

DESIGN ANALYSIS FOR COLLECTIVE SPACES.

Piazzas and contradas in Siena

by
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SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURE STUDIES
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MASSACHUSETTS INSTITUTE
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ABSTRACT

The aim of this thesis is to explore those normative qualities of public squares that provide the infrastructure for a neighborhood network. In medieval times, public squares and neighborhoods were the structuring elements of the organic city. Their complementary aspects are analyzed in this work, and their potential to delineate a coherent city fabric tested in a site planning problem.

The concept of Piazzas and Contradas (quarters) form a central theme throughout three of the chapters: in the analysis of the Sienese context; in the test of an urban landscape project; and finally in forming guidelines and patterns for European urban design.

The intent of this study is to establish an approach to the issues of preservation and improvement of the traditional European city by extracting a number of guidelines and lessons from the Sienese context.

Thesis Supervisor: Julian Beinart
Title: Professor of
Architecture.

TABLE OF CONTENT	
INTRODUCTION	7
OVERVIEW	
MEDIEVAL PATTERNS	35
PIAZZA AND CONTRADA	73
FROM THEORY TO PRACTICE	111
CONCLUSION	159
BIBLIOGRAPHY	165

TABLE OF CONTENT

URBAN SPACES: USES AND ABUSES.

REVITALIZING THE POLITICS OF URBAN SPACES.

READING OF SIENA

SIENA AS CONTEXT

URBAN SPACES: ROLE AND SIGNIFICANCE.

THE SUPPORT OF THE NEIGHBORHOOD LIFE

THE EXTENSION OF PRIVATE SPACE

THE CATALYST OF THE CITY

CONTRADA: THE CUSTODIAN OF THE PATRIMONY

FORTEBRANDA

GUIDELINES

SKETCH DESIGN

EXPLORATION OF PATTERNS

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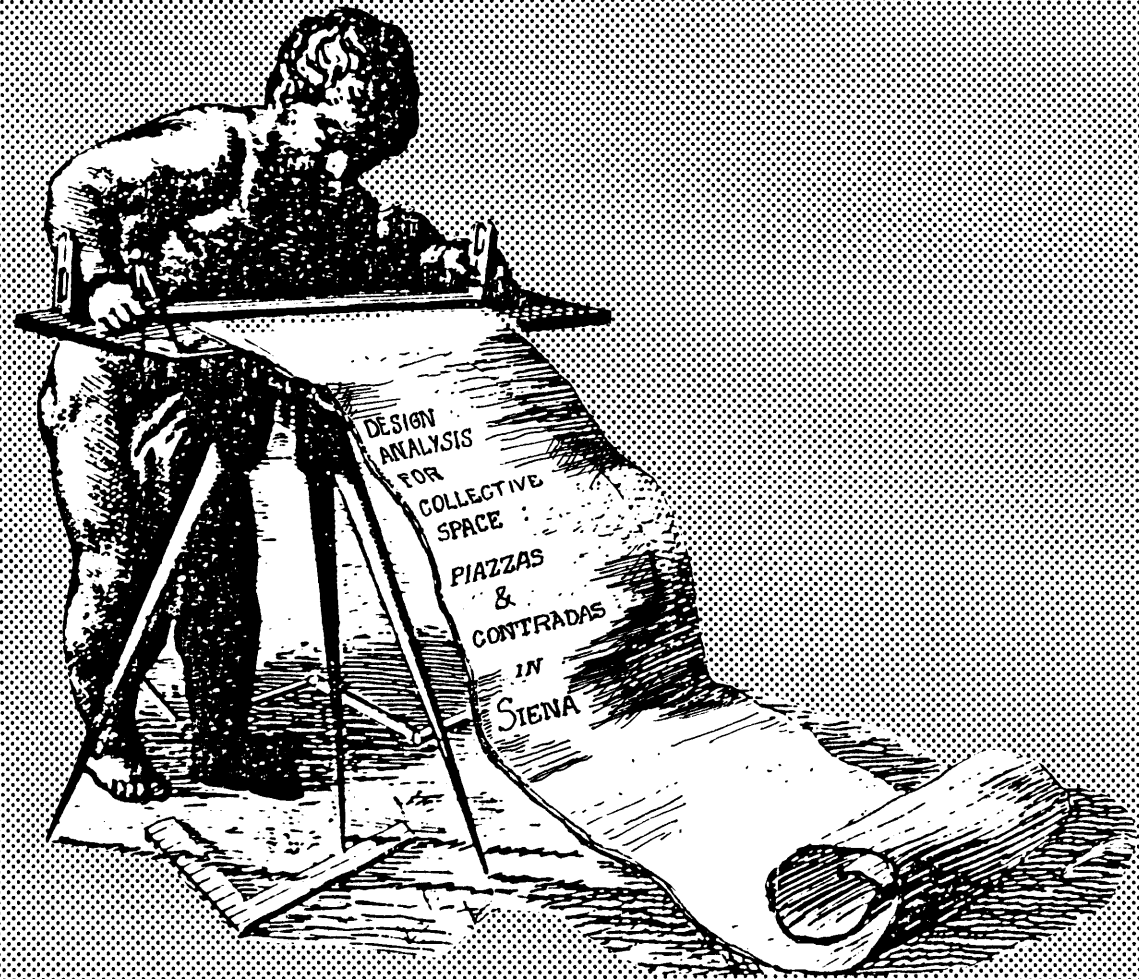
Julian Beinart, Gary Hack and Christine Cousineau for their guidance and encouragement.

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Carr Lynch Associates for their support and encouragement

and last, but not least, to Nadia.

INTRODUCTION



Footnotes

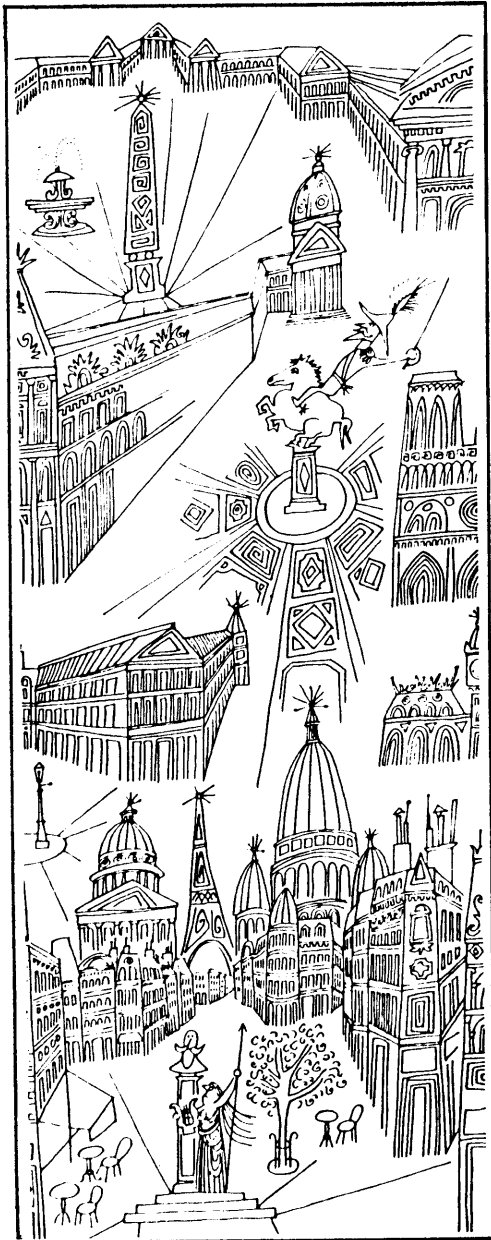
FIGURES

1. Saul Steinberg: Wallpaper design. Paris 1946, pencil, pen and ink drawing. in *Urban Open Spaces*.p.63.
3. Drawing by Robert Krier; in "Urban Spaces".
4. Piazza del Campo-Siena-Italy. in *Space Design* 7-9, 1981. p.4
6. Drawing by Robert Krier, in "Urban Spaces."
7. Chase Manhattan Plaza, New York City. in *Urban Open Spaces*, p.41
8. in *Urban Open Spaces*, p.28.
- 9-11. Drawing by Sefik Berkyie, Brussels 1981.
12. Sketch by Le Corbusier. in "Urban Spaces" by Robert Krier.
10. Sketch by Le Corbusier for the center of Paris. in "Urban Spaces"
16. Drawing in "Antico e bello, Il recupero della citta" by R.Piano, M.Arduino, M. Fazio. Editori Laterza. Milano.
18. Bologna: in "Anachronique d'Architecture", p.153. By Bernard Huet. A.A.M. ed. Brussels, 1981.
19. M.I.T. rotch library.

QUOTATIONS

- A.: Paul Zucker, in "Town and Square" see ref. in bibliography.
- B.: Stanford Anderson, in "On streets" see ref. in bibliography.
- C.: I.L.A.U.D. report "urbino 1981" Language of Architecture. Sansoni Editore.
- D.: Giancarlo di Carlo in "I.L.A.U.D. bulletin 1/83, p. 4.

URBAN SPACES: USES AND ABUSES.



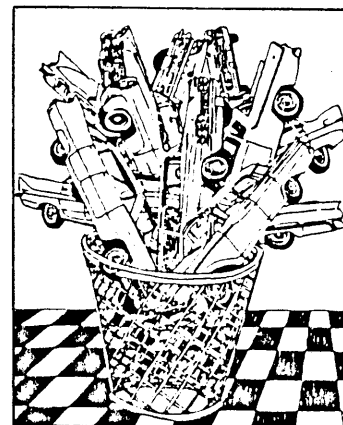
In European cities, public spaces are recognizable to all. They are the symbols for a community or entire city; They are landmarks for visitors; they stand as witnesses of architecture or public art. It is here that the social characteristics of a neighborhood are synthesized, and here that the history and memories of a community and city are concentrated. But public space is given meaning by its inhabitants, and therefore can only have meaning if it is used as a base for activities.

1. On the right: public spaces recognizable to all.

INTRODUCTION

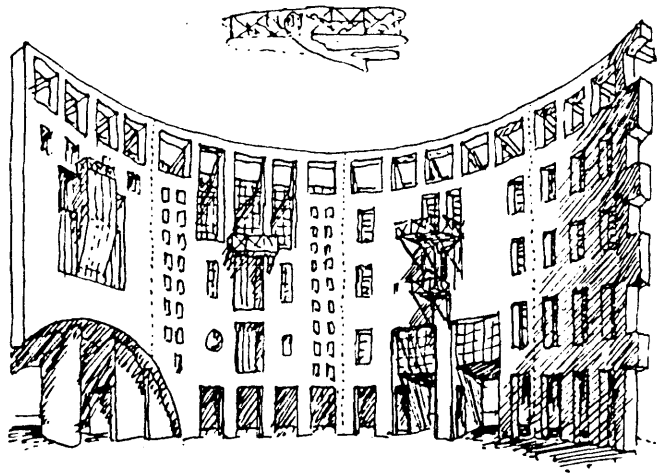
At issue is a two-fold relationship: (1) that between public spaces and their social role for neighborhoods, and (2) the correlation of these spaces to a particular context within the urban fabric. An appropriate human environment for small neighborhoods and cities is predicated on the quality of places and their uses - the forms they take, and the institutions within them. The architect - city planner must be conscious not only of the qualities of a building itself, but with how the building occupies space, how it fits within a given context, and finally, how its uses or add to the participation of public life. One of the fundamental misconceptions of modern city planning

is that it has, for the most part, ignored the concept of collective space as a generator of neighborhood life. Today, festivals, street theater, and other traditional activities are being undertaken in private or semi-private spaces. They are no longer a part of collective life. The use of public space has, more often than not, been reduced to fulfilling the functional needs of the modern city such as traffic and parking.



J.F.D. 82.

URBAN SPACES: USES AND ABUSES.



3. Definition of space

Herein lies a basic dichotomy: On the one hand, formal urban models are often designed autonomously of the economic and social data defined by a given society. On the other hand, when the practice of architecture refers to cultural models characteristic of a class or social group which has its own particular logic, the forms used are related to the specific social classes' needs.

If urbanized public space is conceived of as the reflection of a social order, sustained by popular knowledge and practice, it could induce a reformulation of certain urban policies concerned with functions such as housing, working space, and circulation.

INTRODUCTION

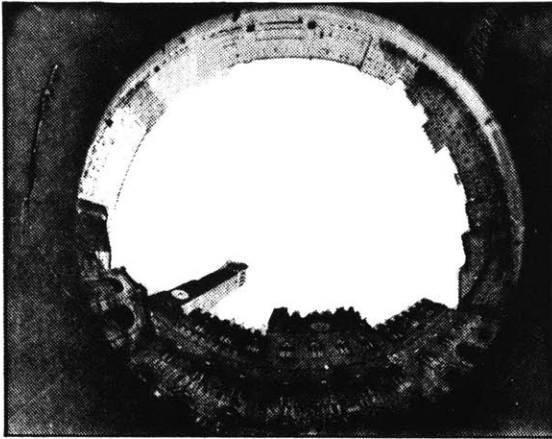
The creation or the rehabilitation of a public space can have a beneficial influence on its constructed surroundings, and in fact, some neighborhoods are brought to life around an appropriate public space. Given current trends, such instances have proved to be the exception. Unfortunately, European cities today have witnessed the degeneration of their urban spaces.

The purpose of this introduction is to provide the reader with a broad overview of :

- (1) The issues and historical developments that led to the degeneration of urban public spaces, and
- (2) The movements that have attempted to

reverse this trend through the application of political pressure and the involvement of city residents.

A . PUBLIC SPACES DEFINED.



