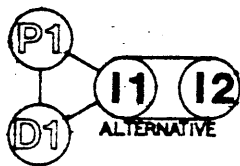
Parcel 19 neighborhood was an area of 30 acres in the South End
Urban Renewal Plan, and contained 1,700 persons in 1966. Bounded by
major cross streets the area had commerce and housing in brick and
wooden structures. Most of the buildings were badly deteriorated, with
the exception of a row of sound brick townhouses along Tremont Street.
The urban renewal plan proposed a complete site clearance and rezoned
the area to include middle income housing, a shopping center, open
space, municipal facilities and a large elementary school.

Within the neighborhood, 40% of the population (largest con-
centration in Boston) in the 60's was Puerto Rican from rural areas.
Among the Puerto Ricans, 59% of the male heads of household were work-
ing, and of these 80% were in operative positions.[21] Half of the
female heads of household were receiving some form of welfare assist-
ance (Dia. 1).

Before the 1965 plan was approved, the Blackstone Neighborhood
Association, one of the 16 neighborhood organizations involved in
the redrafting, represented the Parcel 19 area at only two meetings
with the BRA. It was clear what the Urban Renewal Plan would do to
Parcel 19. The Puerto Rican residents would be relocated outside the
area or even outside the City, causing disintegration of established
social fabric and the extended family structure. Furthermore, reloca-
tion would increase their transportation cost to places of employment,
or would cause them to loose their jobs. Yet, the Puerto Rican group
still did not mobilize themselves to oppose the Plan.

In 1966, the initial organizing efforts were stated by Reverend
William Dwyer of St. Stephen Episcopal Church. Reverend Dwyer was one
of the founders of CAUSE, and being a true Christian,[22] he was con-
cerned about the housing conditions around Parcel 19 and the impact of
the Renewal on the Puerto Rican community. He enlisted the help of
three seminarians, all with experience as organizers, and Helen Morton,
a local resident. Door to door canvassing was conducted to generate
reactions on issues such as slum lords, housing conditions, street
cleaning, junk yard relocation, and the lack of low-income housing in
the renewal plan.

At the same time, growing oppositions to the plan were evident
among other South End communities.[23] The Urban Planning Aid (UPA),
a group of concerned professionals offering help to various communi-
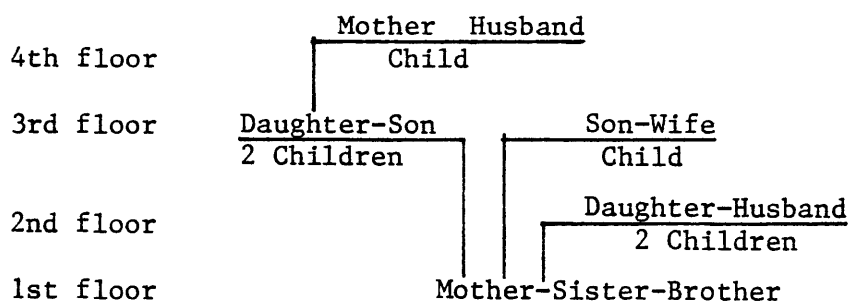ties, commented that:

> "The South End Plan's specific objectives, taken one by one,
> appear to be generally valid. A key questions, however, is
> whether the Plan can meet all the objectives taken together.
> Are they all compatible? If not, the next crucial question
> becomes which ones are being sacrificed in the execution
> stage? The analysis made...shows that the objectives not being
> met by the Plan are of greater significance to low income
> residents."[24]

1960 Census	Parcel 19 Neighborhood	South End

INCOME/HOUSING

Medium income of household	$3,438.	$3,778.
Owner-Occupied Houses		10%
Number of Licensed lodging houses	30	400
Average Median rent/month		$51.
		$77. (1967)

ECONOMY

Unemployment of Male Labor force	10%	10%
Means of Transportation	Foot	25%
	Subway/bus	40%
	Private auto	15%
Employment in Boston		90%

AGE

Under 18	30%
Above 65	20%

(Sources: UPA Urban Renewal's Effect on Low Income Housing in Boston's South End, Oct. 1967)

HOUSEHOLD SIZE (SOURCE: ETC document)

The figure shows the typical extended family structure of the Puerto Ricans.

```
                        Mother   Husband
   4th floor                 Child

   3rd floor    Daughter-Son           Son-Wife
                2 Children                Child

                                    Daughter-Husband
   2nd floor                             2 Children

   1st floor         Mother-Sister-Brother
```

dia. 1

A strong organizational structure was emphasized by Reverend
Dwyer and the seminarians; and one of them, Richard Lampert, had pre-
vious experience in organizing workers in Los Angeles and Syracuse.
The seminarians were influenced by Saul Alinsky; and in the Alinsky
tradition, this group avoided writing the agenda for community acti-
vities. Instead, their aims were to increase the awareness of the
Puerto Ricans and to seek out potential leaders.[25]

In early 1968, the Emergency Tenants Council (ETC) was formed and
Lampert became its first director

By the summer, ETC was ready to make plans for developing Parcel
19. Technical assistance came from professionals outside the neighbor-
hood; these included UPA, VISTA, A.D. Little & Co., Boston Legal Assist-
ance Project, and some architecture students. Using all the resources,
and with major finance from church grants, ETC was actively building a
sense of community among the Puerto Rican group. Though several Puerto
Ricans were working with ETC, there was not enough grass-root movement.

In July, ETC was incorporated as the Emergency Tenants Council of
Parcel 19 Inc. The Articles of Incorporation of the community organi-
zation stated its purpose as:

> "to combat poverty and community deterioration through chari-
> table and educational programs aimed at: promoting community
> participation in the planning of housing development under the
> South End Urban Renewal Plan; preventing the disbursal of resi-
> dents and minimizing dislocation under the impact of urban re-
> newal; and generally improving the housing and living conditions
> of community residents."[26]

In October, ETC invited the director of the Lower Roxbury Com-
munity Corporation (LRCC) to share his experiences in community organi-
zation. Along with this exchange was John Sharratt, the architect
working with LRCC. Around the same time, Dwyer and Lampert hired
Israel Feliciano, the older brother of one of the members of the board
of ETC Inc., as ETC's director. These two persons, both in their 30's
at that time, became instrumental in the next stage of ETC's struggle.
After its first neighborhood convention with 150 families, in late
December, and with a board composed of a majority of Puerto Ricans,
ETC was ready to enter negotiations with the BRA.[27]

STAGE 3

ETC vs. BRA, 1969
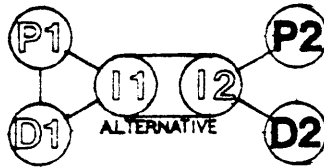
Housing was the original issue that brought people in Parcel 19 together. But the organization never developed enough roots in the community until its leadership became Puerto Rican and outwardly manifested its Puerto Rican character.

Reverend Dwyer later referred to Israel Feliciano as someone who "had plenty of savvy and plenty of class. He knew English, was very sophisticated, and was tremendously charismatic."[28] Feliciano had a high school education in Puerto Rico and later served in the U.S. Army. Before coming to Boston to visit his extended family, he worked in Chicago and organized a worker's union. Prior to joining ETC, he was working with a man-power training organization in Boston. His charisma became the driving force behind ETC as well as its image to the outside world. John Sharratt, who worked closely with Feliciano from 1969 to 1972, remembered him as charming and tough, but he was the perfect leader at the right time.

After working for several years in professional offices around Boston, John Sharratt began volunteering his service to communities in 1966 through UPA. He explained his change by commenting that, "In the sixties, the planners never touched the upper middle-class neighborhoods which had plenty of volunteer lawyers to defend them. They pushed their highways and their over-sized schools into the poor communities where people don't have the time or skills to defend themselves." [29]

With ETC, Sharratt acted as a member of the team to develop strategies and as a political analyst. "He (John Sharratt) was the best and most experienced planner in Boston. He knew all the theories and he had lots of experience. The organizing plus John Sharratt = ETC in the early days. That was the formula that made/created the product."[30]

The strategy adopted by ETC was one of cooperation with the BRA to develop counter proposals to the renewal plan. Feliciano and Sharratt held slide presentations at different communities in South

End as well as to the newly elected Mayor White, in order to lobby
support for ETC's struggle. The slide presentation, the product of a
trip to Puerto Rico by Feliciano and Sharratt, gave collected informa-
tion about the kind of life style that the community wanted to have in
Parcel 19.

With help from students of Urban Field Service, and staffs of ETC,
Sharratt developed comprehensive studies on the character (income, age,
employment, ethnicity, condition of housing, and ownership pattern)
of the community. As Sharratt said, they were using BRA tools to con-
tradict BRA's information. Soon a counter proposal was generated to
better suit the needs of surrounding communities.

STAGE 4

Changes in Political Climate, 1969
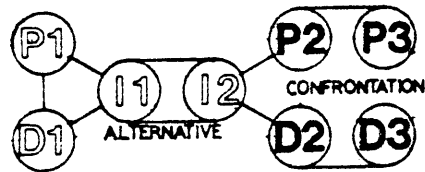
Kevin White was elected Mayor of Boston in late 1968. One of
his political platforms was greater community participation in policy-
making. At the same time, there was a shift in structure of BRA. Under
mounting criticism of BRA's operations, many of its capable staffs
left; some of them became sources of valuable informations to ETC.
In the summer of 1969, Mayor White, under pressure, removed the unpop-
ular Hale Champion as director of BRA, and appointed an inexperienced
John Warner. White and Warner both needed something to improve their
images: they needed publicity.

Since March 1969, ETC prepared detail plans for development of
Parcel 19 area. Detailed proposal of relocation rehabilitation, and
new construction was put forward with well prepared phasing procedure;
the importance of the latter was strongly recommended by Sharratt, so
as to maximize the efficiency of development and minimize dislocation of
people. ETC also produced reports concerning changes in the Parcel 19
area, with reasons given for each recommended change. ETC further
argued that "all changes are considered within the latitude outlined
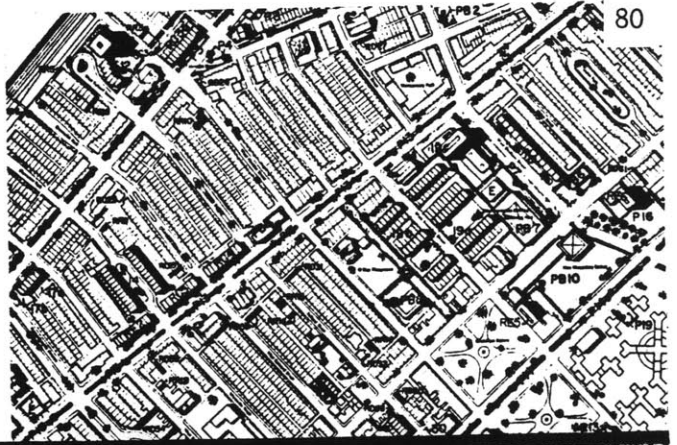by the Federal Government as minor because:

dia. 2

South End Urban Renewal Area R-56

BOSTON REDEVELOPMENT AUTHORITY

PROPERTY ACQUIRED FOR CLEARANCE AND REDEVELOPMENT

PROPERTY ACQUIRED FOR PUBLIC FACILITIES

PROPERTY ACQUIRED FOR REHABILITATION

PROPERTY ACQUIRED BY STATE D.P.W. FOR INNER BELT HIGHWAY RIGHT-OF-WAY

CASTLE SQUARE EARLY LAND ACQUISITION

PROPERTY MAP

RESIDENTIAL [N]

LOCAL BUSINESS [L]

GENERAL BUSINESS [B]

RESTRICTED MANUFACTURING [M]

GENERAL INDUSTRIAL [I]

ZONE DISTRICT CHANGES
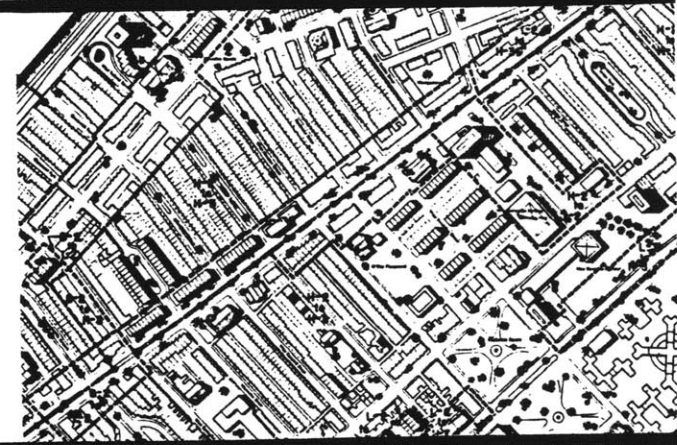
EXISTING CITY STREET TO REMAIN

EXISTING CITY STREET TO BE CLOSED

NEW RIGHT-OF-WAY

EASEMENT

NEW MEDIAN

NORTHERN BOUNDARY OF PROPOSED INNER BELT

PROPOSED RIGHTS-OF-WAY

dia.3

COUNTER PROPOSAL OF E.T.C.

PURPOSE

ETC wanted to participate in the planning of the area. Housing for low-income and elderly should be included in Parcel 19, and the area should show the Puerto Rican character.

SITING

ETC decided to expand the site to include other parcels which were related in use and social activity. Sharratt and staffs decided to move the proposed market from Parcel 19 to a neighboring area, so that Parcel 19 would be only used for housing.

RESOURCES

ETC, besides membership fees, had seed money for organization from Church groups (Permanent Charities, Cooperative Metropolitan Ministries, Episcopal City Mission). Sharratt and staff also looked into future resources for housing, including selling tax shelters and federal government programs.

ORGANIZATION SYSTEM

Modifying the BRA plan, ETC decided to rehabilitate the sound brick townhouses. Also ETC wanted a plaza as a focal point of the community, with pedestrian axis linking the plaza to O'Day playground.
The size of the school proposed by BRA on an adjacent site was trimmed, and Sharratt and ETC began to rewrite the educational program.[31]

B.R.A.
1967 PLAN

KEY

EXIST. OR REMOV. BLGS.
NEW HOUSING
COMMERCIAL
INSTITUTIONAL
RECREATIONAL
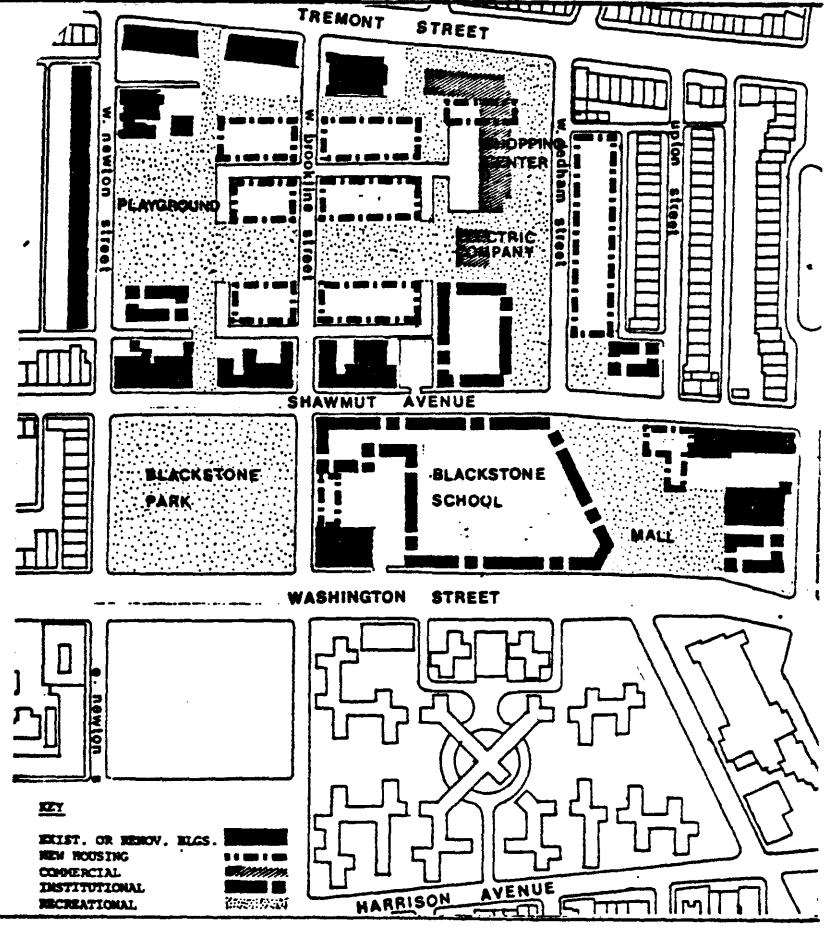
CHANGE RECOMMENDED:

1. The locations of the various COMMUNITY FACILITIES must be rearranged.

REASONS FOR THE CHANGE:

a. The SWIMMING POOL will be included in the program for the Blackstone by decision of Public Facilities.
b. The COMMUNITY CENTER and the two other institutional locations are spatially more efficient placed together.
c. USES prefers to move.
d. The PUBLIC HOUSING will not be built on sites designated in the '65 plan by order of the BRA.
e. BLACKSTONE SCHOOL should orient itself to Blackstone Park for purposes of utility, appropriateness, and safety.
f. The opening of the school and the taking down of the elevated will coincide so the 150' setback requirement from Washington Street is no longer necessary.


KEY

OLD FACILITY LOCATION
NEW FACILITY LOCATION
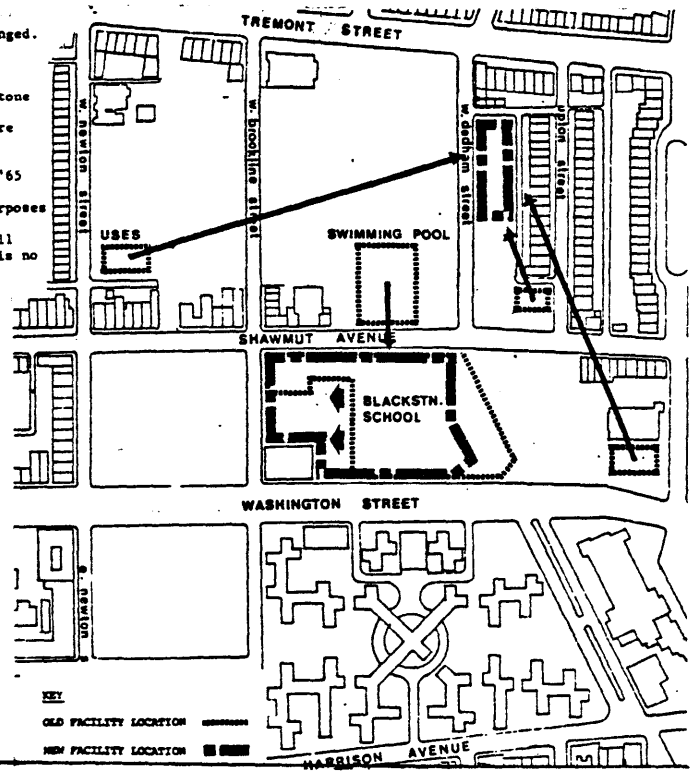
CHANGE RECOMMENDED:

2. The number of buildings for REHABILITATION must be increased.
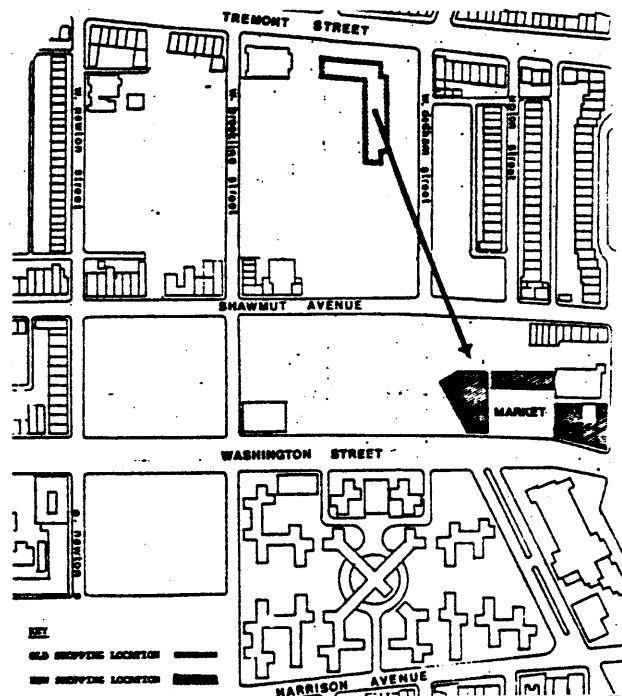
REASONS FOR THE CHANGE:

a. The units are needed for on-site RELOCATION.
b. Rehabilitated Units will provide LOWER RENTS and LARGER UNITS.
c. This will help maintain the HISTORIC CHARACTER of the South End and the parcel 19 area.
d. Rehabilitation can provide more housing units MORE QUICKLY than new construction.
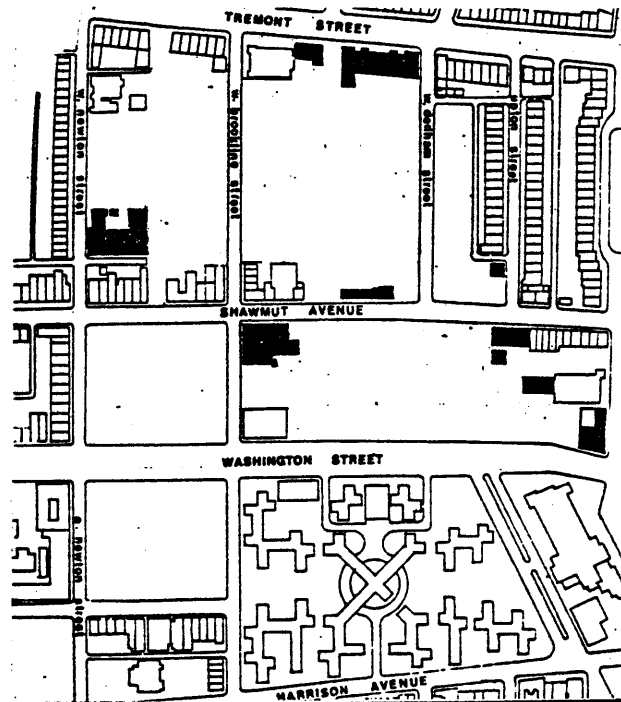
CHANGE RECOMMENDED:

3. The SHOPPING CENTER location must bechanged from the location on Tremont and W. Dedham streets to Washington Street before the Cathedral.

