THE PROJECT FOR THE HISTORIC CENTER OF GENOA: Toward the Integration of Urban Planning and Design

by

BARBARA THEODORA MEHREN
B.A., Barnard College
New York, New York
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Signature of Author.....
Barbara T. Mehren, Department of Architecture, May 11, 1984

Certified by.....
Julian Beinart, Professor of Architecture, Thesis Supervisor

Accepted by.....
Rosemary Grimshaw, Chairman, Departmental Committee on Graduate Students

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ABSTRACT

A current concern in planning and architecture is the apparent inability of either profession to provide quality urban environments. Frequently the problem is attributed to the gap that exists between the plan and planning process which manages the city, and the architecture and design process which creates its three dimensional form.

This thesis presents a case study of intervention in the historic center of Genoa that suggests ways of thinking about city design which deal with with the gap between architecture and planning. The case is documented from the point of view of a participant in the intervention process.

Following a brief description of the project context, the thesis documents the planning/design process according to working phases. The concluding chapter places the case within the context of the Italian experience with city design and discusses the general problem of the relationship between architecture and planning. Finally, it evaluates the project case as an approach to urban intervention and hypothesizes as to its utility in other contexts.

Thesis Supervisor: Julian Beinart
Title: Professor of Architecture

CONTENTS

		Page
CHAPTER I	INTRODUCTION	7
	Description of the City and Its Character	10
	Major Urban Developments and Genoa's Urban Center	16
CHAPTER II	THE GENOA CASE BACKGROUND	23
	Introduction to the Project	23
	Growth of the Urban Form	27
	The Condition of the Area Today	34
	The Project Origin	40
	The Project as Defined by the Comune	45
	The Project as Defined by the Group	48
	The Project Group the Design Team	49
	The Group Process in Relation to the Outside	50
CHAPTER III	THE GENOA CASE PROJECT	53
	Introduction to the Project Phases	53
	Phase I	56
	Phase II	76
	Phase III	124
	Phase IV	138
CHAPTER IV	CONCLUSIONS	143
	The Project in Context	144
	The Issues of Architecture and Planning	152
	Comments on Genoa: a Discussion of the Approach	156
	The Genoa Approach in Other Contexts: Some Hypotheses	170
NOTES		175
BIBLIOGRAPHY		177

CHAPTER I

INTRODUCTION

In 1981-82 I was a participant in the project for the rehabilitation of the historic area Pre for the city of Genoa, Italy. The extreme degradation of the building stock and urban infrastructure of the area had caused the city to commission a special project for the programming of its renewal. As one of the architects of the project group I observed and was part of the design and planning process which developed proposals and guidelines for intervention into the area.

I came to Genoa from my own American experience where city planning is taught separately from design, and where the design education is just recently beginning to focus on design in any larger scale than the building. It seemed to me a problem that planners seldom had any sense of what the three dimensional physical implications were for their urban management decisions. It seemed equally a problem that the architect seldom solved problems of context in any larger scale than the given size of the building site. Further, the architectural education did not provide the necessary analytical or methodological

tools for understanding the urban system in more than building terms. In contrast, the planning student was minimally exposed to issues of three dimensional form and the city as an architectural space.

As a student, I felt that the gap that occurred between the professions seemed to result in a lack of responsibility for decisions concerning the spatial and complex environmental experience of the city as a whole. This idea was, of course, not new or original. Exposure to the opinions of educators and professionals alike who were concerned with the lack of quality in our American urban environments frequently called attention to the problem of this gap between the two professions.

Consequently, when I was offered the opportunity to work in Genoa on a project which had as its scope the physical design of a whole area of the city, I accepted with the hope that this experience would expose me to other ways to think about design and planning. Having gone through this experience I feel that the Genoa project does serve as a different model for city design and may provide a useful approach to the merger of the concerns of the two professions.

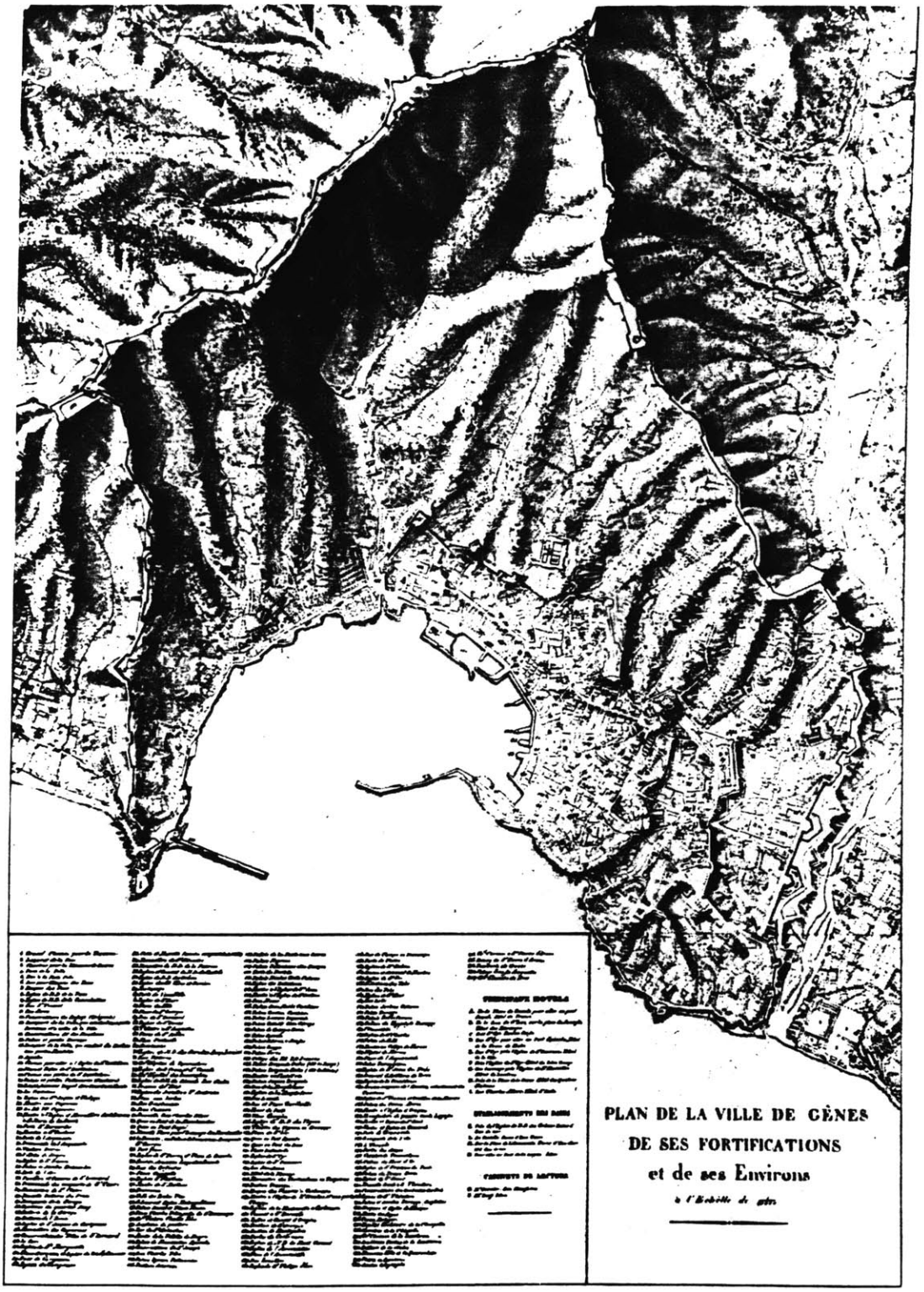
This thesis presents a documentation of the Genoa project from my point of view, both as a participant and as a critical observer, looking at the project in retrospect. Since the completion of the work two years ago, I have worked on another urban scale project in Italy. In addition I have explored the issues of the project through conversations with Italians,with others who know the Italian design experience, and with American pro-

fessionals, to obtain a certain perspective on the work in Genoa. This perspective is also represented here.

Following this brief introduction, I will present a short description of Genoa and its urban character. I will present the urban developments which effect the situation of the historic center today. Chapter two will provide a background to the case. Here I will include a description of the growth of Genoa's urban form in general, and of the project area in particular. In addition, the project context will be discussed including the problem as originally defined by the city, the definition of the project by the work group and a description of the design group members. Chapter three will relate the process of the working phases of the project and their conclusions. Finally, in Chapter four I will discuss four main themes. First, I will look at the Italian context and the approach to city design. Second, I will explore the general problem of the relationship between architecture and planning. Third, I will evaluate the Genoa case in terms of the preceding two topics of discussion. I will conclude by conjecturing as to the utility of the Genoa project's approach and process for city design in other contexts.

Description of the City and Its Character

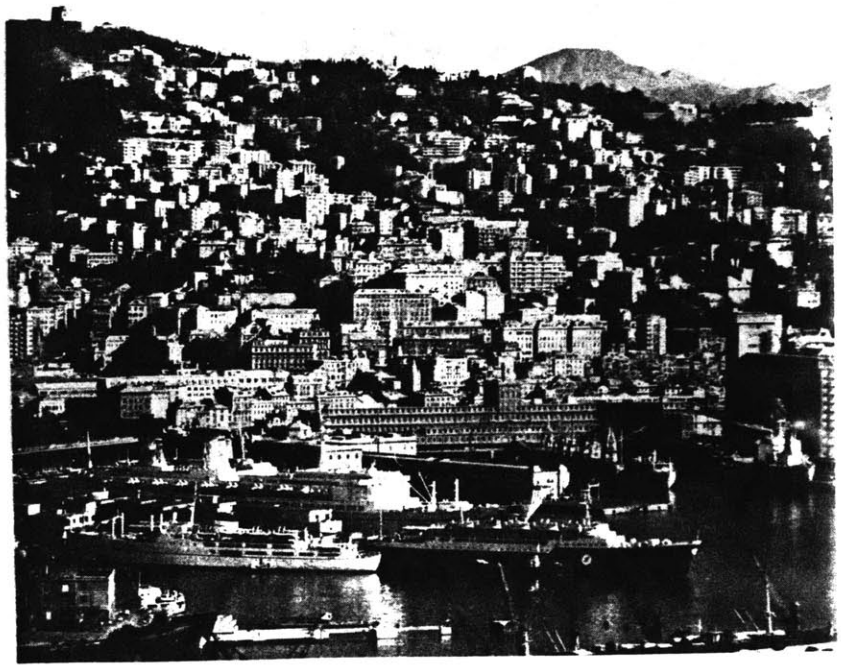
Genoa is a major industrial port city of the Mediterranean located in the northwest corner of Italy on the Ligurian coast. The city is nestled in the bowl of a spectacular amphitheater of mountains which form the backdrop of the Gulf of Genoa and create the almost perfect natural port of the city. The character and history of Genoa has largely been determined by its topography and its relationship with the sea. Genoa's geographical position, its harbor, and the natural fortification furnished by the surrounding mountains all contributed to its historical importance as a major sea power. Although in population Genoa is relatively small, the perceived scale of the city is much larger and intense due to the layering of the built form as it ascends the mountains from the sea's edge.


PLAN DE LA VILLE DE GÊNES
DE SES FORTIFICATIONS
et de ses Environs

Genoa 1845

Via San Luca at Noon

Walking in Genoa, one is struck by the sectional character of the city. The fingers of the mountains which penetrate virtually into the city to the sea's edge have caused street and building patterns which react directly to this dramatic topography. Zones which in plan are contiguous are often separated by level differences of a hundred feet or more. Accessibility between these zones may be bridged by buildings in their verticle circulation, by tunnels, elevators, or funiculars, or access may be, of necessity, circuitous. The city's neighborhood texture is determined to large extent by zones which have physical access to each other. Although large scale urban interventions, which occurred during the Renaissance, and after attempted to connect the city as a whole, the original zones still stand to maintain their identity and cohesion as neighborhoods within the city.



View of Sampierdarena

The streets that follow the contours of the land are relatively flat. However, many of them are steeply inclined, especially streets which follow the decent of old river beds that lead to the sea. This is possibly one of the reasons why Genoa has little street life compared to other Italian cities. Most storefront commercial activity and open areas heavily used by pedestrians can only be accomodated by the flatter streets and spaces.

Street sections of the city in general, but especially in the medieval historic center, present exaggerated building heights compared to street widths. This has been a function of the scarcity and value of buildable land. Over the centuries buildings in the central city were added to in height to maximize their use of ground coverage. Consequently, the average height of the historic building stock is much greater than what is commonly found in other Italian cities. Streets of the medieval fabric take on a canyon-like character as they wind their way through the dense built form.

Open spaces, such as piazzas or parks are scarce. The only relief from the urban density of the medieval fabric is given by the streets' penetration to the sea's edge. Unlike other Italian cities, there is no developed system of built public open spaces and promenades in the city core. Most of the spaces that exist have been created by later, large-scale urban intervention and tend to have a monumental quality or function as vehicular circulation. Further, due to the lack of street space the transition from public thoroughfare to private interior space is abrupt, with generally no transition zone unless it occurs inside the building. The noble families who built the palazzi in Genoa

created their homes to enclose privately owned gardens. The closeness of the built-form opening out to the expansiveness of the sea creates an overall impression of a city of dramatic contrasts.

Major Urban Developments and Genoa's Urban Center

Research on the early history of Genoa seems to indicate that the urban core was originally founded as a Greek settlement which later became a Roman outpost that formed part of an important link from Rome, up the coast, to France. Archaelogical findings suggest that the settlement existed for trade and military purposes rather than a residential city with its own institutions. In fact, Genoa's economic, political, and social history, as well as the city's cultural heritage has centered around seafaring activity and trade for centuries. The city became a major sea power during its medieval period. It held this position of dominance up until the founding of the Italian Republic. It was not until the late 19th century and the advent of the railroad that Genoa began to be industrialized.

Early in the medieval period, the city core became dense. The search for flat, buildable land between the mountains and the sea forced expansion of the urban area in settlements, or borgi outside the medieval walls.

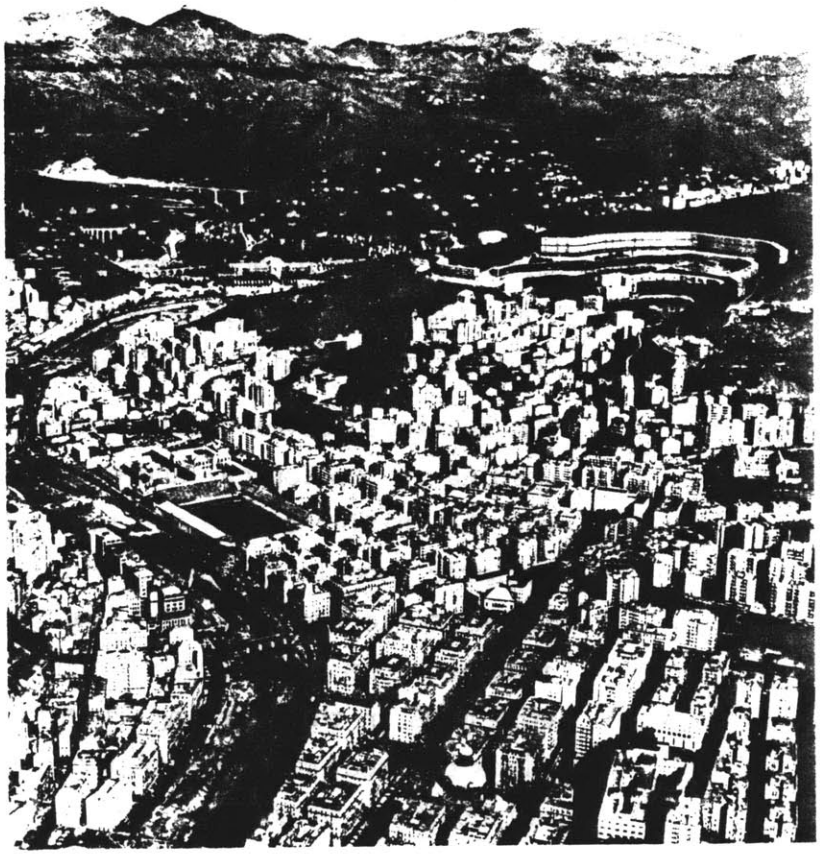
There first peripheral developments occurred where valleys or flat areas in the mountainous terrain permitted construction. Most often such settlement was associated with coastal trade and the movement of commerce through the passes into the hinterland.

As Genoa proper eventually expanded, rebuilding the city walls to encompass thse "borgi", they formed small zones of medieval urban fabric surrounded by the building of later periods.

The scattered development of medieval borgi according to topological and economic imperatives was the initial source for the lack of a unified historic zone in the city. Further fragmentation of the historic area resulted from later urban scale interventions (Renaissance, industrial, etc.) which were made in the existing fabric. These interventions defined sub-zones in the city with their own neighborhood identity.

Throughout Genoa's history peripheral development in response to the search for buildable land shaped the pattern of urban expansion. From the turn of the century through World War II when Genoa developed as an industrial city, expansion of both industry and population resulted in the development of areas along the coast and the valleys leading inland. For example, the sub-borgo of Sampierdarena became a smaller but prosperous center west of Genoa after the mid 19th century construction of improved roadways and the rail system placed it as the hub of connections between the coast and the hinterland through the Giovi pass.

At a certain point in time the cities' centrifugal development, combined with other important events began to seriously threaten the life of Genoa's historic core. During World War II the city ex-



The Peripheral Development of Val Bisagno

perienced heavy bombing. Immediately after the war began a period of reconstruction. However, due to the dramatic shift in population from Italy's devastated south, the region was put under a great deal of pressure, both economically as well as socially. There was an urgent need to provide housing. Peripheral development presented the opportunity to build housing more cheaply and quickly than reconstruction of the center.

This began a progressive decline in the population of the historic area. The building fabric initially damaged by the war continued to deteriorate. This fostered further depopulation and movement to the suburbs. The trend of depopulation and deterioration became especially pronounced after the initiative of the Master Plan of 1957 which permitted the rapid development of open land in the areas surrounding the city.

An additional force acting on the decline of Genoa'a urban center was the gradual relocation of port and industrial activities to areas open for expansion outside the city limits. The new facilities made the old port obsolete and pulled a major ecomonic base away from the metropolitan core.

Attempts at revitalization of the center during the 50's resulted in land speculation and the destruction of the historic neighborhoods of Piccapietra and Via Madre di Dio. With the advent of regional planning in the 60's such speculation was halted. The city began to approach planning from a conservationist position and initiated research to develop a comprehensive plan for the restoration of the historic center.

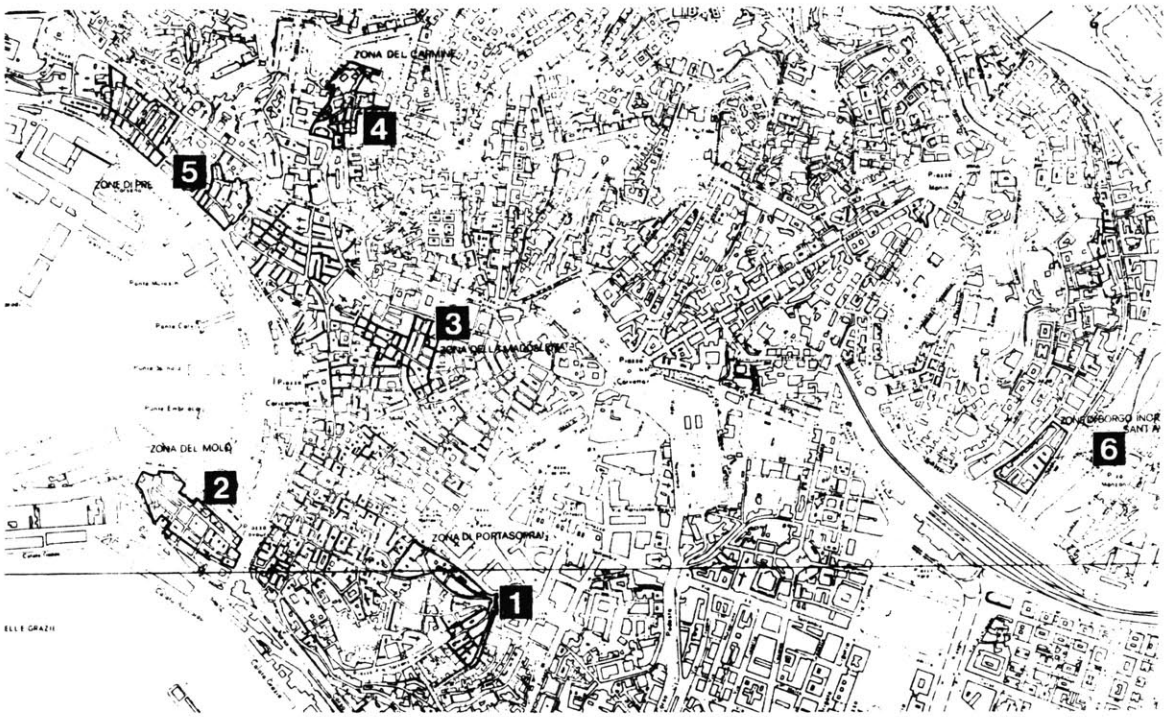
CHAPTER II

THE GENOA CASE BACKGROUND

Introduction to the Project

The historic center of Genoa is considered the largest in Europe. However, it is unusual in that by geographical configuration, historic development, and various urban interventions in modern times, it is fractured into separate, distinctly different city quarters. These quarters manifest different physical as well as social characteristics which make them identifiable neighborhoods within the city context.

The recognition of the distinctness of these quarters has resulted in a prolonged debate as to the nature of the urban plan for the conservation of the historic center of Genoa. Many planners, architects, and historians influencing planning policy in Genoa have felt that the development of a single urban plan to guide building in these areas as if they were a unified historic center would be inappropriate if not impossible. Because of this, as well as other political and economic reasons the city has decided to recognize these quarters as separate entities in the development of the urban plan. As such, six areas, identified as critically in need of restructuring and preservation, were commissioned

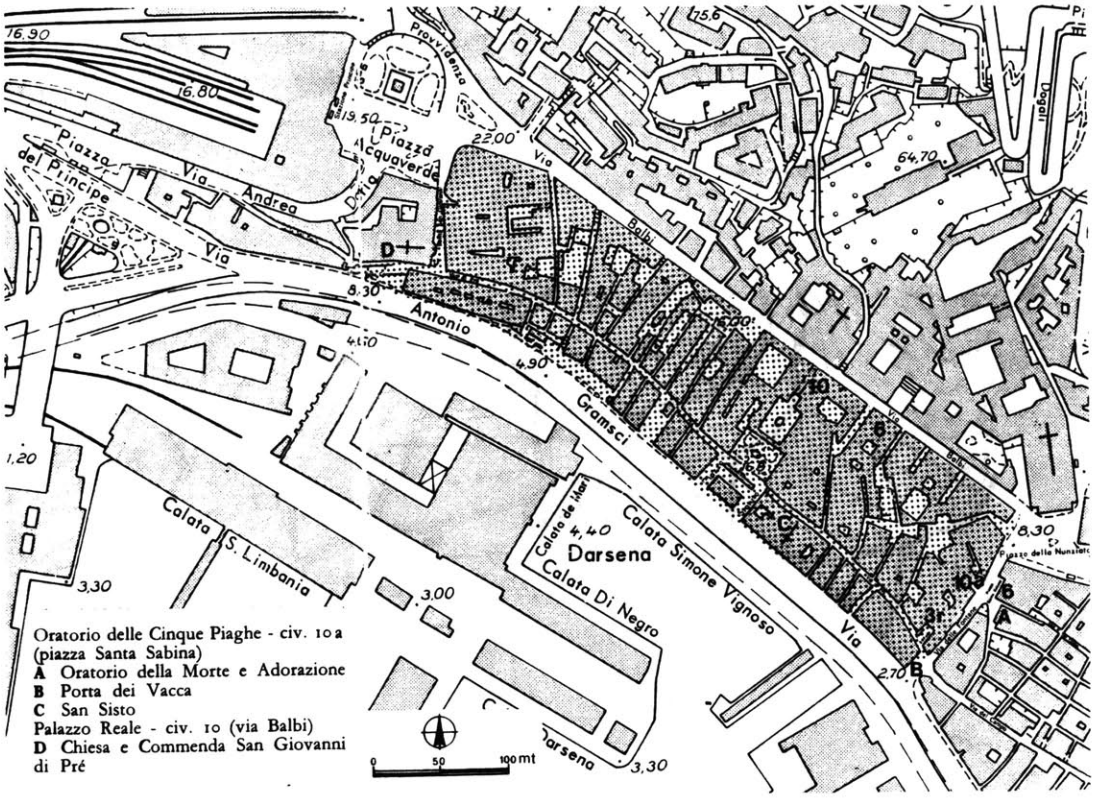

ZONA DEL CARMINE
4
5
ZONE DI PRE
3
ZONA DEL MOLO
2
ZONA DI PORTASOPRANA
1
6

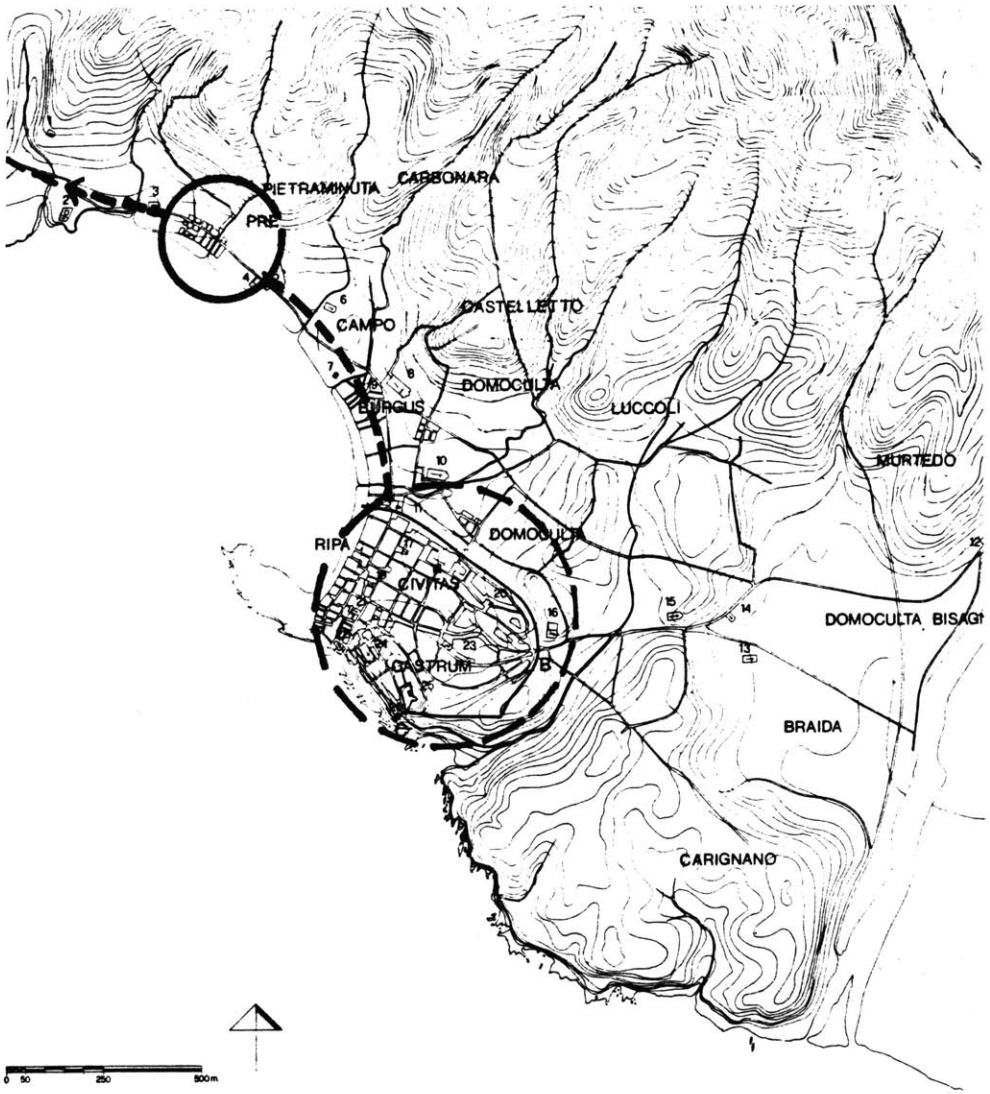
to six different architects for the projection of exploratory projects of rehabilitation and the development of urban planning and the design guidelines.

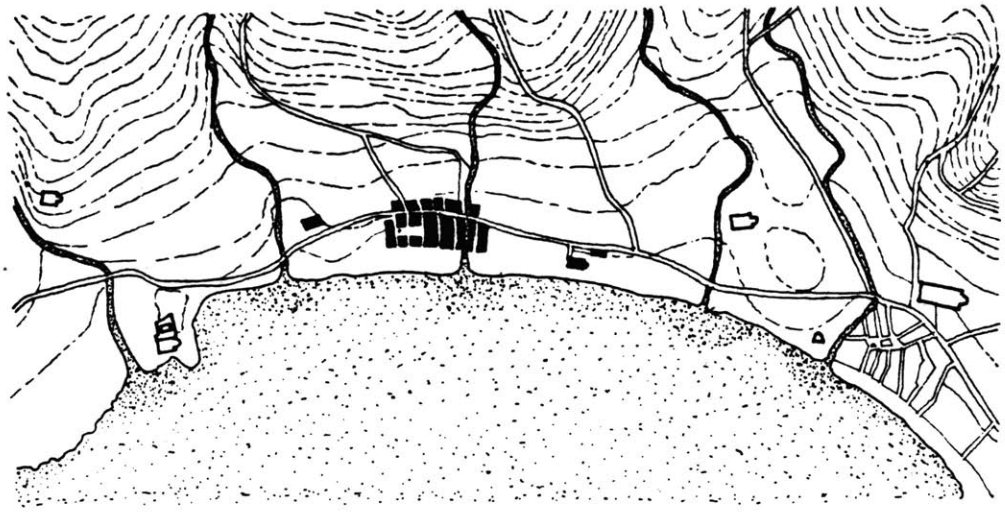
The Area Pre was identified as one of the six quarters. Like the others, it is a distinct physical area with its own particular character.

The Definition of the Project Area

The Area Pre is delimited on the north, south, east and west by Via Balbi, Via Gramsci, Piazza Acquaverde, and Piazza Nunziata, respectively. Its Main access spine is Via San Giovani di Pre which enters the area from the medieval gate of Porta Vaca and finishes at the Piazza della Commenda at the flank of the Church of San Giovanni Di Pre.





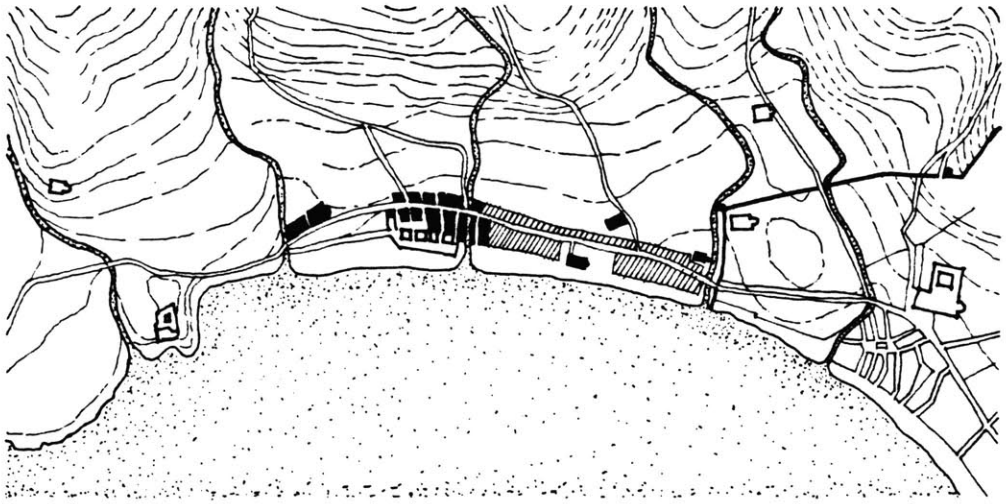


11th Century- The settlement of Predis

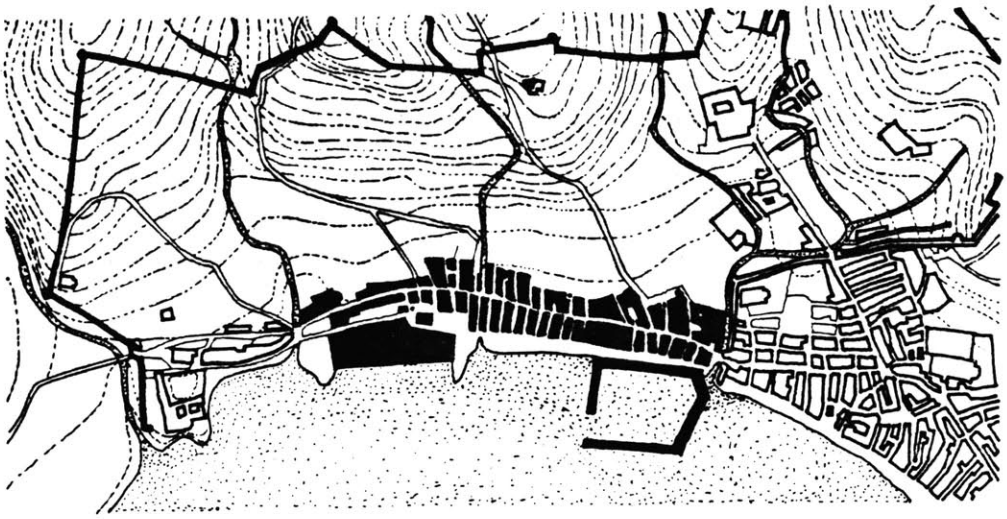
Growth of the Urban Form

Genoa's generation and urban growth has been strongly determined by the topographical factors of the land and the sea. The mountainous land, while forming the cup of a natural cove, ideal for the port, and protecting the city from the colder climate and winds of the north, has made building difficult and influenced the nature of urban growth. The city core initially was founded on a relatively flat outgrowth of land which projects into the sea where the physical area allowed a node to develop. As the city expanded from this node the constriction of the flat land between the mountains and the sea produced a linear growth along the cove's edge, north and westward. This growth corresponded with the practical movement of the people and their need for easy access up the coast from Genoa to the neighboring ports.

