Policy and Design in Urban Social Housing:
A Reconciliation

by

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ABSTRACT

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.

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PART ONE
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 Architecture and Urban Design (ILAUD) in 1976, I had to clarify, to other participants, my thoughts on the main theme of ILAUD, which is ARCHITECTURE 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 reflected 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, 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 academia extrapolate that a good built-form would emancipate people from Taylorized 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 uncompromising positions create uncertainty in students who are pursuing an architecture of common sense participation, which entails a collaboration of policy PLANNING and architectural DESIGN.

Growing up in Hong Kong, which is one of the most densely populated 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 contrary, an architecture of common sense participation respects the differences between those groups, for it is based on their support. Therefore, 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 between 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, 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 provide 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 context. This framework is presented in Chapter 4. Three projects which evolved through a participatory process are examined using the analytical 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 architecture of common sense participation.
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 redistribution of power. To be of service to communities requires an architect to make a commitment in time and energy: to be a member of a community; to know the social forces inherent in any production process; and to understand differences between various value-systems. Yet the architect 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 functions. 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 performed.

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 structuring 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 structure 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 evolution 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 between order and violence; it is a wholly different way of living, meaning that people will no longer be caught between these two polarities."  

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 resources. 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 domestic 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 industrial 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 expression of the process of collective treatment of the daily consumption 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 housing projects, the production of which is totally at the mercy of market 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 diffuse their awareness of their rights to scarce resources. It suffices to say that, historically, social housing was rarely a social conscience. 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 partly caused by the lack of input or involvement of people in the decision-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 environment are social responsibilities enforced by the inherent social structure 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 acclaimation by the architecture profession, is not unusual. Yet it is reactionary 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. 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 suggests 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 maintenance of the environment creates a dependence on public service, and finally leads to dissatisfaction with the inefficiency and ineffectiveness 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." 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" between the public and the private realms of housing.

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Giancarlo de Carlo identified 10 stages of decision making of organization 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.¹°

Architects are traditionally confined to stages 4, 5, and 6, which coincide 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 inhabited; 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 quality 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 designer'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. However, 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 provide 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 necessary 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 different levels of success in attaining the above goal.
PART TWO
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.'
INTRODUCTION

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 architecture 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 eighteenth 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 revolution, characterized by increase in population, in industrial production, and in mechanization or productive systems. 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 activities, for the third the right to a reasonable standard of living. Yet all used the same conventional phrases and allowed discussion to take place in metaphorical terms, through habit or calculation."

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 controlling the market economy. Without direct involvement, the capitalist opened up the housing market to the bourgeois. Motivated by monetary gains, the bourgeois (land owner) provided overcrowded rental housing to the proletariat. Industrialization improved the hygiene, yet it provided the means and skills to build high-density environment: 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 tumults by changing its emphasis to the scientific development of styles or "working concepts."

To guarantee the separation of status, building typologies were categorized.

"It was expected by minimizing unnecessary construction costs, it would be possible to increase the amount of material available to man. Affluence would thus lead to a liberating environment" (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 functions. 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 industrial 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...."

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. Yet government actions were limited to sanitary regulations, enforced to control the periodic spread of epidemic, originated from the over-crowded working-class slums, that threatened the bourgeois. Along with these regulations was the establishment 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 government (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 philanthropists and social communitarians. As reactions to the deteriorating urban environment and to the political system, these instances exposed social contradictions and conflicts generated from the incompatibility between a desired humane environment and the exploitative planning policies of government and capitalist.

In 1872, Frederick Engels published "The Housing Question," 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 "comfortable 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 objectives 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 capitalist. 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. Conflicts of interest among the advanced capitalist states finally led to war in 1914.

The industrial capitalists relinquished their share of the responsibility 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. Conditions 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 progressive 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 independence 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 products" (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 existing 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 Fascist 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 increasingly 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 responsibility, 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) flourished 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 consequences 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 implication. 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 because 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 Surréz declaration, with statements on "Architecture and the Public Opinion" and "Architecture and the State."