4. "a hole or a whole"

To live in a city implies the constant use of public space. As soon as one goes out of his/her home, one confronts public domain: The street that one crosses, the square where one does one shopping, the park where one takes a walk, the bench where one takes a rest. In an attempt to define public space in relation to city planning, Paul Zucker explains:

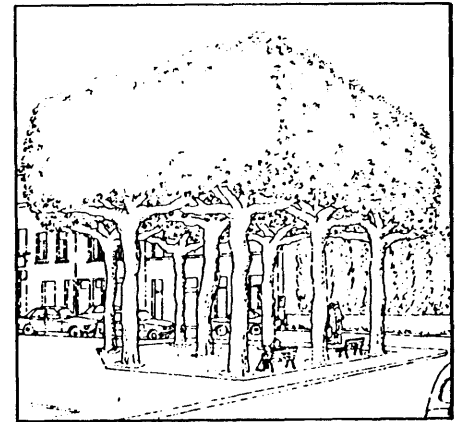
"Here, 'space',...means a structural organization as a frame for human activities and is based on very definitive factors: on the relation between the forms of the surrounding buildings; on their uniformity or their variety;...In other words, specific visual and kinesthetic relations will decide whether a square is a hole or a whole." (A)

INTRODUCTION

Physically, urban public space is composed of streets, piazzas and monuments. In Medieval times, streets and squares were demarcated by blocks of urbanized areas. This demarcation was not haphazard but was rather a precisely designed repetition of types and models. These models were specifically tailored to the geography, climate, and indigenous craft of the particular city. In the nineteenth century, public spaces provided the "nature in the city" - that is, trees lining the avenues, forming shelters for market places, etc.

From a sociological perspective, it is often said that "every city has its own smell". And truly, public spaces have

never been antiseptic places. On the contrary, they have been full of noises, movements, and smells. It is a simultaneous presence of all these elements, which are given a particular flavor by the surrounding neighborhood, that creates urban life and its richness.

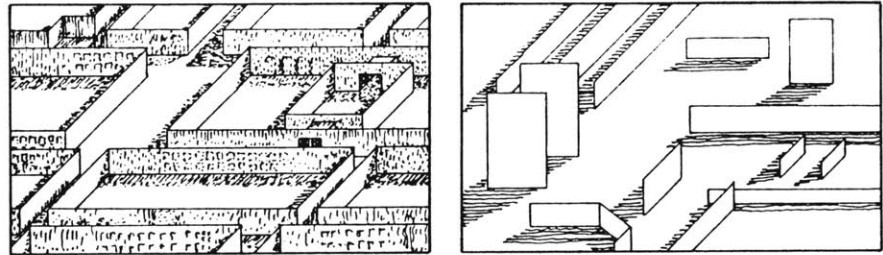


5. A roof of trees. An image that could exist.

URBAN SPACES: USES AND ABUSES.

"The Modern Movement in Architecture developed in such a way as to emphasize the separate identity of each building, often according to degenerating formal principles that were no longer in discourse with the socio-cultural setting, nor even, reflexively with themselves. The city, especially its open space and its users was neglected". (B)

6.



B. THE DEGENERATION OF PUBLIC SPACES.

The decline and progressive deterioration of public spaces in European cities cannot be attributed to any single cause. As with most complex events it is the result of the combination of numerous different factors. For the sake of simplicity, three of the major causes have been isolated for discussion: (1) The evolution of industrial production, (2) the ideology behind the "garden city" concept and (3) the policies of functionalist city planners.



7. "A group of four trees" by Jean Dubuffet. An image that exists.

INTRODUCTION

One of the most significant transformations of the industrial revolution took place in transportation. The development of trains and the subsequent inter-connection of urban and rural areas had a dramatic effect on the structure of the city. It also allowed workers who formerly had to live in the city, to live and work outside the city. In response to this trend, city transportation systems were extended to incorporate the new additions of peripheral quarters. Yet the structure of the city itself remained organized in mixed or complex quarters.

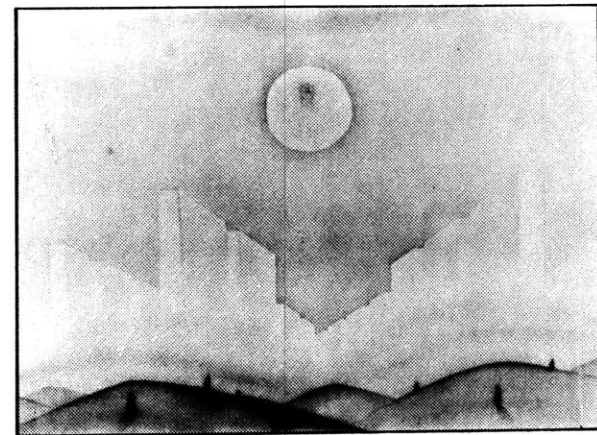
At the turn of the century, socialist thinkers began making charges that the structure of the traditional city contained the seeds of an oppressive and unequal society. The abject living conditions of the working class provoked socialist thinkers to believe that not only the process of industrialization, but the design of the city itself was responsible for the condition of the poor. This was a crucial misjudgement. Historically, European cities had developed their own typology and a structure that had adapted itself to change over centuries. The European city has always offered sufficient physical characteristics (especially public spaces) to its inhabitants in order for

URBAN SPACES: USES AND ABUSES.

them to appropriate their quarters-and ultimately the city- for the sake of their collective life and liberty. Although not much more than political conjecture, the argument nonetheless represents an example of the kind of political justifications that supported the decline of urban spaces.

The concept of the "garden city", developed in the nineteenth century, is another example of the "anti-city" ideology of that period. Originally, the concept developed by Howard envisioned a "garden city" with its own source of employment for its residents. However, the promises of services and employment in those communities were often not

delivered, which led to the concept of "suburbia" where everyone had their own "house in the green" and connected to the city for work. The new phenomenon of commuting back and forth to the city promoted the development of transportation networks, and ultimately encouraged residents to move out of the city.

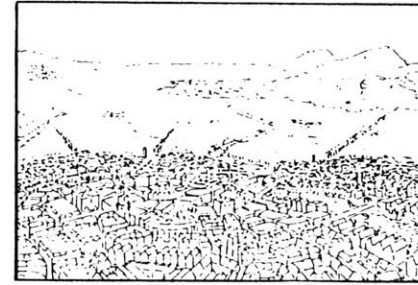


8. " Out there. Because we don't know what's out there." by Jean-Michel Foucault.

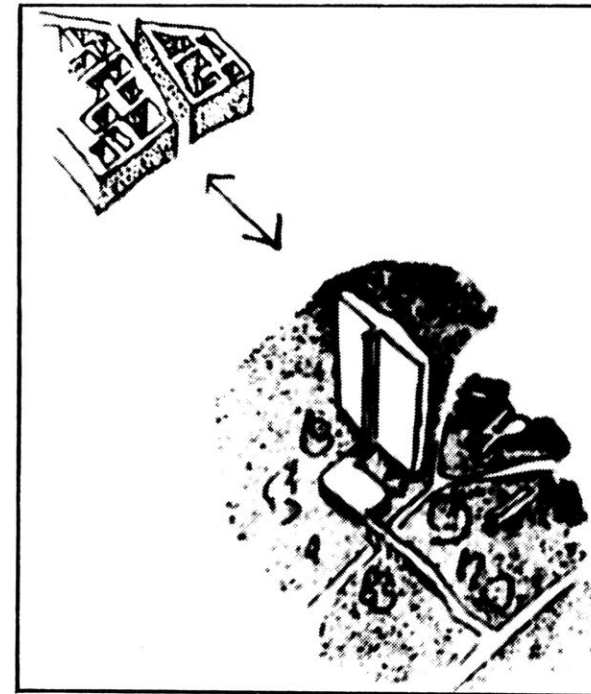
INTRODUCTION

By the second World War, most European capital cities had developed into administrative centers. The functionalist doctrine, based on ideas of utility and efficiency, promoted the concept of "zoning" the different functions of the city and the development of circulation networks.

Highways directly connecting the administrative center to the outskirts were constructed. This eventually transformed avenues and places into expressways or crossroads. In accordance with new standards of spacing and lighting (established in part to reduce health hazards), streets were widened to allow for more light.

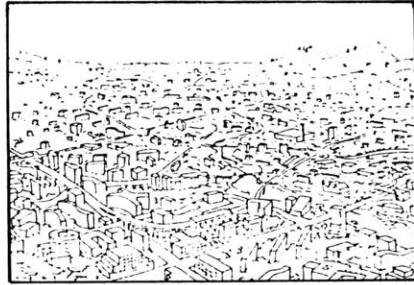


9. *The country and the city*

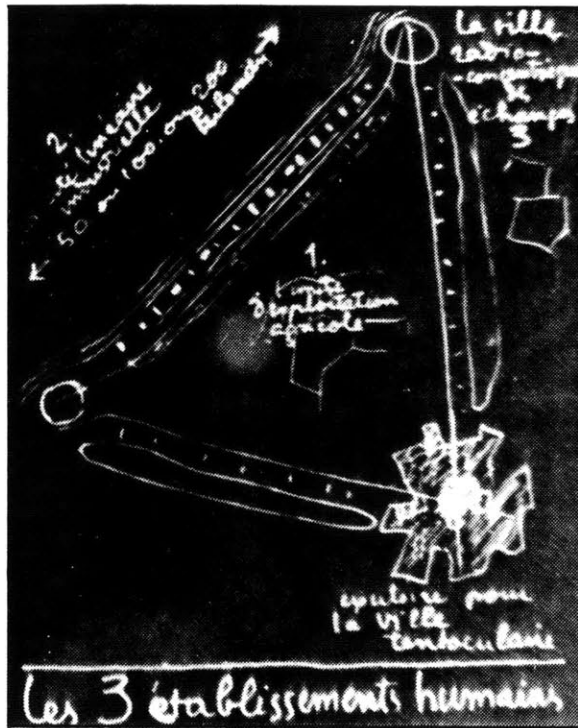


10. *Towards a new conception of Space*
Le Corbusier.

URBAN SPACES: USES AND ABUSES.



11. The country-city.



12. "The three human settings"
Le Corbusier.

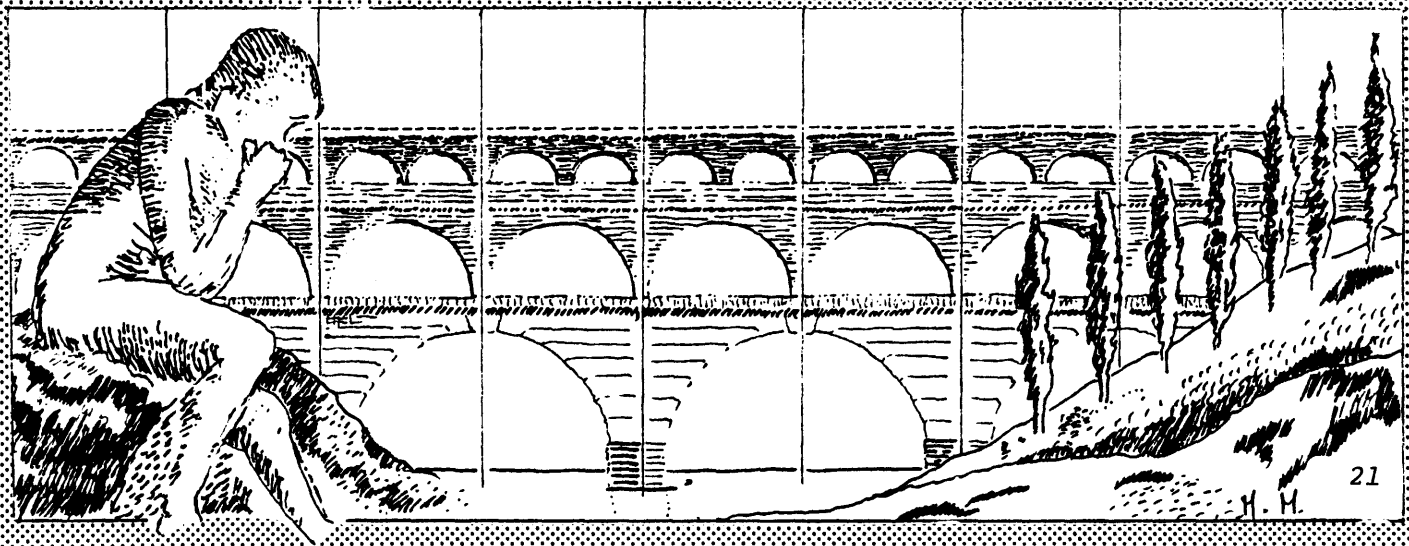
From a social point of view, the results of this adaptation of public space to the automobile was disastrous. In a recent report (C), several Venetian students complained: "Nowadays cars invade the center of the city. The square once the center of public life has now become a parking lot." Under the influence of the functionalist doctrine, the city became a conglomerate of monofunctional areas divided by expressways. This particular doctrine gave the strongest political justification for the destruction of public spaces.

INTRODUCTION

Finally, the most striking demographic manifestation of the degeneration of European cities is the diminution in the number of city inhabitants. For the purpose of this study it is important to note the correlation between the decline of public spaces and city life. As the progressive deterioration of public spaces continued, the city population and public officials ceased to consider the city as a commonweal. The resultant loss of a sense of belonging to a city provoked the trend towards leading a secluded life in one's own quarter, with little or no participation with other parts of the city.

What is needed today is means by which both city residents and public officials will consider again their city as a commonweal. One of the critical ways of achieving this end is through rehabilitation of public spaces. After the past failures of urban planning, due in part to the imposition of policies from the "top down", the involvement of city residents in urban planning is more vital than ever.

OVERVIEW



OVERVIEW

Can the rehabilitation of public spaces be undertaken without the involvement of its residents? At what stage is resident involvement necessary: proposal, decision making or execution? And finally, under what conditions can resident involvement be successful? An attempt to answer these questions has been organized into three parts. Firstly, this section is restricted to an analysis of resident involvement. In the following, two illustrative examples of successful resident involvement and city rehabilitation are examined. And lastly, those normative qualities that necessitate resident participation in the process of city

renovation are analysed within the context of Siena in part two.



13. Poster for the European Campaign for the RENAISSANCE of the city.

REVITALIZING THE POLITICS OF URBAN SPACES.

A. THE ORIGIN OF RESIDENT INVOLVEMENT

Prior to the emergence of Modern urban planning in the 1920's, the evolution of city development retained a relative continuity. In the Medieval, Renaissance and Baroque period, this continuity was provided by the precise roles of an organic order, and by a culture based on craftsmanship that was adaptable to particular climates, geography, and local materials. In the 18th and 19th centuries, although the Classical and Gothic revivals produced a multiplicity of eclectic styles, it was still integrated into the traditional city fabric.