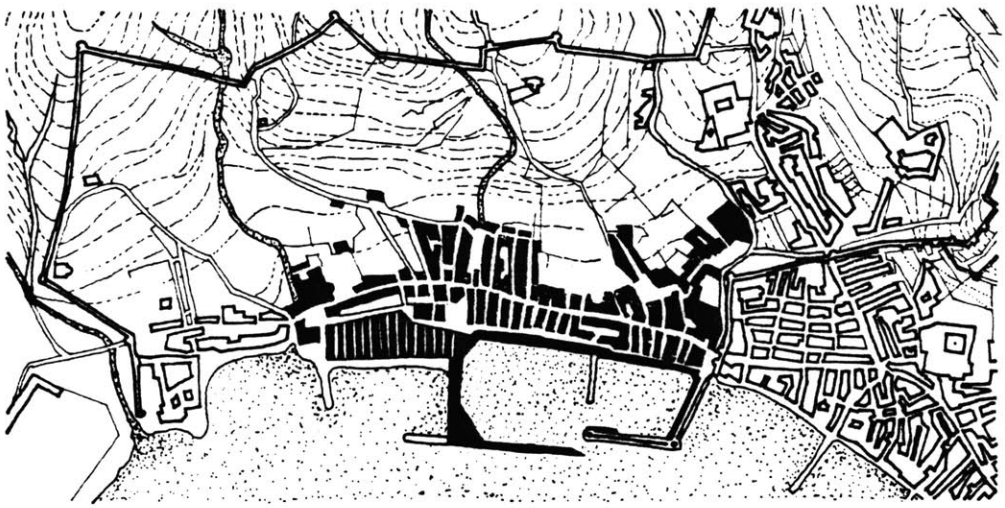
The settlement of Predis formed on this movement path. The spine of this settlement, which was to become Via Pre supported the ribs of Vicoli[1] extending up to meet the land and down to access the sea's



12th Century-Via Pre and the Medieval Walls



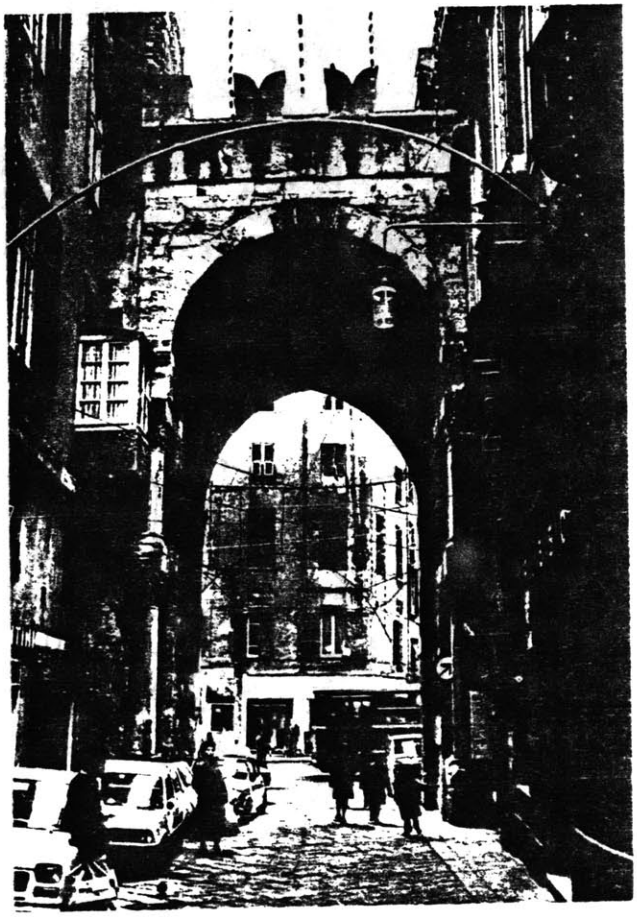
13th-14th Century

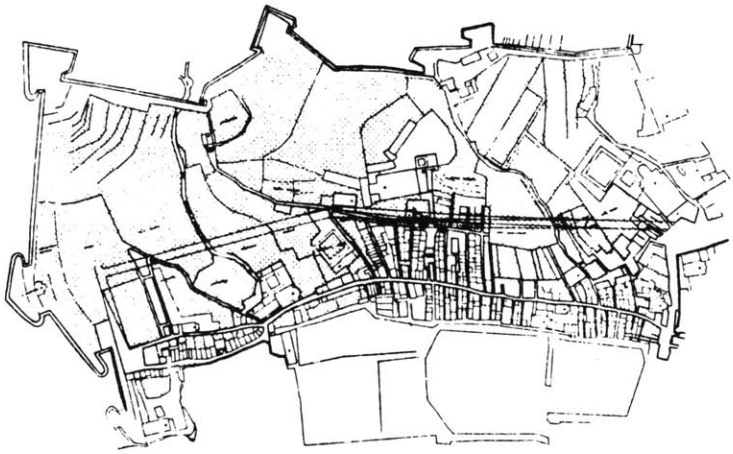


15th Century

edge. Thus, the urban form of Pre was first generated by the two confining, parallel edges of the sea and land with access from the strong node of the city center from the southeast and continued movement to the north west and was characterized as a link from the land to the sea. Because Pre developed outside the main city walls and was associated with the activities of the harbor, it was from its inception a peripheral settlement and acquited a different character from the center; it traditionally accepted those activities both licit and illicit associated with the port which were less acceptable to genteel society.

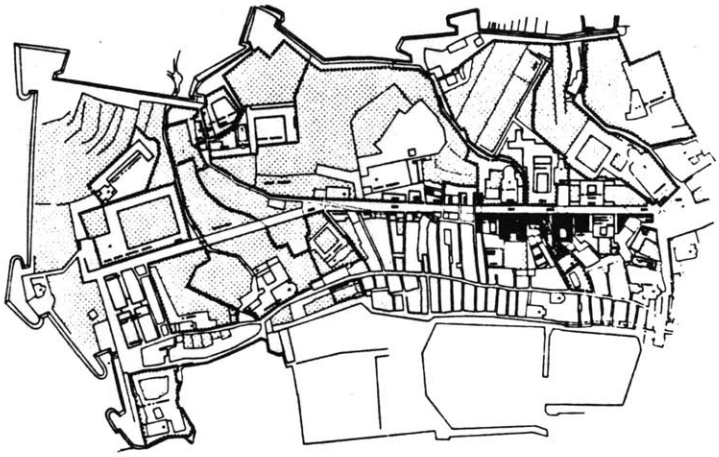
Porta dei Vaca





The Planning of Via Balbi 1605-1613

Artists Rendition of Balbi



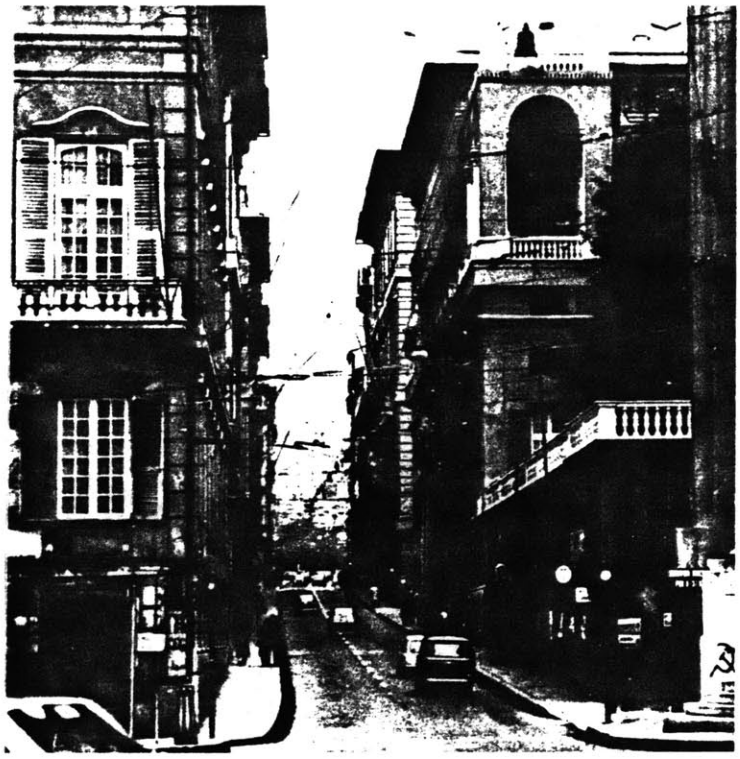
The City Reformed by the Balbi Intervention

Five major interventions to the urban fabric contiguous to Area Pre have strongly effected Pre's relationship to the rest of the city and to the sea, and have contributed to the present condition of the area. Listed chronologically they are:

1. The introduction of Via Gramsci along the sea's edge cutting the area off from the sea and replacing it as the major movement along the port.

2. The late Renaissance intervention of Via Balbi which cut through the existing city fabric to the north of Via Pre to create an axis running parallel to the via thus emphasizing the already existing topographical

Modern Via Balbi from the Same View



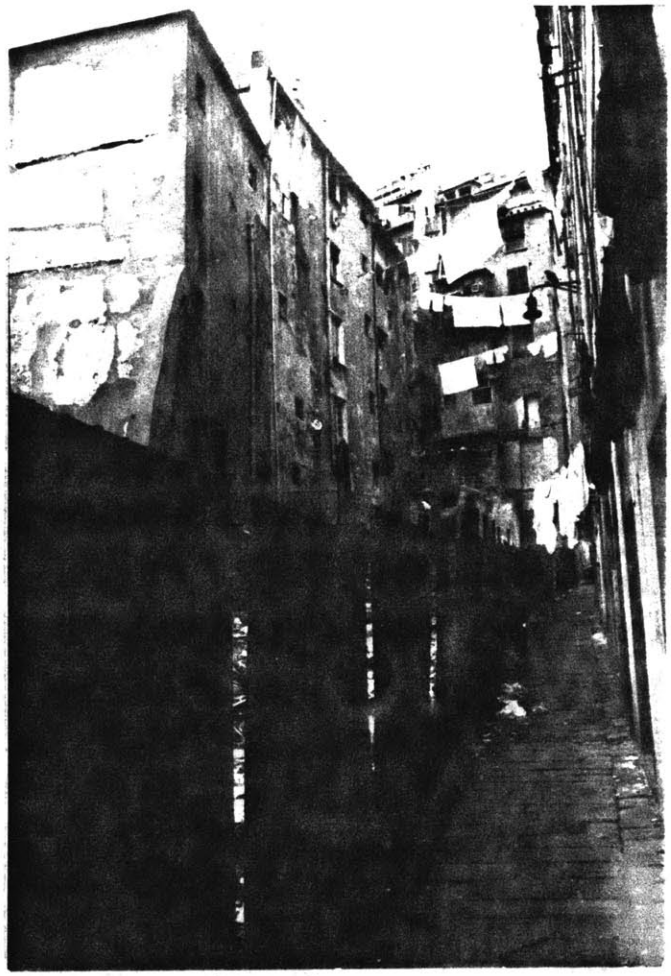
separation of the area from the city in that direction, as well as replacing it as a major movement path from the city center to the west.

3. The introduction of the train station at the head of Piazza Acquaverde, and the creation of a major transportation node in that Piazza.

4. The bombing of the area during World War II.

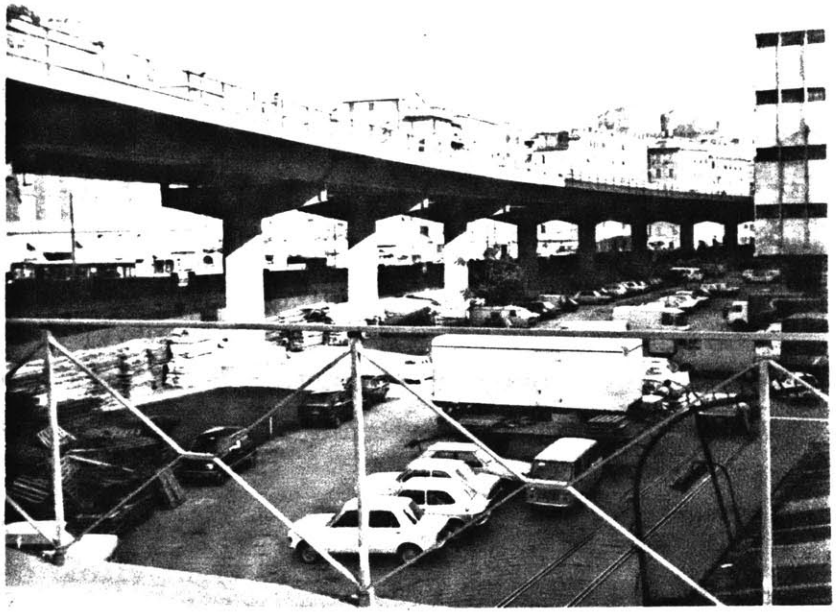
5. The modern construction of the elevated highway along the port's edge which completed the separation of the area from the sea, both physically as well as visually.

Modern Piazza Acquaverde- the Train Station



War Destroyed Vicolo

The Elevated Highway



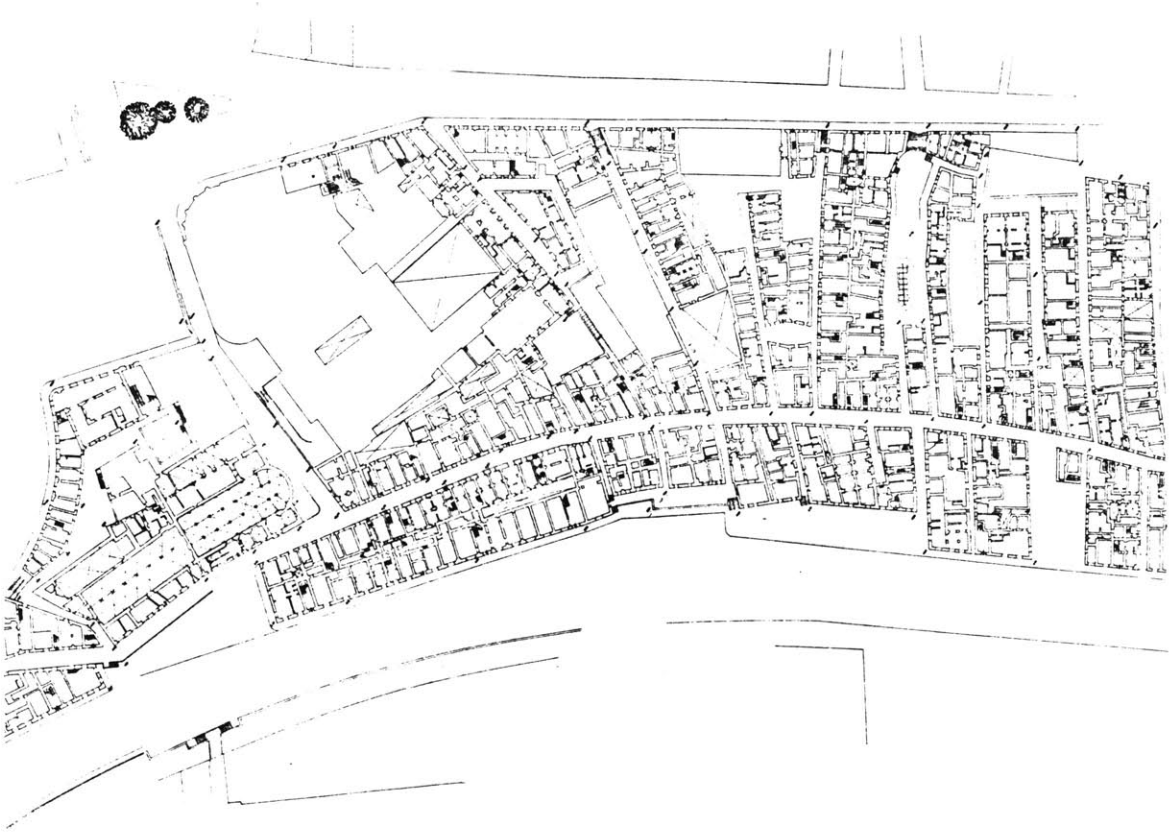
The Condition of the Area Today

The Area Pre within the context of Modern Genoa is a tail of the medieval city projecting from the historic center. It is isolated due to the above urban changes and is difficult to access. This isolation has resulted in both the maintenance of much of the original character of the area as well as causing its deterioration.

The area is characterized by its original medieval urban structure of tight vicoli defined by the aggregation of tall and narrow masonry and stucco

buildings generating from the spine of Pre. There is little sunlight except that which enters from the major streets or where World War II bombing has left gaping holes in the urban fabric. Buildings are badly deteriorated; there are virtually no internal or city services.

The medieval residential fabric is interrupted in the area contiguous with Via Balbi and the Piazza Nunziata by the palazzi of the Balbi intervention, as well as by the buildings of the university.



Views of Via Pre

Via Pre itself is a lively commercial street of stores on the ground floor and residences above. During the hours when the stores, cafes, and restaurants are open, it and the connecting markets of St. Elena and Piazza Statuto are extremely colorful and have special character of the peripheral life; black market trading, and the intense activity of the moving crowds of people who come from the city and the rest of the world to this infamous area.

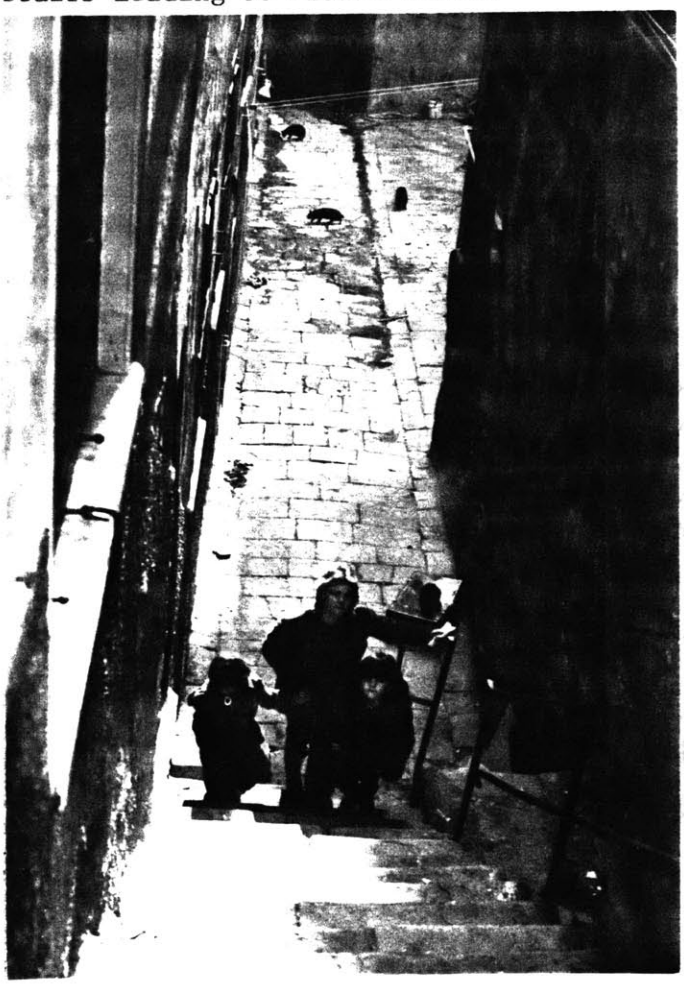
Via Pre at the Edge of the Market

Piazza dei Trougoli

Vicolo (Vehicles by Hand Only!)

The vicoli turn abruptly off of Pre into another world, very closed; a world of drugs, dirt, whores, as well as neighborhood activities more normally associated with family life. The first level of the buildings are often occupied by artesans, wine dealers and small family style restaurants. The upper floors are residential. Entry into the private residence is directly from the public realm of the street.

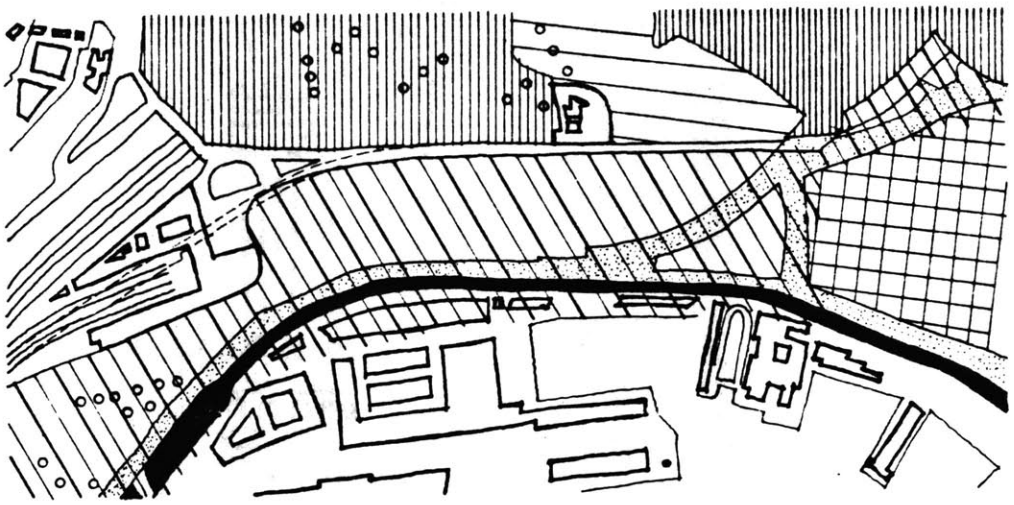
Stairs Leading to Piazza Tenedo



The Project Origin

Genoa's master plan of 1957 promoted the development of land as a means of generating income quickly. Speculation became the major means by which the city expanded. The historic center was not immune to speculative development. Two historic neighborhoods were razed to be replaced by new development and other areas were bought up and slated for the same treatment. For example, the whole area of Pre was designated to be transformed. In addition, a new main traffic artery was proposed to cut the area diagonally at the Piazza Nunziata (see plan below).

A change in the political climate of the late 1960s caused the Comune to re-evaluate its zoning policies and the use of land to generate income.



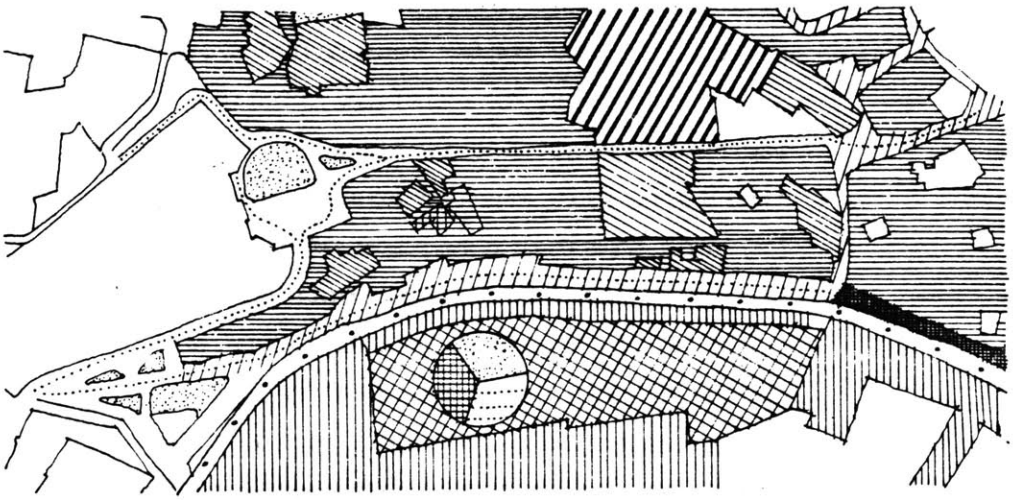
MASTER PLAN OF 1959- ZONING

- zone to transform
- residential zone
- zone to be rehabilitated
- zone important to linking panoramas
- intercity highway
- major urban artery
- city elevators

During this period the policy for the redevelopment of the historic center came under scrutiny. The historic center, as existing, provided a poor living environment. Narrow streets, relatively tall structures with limited access to sun, as well as the poor physical condition of its building stock and urban infra-structure contributed to the difficulty of its restoration and modern use. The decay of the historic area was seen as a major determinant in the continued decline of the city center and the reciprocal trend of peripheral residential development. Yet, speculative development of the area was recognized as the potential destruction of the city's architectural heritage. Action was taken to freeze speculation and to forbid further destruction of the urban fabric while a preservation plan for the historic center was considered.

The scattered development of Genoa which began early in the city's history in response to the search for buildable land, and access to the sea and trade and resulted in the fragmentation of the historic zone into neighborhood areas. Renaissance and modern interventions as well as destruction during the war further isolated these areas. As was mentioned earlier, the recognition of the distinctness of the different historic quarters from the very inception of the idea of a Master Plan for the historic center inhibited the development of a policy.

The Master Plan of 1967 produced a study of a single neighborhood to generate a set of guidelines and began to suggest a framework for the rehabilitation guidelines for the entire center. However, a change in administration prevented further work on the plan.



MASTER PLAN OF 1976-ZONING

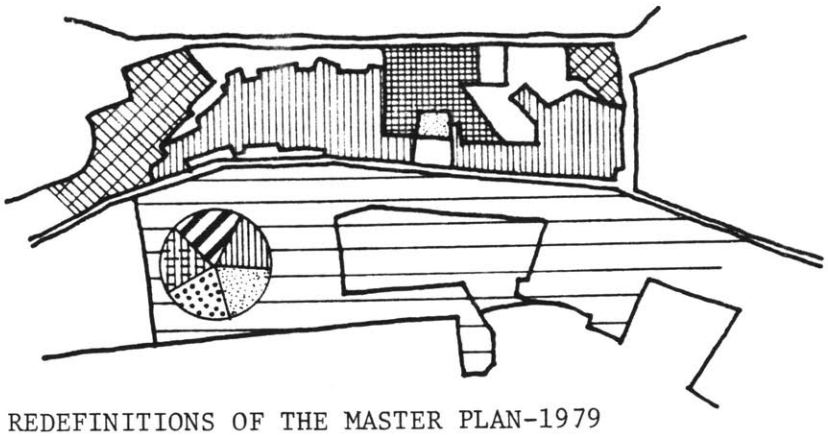
- historic zone
- urban priority
- educational priority
- urban & ed. priority
- urban & technical
- maritime zone
- local urban traffic
- parking
- garrage car storage
- green zone, recreation

The Master Plan of 1976 approached development as a regional, resource conscious process. It emphasized the self-determination of small pieces within the regional framework and the need for precise and detailed planning of the parts related to the whole. It stressed the need to determine appropriate use according to the nature of existing physical definitions and the needs of the population.

In considering the plan for the historic center, these new attitudes emphasized the need to integrate controls for rehabilitation into the operation of the center itself, and heavily favored a decentralized and process approach to redevelopment. However, the city still sought a unified master plan that could be applied to the entire historic area.

Apparently attempting to integrate these conflicting notions of decentralized plan and master plan, in 1980 the Comune decided to confront the problem of the historic center by reversing the approach normally used for developing a master plan. Instead of developing a study of the whole center they identified and separated out six archtypical areas of the historic fabric for the development of exploratory projects and plans. The intent was that from the detailed study of the different areas one could generalize to the whole. These six projects were identified as critical in need of restructuring and/or restoration.

Each project area was composed of one or more urban "comparti". Comparti are sub-zones or parcels of the city with a similar and rather homogeneous building morphology which make them a cohesive part of the urban fabric within the area. They are identified and defined in the Master Plan.



REDEFINITIONS OF THE MASTER PLAN-1979

urgent rehab.need
public green space
university & city services
zone for C.B.D use
parking
port zone
technical service

Boundaries of the "Comparti"

The Project as Defined by the Comune

All the buildings and spaces included in the comparto are considered related and must be designed and planned together.

The Comune originally identified two such comparti in the area of Pre as a single project. One comparto was a sub-zone of vicoli on Via Pre in the area of the Piazza Dei Trougoli. The other comparto, also on Via Pre, had as its focus the Piazze del Roso.

The project was commissioned to Giancarlo De Carlo, who negotiated the contract to be taken by the group ILAUD (International Laboratory of Architecture and Urban Design) under his supervision. A work contract was signed in 1981.

This contract designated that the project be completed in phases:

The first phase required a historical and urbanistic analysis of the comparti.

The second phase requested the projection of a schematic plan of rehabilitation utilizing example buildings and their context which took into consideration more specifically, the various socio-urban planning aspects of the area of study. These aspects included population composition, use and ownership of the buildings, condition of the habitation, structural and service conditions. In addition, the Comune requested the definition of the typological structure and morphology of the buildings in relation to their historical development.

The third phase asked for a draft of the guidelines which specified the interventions in the area surrounding the comparti as well as defining how these interventions should be made. Finally, it requested architectural project schematics for important nodal points and at least one third of the building mass included in the comparti.

The fourth phase required the final draft for the technical specifications, and the final guidelines relative to the first two phases. In addition, the final schematic drawings for one third of the buildings in the area illustrating their rehabilitation were to be presented. The contract requested graphic documentation necessary for the Master Plan as follows:

A. Final proposed variants to the Master Plan, which would accomodate public services, at scale 1:5000, and suggestions as to how they may be carried out by the administration.

B. Drawings to support the rehabilitation project comprising historic and photographic documentation integrated with the documentation of the projects.

C. Base Maps of the Master Plan

   1. Base Master Map at 1:5000 including the historic center.

   2. Delineation of the rehabilitation zone at 1:5000.

   3. Drawing of the actual area subject to the rehabilitation plan at 1:500.

4. Base Map specifying and indicating the modes of intervention at 1:500.

5. Map specifying intervention types for the facades at 1:500.

6. Map defining the minimum allowed unit for which a project should be made as an integral unit and the eventual linking of projects with their maximum building mass at 1:500.

7. Zoning Map with the boundaries of the area of the Rehabilitation Map and the principle division of the land and mode of intervention at 1:500.

8. Map defining the public areas or areas for public use including the pedestrian and vehicular movement systems at 1:500.

9. Map including links for public use, public green area, Comune property, schools within the project at 1:500.

10. Sections showing Master Plan specifications at 1:200.

11. Principle building outlines or profiles at 1:200.

The first phase was to be completed in the first months of 1981. The deadline for the second phase was January 1982. The third phase was to be completed by March 30, 1982, and the final phase by June, 1982.

The Project as Defined by the Group

The contract agreed upon by the Group and the Comune provided structure for the work schedule, and the required studies, documentation, proposals, and designs. However, in practice, the work process of the Group redefined the project and to some degree altered both the work as well as when it was presented.

For one, the Group's study and response to the findings of the study altered the scope of the project. For example, although the contract defined the comparti as the project site, from the beginning the Group considered the relationship of the comparti to the whole area. Thus, the project was treated as an "Urbanistic" intervention; i.e., it integrated urban planning, urban design, and architecture. Analysis, proposals, and designs were directed toward the interdependence of the area within the entire urban system: the operation of the zone as an integral unit of the city, the functioning of neighborhood and its place within the urban fabric of the zone, the integral role of the building in the deginition of urban fabric, as well as re-use of the structures. Finally, the Group considered the details and materials of the open spaces and architecture which gave the area its character at the human scale.

Consequently, the project area was expanded to include the whole area of Pre and important contiguous zones and the work presented exceeded what the contract requested. In addition, the approach of the Group produced a detailed development of architectural solutions rather than schematics alone. As the project was redefined, and time was needed to complete the additional work, the contract schedule was re-negotiated.

In summary, the definition and direction of the project for Pre was determined by the combined initiatives of the Comune of Genoa and the Design Group.

The Project Group: The Design Team

Phase one of the project was completed by a group of three Italian architects under the supervision of DeCarlo and his project supervisor, Armando Barp.

The Group for phases two and three came from Italy and abroad and was composed of recent graduates from universities which participated in the ILAUD course. Consequently, they had come together from different backgrounds and different cultures with different views. The three Italian designers were obviously aware, from experience, of the Italian urban scene. The four foreigners played a naive role in every way, lacking the culture, society, politics and the language of the city in their background. The theory was that their naive view might, in fact, see a new way of doing things. There was also a belief in the common language of design and the cross-cultural relationship between human experience that supported the validity of foreign designers working on the project. Since they worked individually and as a team, they called on each other frequently for information and criticism.

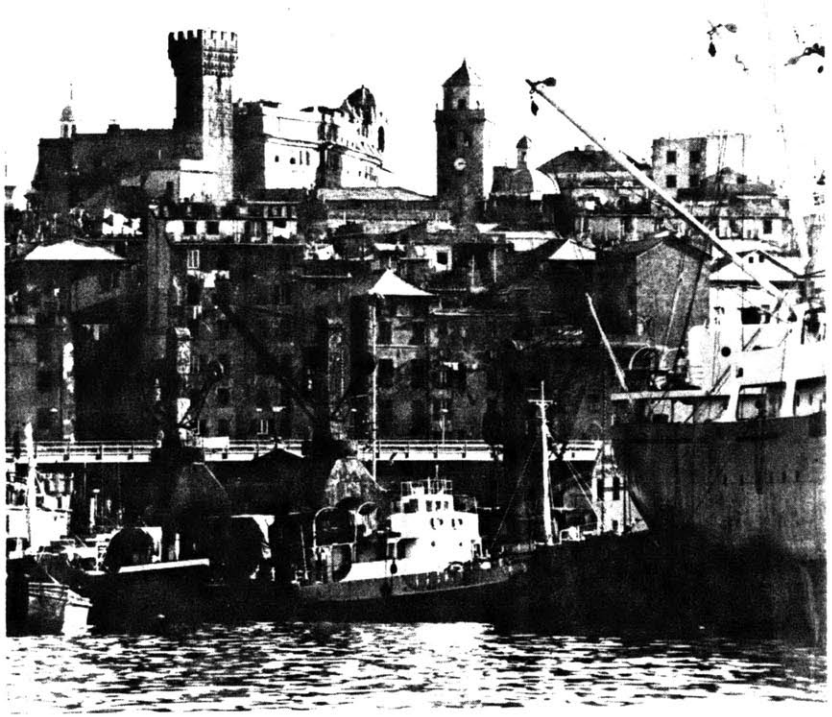
Finally, two of the Italian designers remained on the project to complete phase four with Barp.

The Group Process in Relation to the Outside

The diverse individuals and personnel available to the Group for consultation were utilized frequently both formally and informally. Because the Group worked in the offices of the Comune's urbanistic administration building, there was daily informal contact and scheduled meetings with the Comune professionals.

The current urban developments, proposed future plans and feasibility of the Group's proposals could be checked through this immediate contact. In addition, the work presented at the end of each phase was formally reviewed by the Comune staff.

Through the use of visiting architectural critics, public forums were held to review the work and the approach during the different phases. Press coverage was also significant, and made the citizens of the city aware of the process and proposals. One meeting of the residents of the community was called at the end of the first phase to tap their views.



CHAPTER III

THE GENOA CASE PROJECT

Introduction to the Project Phases

The basic goals and premises of the project were established at the onset of the project phases by the Group through study and interaction with the Comune. Briefly they were:

- Conservation of the historic area;
- Amerlioration of the conditions for inhabitants;
- Recreate a functioning urban system that would as much as possible regenerate and maintain its viability from within by itw own means;
- Permit natural changes in the area without forcing population movement, although not attempting to make the existing situation static.
- Encourage population participation in the determination of the physical distribution of their own space.

These goals were translated into each phase of the

work, and were used to guide the direction of the final design solutions as well as the urban plan. Sometimes the real implications of one goal contradicted or made another goal difficult to implement. The role of the work phases was to confront these contradictions with appropriate compromises.

The work processes of the project are presented here according to their phases of presentation to the Comune. In reality the tasks of the process are not easily separated and do not form a strict hierarchy. In each phase every scale of the project was treated from the urban level down to the level of the building detail. Thus each phase refined and built on the work of the previous phase.

The difference between the phases is one of the work's emphasis. For example, Phase I attempted to determine the scope of the project and to establish a base of information and an approach to the problems at all the design scales. However, the work emphasized the formulation of the urban scale solutions for the rehabilitation of the area. Phase II emphasized the architectural design of the projects, but was able to redefine the urban framework through these designs. Phase III concentrated on the definition of the guidelines for the Master Plan of the area. However, the analysis of the designs necessary to produce the guidelines also redefined some of the design solutions at every scale. Finally, Phase IV, which was the development of the technical means of executing the projects and of the estimate of costs helped to verify the solutions of the projects.