REASONS FOR THE CHANGE:

a. It will preserve the HOUSING STOCK on Tremont Steet so that on-site relocation of the area's residents is possible.
b. It will BETTER SERVICE the South End community by insuring that two food market locations will be built and a better distribution pattern.
c. It will insure the FEASIBILITY that the markets will be built at all.
d. It will better service the POOR NEIGHBORHOODS of Cathedral Housing, Union Park, E. Brookline Street, etc., necessary because of their lack of mobility.
e. To preserve WASHINGTON STREET as a vital community way.
f. It will protect the EXISTING BUSINESSES on Washington Street and provide for their RELOCATION within the immediate area.
g. It can capitalize on the Cathedral to create a shopping plaza and a proud civic asset.
h. It will better utilise the space in the parcel by changing what would have been a barren mall to just look at, to an activity plaza to participate in.
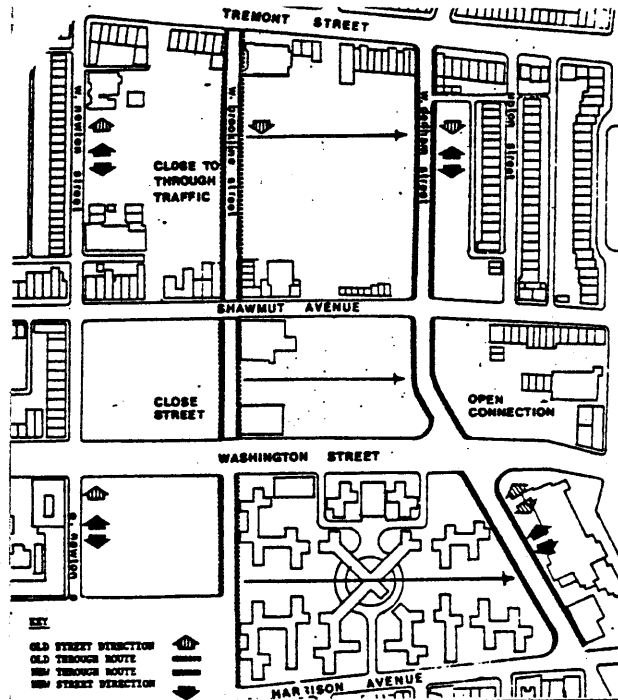
CHANGE RECOMMENDED:

4. WEST BROOKLINE STREET must be closed and the Dartmouth-W. Dedham- Malden Streets connection must be opened.
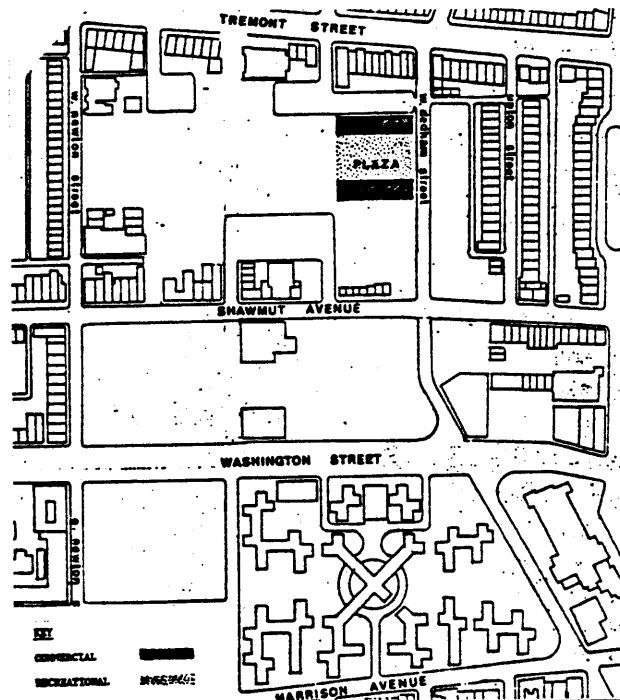
REASONS FOR THE CHANGE:

a. The existing traffic plan is INADEQUATE: Traffic will be confused and therefore increased with the one-way pair idea. Traffic going through the SE will be found on all the streets of the SE instead of established corridors. The plan does not provide for traffic but is based on thwarting it.
b. The opening of the connection will provide for this traffic by ESTABLISHING CLEAR ROUTES for through traffic (controlled by stop lights and signs) and therefore protecting local streets so that quiet and safety can be maintained.
c. Brookline Street SPLITS the ETC neighborhood in two, causing children to frequently cross a very dangerous way. Furthermore, it upsets the identity of the neighborhood.
d. It is preferable for the SCHOOL to have a safe relationship to BLACKSTONE PARK than to the shopping center or mall; outdoor classes could be held, recess, convocation, marches, etc..
e. Dartmouth and W. Dedham streets are MORE APPROPRIATE to take heavy traffic because there is proportionately less residential on them and more institutional and commercial than on any other in the SE. Brookline Street however is a very residential street.
f. The city might open the connection anyway in the future (see configuration on BRA plan) and then the SE would have BOTH ROUTES instead of just one as the central through connector.
g. The ETC-BRA plan most closely approximates the plan recommended by the Traffic Consultant hired by the BRA (Wilbur Smith Associates) to do the traffic plan for the SE.

CHANGE RECOMMENDED:

5. The creation of a COMMUNITY PLAZA is necessary.

REASONS FOR THE CHANGE:

a. It will serve as a SOCIAL CENTER.
b. It will provide RECREATION for young and old.
c. It is necessary for the SECURITY of outside activity.
d. The IDENTITY of the new neighborhood will be from this plaza.
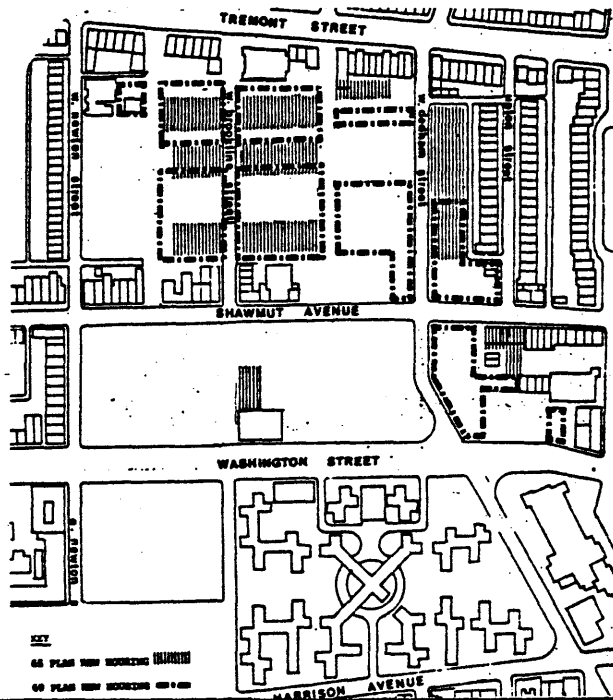e. The CHARACTER of the neighborhood will be enhanced.

CHANGE RECOMMENDED:

6. More NEW HOUSING must be built.

REASONS FOR THE CHANGE:

a. The Boston Community needs to increase its HOUSING STOCK.
b. The existing SE density is higher than that proposed by the '65 plan.
c. LAND ECONOMICS and the location in the city demand a minimum of 400 to 600 new units.

CHANGE RECOMMENDED:

7. The BOUNDARIES OF PARCEL 19 or the area of which ETC is to become sponsor-developer must be changed from just parcels 19a, 19b, 19c, to include Parcels 19a, 19b, 19c, PB6, PB7, PB8, PB11, P7, P8, P16 and RE6.

REASONS FOR THE CHANGE:

a. The plan that these numbers were based on no longer works.
b. The plan cannot work well unless all the area indicated above is controlled by the ETC. (Traffic-Parking-Recreation-Shopping-Plaza).
c. ETC needs all the buildings in the additional parcels in order to systematically provide for relocation.
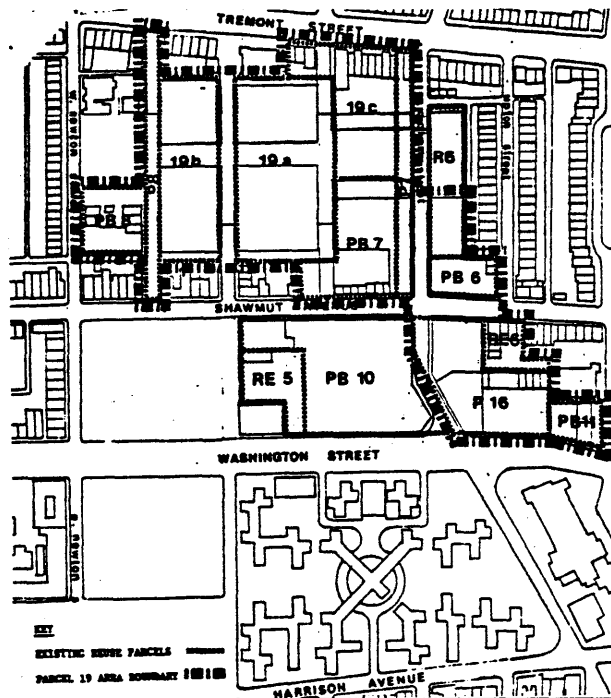
a) No new requisitions are necessary; therefore no eminant
   domain need be invoked and no questions of constitution-
   ality need be considered.

b) No increased expenditure of Public Funds for Urban Renewal
   is required.

c) No change in Project Boundaries is requested."[32]

Meanwhile, Sharratt and ETC staffs worked closely with the BRA and
South End Project staffs. Each of ETC's plans was presented and re-
viewed by BRA, and modifications were made (see Dia. 3).

On June 30, 1969, "ETC sent a formal request to the BRA administra-
tor asking to be designated Sponsor-Developer for the housing reuse
parcels in the ETC area." In this letter, Feliciano pointed at the
critical point of existence for ETC and BRA, where success and failure
depended on mutual cooperation. "We have participated in the planning.
It is now time to participate in the execution."[33] He further stressed
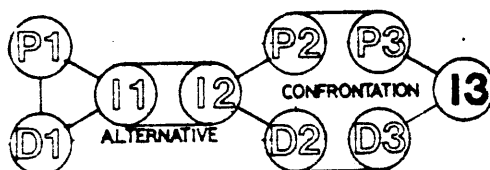that,

"We represent a stable and strong element in this 'Urban Renewal
Area.' We cannot be ignored. We must be dealt with fairly.
My people have been mistreated and misrepresented for too long.
We are capable, intelligent, hard-working and deserving of the
opportunity to make this a better city...We demand respect for
our individual and collective dignity. We intend to rebuild
our community. The City's action on this issue of 'Sponsor-
Redeveloper' will indicate to us its attitude towards us as
human beings...We fully realize the difficulties we shall en-
counter. We have acquired competent technical and ample finan-
cial resources to guarantee success...We want the responsibility
to determine our destiny. We are tired of other people making
our decisions. At what point does a system recognize the failure
of its methods and process? After the West End? After Wash-
ington Park? After the South End?"[34]

Included with the ETC letter were letters of support from all major
South End Communities.[35] In July, under pressure and fearful of civil
disturbance, the City agreed to hold an election for the first South
End Project Area Committees (SEPAC). Several ETC leaders were nomi-
nated, and they were also represented in the SEPAC counter group,
People's Urban Renewal Committee (PERC), which was supported by low in-
come and minority groups. SEPAC's official power included the right to
review and veto changes in the Urban Renewal Plan, to veto developers
chosen by the BRA, and to review and veto plans for demolition of build-
ings. In August, SEPAC voted not to oppose ETC as Sponsor-Redeveloper

of parcel 19 area; thus in late 1969, the focus was on the city to see whether it was actually going to keep its promise.

ETC, during this transitional period, put on its own pressure on the BRA and the city. ETC members packed every City Council's meeting concerning the development of the Parcel 19 area. Feliciano also arranged to bus supporters from Chicago and New York to march in front of the City Hall. Baiting Mayor White's political ambitions,[36] and exploiting BRA's Warner's inexperience, ETC set the stage for its final recognition.

STAGE 5

Final Recognition

On November 10, 1969, ETC submitted a preliminary Development Proposal to the BRA and the city. It stated that "ETC intends to form a 121a corporation as soon as the BRA grants them the permission." Furthermore,

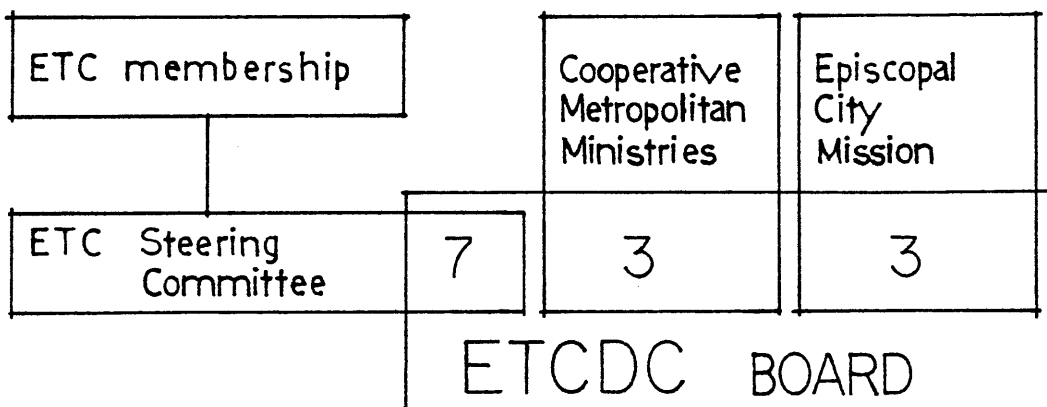> "The contents of this paper do make a commitment to:
> 1. The right of ETC to be the Redeveloper, to select their own consultants (with the assistance of the BRA), and to rebuild their community.
> 2. The opportunity for the existing residents to stay within the Parcel 19 Area.
> 3. Respect for the ethnic character of the existing residents.
> 4. Housing for low income families through utilization of Federal housing programs to subsidized rents.
> 5. Meaningful participation of community residents."[37]

According to the Proposal, ETC wanted to build 400 to 600 new units of housing, and 200 to 250 units of rehabilitated housing. The ownership and management of the housing would be either cooperative or non-private. In addition to housing, there would be recreational spaces and around 35,000 s.f. of commercial space.

ETC was named sponsor-developer by the BRA Board on December 11. A new corporation, the ETC Development Corporation (ETCDC), was formed to manage the development. ETCDC is a non-profit organization, which secured seed money from federal subsidies and programs, as well as grants from foundations and other organizations. Functionally, the

relationship of the two boards (ETC and ETCDC) in early 1970 was shown
in the following diagram.

DIA.4   STRUCTURE OF THE ETCDC BOARD

ETC membership		Cooperative Metropolitan Ministries	Episcopal City Mission
ETC Steering Committee	7	3	3
	ETCDC BOARD		

Legally, ETCDC was incorporated by five ETC members, who named the
13 members of ETCDC and elected the treasurer and clerk.   ETCDC Board
then selected its other officers, and it named Israel Feliciano as
president.

Now, ETCDC had a 90-day period, after the designation as sponsor-
developer, to select a preliminary group of developer, architect, and
lawyer; and to secure seed money.

STAGE 6

Realization 1970-1979
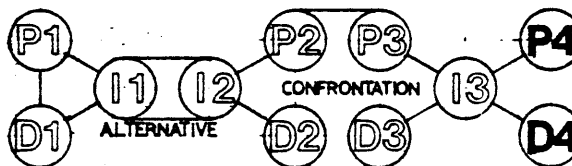
John Sharratt had been working as a consultant to ETC since late
1968 free. He was blacklisted by the BRA beginning with his involvement
with LRCC.[38] When ETCDC began to organize the development package, UPA
recommended a list of architects to design the housing; among them was
John Sharratt. ETCDC reached its own conclusion.

"John Sharratt Associates be the architect. The knowledge required
in the process of making the proposal design, in getting to know
the members of the ETC, in working closely with the staff of the
BRA seemed important reasons for making the recommendation."[39]

In between the year 1970 and 1977, ETC achieved most of its stated
objectives in the 1969 Proposal. In addition, new needs and objectives
were put into focus through practical experiences. There had also been
shifts in the character of the organization of ETC staffs, and in the
role of Sharratt.

In 1972, perhaps following the Alinsky tradition of his prede-
cessor, Israel Feliciano resigned as director of ETC and "disappeared."
Sharratt thought that Feliciano felt his ability as an organizer had
been useful in the struggling stage, and that the new situation demanded
a new type of leader. Luz Cuadrado, a university trained planner, suc-
ceeded Feliciano as director of ETC. Subsequently, in 1973 ETC was re-
names Inquilinos Boricuas en Accion (Puerto Rican People in Action), to
reflect the Puerto Rican character of the community. Similarly, the
character of the Puerto Rican community changed from the early concen-
tration of rural immigrant to the present mix of professional and edu-
cated city dwellers.[40] This change reflected the increasing complex-
ity of the community's status within Boston and the South End. More
sophisticated strategies were needed to secure resources (financial and
political) for IBA development; the required level of sophistication re-
sulted in the appointment of Jorge Hernandez, a graduate of Harvard's
City Planning, as director of IBA.

Till mid 70's, Sharratt was still actively involved in ETC's
policy planning, like exploring potential financing sources and struc-
turing development strategies. When IBA was formed, with the community
structure firmly established, Sharratt slowly withdrew from active in-
volvement in the community, and accepted a more traditional relation-
ship between architect and client.[41]

The development of ETC/IBA in the 70's is presented here using
eight of DeCarlo's ten stages of architectural development as a frame-
work of investigation.

PURPOSE

Housing for the Puerto Rican is the main concern of IBA; however, the control of housing is the goal. Beside housing, IBA develops other human services for the community and involves commercial ventures. As Hernandez pointed out, IBA is actively building up the equity of the community.

SITING

IBA is still limiting its investment in the Parcel 19 area, as designated in the 1969 Development Proposal.

RESOURCES

ETC Development Incorporation (ETCDI) was formed as a profit-making organization, and ETCDC remains non-profit making. There are three basic revenues for IBA:
a) ETCDC receives donations, grants from foundations and government, and seed money. (For Villa Victoria, ETCDC got $250,000 seed money loans.)
b) ETCDI sells tax-shelters, and uses normal federal government subsidies (construction and rent), as well as loans from bank.
c) Rent from housing.

ORGANIZATION
SYSTEM

Much emphasis was put in the plaza, for it was intended to be the focal point of the community. However, cuts in budget reduced its amenities. From the plaza, flanked by the elderly tower and the arcade - lined with commercial - under the mid-rise, is a pedestrian axis to the groups of townhouses. In Viviendas II (under working drawing stage), the pedestrian axis - for children's safety - is extended, closing off W. Brookline Street, to O'Day Playground. Two cul-de-sac roads served the townhouses.

FORM
GIVING

The Puerto Rican community wants to have a different image from the public housing several blocks away. They wanted a pitch roof, a lively color scheme and an identity for each dwelling. These are achieved in the townhouses with brick, painted stucco and facade articulation. The elderly tower dominates the site and gives a formal gesture to the plaza; while the arcade suggests a particular cultural preference.

TECHNOLOGICAL
SOLUTIONS

In order to achieve the richness of the town-houses, with the available budget, a rectangular foundation was used and the articulation was done with steel frame construction. Brick is the major material, as Sharratt wanted to have at least a minor gesture to the existing South End brick townhouses; also he used concrete stairs similar to those of South End for the townhouses. The low rise was built of an economical system of load bearing concrete masonry wall and precast concrete planks. For the elderly tower, the scheme was designed by Sharratt to be adaptable to different structural systems depending on economic variants. Finally, steel frame was used with brick veneer exterior. Individual boiler for each townhouse module was used because IBA planned to have owner-occupied units in the future.

USE

The satisfaction of the community with Villa Victoria stemmed from the history of the struggle and its unique identity. Uses of public space are not as intense as planned, due partly to the partial occupancy of commercial space. Maximum number of 3 and 4 bedroom units were constructed for the extended family structure. The balcony at the tower was used by the elderly to have active involvement with the plaza's activities.

MANAGEMENT

IBA has its own management incorporation to maintain and manage all the housing. It is run by hired professionals with a training program for residents. A security force is also managed by IBA. Community organization also provides manpower referral and placement. Recently, IBA has been trying to open up commercial development to create job and income for residents.

VILLA VICTORIA
COMPLETED & PROPOSED DEVELOPMENT

PLAN OF
TOWNHOUSE

GROUND FLOOR   ıp   FIRST FLOOR   SECOND FLOOR   THIRD FLOOR
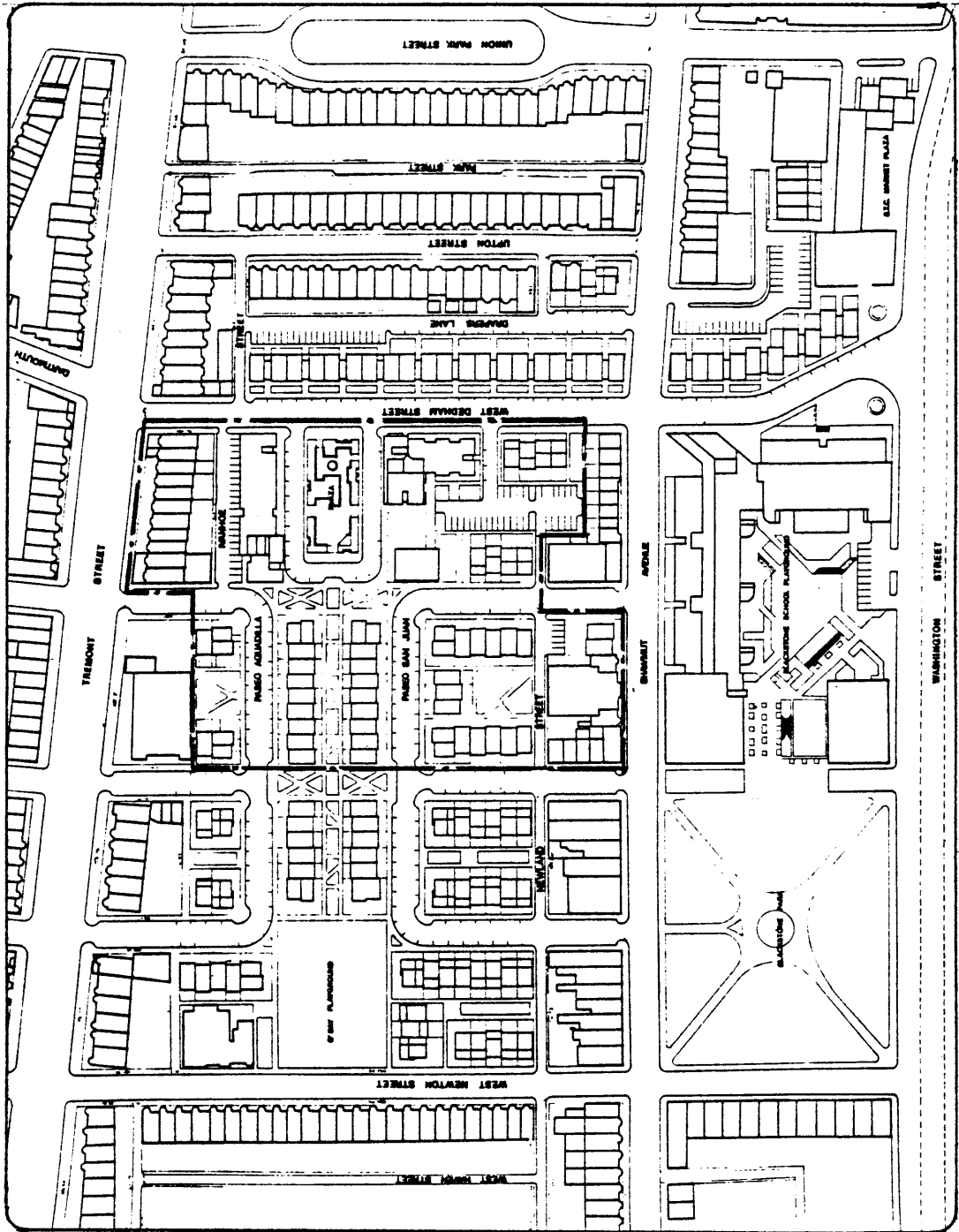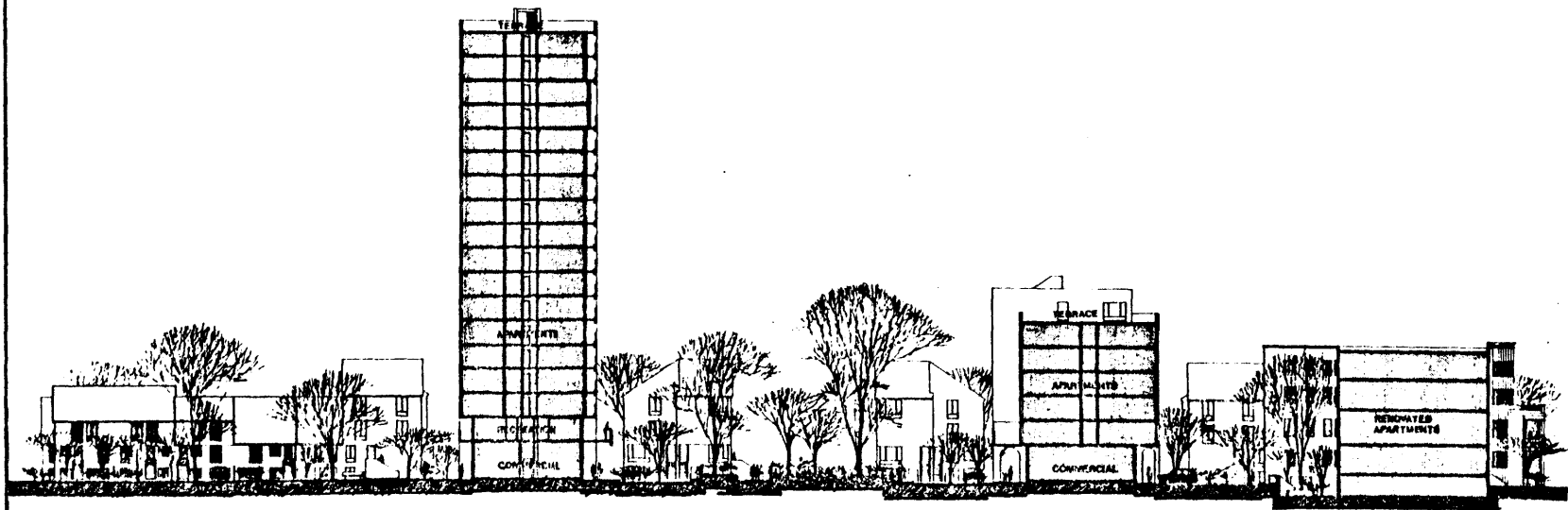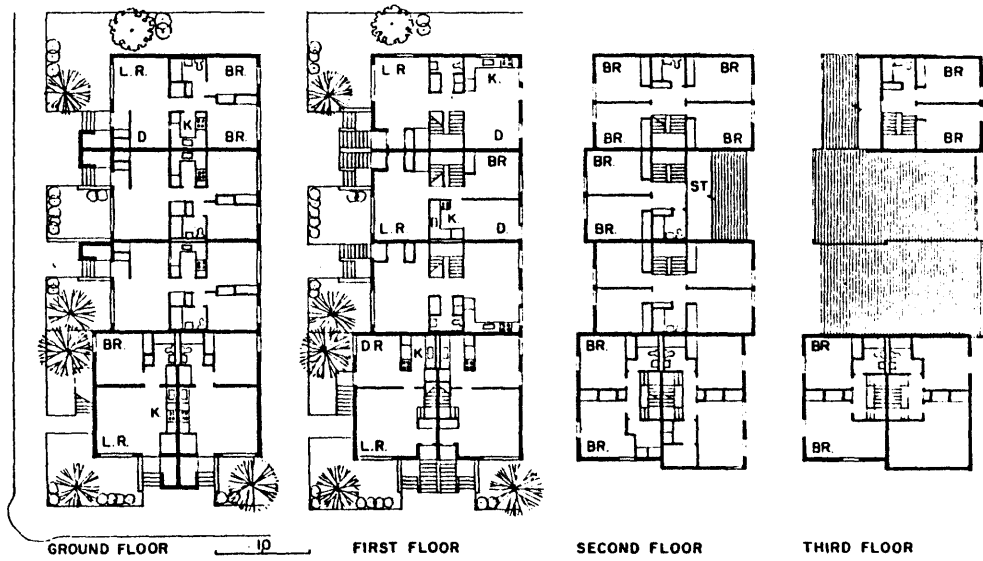
BUILDING AND SITE SECTION