OVERVIEW

Despite the destructions caused by the industrial revolution at the turn of the century, the large modifications of the city fabric (i.e. Haussmann in Paris) were nonetheless in keeping with existing urban continuity.

In the late 19th. century, public participation and debate focused on the construction of public monuments, public buildings, and important public spaces. There was no consideration given to the basic, overall structure of the city. The Bourgeoisie had the greatest influence, enriching the city with its own urban codes and creating a new image using traditional rules: avenues, boulevards, and monuments. As a result,

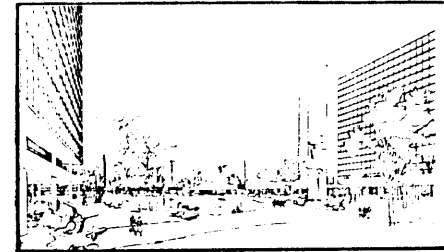
resident involvement was confined to that of the Bourgeoisie. The working class, living in terrible conditions, had no voice in urban planning. They were forced to comply and adapt to the changes instigated by the Bourgeoisie, including Haussman's interventions.

Criticising the living conditions of what was then considered for good reasons the "harmful city", functional city planners broke with the principles of urban continuity. The city was adapted to the new forms of industrial production and the new concept of "garden city housing." Urban art became town planning. The tools of this "neutral" city planning, were no longer based on

REVITALIZING THE POLITICS OF URBAN SPACES.

traditional rules, but on complex, egalitarian data such as square foot per inhabitant, square foot per industrial building, etc. From this point on, the technician-city planner could hide behind the scientific character of his approach which was legitimized by democratic intentions.

The idea of resident involvement was scoffed at by an architectural milieu sustained by pro-functionalist politicians. The progressive destruction of the poor peoples quarters was undertaken in the name of progress, and publicity devised to convince the population it was necessary. Promised public equipment and spaces, intended to

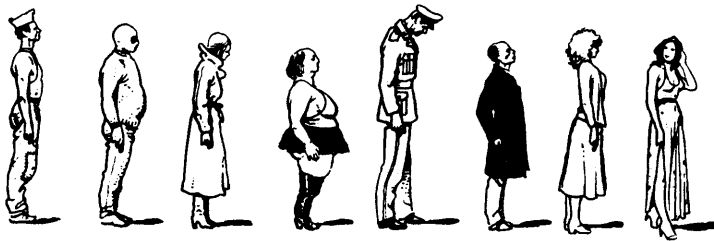


*14. In the name of Progress.
Le Corbusier.*

lighten the burden of the lower classes were never realized. Those who could afford to move to houses in the suburbs did so. For those who stayed and waited for improvements of their poor neighborhoods, it became clear that functionalist city planning would not bring them anything. It should be noted in favor of functionalist city-planning, that it was the first attempt made at

OVERVIEW

appling egalitarian, democratic principles to spatial relationships. However, they created false expectations for a number of working class poor.

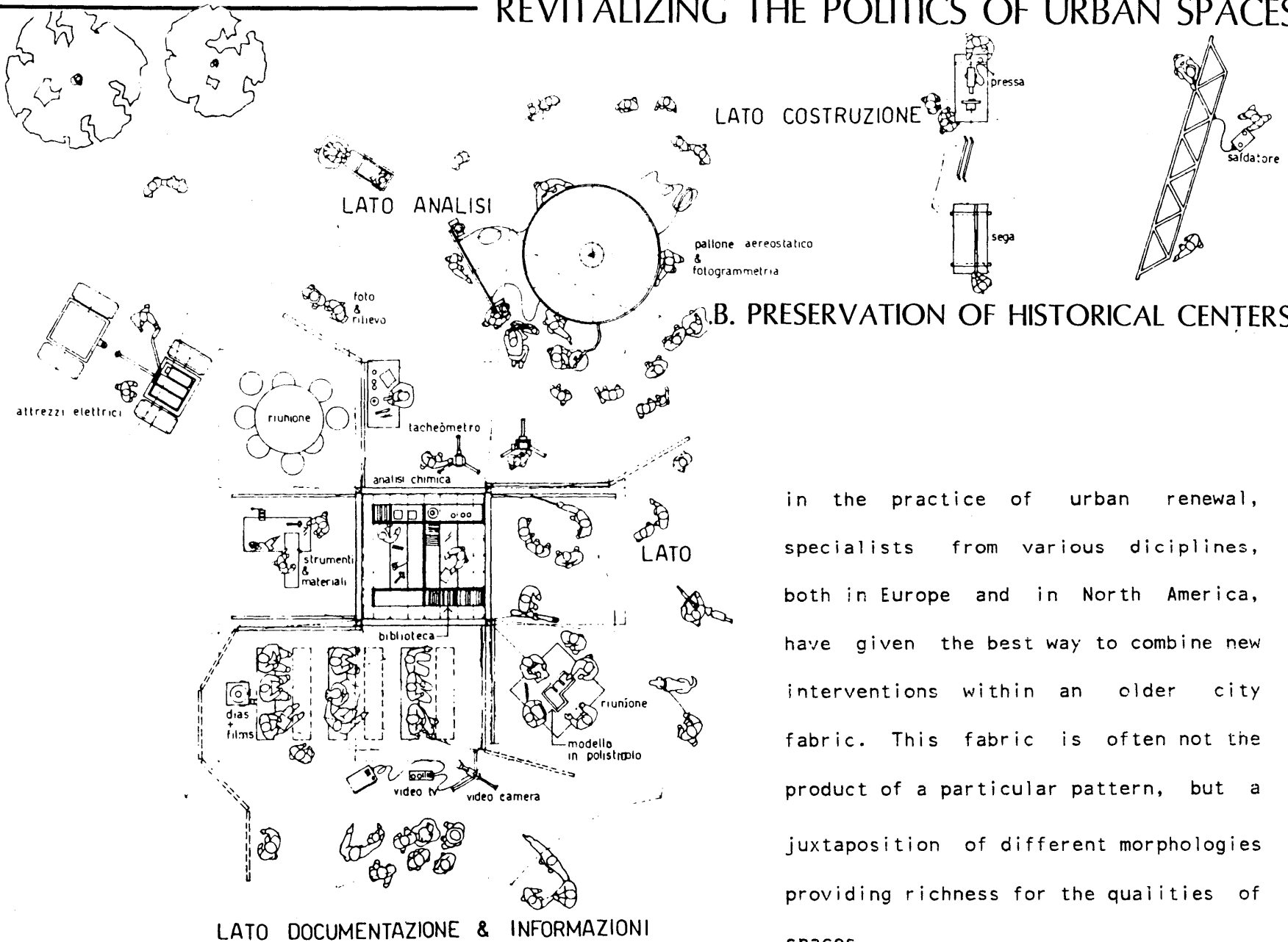


15. Do we think about all the inhabitants?
Drawing by Manara.

The fundamental concepts underlying the functionalist movement (such as "basic needs") are continually being challenged by sociological realities, economics, and... common sense. Granted, the way that traditional urban structure had integrated these variables had to be replaced by a more scientific method based on inter-disciplinary teams. However, there is a lack of cohesion among the different disciplines and ultimately leaves the city planner alone when it comes down to designing.

16. New techniques at the service of rehabilitation.
Otranto. Project by Piano and Rogers. ▶

REVITALIZING THE POLITICS OF URBAN SPACES.



B. PRESERVATION OF HISTORICAL CENTERS.

in the practice of urban renewal, specialists from various disciplines, both in Europe and in North America, have given the best way to combine new interventions within an older city fabric. This fabric is often not the product of a particular pattern, but a juxtaposition of different morphologies providing richness for the qualities of spaces.

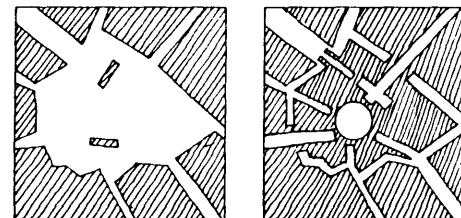
OVERVIEW

Giancarlo di Carlo describes a typical approach to the problem of historical preservation. First is the attitude that ignores the history and quality of places and therefore destroys a certain set of values associated with historic spaces. The following approaches acknowledge the importance of history in designing within an urban context. Secondly, there is the passive approach which leads to vernacular design. Thirdly, there is the approach that avoids passivity and abandons itself to stylistic exercises and therefore becomes eclectic. And finally, the solution which G.D.C. recommends which is an approach consistent with the present needs of inhabitation and the

present perception of history.

"We believe that a careful and intelligent reading of the environment in which we are about to insert a new construction, could help contemporary architectural language to be more refined and, without disowning itself, actively consistent with the architectural language of the past." (D)

As one goes through the task of inserting a "contemporary language in an urban environment structured in the past", one has to choose a specific type or mode of intervention. The issue is to see how a different mode of intervention can produce a different city form.



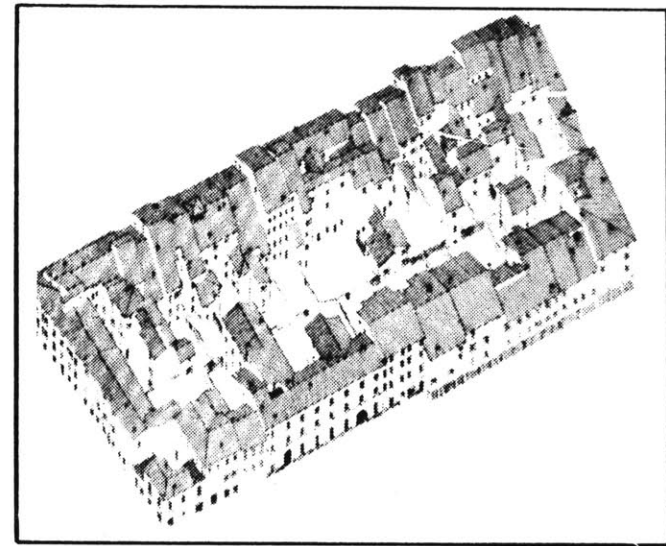
17. *Left-overs or infills?*

REVITALIZING THE POLITICS OF URBAN SPACES.

Two extreme examples of rehabilitation in historical centers are provided by the experiences of the Italian cities Bologna and Otranto. The conservation of Bologna illustrates a radical "vernacular approach", based on the strict reproduction of historical buildings. Otranto, on the other hand, experimented with the application of contemporary techniques combined with the participation of the inhabitants. In some ways, this approach is similar to the one suggested by G.D.C.

The following charts summarize the different modes of interventions that were applied, as well as the assumptions on which they were based. These two

cases illustrate the key role given by public officials and planning professionals to the rehabilitation of public spaces within an urban renewal policy for medium sized historic European cities.



18. Back to our origins. Rehabilitation of a block in Solferino quarter. Bologna.

OVERVIEW

THE CASE OF BOLOGNA

Modes of intervention	Body of principles / ideas	The (hidden) postulates	Critic and comments
<ul style="list-style-type: none"> - The project of 1960 + the neighborhood committees - Restoration methods: (*) <ul style="list-style-type: none"> . restoration . rehabilitation . reconstitution . destruction + reconstruction . pure destruction - Strong regulations about Modern Architecture in the city. (most cases, Mo Ar. is rejected.) 	<ul style="list-style-type: none"> - Suppression of any development of the city - All the structures of the past had to be reestablished - All the foreign features that did not belong to the popular culture were eliminated (i.e: skyscrapers) 	<ul style="list-style-type: none"> - The urban culture has to be restored to a living process - This process has to be controlled by the entire population and therefore, must coincide with the socio-economic program (anti-"elitist" process) - Creating a new urban culture can be achieved only by keeping alive the old city core, which is supposed to contain all the urban values of the past. 	<ul style="list-style-type: none"> - Inner-city has to be used for its own value. - They want the city to be used but they impose an image = contradiction <ul style="list-style-type: none"> . Another contradiction : two structures coexist M.A, Baroque & Renaissance - They are obsessed with the visual quality
<ul style="list-style-type: none"> - Archives work,/.research . photography, areal views,... - Removal of any anachronistic addition to a building and removal of any building constructed on a public space. - people have to move during the work. It need a phased-in process and housing for the dispossessed. 	<ul style="list-style-type: none"> - Strict typology - Original parcelling - No social conservation during the works 	<ul style="list-style-type: none"> - The "Museum idea" - To recreate the previous public or semi-public spaces; to recreate the quality of life in the city 	<ul style="list-style-type: none"> - No restoration without art-historians. - They deny the quality of what people did to their houses: No Memory of the city
<ul style="list-style-type: none"> -1 citizens can be deprived of their property -2 Craftmanship -3 Plans and archives 	<ul style="list-style-type: none"> - Restoration: <ol style="list-style-type: none"> 1- controlled and funded by the Municipality 2- traditional techniques 3- traditional methods of survey. 	<ul style="list-style-type: none"> - people do not participate in the restoration process - decision-making process has to be highly organised -2 The use of certain materials support certain types of economy. (aluminium vs. stone) -3 Knowledge of the history of the town is crucial. 	<ul style="list-style-type: none"> - There is a controversy between preserving the " social" atmosphere and improving the buildings. - Control : actually, they succeeded in keeping the poor people in the core. Funding : the communist municipality, because of its absolute political power, can afford such kind of puristic restoration. -2 Perfect restoration = money. Only 6000 dwellings.

REVITALIZING THE POLITICS OF URBAN SPACES.