In addition, it is important to note that each of the

phases was approached with the knowledge of what the subsequent phase would require. This recognition influenced the way in which the initial approach was developed. The approach of the work meant that the pieces of the project were constantly interrelated and never completely taken out of the context of the work at large. This approach will be best illustrated in the subsequent descriptions of the work phases and products.

The work of the phases followed a process of research and observation, presentation of findings, diagnosis of problems, proposal of solutions to the problems, and criticism of the solutions which resulted in a return to one of the above tasks. This process was maintained at every scale of the design. The process was nor necessarily linear, and there was a reiteration of the process as the development of the solutions required.

The nature of each of the tasks of the process changed according to the phase. For example, research in the first phase concentrated on the background and basic information for the existing conditions in the area. In the second phase, the Group concentrated their research on the architecture. The structure was examined closely, as was the use of the built and open spaces. Observation of the behavior patterns in the community became more important. Whereas the proposal of solutions in the first phase defined the urban scale interventions and superficially treated the architecture, phase two provided in depth architectural solutions, but only verified or added detail to the urban scale solutions in the area.

The work phases proceeded from basic resources provided by the Comune to the Group:

a) Master Plan - zoning, use, traffic, transportation, etc.;

b) Urban tissue map including building footprints (Figure/Ground),
1:500 of the zone

1:200 of the area

c) Measured plans, sections, elevations of all the buildings of the comparti, at scale 1:200, including

d) Technical information such as structural condition of all the buildings; location of existing plumbing; use of built spaces as they existed when the survey was done.

In addition, historic information was available through the University.

Phase I

The first phase provided the basic background study (urban framework and first proposals) for the sequential phases. In this phase every scale of the project was integrated in the "urbanistic" approach discussed earlier. The work process at this phase emphasized analysis of historic research, research from documentation, and observation of existing conditions and the presentation of these findings.

Historical Research and Analysis

For the Group the historical analysis formed the basis

for an understanding of the city as a system. It was from the history of the city that the designers searched for the generating logic of the city: What political, economic, social, cultural and environmental conditions had initiated form? What had been the order of the city as it had evolved (orthagonal, linear, monumental). How had this order been reinforced or interrupted? How and why had changes occured? What things seemed to have been significant enough to remain constant over many years? What was the rhythm or pattern of the city's generation, growth and change over time? From this emerged the complete picture of the system and its functioning.

This understanding of the past formed the foundation for understanding the present organization of the city as well as predicting possible future developments. From this historic research the Group sought to propose interventions which would work in harmony with the local patterns of form and function, continuity, growth and change. In addition, history began to define where and how urban intervention should take place: where it was possible to recreate lost access, clarify what seemed to be the original intention of the plan, re-define the urban order, or correct past conditions which were no longer acceptable for present of future uses. In this analysis, it was not only remote history, but also the immediate past which became relevent as the foundation from which to design and plan. The city was examined then from the special point of view of the site's development and its relation to the urban system.

Research and Analysis of the Documented City

Measured plans and sections were analyzed for morphological systems at each scale: urban, zone, neighborhood, sites, building; they were also analyzed in terms of movement, access, open space, built space, structure, infrastructure, building components, materials, etc. In addition, diagnoses of these problems were made at these different scales which could be determined from the drawings or which had been observed on site and could be verified in the drawings. These diagnoses included such problems at the building scale as the practical diagnosis of the conditions of the plumbing and the logical placement of new systems within the existing structure to bring the building up to standard.

Analysis of Observation

Observation provided the sense of how the city and site were lived, used and experienced. When information was needed in detail it was taken directly from the site. On site observation was also the verification of what was indicated in the plans as well as the verification of what was proposed in designs. The three dimensionality, movement and sense of time (sequence of day) of a city can only be understood through observation. Again, the whole range of scales was included from the movement of traffic, the experience of walking through a series of spaces with all of its contributing views and enclosures, to the way the paving stones fit together.

The Phase I Presentation

This phase presented the basic approach of the project to the Comune which was to expand the site to

consider its role within the urban system and to seek its rehabilitation from the reconnection of the piece to the whole. In addition, it presented the first pass at reparation and restoration of the buildings themselves.

The report to the Comune argued that the degradation of the building stock was not due to age, but to neglect, and that neglect was due to the social and economic conditions of the area, which had declined as a result of the zone's ghettoization. The report recommended a series of interventions which would link the area to the city in creating movement paths between complimentary functions (needs) of the area; to be serviced by uses already suggested in the existing historic system. The report emphasized the need to establish a healthy urban system which would, once established, be self-perpetuating and regulated by the natural changes that the population would make in reacting to the system. Public efforts would be made in public and service areas and the private sector, by and large, would restructure the private building stock.

The project drawings for the intervention to implement this planning strategy presented urban design and details of architectural pieces which gave form to these proposed uses. Architectural design was used to present the feasibility of the building re-use as well as a first pass at eventual implemenetation possibilities for the private owners of the buildings.

The document presented to the Comune consisted of 1) a document illustrating the historical development of the urban area; 2) the analysis of the morphology of the urban fabric and its composite

building types; 3) the analysis of the building morphology which faced the important movement edges; 4) the analysis of the system of penetrability of the building fabric at the ground floor; 5) the analysis of the pavement types and their level changes; 6) presentation of the use of buildings at the ground floor; 7) the initial diagnosis of the condition of the buildings; 8) the presentation of an existing structure of the "comparto" and a hypothesis of how it was to be transformed; 9) the existing movement system and a proposal for its alteration; 10) the general scheme of the intervention or urban planning framework; 11) the presentation of three urban organizational nodes and a hypothesis for their development and finally, 12) an example of the re-servicing of one of the structures to provide it with modern plumbing without altering its morphological structure.

The following summary of the first phase urbanistic framework and intervention proposals represents the first pass at design for the recuperation of the area which would become the basis for later refinement.

phase 1 intervention proposals at the level of the urban system

The City Scale

The intention to reconnect the area to the city and to restore it as a link to the sea was accomplished through physical and operational intervention into the surrounding urban context:

- Improved functioning of existing public access nodes of Piazza Acquaverde and Piazza Nunziata;

- Increasing access from and across Via Balbi and Via Gramsci.

- The creation of public activity nodes at the Botanical Gardens, above and north of the area, and at the Darsena (the port), and the creation of a pedestrian path linking these nodes to reinforce movement across the zone.

- The creation of a commercial access link between Via Balbi and the port transversing the area.

- The development of the port as a public re-creation and service area, as well as for the provision of those functions which are impossible to include within the area itself.

- The utilization of the proposed city metro system to make the Darsena accessible to the entire city as well as to the immediate area.

The Neighborhood Scale

Movement within the area had been inhibited by the rigidity of the vicoli which were closed except for access at each end. This created islands of isolation and dangerous alley-like conditions, as well as making public maintenance and service to the area nearly impossible. Automobile traffic on the narrow Via Pre and vicoli restricted pedestrian movement. In general, the public open space had physically destriorated to the point where it was non-functional. Interventions proposed were

directed toward the resolution of these problems by:

- Creation of pedestrian zones in the vicoli

- Creation of new pedestrian paths parallel to Via Pre to increase internal communication for residents within the zone.

- Encouragement of transverse movement through the area with the introduction of a commercial zone extending from Via Balbi to the Port.

- Definition of the use of public open space and building.

The Urban Fabric

The proposal for intervention to the urban fabric was bifurcated in intention; on the one hand there was the need to maintain the character of the historic area; on the other hand it seemed necessary to restructure the fabric in order to permit easier internal connection, improve sanitary conditions, and augment ambient quality. These intentions conflicted, as the traditional pattern was one of extremely narrow streets framed by proportionally high buildings which created dark and sometimes uninhabitable conditions. The proposal incorporated a comination of rebuilding and restructuring to maintain a certain urban pattern.

- Re-knitting the urban fabric of Via Balbi, the vicoli, and the Piazzette where they have been destroyed by bombing or deterioration;

- Introduction of new spaces;

- Introduction of new movement systems.

phase 1 intervention proposals at the level of the architecture

The Building

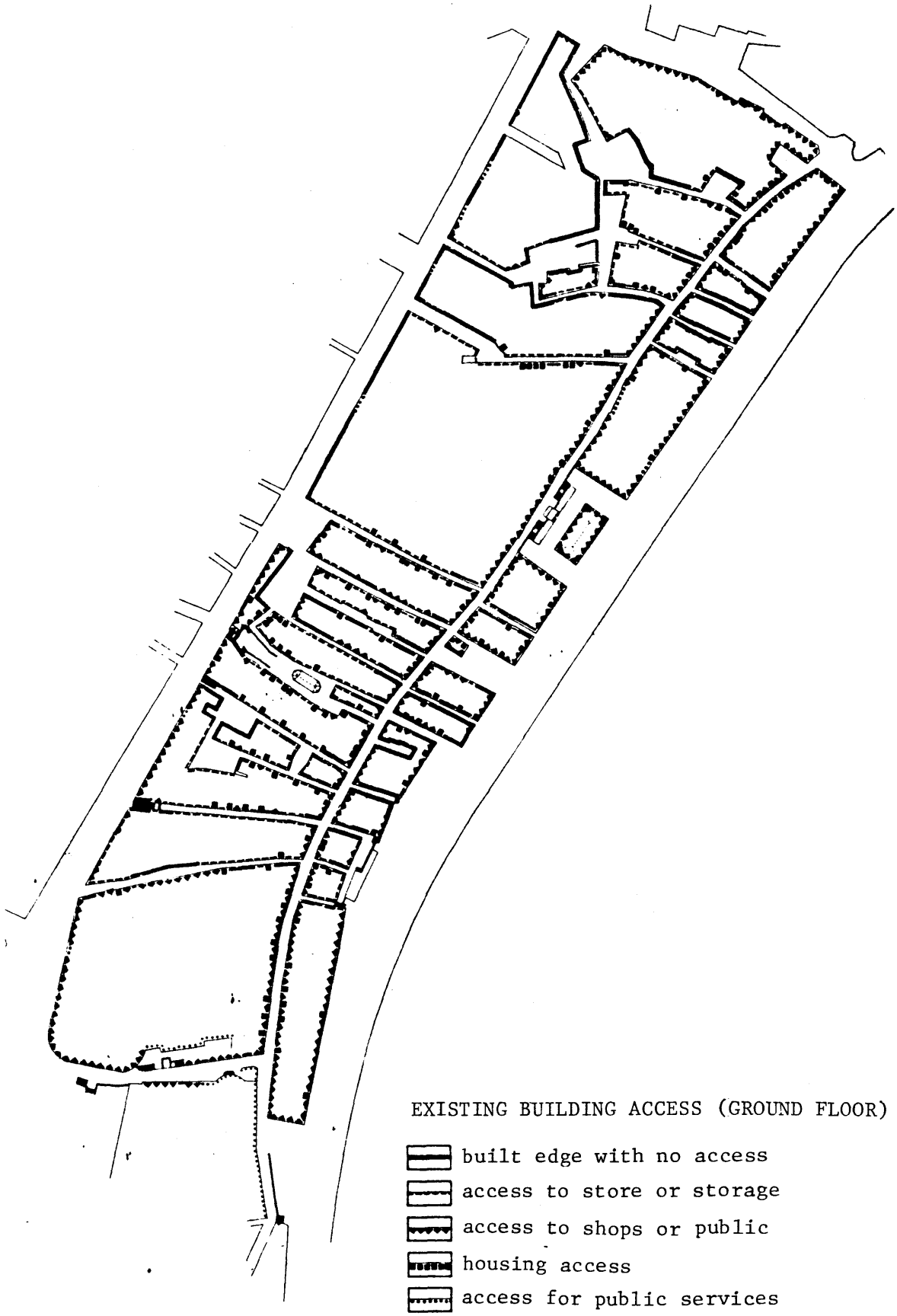
The deterioration of the buildings and their lack of internal services were of primary concern. However, the introduction of modern elevators, plumbing, electricity, etc. threatened to destroy the historic pattern of the built form. Further study would need to focus on when and how the buildings could be manipulated to determine in what manner modern services are to be introduced to create a double and financially feasibly system. Phase I determined problems which would be defined in the second phase.

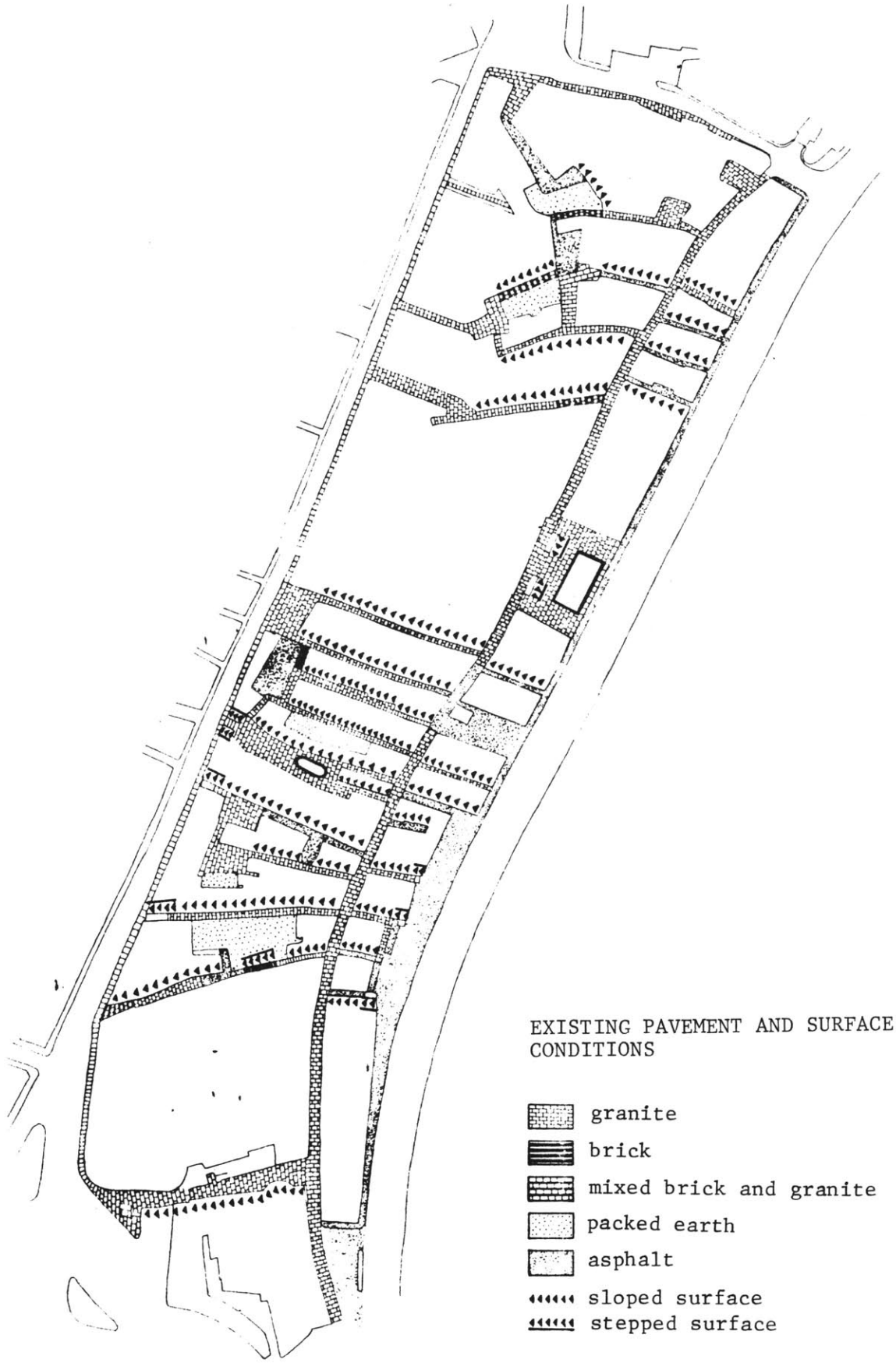
- The movement sytsems: increased vertical and horizontal accessability;

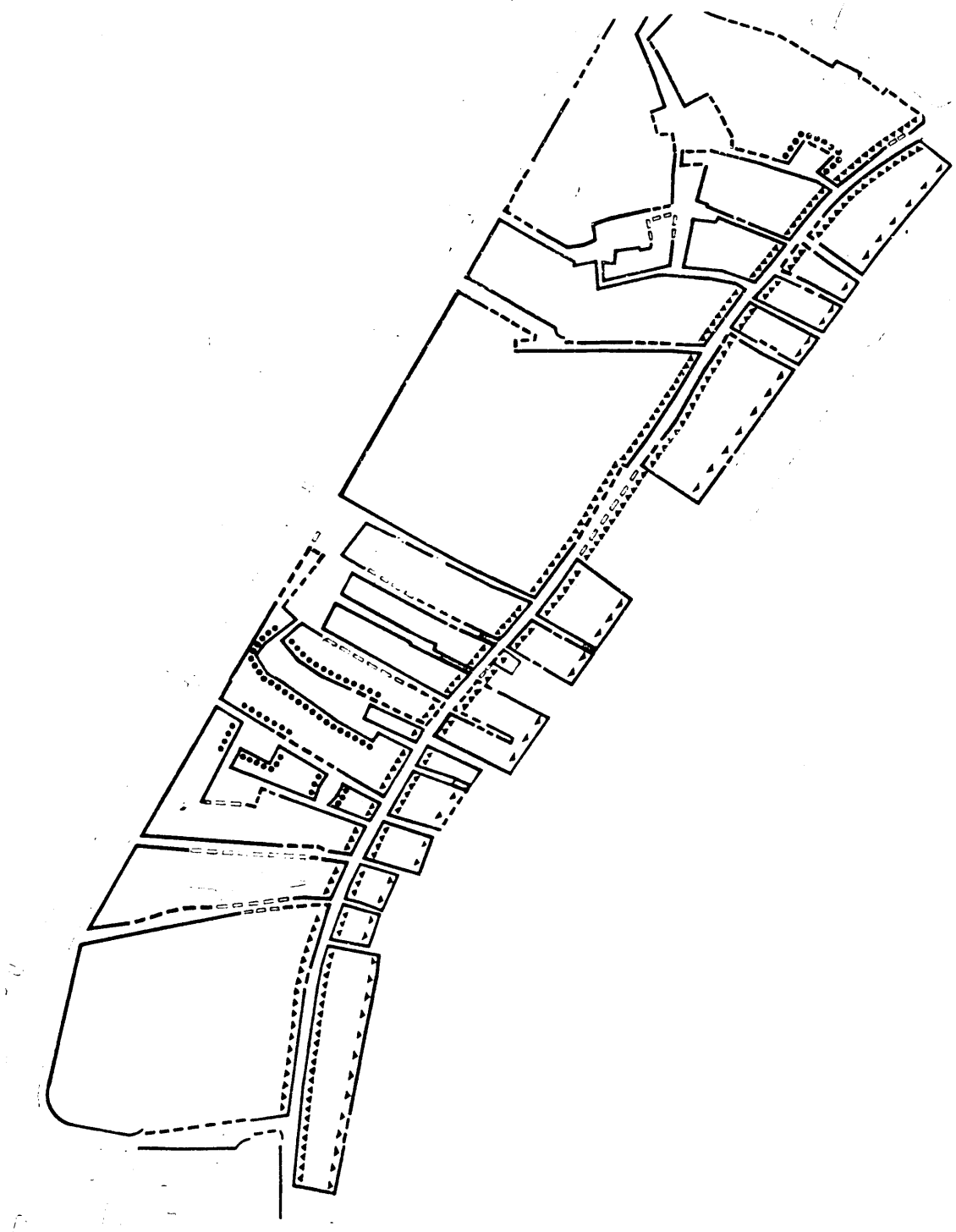
- Restructuring of the building for modern use;

- Maintenance of historic characteristics of forms associated with use;

- Introduction of new building based on the typology of the traditional building.

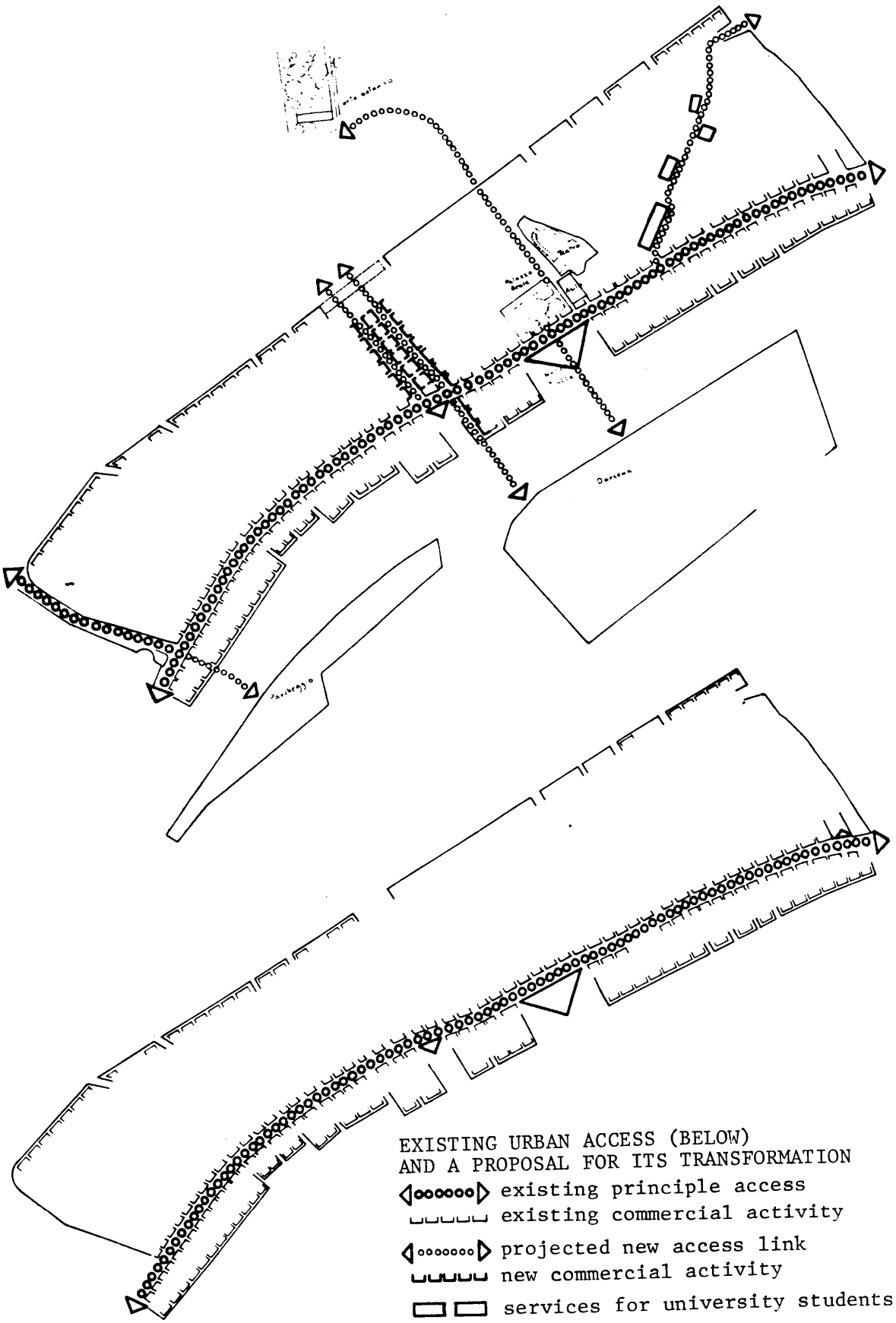

EXISTING BUILDING ACCESS (GROUND FLOOR)
built edge with no access
access to store or storage
access to shops or public
housing access
access for public services

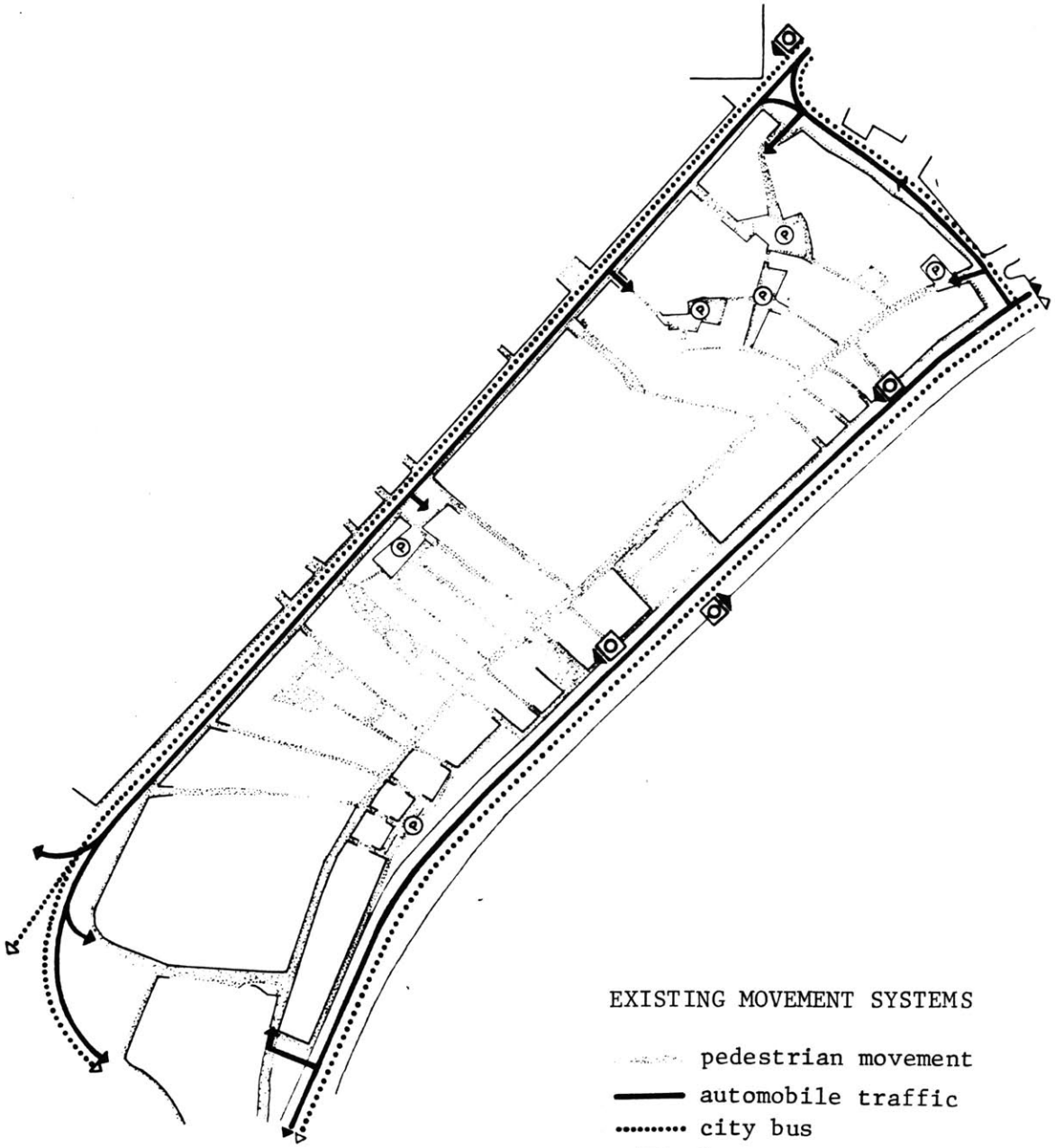

EXISTING PAVEMENT AND SURFACE CONDITIONS
granite
brick
mixed brick and granite
packed earth
asphalt
sloped surface
stepped surface

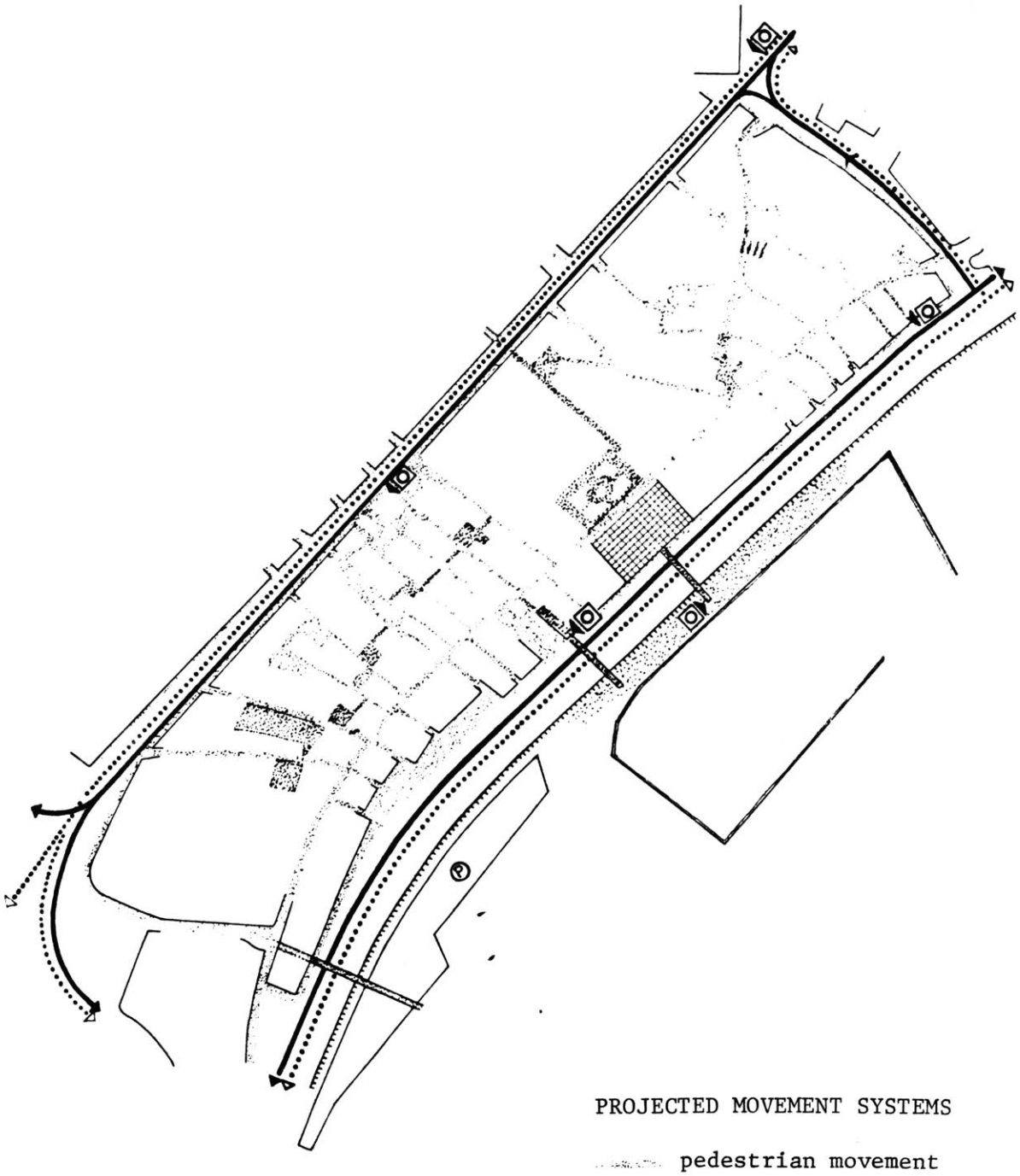


EXISTING BUILDING EDGES

- edge destroyed at the ground floor
- edge destroyed at the upper floors
- continuous edge
- commercial edge
- edge with special urban significance


EXISTING URBAN ACCESS (BELOW)
AND A PROPOSAL FOR ITS TRANSFORMATION
existing principle access
existing commercial activity
projected new access link
new commercial activity
services for university students

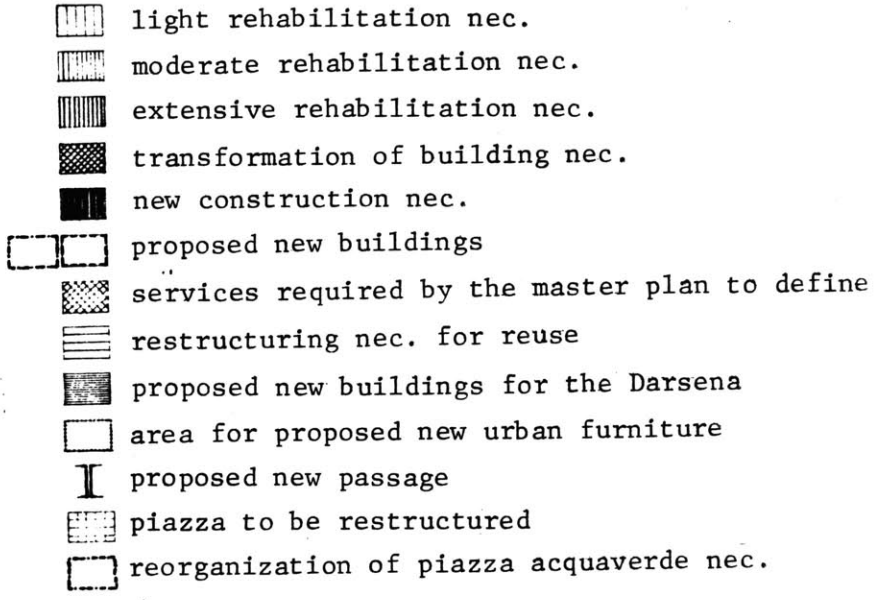

EXISTING MOVEMENT SYSTEMS
pedestrian movement
automobile traffic
city bus
bus stop
parking
local inter-city train