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

1930 CIAM 3 - Rationnelle Bebauungsweise (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 production, technology, building science, and social behavioral studies. In the analysis of the three case studies, an account of the development 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 massive-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 inhabitants. 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." 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 accidently contained process. This reversal of priorities indeed 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 product 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 economist, Manuel Castells.
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.
"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)
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.
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 Treatises 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 Fortune." 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 provide a rational and logical thinking for design. In his book, A Treatise of the Five Orders in Architecture, 1683, Perrault concluded that the laws of nature were the basis for "Positive" objectives, 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 verification." 

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 chaotic development 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." 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."

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 construction process.

1750-1900

"The Architecture prepares the way for commerce: she builds ships, with ports and piers for their reception and security; 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."

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 activities with appropriate building prototypes. The culmination of a century of rationalist theory was celebrated with the publication of "Precis des lecons d'architecture donnees 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 eclectic. In England, the successful architect John Nash (1752-1835) incorporated exotic eclecticism 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 prominent 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 succeeded 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 neighborhood... (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."

This urban stigma, caused by the raping of the environment by speculative market economy, was seized upon by many intellectuals 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 build collective communes. 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 structure that was the origin of the wrongs. Both Owen and Fourier believed 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 bourgeois. Indeed, these social utopians created environment where "one has to create collectively the comfort that they (the workers) cannot achieve individually."

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. 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 activity. 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 (topographic and typological) became metaphors by which the ruling class controls the distribution of the various social classes in the big industrial towns." 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 development of the tenement housing in New York, which developed as a corrective 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 provide adequate light and air to every room through internal set back and courtyard. Despite the good intentions, but under capitalist economy, such typography 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 themselves in how to make uniformity less uniform by applying the cosmetic 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. Berlage, 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 dependent. 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 kennel,' means to them being stacked away in some sort of cellular 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 Gropius'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 conventions, 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."

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." 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 according to the new principles can only regard the official academies 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 individuals (promoted by unemployment and the housing shortage) into a collective affair of the whole nation.
building is nothing but organization: social, technical, economic, psychological organization."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 responsibility 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).

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. Government involvement, direct through construction or indirect through subsidies to private enterprise, 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
Typologies of Worker's Housing, the 19th Century.

MAISON*; XQ0IS3 DE BROOKLYN -...

A UO

GROUPE DE DEUX MAISONS

CROUPE DE DEUX MAISONS
Berlin, 1900
Courtyard Tenement Development.

New York, 1896
Ernest Flagg’s Model Tenement.
Typologies of Worker's Housing, the 18th Century.

The Crystal Palace, during the 1850 World's Exposition.
English Working Class Neighborhood, the 19th Century.

London 1870.
Le Corbusier's peripheral Courtyard Block, 1922.
Walter Gropius, height and open-space study, 1930.
Le Corbusier, L'Esprit Nouveau 1920.

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.
"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

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 itself, 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 labyrinths of images so multivalent they end in muteness, nor enclosed 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 structures 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 architecture'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 buildings 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 architecture, 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.

from Charles Jencks, Modern Movements in Architecture.
<table>
<thead>
<tr>
<th>1950's</th>
<th>1960's</th>
<th>1970's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team 10</td>
<td>Byker Housing by Ralph Erskines.</td>
<td></td>
</tr>
<tr>
<td>Anarchist approach</td>
<td>John Turner</td>
<td>Self-help housing.</td>
</tr>
<tr>
<td>Third World experiences</td>
<td>Colin Ward</td>
<td>Tenant's take over.</td>
</tr>
<tr>
<td>Student revolution</td>
<td>Advocacy planning and design: ARAU &quot;Fighting a profession that is profoundly reactionary, so as to force it to take part in decisions of a political nature&quot;. Urban Planning Aid. John Sharratt and IBA. Community Design Workshop.</td>
<td></td>
</tr>
<tr>
<td>community actions</td>
<td>Frans van der Werf and Molenvliet in Papendrecht. Lucian Kroll and others in Europe.</td>
<td></td>
</tr>
<tr>
<td>N.J. Habraken and SAR</td>
<td>Christopher Alexander</td>
<td>The Pattern Language.</td>
</tr>
<tr>
<td></td>
<td>Institutionalized participation.</td>
<td></td>
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</tbody>
</table>