AERIAL VIEW OF VILLA VICTORIA
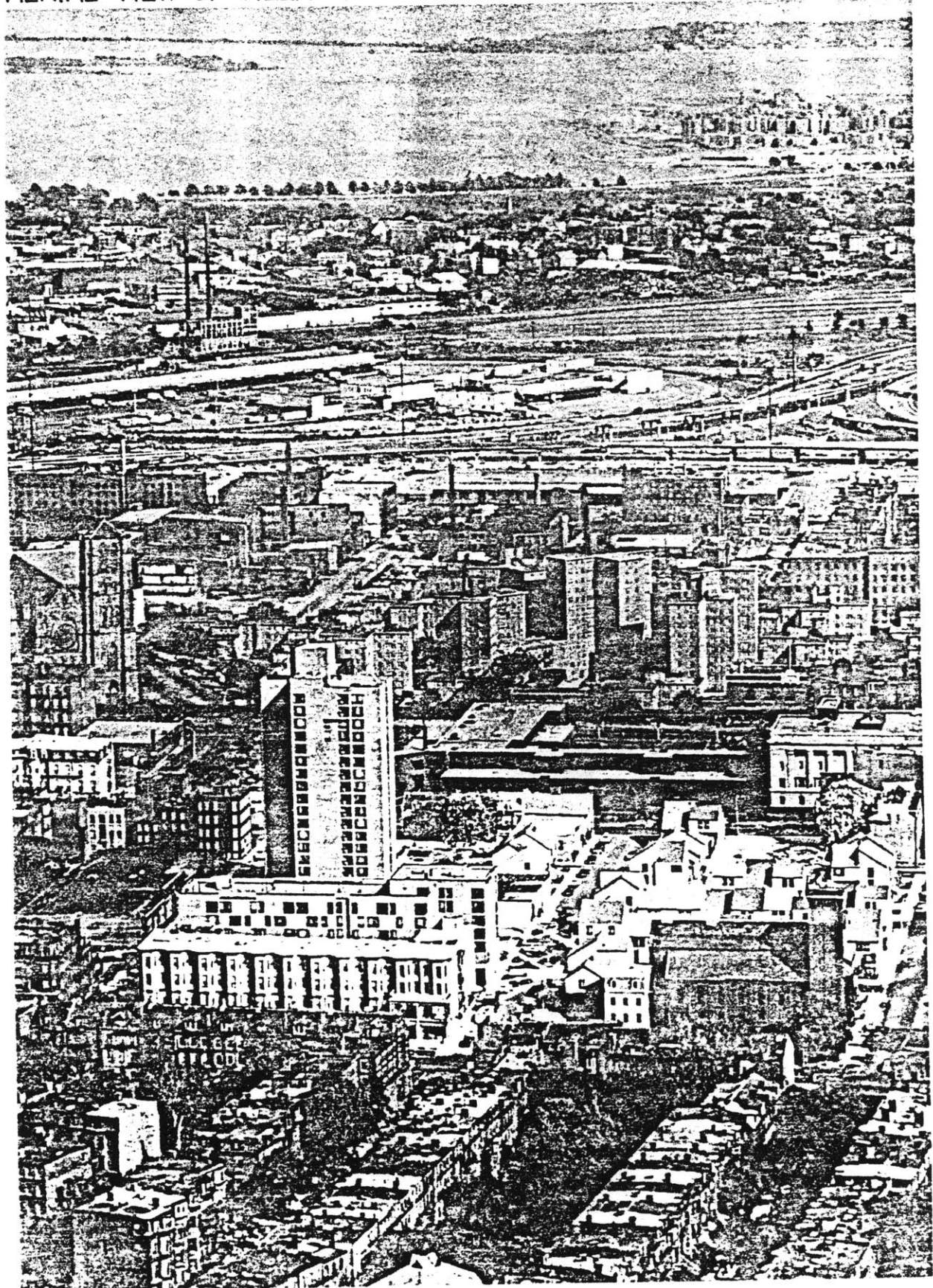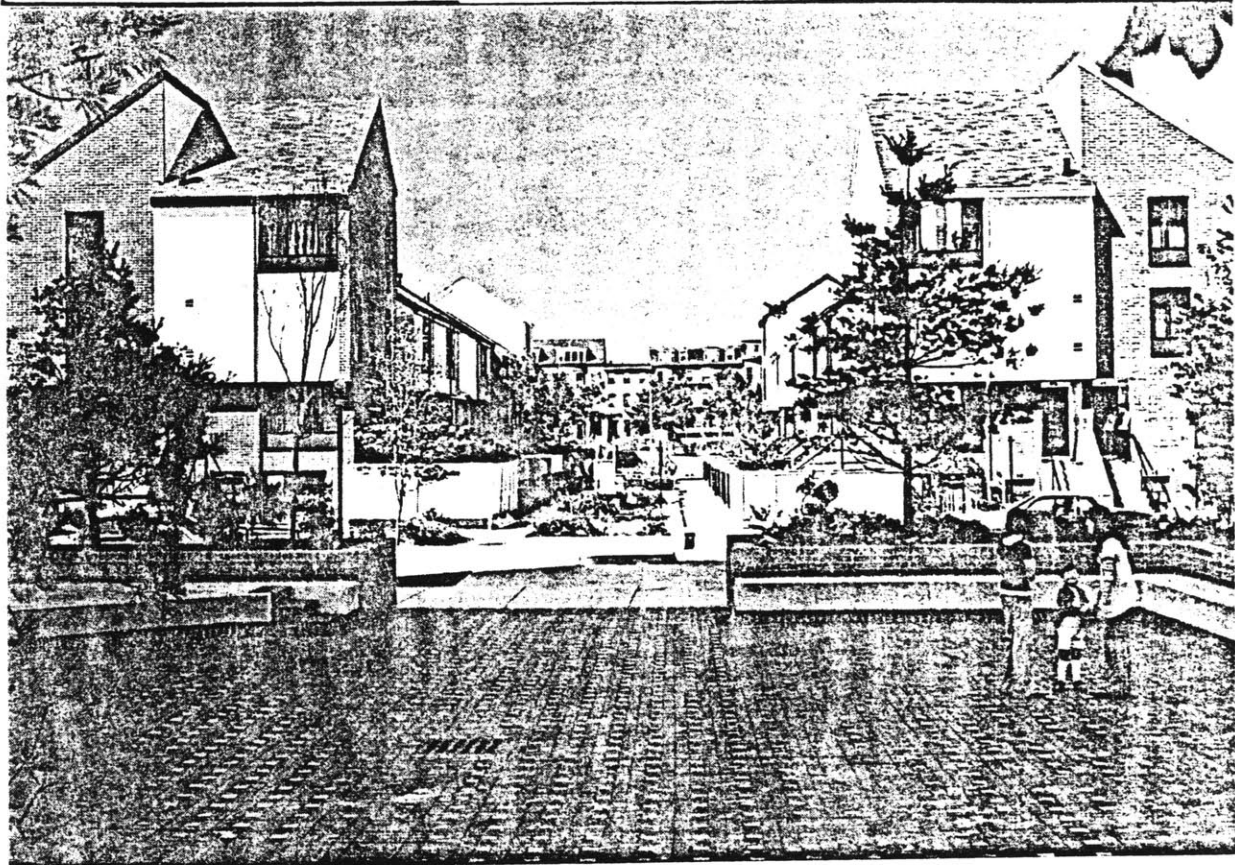
VIEW OF THE PEDESTRIAN AXIS FROM THE PLAZA
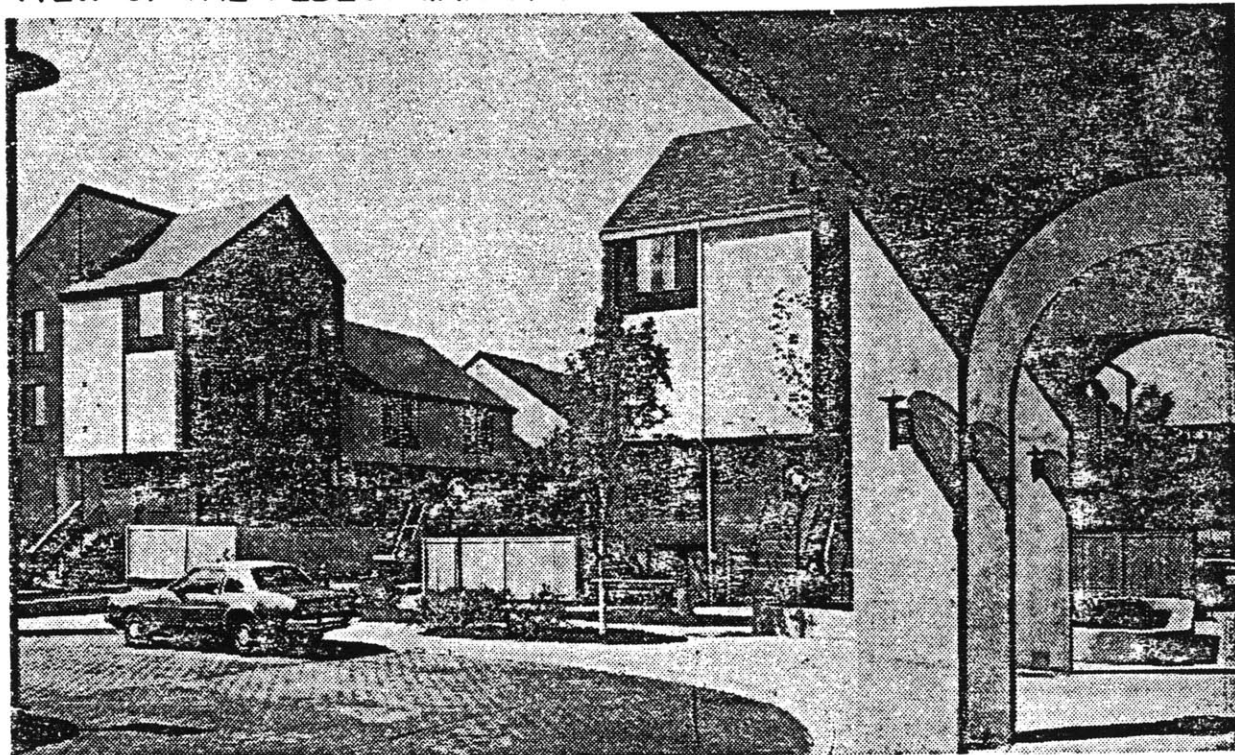
THE ARCADE AND THE TOWNHOUSES

HOUSING STOCK

dia.5

PHASE	OWNERSHIP	DEVELOPER	MANAGEMENT	FINANCE
I. Rehab. I 1972 (71 units) West Newton St. (136 units rehab.)	ETC & Assoc.	ETCDI	ETC Management, Inc.	Construction: commercial bank loans Subsidies: HUD Sect. 236 HUD Rent Supplement
II. Torre Unidad & Plaza Betances 1974 (204 elderly units)	Boston Housing Authority	ETCDI	ETCMI	Construction: MHFA Permanent: FHA/HUD Turnkey Sale Subsidies: Turnkey Management Contract to ETC
III. Viviendas I 1976 (181 units, mid-rise & townhouse)	Viviendas Assoc.	ETCDI	ETCMI	Construction: MHFA Permanent: Commercial Bank Subsidies: HUD 236 HUD Rent Supplement
IV. Casas Borinquen 1977 (36 rehab units)	Borinquen Assoc.	ETCDI	ETCMI	Construction: MHFA Permanent: MHFA Subsidies: HUD Sect. 8 Rent Subsidy
V. Viviendas II (207 units under working drawing) 1979		ETCDI		