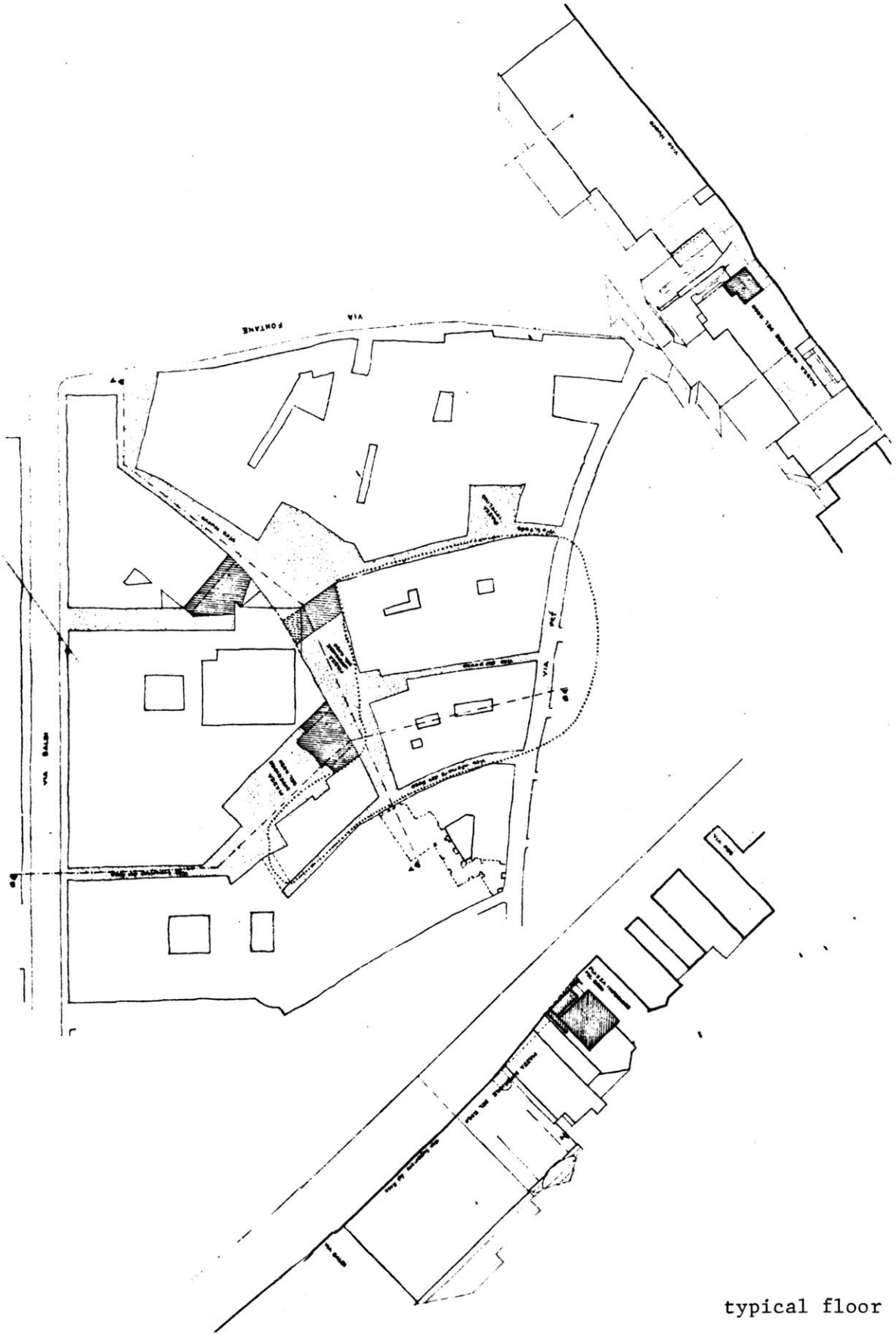
PROJECTED MOVEMENT SYSTEMS

- pedestrian movement
- automobile traffic
- city bus
- bus stop
- parking
- local inter-city train

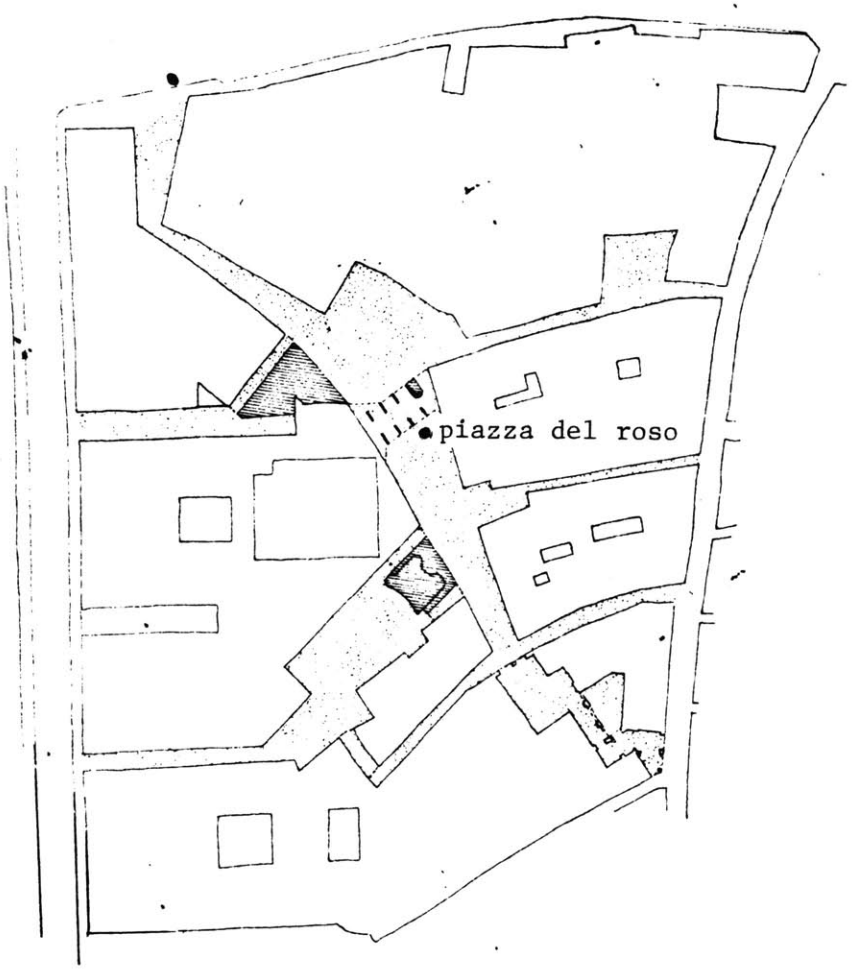
EXISTING BUILDING CONDITIONS AND PROPOSED INTERVENTION TYPES



PIASTRA PARCHEGGIO



typical floor



PROPOSED ORGANIZATION OF SERVICES

▨ services for university students

□ zone shown in upgrade scheme

ground floor

EXISTING CONDITIONS

EXAMPLE BUILDING UPGRADING

services

kitchens

Phase II

The Architectural Scale Projects

Introduction to the Zones of Study and Design

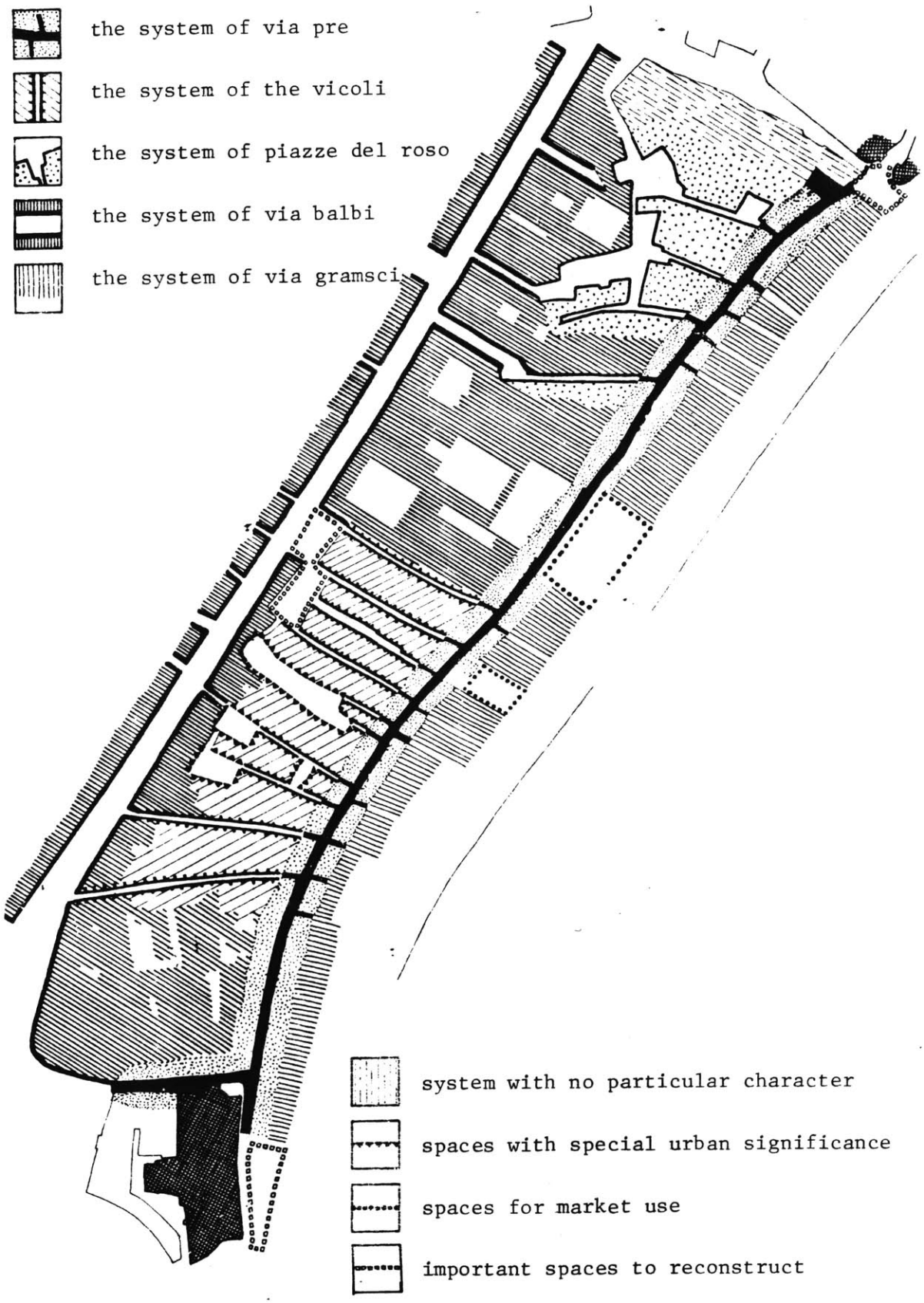
The first phase of the project had identified five different sub-zones of the area Pre as distinct morphological systems. These systems included, but also extended beyond the boundaries of the "comparti" and were designated as:

1. The system of Via Pre
2. The system of the Vicoli
3. The system of Piazze del Roso[1]
4. The system of Via Balbi
5. The system of Via Gramsci

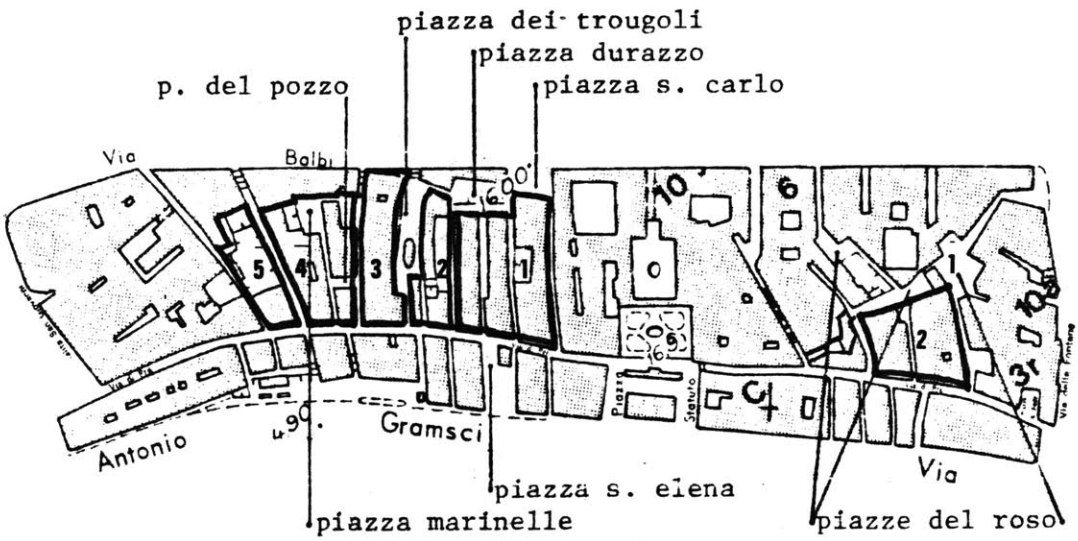
The system of Via Pre was described as constituting a serial sequence of building flanking the street, which, because of its strong built continuity and consistent first floor commercial use along the length of the street, functioned as the principle artery for the entire area.

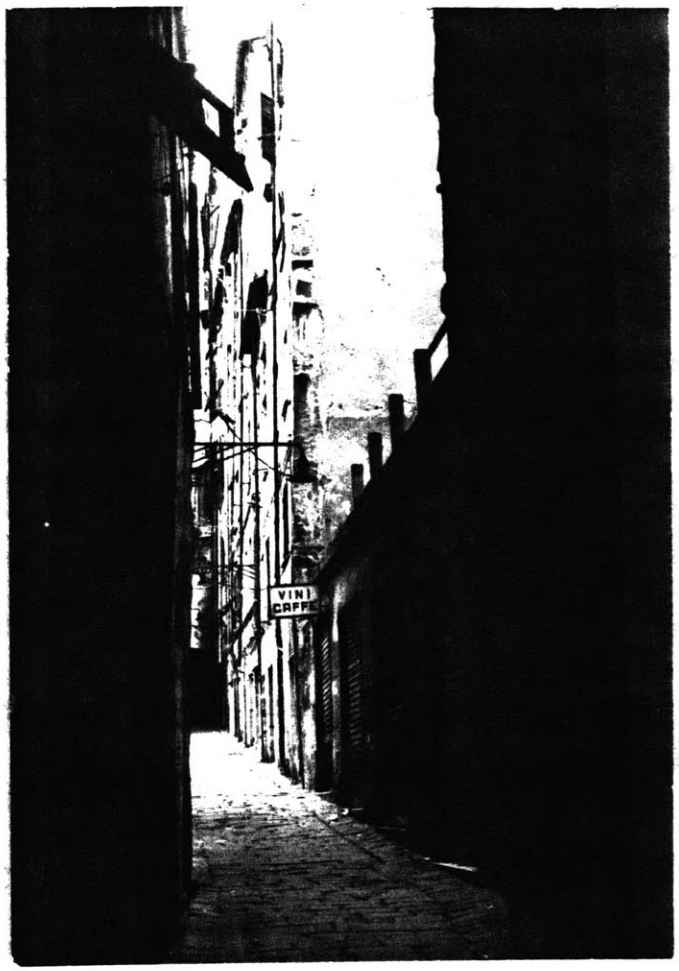
The area of the Vicolo, located between Via Balbi and Via Pre, was seen as a morphologically homogeneous system of linear, serially aggregated buildings, structured by the repetitive pattern of parallel vicoli running perpendicular to the two main streets which define the area. The narrow vicoli, which define, and are defined by the tall flanking building masses, formed a tight urban fabric which widened in two places to enclose particularly important spaces in the urban contect: Piazzetta del Pozzo and Piazzetta dei Trougoli de Brigida.

The system of streets flanked by residential building which attached themselves to the focal spaces of Piazzette del Roso was identified as another morphologically discrete sub-zone. The open spaces of this system were in part deliberate and in part resultant from demolition of the buildings which had defined the original spaces.



THE SYTEMS OF MORPHOLOGY AND OPEN SPACES


piazza dei trougoli
piazza durazzo
p. del pozzo
piazza s. carlo
Via
Balbi
Gramsci
Antonio
Via
piazza s. elena
piazza marinelle
piazze del roso


VINI
CAFFE

The system of Via Balbi was characterized as having a strong edge, well defined by a series of Palazzi on either side of a street which functioned as the main traffic link between Piazza del Anunziata and Piazza Aquaverde.

Finally, the fabric along Via Gramsci was characterized as one system of buildings which formed a screen facing the zone of the port.

During the second phase design work focused on the system of the vicoli and the morphological system revolving around the Piazette del Roso and comprised those parts of the system of Via Pre which were structurally joined to these sub-zones.

Work on the sub-zone of the vicoli was divided among four designers into projects which related to the proposed systems of access and use from the first phase.

The first project area comprised the series of vicoli which were proposed to be transformed into a new commercial pedestrian movement system linking Via Balbi with Via Pre, Piazza St. Elena, Via Gramsci, and the Darsena project. Three projects were located in an area of building and spaces designated as residential in character. The fifth project was part of the vicoli fabric which had been destroyed by World War II bombing and was designated in the proposal to be re-built to repair the urban fabric. This area formed one edge of the vicoli system and was flanked on its other side by a different building type and use area which included hotel and institutional structures.

Work on the sub-zone of the Piazzette del Roso was divided between two designers. One project concentrated on the system of spaces and the building which formed a proposed pedestrian link between the Piazza

dell'Anunziata, traversing the Piazza del Roso and an existing structure, and entering Via Pre. The other project focuses on the revitalization of the block of buildings between Piazzetta del Roso and Via Pre.

In defining the projects according to urban zones of morphological and functional continuity, the design of the buildings and the open spaces were projected together as a system of reciprocal moves where the form of the built space defined the form of the open space and vice-versa and where the movement systems and uses were considered within the context of the urban functional unit. In addition, during the design process this functional unit was constantly related to the systems of the other contiguous projects and to the initial guide of the urban scale proposals made in the first phase.

For the purpose of describing the projects, the design aspects of the urban system will be sub-divided into the discussion of the design generated from the structure and use of the buildings, and of design generated by the structure and use of the open spaces.

Design Generated from the Structure and Use of the Buildings

A general description of the existing building fabric was presented in the background section discussing the Area Pre. In addition to these general physical characteristics, a more detailed description of existing conditions in the buildings is necessary to explain the projected interventions for the re-use of the structures.

The three aspects of the building fabric most important for the understanding of the project are the structure, the aggregation of the structure, and

the vertical and horizontal circulation systems. Simply stated, the dominant structural system is one of load-bearing masonry and stucco, with timber and masonry or vaulted ceiling construction. Since all or almost all of the walls are capable of carrying loads, the building can be viewed as a cellular agglomeration of spaces which can be altered quite freely by the removal or addition of walls, given the limitations of the structure above and the spanning capacity of the timber members or vaults. In most areas there is a party wall pattern which defines a row type system; however, this is not always completely clear, and does not exist at all in areas where the buildings form blocks rather than linear configurations. Because of these characteristics of the building system, in the areas where demolition, destruction, or deterioration of the building fabric has occured the building fragments which remain can be structurally sound and capable of use for the foundation of new building.

The aggregation of the structure occurred in three spatial directions. In the areas of the vicoli and Via Pre there was a serial aggregation in a row type fashion continuous along the street in a double or single row, depending on the spacing between the structuring streets. In areas where the street spacing was wider, and the street length truncated the building aggregated to form a block of cells, with a less clear system of unit sub-divisions. In the areas of the vicoli, the unit of the building seems to be largely determined by the steep incline of the streets which made the buildable surface more adapted to incremental building which aggregated up the slope. Consequently, however, there is a considerable level difference between corresponding floors

from one building to the next. This variation between the floors of adjacent buildings limits the possibilities for breaking through party walls to create continuous units in the horizontal direction. Complicating this already confusing system of aggregation, in order to maximize land use, existing structures were added on to also by building up. These additions were often made in small increments as space was required without any consistent system.

The growth and aggregation of the building fabric has resulted in patterns of access, and systems of vertical and horizontal circulation which are characteristic of the area and which affect the use and re-use of the structures. Access to each building aggregate is almost always directly from the street. There is very little horizontal circulation and when it does occur, it is usually indirect. Vertical circulation is also characteristically haphazard and wanders upward through the agglomeration of the built spaces. This is expecially true of the upper floors of the buildings where the structural organization gets very loose.

Design for the re-use of the existing structures and the construction of the new building was guided by the desire to conserve, as much as possible, the historic character of the building fabric as described above. Ultimately, however, the need to improve the habitability of the building stock and the living conditions of the residents necessitated certain changes.

The average building height of seven floors or more requires the introduction of elevators. The obsolete or non-existent plumbing and garbage disposal provisions made the installment of service cores imperative. The configuration and size of the internal spaces

were often inadequate for habitation and required restructuring of the internal organization of the buildings to improve living conditions. The lack of light and air available to the building interiors suggested the need to restructure the building mass to improve access to the outside. Open spaces for communal or private use were rare in existing historic fabric. This again suggested the need to modify the historic fabric to accomodate increased access to outdoor space.

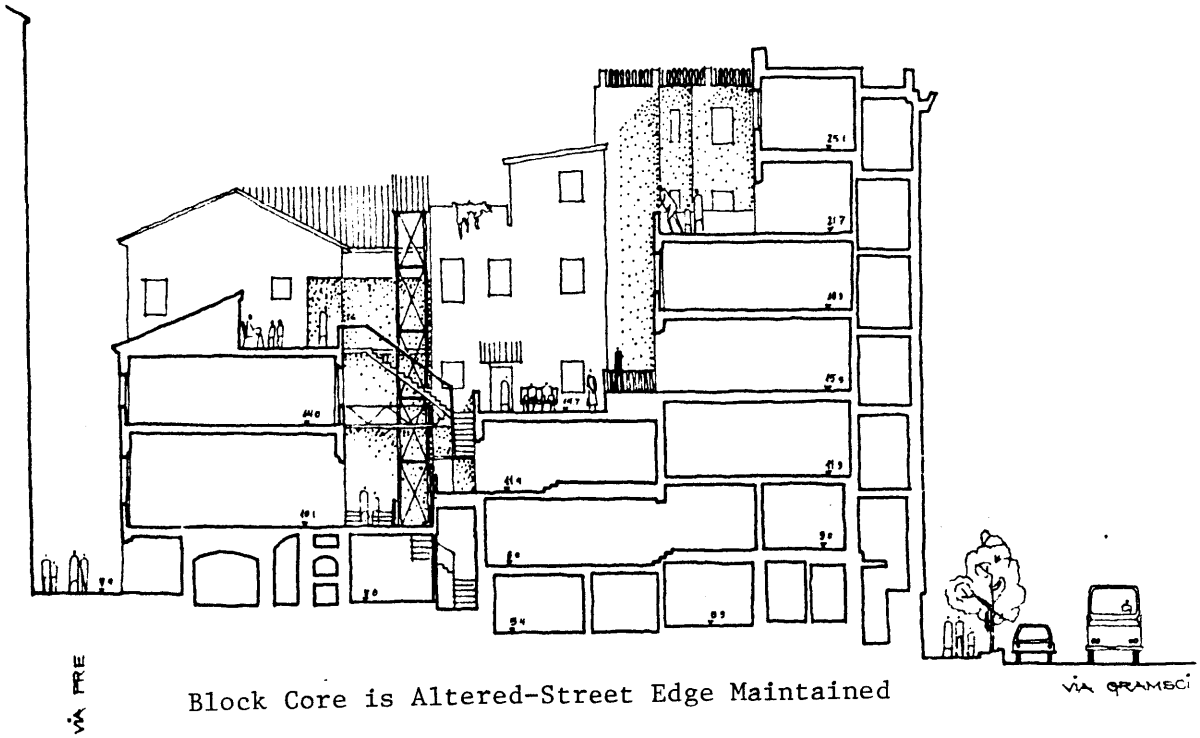
When modifications of the structures necessitated breaking away from a strict, formal preservation or reconstruction of the historic building type the designers attempted to carry into the changes the use significance of the building morphology. To inform the process of transformation, the design exploration began with observation to determine what the character of the building was in terms of how it functioned in its present urban context.

It was assumed that the way the existing built fabric was structured, aggregated (or was sub-divided for use), and was accessed was a product of, and also supported, the culture and society of the neighborhood and contributed to the texture and the rhythm of the life within the building and of the urban life of the area. Complicating a simple translation of these patterns of habitation into design was the fact that some of the negative aspects of the environment seemed to reinforce aspects of the community life which might be viewed as positive. For example, the paucity of private and semi-private outdoor space tended to make the social ife of the street and public spaces more intense and colorful because the residents had no other place to go.

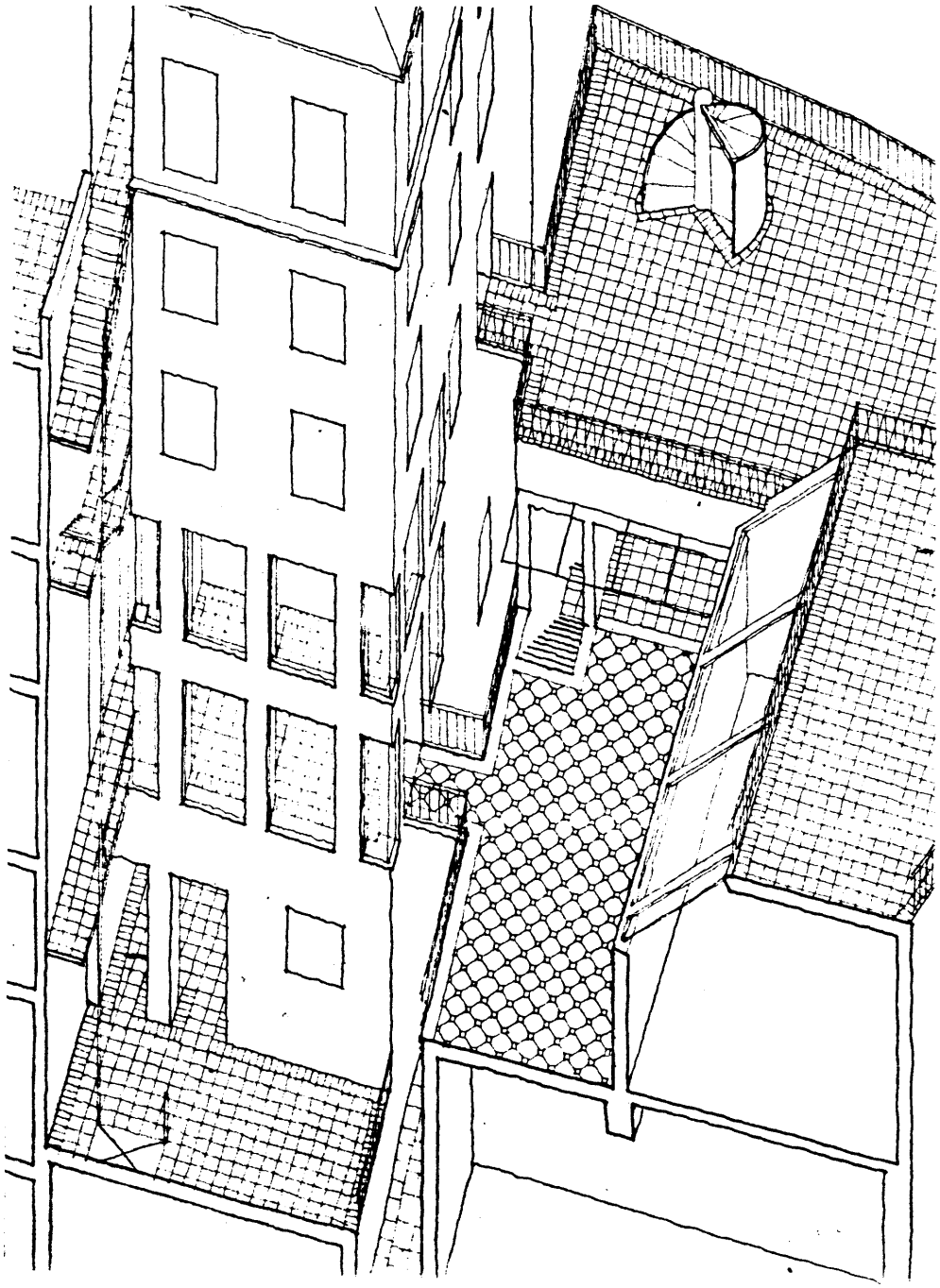
In these cases it became the intention of the design to provide choices for the residents with the assumption that increased opportunities without the destruction of existing spaces would not diminish an important, culture supported activity. Onsite observations continued throughout the design phase to inform the modifications of the building fabric and to help visualize the notions of the intervention proposals.

Summary of the Design Interventions

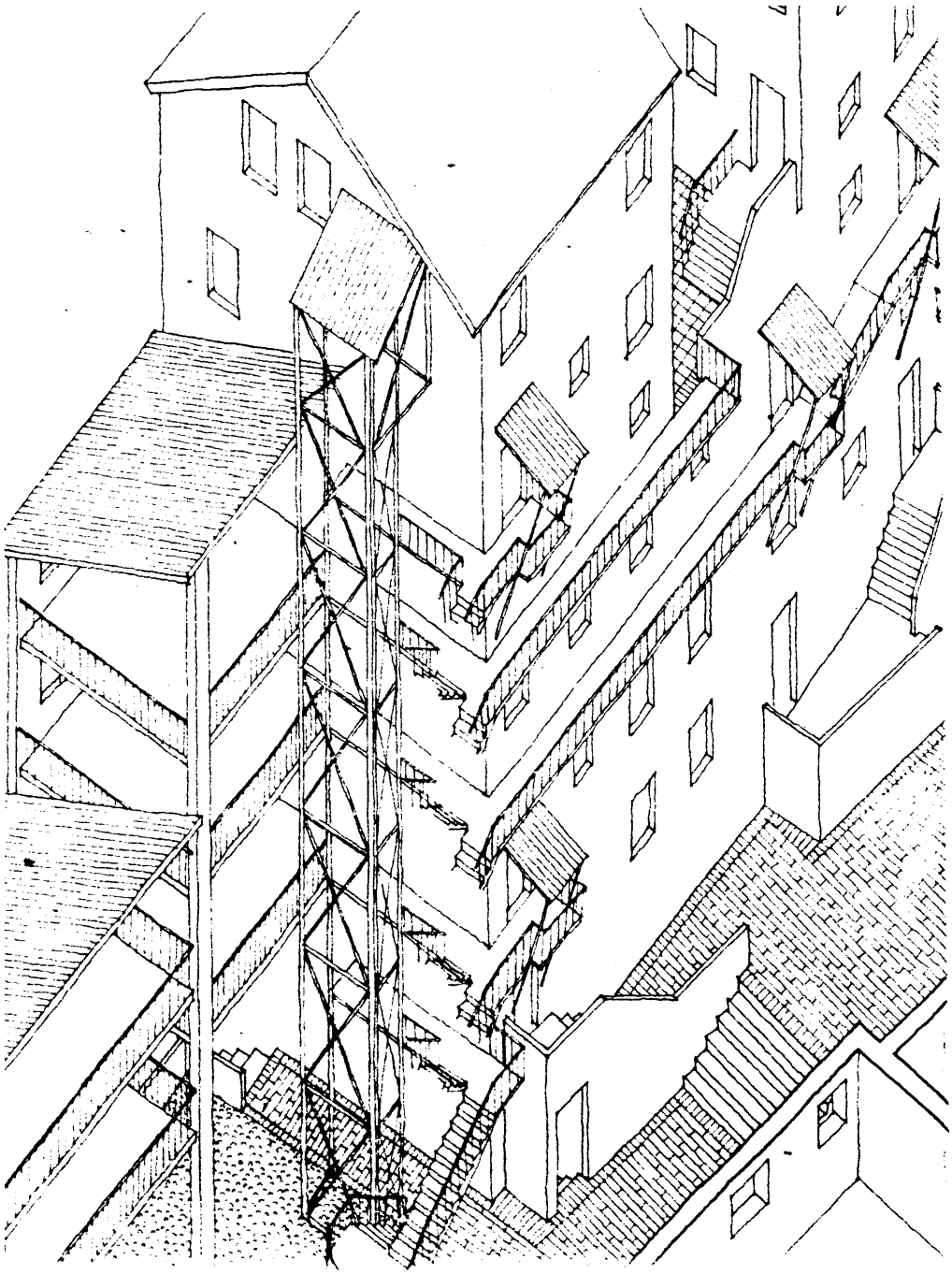
The design process tried to use as much as possible the context of the existing building conditions and patterns of use to develop a system of interventions which would introduce the needed architectural and urban improvements and yet disturb the historic fabric as little as possible. This intention was not only derived from the restrictions of historic conservation but also from the need to propose solutions which could be more easily and inexpensively built, could be constructed in phases so as to limit the displacement of inhabitants, and would work



Block Core is Altered-Street Edge Maintained



Design Explorations to Alter Roofs for Light Penetration



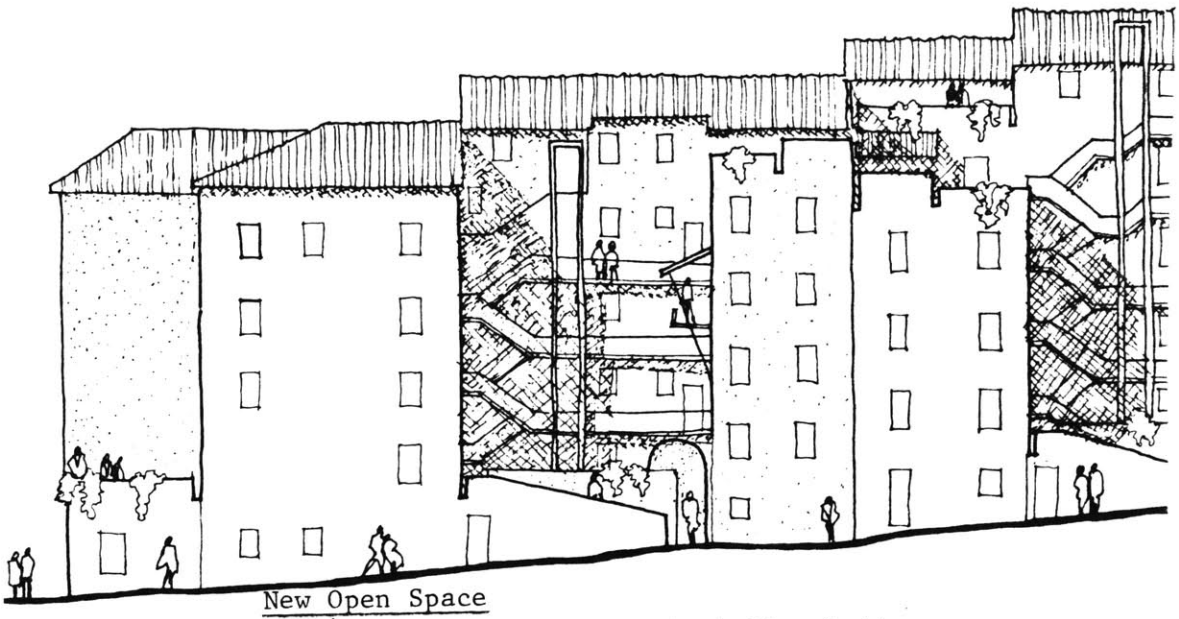
External Circulation Structure Linking to Existing Building

with the existing patterns of habitation and ownership to facilitate the rehabilitation process. With these intents and consequent to the variety of building conditions, the integration of elevators, plumbing cores, the restructuring of the living spaces, and the alteration of the building mass to improve ambient quality were designed on a case by case basis.

For example, the designs solved the problem of the addition of elevators in three different ways. When new construction was designed to replace already demolished structure or to reconstruct structure which was in poor condition the elevators were designed into the new construction and linked through horizontal circulation to serve the existing contiguous building. When sufficient external space existed or was created to provide semi-private areas, vertical and horizontal circulation were designed as a separate, external structure of elevators, stairs, and balcony walkways. In this manner the introduction of the modern access system would require only a minor disruption of the existing structure where it was necessary to access the units served by the system. This mode of intervention was particularly useful in the situations where the agglomeration of the units lacked vertical order and where there were level differences between the same floors of contiguous buildings which would prevent easy internal systemization for mechanized circulation.