**ALTERNATIVE HOUSING PROCESS**

**dia.3**
PART THREE
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.
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 consensus 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 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, 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**

**dia. 2**
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

FRAMEWORK OF INVESTIGATION

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 strategy

dia.3
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 century. 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, and the second occasion was at the Depression years. The U.S. Government, up till 1932, depended on private capital to bear the responsibility of housing. Two considerations finally led the government into the housing market. First, it was believed that a housing program for the urban poor could stimulate 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 administering low-rent housing and slum-clearance projects." 5

Dwellings of moderate standard built at minimum cost was specified in the Act. This was interpreted to mean construction of minimum-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. 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."

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
environment, was also cited as one of urban renewal goals. 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."

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, 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." 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."

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 administrated with the maximum feasible participation of residents of the areas and members of the groups served." 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 participation through the establishment of a citizen advisory committee to examine constructively the workable program goals."\(^\text{13}\)

**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.\(^\text{14}\) Two stages of the renewal process were severely criticized. One was the ruthless use of eminent domain to force people out of their social environment without 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 convenient 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.
it has provided jobs for around 17,000 workers, most of them unskilled or semi-skilled and many of them South End residents."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 retiring 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 organizations 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 commercial, institutional and industrial uses. These were then connected by a ceremonial park and road network. Low-income housing was substantially 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

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 concentration in Boston) in the 60's was Puerto Rican from rural areas. Among the Puerto Ricans, 59% of the male heads of household were working, and of these 80% were in operative positions. Half of the female heads of household were receiving some form of welfare assistance (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, relocation would increase their transportation cost to places of employment, or would cause them to lose 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, he was concerned 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. The Urban Planning Aid (UPA), a group of concerned professionals offering help to various communities, commented that:

"The South End Plan's specific objectives, taken one by one, appear to be generally valid. A key question, 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."
Parcel 19 Neighborhood South End

1960 Census

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 10% 10%
Labor force
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.

<table>
<thead>
<tr>
<th>Mother</th>
<th>Husband</th>
</tr>
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<tbody>
<tr>
<td>4th floor</td>
<td></td>
</tr>
<tr>
<td>3rd floor</td>
<td>Daughter-Son 2 Children Son-Wife Child</td>
</tr>
<tr>
<td>2nd floor</td>
<td>Daugther-Husband 2 Children</td>
</tr>
<tr>
<td>1st floor</td>
<td>Mother-Sister-Brother</td>
</tr>
</tbody>
</table>
A strong organizational structure was emphasized by Reverend Dwyer and the seminarians; and one of them, Richard Lampert, had previous 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 activities. 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 neighborhood; these included UPA, VISTA, A.D. Little & Co., Boston Legal Assistance 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 organization stated its purpose as:

"to combat poverty and community deterioration through charitable 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 residents and minimizing dislocation under the impact of urban renewal; and generally improving the housing and living conditions of community residents." 26

In October, ETC invited the director of the Lower Roxbury Community Corporation (LRCC) to share his experiences in community organization. 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
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." 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." 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." 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 information 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 contradict 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 unpopular 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:
COUNTER PROPOSAL OF E.T.C.

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITING</td>
<td>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.</td>
</tr>
<tr>
<td>RESOURCES</td>
<td>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.</td>
</tr>
<tr>
<td>ORGANIZATION</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 the Public Facilities.

b. The COMMUNITY CENTER and the two other institutional locations are more efficiently 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 BBA.

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.
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 be changed from the location on Tremont and N. Dudley streets to Washington Street before the Cathedral.

REASONS FOR THE CHANGE:

a. It will preserve the HOUSING STOCK on Tremont Street so that on-site relocation of the area’s residents is possible.
b. It will serve the South End community by ensuring that two food market locations will be built and a better distribution pattern.
c. It will ensure the FEASIBILITY that the markets will be built at all.
d. It will better serve the POOR NEIGHBORHOODS of Cathedral Housing.
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 utilize 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.
CRAM RECOMMENDED:

A. 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.
CHANCE RECOMMENDED:
6. More NEW HOUSING must be built.
REASONS FOR THE CHANCE:
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.