THE CASE OF OTRANTO

Modes of intervention	Body of principles	The postulates	Critic and comments
- Very sophisticated methods of survey.	- Reuse of the buildings	- . clear social basis . social aspect of participation in restoration	- the poor people work out themselves their way through rehabilit.
- The additions are maintained. Restoration meth.: . restoration . rehabilitation	- The structures have to stay the way they are	- No "museum" idea It is the Mark of change	- not only the historical center, but what the people use and work with has to be preserved
- The mobile unit (laboratory) will help the population to understand the new techniques available.	- Modern technology applied in the work will respect the traditional culture.	- The actual means of restoration to make it more efficient is essential for social conservation.	- Very "light" projects; financially easy to cope with. Less stress on the families.
- If the state of decay is important, some destructions and reconstruction will be done. The typology could change.	- Actual typology	- The "Memory of the city".	- There is a trend in many cities now toward dealing more casually with old structures.
- Aerial photography	- Actual parcelling	- They work on the present not the past.	- it is a poor intellectual level of restoration
- People stay in their houses during the restoration work	- Social conservation	- People have to participate in the "renovation" of their houses. The family has to decide and organise the work.	- it leads to a collective urban creation.
- Communal mobile workshop + craftsmanship	- Restoration: 1- experience funded by the Unesco and the Italian government. 2- Both traditional and new techniques.	-1&2 Working on a building was part of the city life and part of a continuous phenomenon involving craftsmanship.	- They are not obsessed with the visual quality 1&2 This refers to the continuity of the working sites of the cathedrals (M.A.)
. Thermography and aerial photography (balloon) . Devices of modern technology	3- New methods of survey. . Analysis and diagnosis . Open project . Works	-3 in a post or pre-industrial society, the working tools have to be more accessible and therefore mobile.	3- specialized technicians are needed
- Communal mobile workshop analysing and integrating the personal needs 1 exhibition elements 2 audio visual equipment 3 library	- Information and education	- High participation level	- The local craftsmen had to be aware of the new techniques.

OVERVIEW

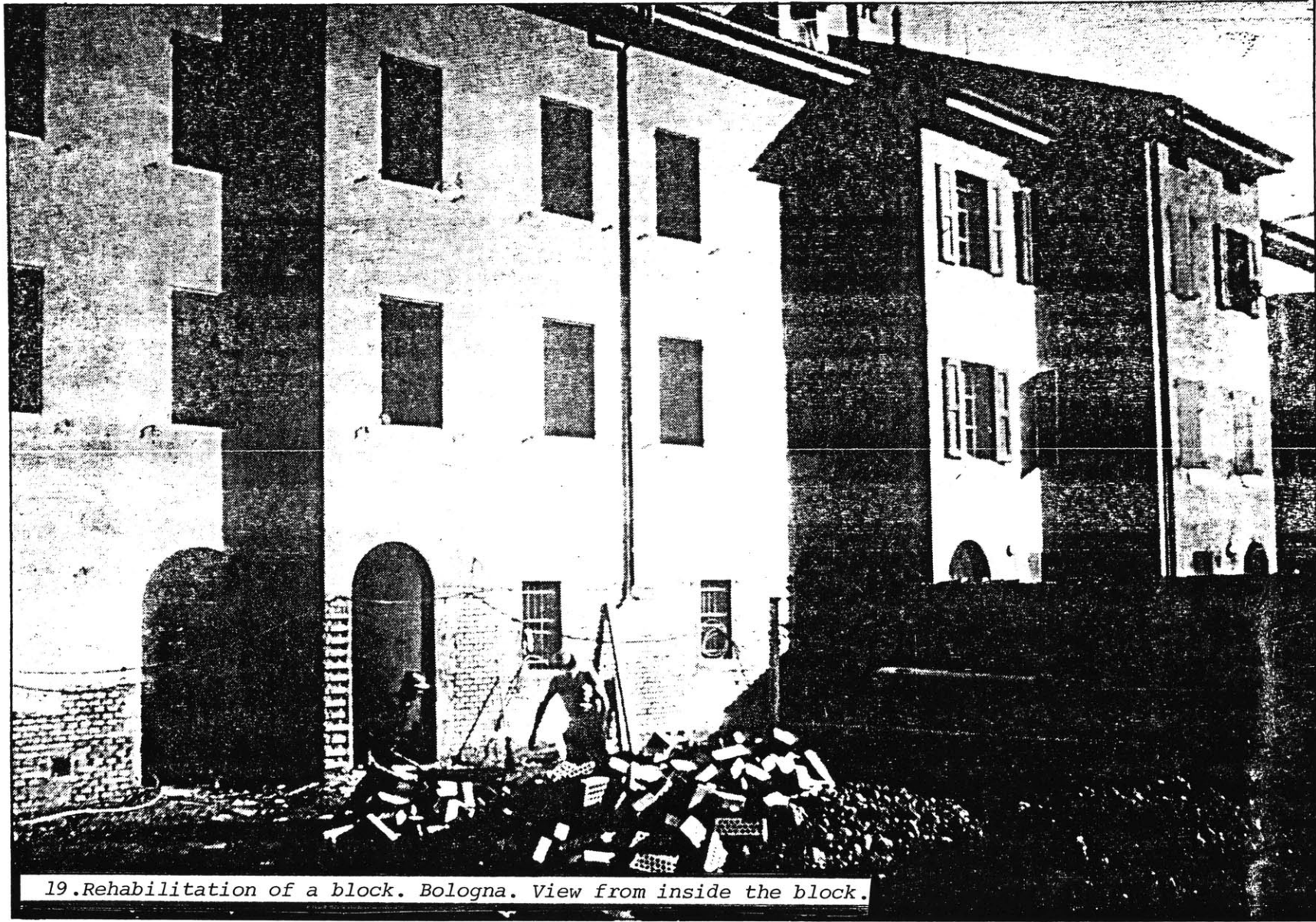
Differences	Bologna	Otranto	Comment
<u>- Political</u>			
. Power	. The concil has an absolute power as far as city-planning and restoration goes.	. It is the decision of the inhabitants to restore or not.	
. Organisation	. Very hierarchized organisation: Council & inhabitant committee	. Inhabitants are educated to organise themselves.	
. Participation	. The participation of the citizens is done through a serie of public consultations.	. Citizens have a direct involment in the restoration process.	
<u>- Social</u>			
. Social preservation	. People have to move in temporary housing	. The district population is not stressed by the works	
. Social structure	. Will to recreate the original urban pattern, which provide a defined social structure.	. Use of the actual social structure to improve the quality of the neighborhood.	- The traditional urban fabric has an interesting quality of life.
. Public spaces	. There is a great attention given to the fabric of the city. The public spaces have as much importance than the building themselves.	. The first concern is housing.	
. Role of the Architect	. The relationship to the inhabitant is possible by the inhabitant's committees. <i>made</i>	. Through information, education and construction means, there is always a direct relationship with the inhabitants	
<u>- Economical</u>			
. Size of intervention	. concerns the whole city	. concerns little cities or districts within a larger city	
. Costs	. Very expensive operation	. Minimal costs	

OVERVIEW

The attitude of preservation in Siena combines the experience of Bologna and Otranto in that it is: (1) constantly adapting the city environment to modern needs while retaining the original Gothic image of the city; and (2) relying on the inhabitant's involvement in keeping the Medieval quality and social structure of the contradas (neighborhoods-quarters). The example of Siena, which like a frozen fossil avoided the trauma of industrialization, combines the problem of contemporary needs with the maintenance of a Medieval environment. For this reason Siena was chosen as a model for studying the problem of historical preservation.

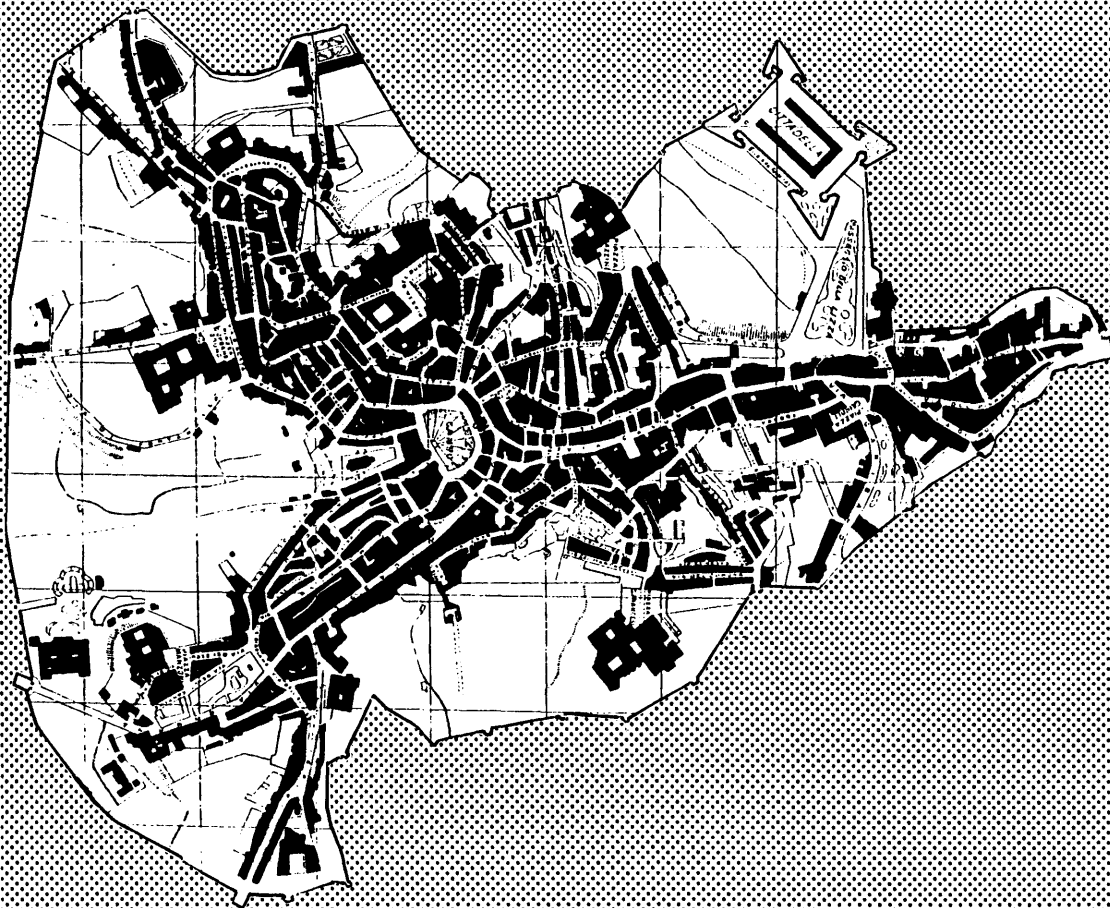
The approach taken in this thesis is similar to that of G.D.C. in that it follows its contemporary view of rehabilitation of historical centers: it consists of a "reading" of the contextual environment of the city (Chapter I); an analysis of the interaction of city form and neighborhood life (Chapter II) and finally a design phase testing this analysis by using a contemporary language consistent with the past is undertaken in Chapter III. In the conclusion, certain principles of the Medieval urban patterns in Siena are extracted in the hope of providing new insights into the problem of historical preservation.

OVERVIEW



19. Rehabilitation of a block. Bologna. View from inside the block.

MEDIEVAL PATTERNS



Footnotes

Figures

1. Bird's eye view of Siena.
Engraving after a painting by
Rutilio Manetti, beginning of
18th.c. in "Siena the city of
the Virgin" by Titus Burckhardt.
see bibliography.
2. in *Space Design* 7-9, 1981. p.7
"The market place" in "The story
of Siena and San Gimignano" p.35.
see ref. in bibliography.
3. in *Space Design* 7-9, 1981. p.23
4. *ibid.* p.21
5. in "Villages & Towns" No.4. p42,43.
6. *ibid.* p.28,29.
7. It illustrates the effect of good
and bad governement on the city
and the countryside. Painting in
the palazzo publicco, Siena.
8. in *Space Design* 7-9, 1981. p.5.
11. in "Villages & Towns" p.50,51.
ref: No. 4. Edited and photographed
by Yukio Futagawa. A.D.A. edita,
Tokyo, 1973.
15. in "Italian Hilltowns" by Carver.N.
Document Press. Michigan 1979. p.15.
16. in "Villages and Towns", p48,49.
17. in "The Story of Siena and San Gimignano"
opcit. p.132.
19. in "Urban Open Spaces", p.26. *Opcit.*
23. in "IL Campo di Siena" by Enrico
Guidoni. Biblioteca di Storia della
cultura Urbana. Roma 1971.
26. in "Siena, the city of the Virgin"
p.15. *Opcit.*
28. From postcard.
29. in "Villages & Towns". *opcit.*

QUOTATIONS

- A. in "Urban Open Spaces"
' We reflect our urban
Landscape' by Lawrence
Halprin. p.3
- B. in the *Blue Guide*, Part on
Siena. see ref. in Bibliography.
- c. in "Urban Open Spaces"
' The historical development
of Open Spaces' by Dora Polk
Crouch. p.4
- D. From the notes taken in Siena
during the lecture of Spiro
Kastov.
- E. *id.*
- G. in "Urban Open Spaces"
' Dreaming of Urban Plazas'
by Robert Jensen. p. 24
opcit.
- F. *Stadbau: "City Planning
according to artistic principles"*
by Camillo Sitte. (translated by
R.Collins) Random house /New York.
1965
- H. Marc Antoine Laugier (1713-1769)
" *Essai sur l'ARCHITECTURE*" p.219.
re-edition of 1755. Pierre Mardaga
Ed., Paris 1979.



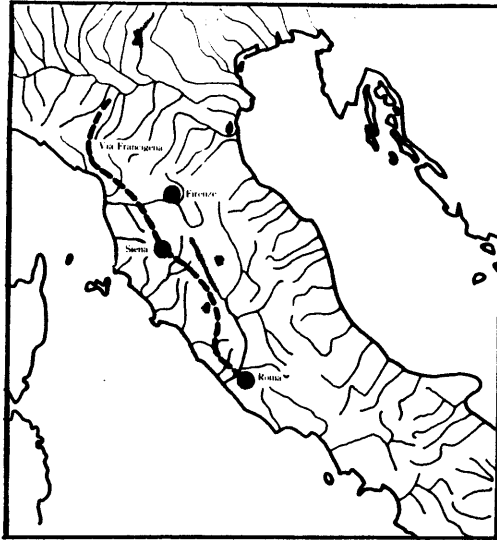
1. The shape of Siena in the 18th. c.