TOTAL UNITS   835

ORGANIZATION

```
┌─────────────────┐
│ IBA Membership  │
└─────────────────┘
        │
┌──────────────────────────────────────┐
│ IBA Board (20 elected members)       │          ┌──────────────────────────┐        ┌──────────────────────────┐
│   12 at large representatives        │──────────│ ETCDC                    │────────│ ETCDI                    │
│   8 district representatives         │          ├──────────────────────────┤        ├──────────────────────────┤
└──────────────────────────────────────┘          │ Non Profit               │        │ Profit Making            │
        │                                          │ Housing Team             │        │ Syndicate                │
┌──────────────────────────────────────┐          │ Free Services from:      │        │   Housing                │
│ Social Service (health,legal and welfare) │     │ Lawyers                  │        │ Housing                  │
│                                        │        │ Architects               │        │   Management             │
│ Cultural Program (the Areyto Program)  │        │                          │        │   Construction           │
│                                        │        │                          │        │                          │
│   music                                │        │                          │        │                          │
│   art                                  │        │                          │        │                          │
│   communication (Cable TV)             │        │                          │        │                          │
│                                        │        │                          │        │                          │
│ Security                               │        │                          │        │                          │
│                                        │        │                          │        │                          │
│ Day Care Center                        │        │                          │        │                          │
│                                        │        │                          │        │                          │
│ Community Organization &               │        │                          │        │                          │
│   Educational Program                  │        │                          │        │                          │
│                                        │        │                          │        │                          │
│ Housing and Commercial                 │        │                          │        │                          │
│   Development                          │        │                          │        │                          │
└──────────────────────────────────────┘          └──────────────────────────┘        └──────────────────────────┘
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dia. 6

STAGE 7
New Reality

Character

Presently, IBA has a membership of around 2000 persons. The membership is strictly limited to residents of Villa Victoria and there is a $1 annual fee. Each member has the power to vote for a representative on the IBA Board. Around 490 units are already built, and another 200 units will be built in Viviendas II, bringing the total housing investment to around 25 million dollars after completion of the next phase.

Population

Total 2000

	Household	Population
Puerto Rican	50%	70%
Black	20%	
White (elderly)	20%	30%
Chinese	10%	
	100%	100%

Reaction

Upon its completion in 1977, Villa Victoria received praise from the news media. It was heralded as a showcase of community strength. Social structure, however, changes with time. In 1979, South End is facing another stage of transformation. Again, the middle and upper classes, motivated by the gas shortage and an increasingly attractive city life, are moving back to inhabit the now fashionable brick townhouses. Heavy investment by private development is put into condominium conversion where there is high profit. Gentrification thus becomes the leading edge of an excroachment on IBA.

In mid 70's, the BRA was sued by the Committee for a Balanced South End (Balance Committee) for the construction of Villa Victoria without filing an environmental impact report. Made up of property

owners, the Balance Committee charged that Villa Victoria would be "isolated and alienated for its inhabitants" and could "produce an environment of pressure and claustrophobia that is undesirable for the tenants and unhealthy for the neighborhood."[42] The suit was dropped. Recently, the same group, with a different name and support from the Historical Preservation Board, sued IBA for demolishing eight historic registered townhouses in the Viviendas II. The historic buildings in question are of no architectural significance; some are dilapidated and some are burnt out. All the buildings, in fact, are considered safety hazards by the city inspector. Another prong of the challenge to IBA is centered around the closing of West Brookline Street to allow the pedestrian axis to continue in Viviendas II.

One motive among several of the Balance Committee can be one of maximizing the profit for turning South End into a haven for middle to upper income groups. Sentiment sympathetic to the above motive was voiced recently by a columnist in the Boston Globe:

> "Victoria II will, if it survives the litigation, contain 207 units of low-income housing on which the larger part of the rent will be paid by the federal government. It will also offer substantial rewards to high-income taxpayers who invest in those shelters made possible by the project, which provides seven-year, accelerated depreciation to its owners. You can buy such shelters the way you buy telephone stock. Doctors buy a lot of them...The pioneers of "gentrification," paying market rents, heavy real estate taxes and high, conventional interest rates, naturally find this hard to swallow. They are objecting in court on preservationist grounds and because, they assert, the project will result in a legally impermissible intensification of concentration of low-income tenants in the area...For 207 prospective tenants and their patrons in the political, realty, social service and investment communities, this is just dandy. For inflation-sheltered, long-term investors who will own the property some day courtesy of the federal taxpayer, it is even more felicitous. But doesn't it raise a question of fairness? A lot of working people, paying heavy taxes and fuel bills, cannot afford the amenities that Victoria II, if it is ever built, will offer to welfare clients. Most of them don't even know what a tax shelter is."[43]

A Participatory Design Process

Is there a participatory design process in IBA's history? The answer is yes. It is clear that the participation of the people in

the housing design is through representatives, in ETCDI and IBA housing team. John Sharratt still goes to the team meetings to listen to up-dated information and demands from the community. One member commented that the architect,

> "...is always very laidback with us..., most architects have preconceived ideas and try to fit the client into them... Sharratt took the client's needs as the most important...he was never manipulative or imposing...now he is a commercial architect and has to eat and pay his draftsmen, but he is still this way with us."[44]

For five years since Sharratt volunteered his service to community, he was more than an architect; he was a member of the community and played the role of strategist in economic and policy planning, as well as design development. With ETC in the beginning years, Sharratt gained the confidence of the community through spending long hours at weddings, birthday parties or around a kitchen table. Thus the design input from the residents was not a structural one; it was in fact a dynamic process of personal contact and of synthesizing individual's needs and community's needs. Also, larger meetings of the community were held through 1970 to 1971 to review alternatives of various character of Sharratt's master plan.

Looking back to ETC/IBA history, it should be noted that not all Puerto Ricans were involved in the struggle. The success of the struggle was due to the hard work of a core group of community people. The ETC steering committee, the ETCDI and ETCDC, the IBA board, and IBA housing team, are built on a number of dedicated residents. However, IBA is firmly rooted in the community. Through the structured representation, the inhabitants' input on housing is brought to the team meetings which Sharratt attends. Sharratt's trusted relationship with IBA and his competence are established. Villa Victoria is built with maximum FHA space requirements and FHA maximum mortgage limits.[45] Through efficient design and construction, Sharratt succeeded to satisfy the program within the budget (including adjustment on inflation), and to reflect the community spirit in the physical environment.

6

MATTEOTI VILLAGE, TERNI, ITALY

"I suppose...that I should try to define the architecture of participation and to give some idea of how it could be practiced.

We have participation, in fact, only when everyone takes part equally in the management of the power structure, or when the power structure no longer exists because everyone is directly and equally involved in the process of decision-making." Giancarlo de Carlo, An Architecture of Participation.

This chapter is about an ideology.
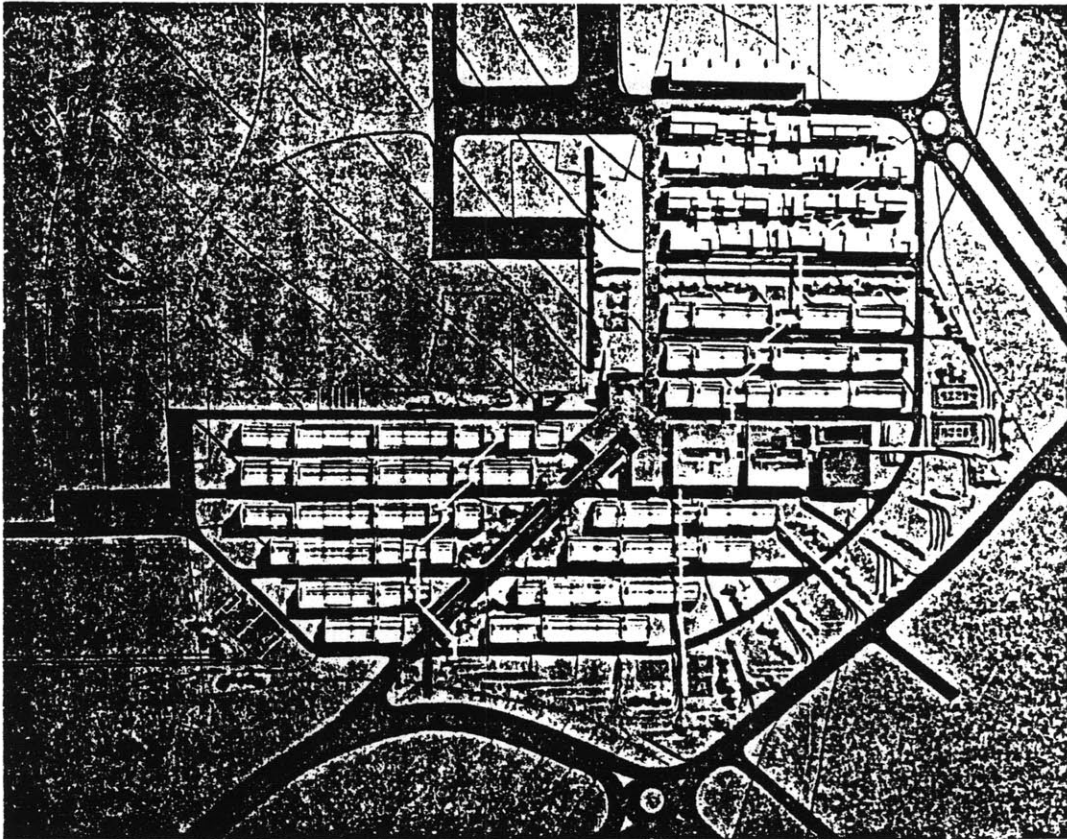
HISTORICAL BACKGROUND

Industrial Revolution arrived in Italy late in the nineteenth
century, when urban centers were well devloped in the northern part of
the country. Historic urban centers provided the source of labor for
industries, but these centers could not accommodate industrial develop-
ment. Thus industrial areas were located outside the historic urban
centers, and subsequently were developed into new towns with worker's
housing provided by the industries. Except in several major historic
centers, like Rome and Milan, these new developments drained the life
from the centers, and turned them into administrative and cultural
enclaves.

During the 1920's and 1930's, especially under the Facist regime,
numerous housing developments and experiments were carried out for the
workers. Conceived under the influence of the Modern Movement, these
projects brought a political significance into the physical environment.

Italy was in economic and physical ruin following the Second World
War. Soon, however, Italian economy was boosted with an expansion in
every capitalist development. The rapid economic growth brought about
large scale migration of labor from the depressed agricultural areas of
the south to the industrial north, and from rural areas to urban centers.
Unfortunately, the miracle recovery of the Italian economy heralded in
the 50's turned out not to benefit the people; rather the real growth
was in the profit made by a small minority.

The peak years of capitalist expansion were between 1955 and 1965,
which coincided with the high level of urbanization and housing growth.

Yet almost all of the housing in Italy is built by the private
sector for sale or rental in the private market. Public housing, in
1971, only constituted about 6% of all housing construction and 2.8%
of amount invested in housing was public funds.[1] Subsequently the
majority of workers could not afford to pay market rent for housing.
Despite the fact that there were a lot of vacant houses or apartments
(including second houses for the rich), Italy had the second highest
per capita housing shortage of all the EEC countries. A United Nation
study (1968) found that the need in Italy was 40.8 dwellings/1000
persons in 1961.

The massive housing shortage for worker's was further aggravated by the lack of a rational system of planning and management for housing and urban development since 1940's. Those planning legislations that existed have been used to stimulate private investment, and they are still based on an outdated town planning act of 1942.[2] Thus there is no surprise that the housing movement is organized and has its root in the working class.

One outstanding quality of the Italian woker class is its good organization, based largely on membership of the Communist Party. This advantage was used successfully in the 1960's to negotiate with industries for worker's benefit, and as Thomas Angotti pointed out:

> "The well organized Italian working class began to see the material gains it had earned by collective bargaining in a period of expansion whittled away by inflationary price increase, including rent hikes. Thus, the link between housing battles with trade union battles therefore arose from the wage-price crunch and the success of the trade union movement in wage struggle."[3]

In 1968, the student revolution in Italy threatened the foundation of the state. In 1969, over 20 million workers went on strike to dramatize demands for housing reforms.

STAGE 1

Period of Tensions
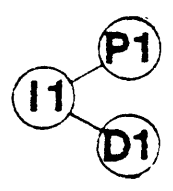
Terni is situated 100 kilometers northeast of Rome in the Umbria region with a population of 110,000. It typifies the sub-center which grew out of the late industrialization, and its economic structure is dominated by a steel mill. The mill belongs to the huge Finsider group which is now State owned. Worker housing provided by the mill consisted of a few dilapidated buildings in the town center, some new houses at the outskirts, and the Matteotti Village.

The Matteotti Village, built in 1939 by the mill as a substitute to a salary increase, was a working class ghetto with two story (four apartments) houses of the worst quality, served by a network of dirt roads. Nothing much happened to the village until the 1960's.

In 1968, the Bridge Act was pushed forward by the socialist with a group of architects and planners.[4] The Act required that all municipalities complete a master plan by the end of 1969. Stricter regulations to building development were implied in the new plan. Before the Act was passed in the Parliament in 1969, there was a rush of request for building permits.

One feature of the 1969 master plan for Terni was an allowable increase of density from 1.5 cu.m/sq. m to 3 cu.m/sq. m. The private market reacted by increasing land speculation, and replacing old buildings with higher density housing for larger profit. The Old Matteotti Village would have been a target of private speculation had it not been the general worker's strike.

The steel-mill's management in 1969, under pressure from the worker, had to make a decision about the old village. Either the 800 dwellings were sold to the inhabitants without any improvements, or the village was going to be restructured, which the worker's council demanded. In an attempt to ease the tension over the situation, and a show of good will, the socialist management decided to enlist an Italian architect of the Left and with international fame. Their choice was Giancarlo de Carlo.

De Carlo came up with five alternatives. The first was a complete rehabilitation of the existing dwellings; the second was based on a model with towers which the mill had already adopted in the past; the third was a mixed solution of the type favored by the State housing agency; the fourth and fifth were more complex structures unfamiliar in Italy. Furthermore, the architect warned the steel-mill that he "was interested only in the last two solutions: should the first three be chosen some other architect would have been appointed."[5] Underlying this proposal, what De Carlo had in mind was to have an architecture of participation, that of the worker.

Ideology

    The reason why Giancarlo de Carlo challenged the mill management
could date back to the 1940's, and was based totally on his belief in
the urgency to legitimize architecture.

    Back in 1948, de Carlo wrote about the housing situation and its
position within the larger political system. He remarked that both
capitalism and the state were incapable to resolve the desparate hous-
ing crisis, because "the home cannot have any relationship to the state,
which recognizes man not as individual but as a number, a fraction of
some greater number."[6] An alternative strategy was proposed:

> "The plan must necessarily emanate from authority, therefore
> it can only be detrimental. The changes in social life cannot
> follow the plan - the plan will be a consequence of a new way
> of life...The plan is the opportunity of liquidating our present
> social order by changing its direction, and this changed aim is
> the necessary preliminary for a revolutionary social structure."[7]

    The issue that has preoccupied de Carlo, one among a group of
practitioners, is:

> "how to change the way in which housing and planning issues are
> perceived, how to shift the initiative in planning from the
> bureaucrat to citizen, how to shift that in housing from passive
> consumption to active involvement."[8]

    At the 1959 CIAM meeting in Otterlo, de Carlo criticized modern
architecture for failing its social responsibility.

> "I have tried to show how, within the modern architectural move-
> ment - as in every movement undertaking a revolutionary task -
> two opposite trends co-existed in its development: one pursuing
> a renewal of structures and prepared to upset its very basis of
> life in order to reach it; the other pursuing a renewal of out-
> ward appearance and not going beyond the boundaries which might
> have endangered the autonomy of its own position."[9]

    In presenting his worker's housing in Matera, a congested and
poor town in Southern Italy, de Carlo presented his position as archi-
tect with the first trend. While the other architects were concerned
with the potential of a plastic architecture and rational planning in
representing the modern spirit, de Carlo's building was simple and
utilized local construction means and material. In responding to

criticism of the rigid floor plan and the building's lack of modern
spirit, de Carlo retorted:

> "If there is a rigidity in this plan and building, it is only a
> formal rigidity. But in terms of the people, the only freedom