CHANCE 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, P10, P16, P11, P1, P8, P14 and RES.
REASONS FOR THE CHANCE:
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-Pizza).
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 eminent domain need be invoked and no questions of constitutionality need be considered.

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

c) No change in Project Boundaries is requested."

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

On June 30, 1969, "ETC sent a formal request to the BRA administrator 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." 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 encounter. We have acquired competent technical and ample financial 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 Washington Park? After the South End?"

Included with the ETC letter were letters of support from all major South End Communities. 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 nominated, and they were also represented in the SEPAC counter group, People's Urban Renewal Committee (PERC), which was supported by low income 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 buildings. 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, 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 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."

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

<table>
<thead>
<tr>
<th>ETC membership</th>
<th>Cooperative Metropolitan Ministries</th>
<th>Episcopal City Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETC Steering Committee</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>ETCDC BOARD</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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. 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 predecessor, 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, succeeded Feliciano as director of ETC. Subsequently, in 1973 ETC was renamed 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 concentration of rural immigrant to the present mix of professional and educated city dwellers. 40 This change reflected the increasing complexity 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 resulted 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 structuring development strategies. When IBA was formed, with the community structure firmly established, Sharratt slowly withdrew from active involvement in the community, and accepted a more traditional relationship 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 framework of investigation.
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.

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

ETC Development Incorporation (ETCDI) was formed as a profit-making organization, and ETCDI remains non-profit making. There are three basic revenues for IBA:

a) ETCDI receives donations, grants from foundations and government, and seed money. (For Villa Victoria, ETCDI 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.

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.

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.
In order to achieve the richness of the townhouses, 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.

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.

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 - 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
<table>
<thead>
<tr>
<th>PHASE</th>
<th>OWNERSHIP</th>
<th>DEVELOPER</th>
<th>MANAGEMENT</th>
<th>FINANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>ETC &amp; Assoc.</td>
<td>ETCDI</td>
<td>ETC Management, Inc.</td>
<td>Construction: commercial bank loans</td>
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<tr>
<td></td>
<td>(71 units)</td>
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<td></td>
<td>West Newton St.</td>
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<td>HUD Sect. 236</td>
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<tr>
<td></td>
<td>(136 units rehab.)</td>
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<td></td>
<td>HUD Rent Supplement</td>
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<tr>
<td>II.</td>
<td>Boston Housing</td>
<td>ETCDI</td>
<td>ETCMI</td>
<td>Construction:</td>
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<td>Authority</td>
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<td>MHFA</td>
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<td></td>
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<td>Permanent:</td>
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<td></td>
<td>FHA/HUD Turnkey Sale</td>
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<td>Subsidies:</td>
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<td>Turnkey Management</td>
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<td>Contract to ETC</td>
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<tr>
<td>III.</td>
<td>Viviendas Assoc.</td>
<td>ETCDI</td>
<td>ETCMI</td>
<td>Construction:</td>
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<tr>
<td></td>
<td>1976</td>
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<td>(181 units,</td>
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<td>mid-rise &amp;</td>
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<td>Commercial Bank</td>
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<td>townhouse)</td>
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<td>HUD Rent Supplement</td>
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<tr>
<td>IV.</td>
<td>Borinquen Assoc.</td>
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<td>ETCMI</td>
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<td>1977</td>
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<td>V.</td>
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<td></td>
<td>(207 units under working drawing)</td>
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<td>1979</td>
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<tr>
<td></td>
<td>TOTAL UNITS 835</td>
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</tbody>
</table>
ORGANIZATION

IBA Membership

IBA Board (20 elected members)
- 12 at large representatives
- 8 district representatives

ETCDC
- Non Profit Housing Team
- Free Services from:
  - Lawyers
  - Architects

ETCDI
- Profit Making Syndicate
- Housing
- Management
- Construction

Social Service (health, legal and welfare)
Cultural Program (the Areyto Program)
- music
- art
- communication (Cable TV)