In the situations where the existing urban fabric was of particular historic value, or extremely tight, with little space between adjacent buildings, and/or when the internal organization of the existing

Elevator Reference in Genoa



The Vicoli- Location of External Vertical Circulation

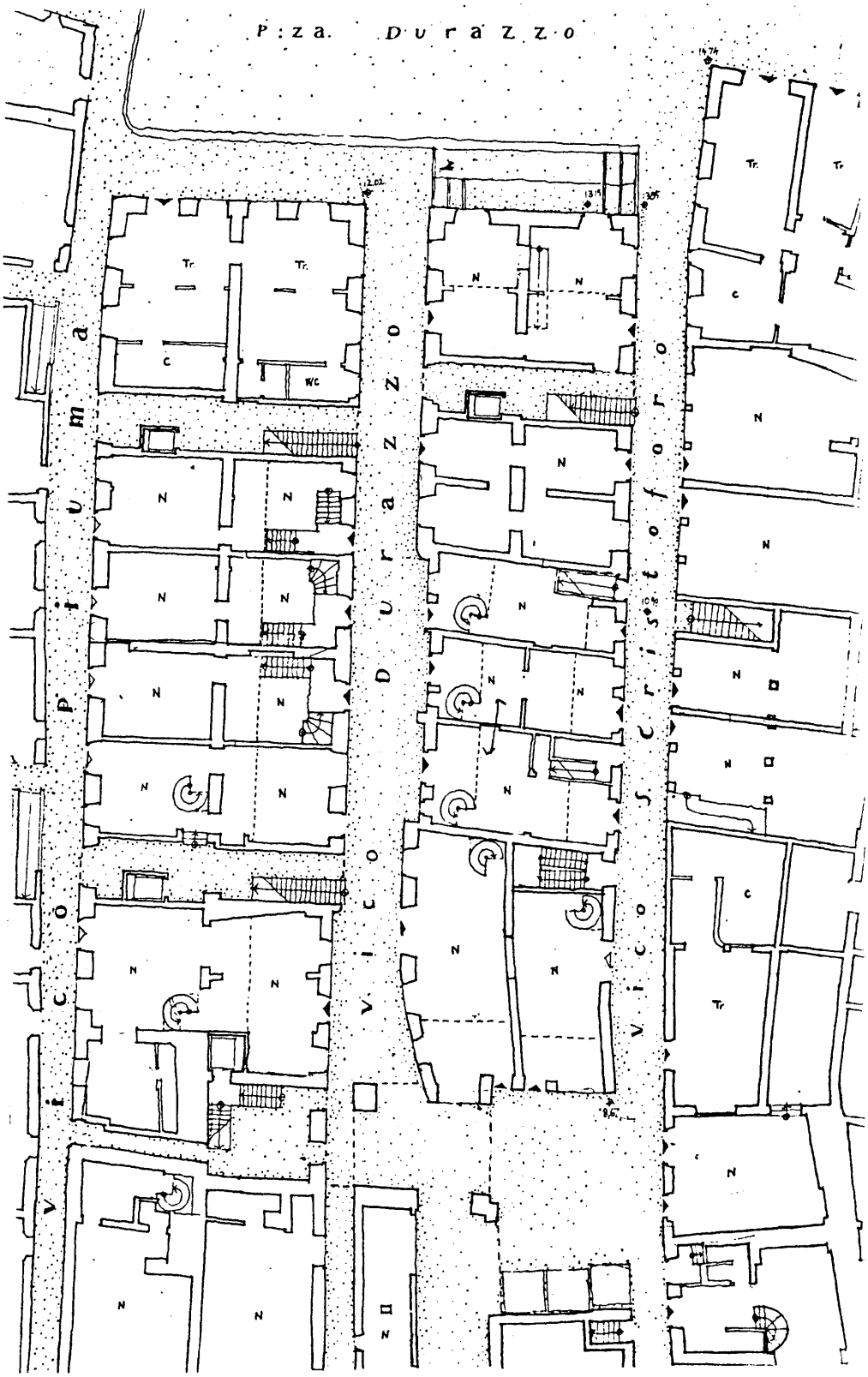
circulation was sufficiently aligned vertically, elevators were introduced directly into the building fabric.

While the condition of the structure and its formal composition indicated a first strategy for adding new vertical circulation cores, the manner of access to the building, the frequency of access, the number of units served, the definition of the new circulation types, such as the design of external structures, also considered existing patterns of form and their use in the area.

For example, given the constraints of economic need to maximize the number of units serviced by each elevator core, the cores were introduced as much as possible according to the existing pattern whereby each building block had its own circulation and access to the outside. In the case of the "new" system of access, the addition of a separate external structure was suggested in a Genovese tradition of adding light metal structures to the building facades to gain balcony space or to provide access from the street or another building to the upper floors of an adjacent building.

In general, demolished or degraded areas of the building fabric were used as opportunities to introduce needed change into the context. Through careful disection, removal and addition in these areas, living spaces were restructured, and building volume was altered to permit better access to light and air and to introduce outdoor space in the form of terraces and balconies. Because the buildings tended to "disaggregate" in a pattern which reflected their construction, as noted earlier, changes made to existing structures in this way tended to be in sympathy with the buildings' historic pattern.

Shop Space in Proposed Commercial Link



New building proposed as infill within an existing morphological context used a similar vocabulary of aggregation, massing, and roof definition to the adjacent structures.

The use of the building fabric was determined by three directives 1) existing use and patterns of use which were taken as a valid indication of what the future use should be; 2) indications by the Master Plan, the Comune, and the residents as to functions, such as social services, which were not adequately represented in the area; 3) proposed uses from the first phase urban intervention proposals which suggested functions and functional zones as part of the revitalization scheme of the area.

e design work in phase two was used on the one nd as the exploration of the physical possibility and implication of the programmatic directives and, on the other hand, as the means to provide detailed definition of the proposed functions in what was, initially, a more general zoning designation.

For example, in the case of existing use, there were residential structures in the area where the ground floors were sub-divided into living units. In the design exploration it was found to be nearly impossible to alter the structure of some of these buildings adequately to provide sufficient light for good habitation. These areas were designated to change use to functions less in need of good ambient qualities such as comunal storage, work shops which did not require a great deal of natural light, etc.

In the case of uses proposed by the Plan, the designs helped to both appropriately place the functions in the neighborhood in respect to the surrounding

use context, as well as to explore the capability of an existing structure to house the proposed function. When necessary, and possible, the design indicated the physical transformation of the structure to meet the programmatic needs. In situations where the existing structures were discovered to be unsuited to house the function, the designs for new building were utilized to introduce proposed uses.

Finally, the design explorations of the first phase proposals lead to a specificity and understanding of the physical solution which suggested use. For example, in one case a proposed infill structure formed part of an area designated to serve the university of the contiguous zone. During the design phase the building form suggested by the constraints of the site, and the in depth study of the context for design purposes, began to inform as to the specific use that would be appropriate in that site. The building was then more confidently described as a student center with auditorium facilities. The auditorium was proposed as a result of the discovered needs and the fact that part of the built space would have to have restricted natural light due to the physical constraints of the site. This last example shows how design began to determine planning for the future use of the area before there was a specific notion of that use.

Design Generated by the Structure and Use of the Open Spaces

The nature of the open spaces and their use in the area Pre were integrally related to the form and use of the buildings. As was described earlier, the pattern of the streets and open spaces through the zones in part defined the morphology of the building fabric. Simultaneously, the alignment

and profile of the buildings and their relationship, one to the other, shaped the space which was not built. For example, the section of the vicoli and its built continuity was a dominating formal characteristic of the area. Consequently, in the projects, areas which had been destroyed by World War II bombing were designed to reconstruct the characteristic vicoli pattern. In addition, in areas where the existing building mass was to be modified to improve access to light and to increase ventilation, continuity of the built edge was always maintained at the ground floor.

In general, there were three different types of open spaces existing in the area Pre. One type, mentioned above, was the result of the destruction of the urban fabric by war. The second type were the open spaces which were a deliberately created part of the urban fabric and had special architectonic significance in the way they were defined or had a special function in the area such as the market spaces. Some of these spaces had been partially eroded by the deterioration of the surrounding building or had been radically transformed by the demolition of building which had once defined the space. The third type were the open spaces of the movement and access systems: the via, vico, and vicoli. The projects proposed the maintenance, recuperation, restructing and re-design of these spaces. However, in addition to the existing spaces, design was projected for new pedestrian movement systems as cross neighborhood connections associated with new open spaces proposed in phase one.

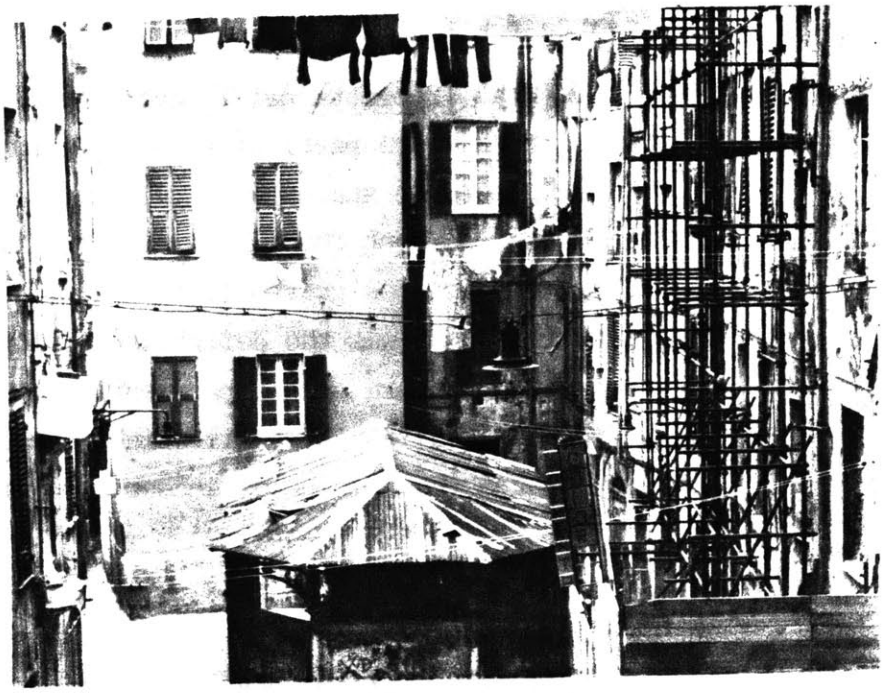
Due to the different morphological characteristics of the system of the vicoli and the system localized around the Piazza del Roso it is useful to discuss these area separately.

The System of the Vicoli

Within the system of the vicoli, three areas of intervention demanded different approaches: 1, the architectonic spaces of Piazzetta dei Trougoli and Piazzetta del Pozzo, 2, the open spaces of Piazza Marinelle, Piazza Tenedo, Piazza Durazzo and Piazza San Carlo, and 3, the vicoli themselves.

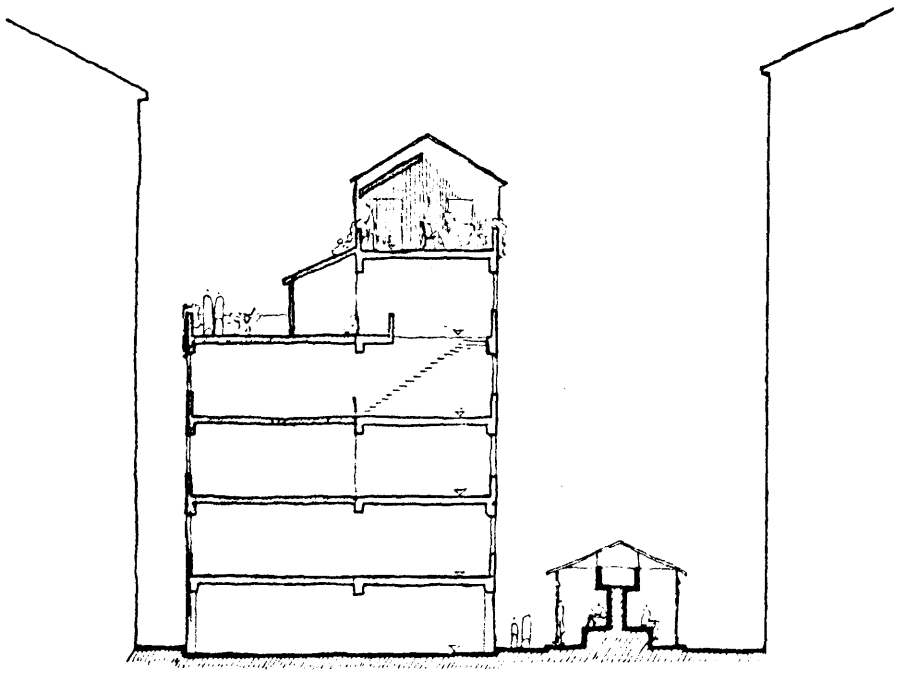
The Architectonic Spaces

Both the Piazzetta dei Trougoli and the Piazzetta del Pozzo were particular and strongly defined architectonic spaces with definite historic significance. As such the buildings which defined these spaces were designated to be strictly restored and preserved as was the definition of the enclosed ground and the pattern of the pavement. Concerning the surrounding buildings, their heights, alignments in plan and their means of access into the spaces were



to remain as existing. The fenestration patterns and the detailing of the facades were also to be restored to good condition according to the present state.

For example, where it was necessary to create physical connection to these spaces for the proposed cross neighborhood pedestrian links access was made through existing doors in the facades without alteration to their size or construction. Consequent to the decision to maintain these spaces and to keep the full building height and existing window openings of the buildings defining them, any modifications of the enclosing structures needed to improve internal living conditions had to be designed to face the other side of the building block which fronted on the vicoli. The designs were able to use the double row aggregation of the buildings to complete the one row which faced the Piazzetta, while modifying the row behind to create needed openings in the tight urban fabric. In this way the creation of a false, non-functioning facade was avoided.



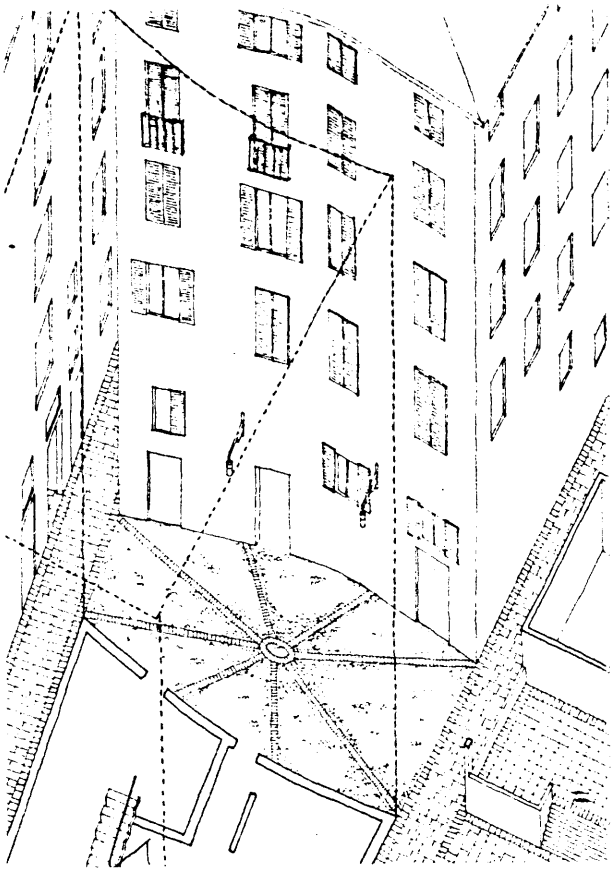
Changing the Building Profile Away from Piazza dei Trougoli

The uses of these open spaces had been related to functions now obsolete in the area. Piazzetta dei Trougoli had as its main focus an outdoor public wash trough which had been the gathering place of the local women to do their laundry. Old postcards can still be bought which show the laundry colorfully suspended between the facades of the Piazzetta to dry. The laundry trough as existing was unuseable, filled with rubble from the work on surrounding buildings. The Piazzetta del Pozzo had apparently been the location of a neighborhood well.

The re-use of both spaces was considered from the standpoint of their past uses, the uses of the surrounding building, existing or proposed, their formal structure and the way this related to the surrounding fabric, and their possible transformation which would result from proposed new cross neighborhood linkages.

Although the literal past function of Trougoli was obsolete it was trasitionally significant to the area residents and to the city as a whole. In addition, the Piazzetta would continue to be important as an open space for the surrounding residential neighborhood where outdoor space was scarce. Finally, Trougoli was an integral part of the movement system connecting via Balbi to Via Pre. As such, the project proposed the restoration of the physical space as being sufficient to reinstate the piazzetta as a major gathering place in the neighborhood. The existing washing troughs were explored for possible transformation to a more appropriate modern use, such as an information kiosk, seating, or a fountain. The additional access to the space from the proposed cross neighborhood pedestrian path would reinforce the space as a neighborhood gathering place.

Piazzetta del Pozzo Existing



Piazzetta del Pozzo as an interruption in the linear building fabric, was an existing neighborhood link between two vicoli. In the project it became an integral space in the proposed intra-neighborhood pedestrial movement system. Programming of special uses were not considered, since existing activities in the surrounding buildings resulted in the heavy use of the space for the outdoor work of the artisans, and neighborhood gathering. Consequently, it was considered more important to preserve the simplicity of the space and its unusual form.

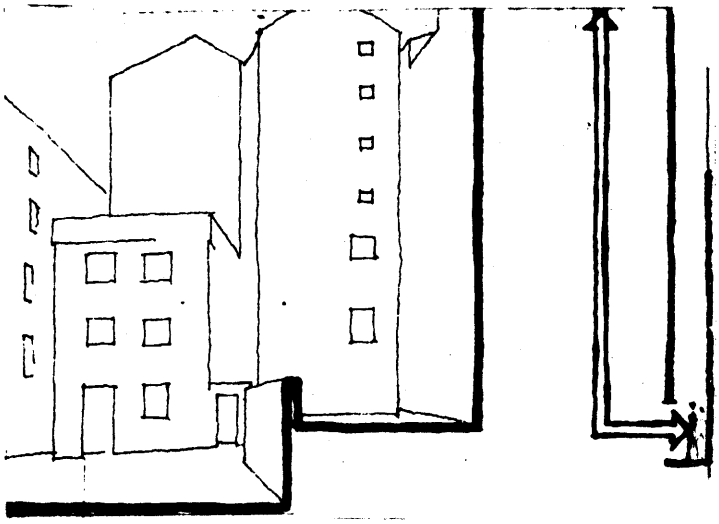
The Open Spaces

The existing spaces of Piazza Marinelle, Piazza Tenedo, Piazza Durazzo and Piazza San Carlo, although existing as defined urban spaces in the

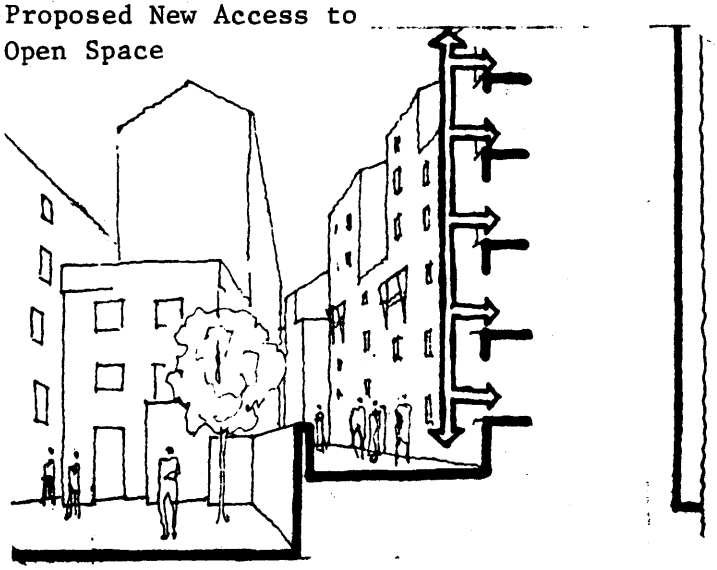
fabric, were formed as a result of the truncation of the system of the vicoli when via Balbi was constructed and were much less formally defined then the other two piazzette. These spaces offered the opportunity to provide outdoor space for the addition of amenities and new functions needed in the area. As such they were redesigned and restructured to become an integral part of the functioning of the buildings at their edges.

For example, working from the existing conditions of the Piazza Marinelle which was divided into two zones by a level change, the raised area which was already associated with and used by the residents

Piazza Marinelle Existing
Center Building to Be Removed for Piazza



Existing Building Access
Proposed New Access to Open Space

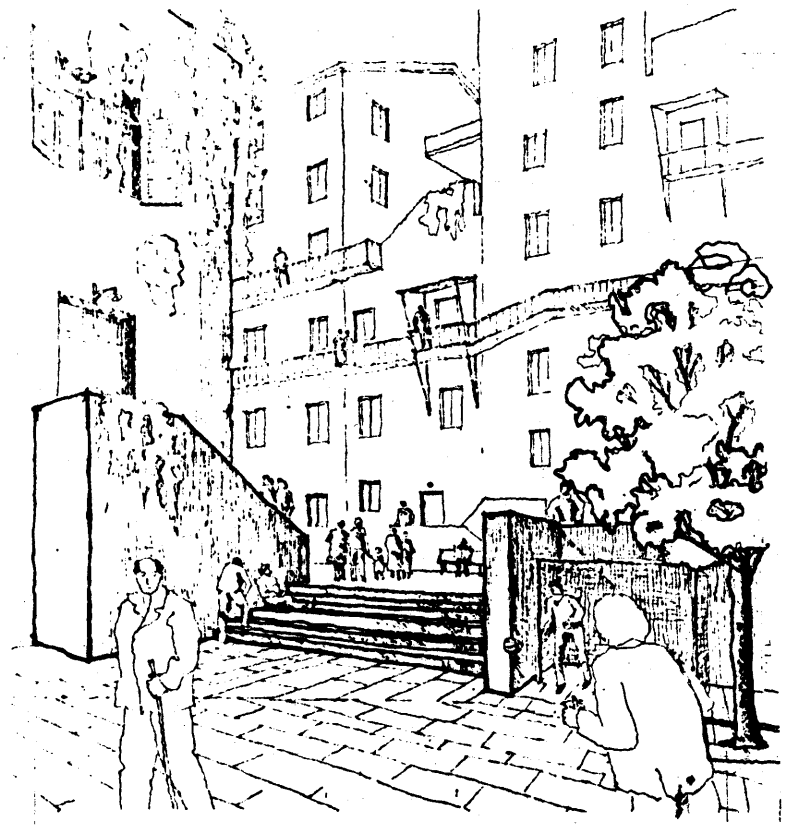


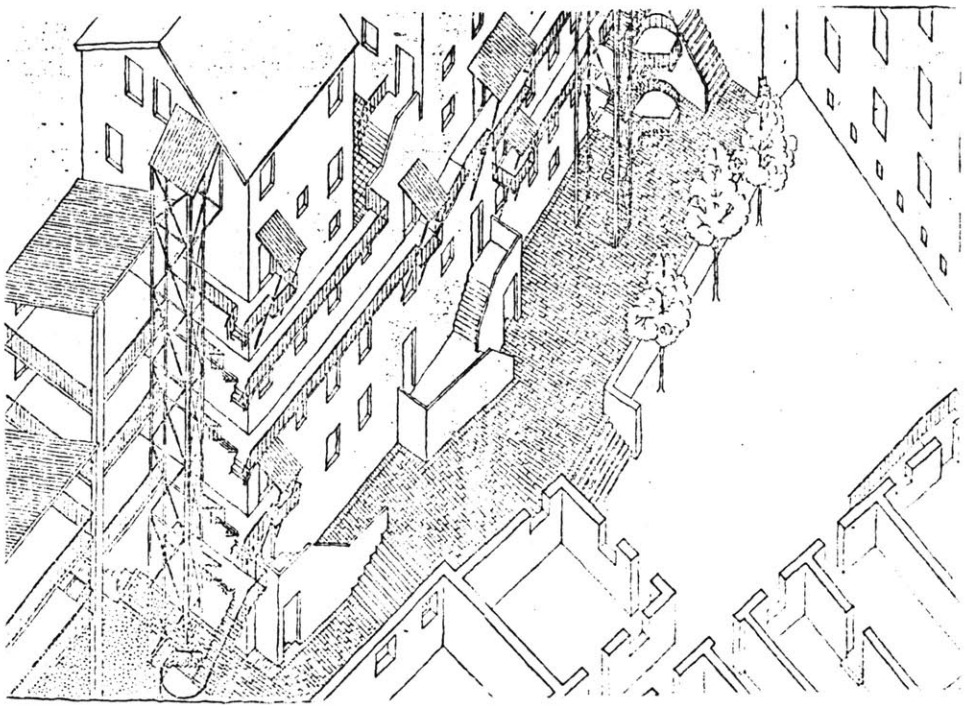
of the bordering residential buildigns was expanded in the designs by the removal of deteriorated structure and brought in between two residential building rows to create a semi-public zone. Supported by the definition of the level change, this area could function differently than the rest of the Piazza. As such, it was used as a free area to construct the external vertical circulation system proposed to house the new elevators for the buildings at its edge. In being strongly linked in this way with

the access to the residential buildings, it became a transition zone from the public realm to the private and provided needed outdoor space to the buildings residents.

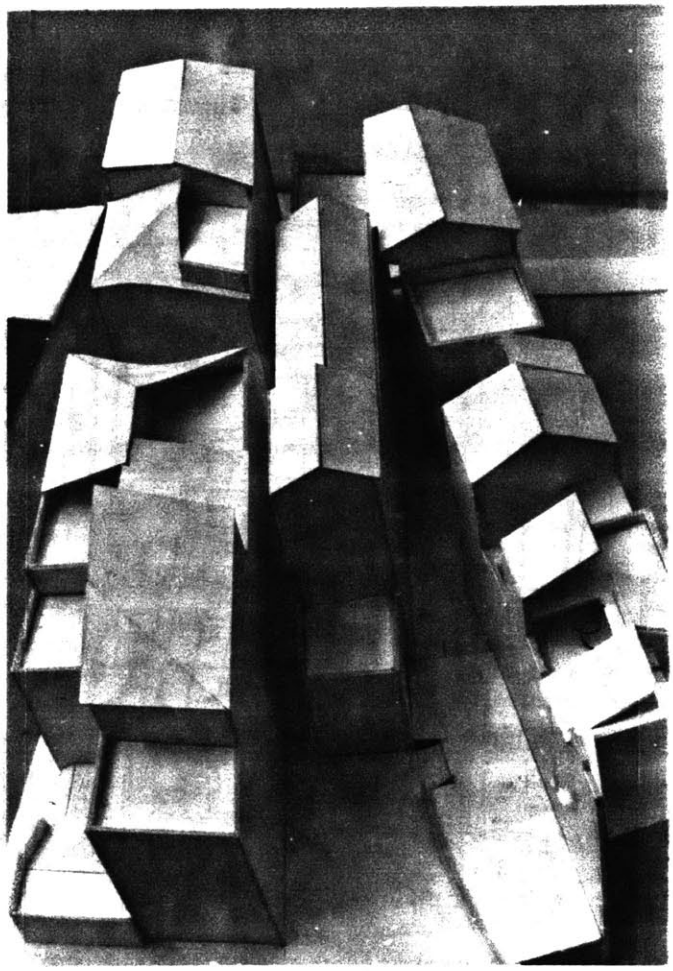
The lower level of the piazza was directly linked to the vicolo of which it was an extension. Being more related to the public realm, it was a space which could be used for more public activities. The project took advantage of the availability of this space and its public nature to design commercial uses for the ground floors of buildings with access to the spaces. These included a restaurant and artisan shops. The floors above remained residential.

Pedestrian View-P.Marinelle (Proposed)

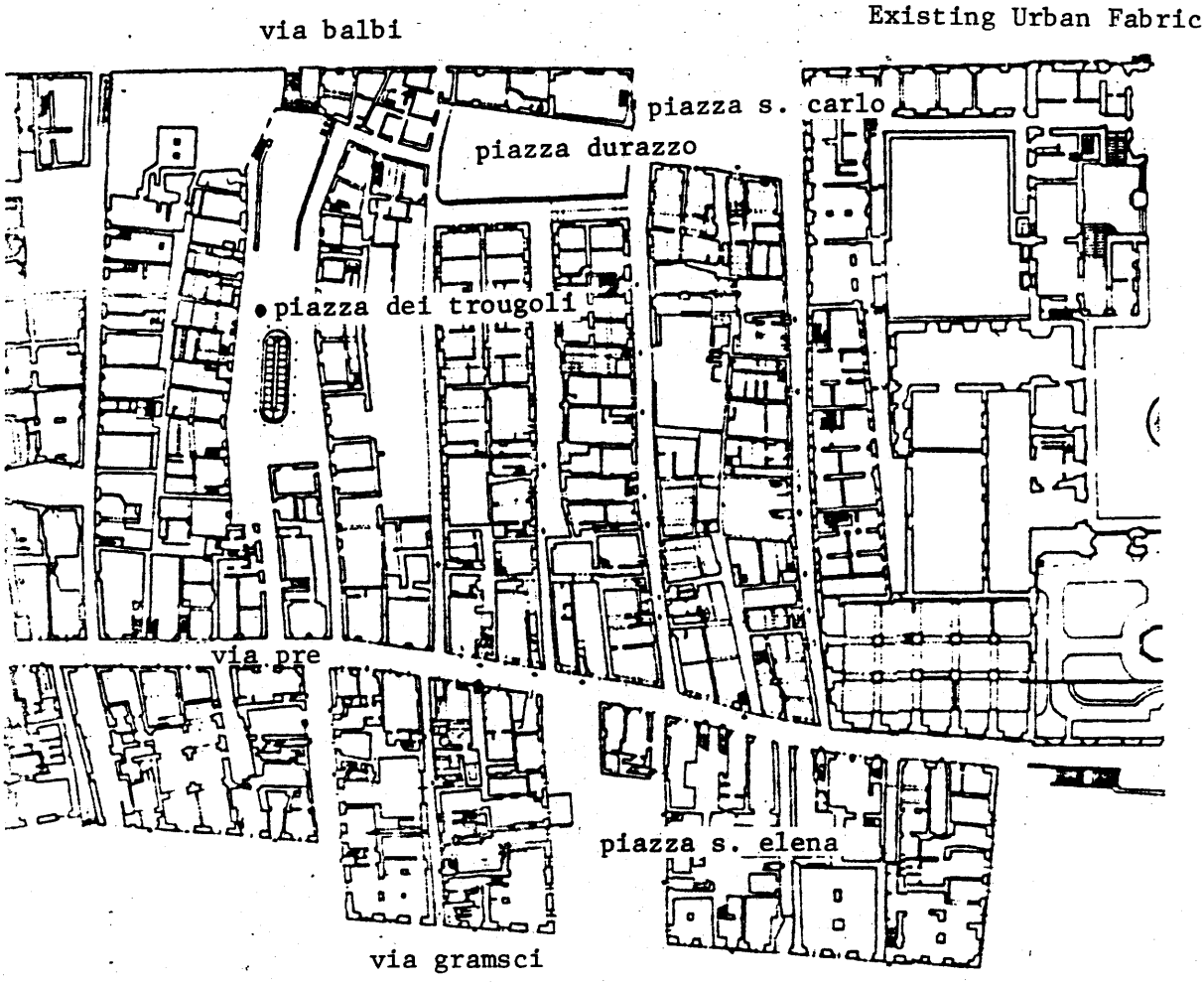




Axon.& Study Model P. Marinelle

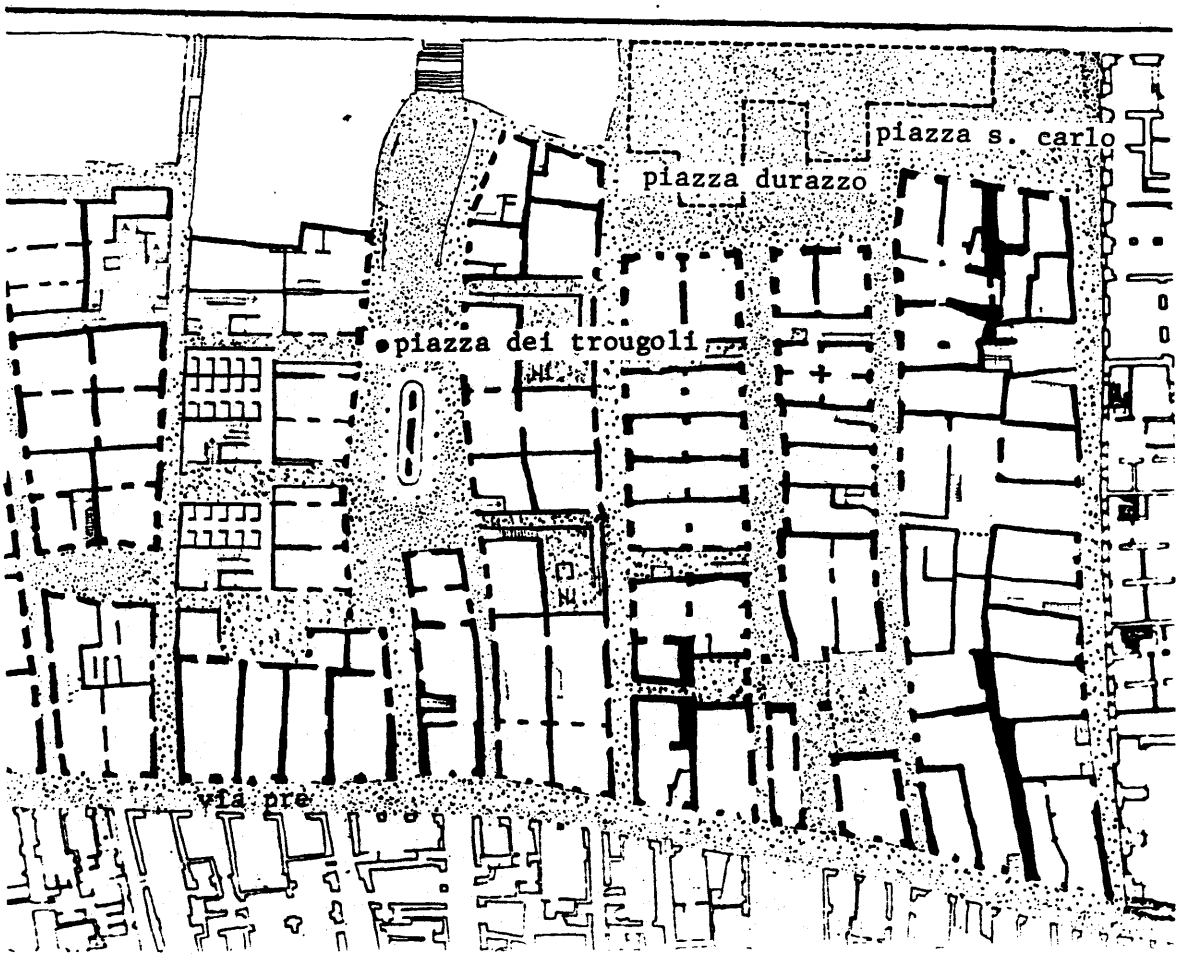


Another different example of redesign for the re-use of this type of urban space remaining where the fabric of the system of Via Balbi joined the area of the vicoli were the open areas of Piazza Durazzo and Piazza San Carlo. Piazza San Carlo opened directly onto Via Balbi. Piazza Durazzo was diagonally linked to Piazza San Carlo, but was further defined by a new low rise commercial structure which separated it from Via Balbi. These two Piazze formed the main access from Balbi into the commercial link connecting Via Balbi to Via Pre, the market of Piazza San Elena, and across Via Gramsci and the elevated highway to the Darsena project, which formed part of the first phase plan to increase public access and movement across the zone of Pre.