> that I felt I could give them, was a consciousness of their rights -
> and the stability of these rights as seen against the background
> of their lack of rights."[10]

For de Carlo, people must have the rights to influence decisions
that affect them. In Matera their rights were to have a secured home
in the midst of urban decay, and to gain economic stability. Since that
final meeting of CIAM, and with the establishment of the more progressive
group called Team X,[11] de Carlo continued to expand his search into an
architecture of participation. The basis of this, he argued, is in the
exposition and criticism of contradictions in the present social-
economic structure.

He felt the need of architectural education and practice to focus
on the social problems, and to invest their energy to legitimize archi-
tecture as a social art.

> "Our purpose is to investigate the architecture's legitimacy
> i.e., its capacity to meet expectations of its 'public,' Therefore we
> must immediately clarify a question which appears basic: who is the
> 'public' for architecture? The architects themselves, the clients who
> commission the buildings or the people, all the people who use archi-
> tecture?"[12]

Traditional architectural practices, de Carlo argued, are based on
"the faith in 'how' and the ignorance of 'why'." The mistake of which is

> "Working on 'how' without a rigorous control of 'why' inevitably
> produces the exclusion of concreteness from the process of planning.
> Proposals solving problems necessarily stand midway between the
> definition of goals and the evaluations of effects. The refusal to
> correlate one's own contribution with two poles of motivation and
> control is a typical manifestation of the idiocy of forced special-
> ization. A manifestation which also influences the quality of the
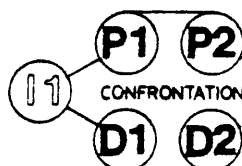> proposals and their capability of resisting attempts to alter
> them."[13]

STAGE 3
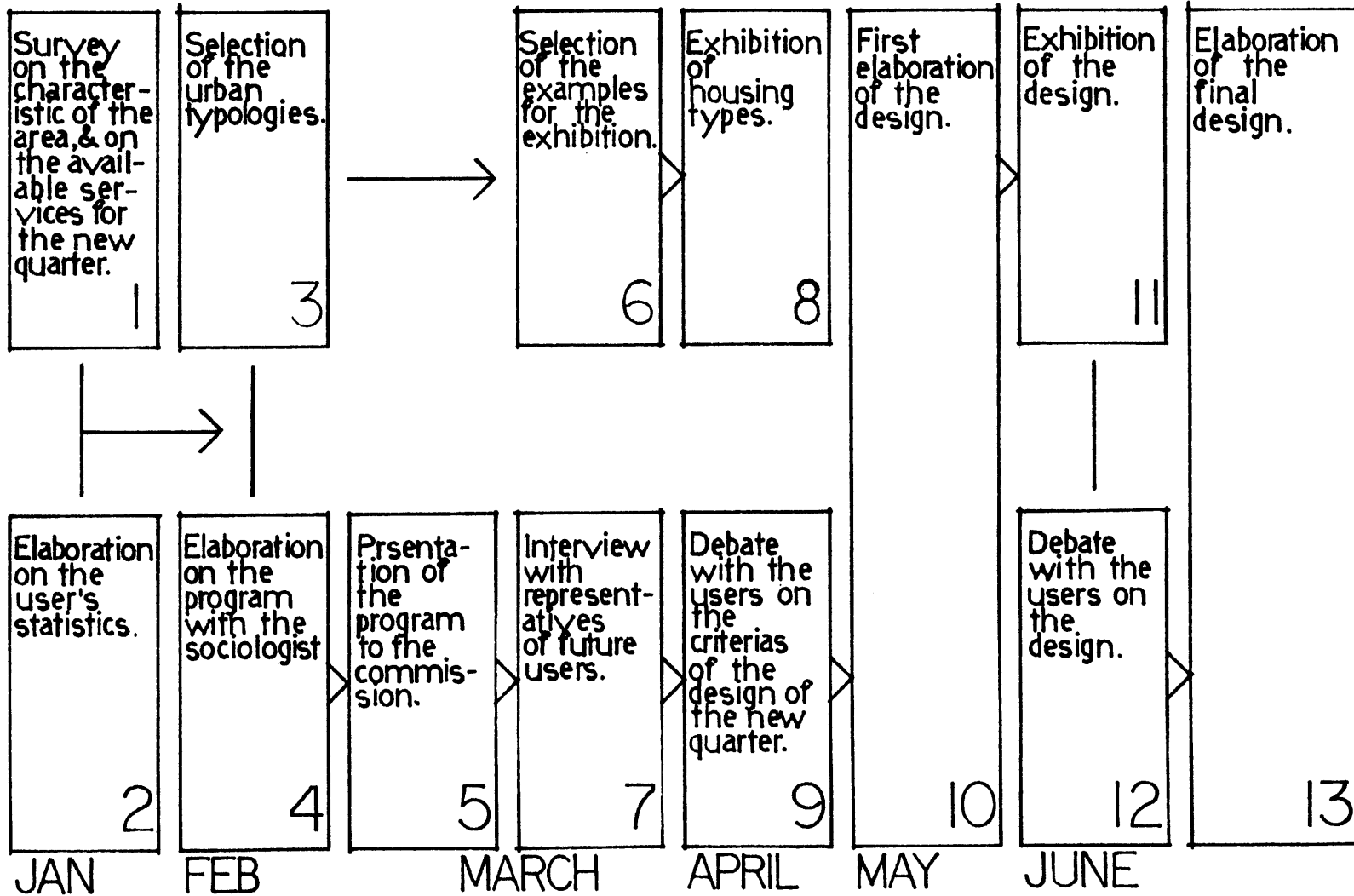Alternative Design and Planning

>"An architectural image can have important effects if it does not
>succeed in becoming a reality (provided that it is full of po-
>tential energy that it puts a great deal of strain on the forces
>opposed to its realization)...Even the smoothest and most compact
>systems are interrupted by networks of deep fissures arising from
>their internal contradictions. Thus it is always possible to find,
>along these networks, edges where innovative events can be in-
>serted, and, having been introduced, they can grow, widening the
>fissures, producing others, and thus, contributing to demonstrate
>that the logic of the system is corruptable, and must be replaced
>by another, less contradictory logic." (De Carlo)[14]

The steel mill management, under the tension of the worker's strike,

was committed to de Carlo as the architect. Having no alternative, the

management accepted the last two of the five schemes proposed by de Carlo,

along with the conditions implied in the schemes' organization and de-

velopmental process. These conditions were identified as technical,

economic, and procedural.

Linear organization was the basic concept behind the two schemes.

This implied segregation of pedestrian and vehicular movement into

parallel channels. Low-rise high density (a new concept in Italy at

that time) buildings with facilities as 'extension of the house' form

the residential network, which was then interpenetrated with green spaces
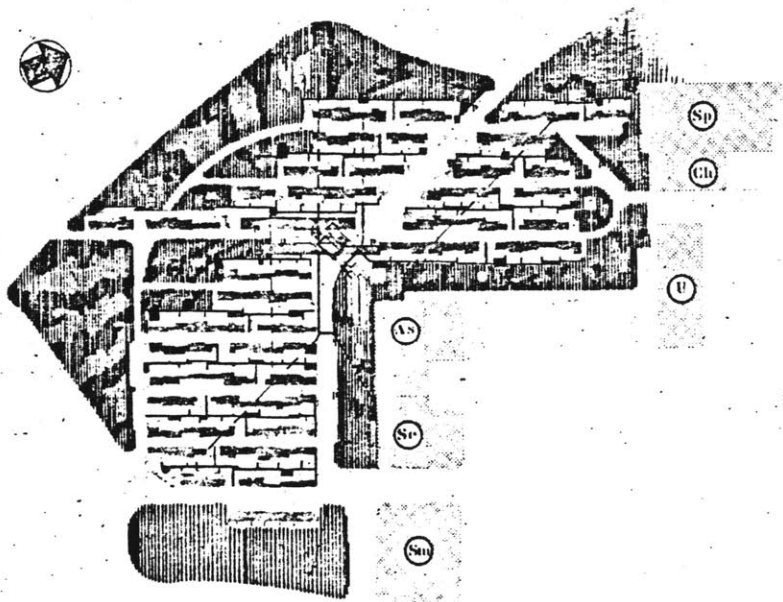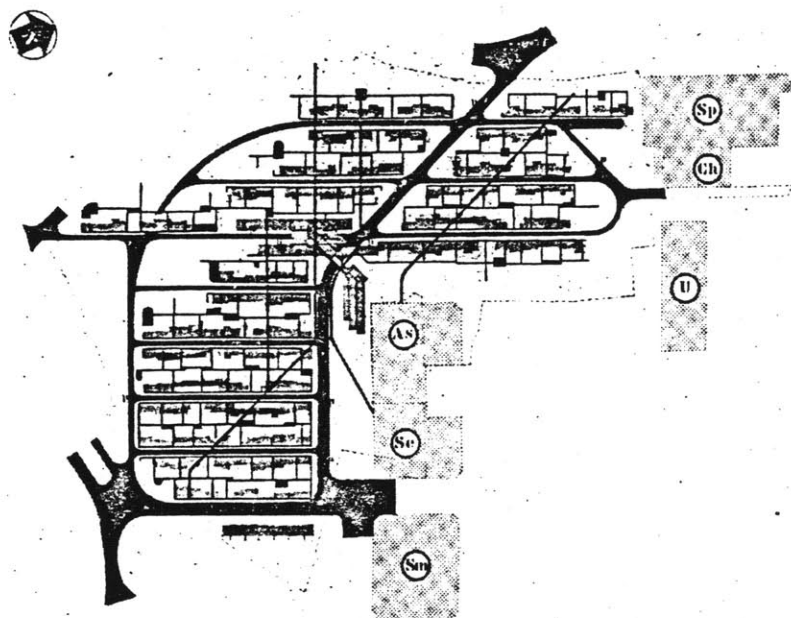
and collective spaces.

Around 15% increase in the budget was allowed, justified by the

fact that the available State funds were not sufficient to ensure the

above standards of design. The mill management agreed to allow owner-

ship of dwellings by inhabitants through installment and the management

of the housing will be run by the worker's committee. Also, the right

of pre-emption was guaranteed for the retired workers living there at

present, with no increase in financial charges. Most important of all was

that the management sanctioned the participation of the future inhabitants

during the design process.

| Survey on the character-istic of the area,& on the available services for the new quarter. 1 | Selection of the urban typologies. 3 | | Selection of the examples for the exhibition. 6 | Exhibition of housing types. 8 | First elaboration of the design. | Exhibition of the design. 11 | Elaboration of the final design. |

| Elaboration on the user's statistics. 2 | Elaboration on the program with the sociologist 4 | Prsenta-tion of the program to the commis-sion. 5 | Interview with represent-atives of future users. 7 | Debate with the users on the criterias of the design of the new quarter. 9 | 10 | Debate with the users on the design. 12 | 13 |

JAN   FEB   MARCH   APRIL   MAY   JUNE

THE PARTICIPATORY PROCESS 1970

dia. 1

Participatory process and the Master Plan.

dia. 2

STAGE 4

Participatory Process
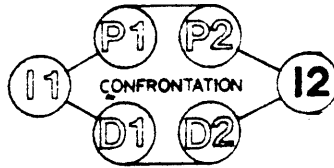
> "Participation transforms architectural planning from the authoritarian act...into a process. A process which begins with the discovery of the user's needs, passes through the formulation of formal and organizational hypotheses and reaches the phase of use...The three phases...follow one from the other, but they also correlated in a cyclical relationship."[15]

De Carlo decided to ask all the workers in need of housing to participate in the planning process. This was necessary because the real inhabitants were not yet chosen due to the procedure of the public works, which distributed dwellings only when they were finished.

Surveys on the existing conditions, along with a preliminary program written with a sociologist, were prepared in early 1920's. The informations collected were "aimed at exposing all the imposed value systems, dissipating the alienation that the century old imposition of these systems had produced, and stimulating a consciousness so precise as to provoke the feedback of new information and criticism."[16]

A scientific method was used to identify users' need, but it "does not mean planning 'for' them, but planning 'with' them." De Carlo wanted to enlarge the scope of participation to both design and use of the plan. Several urban typologies developed by de Carlo's team and the preliminary program were reviewed by the worker's committee. However, participation was limited to a group of representatives, and the design alternatives were unable to communicate their inherent different value systems. It was still difficult to break the worker's a priori image of housing suitable to worker.

STAGE 5

An Exhibition
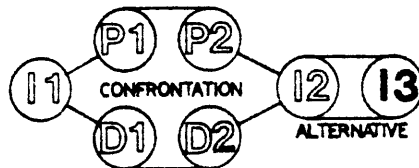
> "To discover the real needs of the users, therefore, means to sub- substantially bring out into the open, their rights to have things and at the same time their rights to express themselves...the user as the fundamental protagonist of the operation and thus questions from the very beginning legitimacy of the constraints which are

imposed, including those concerned with resources and standards...
The job of the planner is to open the sequence of hypotheses
enlarging the image byond the margins of the framework imposed
by the client: to show that we could (should) have it instead of
moving within a condition of preordained subjection we move accord-
ing to an objective confrontation of real rights."[17]

In March of 1970, an exhibition of drawings and models of housing,
organized with the help of architectural students, was presented to
all the workers.   Many housing types, chosen from various countries,
were those considered as acceptable to de Carlo; that means the ex-
amples were both high-cost and low-cost. The workers reacted to the
high standards of the examples with dubious questions on whether they
could live like that; in return, the architect asked them why not.

De Carlo's intention was to draw the worker's attention away from
the traditional housing condition imposed on them; and in so doing to
encourage the identification of conflicts between the real desires of
the worker and the imposed limitation of resources. Fruitful exchanges
occurred during the exhibition's presentation, which entailed more in
depth dialogue between the workers and the designer.

In the months following the exhibition, small group meetings be-
tween workers and architects took place during work hours with no wage
deduction and with the absence of the management. Real overall needs
were defined, on the basis of which de Carlo developed hypothesis on the
organization of the physical environment. Next, specific needs of dif-
ferent groups (age and family size) were interpreted into various build-
ing typologies. The evolving design was presented in drawings and models
to further elicit responses and suggestions of the worker. At the end
of 1920, a final scheme including the master plan for the area and the
designs of different building typologies were completed.

STAGE 6
Realization
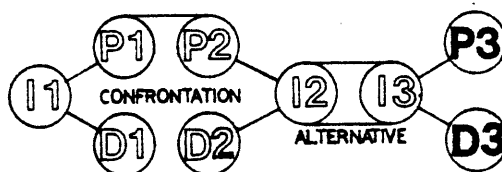
Only about 15% of the proposed master plan was completed in 1975,
with no plan for any further construction. The environment created is

discussed here based on de Carlo's 10 stages of decision-making in architecture.

|	
PURPOSE	A housing environment responsive to the worker's needs was the means through which the rights of the workers was confirmed.
SITING	15% of the proposed development was built.
RESOURCES	State funds for planning and construction.
ORGANIZATION SYSTEM	Series of platforms placed above one another with interlocking pedestrian 'channels' and built 'fields.' Vehicular 'channels' and green spaces are separated by the building 'field.' Bridges over the roads connect the main pedestrian systems crosswise, on the building field and link up various communal services.
FORM GIVING	The building 'fields' are the areas where the building typologies are located. A three-dimensional grid was used to position vertical connections and built volumes. The definition of typologies evolved during the planning process. Based on initial classification of requirements listed by all potential inhabitants, five different cells were defined, each with three different nuclei, resulting in fifteen alternatives. A second classification of requirements and needs of the real inhabitants selected led to three more variants of each nucleus. Thus, there were forty-five solutions for the 250 units built.
TECHNOLOGICAL SOLUTIONS	During the meetings, some workers wanted to have their own gardens in front of their units. De Carlo responded that they were not living in houses, and it would be difficult to have individual gardens in a multi-unit structure. The worker answered that it's the architect's responsibility to design the solutions. Thus, outdoor terraces cantilevered from the main concrete structural system were filled with several feet of dirt and became the inhabitant's front garden. Pour in place concrete was used rather than prefabricated concrete components preferred by de Carlo. This was due to economic constraint and political tradeoff with building union.
USE	Much effort was put in by individual families to decorate and use the gardens. The partition

between use spaces in the units were built for
easy removal, yet there are no evidence of such
inhabitant's action. There is, otherwise, a
definite pride shown by all families in their
environment.

MANAGEMENT   The Matteotti Village is managed by a worker's
committee. All units are for future ownership
by present inhabitants. De Carlo envisioned that
at a later stage, if that is possible, it will be
possible for the worker to choose a particular
dwelling from a catalogue which contains all the
45 alternative unit's design. Then, addition of
any new solutions is possible with the experience
which comes with the use of the first phase, and
with different needs of future inhabitants.

STAGE 7

Consequences
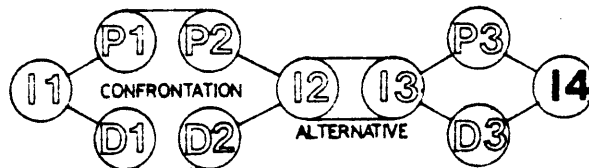
The success of Matteotti lies in the process through which the
housing was built. Gianlupo Osti, the manager of the steel mill until
1975, noted that this success depended on the political scene of the 60's.
With the absence of urgent political reform typical of that decade, it
is believed that the rest of de Carlo's master plan has little chance of
realization. However, the Matteotti had caused changes not just in the
urban fabric of Terni, but in the political structure as well.

The linear structure of de Carlo's design, if not considered British
by some city council members, is definitely new in Terni. It has little
relationship to the existing chaotic urban structure caused by decades
of speculative market exploitation. Thus de Carlo's scheme carries with
it a political and ideological dimension. Unfortunately, speculative
mechanism catches up with this image, and presently there are several
developments in Terni which have also a linear organization.

Consensus among the management and public official interviewed[18] is
that de Carlo's achievement is beyond the significance of the archi-
tectural language used. De Carlo incited confrontations with the manage-
ment at the very beginning, and de Carlo compared this attempt to the
invasion of the Bastille. The subsequent participatory process orches-

trated by de Carlo challenged the established management of the City
and opened up a dialogue between the workers and the public (City
agencies and the mill management). The experience generated a new image
of a methodology of constructive collaboration between policy planning and
architectural design when the political process is favorable. More-
over, the future role of the city's operation, put into focus by the
experience, has to justify the 'why' of city development, and not just
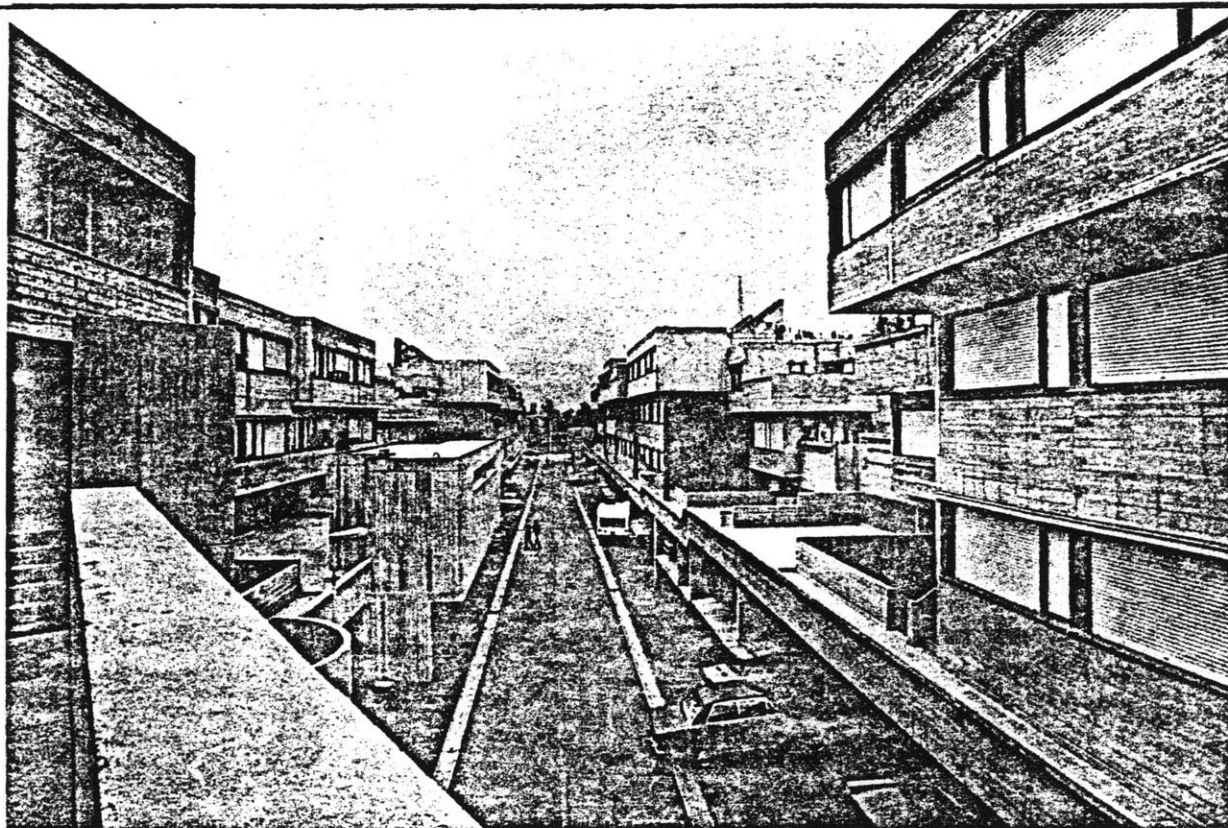concerns with 'how' the city stimulates economic development.
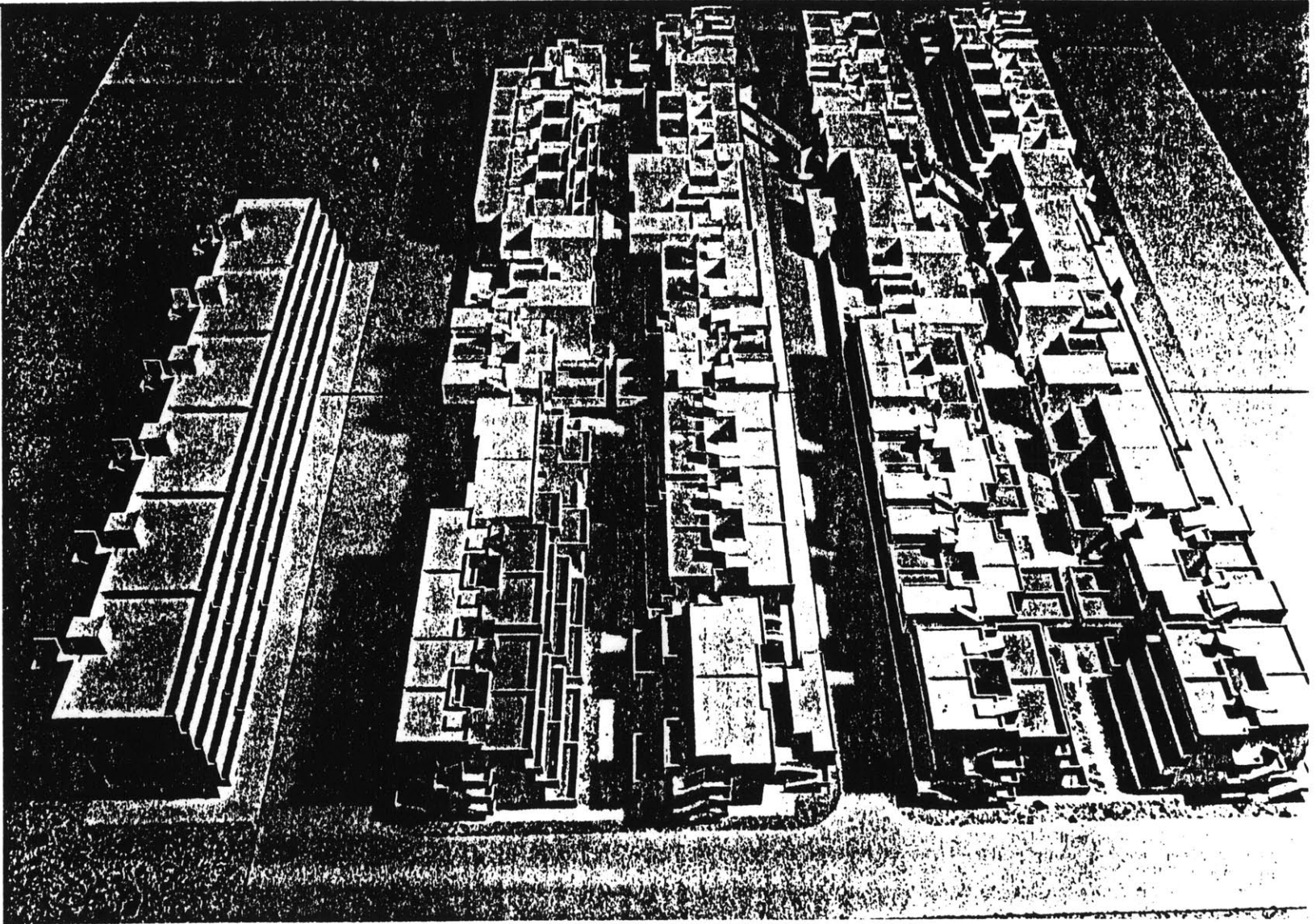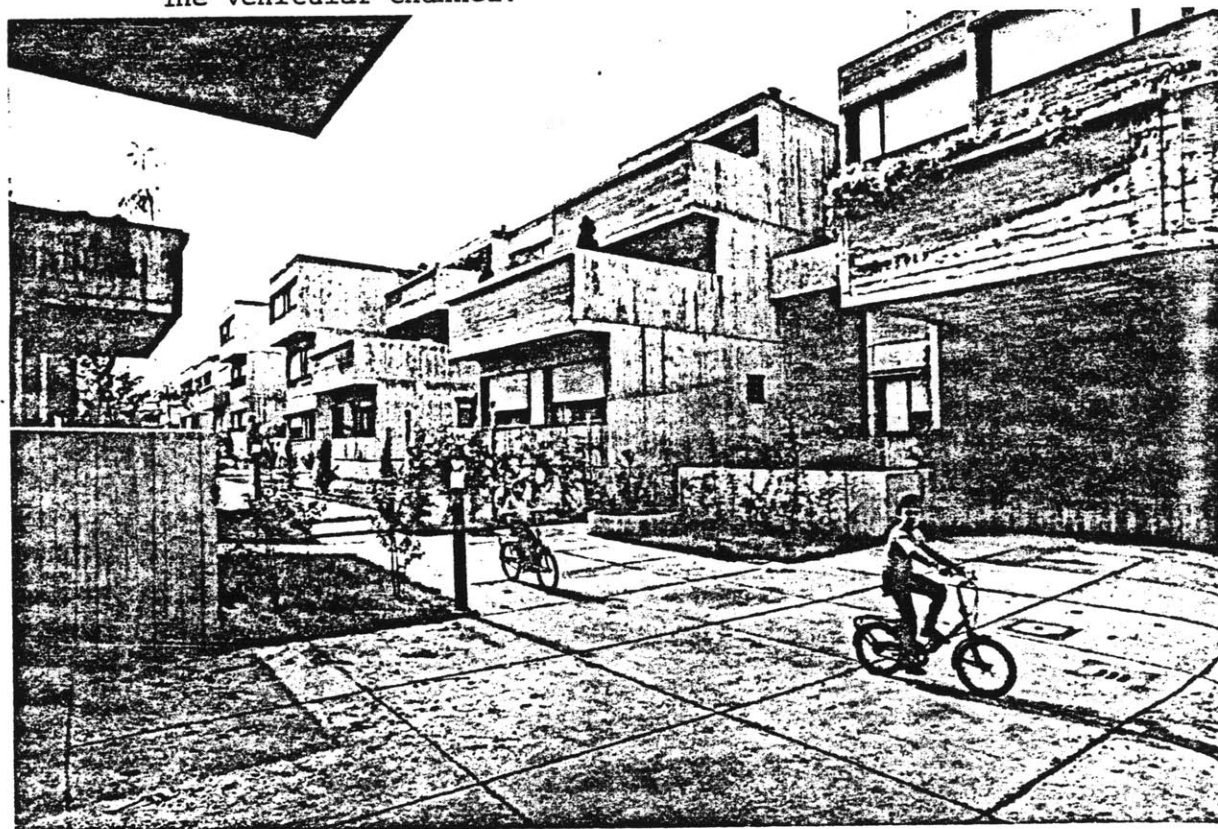
Model of the Matteoti Village.
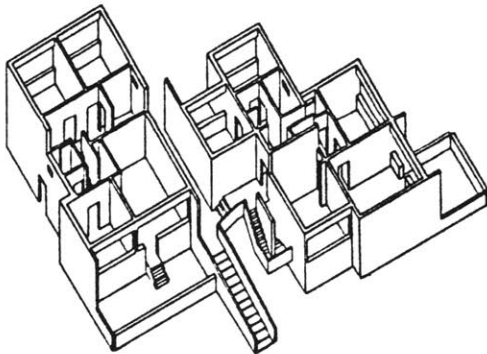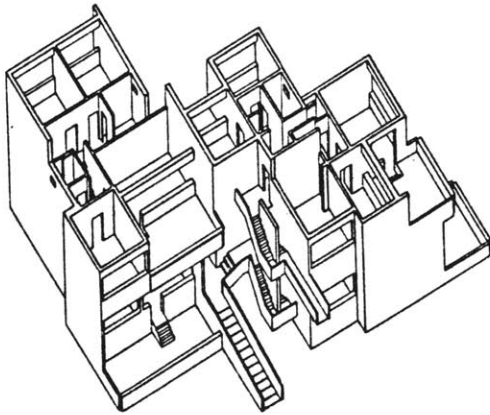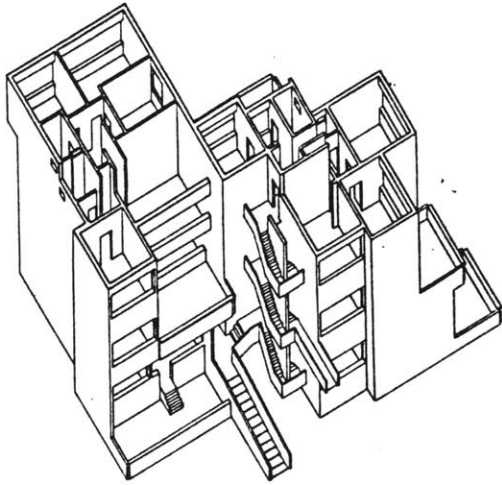
Plan and Illustration of the
Building Field.
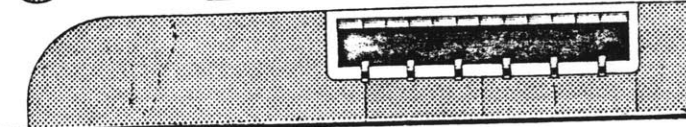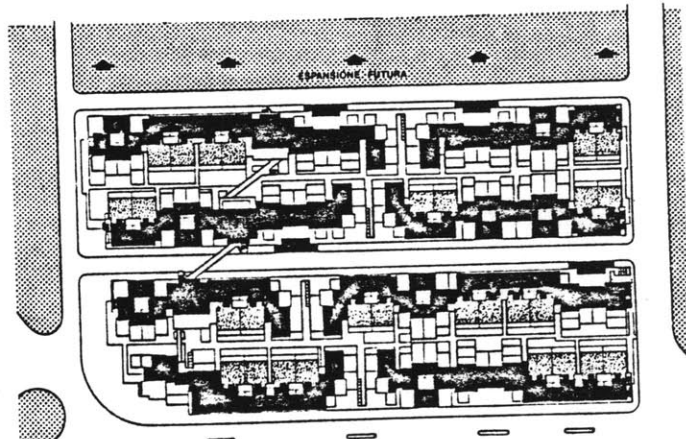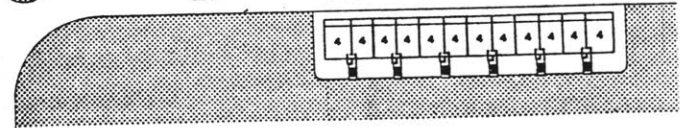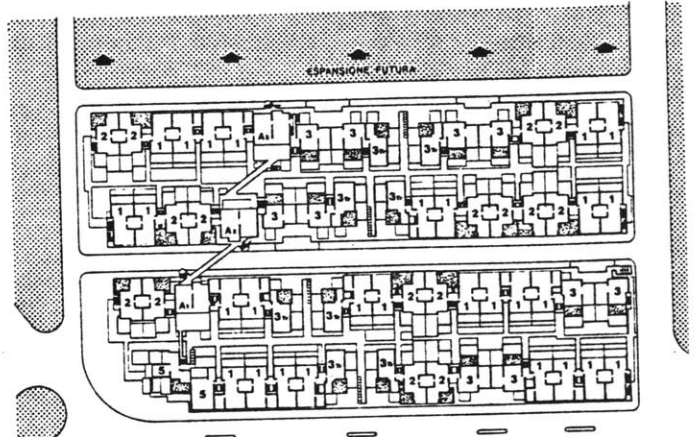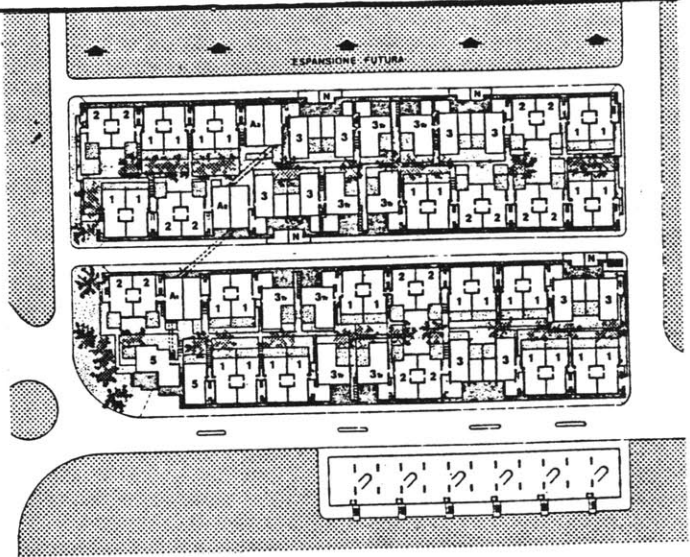
The vehicular channel.

The pedestrian channel.

The Freedom for Individual Expression.

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MOLENVLIET, PAPENDRECHT, THE NETHERLANDS

In the early 1960's, an idea of direct participation of inhabitants in the housing process was put forward by the Dutch architect N. John Habraken. Over the next decade, this idea is developed into a working methodology by the Stichting Architecten Research (SAR). In 1972, using the SAR TISSUE methodology, architect Frans Van der Werf designed Molenvliet, a 123 unit housing project in Papendrecht, where the inhabitants decided on their own dwelling environment (INFILL) within a built structure (SUPPORT). This chapter discusses the level of competence achieved by the SAR, the architect and the building industry.
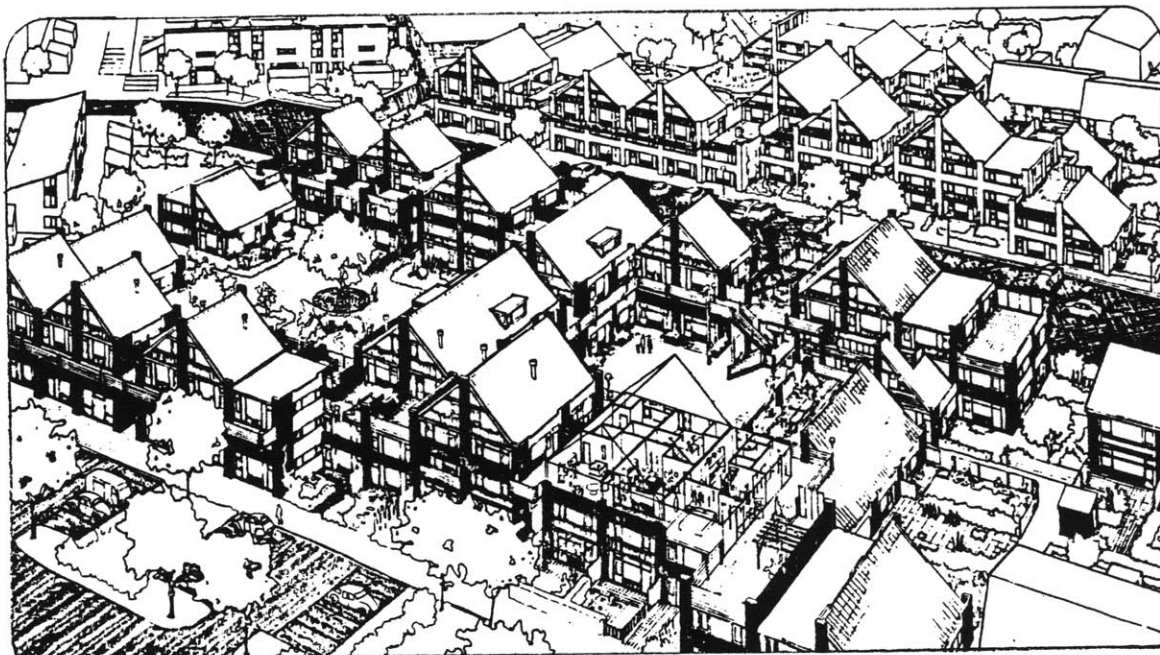
HISTORICAL BACKGROUND

Throughout the nineteenth century, the involvement of the government authorities of the Netherlands in housing was limited to technical regulations on fire hazard and building lines. This position was changed when the Housing Act of 1902 came into force. Under a system of decentralization, the local municipal councils prepared the initial housing program, and the provincial and central government took on a supervisory function and carried a considerable part of the financial burdens.[1]

The Housing Act of 1902 also conferred legal status on the Housing Corporation, which maintains its status as a non-profit organization. During the years between 1915 and 1923 large numbers of innovative worker's housing projects were developed for such corporations.[2]

World War II brought severe damage to the housing supply of the Netherlands. Beside the destruction of cities and villages, the war had caused a total breakdown in the housing industries and resources. After two years of post-war emergency measures taken directly by the State, a second reconstruction phase began in 1947. An accelerated procedure for expropriation and land consolidation was applied to combine reconstruction and drastic town-planning reform.

Large-scale housing projects were made possible with full financial support of the State and new and more efficient industrial productions. Large-scale interventions were justified also by steady increase in population; now, the Netherlands has the highest population density in Europe. One result of such massive housing program is the development of flats and apartment buildings, which are too often monotonous and anonymous in appearance.

In 1965 New Housing Act established a higher degree of decentralization with the gravity lying with the municipalities. As stated by the government, "Housing became the State's affair but the municipality's job."[3] The role of the State is thus concentrated on providing various forms of subsidy to private or municipal builders; sometimes, the State will pay the total cost of a housing project. At present 60% of the housing stocks in the Netherlands are subsidized by the State.

In 1968, the revision on the Housing Act allowed extra sub-
sidies for experimental housing projects. This was introduced to sanc-
tion innovative concepts of planning and design, as well as experiments
on more efficient systems of production.

STAGE 1
An Idea

In 1961, the Dutch architect N.J. Habraken discussed a new idea
in his book SUPPORTS: An Alternative to Mass Housing. He begins with the
question:

> "Could the fact that a conflict exists between man and the method
> chosen to combat the half-century-old housing shortage mean that
> there is a connection between the two? Could it be that the hous-
> ing shortage, or rather its apparent insolubility, is caused by
> the antithesis between man and method...The method which has been
> referred to may be described as mass housing. The aspects of it
> which have aroused the resistance of the users are: the denial of