Security
Day Care Center
Community Organization & Educational Program
Housing and Commercial Development

dia. 6
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

<table>
<thead>
<tr>
<th>Household</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rican</td>
<td>50%</td>
</tr>
<tr>
<td>Black</td>
<td>20%</td>
</tr>
<tr>
<td>White (elderly)</td>
<td>20%</td>
</tr>
<tr>
<td>Chinese</td>
<td>10%</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

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 encroachment 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." 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.
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.
Industrial Revolution arrived in Italy late in the nineteenth century, when urban centers were well developed in the northern part of the country. Historic urban centers provided the source of labor for industries, but these centers could not accommodate industrial development. 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 Fascist 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. 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 workers 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.\textsuperscript{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 worker 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."\textsuperscript{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. 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." 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 desperate housing 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." 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."  

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."  

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 movement - 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 outward appearance and not going beyond the boundaries which might have endangered the autonomy of its own position."  

In presenting his worker's housing in Matera, a congested and poor town in Southern Italy, de Carlo presented his position as architect 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 architecture 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 architecture?"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 specialization. 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 potential 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 inserted, 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)\(^4\)

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 developmental 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 ownership 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 characteristic of the area & on the available services for the new quarter.

Selection of the urban typologies.

Selection of the examples for the exhibition.

Exhibition of housing types.

First elaboration of the design.

Exhibition of the design.

Elaboration of the final design.

Elaboration on the user's statistics.

Elaboration on the program with the sociologist.

Presentation of the program to the commission.

Interview with representatives of future users.

Debate with the users on the criteria of the design of the new quarter.

Debate with the users on the design.

**THE PARTICIPATORY PROCESS 1970**
Participatory process and the Master Plan.
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."\textsuperscript{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."\textsuperscript{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.

An Exhibition

"To discover the real needs of the users, therefore, means to 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 beyond 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 according 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 examples 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 between 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 different groups (age and family size) were interpreted into various building 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.

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 is that de Carlo's achievement is beyond the significance of the architectural language used. De Carlo incited confrontations with the management 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. Moreover, 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.
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 subsidies for experimental housing projects. This was introduced to sanction 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 housing 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."

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 environment. Third, contemporary MH production fails to maximize the contribution 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.'"

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 in responsibility for his own dwelling. The individual can only operate if the non-participation of the dweller is the result of the support of the housing. 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 rethink everything and work out a new logic and a new process.

A1 the concept

Supports and detachable units recognize the two spheres. The support is 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, but one that is made on a division of the decisions to be made. If the dweller in his dwelling 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 can we start with the design process.

A2 of the result

That is what SAR is concerned with - a new housing process where the decisions are made by the individual himself.

A dwelling always exists in two spheres, the sphere of the community and the sphere of the individual. Thus we talk about two spheres of responsibility. 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 sphere is non-existent. There is no scope for the individual to make decisions concerning his dwelling. The result is uniformity, where the individual is left out of the process and the result is uniform.

Conversely when everything is decided in the private sphere a kind of slum town comes into existence. Where there is no communal role the result can be chaotic and inhuman. Somewhere between these two extremes lies the balance of the new technical possibilities for individual action on the one hand and possibilities for community on the other.

This is a political and anthropological 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 have been able to recognize the uniformity in mass housing as the result of the housing process.

That is the tragic condition of human settlement today; for the individual in the dwellers sphere and the public sphere has been alienated but the possibilities of industrial production have not been gained.

In both spheres the methods of industrial production can be applied. In the building of supports the industry can produce prefabricated elements. In the building of detachable units the industry can produce prefabricated elements. But if the support and the industry serve the building trade. In the production of detachable units the industry serves the dweller directly. This gives a role for the individual. The individual can Organizations that industrialize this support and the individual can industrialize the detachable units. The individual can take responsibility and be in the field of durable consumer goods.

In 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 of the participation of the dweller.
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."!

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 direction 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 demographic 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 policies and uncertain of future development; subsequently, the town postponed 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 working concept of the SUPPORT and INFILL systems for the dwelling environment. 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, harbouring the same problems of influence and control, a problem which was increasingly apparent in the process of housing. A neighborhood 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 subsidy to develop the new design. Under the 1968 revision of the Housing Act, seed money will be granted to develop new ideas in housing construction 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 architect and the town had submitted a completed design scheme for the State's approval.