"The city lives within its landscaped environment. Each city has grown from the nature of its surrounding landscape-the bedrock from which it has been built...These more than anything have established its original character, the essence of its personality, the quintessence of its usage". (A)

HISTORY and CITY FORM

Siena appears in history as Soena Julia, a Roman colony founded by Augustus. There were no major changes until the seventh century. The town grew along the road that connected Rome to North Europe. Siena became powerful, self governed city around the eighth century. Under Charlemagne, the town had its own counts, and about 1125 it became a free

MEDIEVAL PATTERNS



2. Siena, Florence and Rome. Italy.

republic which soon entered into competition with Florence. At that time, the city developed into a Commune and their meetings took place near the cathedral within the city walls. Because the Bishop exercised too much control over the meetings, the Commune decided

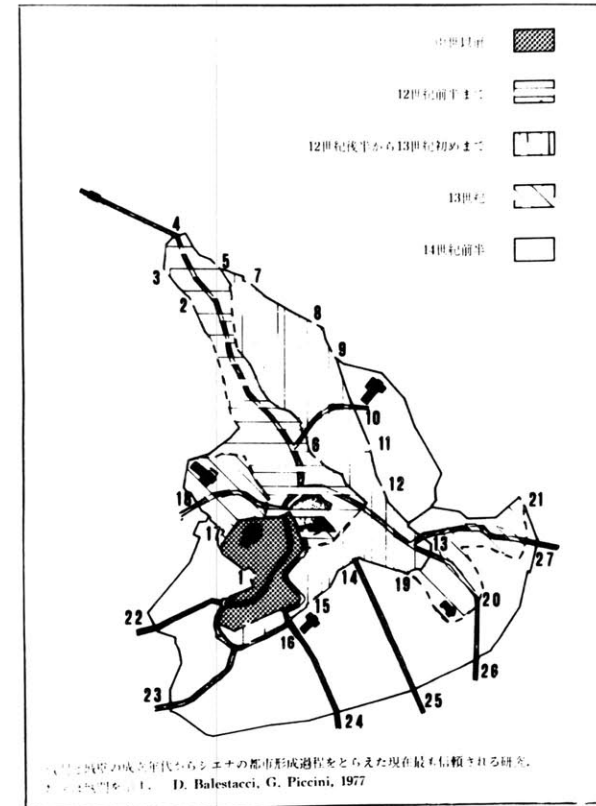
to convene outside the existing city walls at the intersection of the Y-shaped mountain ridge. This intersection eventually developed into the Piazza di Campo.

The campo was then divided into two parts by a wall separating the upper and lower piazzas. Along this divide, a storage house was constructed that was later chosen as the site for the city hall. The lower Campo eventually developed into the city market place.

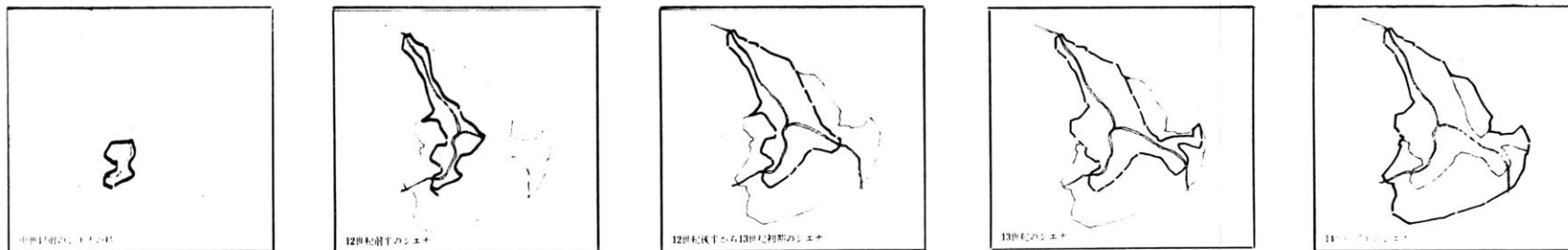


The Market Place

Later, in 1260, Siena, which headed the Tuscan Ghibellines, aided the exiles from Florence after defeating the city at Montaperti. When the Ghibellines were defeated ten years later by Charles d'Anjou, Siena established a Guelph oligarchy made up of the middle class (popolo grosso) ruled by the Council of the Nine. It was under this Council that the storage house became the first palazzo Comunale (city hall). The decisions made by officials to have a building facing a piazza was one of the first acts of city planning in Siena.



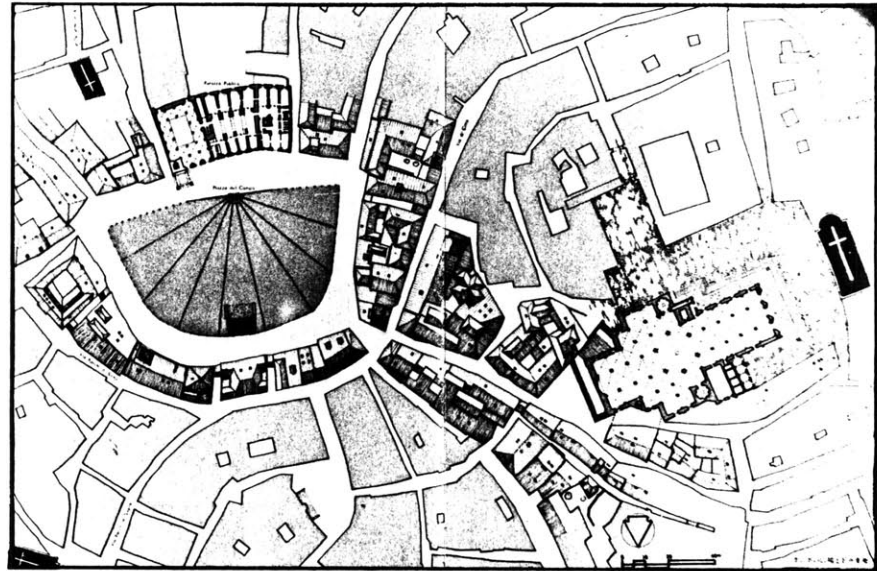
3. Underground waterways and location of fountains.



4. Siena: its birth and growth. The successive city walls during its evolution.

MEDIEVAL PATTERNS

In the following years, Siena began looking for its own architectural style that could compete with the Renaissance of Florence. The Gothic style was chosen as the aesthetic preference and localised under the strong influence of the Siserian Order. An important characteristic of the Sienese Gothic style is the material used. Stone was too expensive. One can still see today the arches of the cathedral that remain unfinished because of the prohibitive cost of stone. Siena opted instead for an inexpensive material like brick which the city itself provided. At this time, the tower of the city hall made of Sienese bricks was erected. This tower

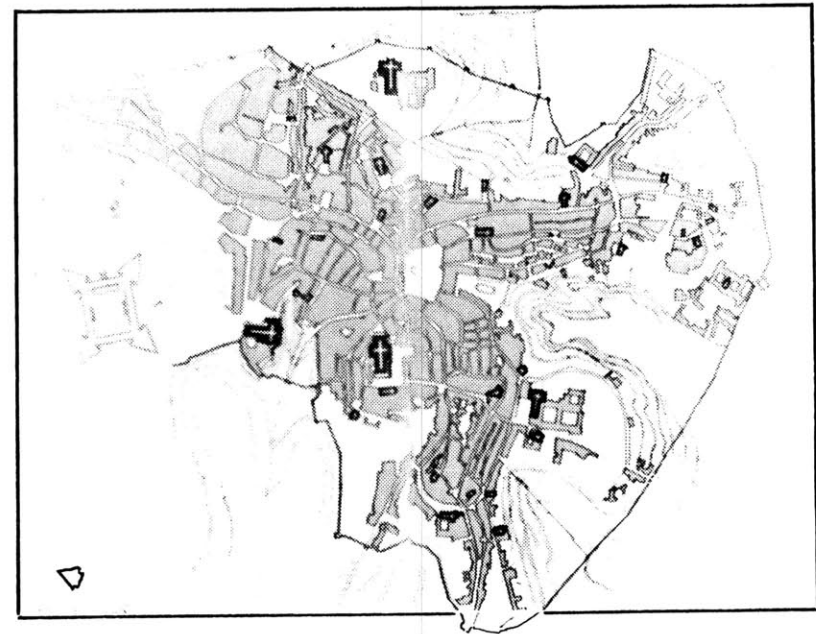


5. *Piazza del Campo and the Piazza del Duomo.*
Note the former shape of the first plan for the Duomo, now the Piazza Jacopo d. Quercia, perpendicular to the cathedral.

represented the new central power and the other towers, symbolizing the individual power of the Castellare were torn down.

In the fourteenth century, Siena controlled an area of more than thirty miles. Although there was already a very poor region developed in the direction of Florence (Porta Camollia), the city grew southward in the opposite direction. The Franciscan and Dominican Orders which had become powerful, took over the upper regions of Siena outside the city walls. They were extremely popular and an urban development rose up around them, primarily near the gates of the town. When the city constructed its last walls, they were intentionally placed to incorporate the lands held by these Orders so as to control them. This extension of the city was undertaken during the full growth of

Siena. Nevertheless, this development was never as important as they expected: because of the devastation of the plague in 1348, the city did not develop as planned, and the green valleys within the city were never urbanized.



6. Location of the Sienese churches.

MEDIEVAL PATTERNS

In the beginning of the fifteenth century, Siena was engaged in struggles with Charles IV. Later, it fell into the power of Gian Galeazzo Visconti, who was scheming to hem in Florence. After his death, the city regained its liberty for a time, but Pandolfo Pertucci (Il Magnifico) proclaimed himself autocrat in 1487. Another spell of liberty was marked by a victory over the Florentines and Clement VII, but the Spaniards captured Siena in 1530. Costumo I de Medici, unwilling to allow Florence a spectacle of liberty so near their city, entrusted the final suppression of the Sienese to the blood thirsty Marquis di Mignano, who took the city in 1555 after a disastrous siege of eighteen

months. Some 700 families, who refused to live beneath the Medicean yoke, migrated to Montalcino, where they maintained the Republic of Siena until 1599 when it was delivered up to Florence by the Treaty of Cambresis. Thenceforth, Siena shared the history of Florence and Tuscany. (B)

As a result of continual warring, little was added to the city's essential fabric until the twentieth century, and consequently, the greater part of Siena's Medieval inheritance has been preserved. Siena today still retains the physical form and cultural values of the Medieval urban spirit.



POLITICS

and

CITY FORM

*7. "Allegory of the Good and Bad Government",
Partial reproduction of the frescos by
Ambrogio Lorenzetti in Siena, 1338-1340.*

"There we can see the tension between , and mutual adjustment of religion, market, and government, playing themselves out in control and use of the main urban open space." (C)

The emergence of a governing structure in the city, can best be understood as the architectural form setting the framework for politics. Today the remains of the towers of the Castellare, representing the strength and power of the individual families, is a physical testament to the political role of architecture. The Castellare of Siena were sprawling households composed of

MEDIEVAL PATTERNS

servants, quarters, stables, and distinguished by their individual towers. The height of these towers, and their location on the crest of the three Sienese ridges, was a physical measurement of the families' political power within the city.

The city itself expressed political power through architectural means. The Charter of the city always contained an architectural clause concerning the control of the construction of the walls, the curving of the streets and the height of the houses. The individual assertion of power by the Castellare, and the central control of the city demonstrates a type of



8. The Medieval skyline formed by the towers of the individual castellare. Painting by Ugo Tolemai, Siena.

artificial design founded on political tension.



Around 1200, the city developed beyond a political and economic concern. Town planning began to be thought of in terms of aesthetics. The city, consciously, became a work of art. The morphology and typology of the city were recognized to the extent that urban planning was applied through laws

In the same period , city architects began to appear. This "Uomo Universale" might have been a painter, a sculptor, or a city planner. The man who painted Santa Caterina, could have designed the shape of the Campo. The artistic trends of that period were supported by the Nine , who ruled the city during the 13th century, reaffirmed the relationship between the aesthetic of city form and politics. The nine brick paved sections radiating from the Town Hall date back to 1347 when they were first installed to symbolize the city state governemnt that the Sienese called The Nine.

During the fourteenth century , the Tuscan region flourished. At this time, there was a revival of the ancient Greek concept of the city and citizenship. As Fra Giordano da Rivolta said:

"The word 'city'(civitas) sounds almost like 'love'(caritas), and through love are cities built, since men delight in living together." (D)

Part of the responsibility of being a Sienese citizen included building a house within the city walls.

The way in which Siena developed within its successive walls, represents a typical Medieval growth as opposed to the Renaissance development of cities like Pienza and Florence, where urban space was controlled differently:

MEDIEVAL PATTERNS

Like some other cities, Florence was founded on an ancient form comprised of a grid and a river. During its evolution, Florence had to fight against this type of Roman pattern in order to develop its own form.

The creation of some other cities was generated from their natural settings: hills, valleys, water level, etc...

For this reason, Siena's city pattern could hardly have evolved in the same way than Florence or Rome. Unlike those other cities, Siena's form was not the work of a single architect. The entire design of the city evolved

through Castellare involvement, arbitration between the people of Siena and city officials, and finally implemented by the designers.