> involvement and initiative to the inhabitant."[4]

Several assumptions are made by Habraken. First, in the housing
process, dwelling and mass housing (MH) are related as end and means.
Second, the inhabitants of MH should have the means of self-expression
and the right of possession through direct actions on their environ-
ment. Third, contemporary MH production fails to maximize the contribu-
tion of modern industrial techniques to a more humane housing environment.

Habraken points to the existing production of "perfected-barracks"
in MH program and the resulting social protests and the accelerating
rate of obsolescence of the objects. He argues that a dwelling is first
and foremost a relationship between people and environment.

> "A relationship relies upon actions, and dwelling is after all
> doing something; it is the sum of human actions within a certain
> framework, within the protective environment created by man...
> dwelling is building. We are constantly faced with the results
> of the same relation between man and matter. This relationship
> therefore is the basis for all that has to be done in the matter
> of human inhabitation. It is the outcome of human nature, and I
> will therefore call it the 'natural relationship.'"[5]

To establish the natural relationship in modern society requires an
understanding of the reality of the housing problem. The need for

BRIEF OUTLINE OF THE SAR PRINCIPLES & METHODOLOGY

Ao
the philosophy

In the process of mass housing as it is universally known today there is no scope for the participation of the individual dweller. This process can only operate if the non-participation of the dweller is accepted. On this principle mass housing has its logic. But if we think that the occupant should have a role in this process the logic disappears and we should therefore have to re-think everything and work out a new logic and a new process.

That is what SAR is concerned with - a new housing process where no dwelling will come into existence unless there is action by the dweller himself.

A dwelling always exists in two spheres, the sphere of the community and the sphere of the individual; thus we talk about a public sphere and a private sphere. We must first of all recognize these two spheres. Each sphere gives possibilities for action. Each sphere gives possibilities for production. Today, in the mass housing process everything is decided in the public sphere. The private sphe-

re is non existent. There is no scope for the individual to exercise his opinion and take action concerning his dwelling. The result is uniformity. Where the individual is left out of the process the result is uniformity.
Conversely when everything is decided in the private sphere a kind of shanty town comes into existence. Where there is no communal role the result can be chaotic and inhuman. Somewhere between these two extremes lies a balance between technical provision on the one hand and possibilities for individual action on the other.
This is an organisatorical problem not a technical one. Uniformity in mass housing is not the result of the application of industrial methods. If we really had been able to use industry in an efficient and human way we would at least not have housing shortage: the uniformity in mass housing is the result of the elimination of the individual from the housing process.
That is the tragic condition of human settlement today : for the sake of mass production the individual has been enslaved but the possibilities of industrial production have not been gained.
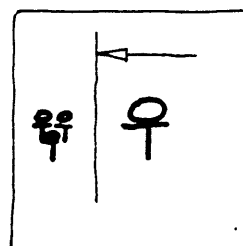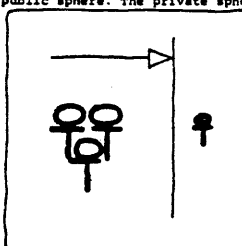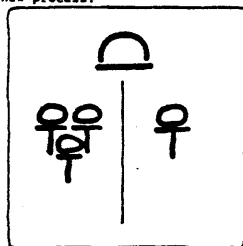
A1
the concept

Supports and detachable units recognize the two spheres. The support is the product made in the public sphere and is made for the community. The detachable units are products about which the dweller can make decisions.
Thus, the definition of the word "support" and the word "detachable unit" is not a technical one. It is a definition based on a division of the decisions to be made. If the individual dweller can make decisions about an element of his dwelling,then this element is - by definition - a detachable unit. Regardless of the question whether this element is industrially made or not. If the dweller as an individual cannot decide about an element in his dwelling then this element is part of the support.

If we want to make supports and detachable units we must start with a philosophy that tells us where the decisions to be made

in the public sphere will stop and where the decisions to be made by the dweller begin. Only then we can start with the design problem.

The support therefore is a piece of real estate. It is the result of a design process in the public sphere. It can be a prefabricated, but it can also be built in traditional building methods.

When the support is finished the dweller can make decisions concerning the detachable units which he would like to use to make a dwelling in the support structure.
Only then the dwelling comes into existence. Without the dweller no dwelling will exist. A dwelling is not a product to be produced. A dwelling is not a thing that can be designed by architects or anybody else. A dwelling is an act. The act of the dweller.

A detachable unit can be made as an industrial product. It can be considered as a durable consumer good.
Therefore supports and detachable units represent not only

two spheres of responsibility. They are also the result of two spheres of production. The production of real-estate and the production of durable consumer goods.
In both spheres the methods of industrial production can be applied. In the building of supports the industry can produce prefabricated elements out of which the support can be built. In that case the industry serves the building trade.
In the production of detachable units the industry serves the dweller directly. This gives a relationship between producer and user that until now has been unknown in the housing process; yet this producer/consumer relationship is very well known in the field of durable consumer goods.
In the new housing process the architect should stop producing dwelling.
A dwelling is not a thing that can be designed or can be produced. Architects should design supports and detachable units. Builders should build supports. Industry should produce detachable units. The dwelling will be a result. The result of the participation of the dweller.
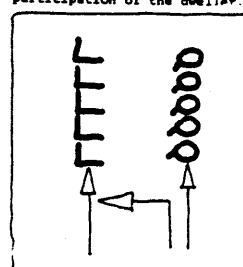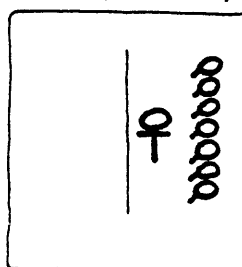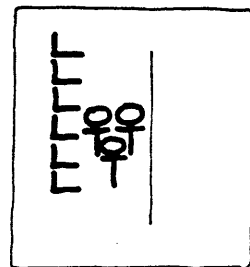
dia. 1

social housing in a high density environment persists and the most feasible solution is to house them in multi-family buildings. Moreover, housing production for such buildings demands specialized skills and techniques, which are foreign to future inhabitants.

Accepting the limitations of social reality, Habraken proposed a system of SUPPORTS and INFILLS for the fulfillment of the natural relationship. An analog could be made to explain the INFILLS as dwellings controlled by the inhabitants, which are then placed within a built surrogate of landscape (SUPPORT structure). Built by the public realm (government agencies and building contractors), the SUPPORT structure allows self-expression of each inhabitant through individual choice of the closure systems (partitions, windows and furnitures) and the spatial arrangement of the dwelling (see dia. 1). The coordination of the public and private actions is crucial to Habraken's concept, and he seeks the support and assistance of industries to develop the appropriate building methods.

The ensuing effort resulted in the formation of the Stichting Architecten Research (SAR). Founded by architectural firms and the Bond Van Nederlandse Archifecten (BNA), SAR sets up a fund to make research possible for "the betterment of housing." A research office was formed in 1965 to conduct researches for the realization of the natural relationship through SUPPORTS and INFILLS. The aims stated by SAR are:

> "a. to study the measures which can be taken to increase the usefulness of the built environment with particular respect to the field of housing;
> b. to promote these measures by the development of design methods;
> c. to put these measures and design methods into practice;
> d. to study measures in the decision making and production process bringing out user control."[6]

STAGE 2

A Competition and an Alternative Solution
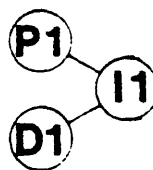
In 1968, the community of Papendrecht held a planning and design competition for a project of 2,400 subsidized rental apartments.

Papendrecht lies 20 km SE of Rotterdam, which is the major employment
center of the region. In the post war years Papendrecht experienced
steady expansion of its population, made up mainly of working class whose
housing is heavily subsidized by the State. In order to control the di-
rection of growth of the town, the Papendrecht Housing Authority decided
to locate the competition project in the desirable growth area. Since
the project was based on a hypothesis of growth and projection of demo-
graphic changes, the competition was in fact an "idea competition."[7]

The winner of the competition was Frans Van der Werf, a young
Dutch architect living in Paris at the time of the competition. His
proposal was one of high density and low site-coverage; however, this
was never realized. The town felt unsure of the overall planning poli-
cies and uncertain of future development; subsequently, the town post-
poned the project indefinitely.

Van der Werf didn't give up hope. He maintained communication with
the officials of Papendrecht while he began work at the SAR office.
This double relationship proved to be instrumental in the realization of
the final project five years later.

At SAR, between 1969 to 1971, Van der Werf was a member of a team
investigating the TISSUE methodology. By then, SAR had produced a work-
ing concept of the SUPPORT and INFILL systems for the dwelling environ-
ment. In 1968, SAR felt the need to examine aspects of living beyond
the domain of the dwelling.

> "The support, like the dwelling, is part of a larger whole.
> Neighborhoods, consisting of streets, squares, buildings and traffic
> circulation also constitute a part of the housing process, har-
> bouring the same problems of influence and control, a problem which
> was increasingly apparent in the process of housing. A neighbor-
> hood can also be seen as an area where responsibilities have to be
> separated into areas of collective decision making and areas over
> which the users assume individual responsibility."[8]

Yet to have inter-related sphere of decision-making requires a new method
of agreement.

> "The traditional method of design is static. What is needed is a
> dynamic method encompassing alternatives and variations...The
> problem of the built environment is not only a design problem,
> however design decisions still have to be taken. Without a design
> method recognizing the current problems, no solutions can be found.
> Methods of financing, decision making, organization and production

have undergone basic structural changes. The solutions will only go as far as the means allow us to go."[9]

In order to translate the concept of a new form of inhabitation into working methodology, the SAR office developed a model of decision making based on agreements. Similar to the agreements needed between the decisions made for the SUPPORT and INFILL, SAR developed agreements at the scale of the immediate living environment.

> "Not every decision in design and planning is an agreement. Decisions are only agreements when they are made in an open decision making process, i.e. all those involved take part in the process... When decisions are made regarding the immediate living environment, based on agreements, the area is considered as an independent level of decision making process. This level is referred to as 'Tissue,' an intermediate level between a town and a building."[10] (See dia. 1.)

STAGE 3

A New Scheme
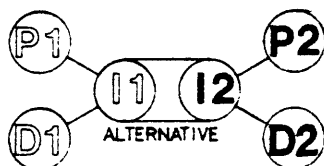
While Van der Werf was developing the TISSUE method, he maintained contact with the Papendrecht Housing Authority staffs. Moreover, the exchange was mutual; Van der Werf shared his ideas with the planning staffs, and they informed him of the evolving planning policies.

In 1971, the town officials decided to go ahead with the proposed expansion plan for the area. Thus they asked Van der Werf to present his winning design once more. Instead, Van der Werf wanted to develop a new design based on the SAR methodologies.

Based on the good relationship Van der Werf had with the people and officials of Papendrecht, he succeeded to arouse local interest over the SAR methodologies. For the local officials and builders, the new idea provided an alternative to the unpopular housing stocks where no changes were possible, thus decreasing their values and yet increasing the required maintenance cost. For the town's people on the other hand, although the majority won't be living in the project, the new idea opened up channels of participation in the town's development.

Thus, with consensus achieved on the local level, an application

was made by Papendrecht to the State for experimental money sub-
sidy to develop the new design. Under the 1968 revision of the Housing
Act, seed money will be granted to develop new ideas in housing con-
struction and planning. An initial approval was given to Van der Werf's
proposal of the idea, but the money won't be given until the archi-
tect and the town had submitted a completed design scheme for the State's
approval.

Upon receiving the State's agreement to provide experimental sub-
sidy (an extra of around U.S. $2000/unit over the regular subsidy) for
the developmental phase, Van der Werf convinced the local officials to
appoint a building contractor. This request was an exception to the
usual public bidding for government subsidized housing projects. But
Van der Werf felt that an informed and enthusiastic builder involved
from the very beginning would contribute to the design of the SUPPORT
structure. The reason was simple: the project was the first one in
Holland where "an agreement" in connection details, services (plumbing,
electricity, etc.), and dimensions was needed between the public con-
trolled SUPPORT and the user's controlled INFILL.

STAGE 4
Confrontation
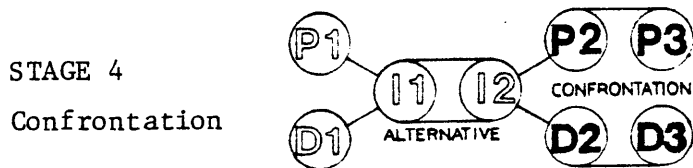
During the early months of 1972, Van der Werf worked closely with
the planning staffs and the builder to develop the scheme. He used a
TISSUE plan that was low-rise but high-density, with SUPPORT structure
forming walls around square-shaped open spaces. Once the designs of the
TISSUE and the SUPPORT were finished, they were submitted to the
Ministry of Housing for inspection; and if the design conformed to the
required standard, the extra experimental-subsidy money would then be
honored.

The reviewing procedure for granting housing subsidies in the
Netherlands is based on a "point system." Different types of dwellings
are allocated points depending on the number of rooms and their sizes,
the presence of central heating, good service utilities, and extra

amenities.[11] Usually, plans of the dwelling (lay-out and equipment), the dwelling type (method of aggregation of dwellings), and the dwelling environment (parcelling and site lay-out) are submitted by the architect to be evaluated by the Experimental House-Building Advisory Committee.

When Van der Werf and the town of Papendrecht submitted only the TISSUE plan and the SUPPORT plan, with no INFILL (units and equipment layout) plan, they were asked to resubmit a new set of drawings that included typical unit layouts.

Together with the planning staffs of Papendrecht, Van der Werf worked out 96 different unit plans, all conforming to the government standards. The revised submission was again rejected because the government evaluators didn't know how to allocate points to 96 different and yet possible dwelling-plans for the same project. Clearly the bureaucratic procedure was not capable of adjusting to unconventional and innovative ideas.

The latest fuss of the State bureaucracy annoyed the townpeople, who had been showing interest and support for Van der Werf's scheme. Thus, the Mayor went over the head of the Advisory Committee to complain directly in front of the Minister of Housing. Finally, with the red tape removed, the housing project Molenvliet in Papendrecht was officially receiving extra subsidy for its experimental status.

STAGE 5

User's Participation
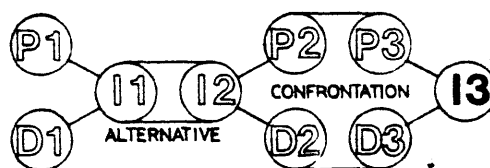
During the construction of the SUPPORT structure, selection procedure for future inhabitants began. They were selected from a waiting list of those eligible for subsidized rental housing and who lived within a certain radius from the project. An announcement was then made to inform them that they were welcomed to consult with the architect to design their own dwelling environment.

The 96 hypothetical dwelling plans used for the evaluation stage

THE HOUSING PROCESS

MASTER PLAN

LEVEL 1

agreement on the relation

functional require-ments	design elements: highway, road, water, built and open areas

conclusive model

LAND USE PLAN

LEVEL 2

agreement on the relation

functional require-ments	design elements: street, road, garden, building

tissue model

TISSUE PLAN

LEVEL 3

agreement on the relation

functional require-ment	design elements: floor, wall, boiler, piping, stair, roof

support principle

SUPPORT PLAN

LEVEL 4

inhabitants participation

functional requir-ment	element: wall, partition, closet, entrance, room, kitchen, bathroom

basic variants

INFILL PLAN

dia. 2

became the basis for the discussions with the future inhabitants.

By referring to those plans, they were shown which elements were not

free for them to choose. These building elements were parts of the

SUPPORT structure shared by more than one dwelling such as party walls

and central service ducts, as well as the position of stairs. The

standardization was necessary so that the SUPPORT could be built inde-

pendently of the INFILL.

After the position of all the 123 dwellings in the SUPPORT had been