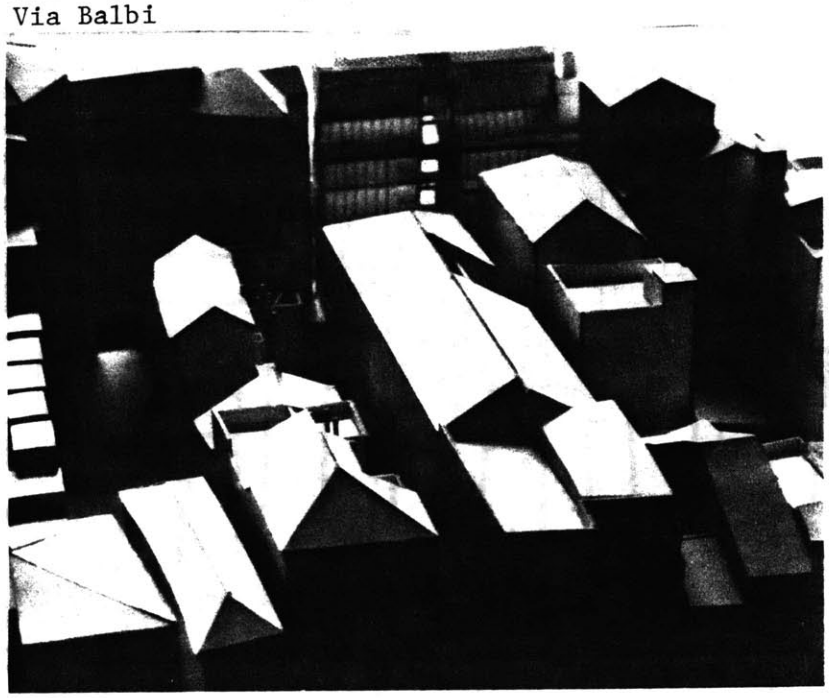
As such, the Piazza San Carlo was left open to Via Balbi to function as a gateway to this area. The existing commercial uses on the ground floor of the surrounding buildings were reintroduced into the design projections. Only the surface of the piazza was re-defined to permit direct access and continuity of the vicolo which joined directly with Via Balbi. During these design explorations, the first phase proposal to provide a pedestrian overpass across Balbi to link Pre with the area above was abandoned as being too disruptive to the visual continuity of Balbi.

Redesigned Fabric



The Piazza Durazzo, however, existed as the back lot of a modern structure facing Via Balbi. This structure was out of character with the area, but also did not respect the monumental pallazzi which defined Via Balbi. Consequently, it was proposed that this building be demolished. In this way the definition of Piazza Durazzo and its re-use was explored through the re-design of this important building. The proposed new structure was designed as a screen. On the one hand it was to reinforce the continuity of the building along Balbi, to respect the building heights, the rhythm of the fenestration, etc. On the other hand, it was designed at the ground floor so as to reinforce pedestrian movement into the area along the traditional paths of the vicoli. The design for the open space continued the pattern of the vicoli through the building.

Working Model-Background New Building on Via Balbi

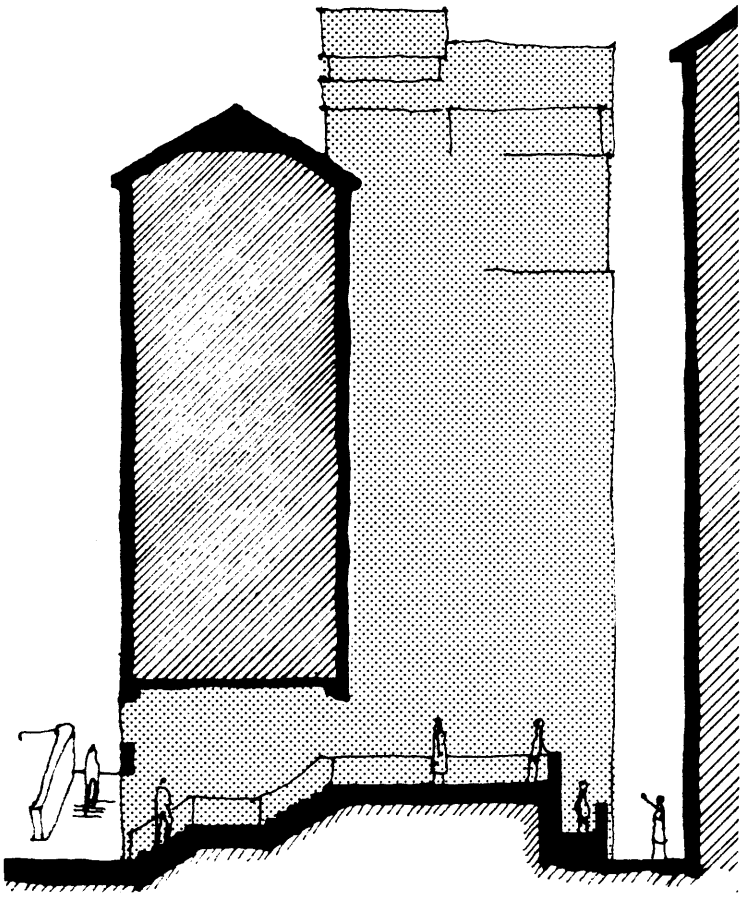


Using the grade change from the vicoli to Via Balbi, a level was defined to associate with the new structure, which was separate from and further defined the edges of the vicolo that bordered the adjacent buildings of the historic fabric. In sum, the form and function of the built and open space were designed together to augment the transition into the area and to reinforce the commercial axis which was introduced.

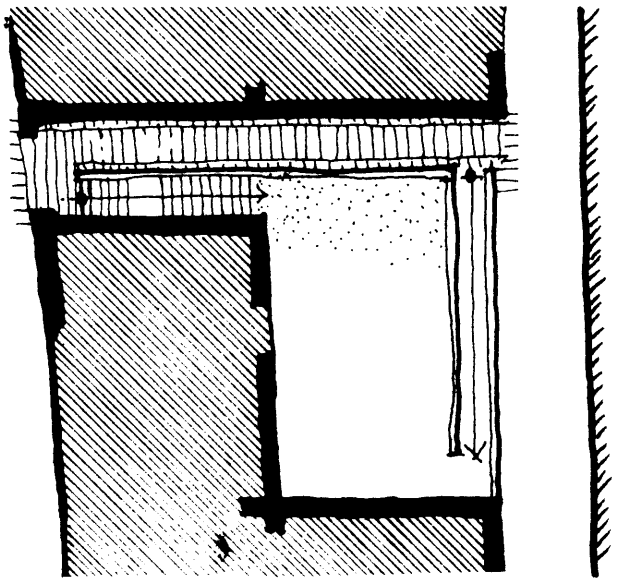
The Vicoli

Design explorations of the vicoli for the area which derived its morphology from this system of parallel streets, involved balancing needed change for the defining buildings with the intent to maintain the characteristic built continuity and street section. These two goals often conflicted. For one, the characteristic street continuity without any interrupting cross streets meant that the vicoli were isolated one from the other. The resultant fragmentation of the neighborhood seemed to contribute to the dangerous, alley like conditions of the vicoli. Therefore, study had projected the creation of a new pedestrian movement system cutting across the strong, one-directional system to link the vicoli of the area together in an intermediary zone of communication between Via Balbi and Via Pre. The designs explored the making of this system in such a way as to prevent the destruction of the dominance of the existing urban fabric.

Secondly, the deep and narrow section of the streets which gave the vicoli their characteristic canyon-like structure had to be modified to admit light and air as has been stated previously. In the discussion of the building fabric, it was noted that



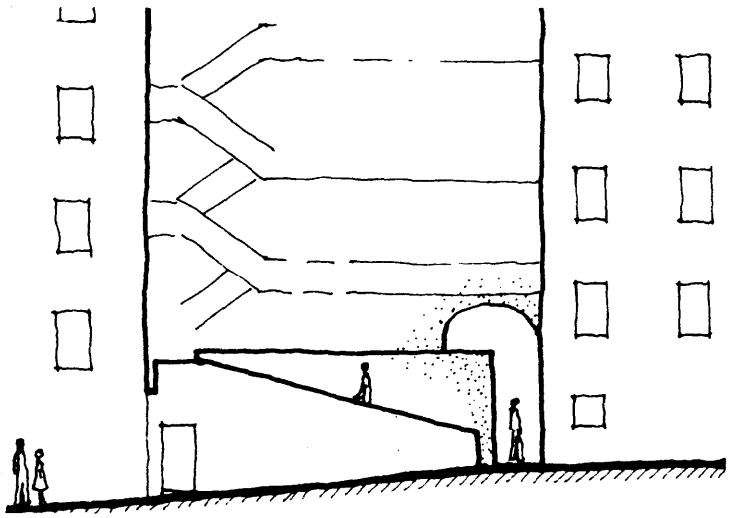
Section & Plan-Pedestrian Passage
on Vicolo



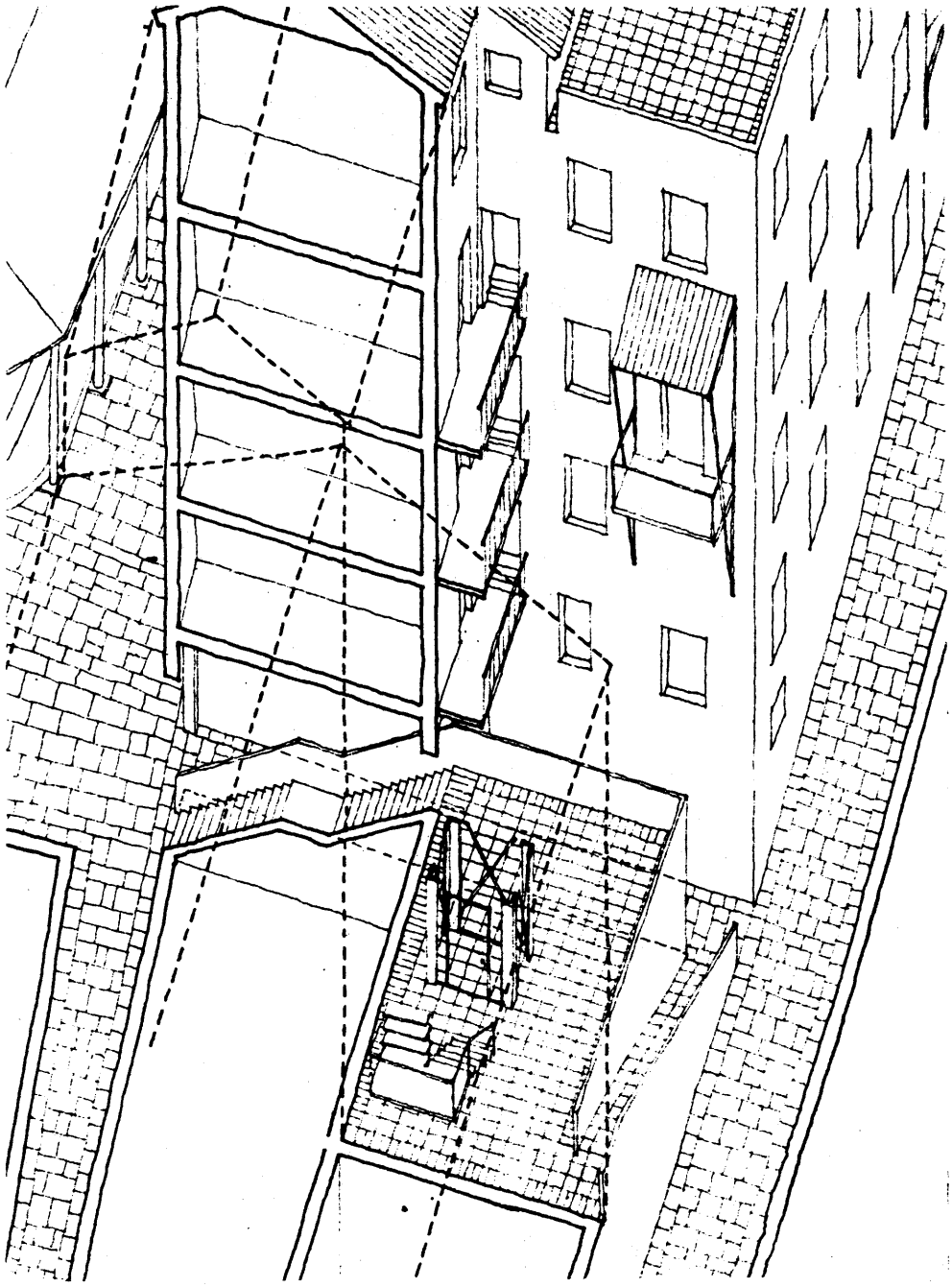
the existing condition of the structure and the presence of demolished areas afforded opportunities to restructure the built form. This restructuring was a reciprocal process of design between the re-definition of the building, the restructuring of the vicoli, the definition of the semi-public spaces and the pedestrian network moving across the neighborhood and the accomodation of associated functions.

For example, in the zone where the building fabric had been completely destroyed, the Master Plan of the City had planned green space. In context, the projects proposed the re-building of the urban fabric and the creation of an urban piazza structured so as to define the vicolo pattern and yet accomodate the need for open space.

The definition of new open spaces introduced into the urban fabric of the vicoli were consistent in concept and as such can be described as a system of interventions. The open spaces were designed as part of the built fabric and were separated from the vicolo by a level change and a wall. Entry to the space was indirect and off the new pedestrian pas-



Axon- New Open Space & Passage



sage. The level change served to continue the built edge of the vicolo as well as to define the use of the space as semi-private and associated with the elevator access to the building.

In order not to disrupt the continuity of the vicolo, these spaces were introduced asymmetrically on one or the other side of the vicolo so that at least one edge of the street remained to define the original building height and facade. In addition, the spaces were kept to a minimum number and size. They were introduced according to the aggregation of the building, usually replacing two to three rows of the previous structure, and being separated, one from the other, by at least three rows of built structure. Usually no more than two such breaks in the fabric occurred on each side of the vicolo.

The design of the pedestrian network across the building fabric connecting the vicoli was made by penetrating through existing or re-built structure, as enclosed passages, totally different from the street, with their access made through doors or portals. In this way the built continuity of the vicolo was uninterrupted by the intrusion of the new system. The passages were always associated with access to the building through which it passed or to the adjacent semi-public space in order to reinforce their active use in the area. In the zone of the vicoli projected as a commercial link, the passages were designed to include retail and restaurant display space to reinforce the nature of the link.

Additional private and semi-public open spaces that were needed in this area were designed into the upper floors of the buildings and accessed from the vertical circulation cores. In this way it was unnecessary to further erode the urban fabric.

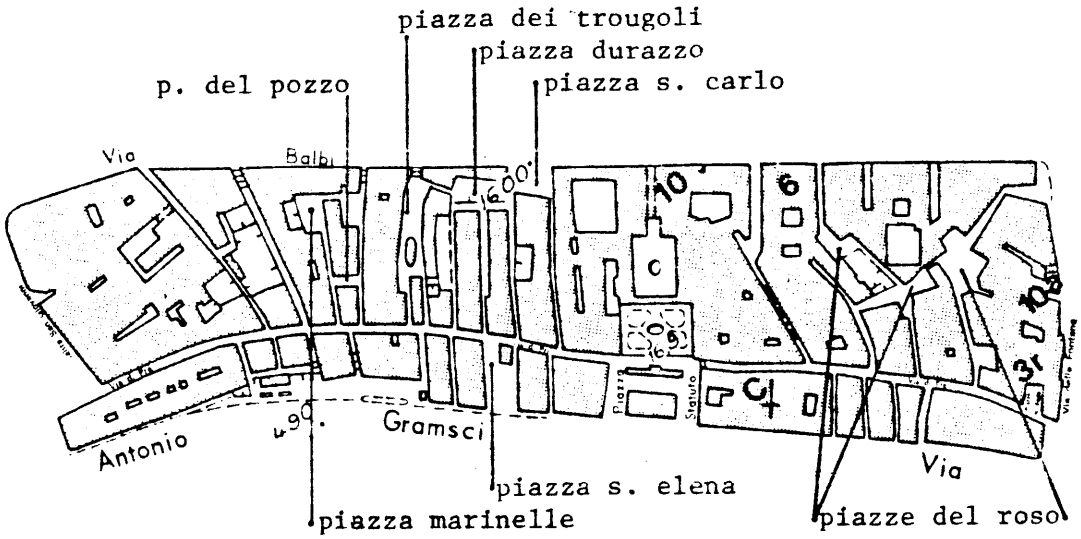
P. del Roso-Toward Proposed New Connection

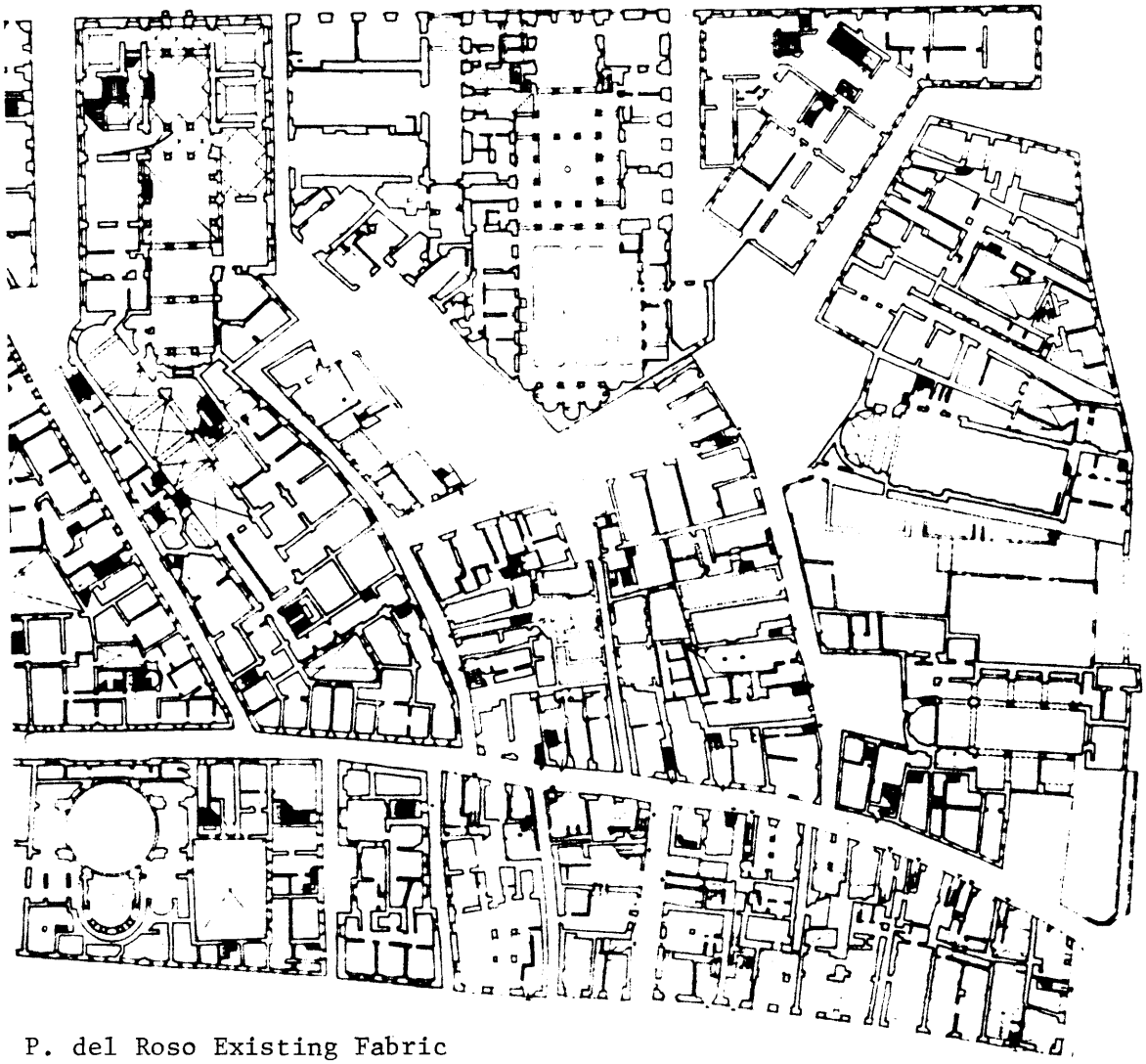
P. del Roso-Toward Proposed New Passage

The Area of Piazza del Roso

In the area of Piazza del Roso the design explorations of the open spaces involved the reformation of a progression of spaces and the creation of a new internal passage proposed as a link from the Piazza Nunziata to the Via Pre. The Piazze del Roso were originally a group of three interconnected but separately defined urban spaces which formed the focus where directional shifts of the urban fabric came together. These spaces also formed the transition between scales and use in the area from the institutional, monumental scale of the university palazzi to the residential scale of the vicoli. After

View From P. Nunziata Entrance





P. del Roso Existing Fabric

the war the piazze had lost their architectonic definition due to the destruction and modern alteration of part of the building fabric which had built their perimeter.

On the one hand, projections for these piazze involved the re-design of the buildings which would restructure the enclosure of the spaces. On the other hand, the restructuring was directed toward the emphasis of the piazze as a sequence of spaces which directed pedestrian movement from the contiguous urban node of Piazza Nunziata, diagonally across the zone of Pre in order to increase access into the area.

The intent to create an urban connection to the area resulted in a solution which was not a literal reconstruction of the action piazze forms and uses. First, three interventions to the building fabric were designed to reconstruct and alter the spaces which emphasized the intended diagonal movement. Second, new connections were made to the spaces. A public passage was projected as an extension of the spaces to link them directly with Via Pre. A new connection was made from the garden of a university building to the space. Third, the new uses introduced in the re-designed buildings were related to the university which fronted on Via Balbi creating a strong use linkage.

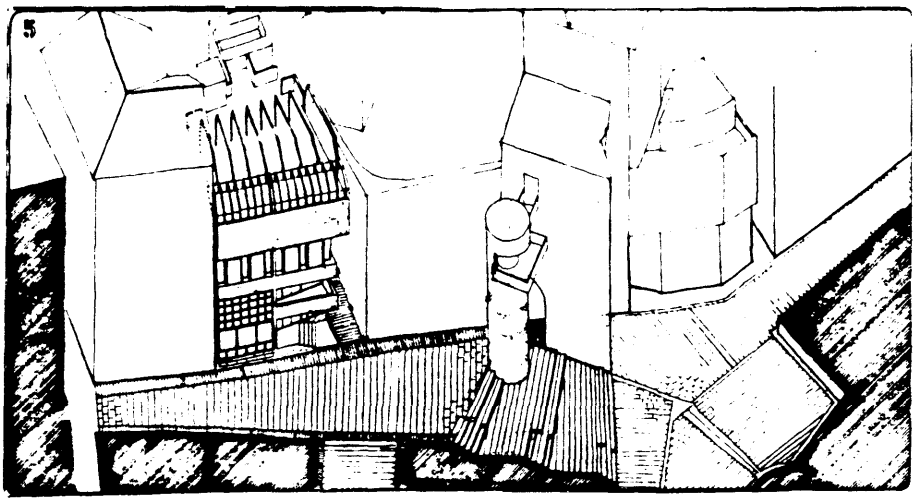
Redefining the Urban Spaces and the Creation of a Link.

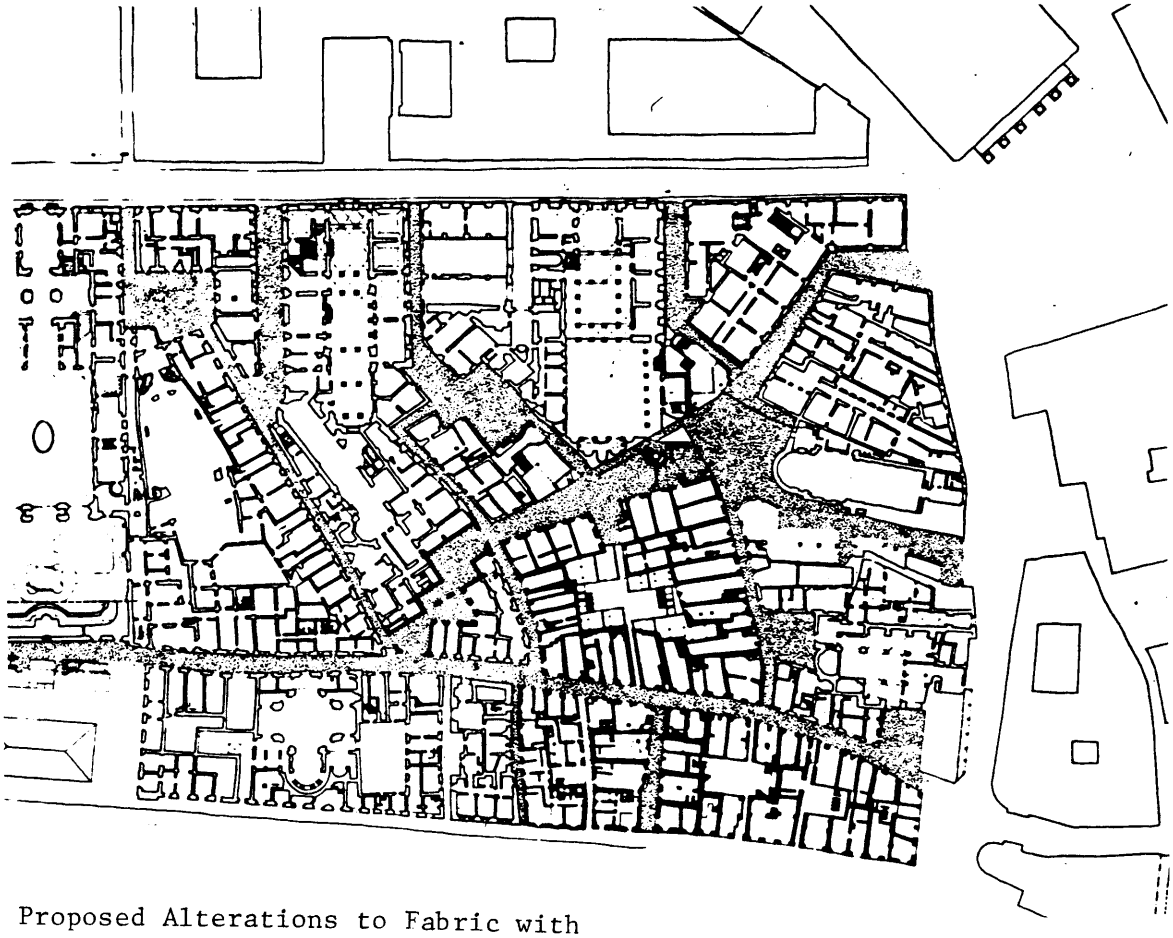
The first intervention to re-define the urban space was the design of a structure projected to replace the building which had separated the upper Piazza del Roso from the lower. The approach of this design was conservative in its respect of the previous

building alignments in the piazza and along the vicolo, of the existing heights of the adjacent structures and of the means of access from the upper piazza to the lower which had existed under an arch structure. It, however, broke away from the traditional form of the surrounding buildings in directing a very active and open facade toward the piazza. The design of this facing elevation, to include a main entrance to the new structure and larger than traditional windows, was projected to reinforce the activity of the space as well as to create a more lively street edge along the desired direction of movement.

The second intervention infilled part of the extension of the Piazza del Roso. The new building actively reformed the piazza to make the entrance to the vicolo connecting the space to th Piazza Nunziata the largest and most direct access. This intervention, again, projected a very open facade to face toward the piazza.

Axon. P. del Roso Space & New Buildings





Proposed Alterations to Fabric with
New Connections

The third design intervention removed most of the built separation existing between the Piazza del Roso and the connecting piazza in order to open up the space visually to the proposed direction of the primary movement. The built separation was replaced by simple grade changes to define the original piazze forms.

New connections made to the piazze had two intentions, one to create the new urban, the other to reinforce the projected new uses of spaces. The first connection was made as a public passage through an existing large scale structure which intruded into the morpho-

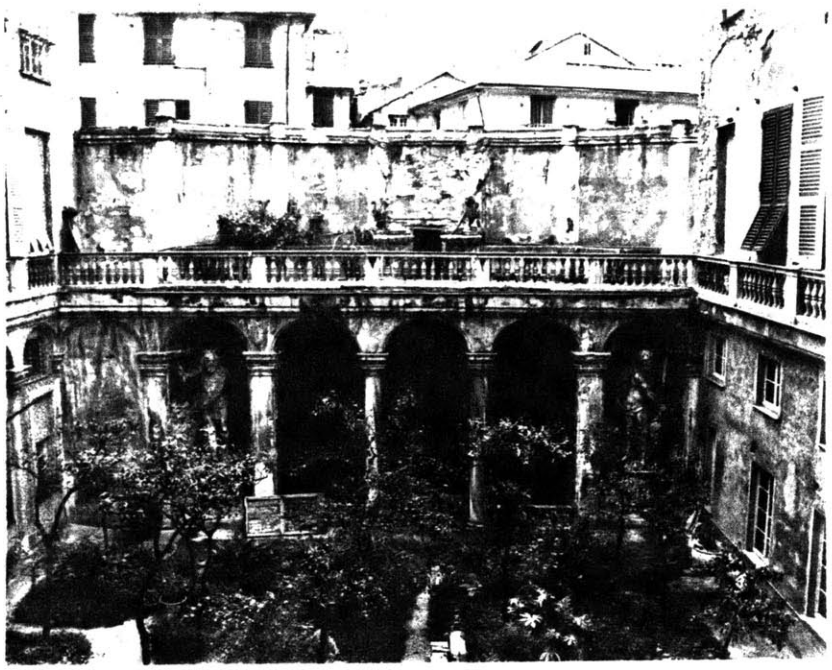
logical system of Piazza del Roso and thus permitted a direct connection from the spaces to Via Pre and a knitting together of the urban fabric of the two sub-zones.

The passage was expanded in order to accomodate uses such as small scale vanding and social spaces which would support it as a major link.

The second connection was made between the garden of a university building to the Piazza del Roso.This connection was of a smaller scale,meant only to create an opportunity for direct use of the spaces by the university and to reinforce the proposed uses for the re-designed building fabric.

Plans for the future use of the area of Piazza del Roso were determined by the existing uses of the nearby areas and of the area itself, the strategy to overlap the uses of the near zones with the existing uses to create a link between the surrounding urban context and the area of Pre which would

Garden of the University Above P.del Roso



reduce the isolation of the area, and the physical restraints of the site which suggested building types adaptable to certain uses in accord with the initiatives above.

In the first phase, the use of the area was projected as an integration of university uses generated from the zone of Balbi, and residential uses generated from the area of Via Pre. In the second phase, the infill structures, projected to be pieces to reform the spaces and yet to have their own identity, developed a specific program in the design explorations.

The Urban Scale Projects

Introduction to the Project Areas

The first phase of the project had indicated that the recuperation for the area of Pre could not be accomplished through a simple reparation of the building stock. The success of the restoration and upgrading of the area was dependant upon a strategy at the urban level to reconnect the area with the larger city. The barriers seen as the major reasons for the area's isolation were cited for proposed projects of reconnection.

The second phase of the work identified two sites outside of but contiguous to the Area Pre for active intervention, and developed design proposals for their future planning and physical transformation. The first site, an important transportation node of the city, the Piazza Aquaverde at the main train station, located at the west end of the area, was identified as a major obstacle for pedestrian movement and access into Pre due to its congestion and poor organization. The second site, known as the Darsena or old arsenal of the port that had once been the waterfront of Pre before the construction

of Via Gramsci and the elevated highway, was viewed as a lost but recoverable opportunity to provide open and recreation space, services, parking, and other functions for which there was limited space in the area of Pre itself.

The Project for the Principle Train Station and Piazza Aquaverde

Intervention to this area was directed toward the resolution of pedestrian accessibility and movement in an area which needed to also function as an urban traffic node, a bus transportation terminal, taxi stand, bus stop, as well as a major arrival and departure point for travelers on national and international trains.

Additional pressure on the area was predicted for the future with the construction of a new subway system and the activation of a new intercity train line, both of which would stop in the area. From the beginning of the exploration for the reorganization of this area, it was clear that there was not enough space for the comfortable accomodation of all of these functions and their needed interchange relationships. Further, the space that did exist was, in form, physically constraining to any simple reorganization. The topography, the confrontation between different urban fabrics, and the formality and importance of the surrounding architecture and architectonic spaces of the piazza all contributed to the difficulty of the problem.

Reconnecting the area Pre to the city at this urban node was seen primarily as a problem to ameliorate the conditions of the piazza for the pedestrian in order to make access from this node into Pre more simple. To accomplish this goal it was ne-

cessary to resolve the circulation problems and separate, as much as possible, first, the pedestrian from the vehicular traffic, and second, the other types of movement one from the other, to provide clear and separate circulation patterns and function areas for each of the different types of traffic and, finally, to provide adequate parking, not only to serve the station, but also to take the vehicular pressure off the historic area Pre. Because of the spatial problems of the piazza, the functional reorganization of the area depended on a physical restructuring which was necessary to "find" more space.

Given the ambiguity of dealing with the state administration of the railway system, and the importance of the urban space, four schemes for its reorganization were explored during this phase to provide alternatives for discussion with the administrations. The four schemes respresnted different interventions to the space of the piazza and different degrees of intervention to the spaces and buildings which were the property of the railway.

Each of the four schemes separated the pedestrian and vehicular traffic by the creation of a pedestrian level below the grade of the existing piazza which permitted the free movement of the vehicular traffic at the level of the street. In addition each of the four found additional space for parking by proposing the construction of a parking garage to be located over the tracks of the train station.

Scheme one and two sought to resolve the circulation and functioning of the area within the space of the piazza through the expansion of the area below grade to create a double level piazza. Scheme one created two complete levels. The level below grade

included parking and taxi/car drop off. The other half of the piazza below grade included a pedestrian zone separated by commercial activities from the traffic area. The upper level of the piazza was left free from vehicular circulation except for through traffic on Via Doria and the original bus stops. The second level over the parking was a garden area. The area over the pedestrian passage was left open to permit the sunlight and air. The main bus terminal was brought inside the zone of the train station, and was located in an unused area behind the main building which was accessed from Via Doria. Scheme two did not include parking in the piazza and left the garden area intact. The other half of the piazza provided below grade pedestrian passage open to the air as in the first scheme but without any commercial activity. Taxi and drop off traffic circulated around the perimeter of the piazza, while the other circulation pattern were proposed as in the first scheme.

Scheme three and four sought to relocate all the vehicular functions except through traffic and the local bus stop to the internal area of the train station in order to leave the piazza completely free for pedestrian use. In this way only a minimal pedestrian passage was needed under Via Doria. Scheme three used an access from Via Doria to the internal area of the station where the bus terminal, taxi stands, drop off traffic, etc., would be located. Scheme four opened up access to this area through a new opening created in the piazza facade of the terminal building. This new circulation access would be more easily negotiated by busses and other service vehicles than the access from Via Doria.

Of the four schemes, the first alternative was developed in more detail at the design level. Schematic plans by level, and sections through the station and piazza areas showing the pedestrian and vehicular links were drawn at 500 scale. These drawings illustrated a first pass at what possibilities existed for the physical transformation of the piazza.

The Project for the Darsena

The urban intervention to rejoin the area Pre to the sea was more than a poetic image and involved the development of the area of the old Darsena to provide needed functions for the area as well as for the city that were impossible to include in the tight urban fabric.

Due to the expansion of the modern port to outside the city limits the Darsena had become an under-utilized and obsolete facility. The exploration of the re-use of store house and other large structures in this area sought to take advantage of the resources of the existing building stock and to revitalize the historically significant arsenal area by introducing social, cultural, and recreational services, provisions for large scale commercial activity, as well as desparately needed parking for the historic center.