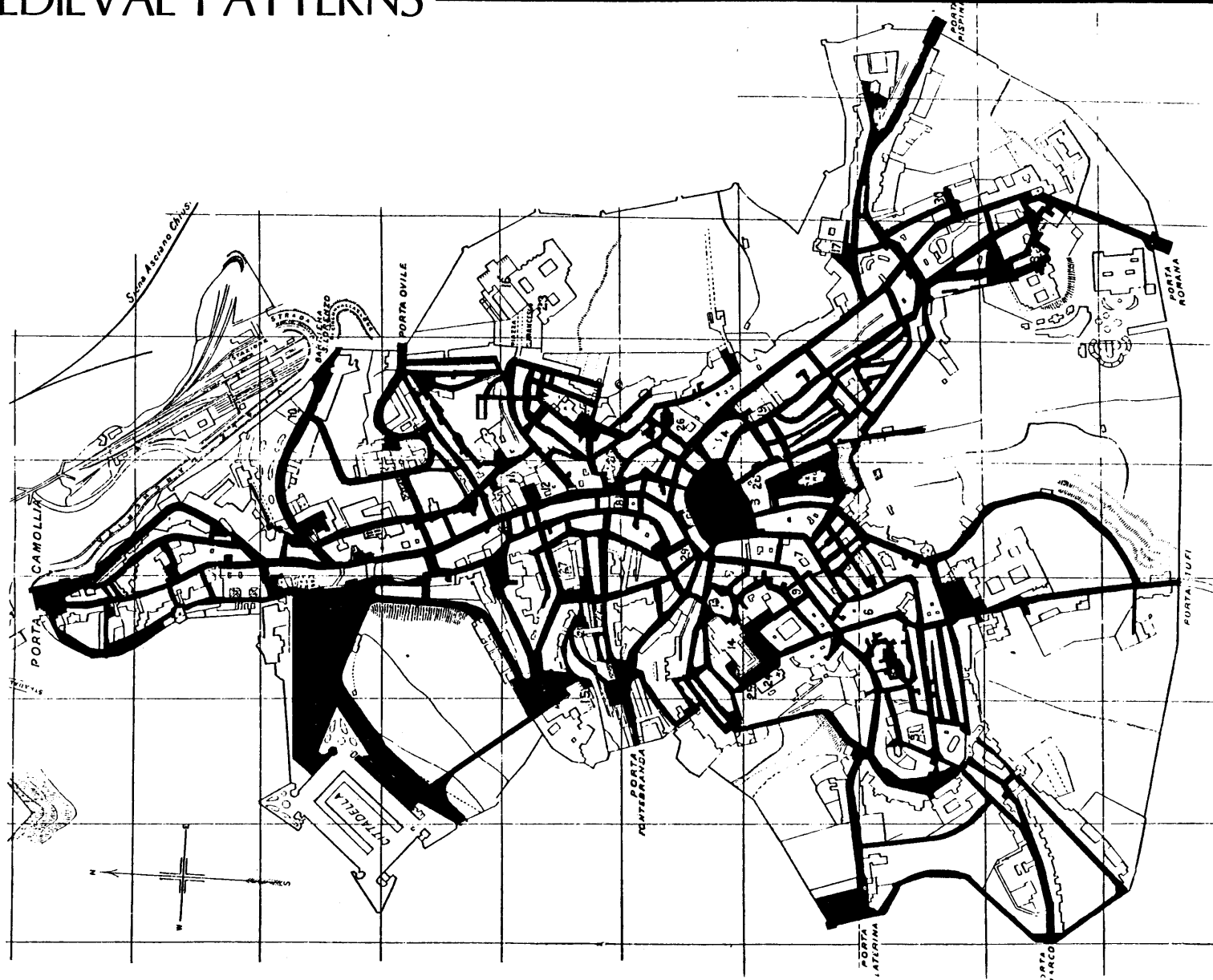
9. Typical view of a Sienese street. The arches are holding the facades together.

"Siena's admirers are legion. For students of the Western city she typifies medieval urbanism at its most endearing, and holds lessons of seemingly unregimented community...Her compact brick texture...speak of compellingly exploited topography, of sensible improvisation, variety within unity, the felicitous fit of the material and social dimensions of urban life." (E)

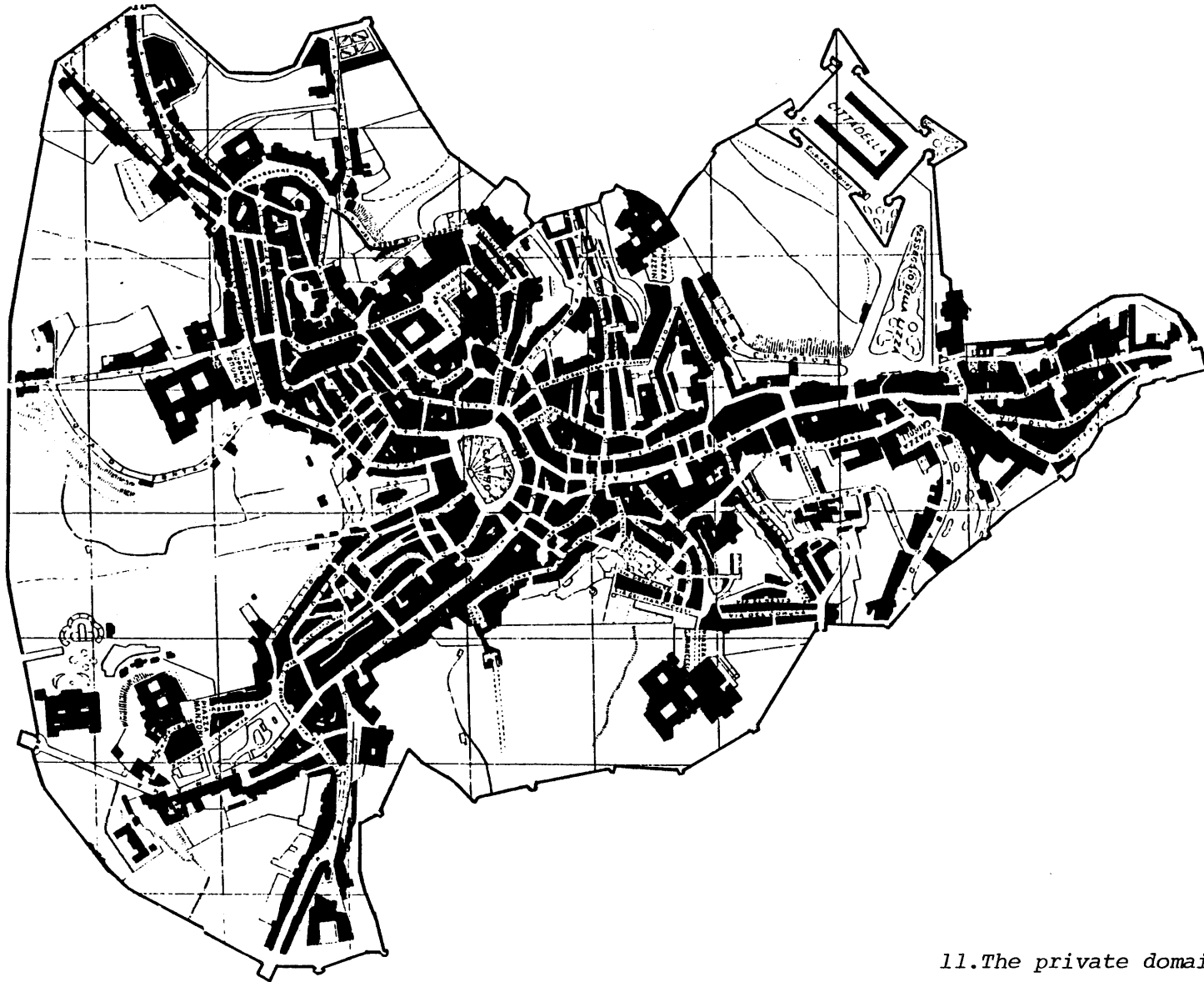
THE "ORGANIC" CITY

Siena is the model of a city that has an optimal size population and possesses an organic quality in the way it organizes itself when growing. It therefore has the capacity to be landscaped because the city fabric is understood as a whole. In Letchworth, the garden city planned by E. Howard, the project induced a relationship among people that was nearly medieval in character. The form of the urban design incorporated some of the Medieval features described by C. Sitte in his book "Der Stadtbau" (see section on medieval squares.) Similarly,

MEDIEVAL PATTERNS



10. Network of defined public spaces throughout Siena.



11. The private domain.

MEDIEVAL PATTERNS

the scientifically designed neighborhood unit by Clarence Perry, (1929) used many qualities of the spontaneous Medieval quarters.

In his class "Theory of City Form", Julian Beinart described eight characteristics of the organic city, four of which are described below: (1) Separate but dependent units form the so-called "Neighborhood town". (2) Within each one of those units, there is a balance in terms of class and work. In other words, each unit represents a microcosm of the city itself. (3) There is an optimal size for the city, that is

a maximum number of inhabitants beyond which the economic utility curve declines. Until the nineteen hundreds, the maximum was approximately 30,000 but following the boom of the "new English towns", that number increased to 60,000 and today is close to 250,000. (4) The distinction between the city and country is kept rather clear. The nature surrounding the town could be called a green belt and would act as the physical limit to the growth of the organic city. Beyond the green belt, other satellite cities or towns could then develop.

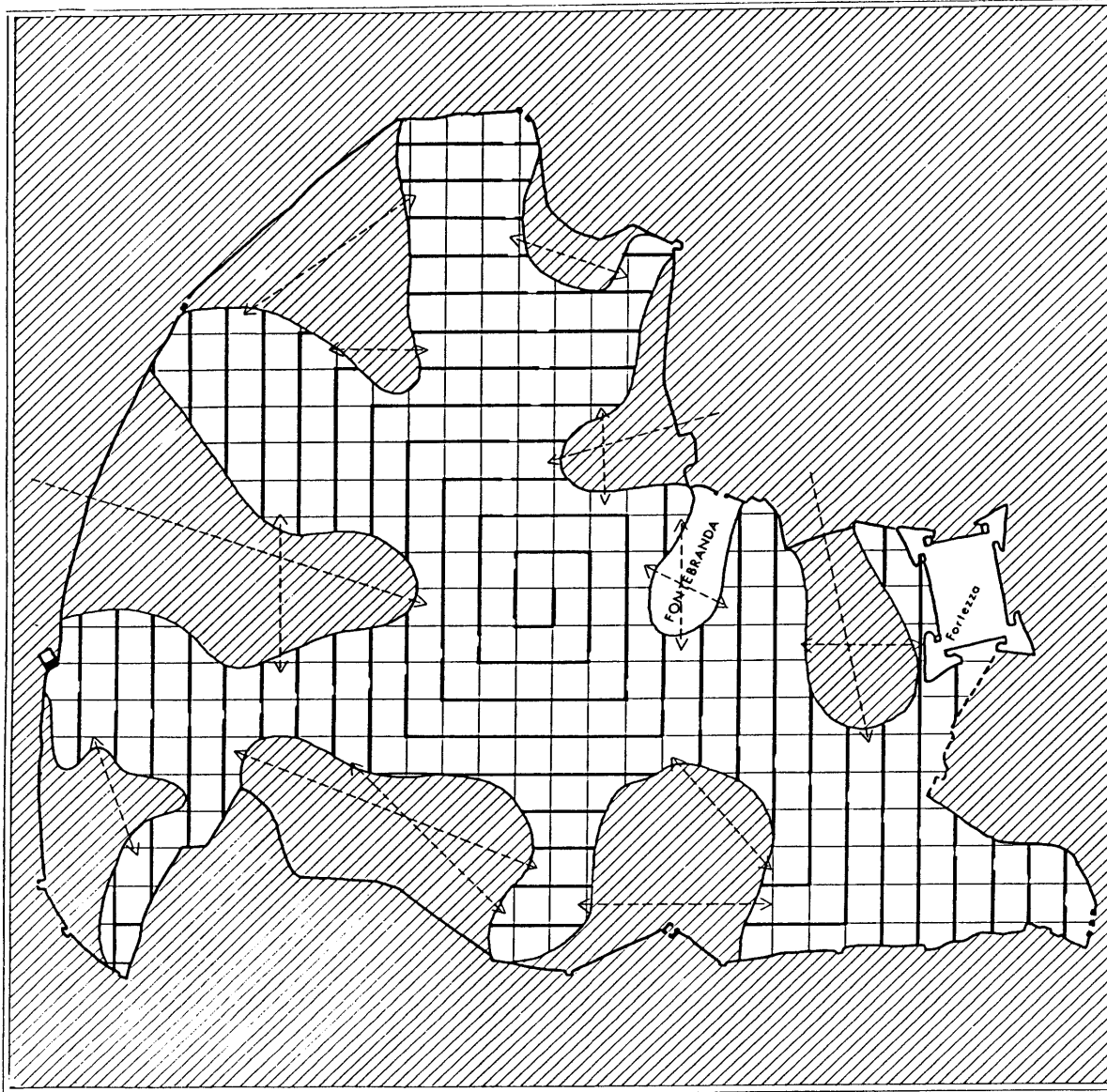


11'. Brick and tile are the materials commonly in use in Siena.

CITY FABRIC and VALLEYS

We know, after analysing the political and historical origin of Siena, that the city fabric was for a long time an agglomeration of individual powers. Later, when the city state arose, strict building regulations were made for the curving of the streets, the material to be used and the style to be copied-Gothic. However, we cannot identify the imprint of a master-planner. The city was never designed; their buildings and spaces are a reflection of the communal life which was, as I will hypothize along this thesis, conditioned by those physical spaces among which people passed their lives.

MEDIEVAL PATTERNS



12. On the left: the city fabric and the valleys.

Legend:

Countryside and greenery in the city.

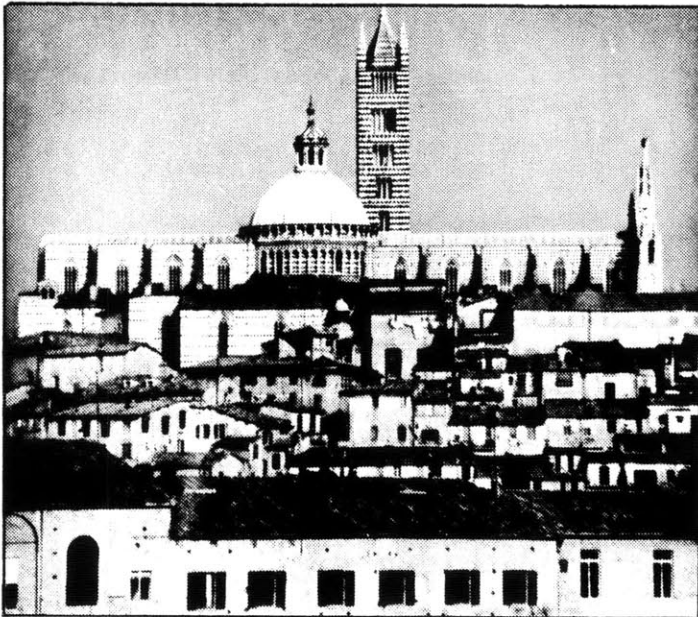
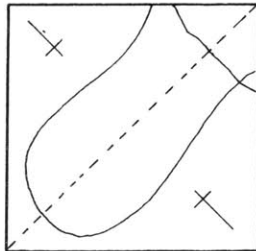
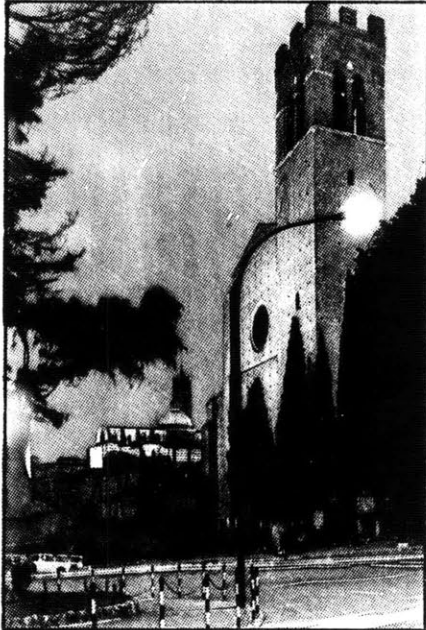
The Sienese labyrinth.