fixed in consultation of the Papendrecht Housing Authority and the future

inhabitants, Van der Werf conducted meetings on the layout of the dwell-

ing with each family. The architect had two sessions with each family,

about two weeks apart.

> "The occupants were provided with a basic design sheet (scale 1:20)
> on which they could choose the layout of the dwelling as their
> imagination dictated; this design was then discussed and evaluated
> together with the architect. The use of the 10cm-20cm grid in this
> basic design sheet was of great assistance in giving the occupant
> a quick insight into the possibilities of the spaces at his dis-
> posal.

> "After these discussions were completed, finished drawings were made
> from the rough design sketches. These drawings were sent to the
> various sub-contractors so that the positioning of the infill, in-
> cluding services (electricity, gas, sanitary, central heating, etc.)
> could be determined. When this was completed, the installation of
> the infill could begin."[12]

STAGE 6

Realization

The project is discussed here based on de Carlo's 10 stages of

decision-making in architecture.

PURPOSE	A housing environment where the dwellers have direct control over the character of their dwelling environment; and where there is an "agreement" between individual and collective decision-making.
SITING	125 units of the master plan was built, with no future plan for further construction.

RESOURCES	Government subsidized rental housing, with an extra U.S. $2000/unit experimental subsidy for developmental and construction stages.
ORGANIZATIONAL SYSTEM	There are three spatial patterns that form the theme of the TISSUE: the square, the path, and the traffic street. The square, measuring 23 x 23m to 27 x 31m, is surrounded by 20 and 30 dwellings in 1 to 4 stories high SUPPORT structure. It is a space for various activities (play area for children, communal area) in the direct vicinity of the dwelling. The paths (about 5m wide) connect the squares (courtyards) with one another; and with the traffic streets, where cars can be driven and parked.
FORM GIVING	The SUPPORT structure is a reinforced concrete skeleton with wall sections measuring 20 x 170 cm, separated by 310 cm spaces; the entire system is based on a grid dimension of 4.80 m. The wall sections are all aligned in the same direction, giving two dimensions of 11.30 m and 9.60 m. to the depth of the buildings forming the four sides of the courtyards. The height of the building depends on the sunlight angles, thus those on the south side of a square were 1 story high. The parcelling out of the SUPPORT created a large number of different dwelling types. These range from one story flat, two story apartments, to maisonette-type with the upper (entrance) level situated along a gallery. Also, each dwelling has private outdoor space, on the ground or on terraces, of about 20m. The terraces with the gable roofs (based on two 4.80 m modules) gave the environment a lively appearance.
TECHNOLOGICAL SOLUTION	The early involvement of the builder was crucial to the success of the project. Numerous connection details as well as the positioning of fixed elements in the SUPPORT were developed by the architect and the builder. Only when these were satisfactorily worked out could there be freedom for the inhabitants to choose the INFILL. Furthermore, the tartan grid of 10-20 cm has been developed by the SAR in the past decade to coordinate various industrial household products, partitions, and weather closure systems to fit into a SUPPORT structure.

USE   Before the actual inhabitation occurs, the dwellers
                       were free to choose the position of the inside
                       walls, the types of facade, the arrangement of
                       the services and the positioning the sanitary and
                       central-heating installations. The colors of the
                       wall panels and facade elements could be chosen
                       from six matching colors. Through such involvement,
                       the resulting dwelling environment could closely
                       reflect the individual expression of each family.
                       Also, collective responsibility was assumed for the
                       courtyards, which contained public accesses and
                       open spaces, or in some cases, private gardens.

MANAGEMENT   The project as a whole is managed by the
                       Papendrecht Housing Authority. Yet individual or
                       collective effort is encouraged to share the
                       responsibility of maintaining and managing the
                       environment.

REUSE   When one family moved away from the project, the
                       new inhabitants could re-arrange the dwelling en-
                       vironment (partitions, positions of utilities or
                       facades) within the given party-walls.

STAGE 7

Evaluation

     After one year of occupancy, upon an evaluation conducted by the
State, the methodology of housing used in Molenvliet is considered com-
patible with conventional housing process. Unfortunately, the town of
Papendrecht changed its planning policy, and the rest of the master plan
prepared by Van der Werf would not be realized.

     The major problem of the project is with the construction. The com-
plexity of the design is one reason why some of the construction details
are not performing up to standard. The other reason is that Molenvliet
is the first time that the SUPPORT and INFILL systems are used in the
Netherlands,[13] thus all the details had to be designed without previous
testing of their performance standards.

     Both Van der Werf and Habraken agreed that the difficulties
encountered are not intrinsic in the SAR theories. Van der Werf admitted

that the next time he will avoid unnecessary complications in the
design.

     Molenvliet is the pilot project for further exploration of the
SAR methodologies. Several more SAR projects were granted experimental
status. However, the actual satisfaction of the users with the SUPPORT/
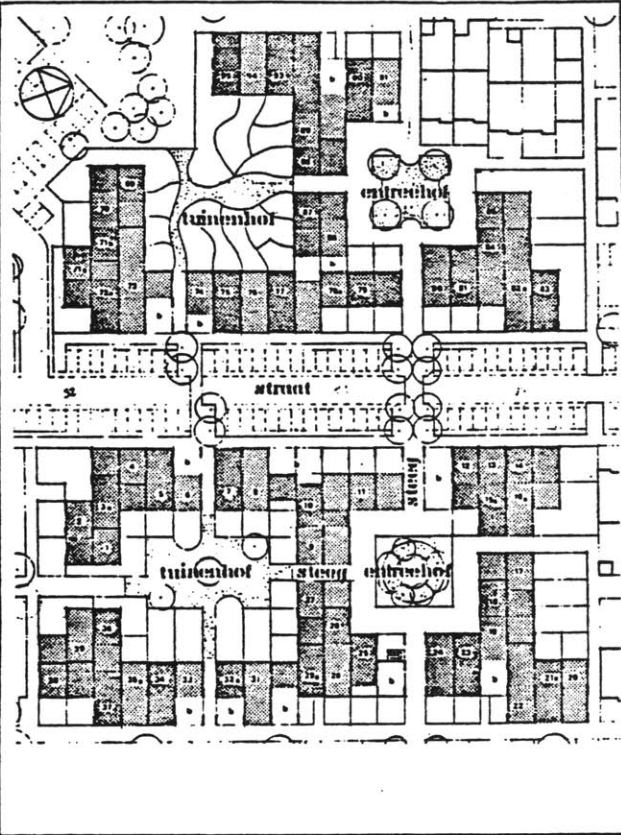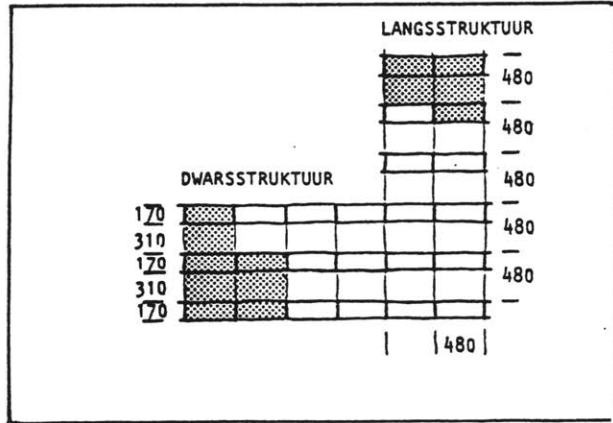INFILL concept has yet to be evaluated.
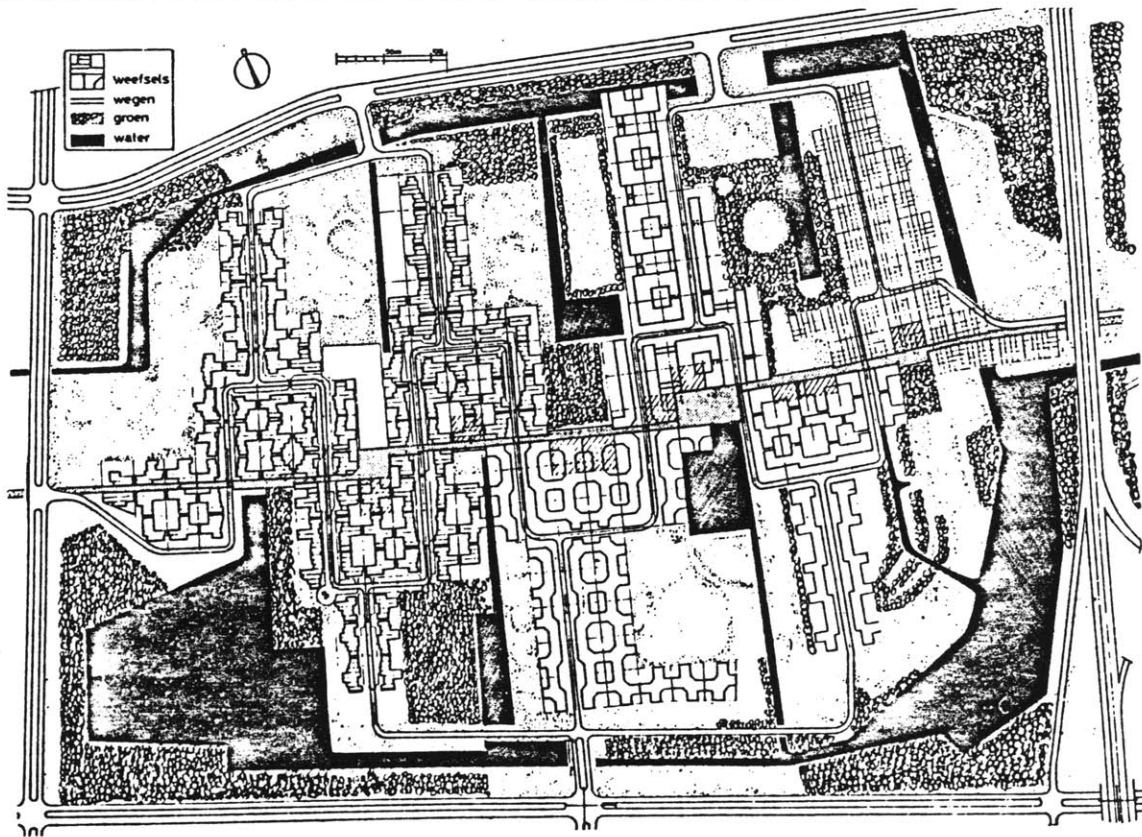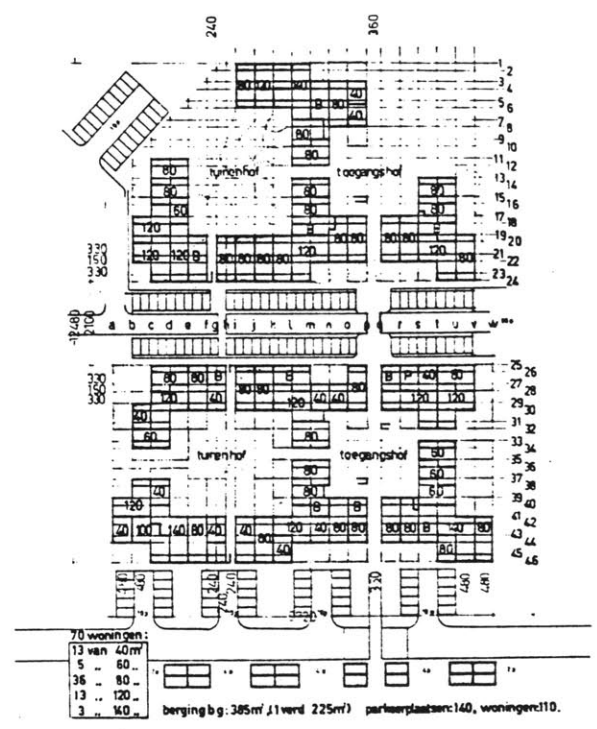
Master Plan and the TISSUE MODEL.
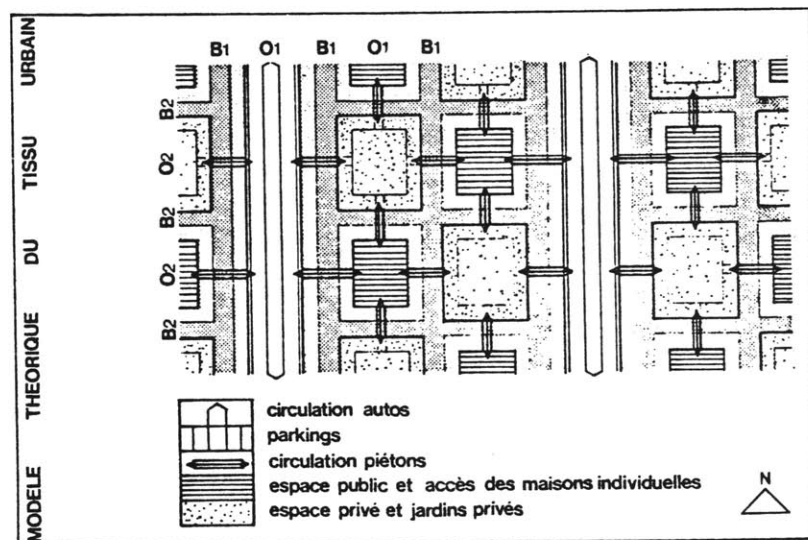
Site Plan and
the SUPPORT plan.

FUNCTIONS GROUND LEVEL (east side)

TUINENHOF TOEGANGSHOF
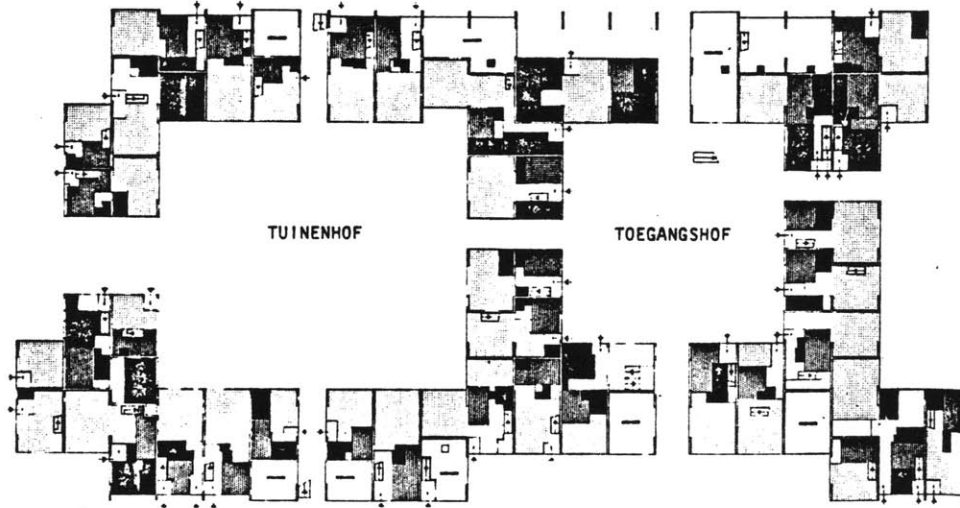
living   kitchens

sleeping   sanitairy cells
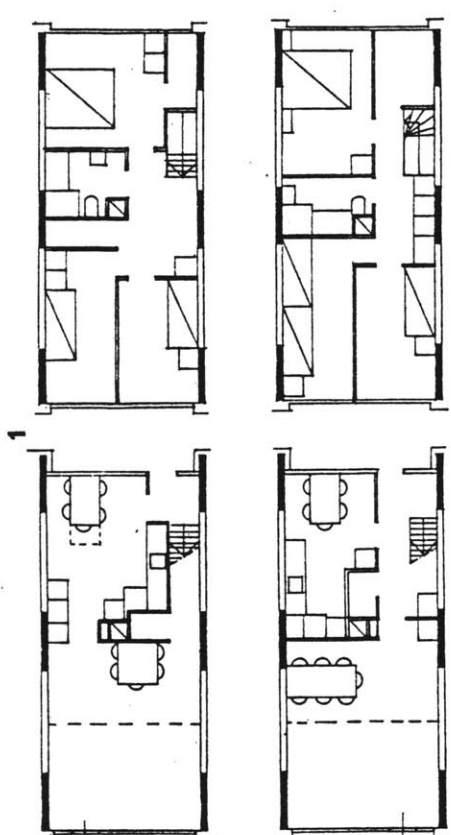
Example of a floor plan
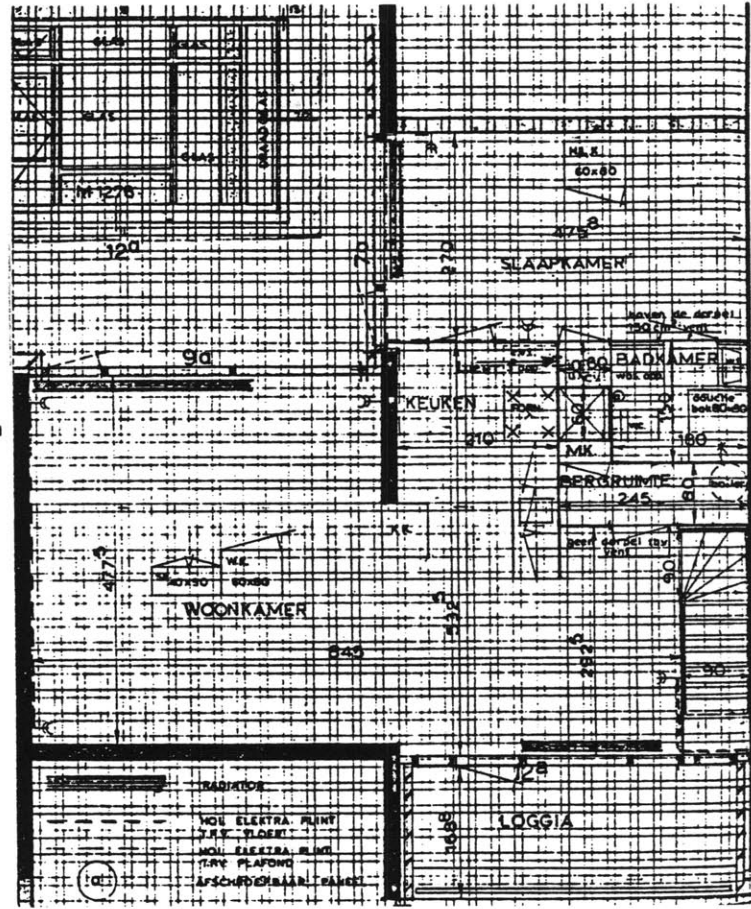
The tartan-grid.
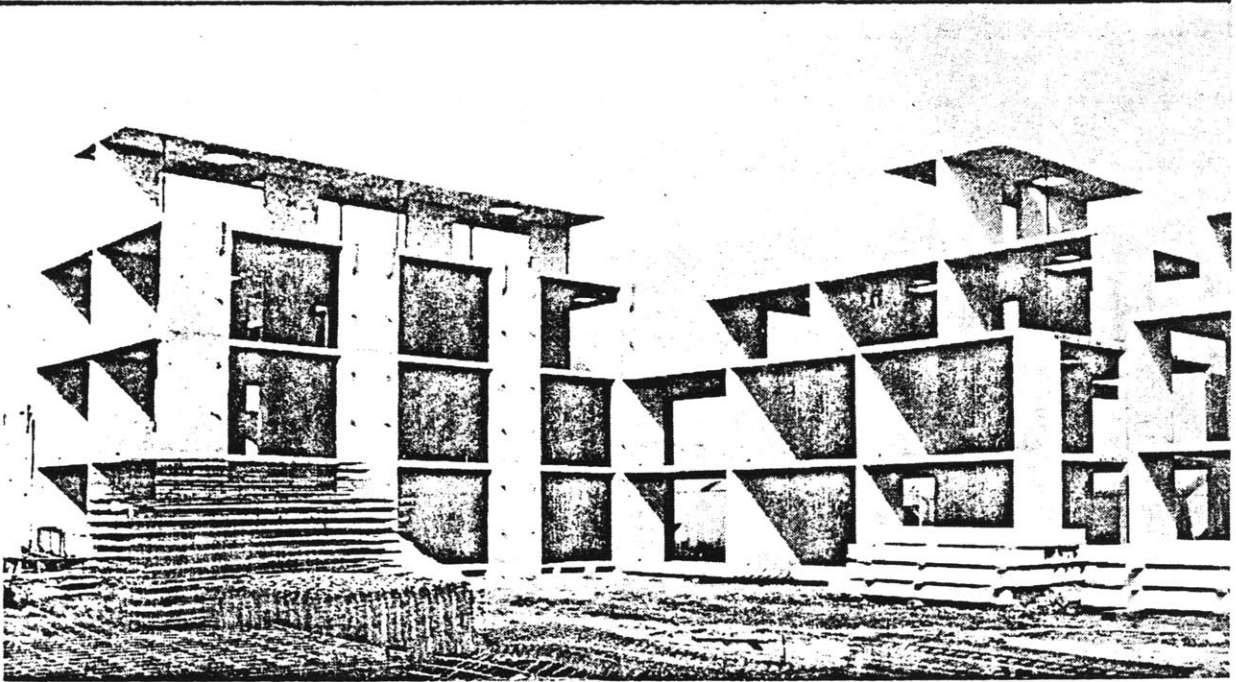
The SUPPORT structure.
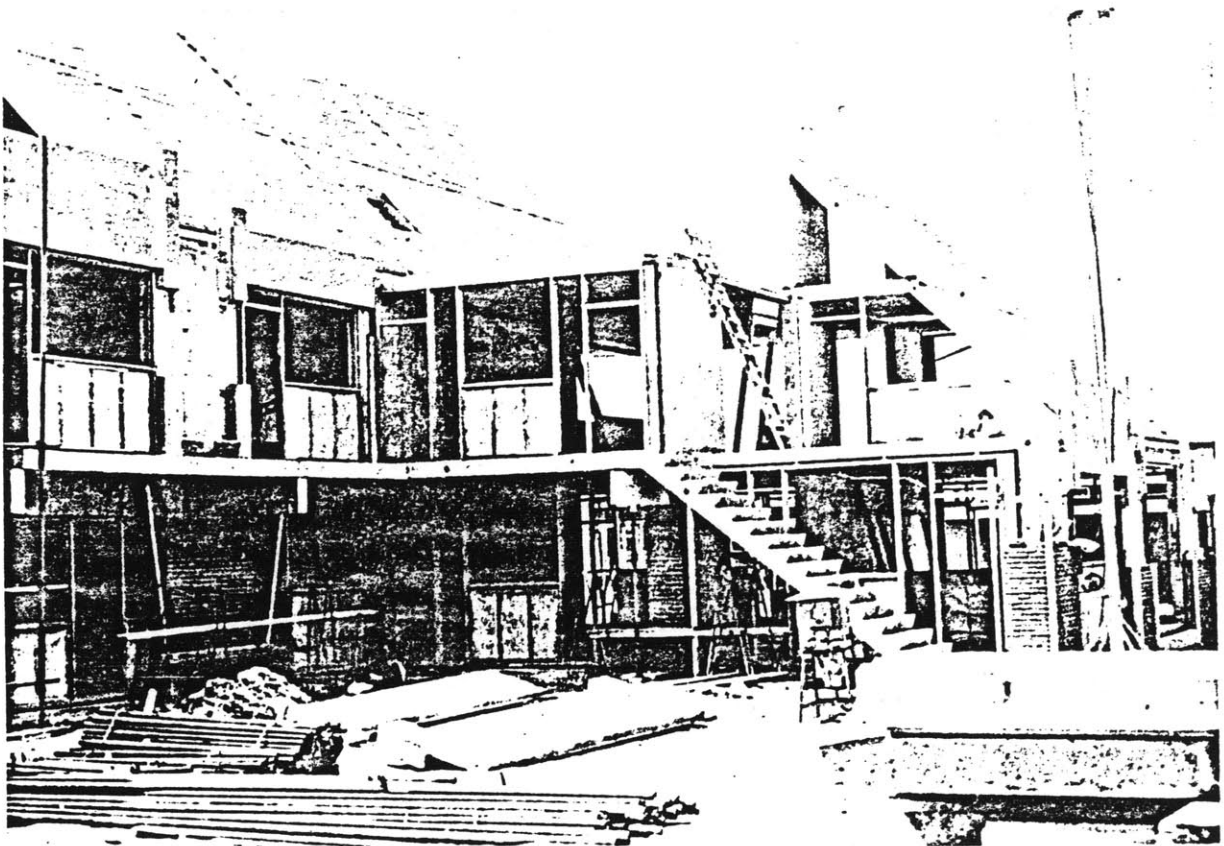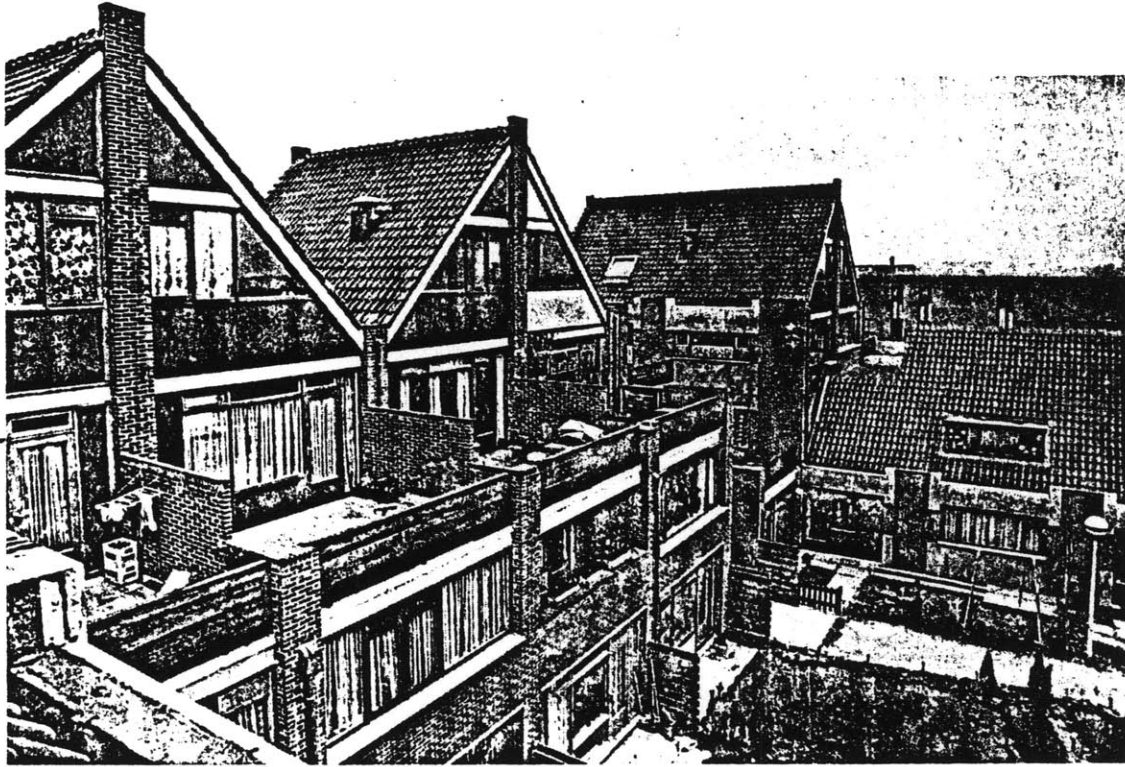
The environment after the INFILL and INHABITATION.
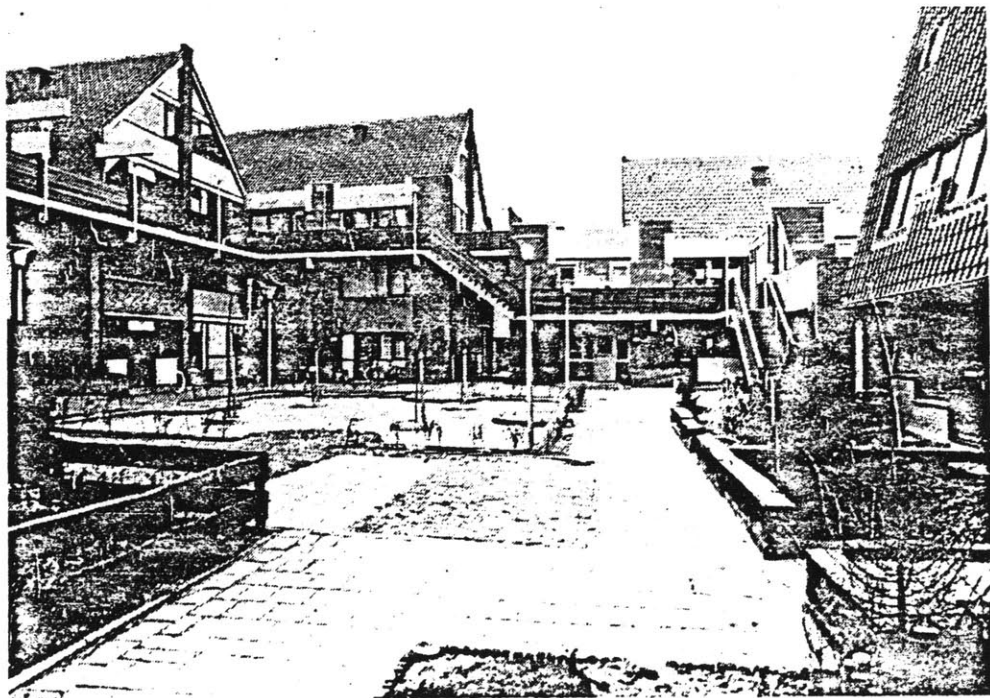
PART FOUR

8

CONCLUSION

"For fulfillment there must be a resorbtion of government into the body of the community. How? By cultivating the habit of direct action instead of waiting upon representative agencies." (Patrick Geddes, 1912)

It is argued in this thesis that urban social housing should
not be a consumer good, distributed to those in need by a central-
ized official agency. It is also argued that an alternative housing
process controlled by a community is viable and desirable. Further-
more, it is argued that the practice of an architecture of common-
sense participation, as an integral part of an alternative housing
process, is valuable.

As Colin Ward stated, "Education for participation in planning
is not education about aesthetics, or about cost-benefit or central
place theory, it is education about power."[1] In urban social hous-
ing, this educational process is one through which a community gains
control over the production process, the management, and the use of
the housing environment. Yet it is clear that a community is inca-
pable to control every detail of the housing process; for a commun-
ity is only a part of a larger and more complex structure of modern
Western society.

Those aspects that a community should control are the distri-
bution, and the use of available resources. When a community
acquires this power, it is the only legitamate group to define the
policies and the architectural designs that lead to an acceptable
(to the community) form of inhabitation.

Nevertheless, the housing process is only one among several
means for community to gain power. Indeed, only when the political
expedience of housing is understood, can there be a role for the
housing process as a catalyst for the establishment of a fine-
grain power structure.

Housing is understood by all as essential. The impact of
housing shortage and poor conditions is felt by those inhabitants
in urban social housing projects. Thus housing, as a process,
has more potential than other issues (employment, income, and
constitutional rights) to involve all in an education of power.
This is especially true for those less-privileged. As seperate
individuals, they are victims of manipulations of the power groups;
as collective and cohesive group, they become power groups to be
recognized by society. Evident in the three housing projects

discussed here, housing as verb is the issue that draw these indivi-
duals together to form power groups.

An understanding of the distribution and relationship of dif-
ferent powers at the individual level, the community level, and the
public level was essential in the success of these three housing
projects. By gaining the power to bargain for resources, a new
vision of INHABITATION was the goal common to all three communities,
and was realized through a collaboration between POLICY planning
and architectural DESIGN. The two disciplines, working toward the
same goal, reconciled their different specialities in fulfilling
the demands of the community.

The architect in each case, instead of serving the established
power-holder, provided services beyond those specific to architecture
for the less-privileged group. The architect became a member of the
community; and as a member, he subjected his values to criticism
and evaluation by others in the participatory process. Only when
he gained the community's confidence could his knowledge be of use
to identify the problems and to. develop the appropiate strategies
and solutions.

The commitment of involvement (time and energy), the extensive
knowledge of the power structure, and professional competence formed
the basis of an architecture of common-sense participation. This
architecture develops its public value through interactions within
a broad framework of causal relationships in the power (political
and economic) structure. The practitioner of this mode has to be
competent in the skills specific to architectural practice, and
yet as a member of a community, he/she has to acquire an understand-
ing, over a long period of time, the non-physical needs and visions
of the community.

The historical perspective included in this thesis shows the
dependency of architecture on the political and economic forces of
society. When architects dress up the built-environment with
different styles, in apparent deviance from the previous norms, they

in fact are responding to changing realities. Historically, architects made exuberant prophecies as well as apocalyptic warnings, yet they conveniently ignored the political and econmic expediency of architecture out of naivete or out of submission. They convinced themselves that "correct" design, reflecting the spirit of the time, was the salvation of the oppressed. Unfortunately, they assumed that the oppression was caused by the physical environment, and not by the political and economic manipulations that shaped the environment.

The paradox between architect's statements and actions was best documented in the design of urban social housing. Despite the good intention, most of the ideas proposed by architects were rejected by those who had power and those who had none; for these proposals failed to acknowledge the inter-relationship between the form of inhabitation, the policy planning, and the architectural design. The examination of the evolution of this triangulated relatioship reveals the process of social change when it is controlled by government (dia. 1). Yet the examination of alternative processes of urban social housing, represented by the three cases, maps out a different kind of change in the social structure (dia. 2).

dia. 1

POLICY   DESIGN

INHABITATION

POLITICIAN

INHABITATION

POLICY   DESIGN

dia. 2

POLICY   DESIGN

INHABITATION

COMMUNITY | ARCHITECT PLANNER

INHABITATION

POLICY   DESIGN

RECONCILIATION
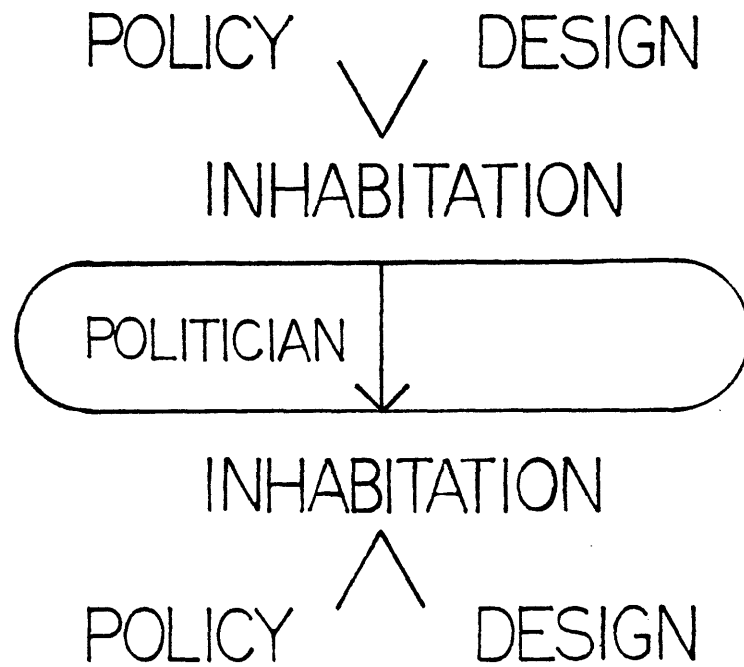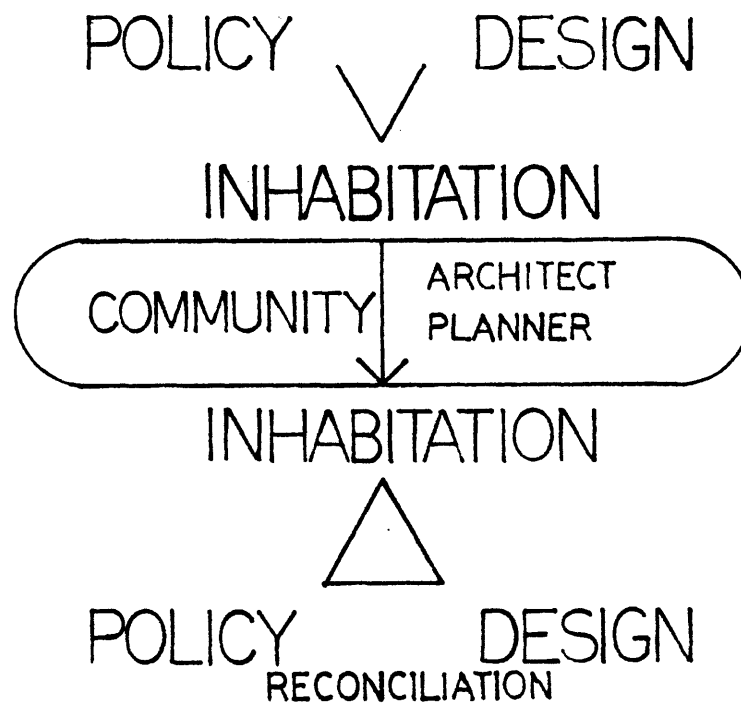
THE HOUSING PROCESS

A) Form of INHABITATION

Villa Victoria

An image of the Puerto Rican community reflected in the housing
environment is possible through community contol over the hous-
ing process. Collective power, based on a process of participat-
ion, gives IBA the political means to build up equity of the
community within a heterogeneous society.

Matteoti Village

Through a process of confrontation with the officials, the aware-
ness of the individual's rights of political power is heightened.
And through a process of participation in planning and design,
the fulfillment of individual's and collective demands and needs
is possible.

Molenvliet

Accepting the given production pattern and the consumeristic
nature of midern society, it is proved that the individual can
have direct control over his/her immediate dwelling environ-
ment. This is possible by the collaboration of the public
sector (government and industries) and the private sector
(architect, builder, and inhabitants), using a methodology of
agreement.

B) POLICY planning

Villa Victoria

Comprehensive community contolled policy planning proved to be
to be more accurate and responsive to the community's needs.
Success in the implementation of policies depended on a colla-
boration between city agencies and community's representatives.
Innovative policies can, when objectives are clearly defined by

the community, achieve decentralization of power and enable the
community to claim resources of housing.

Matteoti Village

Taking advantage of the political climate, a policy contradicting
the official one was accepted through pressure from the masses.
The success of such counter-politic depended on the timing of
actions and an understanding of the vulnerable political struct-
ure which is filled with policy contadictions. Moreover, the
success here was firmly rooted in the support of the workers.

Molenvliet

Planning policies that envisioned an alternative form of inhabita-
tion were difficult to be evaluated by the government bureaucracy.
Nevertheless, by working together with the community in planning
the environment, enough political support was attained to alter
the rigid structure of government policy in the distribution of
resources.

C) Architectural DESIGN

In all three cases, the images of the buildings are different
from their respective contexts, The shed roof and multi-color
stucco facades of the townhouses in Villa Victoria are as alien
to the South End as the linear organization of Matteoti Village
is to Terni. Similarly, the different facades of Molenvliet are
in contrast to the traditional anonyomous public housing. The
contrast of these projects to their surrounding built fabrics
is justified. For the image of inhabitation in each project was
the result of inhabitant's input through a structured process
of participation. Moreover, the image is a reflection of the
values of the inhabitants.
To translate the inhabitants' needs and requirements into physical
realities demanded each of the three architects to first, exercise
his skills competently, and second, to put his actions into a

proper political, economic, and social framework. In the first
instance, flexibility of the design process to accomodate changes
caused by inhabitants or by economic variences was compatible to
the conviction of providing an architecture of quality. In the
second instance, the means to implement ideas into actions were
fully exploited by the architects.

THE ARCHITECT

A) CONTEXT

The three architects were able to develop alternate forms of
inhabitation by exposing existing contadictions in the traditional
urban social housing process, thus forcing the official agencies
to act on behalf of community's interests. The use and the image
of the housing environment were determined, through the partici-
patory process, by the people.

B) IDEOLOGY

All three architects realized that architecture/housing is politics,
and acted to utilize fully the political and social expediency of
architecture/housing. They believe that the value of architecture/
housing ultimately depends on the users; that through community
control, architecture/housing can express both individual as well
as collective identities. Finally, the architecture of common-
sense participation is rooted in the belief of a just distribution
of political power and resources among different groups in a
heterogeneous society.

C) COMPETENCE

Each of the three professionals was both the architect and a
member of a cohesive group gathered for actions toward a non
oppressive environment. They offered to these groups skills
specific to architectural practice; in addition, they established
channels of communication with the communities to clarify their

ideas, and to exchange opinions and facts of life. The HUMAN FACTOR, historically absent from any discourse of architecture, was the foundation of the success of these three projects.

	VILLA VICTORIA	MATTEOTI VILLAGE	MOLENVLIET
form of INHABITATION	ECONOMIC GAIN political gain material gain	economic gain POLITICAL GAIN material gain	economic gain political gain MATERIAL GAIN
POLICY planning	change through COOPERATION	change through CONFRONTATION	change through EXPLORATION
architectural DESIGN	expressive of COLLECTIVE IDENTITY	expressive of COLLECTIVE & INDIVIDUAL IDENTITY	expressive of INDIVIDUAL IDENTITY

HOUSING FOR COMMUNITY

dia. 3

9

A REALISTIC UTOPIA