In addition to providing the expanded space needed for these functions, locating an active urban recreation area in this particular zone would also serve to enhance the relationship between the area Pre and the city. First it established an active physical link with pedestrian crossings over Via Gramsci and under the elevated highway from the zone to the recreation area. Second, it further reinforced the pedestrian use of the proposed

new commercial link passing through Pre from Via Balbi. Third, it provided connection to the surrounding area of the city through the recognition of the new subway stop which would access into the area.

In part, the design exploration for the planned use of the Darsena tested out the feasibility and detailed programming of the re-use of the existing structures as proposed, the feasibility and nature of the physical connections passing the street and highway barriers, the organization of vehicular and pedestrian circulation, and the resolution of the unobtrusive inclusion of a water depurator in the area.

More importantly, perhaps, the designs provided an image of what this area could look like and what advantages it would bring to Pre if it were developed. In this way it initiated a discussion in the Comune of the future use of the area and the development of a plan for its implementation.

Phase II Presentation

The presentation of work from the second phase consisted of the following documentation and drawings: 1) a report describing the deviations which had been made from the contract agreement and why they had been made; 2) within the same report, a general description of the proposed changes to the Master Plan and their explanation; and 3) a description of the project drawings by the design area for the architectural and urban design solutions, 4) plans, sections, and elevations for the architectural projects at scale 1:200, 5) plans, sections and schematics for the urban design projects at scale 1:500.

Introduction to the Phase II Review

After the presentation of the second phase, the Comune gave its reaction to the intervention proposals. Due to the fact that the group worked in the urbanistic offices of the Comune, many individuals who were involved in the review process were already familiar with the design work and had consulted as the explorations had proceeded. The presentation was, therefore, not made totally uninformed of the official position nor was it totally unexpected by the reviewers. Feedback was given in a series of meetings where interaction between the architects and the officals both clarified the understanding of the designs as well as promoted debate as to their intention, appropriateness, and feasibility.

The review of the designs brought up various issues and problems; some of which were related to the role of the designs within the Master Plan designations, others which were related to the technical aspects of the execution of the projects of the feasibility of execution, the appropriateness of the designs to the historic character of the area, and finally, the transferability or generalizability of the designs which would allow their formulation into guidelines.

Variations to the Master Plan

An important part of the work process of the group had been to design the projects within areas of morphological continuity and zones of proposed urban networks and/or uses rather than within the boundaries assigned by the Comune as the "comparti" of the project. This had resulted in: 1) lack of correspondence between the contract and the work produced (Design for much more than the "comparti" had been explored for some areas of Pre. In other

areas parts of the "comparti" had not been designed.), and 2) the explorations had produced proposals which differed from designations of the Master Plan itself. If considered valid by the Planning Department, these variants would have to be approved and the Master Plan altered accordingly.

In general, there was a recognition of the validity of the project expansion for the exploration of urban issues. The project's consideration for a practical program of revitalization for the blighted area of Pre was a strong economic argument for the approach that went beyond the superficial or historic issues of preservation.

The projects for the Daresena and the Piazza Aquaverde, in particular, initiated a great deal of discussion and publicity since these areas could be recognized as key sites in need of intervention to benefit the whole city. Consequently, the proposals for their reorganization and re-use were taken seriously and illicited practical criticism as to the feasibility of their execution.

The designated use of the Darsena had been redefined in the project to link the site with the needs of the population of the surrounding urban areas including Pre. Instead of production and service functions for the port indicated in the Master Plan of 1976, recreational and commercial activity was proposed. This change was also made in light of the continued decline of the actual port operations in the area, which by and large, were moving to areas outside of Genoa proper.

The plans were so well received that work continued on the Darsena in the third phase. This would include further explorations and details of use, with

visual images of how these plans would be experienced, once realized. The further refinement of the project would help the Comune decide where the public interest would lie, what kinds of capital investments were necessary for the project to develop, where private development could take over and who those developers might be. In addition, it was felt that a scheme should be developed which placed the water depurator outside of the area. This would present the ideal situation for the site's development as a recreation area and would be used in the discussion of its possible relocation. Finally, additional technical information became available as the proposed metro system became a reality and preparation for its construction began.

The alternative schemes for the Piazza Aquaverde considerably altered traffic patterns, the organization of the city transportation services, and necessitated considerable construction in a city and state controlled area. In general, although the schemes proposed a better organization of the existing, the cost of intervention when compared to the modest reorganization benefit made the projects less credible. At the end of the third phase it was discovered that the state railways were considering proposals for the complete demolition of the old station to be replaced by new construction. It was felt that a more radical solution could be explored. Consequently, a new proposal was designed with this information in mind.

Within the area of Pre itself, the design explorations had also resulted in variations to the Master Plan. The reconstruction of the urban fabric in

the zone of Via Tacconi and the Piazza del Roso had changed their use from designated green space to built urban spaces.

The modification of the building stock to gain ambient quality and the demolition of the building to create open space had resulted in a reduction of the designated building volume permitted in the area. The use of the ground floor of the residential zones had been changed to other uses not requiring as much light. In addition, a new commercial zone had been created and proposals to create pedestrian zones had altered traffic patterns. In general, the Comune felt that these initiatives could be accomodated in variance to the Master Plan if they could be demonstrated to be economically viable and/or feasible to implement.

The Problems of Project Execution

This last concern, which of course related to the first, was particularly significant to the Comune in respect to the projects. Since many of the design responses were detailed according to local conditions and not consistant across the area, it was difficult to understand how the interventions would be controlled without extensive administration and coordination between owners. In addition, the creation of special patterns or semi-public spaces and public passages which penetrated private buildings, seemed to make the projects unclear as to the responsibility for their implementation. The construction would seem to have to be a series of custom jobs supervised by the public sector. In addition there were the problems of construction sites in the tight quarters of the historic area which might be further exacerbated by a site by site reconstruction.

These considerations were carried over into the work of the third phase where the development of the comprehensive urban guidelines would necessitate the translation of the designs into an understandable system of intervention types to control future construction in the historic center. In addition, the third phase would continue to refine the intervention approach in the design projects required to complete the work for the assigned "comparti". The last designs were used to better understand the system which could be applicable for the whole area as the guidelines were written.

Historic Considerations

Finally, the Phase II designs were reviewed for their appropriateness to the historic center. Issues opened up to debate included the changes made to the historic fabric, such as the network of inter-neighborhood passages and the creation of new spaces, the creation of semi-public open space, including those made at the upper levels of buildings, such as external access from open spaces, the alteration of form and the changes made in building typology. Interestingly, the changes were not found to be historically inappropriate; yet their practicality was examined closely. For example, there was concern that the passages would be dangerous and collect garbage, and that the external circulation would be impractical in the Genoa wind. The detailing of the degrees of historic conservation and their specification by building and open space was left to be refined in the work of the third phase.

Phase III

Development of the Comprehensive Guidelines

While the work continued on the design explorations needed to complete the projects of the "comparti", and further develop the project of hte Darsena the primary task of the third phase was the formulation of the comprehensive guidelines. Since Phase II of the project had resulted in much more than schematics of the building re-use which the contract had specified, the group began work on the guidelines with an understanding of the basic typology of the building structure, the indications of the condition of the building, the ownership and use patterns, etc. which they had acquired through the design of complete projects which included floor plans, sections and elevations. In addition, the architectural solutions provided a complete picture of the re-use of the building fabric placed within the context of a larger urban plan.

The designers began Phase III with an individual analysis of their own projects to determine what they thought the most important aspects of the designs were. In other words, what were those parts of the designs which, if left out, would prevent the functioning of the built or urban piece according to the original intents of the design move. For example, if a proposed public passage through an existing building was left out of the scheme or relocated without respect to the other passages of the new pedestrian links, the cross neighborhood network would not function.

From this individual analysis the process became a group effort in a series of discussions to determine what had to be controlled in the designs and how this was to be done through the guidelines. Group work was necessary at this point for three

reasons. First, there was the problem that not all the members of the team spoke Italian, and could not understand the complexity of the guideline framework. Second, each individual understood his or her own project more completely than the others of the group, and therefore, was needed to interpret the intentions and status of the work. Third, the discussion became a debate to decide issues which would have direct influence on the theoretical basis of the guidelines.

Background to the Dvelopment of the Guidelines

The initial theoretical and organizational framework for the analysis and development of guidelines for Pre was suggested by a set of comprehensive guidelines which had been written for the study area of San Donato and San Silvestro. The outline of the written document and the conceptualization and organization of the aspects of the urban context to be regulated, and through what means, was synthesized for this study from other work and guidelines generated by such landmark projects in Italy as Bologne, Turin, etc. This study was a pilot project for the development of a plan which would apply to the whole historic center. However, because of the debate concerning the center's identity, the Comune considered this document to be applicable only to the specific zone of the study area. It was not applicable where conditions differed.

The guideline organizational framework for San Silvestro categorized the urban context into the built area and the unbuilt area (or free area). These categories were discussed in terms of the public and private and their use.

In the next section the built area was categorized according to levels of conservation (transformation, demolition and new building) with guidelines which applied to each category. In general, conservation was a category where alteration of the building was restricted according to its type restrictions and those changes needed for the permitted introduction of services. Transformation permitted the alteration of the building to accomodate new use and permitted restructuring of the spaces to alter the building type if necessary. Demolition was specified for precise buildings or pieces of building which were in hopeless need of repair or considered a blight to the historic zone. New building was permitted within precise site boundaries specified, and required the approval of designs developed for the entire site designated as the unit of intervention.

In addition to these categories the other aspects of the building which were specifically controlled were the roofs (form and use), the facades (in terms of conservation, transformation, etc.), the building alignment in plan, the building depth, the height in terms of a maximum and minimum for those buildings specified as possible to vary, and in terms of the exact height where this was important, and finally, the building index or the permitted volume of construction for the area of land. These last aspects of the building to be controlled were particularly addressing the reciprocal nature of the built and unbuilt areas and the effect of the building form in defining the nature of the urban open space.

The treatment of the unbuilt space was much more simple, in addition the definition of public and

private spaces and their use the unbuilt or free areas were simply controlled as to their urban furniture and the inclusion of ornamental objects. Spaces with architectonic or other significance were required to have complete designs submitted for approval for their alteration.

The Guidelines for Area Pre

Although the generation of urban guidelines for the Area Pre began with the analysis of the urban and architectural designs presented in the previous stages from the point of view of the framework of the existing guidelines, the transformation of the framework to make it compatible with the projects of Pre was an integral part of the process. It was important to the Group that the level of detail and the quality of and intentions of the interventions which had been explored in the designs be reflected in the guidelines.

Since the guidelines were requested primarily for the preservation of the historic area the first task of the third phase was the development of a taxonomy of conservation types. The second task was to design these types according to the interventions permitted to the structures or spaces so designated. The third task was to identify the area of building fabric, buildings, pieces of buildings, or spaces according to these categories. This work, although important for the historic preservation of the area, also had to be conceptualized so as to coordinate with and contribute to the implementation of the systems of access, circulation, use, etc., and the larger urban context proposed in the projects.

The design explorations had resulted in specific solutions which related the buildings one to the other, as well as to the spaces and circulation which were a part of a system at the level of the urban fabric. Developing the guideline framework so as to guarantee these relationships and urban networks without requiring the exact execution of the design projects as drawn was perhaps the most important task of the conceptualization.

In the end this was accomplished through the specification and control of a series of interrelated, but separately treated components of the built and open spaces. No one of these designated components of the guidelines operated on its own to guarantee the control of the urban environment. The guidelines utilized an array of overlaid rules or specifications which acted reciprocally or in conjunction with other rules.

The categories and subcategories as well as their organization listed in the guideline table of contents provides the complete spectrum of the document's concerns and are included in the Appendix of this thesis.

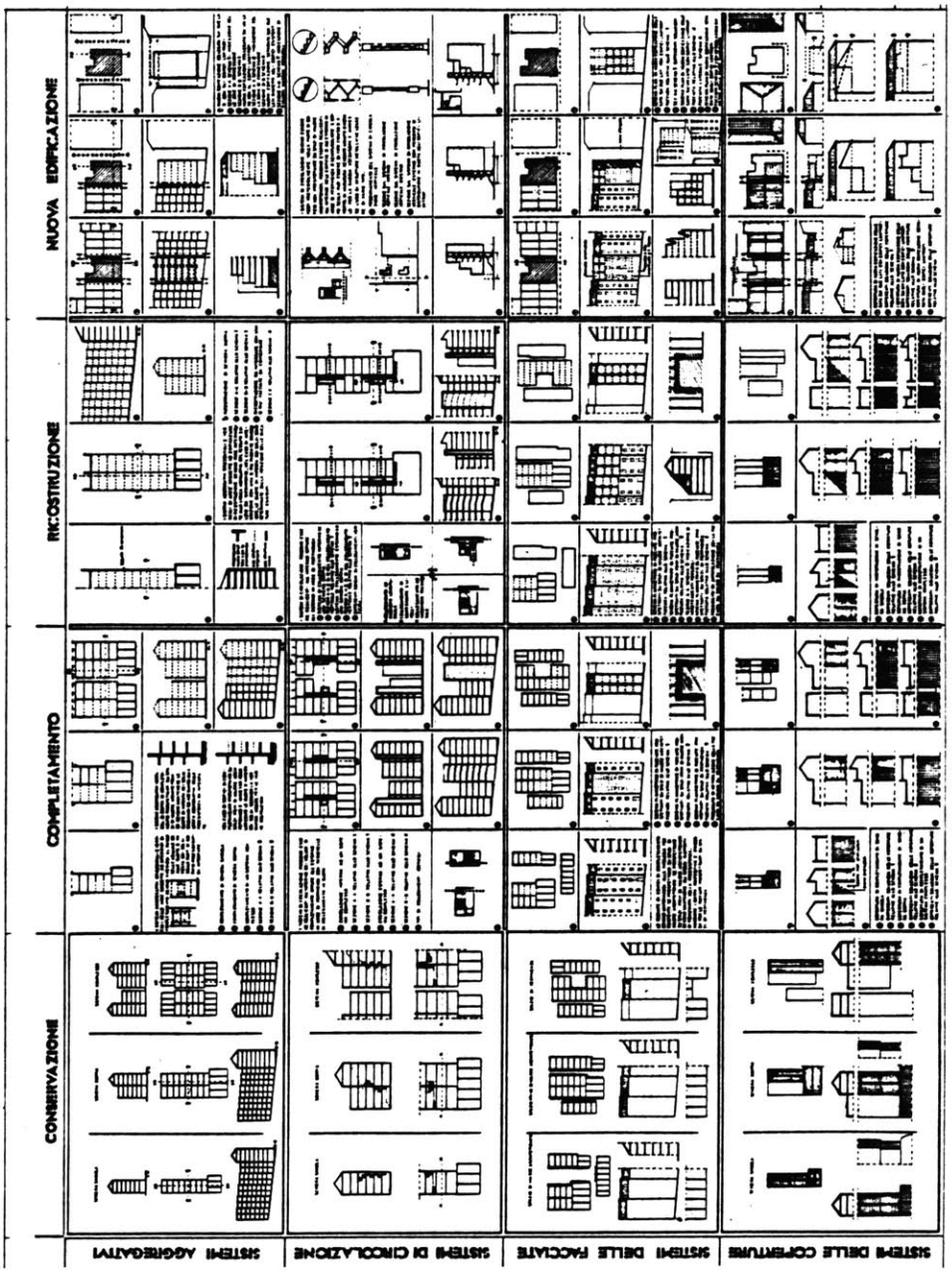
Examples of Guideline Use

An explanation of how the different categories and subcategories of the guidelines added up to provide the means for guiding intervention in the project area is best given by an example: The formation of a new pedestrian passage and its relationship to the urban network was implemented in the guidelines in the following way: First, it was located graphically in the use plan of the area and designated as a public pedestrian passage that passes through private building or buildings. In

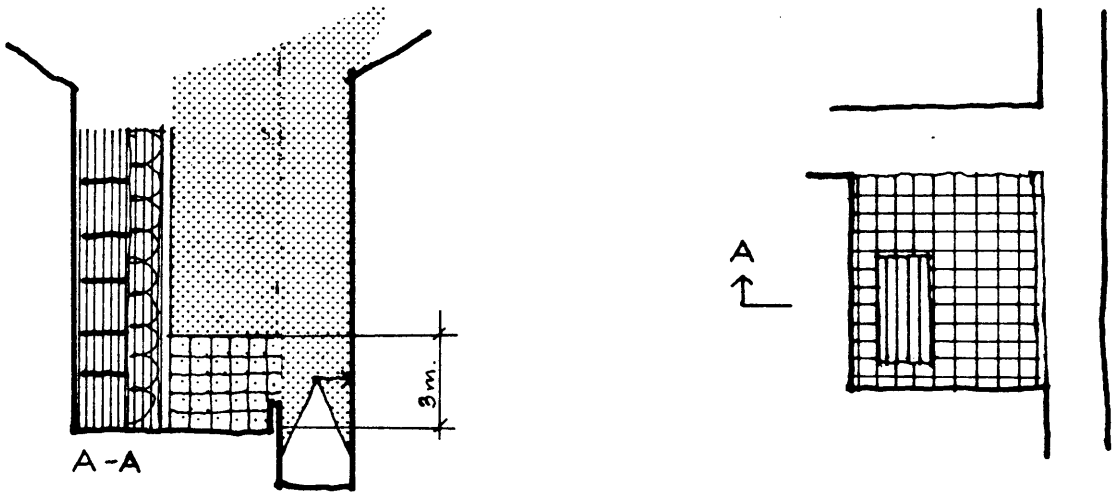
the written guidelines this intervention was completely described as to its manner of definition and construction in the building. Second, the relationship of the passage to the semi-public outdoor space of the building was specified in the same use plan. In addition, the building through which the passage passed was categorized, for example, as a built piece to be restructured in the plan designating intervention types.

In the written guide under the category of building to be restructured, the mode in which the building aggregation was to be interrupted to allow the passage and its accompanying vertical circulation, the vertical circulation itself, the treatment of the facade of the building which was impacted by the passage opening, as well as the roof definition which might be altered according to the semi-public space, were all defined to acommodate the new passage.

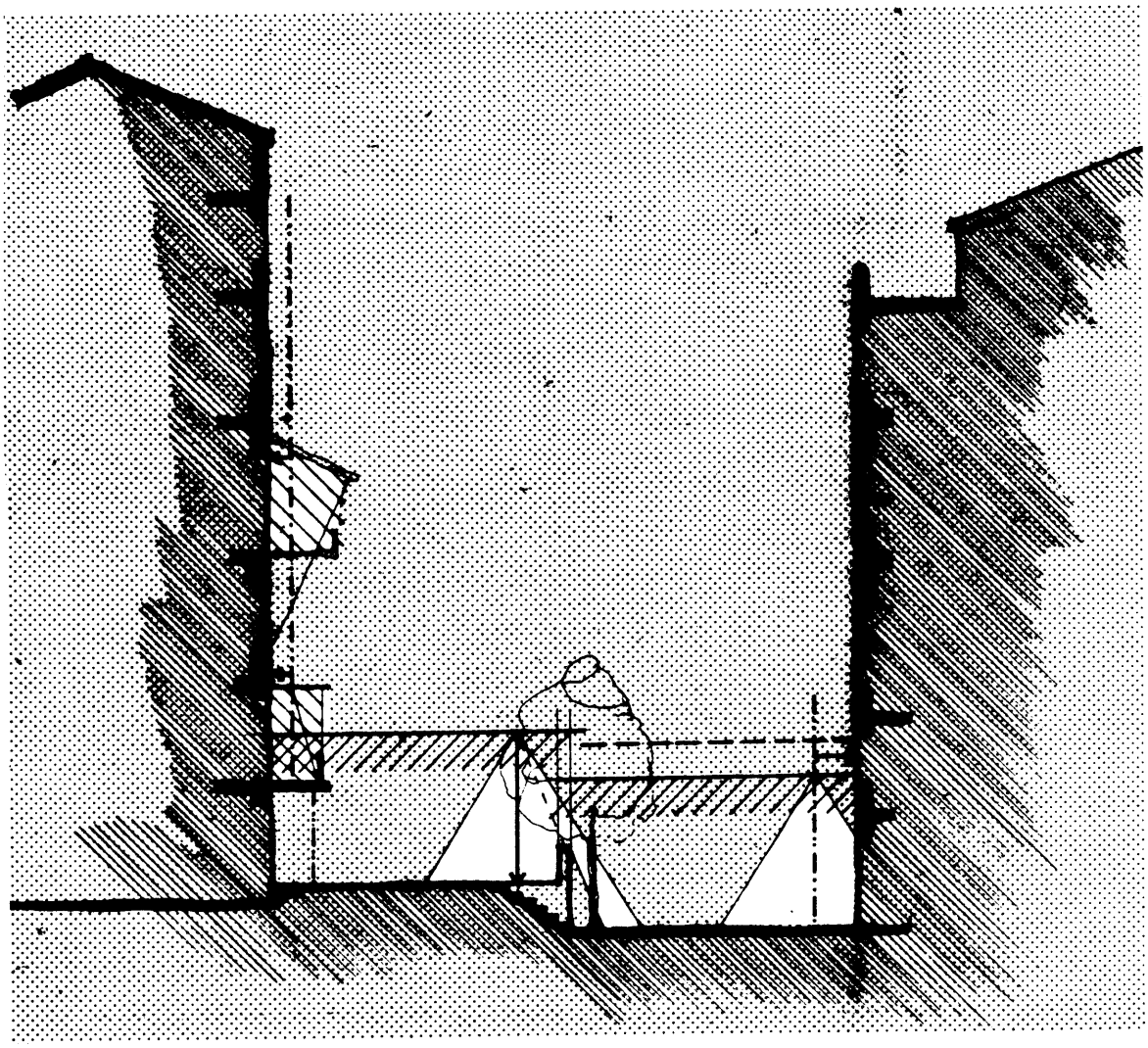
In addition, in the guidelines for the open spaces, the treatment of the new pavement and the transition of the ground from the outside to the passage, and from the passage to the semi-public space were defined in generic terms of pavement patterns, level changes, etc. to represent zones and transition areas. Further, the lighting of the vicolo at the passage, as well as the lighting within the passage was defined in the guidelines for the lighting of the open spaces.



Graphics Describing Rehabilitation Types



Lighting Guildlines for New Open Space
Example Graphics
Lighting Guildlines for P. Marinelle



The Final Form of the Guidelines

The system of the guidelines combined written definitions and rules, and graphic plans and illustrations for locating and describing the guideline designations and controls. In addition, the design projects became a guide for how the urban guidelines could be implemented.

The final presentation to the Comune included these written guidelines, the illustrating plans, maps and diagrams describing the system of intervention to the building and open spaces. In addition the Comune was presented with the finished project designs for the comparti and the urban interventions of the area and the contiguous zones of Piazza Aquaverde and the Darsena.

Phase IV

Phase four was the final working phase of the project for the group. It was a phase of the completion and correction of work. In addition, during this phase the technical verification and support of the proposals were developed.

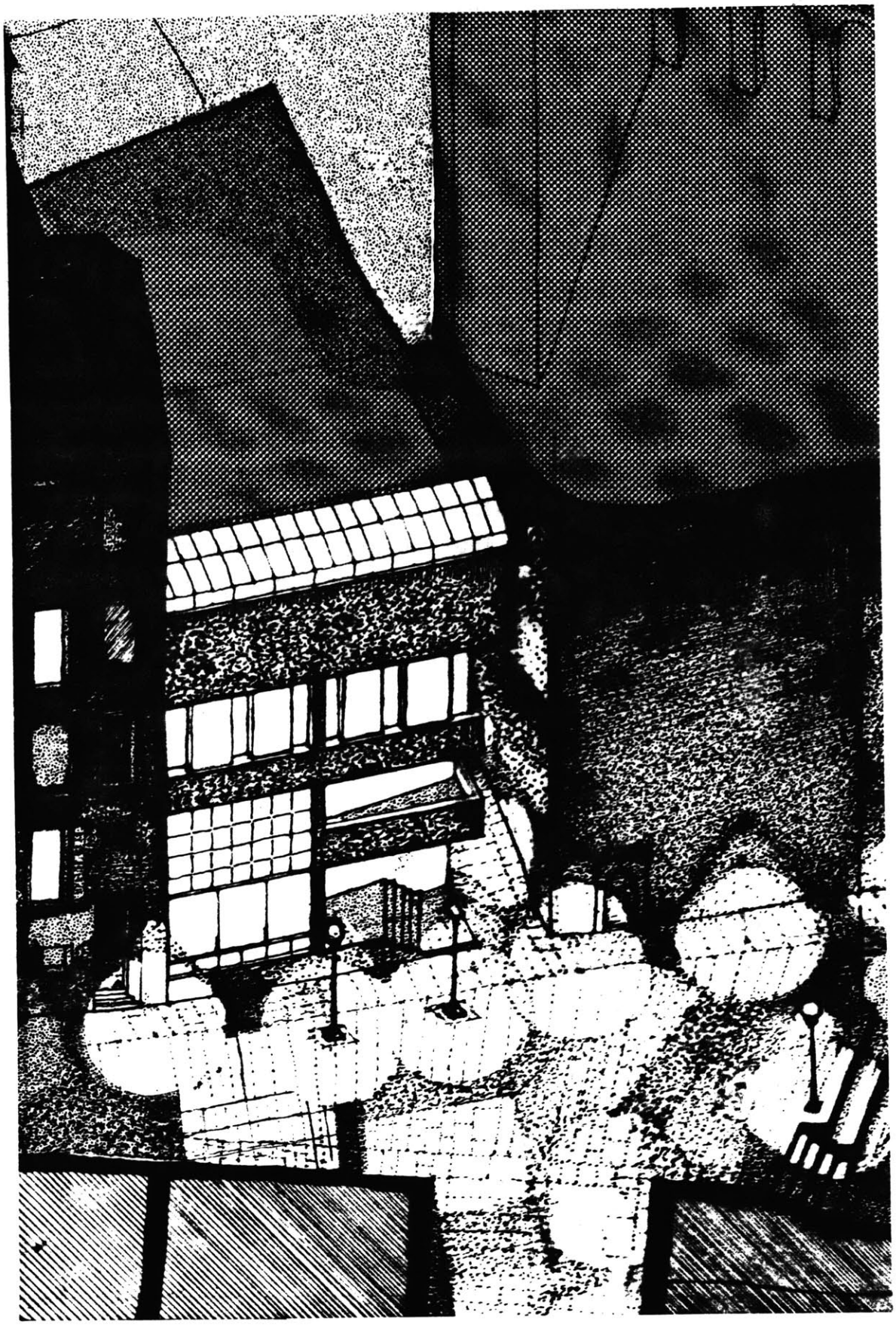
Work continued from phase three to produce a consistent graphic system for the Master Plan. Other work evolved for the zones of the Darsena and the Piazza Acquaverde due to the provision of new information. This new information necessitated the development of revised proposals for these areas.

The water depurator was slated to be built and included in the Darsena area. A new scheme which incorporated the facility into the design was drawn. The scheme for Piazza Acquaverde was reworked to propose more modest changes similar to the solutions which had been presented in the second phase.

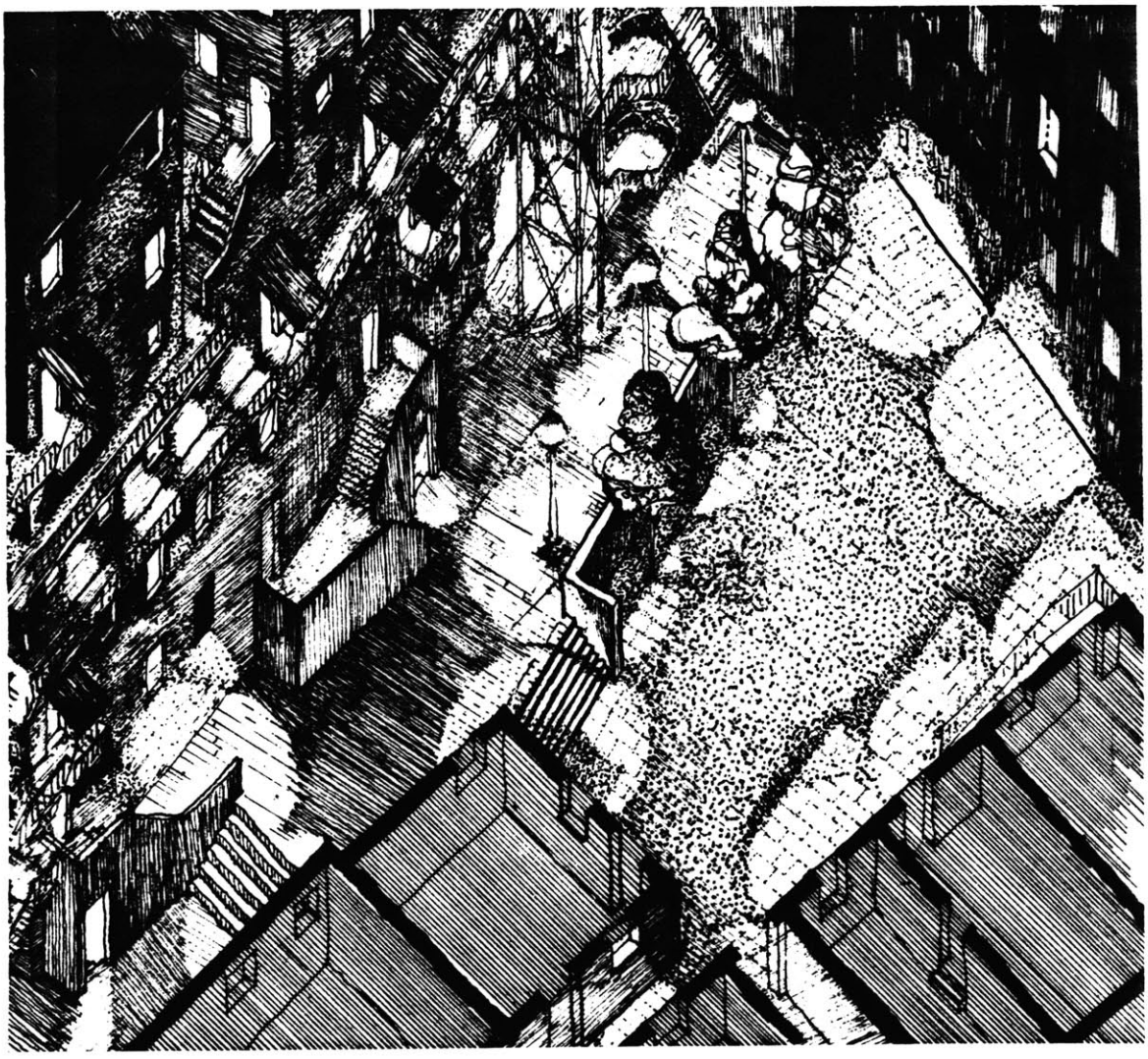
New work for Phase four consisted of the development of the proposal of a scheme for phasing the interventions, the proposal for the organization of the construction sites, and the delivery of materials into the historic area, as well as the estimating of costs to complete the projects as proposed.

The Role of the Comune After the Project Completion

The Comune's task after the presentation of all six of the exploratory projects completed by the architects for the different areas of the historic center was first to review the projects and to present them to the citizens of the city for public discussion. Second, from a critical examination of the projects, the Comune staff would attempt to synthesize the six solutions into one comprehensive approach to intervention into the historic center as a whole. The final product of the synthesis would result in a document to become part of the Master Plan for the city.



Lighting Studies-Piazze del Roso (left)
Piazza Marinelle (right)



CHAPTER IV

CONCLUSION

In the preceding chapter I have presented the Genoa project as a discrete case of intervention in the city. I have chosen to concentrate on the case methodology and working process while highlighting the design decisions and the general approach of the intervention proposals. Finally, the urban guidelines were presented as to the process of conceptualizing the framework of controls and included a brief description of how the different catagories of control worked in unison to guide the implementation of the interventions in the eventual construction process.

This chapter will provide a wider perspective from which to view the case. I will comment on the case in four ways. First, I will place the project in context in Italy. I will examine the case in terms of the major planning theories and approaches to urban intervention which have evolved in Italy since World War II. The conceptualization of the Genoa project is strongly linked to these precedents. On the one hand, this context will provide the basis for a more complex understanding of the thinking behind the case. On the other hand, the manner in which the Genoa project departs

from precedent seems to indicate a re-evaliation of the urban plan and its relationship to the architectural project. Second, following this exploration I will look at the general problem of the relationship between architecture and planning.

The third set of comments will evaulate the Genoa project in terms of the workability of the methodology , what may be some of the problems if it were used in another context, and in what ways it addresses the gap between architecture and planning. I will conclude by commenting on the possible utility of the case approach in other contexts.

The Project in Context

Since World War II city planning in Italy has passed through a sequence of trends in a pattern similar to other European countries. Appleyard cites four major phases in planning of European cities after the war. The first from 1940 to the early 50's focussed on the reconstruction of the city devastated by bombing and the push to provide housing for the homeless. Plans were made for the physical redevlopment of the metropolital areas. In general, resources were limited and under public control. During the 60's Europe as a whole experienced an economic boom and there was a trend toward development in the American style. Peripheral areas and suburbs underwent considerable growth made possible by new highway and transportation systems. In the late 60's there was growing opposition to public and private development and to the dehimanized "modern" city which was graddually replacing the old urban centers. Citizens' action groups and the conservationist movement became strong forces in city planning. The European economic recession of the mid-70's succeeded in slowing down development. While in some ways this

helped the conservation of the urban fabric (by halting its destruction and cutting back on peripheral development) it also cut back on funds available for urban rehabilitation as well as for the social programs which were being developed to support urban renewal in the centers.[1]

Simply described, the view of the city which evolved during these phases was affected by a shift in philosophy. Immediately after World War II the urban plan was affected by CIAM and its dream of the modern, functional city. For this era of architects the existing European city was cramped and dirty. The bombed cities represented an opportunity to be free of the past and to reconstruct the city according to rational models. The vast projects for constructing public housing and instituting the social programs which were also part of the dream necessitated large bureaucratically organized planning structures with considerable power.[2]

The period which followed was in some respects a reaction fo this power and to the depersonalization of the environment created by a single program for mass society. There was also a recognition that the functional organization of the city according to priorities based on production failed to provide urban amenities at the human scale. Regional and city identity became a major concern. The break in continuity to the past advocated by the modernists was negated and there was a reversion to historic contexts in the search for meaningful city form. The administrative planning structure which had been created during the 40's and 50's was equated with development and seemed ill suited to small scale community oriented approach to conservation planning.[3]

The Italian situation evolved in a similar pattern to the evolution of ideas of the city and town planning approaches.Within this pattern which is particular to Italy seems to be partially related to the planning organization in Italy, to the nature of Italian planning as it is practiced and to the relationship between planning and architecture.

First, the planning structure in Italy has had less authority than in northern countries. Due to the weak taxing powers of cities and due to the traditional link between planning policy and political parties which have been in constant flux since the war, the planning bureaucracy has less credibility. Obedience to its legislation has traditionally been weak.[4]

Thus, repeated redrafting of town plans in Italy has partially been in response to disillusionment with the plan's ability to regulate urban affairs accompanied by the re-evaluation of the plan's legitimacy according to the local political party currently in power. In light of this, the movement of the early 60's was less a reaction against massive planning bureaucracy and more a result of shifts in political climate, due to social and economic pressures, which cahsed a questioning of the legitimacy and effectiveness of the plan.[5] There was still the hope that correct legislation would provide a solution to better urban environments.