The wide perspectives over the valleys.

13. On the right: the edge of the valley in "Fontebranda". San Domenico in the foreground; the Duomo in the background.

14. Diagram showing the implied symmetry.

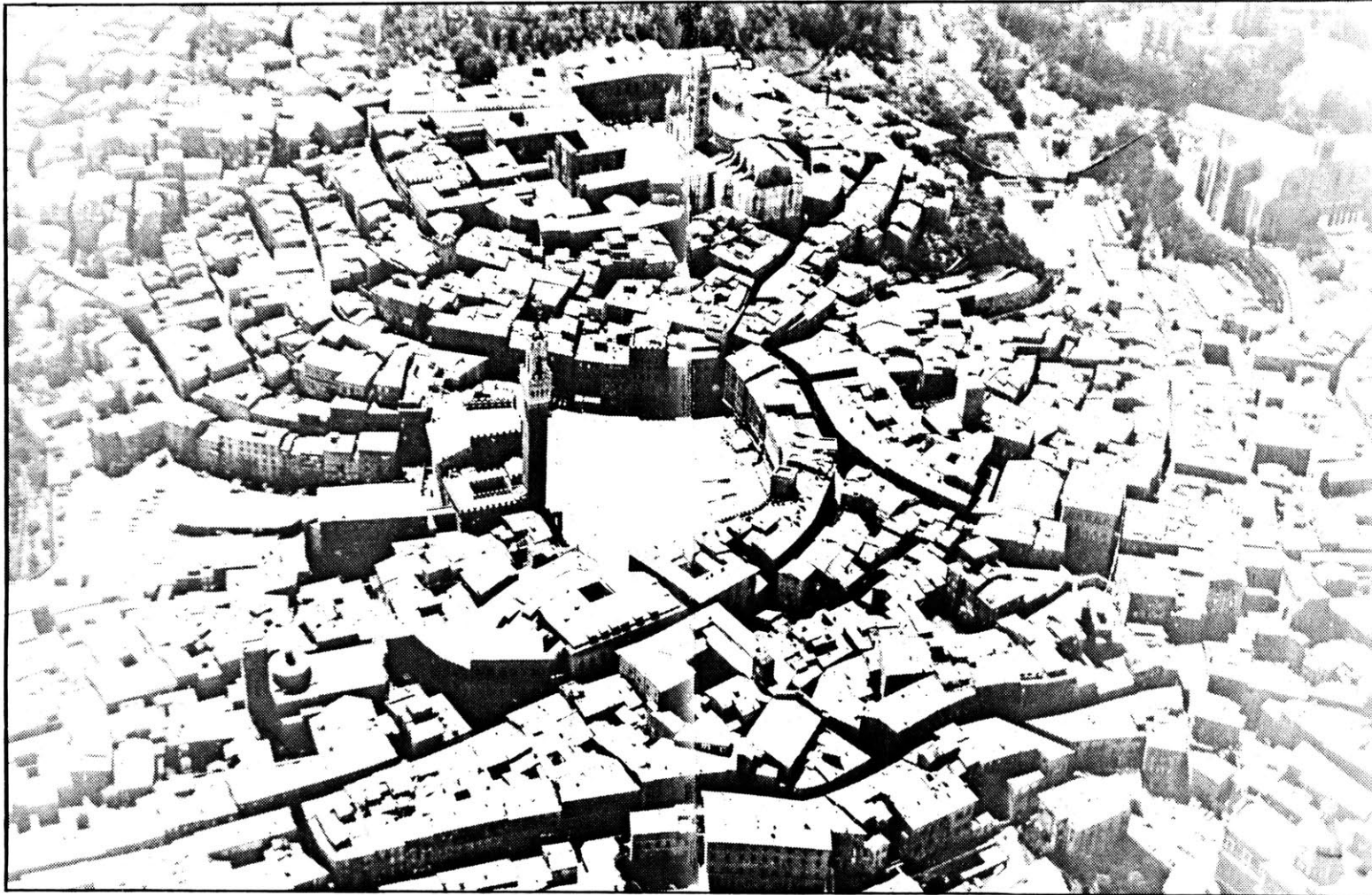
15. Descending cascade of roofs topped by the Duomo.



The city fabric is like a maze whose pattern is only broken by the natural presence of valleys. Indeed, when the "labyrinth" of streets reaches the edges of the valleys, one is confronted with a wide perspective displaying a descending cascade of roofs on the opposite side of the green valleys. At each valley, the city looks upon itself as if in a mirror.

In the case of Fontebranda, the site which will be ultimately the focus of the sketch design section, a church looks out onto the other side at its' reflection. The bottom of the Fontebranda valley becomes the axis of symmetry.

MEDIEVAL PATTERNS

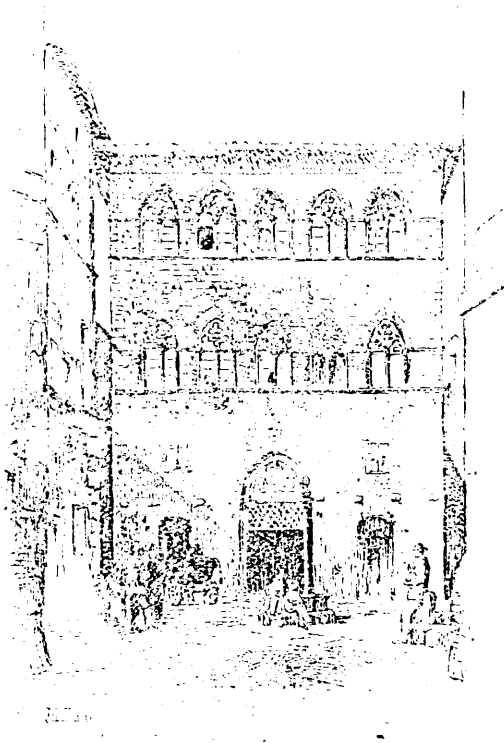


16. *The city fabric is dense, but leaves large Piazzas for the collective life. Note the Valley di Fontebranda at the upper right corner.*

THE MEDIEVAL SQUARE

The public square is probably the first type of space that embodied an intense collective life. Since its' origin the public square has been defined by a unique form that differentiates it from the other constituent elements of the city.

Due to the important increase in population prior to the Renaissance, the size of the Medieval city expanded, and a number of new public squares were created. Although their shapes were often irregular and performed different functions , they nonetheless had some typical characteristics.



17. PIAZZA AND PALAZZO TOLOMEI

MEDIEVAL PATTERNS

In 1889, the Viennese architect, Camillo Sitte, published the book, "Stadtbau" which analyzes the most beautiful piazzas of that time. According to Sitte, the typical features of those squares include: (1) The square is a closed space. It is due to this quality Sitte explains, "that a space in the middle of the city can be called a square." () All the architectural elements -colonnaded arcades, loggias street corners- constituted a system of rules for enclosing the public space. The best examples show that the proportion of a minimum of 2/3 solids is necessary to experience places as described above. The Piazza di Campo

encompasses all these qualities:

"The Campo in Siena is absolutely bounded by buildings and open to the sky; it is an outdoor room. Eleven streets bring people...into and out of the Campo, yet they are nearly impossible to see from the Piazza itself." (G)

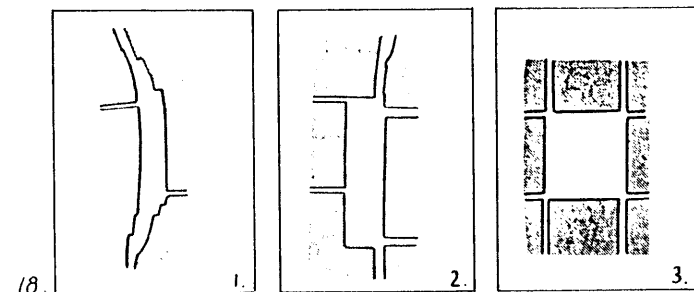
- (2) The center of the square is usually cleared out. Once again, the Piazzo di Campo is a perfect example, as it has its' fountain at the edge of the piazza.
- (3) The square is tangential to the flow of circualtion. The square was reserved for festivities, and was not a part of the circulation network.
- (4) Squares have irregular forms. They are not symmetrical, it is their proportion that counts. The origin of their forms is due to geography, or to the particular historical development of the city. The

shape of the triangle was a common shape used to emphasize the facade of the main building. (5) The facades are not identical. No generally accepted composition existed in the Middle Ages for facades. In fact it is local craftsmanship that gave these squares their charm and feeling of unity.

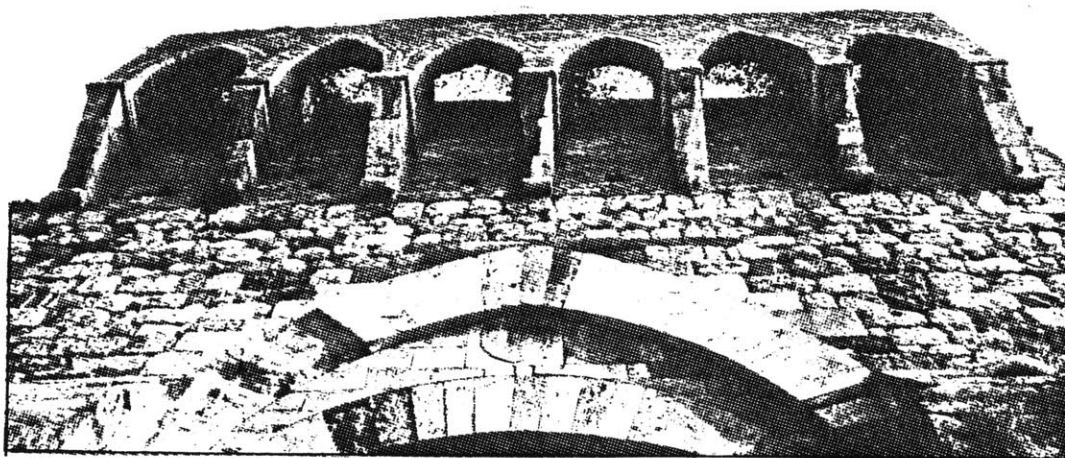
During the Middle Ages, squares served many diverse functions, two of which are described below: The first was fulfilled by the so-called parvis which served as an anti-chamber for the cathedral. The problem of proportion between the form of the square and the height and length of the building or monument, was clearly understood in the Middle Ages.

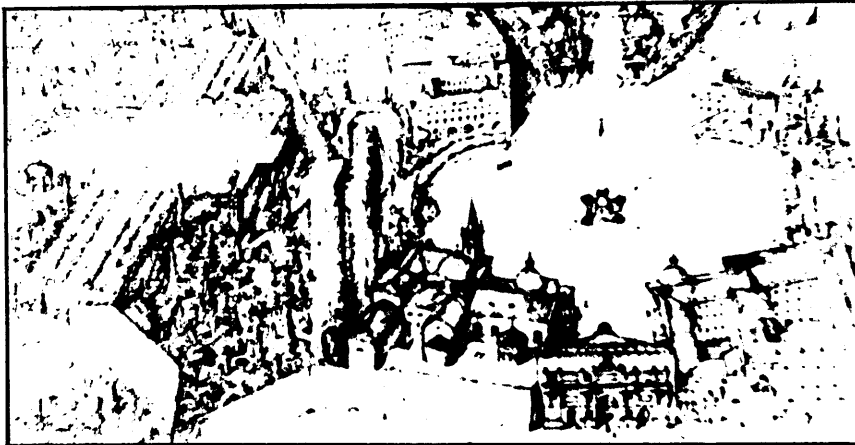
For this reason, many squares were created along Gothic cathedrals in order to preserve the affect of the ascendant lines of the main facade whose parvis' (front space) was limited.

The second major function provided by squares, was the location of the market place. It developed following one of three different patterns: (1) As an occasional enlargement of the streets, (2) As an intentional enlargement of the road, or (3) The market took place in a square specifically designed for that purpose and attached to a main artery.



MEDIEVAL PATTERNS





19. Ernest Farnum Lewis. "Piazza del Popolo and Pincian Gardens," 1910, pencil and watercolor drawing.

" I imagine a large avenue, straight, an bordered by trees. It leads to a triumphal arch...located on a half-circle square,...giving access to streets that lead to the center or to the extremity of the city and have objects to end them. With all these elements, we will see the prettiest entry to a city that one can imagine." (H)

THE GATES-THE LIMITS OF THE CITY

The ideal lay-out described above by Laugier couldn't be implemented around existing cities as it would involve too much reconstruction to re-adapt the urban fabric. Around existing gates, the inverse lay-out was sometimes applied. Arteries were spread outside the city, concentrating the traffic flow into a tight passage that nowadays provokes traffic problems. In most European towns, the transportation network is aimed at the suburbs leaving no reason for gates to exist, and consequently detroying the difference between city and country: no end to the cities, no charm to the countryside.

MEDIEVAL PATTERNS

This answer by modern urban planners to develop cities without a physical limit provoked an anarchistic proliferation of small towns which took over Nature and the rural communities. This disorganised urban phenomenon is a heavy charge for modern society: there is a choice to be made; either affect the budgets and orient investments towards the care and restructuring of public spaces or waste those city budgets on the unlimited expansion of ill-equipped suburbs.

As we can see, the principles of Laugier still make sense today: (1) To have a limit to the city over which the construction should not be permitted.