"The architecture of participation is an Utopia. It is, however, a
realistic Utopia, and this make a big difference." Giancarlo de Carlo.

No action happens in a social vacuum. No architectural product is naked of any social and political implications, or is justified by pure personal and subjective values; simply because the process of creating an architectural object is a social act.

Architects working on community controlled housing process have to actively investigate the context and the problems as perceived by the community. Identification of the relevant issues points to the motivations and expectations of all the actors involved in the participatory process. When conflicts of interests are reconciled to form collective and cohesive support of the community's goals, an agenda of architectural actions will then evolved.

Architecture has always had a political meaning. An architect's ideology is the reason for his/her involvement in a community controlled housing process. The content and definition of this ideology expand beyond architectural practice and ideas to include one's value system, political inclination, and social commitment. Motivated by this ideology, an architect will then have to surmount conflicts and contradictions generated by the participatory process, to be accepted as a member of the community, and to work towards an alternative form of inhabitation.

If one accepts the validity of an architecture of common-sense participation, as a means to attain an education of power, then the traditional definition of the competence of architect is inadequate. To fulfill collective as well as individual needs and visions, the architect has to master traditional and innovative means specific to architectural practice, so as to design a housing environment valued by the inhabitants. To ensure the creation of such environment, the architect has to be knowledgeable in policy planning, on new structure of ownership, and on innovative management practice. No longer restrained to do physical design, the architect shares responsibility in developing a coherent strategy of policy planning and architectural design. Indeed, there is the need of a reconciliation of the two disciplines to service the struggle towards a new form of inhabitation in urban social housing, one that is controlled by community within a fine-grain power structure.

A SCENARIO

Social housing for different communities in modern heterogeneous
urban centers is needed. Yet, modern society survives on scarse
resources. In housing, the avialable resources such as money, mater-
ial, developed land, and employment, dictated the form of inhabitation.
Necessitate by scarcity of resources, efficient and productive use
of resources is critical to provide social housing satisfactory to
the inhabitants; unfortunately, this is consistantly missing in
traditional social housing process, which is controlled by central-
ized government authority.

Effective and productive use of resources is possible when
community in need has control over the housing process. This includes
the right to attain and use the resources, the right to determine the
fabric of the housing environment, and the right to manage and use
the housing stock. The community is the only legitamate group to
define its own needs, and thus can use sufficient energy and resources
to efficiently fulfil these needs.

The power to gain control over the production process is found-
mental; the right for such power can be brought into the public
conciousness through a process of participation, as in the case of the
Matteoti Village.

Participation of the community, through structured representational
system or through spontaneous actions, in the planning of the environ-
ment provides solutions to issues common to social housing. The
definition of minimun housing plagues the official authority for its
failure, and harasses the inhabitants because of its insensitivity
towards the living patterns of different and atypical groups. As in
Villa Victoria, the definition of minimum housing standards could be
tailored to fit the available resources of the community at the time
of planning, with the knowledge that individuals have the rights to
improve their dwellings when they have more resources.

Investment to improve the quality of one's dwelling takes place
over a long period of time, and only when the individual has control

over the dwelling. Such possibility is missing in today cosumerism-
oriented housing production. The design methodology used in Molenvliet
allowed individual self expression in the dwelling environment; and
more importantly, allowed changes over time, and thus minimized the
waste of energy and resources due to the replacement of obsolete
housing stocks.

The housing processes in Villa Victoria, the Matteoti Village,
and Molenvliet give suggestions on how a participatory process can
exploit the social and political expedience of architecture; and on
how architectural design can give quality and social significance to
physical forms and spaces.

There is an urgency for the architecture of common-sense part-
icipation to be part of a housing process controlled by community.
The urgency arises because of the lack of social commitment of
architecture in housing. The scenario presented here is one means
through which architecture can legitamize its public value in modern
heterogeneous society. Yet it is only through communal actions that
architects can justify the social status of architecture.

footnotes

INTODUCTION

1. ILAUD is formed in 1976 by Giancarlo de Carlo; using Urbino
    as the context, an international forum on the architecture
    of participation is held every Fall.

2. The concept of the common-sense approach is based on H.L.
    Leung, Towards a New Methodology of Policy Analysis – Common
    Sense Structured, unpublished paper, University of Cambridge,
    1979.

3. The methods of factory management, which emphasized efficiency
    of the assembly line production process, first developed and
    advocated by the American engineer Frederick W. Taylor around
    the turn of the century.

4. Alexander Tzonis, Towards A Non Oppressive Environment,
    i Press, Boston, 1972.

CHAPTER 1

1. Leung, Op. Cit.

2. Richard Sennett, The Use of Disorder, Vintage Books, N. Y.,
    1970, p. 181.

3. Manuel Castells, The Urban Question, the MIT Press, Cambridge,
    1977, p. 168.

4. The economic framework of the urban housing process used here
    is based on Manuel Castells's work. See Castells, Op. Cit.,
    and City, Class and Power, St. Martin Press, N. Y., 1978.

5. Ibid.

6. Giancarlo de Carlo, "What is Housing", Housing People;
    Proceeding of the Housing 75 Conference held in Johannesburg
    IN Oct. 1975, Micheal Lazenby, ed., Donker, 1977.

7. This thesis is presented in John Turner, Housing by People,
    Pantheon Books, N. Y., 1977.

8. Ibid.

√9. See John Habraken, <u>SUPPORTS: An Alternative to Mass Housing</u>,
     Prager, N. Y., 1972.

10. Giancarlo de Carlo, "Intoduction", <u>Report of the 2nd Resident-
     ial Course</u>, ILAUD, Urbino, 1977.

11. Ibid.

12. N.J. Habraken, <u>The Built Environment and the Limits of
     Professional Practice</u>, Laboratory of Architecture and
     Planning, MIT, 1979, p. 16.

<u>CHAPTER 2</u>

1.   Tzonis, Op. Cit., hence, quotations from this book in this
     chapter are referred to by the page numbers.

2.   H. Saalman, <u>Medieval Cities</u>, George Braziller, N. Y., 1968,
     p. 42.

3.   Ibid., p. 44.

4.   Temporary housing for the workers involved in construction
     projects had been provided by the ruling class; for example,
     the worker's housing in Pienza, Italy.

5.   Geoffrey Scott, <u>The Architecture of Humanism</u>, Peter Smith,
     Massachusetts, 1965, p. 146.

6.   Leonardo Benevolo, <u>History of Modern Architecture</u>, Vol. 1,
     the MIT Press, Cambridge, 1977, p. xix.

7.   Ibid., p. xviii.

8.   Ibid., p. xxii.

9.   Ibid., p. xxi.

10. See Massimo Scolari, " The Origins of Working-Class House:
     Design and Theory", <u>Lotus 9</u>, Milan, Feb., 1975.

11. See Dolores Hayden, <u>Seven American Utopias</u>, the MIT Press,
     Cambridge, 1976.

12. See Friedrich Engels, <u>The Housing Question</u>, Progress Publishers,
     Moscow, 1975.

13. Benevolo, Op. Cit., p. 259.

14. The information is from the course "CIAM and the Minimum Dwelling", offered by Martin Steinmann in Spring, 1979, at MIT.

15. Turner, Op. Cit., p. xvi.

16. Castells, City, Class and Power, Op. Cit., p. 5.

17. Similar criticism is found in Alexander Tzonis and Liane Lefaivre, "In the Name of the People, the Development of the Contemporary Populist Movement in Architecture", Forum, The Netherlands, Feb., 1976.

CHAPTER 3

1. Robert Gutman, "Architecture: The entrepreneurial profession", Progressive Architecture, May, 1977.

2. Leone Battista Alberti, Ten Books on Architecture, English trans. James Leoni, J. Rykwert, ed., London, 1955, Book IV, Chapter 1.

3. Tzonis, Towards A Non Oppressive Environment, Op. Ciy., p. 55.

4. M. A. Laugier, Essai sur L'Architecture, Gregg Press, Farnborough, 1966, p. 9.

5. Tzonis, Op. Cit., p. 74.

6. William Chambers, A Treatise on Architecture, London, MDCCLIX, as quoted in Tzonis, Op. Cit., p. 79.

7. Quoted in Benevolo, Op. Cit., p. xxi.

8. Steinmann, Lecture, Op. Cit.

9. Hayden, Op. Cit.

10. Scolari, Op. Cit.

11. Ibid.

12. Quoted in Habraken, SUPPORTS, Op. Cit., P. 2.

√13. See Kenneth Frampton, "The Evolution of Housing Concepts 1870 - 1970", Lotus 10, Milan, Nov., 1975.

14. Oriol Bohigas, "The Dwelling and the Architectureal Avant-Garde", Lotus 9, Op. Cit.

15. Walter Gropius, "The Theory and Organization of the Bauhaus", Bauhaus 1919 - 1928, H. Bayer, W. Gropius and I. Gropius, ed., the Museum of Morden Art, N. Y., 1975.

16. Scolari, Op. Cit. The Garden City movement tried to provide alternative living environment to the congested urban centers. See Ebenezer Howard, Garden Cities of Tomorrow, Faber & Faber, London, 1946; and writings of Frank Lloyd Wright on his plan of the Broadacre City.

17. CIAM, "La Sarraz Declaration", Programs and Manifestos on 20 th - Century Architecture, Ulrich Conrads, ed., the MIT Press, Cambridge, 1975.

18. See Helen Searing, "With Red Flags Flying: Housing in Amsterdam, 1915 - 1923", Art and Architecture in the Service of Politics, Henry A. Millon, Linda Nochlin, ed., the MIT Press, Cambridge, 1978.

19. Ernst May, "The Social Aspect of the New Art of Building", Das Neue Frankfurt, No. 5, 1928, Martin Steinmannn, trans.

20. Hannes Meyer, "Building", Conrads. Op, Cit.

21. Joachim Schlandt, "Economic and Social Aspect of Council Housing in Vienna between 1922 and 1934", Lotus 10, Op. Cit.

22. See Manfredo Tafuri, "Towards the 'Socialist City': Research and Realization in the Soviet Union between the NEP and the first Five Year Plan", Lotus 9, Op. Cit.

23. See Team 10 Primer, Alison Smithson, ed., the MIT Press, Cambridge, 1974.

24. Charles Jencks, Modern Movements in Architecture, Anchor Press, N. Y., 1973, p. 28.

25. The housing conditions since the Second World War in the United States, Italy, and in the Netherlands are discussed as background information in each of the three case studies.

26. Manfredo Tafuri, Design and Capitalist Development, thw MIT Press, Cambridge, 1976.

27. Jencks, Op. Cit., p. 380.

CHAPTER 4

1. Leung, Op. Cit.

2. De Carlo, ILAUD Report, 1977, Op. Cit.

CHAPTER 5

1. Two agencies involved were the Emergency Fleet Corporation
    of 1917, and the U. S. Housing Corporation of 1918.

2. R.M. Fisher, 20 Years of Public Housing, Harper & Brothers,
    N. Y., 1959, pp. 92 - 123.

3. I am using the term "the urban poor" as defined in Arthur P.
    Soloman, Housing the Urban Poor, the MIT Press, Cambridge, 1974.

4. Fisher, Op. Cit.

5. Ibid.

6. The Housing Act of 1937 stated that no family would be
    eligible if its income exceeded 5 timed the rent; in the
    case of 3 or more dependents, 6 timed the rent. Also, no
    family could continue to stay in an apartment if its total
    income are more than 30% above the admission limits.

7. J.S. Fuerst, ed., Public Housing in Europe and America,
    Croom Helm, London, 1974, p. 137.

8. Herbert Gans, "The Failure of Urban Renewal", Commentary,
    Vol. 39, April, 1965.

9. See Jane Jacob, The Death and Life of Great American Cities,
    Vintage Books, N. Y., 1961.

10. Columbia Law Review, Citizen Participation in Urban Renewal,
    Vol. 66, No. 3, 1966, p. 486.

11. Ibid., p. 487.

12. Ibid., p. 488.

13. Ibid., p. 491.

14. See Herbert Gans, The Urban Villagers, Free Press, N. Y.,
    1962; and Chester Hartman , Social Determinants of Housing
    Satisfaction and Housing Choice: Boston's West End, unpublished
    thesis, Harvard University, 1967.

15. Excerpts from Urban Planning Aid, Urban Renewal's Effect on Low Income Housing in Boston's South End, Oct., 1967.

16. Edward Logue, Seven Years of Progress: A Final Report, Boston Redevelopment Authority, 1967, p. 28.

17. Interview with Ms. Helen Morton, Nov., 1979. Ms. Morton also provided the author with valuable ETC documents.

18. For parallel development in Boston's renewal scene, see Langley Keyes Jr., The Rehabilitation Planning Game, the MIT Press, Cambridge, 1969.

19. Boston Redevelopment Authority, South End Urban Renewal Plan, 1967, p. 3.

20. A documentation of the political scene is described in John Mollenkoff, Community Organization and City Politics, unpublished PhD thesis; Harvard University, 1973.

21. Figures and tables are condensed from the Urban Planning Aid report and from Peter Lawrence, Organization of a Neighborhood Development Corporation: the Emergency Tenants Council, unpublished paper, Harvard GSD, Jan., 1970.

22. Interview with Ms. Morton, Op. Cit.

23. See Keyes, Op. Cit., and Mollenkoff, Op. Cit.

24. Urban Planning Aid, Op. Cit.

25. Richard Lampert, letter to Ms. Helen Morton, May 22, 1977.

26. Emergency Tenants Council of Parcel 19 Inc., Article of Incorporation.

27. Mollenkoff, Op. Cit., p. 163.

28. Ibid., p. 163.

29. Architectural Record, McGraw Hill, Feb., 1978.

30. Lampert, Op. Cit.

31. John Sharratt's letter to Robert Murphy of the BRA, July 10, 1969, where Sharratt explained the need and content of the ETC educational program for the Blackstone School.

32. ETC document.

33. ETC letter to Hale Champion, administrator of the BRA,
    June 30, 1969.

34. Ibid.

35. The list of supporters included white, black, and other
    minority groups.

36. Kevin White was in the 1970 Gubernatorial campaign of
    Massachusetts, and was actively seeking the supports
    of community groups.

37. ETC document.

38. Sharratt earned his living during those years by doing
    renderings for other firms. Interviews with Sharratt, 1977 - 79.

39. ETCDC minutes, Jan. 27, 1970.

40 Interview with Ms. Morton. Another conflict cited by Ms.
    Morton is between different fractions supporting differnet
    political resolution to the Puerto Rican Independence Movement.

41. Sharratt is still a member of the ETC housing team, and
    attends frequent team meeting.

42. "The Final Failure of Boston's Urban Renewal", The Real Paper,
    Boston, Jan. 27, 1979.

43. David B. Wilson, "A Shelter for Rich - and very Poor", The
    Boston Globe, Feb. 19, 1979.

44. Interview with Rodrigues, quoted in Deborah Poodry, Neighborhood
    Self-Definition and Design Imagery, unpublished M.Arch. and
    MCP thesis, MIT, May, 1979, p. 131.

45. Sharratt went to Washington D.C. several times to argue for
    HUD minimum property standard variences in cases where the
    living habits of the Puerto Rican is in conflict with the
    conditions dictacted in the MPS.

CHAPTER 6

1. For background information on the Italian housing conditions
    since the 1920's, see Tommaso Giura Longo, "The Italian
    Contribution to the Residential Neighborhood Design Concept",
    Lotus 9, Op. Cit.; Roberto Garavini, "Mass Low - Cost Housing
    and Urban Land Rent in Post - War Italy", Lotus 10, Op. Cit.;
    and Italo Insolera, "Housing Policy and the Goals of Design in
    Italy", Italy: the New Domestic Landscape, Emilio Ambazs, ed.,
    The Museum of Morden Art, N. Y., 1972.

2. Bernado Secchi, "Territorial and Productive Structure of the Machi Region", lecture given at ILAUD, 1976.

3. Thomas Angolti, Housing in Italy: Urban Development and Political Changes, Praeger, N. Y., 1977.

4. Paolo Ceccarelli, "Current Problems and New Trends in Urban Planning and Design in Italy", lecture given at ILAUD, 1976.

5. The information on the participatory process is from lectures given by Giancarlo de Carlo at ILAUD, 1976, and Casabella, No. 421, Jan., 1977; additional information is from the author's visit to Terni in Nov., 1976.

6. Quoted in Colin Ward, Housing: An Anarchist Approach, Freedom Press, London, 1976, p. 8.

7. Quote, ibid., p. 10.

8. Ward, Op. Cit.

9. Giancarlo de Carlo, "Talk on the Situation of Contemporary Architecture", CIAM' 59 in Otterlo, Group for the Research of Social and Visual Inter - Relationships, Oscar Newman, ed., Alee Tiranti Ltd., London, 1961.

10. Ibid.

11. Team 10 Primer, Op. Cit.

12. Giancarlo de Carlo, "Legitimizing Architecture", Dutch Forum, Vol. 23, No. 1, Jan., 1971.

13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.

17. Ibid.

18. Casabella, Op. Cit.

CHAPTER 7

1. Background information is from publications of the Ministry of Housing and Physical Planning of the Netherlands.

2. Searing, Op. Cit.

3. Current Trends and Policies in Housing and Building in 1975, Ministry of Housing and Physical Planning, the Netherlands.

4. Habraken, SUPPORTS, Op. Cit., p. 2.

5. Ibid., p. 18.

6. SAR 73: The Methodical Formulation of Agreement Concerning the Direct Dwelling Environment, SAR.

7. Information of the housing process is from interview with N.J. Habraken, Dec., 1979, and Ton Van Rooij, "Molenvliet, Support Housing for the Rented Sector recently completed in Papendrecht, Holland", Open House, Vol. 3, No. 2, 1978.

8. SAR 73, Op. Cit.

9. Ibid.

10. Ibid.

11. Ministry of Housing and Physical Planning, Op. Cit.

12. Van Rooij, Op. Cit.

13. Other projects based the SAR methodologies have been built in other European countries, see Plan, No. 3, 1970.

CHAPTER 8

1. Ward, Op. Cit., p. 119.