Second, the nature of planning in Italy has been such that it has not been defined as a separate profession. Town planning or "urbanistica" was based on a research approach to planning that included in-depth historical study of the city and

its development, as well as social, cultural, political, economic concerns. Until recently, Italy did not have a School of Planning. Study plans and experimental research was conducted by public or private study centers. Planning proposals were made available to cities either through the city agency, or by special commission to private study groups. The implementation of the plan was ultimately the choice of the politicians.

Institutes of urbanistic studies as well as city departments included professionals from varied disciplines such as economics, the social sciences, engineering, history and architecture. From the beginning architects have been extremely influential in the drafting of landmark plans as well as in the advancement of urbanistic studies.

Consequently, a third characteristic of Italian city planning has been its strong relationship with architecture and with architects concerned with the physical definition of the urban plan. Although the modern Italian Master Plan utilized land use in zoning to control development, this was frequently accompanied by architectural plans which visualized the realization of the plans.

Considering these three points, the story of planning in Italy has been interwoven with the country's political evolution and with the development of architectural theories. Often architectural theories are identified with positions or parties. Consequently, theories change with the political tide and are heavily debated.

As was noted in Chapter One of this thesis the study for the Master Plan of the historic center in Genoa grew out of a reaction to events in urban

affairs of the 40's and 50's. In general the shifting of attention toward the historic center and its conservation was related in Italy to the "failure of planning" as it has been practiced after the war, and to a concomitant shift in politics to the left that became pronounced from the late 50's and into the 60's.

Rapid development, industrial expansion, and social problems resulting from the imigration of populations from the south to work in the north during Italy's great period of economic prosperity had contributed to a perceived urban crisis. There was a rising disillusionment with the planning bureaucracy which had permitted development through land speculation without proper control of urban quality. In the peripheral areas no proper urban infrastructure had been provided; citizens were without social services. In the urban core historic areas were destroyed to build new commercial developments.

Although this situation was a general condition for cities throughout Italy, the redrafting of urban plans and their enactment in reaction to these circumstances developed differently in different cities according to local political conditions.

For example, the comprehensive plan for Bologna, drafted in the late 50's and enacted in the mid-60's, foreshadowded the trend of the 60's where the governments of the left rallied around the halting of speculative development and the revitalization of the historic center for active re-use. Due to a stable communist government which provided a continuity and a sound economic base for decisive action the city was able to initiate and carry

through an active urban revitalization program.

The approach carried out for the historic area involved a "deep restoration" of the building fabric which integrated active social and economic planning. The scientific studies of building morphologies and re-use according to building types was thorough but also rigid. This type of historic study for the development of urban guidelines for preservation was based on previous work which had been developed in Assisi by Astengo. In addition it made elaborate provisions for the preservation of culture and the historic significance of use as part of the meaning of the city.

Problems with implementation of these elaborate plans had in fact lead to other experiments in historic centers. One such example had been Piano's neighborhood workshops in Ottranto. In addition, debate often focused on correct approaches to social planning. For example, in Bologna's case the preservation of a cultural group which no longer wished to live in the center was falsely considered by many. Genoa can be viewed as perhaps another approach.

In the situation of Genoa the politics and the local economy had not developed a similar stability during the same period. Fluctuations in the local government between the left and the moderate factions and accompanying disputes as to the policy prevented the enactment of a new Master Plan until 1976. In light of this, the debate concerning the appropriate approach for developing guidelines for the historic center which focused on the center's lack of morphological continuity and the different character of the neighborhoods seemed to be more than a historical or formal debate. Initially it also, perhaps, reflected a lack of agreement in

general concerning urban initiatives in Genoa.

Consequently, however, the directive for the historic center in Genoa was initiated in the late 70's, during the period which Appleyard noted was restricted by a lack of funds due to a general recession in Europe.

One indication of this can be found in the introduction to Genoa's reference for the development of guidelines for the historic center. Here the Comune pointed out the inappropriateness of Bologna's conservative typological conservation for Genoa. In the Comune's re-definition of the intervention types to permit a category for the transformation of one building type to another type in order to facilitate a necessary change in use, and in their advocacy of a plan which acknowledged individual property ownership, they made adjustments to the Bologna model to deal with the economic and political constraints existing in Genoa.

The political climate in Genoa would make the expropriation of property for preservation less feasible. In addition, the economic constraints of the times favored re-development by private initiative. The public investment necessary to expropriate and restore buildings according to rigid standards was not a possibility for Genoa.

Finally, Genoa had had the advantage of being able to watch more than twenty years of experiments with town planning for revitalization in Italy. From this vantage point it was clear that the implementation of the best and most sophisticated guidelines was difficult. Even with strong political backing and greater access to funds, Bologna's revitalization was an extremely slow process.

Genoa's concern is that since 1971 the center has lost 100,000 inhabitants and continues to loose 6,000 individuals annually to the peripheral neighborhoods. Since these areas are always more attractive to the builder to develop, the Comune is now particularly desperate to promote construction in the city center. A rigid plan for historic preservation with the provision for the control of social composition of the urban area would not be easily implemented nor would it be attractive to private investment.

In March,1983 issue of Casabella,Bernado Secchi points out that town planning in Italy seems to be going through another period where the bureaucracy of the planning framework and the approach to planning is being questioned. He notes that the elaborate legal frameworks put into place during the 70's have not been implemented efficiently. Partly due to the multipolarity of the political environment the governing body cannot agree on implementation.

Partly due to the lack of clarity of the times concerning the definition of what the central issues are, accord is difficult even when politics permit.

One response in this period has been to attribute the failure of the planning framework to its over ambitious goals. Thus, the tendency is to limit the plan's field of action to a more well defined and smaller parcel of the city which would permit physical and technical forms of designing in order to understand the real problems involved and treat them at a more manageable level. Secchi notes that there seems to be a trend to draw the project out of its context as an isolated experiment and exemplary intervention.

Genoa seems to represent a case of this trend. The definition of comparti, or parcels of building blocks separated from the historic context for the development of exploratory projects permitted the development of designs detailed at the architectural scale. Potentially this would permit a more definite understanding of the physical quality of the final intervention and of the costs and means necessary for implementation.

However, Secchi questions this trend of removing the project from its context. He points out that this mode of action may make it increasingly difficult to check the validity of the outcome of the overall town plan, even in physical terms.

I presume that what Secchi means here is that contrary to the previous decade of planning in Italy which emphasizes large scale planning approaches over individual expression, this fragmentation of the plan according to separate architectural projects may threaten the unity of large order planning decisions in the city.

The Issue of Architecture and Planning

In this respect, the design group's reaction in the Genoa case, to expand the designated project sites to the larger urban context, reflect DeCarlo's roots in earlier period of Italian planning where the total context, i.e.: the relationship of the neighborhood to the city and of the city to the region, was considered.

The last five years have seen a significant rise in the number of articles, whole journals and books dedicated to a reevaluation of how cities are designed and planned. This intensification of interest seems to come from a deep questioning of the practices of both the planning and architectural professions.

On the one hand planners are faced with the rapidly changing nature of the "post-industrial city" where traditional zoning models and long term economic planning are being questioned both in terms of their fiscal effectiveness as well as as their ability to legislate the qualities of good city form.

On the other hand, architects in search of direction after the modernist movement now look to the city and the grander urban vision which ties building to history and creates a more total human environment than the isolated structure within the urban landscape.

In the 1983 issue of Casabella, Architecture for Planning, Vittorio Gregotti noted that the apparent crisis in the professions of architecture and planning seem to be resulting in the two professions moving toward each other to seek a way to plan for the future of physical environments. Speaking particularly of architecture, Gregotti notes that in twenty years of architects' discussing the "notions of town and territory" (i.e.: the relationship of architecture to the larger context), the architect still does not have the means to deal with the range of scale which is inherent in any project.

When Kevin Lynch presented a lecture to U.C. Berkeley in 1979 on the teaching of city design he saw the city designer as one who incorporates in his profession the skills and knowledge of both the planner and designer. Thus for Lynch the merger of the two fields in order to "create proposals for the form and management of the extended spatial and temporal environment" must occur within the training of the individual.

In Italy where "urbanistica" or studies of town planning have not been studied as a separate profession until recently, a potential merger between planning and architecture exists in two realms. First, the education of the architect has traditionally included urban form issues and urbanistic studies. The term urbanistica encompassed issues of urban history and form, society and culture as well as the issues of politics, economics, and management. Especially under the influence of architects and scholars such as DeCarlo, Rogers, Quaroni, Astenzo and Zevi who have played active roles in the development of plans and of planning theory, urbanistica has been a dominant part of the schools of architecture during the period from the early 50's through the 60's. Consequently, the architect is educated in a manner close to Lynch's concept of the city designer.

Second, since the planning departments and institutes have been traditionally interdisciplinary and have included professionals concerned with management and design there is a working merger between the professions. Frequently these interdisciplinary teams have been headed by architects. DeCarlo, for one, had been a guiding force in plans developed for Milan, Rimini and other cities and had been the Architect/Planner for Urbino.

The problem of the separation of architecture and planning in Italy seems to be rooted in the problems of legislation. First, with the possible exception of the historic centers, there is a lack of agreement as to what is controlled in the physical environments as well as to what degree. Second, there is a problem with the implementation of the legislation and with the translation of the legal code into physical interventions.

Addressing the town plan, Gregotti claims that "one can no longer believe in a deductive link between the plan and the architectural project to thoroughly verify the plan as it is drawn, that bureaucratically and chronologically the plan and the project need to go hand in hand to dialectically reciprocate, that the plan's management priorities must be expressed through lasting architectural decisions and that architecture is the only means to finally guarantee the quality of the plan and of its effective capacity to provide better, more complete, and more meaningful living conditions."

In this discussion Gregotti seems to indicate that the unification between the architecture and the plan may only be possible through an integration of the two perspectives in the process of developing the project and the plan together.

From my perspective as a participant/observer in the Genoa project for the Area Pre, this integration of the concerns of planning and architecgure in the work process seems to have been an integral aspect of how the case developed.

In the next section of this chapter I will look at the work approach of the case more closely, in part to examine the integration of planning and architecture in the process, and in part to critically discuss the approach. For example, can this design/planning approach be understood as a methodology applicable to other contexts or is it an idiosyncratic process appropriate to a single case?

Comments on Genoa a discussion of the approach

In the following discussion of the Genoa case I will be presenting my own particular viewpoint of the work process and what I perceived to be the methodology as a participant in the project phases. Since I was not always aware of all the events of the project my viewpoint will not necessarily deal with all the aspects or complexities of the case.

First, it must be said that there was no formal methodology stated for the project. The method was in part determined by the information and products requested by the Comune, in part by the Group's approach to the problem, and in part, by the working process of the group which would alter the details of the approach as problems for the area were diagnosed.

For the purpose of this discussion I will break the "Method" into the following sub-headings:

(1) Urbanistica
(2) The "Reading"
(3) Design Exploration
(4) The Generation of Guidelines
(5) The Work Process

Each of these sub-headings is, in fact, not totally discrete from the others. I will look at them separately when appropriate. Where the discussion issues apply to more than one sub-heading I will deal with the topic where it first appears, and only refer to the issue in the later discussions. In the final assessment I will discuss the sub-headings as one method to look at some of the advantages and disadvantages of the Genoa project as an approach to city design in general.

(1) "Urbanistica"

By urbanistica I mean here the integration of planning, urban design, and architecture in the definition and exploration of the problem and in the proposal of solutions.

The definition of the project, to consider physical design with use, social implications, property ownership, development issues, etc. sets the framework for the integration of the architectural project with planning. Based on the Italian experience, I would identify town planning to mean the assessment of available resources and their allocation and management to satisfy the needs of the city. Resources may be economic, land or they may be physical quality. The needs may include a complete range of social, cultural, housing, educational as well as other, institutional services. As was noted earlier, this type of thinking is not unusual in Italy, especially for projects in historic cities. It reflects a recognition of the relatedeness of all the variables of the urban environment. However, the Genoa case seems particular in that it made changes in the historic urban fabric to introduce proposed new uses for the area. In this sense the project advanced historic conservation to an active reshaping of the physical environment according to perceived urban management needs.

The consideration of all the scales of the city from the region to the architectural, in relation to one another as an urban system, seems to have obvious advantages. First, there is the possibility of following through with planning intentions so that the large scale moves are reinforced by the detailing of the plan. In the case, this is illustrated by the example of the introduction at

urban scale of a commercial zone linking Via Gramsci to the Darsena which was then detailed in the architecture. Another example of this in the case occurs when the metro-stop reinforces and is reinforced by pedestrian passes, over Via Gransci connecting Pre to the public facilities in the Darsena.

Second, each problem can be "diagnosed" and "treated" at its appropriate scale. For example, in the restoration of the comparti the rehabilitation of the building required the treatment also of the isolation of the buildings which made them dangerous and undesirable for use.

Third, it seems possible to develop a more complex understanding of the issues and their interrelatedness. In the case this helped to determine the degree to which change could be introduced throughout the area without destroying the character of the historic zone. Thus, a change in one area could be balanced by maintaining an existing condition in another.

Finally, this approach seems capable of giving a unified urban "vision", or an image of what could be at a scale that links to the city. In a sense this is an aspect of "urban design". However, urban design techniques generally deal with urban open spaces as landscape. In the Genoa case the open space was dealt with as built form, or as the reciprocal of the building. The treatment of the exterior space was related to and designed with the interior space.

For me, the difficulties of this approach seem to fall into three related categories: one being the issue of control;the other to being the issue of the complexity of the process and the issue of

the nature and quality of the decisions. Undoubtedly there are other problems, but for me these issues are reoccurrent throughout the case and the case methodology. They also relate to the implementability of the intervention as well as to the transferability of the approach to other contexts which will be discussed later in this chapter.

The issue of control arises from the expansiveness and comprehensiveness of the urbanistic approach. In order to make proposals at every scale and, in addition, to make those proposals so that each one relates to the other to be successful, one has to presume that sufficient administrative powers and/or civic cooperation exist for their implementation.

The difficulty of administartion seems especially pronounced when the design proposals entered the realm of the private domain and relied on a manipulation of private property for the success of an intervention made in the public realm. This may be justifiable and perhaps more possible in a historic context. In another context design proposals which penetrate into the building would most likely be limited.

When intervention with this scope is proposed for a context where a free market economy is in operation and private development is the means of implementation the strategies which would have to be used for development would seem to have to be extremely complex.

Although the means for private implementation was explored in the Genoa case, the public participation and cooperation between property owners as well as the composite of government compensation funding available which needed to be tapped was

considered a liability of the projections.

For example, where a building block had as many as thirty two different owners it would require a complicated management of the intervention in order to introduce building changes which would affect the whole structure. In this situation it might have been advantageous to approach the reuse of the building through implementation strategies before designs were developed.

Administration is also a problem in cases where the proposed interventions cut across zones of administrative responsibility on the city level. This was the case in the proposals for the state controlled railway station, and in the case of the Darsena, which was under the jurisdiction of the port authority.

The issue of the complexity of the process seems an obvious problem (although it is also for me an advantage). It is difficult to imagine that all of the issues of the city could be dealt with equally and be dealt with well. In fact, the Genoa case tended to heavily emphasize design issues possibly at the expense of planning issues.

For example, during comune seminars, both Peter Smithson and Donlyn Lyndon brought up social issues such as gentrification and planning for the correct housing mix. The architects had proceded to design making basic assumptions that change would occur. They had therefore designed a mix of housing types which would hopefully accomodate changing populations but exact studies as to market demands were not done.

This emphasis of design was possible by virtue of the Group membership which included mostly

architects. Although the group consulted planning personnel in the Comune offices the work concentrated on design and relied on the Master Plan for the general zoning designations of the area. Conceivably, if the group had been more diverse, and had included planners, the approach would have reflected a more sophisticated treatment of those issues related to planning.

It seems justifiable for the design aspects to take precedent due to the historic nature of the zone. However, in contexts where the destination of the urban area is not so clear, the issues of opposing interests, and of potential clients, would result in an even more complex situation, It would be important then to establish, by some other means, a clear goal for the future use of the intervention area.

The final issue which I will discuss here is directly related to the issue of complexity. The nature and quality of the decisions made using an urbanistic method are not guaranteed by the approach. The proposals which result from this process depend on the work team's capacity to generate, understand and respond to the complex information available from the urban context. In addition, the form and the quality of the products would seem to depend on an agreement as to what the project goals were, what client those goals represented, and finally on the sensitivity of the project's critics to judge the final proposals.

In sum, the three discussions above concerning the issues of control, complexity and quality raise the question of project responsibility. Can one designer or group of designers be given such a wide jurisdiction for decision making in such

a vast and diverse public context? In light of this question perhaps the value of this approach is in its imaging capacity. In Italy frequently a "projective plan" is developed as a mechanism for discussion. Often these plans include proposals which are not necessarily attainable but serve to heighten the public consciousness. Thus, the design can be a visual presentation of what the city could be, to open discussion, and to enlighten the citizen and the policy maker. The exploration of possibilities which may be attainable in the urban environment seems invaluable.

(2) The "Reading"

By "reading" I mean here the process of attaining a deeper understanding of the project context through research and observation of history, urban form and morphology and of form and use relationships. Reading also concerns issues of social, political, economic and cultural context. The term "reading" is borrowed from a term used by DeCarlo.

In general the utility of "reading" the context to inform design and the making of proposals can lead to a more aware process. However, there are some problems in the concept of reading. One problem is the issue of complexity which was discussed previously. The urban context being as varied and long lived as it is makes the task of comprehensive reading overwhelming and time consuming.

Given the constraints of time in developing a project, the reading, of necessity, is biased by the choiece of what is read. This choice is determined by what the individual or group is capable of reading (determined by their background

Skills) as well as what information they choose to pay attention to.

Further, when a foreign observer has been asked to respond to an unfamiliar context there may be a lack of understanding. In this case it is important to provide contact with local inhabitants.

An additional disadvantage is that the reading can lead to a conservative approach to intervention. Making such a strong link to context may make it difficult to break away from that context where change is important or could, in fact, be an imaginative approach for the future. The ability to use the information of the reading creatively to transcend a simplistic repetition of past forms depends on the skill of the designer. Thus, the reading also does not guarantee good or appropriate design.

The most creative approach to reading seems to be a reading of change over time and the city in process. This approach can reach out to how change may occur in the future while remaining in harmony with the evolution of the city.

The Genoa project attempted to use readings in order to iniate change. For example, the unliveable conditions of the existing fabric necessitated an approach not suggested in the immediate context. In this case the context at a wider urban scale was observed to find ways to alter the building fabric in sympathy with Genoa itself.

In the cases where even poorer environmental conditions form the context or where there is no built context at all, the reading must take on a different nature. It seems that in these cases the

decisions that the designer makes become more a function of individual "imagination" and ability to read more deeply. Cultural references may become more important, or social issues. However, theoretically there is always something to read whether it is considered negative, to be changed, or positive, to be reinforced.

(3) Design Exploration

Design exploration is defined here has the process of using design as a means of understanding the physical organization of the built environment and its relationship to function as a means of generating proposals for intervention (action in the existing context).

The case description of Chapter Two thoroughly illustrated the use of design for exploring proposed change in the Genoa context. It can be seen that working with the proposals of the plan in synchrony with the physical design resulted in a sensitivity to detail at the human scale not usually found in urban guidelines. This is illustrated in all the working phases of the case, but especially in the second phase where the definition of the architecture begins to affect the plan for the area.

In addition the design offers the possibility of exploring the technical issues of feasibility, construction techniques, and phasing. It also allows a more accurate cost estimate to be made for the proposed changes.

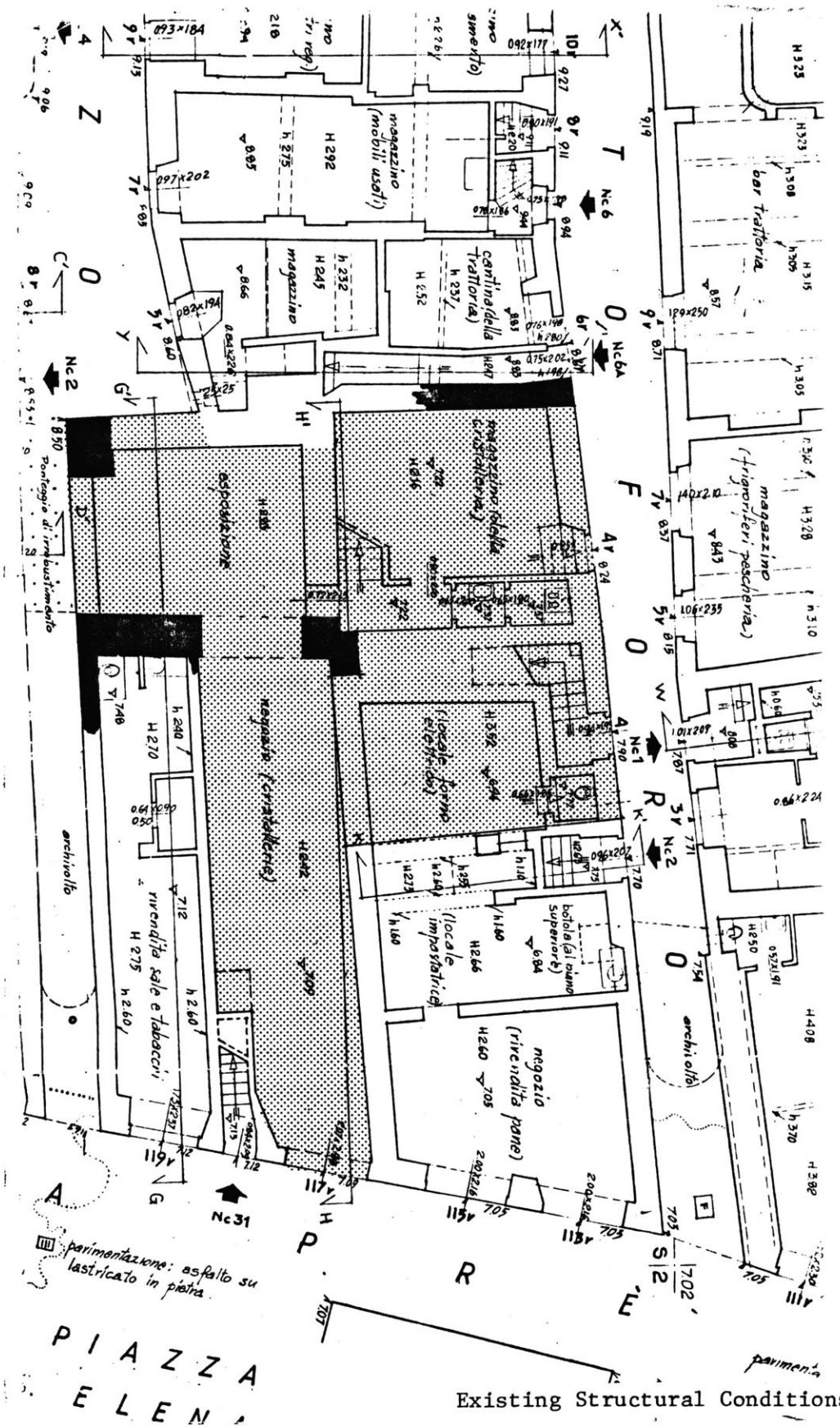
Some of the disadvantages of the design exploration are related to the manner in which they are generatted and to the attitude that the designer has toward the solutions. If the explorations are too

specialized, i.e.: are not applicable except under the exact conditions for which they are designed, they become merely design solutions. While this can provide an image of what is possible, the utility of the design as a guide is minimized. I have noted previously where this has occurred in the Genoa case. In the situation of the guide-line generation, the attitude of the designer must be one of seeking a creative approach to some re-peating problems.

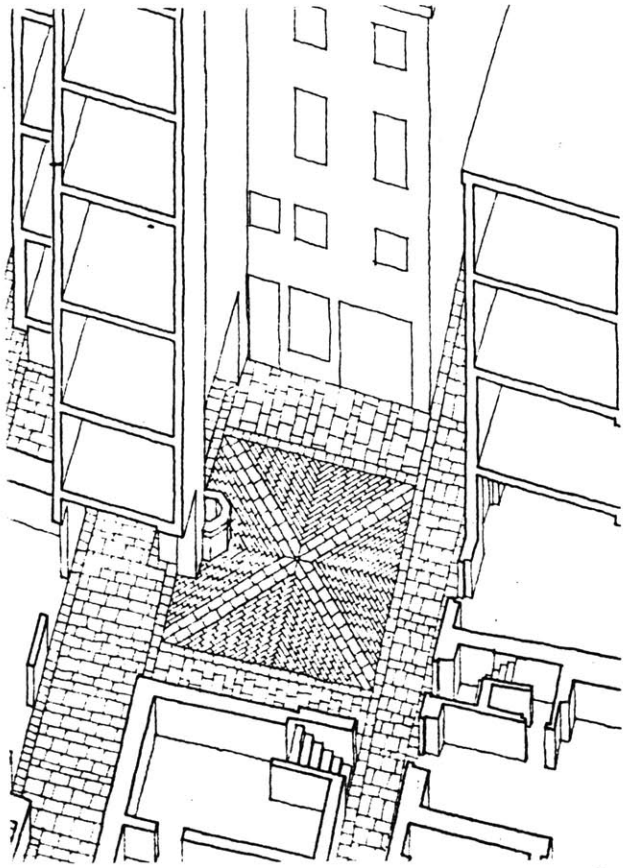
An additional problem with design exploration can be the problem of the presentation drawings and how they relate to reality. Drawings can be a verification of a physical proposal. They can also be misleading and make the proposal seem much better than it could possibly be in reality. There must be an honesty in the presentation of ideas.

Further, the design exploration which becomes the legal guide for building raises again the issues of control. The guidelines which were generated in some sense presume that it is possible to pre-dict what is to happen or what should happen even at the smallest scale. This definition of the fine detail is sensitive and yet it also extremely controlling. Even if areas are defined as being free of control, bounding these area restricts truly free action. While this control may be justified in a historic context it may not be in other contexts.

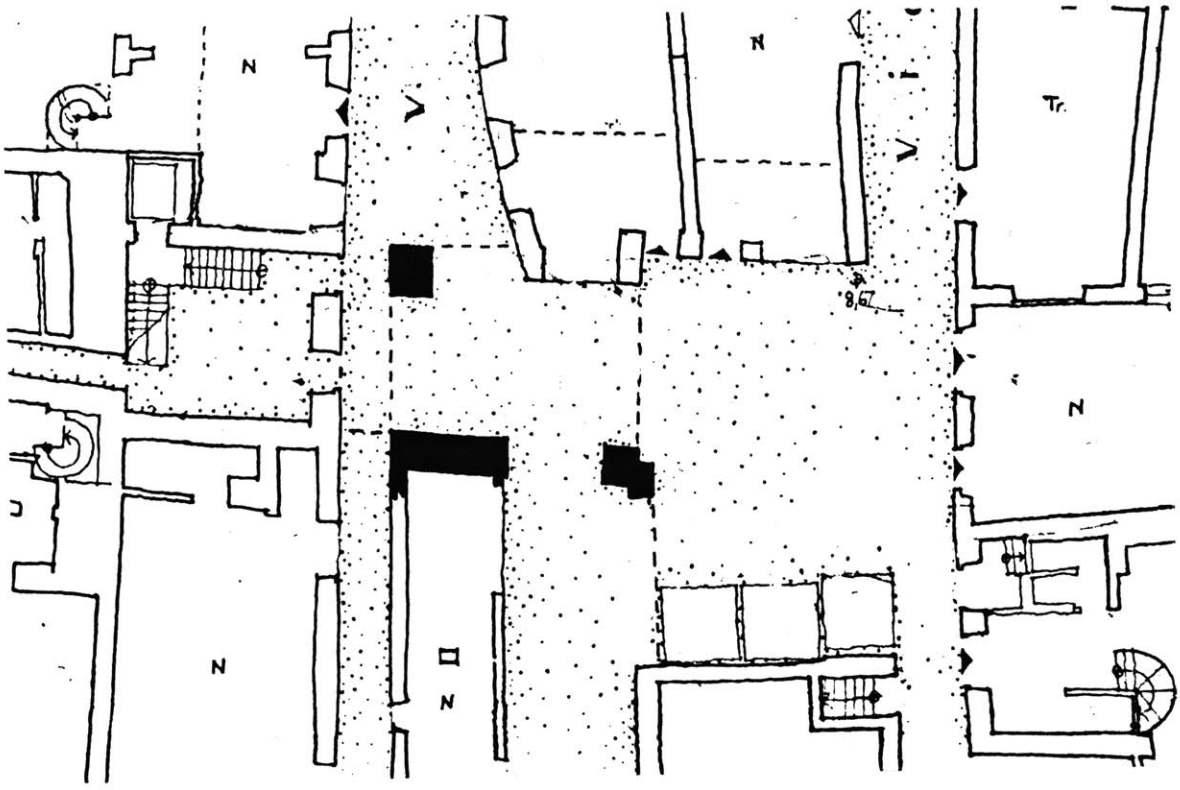
The design exploration is more meaningful if it is treated, in fact, as an exploration to present ideas and to propose the management of the physical environment.



Existing Structural Conditions



Alteration of existing Structure to Create
New Public Way on Commercial Link



However, design seems fundamental in understanding the physical environment.

(4) The Generation of Guidelines

In this case, I will refer specifically to the analysis of the design solutions to obtain the intervention guidelines.

I find the generation of policy through design an intriguing notion. The Genoa case in a sense does this since the design was produced before the legislative tool of the guidelines and the plan was detailed from an analysis of design projections.

However, the translation of the designs into guidelines was a conceptually difficult task; and the guidelines seem to be to be the least successful link between architecture and planning in the case.

First, they seem, on the one hand, to be too design specific, and the other hand, they can not be specific enough to guarantee the built quality of the architecture which will form the interventions.

For example, there seems to be a problem with specifying that a particular type of semi-public space is required in a certain location and associated with a certain access to the building if it is not also specified how the resolution of these details should be built. In this example, it seems that either the intent of the space should be given in a more generic sense or the space should be more completely detailed.

As such, I wonder about the utility of the guidelines. Perhaps the design was more appropriate as a project to be built rather than as a guide for intervention.

The complexity as well as the awkwardness of the final guidelines are additional problems. Considering the problem with implementation of legislation in Italy already discussed, the feasibility of implementing these complex guidelines is questionable.

Finally the design generation of the guidelines again brings up the issue of control, and appropriate levels of control. The guidelines tended to manage continuity and change in the historic context at a deep level by dealing with every aspect of the built and open space. In other than historic contexts this level of control would have to be defined in a different way.

In the Genoa case, the distinction of public and private realms helped to determine how specifically the proposals were detailed. This hierarchy has been a useful framework in other contexts. In a non-historic (freer) urban setting the isolated private realm might not be controlled at all for instance. Thus, the conceptual framework and way of thinking about the guidelines and their generation might be useful elsewhere.

(5) The Work Process

In this case, the work process is defined as the phasing of the work, and the reiteration of the research/observation/proposal/design review steps as the work proceded.

Most good design processes are reiterative. In fact, the non-linear quality of design is considered by most to be one of its defining characteristics. The distinguishing feature of the Genoa process was the opening up of this process

to the aspects of planning and to outside consultants such as technical staff and architectural critics, and other participants from the community to allow them to alter the process. The other distinguishing feature was the expansion of the reiteration cycle to include all the scales of the urbanistic approach.

In reality this process could have been more open and more reiterative. It would have been useful for example if more exposure to the community had been possible at the intermediate design phases. Exposure to the community occurred mostly in the academic realm of the university and in the very public realm of the newspapers and T.V. In addition, the validity of the guidelines could have been tested by permitting an outside design team to work with the guidelines in a re-design phase.

Finally, a difficulty of this process and of the whole of Genoa case was the amount of time and expenditure that was necessary to carry through the exploration. Because of this, work like the Genoa case seems particularly suitable for addressing problems in critical or sensitive situations such as is found in the historic center.

The Genoa Approach in Other Contexts: some hypotheses

In this thesis I have presented a case study of intervention into the urban context to illustrate the approach of a particular project and to examine whether it offers new ways to think about city design. I have been particularly concerned with the problem of the relationship between architecture and planning and the apparent gap between the two professions which is often cited as the cause for the lack of quality in modern urban environments.

The Genoa case illustrated a way of thinking about the city which does not separate the different functional and physical components of the city when proposing and managing physical change in the urban context.

In my opinion, the case suggests that the best merger between architecture and planning is in the working process itself. The planning legislation which was the result of the process, however, still does not seem to guraantee that good physical design will result with its implementation. In addition, the complexity of the urban guidelines produced from the comprehensive approach used in the Genoa project might inhibit the implementation of the intervention proposals. For me this indicates an inadequacy of the plan in general to transmit physical design intentions. In my opinion the approach would have been more valid if the designs generated in the process had been built directly.

Because this approach was a product of a European and, in particular, an Italian experience or urban planning and design executed in the specific historic, cultural, political and economic context of Genoa, questions were raised as to its utility in other contexts.

As mentioned earlier designing contextually in a historic Italian city offers rich physical content for reference. Would such an approach be useful in situations where the existing environment did not provide such cues? For example, how does one procede to "read" when beginning to design in a "bad" context such as the urban periphery. What does this approach offer when designing the extension of the city, or the new city, where no refer-

ence exists for the new settlement? These are all issues which are better explored, in fact, through the design testing of the approach in these contexts.

An additional issue in the special case of Genoa which has affected the project conception and development is the particular consciousness of the Italian, not only the designer, but also the layman-citizen. Having been steeped in the culture of architecure as meaningful experience for centuries, the population as a whole is more accepting to the importance of the city. Consequently, the success of the approach might depend a great deal on the cultural base and awareness of the urban population itself concerning physical design issues and their value. Support for and placing value on good city design above other concerns, sometimes overwhelmingly expedient, requires a citizenry who are sensitive to their architectural heritage. Unfortunately, it seems that cities who already possess sound heritage in good city design are blessed with such a citizenry, while those cities which need improvement are not.

Yet, despite some of the disadvantages discussed, this approach for guiding intervention in the city seems to have considerable advantages: the identification of a site as critical or significant can focus attention on a piece of the city which because of its perceived value (historic, economic, symbolic, etc.) or need (for reconstruction) calls for more careful attention and/or immediate action to safeguard the quality of the urban environment. The appropriate destination of the site is determined in terms of its complex role in the city,

separate from the interests of a particular client or developer with his limited set of interests. The study and design exploration can be more comprehensive since it does not have the time constraints of a project to be built. The approach can take into account a set of values of the larger polis which are considered important to reflect in the final physical resolution of the site. Finally, by commissioning the site to an architect, the approach puts a premium on the physical qualities of the city, but incorporates in its process, through research and design review, the views of the city planners, other pertinent city officials and experts, as well as the community, to create a comprehensive physical plan which is related to use.

NOTES

1. I have not translated certain words from the Italian into English. These words include the terms for: 1) streets: Via (street), Vico (small street), and Vicolo (alley-like street), 2) open spaces: piazza, piazze (square, singular and plural forms), piazzetta (small square), 3) The Comune, in English commune, which can mean the urban polis, or the city governing body, 4) Other terms such as urbanistica, are defined in the thesis text.

2. The History presented in the sections "Major Urban Developments and Genoa's Urban Center" and "Growth of the Urban Form" have been taken from a combination of sources which are listed in the bibliography.

3. The section on "The Project Origin" was derived from the issue of Urbanistica on Genoa, as well as the issue of Costruire, both of which are listed in the bibliography.

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