Upon receiving the State's agreement to provide experimental subsidy (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 controlled 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. 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

<table>
<thead>
<tr>
<th>LEVEL 1</th>
<th>agreement on the relation</th>
<th>functional requirements</th>
<th>design elements: highway, road, water, built and open areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>conclusive model</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>agreement on the relation</td>
<td>functional requirements</td>
<td>design elements: street, road, garden, building</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tissue model</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>agreement on the relation</td>
<td>functional requirement</td>
<td>design elements: floor, wall, boiler, piping, stair, roof</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>support principle</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>inhabitants participation</td>
<td>functional requirement</td>
<td>design elements: wall, partition, closet, entrance, room, kitchen, bathroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>basic variants</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INFILL PLAN</td>
</tr>
</tbody>
</table>

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 independently 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 dwelling 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 disposal.

"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, including 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.
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 environment (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 compatible 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 complexity 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, 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.
Example of a floor plan

The tartan-grid.
The SUPPORT structure.
The environment after the INFILL and INHABITATION.
PART FOUR
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 centralized official agency. It is also argued that an alternative housing process controlled by a community is viable and desirable. Furthermore, 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." In urban social housing, 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 incapable to control every detail of the housing process; for a community is only a part of a larger and more complex structure of modern Western society.

Those aspects that a community should control are the distribution, and the use of available resources. When a community acquires this power, it is the only legitimate 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 expediency 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 separate 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 individuals together to form power groups.

An understanding of the distribution and relationship of different 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 appropriate 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 understanding, 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 economic expediency of architecture out of naiveté 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 architects' 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 relationship 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).
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 control over the housing process. Collective power, based on a process of participation, 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 awareness 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 modern society, it is proved that the individual can have direct control over his/her immediate dwelling environment. 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-controlled policy planning proved to be more accurate and responsive to the community's needs. Success in the implementation of policies depended on a collaboration 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 structure which is filled with policy contradictions. Moreover, the success here was firmly rooted in the support of the workers.

Molenvliet
Planning policies that envisioned an alternative form of inhabitation 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 anonymous 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 accommodate changes caused by inhabitants or by economic variances 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 contradictions 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 participatory 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
form of INHABITION
economic gain
political gain
material gain

POLICY planning
change through COOPERATION

architectural DESIGN
expressive of COLLECTIVE IDENTITY

MATTEOTI VILLAGE
economic gain
POLITICAL GAIN
material gain

change through CONFRONTATION
expressive of COLLECTIVE & INDIVIDUAL IDENTITY

MOLENVLIET
economic gain
political gain
MATERIAL GAIN

change through EXPLORATION
expressive of INDIVIDUAL IDENTITY

HOUSING FOR COMMUNITY
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 scarce resources. In housing, the available resources such as money, material, 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 consistently missing in traditional social housing process, which is controlled by centralized 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 legitimate group to define its own needs, and thus can use sufficient energy and resources to efficiently fulfill these needs.

The power to gain control over the production process is fundamental; the right for such power can be brought into the public consciousness 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 environment provides solutions to issues common to social housing. The definition of minimum 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 consumerism-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 participation 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 legitimize its public value in modern heterogeneous society. Yet it is only through communal actions that architects can justify the social status of architecture.
footnotes

INTRODUCTION

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.


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.


CHAPTER 1


5. Ibid.


8. Ibid.


11. Ibid.


CHAPTER 2

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


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.


7. Ibid., p. xviii.

8. Ibid., p. xxii.

9. Ibid., p. xxi.


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


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


11. Ibid.


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.


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.


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.


CHAPTER 4


CHAPTER 5

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


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


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.


11. Ibid., p. 487.

12. Ibid., p. 488.

13. Ibid., p. 491.


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.


28. Ibid., p. 163.


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 different political resolution to the Puerto Rican Independence Movement.

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


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

CHAPTER 6


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.


7. Quote, ibid., p. 10.


10. Ibid.


13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.

17. Ibid.


CHAPTER 7

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


5. Ibid., p. 18.

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


9. Ibid.

10. Ibid.


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

CHAPTER 8