(2) To suppress any new developments in preference of reconstructing empty areas within the city. (3) To reabsorb the suburbs and create at least "country-fingers" around the city periphery.



20. the gate of Fontebranda seen from outside the city.

The principle of gates defining the Sieneese urban system emphasizes strongly the dividing lines and contradictions between city fabric and countryside.

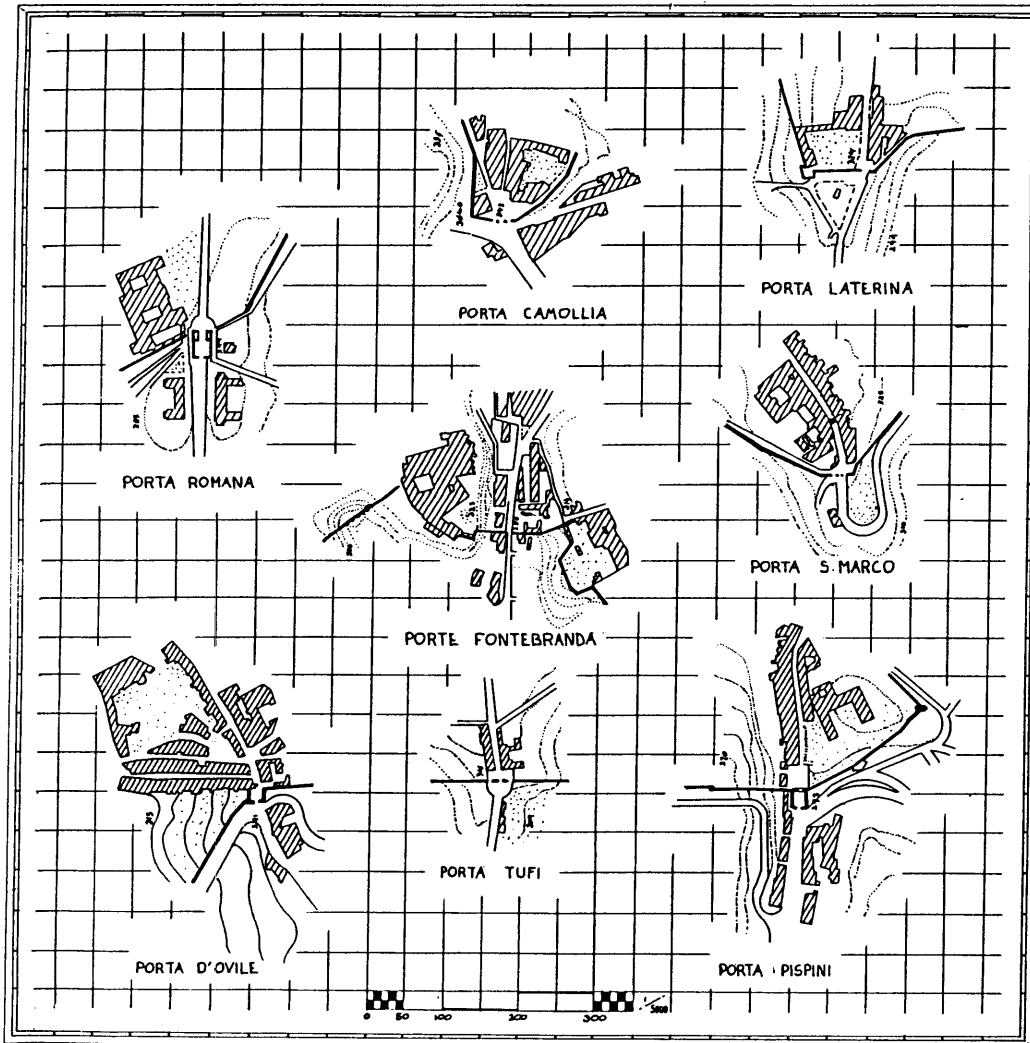
The "neutral" space, particular to most gates, gives us the impression of a "double-skin"- that is a transition from a domain of plant-life to a constructed city-life. (see morphology, next page)

This "double-skin" system has of course historical origins. It was an ingenious trap that stalled the attacking enemies. After forcing the exterior wooden door of these fortified gates, the Sieneese could easily combat the enemies trapped below. (see typology, next page)

Today, they still symbolize the complete autonomy of a city core in regard to the rest of the new housing and small industry which developed in its vicinity.

At the time comes for festivities and dinners in the street, the neighborhoods in the proximity of these gates organize themselves around them. The gates are then decorated with the flag and colors of the contrada, and as the dinners go on late, they are highlighted by a series of spotlights to enhance their austere majesty.

MEDIEVAL PATTERNS

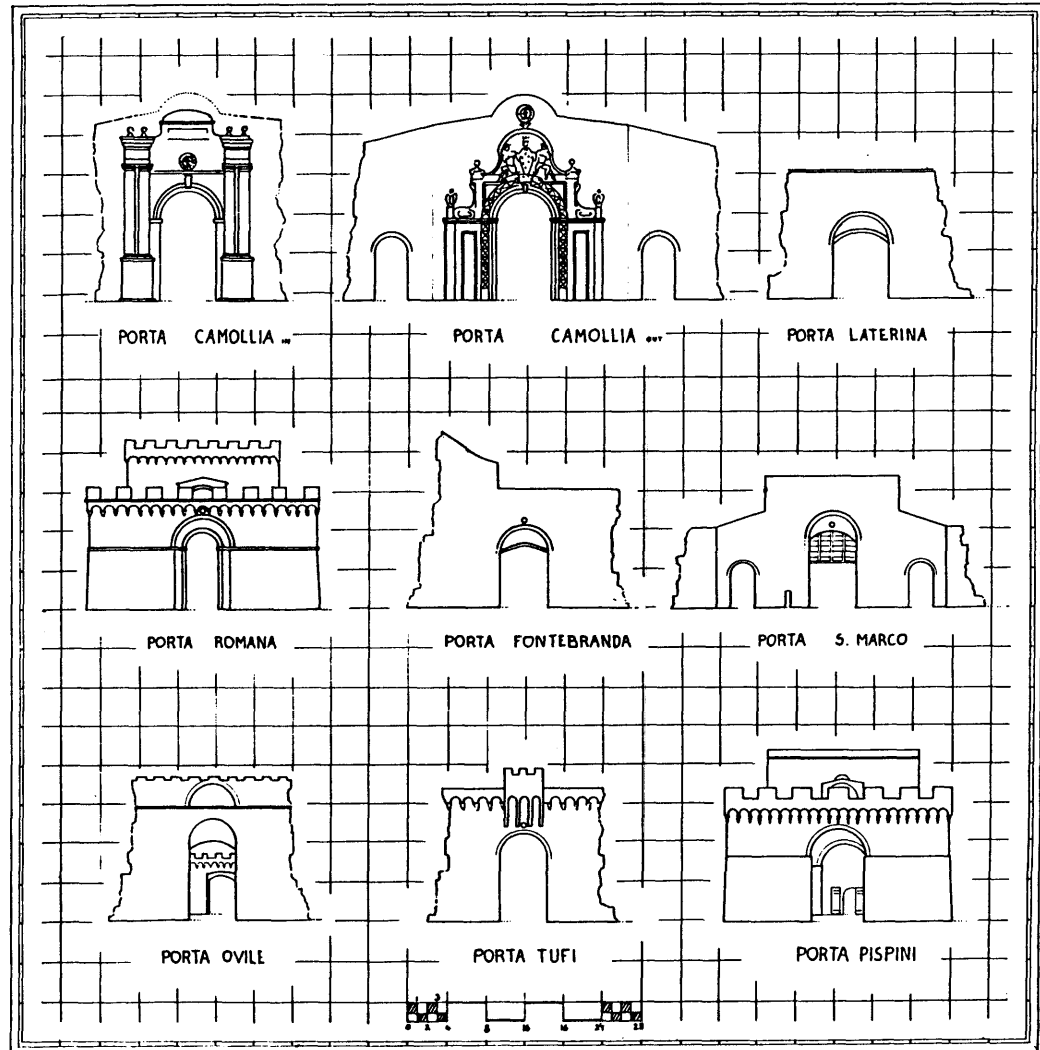


21. Morphology of the Siennese gates.

Note the "double-skin" system common to most of the gates.

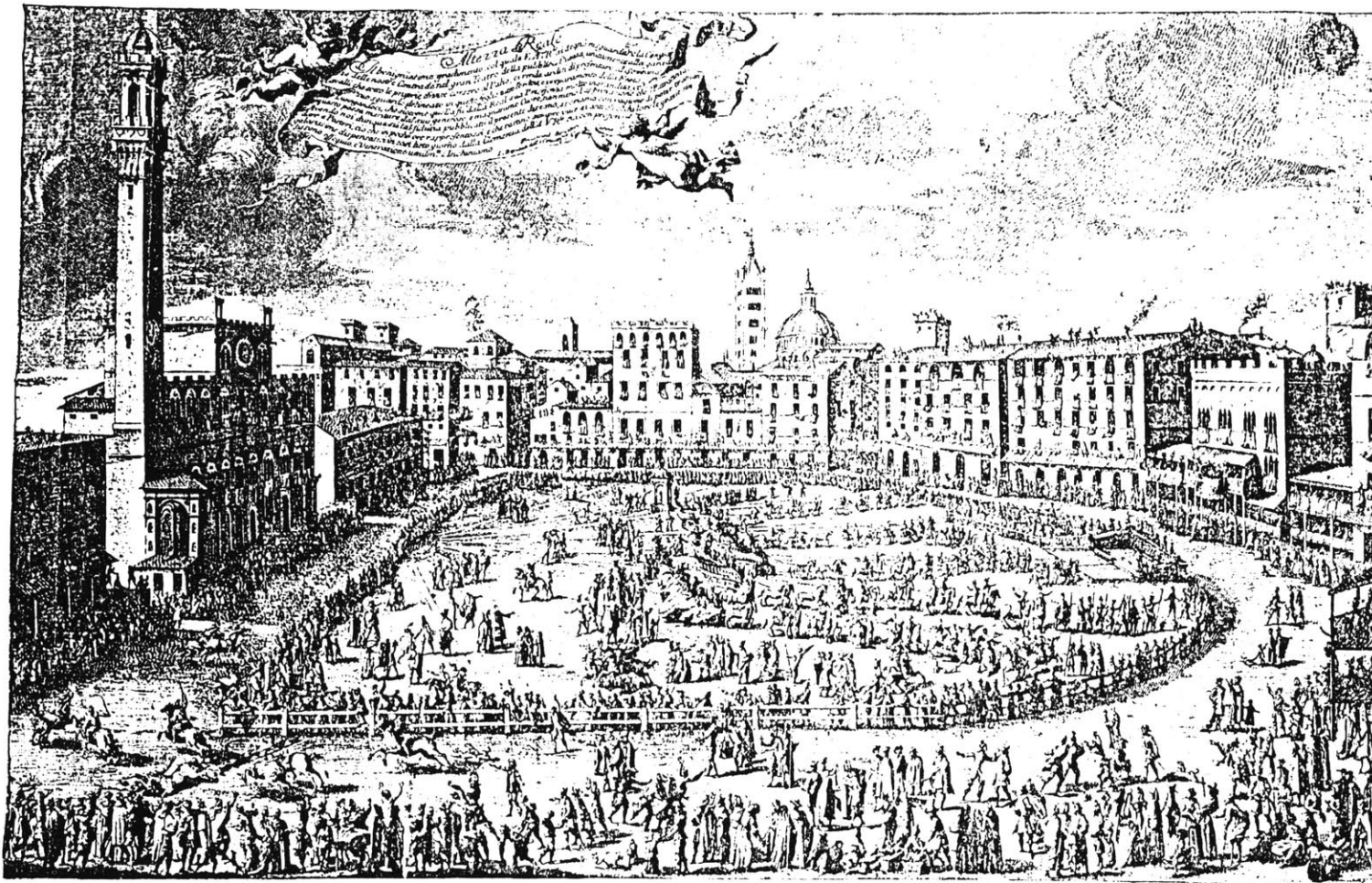
In most cases, a small public square developed in front or behind the city gates.

Corresponds with the drawing on the opposite page.
 Note the decoration of the rich contrada di Istrici
 Note the rich decoration of the Porta Camollia (inside and outside)



22. Typology of the Siennese gates.

MEDIEVAL PATTERNS



23. View of the Campo during the Palio horse-race and the procession of the *comparsa* on 2 July 1717. From a contemporary engraving printed by Domenico Rossi in Rome. *City Museum, Town Hall, Siena.*

THE DIVISION OF SIENA IN CONTRADAS

The tendency of the medieval world was to prefer the corporate to the individual, the role of the Commune was to convey the idea of itself as the most perfect corporate of all. It had to attract the allegiance of the Sienese community as a whole.

The division of the city into separate and independent quarters seems to be typical of most European cities of the time.

However, today, in most of those cities, the differences between neighborhoods



25. *The day of the Palio, the different contradas meet in the streets... It is very colorful.*

MEDIEVAL PATTERNS

tends to be diminished; this for a number of factors that can be found in the introduction. What I want to stress, is the fact that it still survives, today. in Siena, not only as a touristic attraction but as a constant characteristic of their lives.

The following description made of the contrada can explain how

- it was part of the evolution of the political life in Siena,
- it influences the class structure and the architecture of the city,
- a division can, through the festivities (Palio) find a unity of being.

Evolution

The city's government was created by an alliance of groups, each occupying one of the three hill ridges of the city. At the end of the thirteenth century, were included within the circuit of the walls. This division appeared later as three "Terzi": Terzo di Citta, Terzo di Camollia and Terzo di San Martino. The natural topography helped to perpetuate this tripartite division. The topography of Siena will also play a role in the division of the contradas as we will see later.



26. The medieval skyline of Siena had a lot in common with the 'San Gimignano' of today.

Class structure and architecture

We can appreciate the role of the different nobles families since we know they initially dominated the Commune. (see "politics and city form") It was described above a patronage system was centered on family-powered group, called Castellare. The fortress and their towers were inhabited by their family and their clients. By the beginning of the fourteenth century, there were more than fifty towers in the skyline of Siena. The importance of those towers was their symbolic value and their capacity to indicate the particular area of territorial control applied by a castellare.

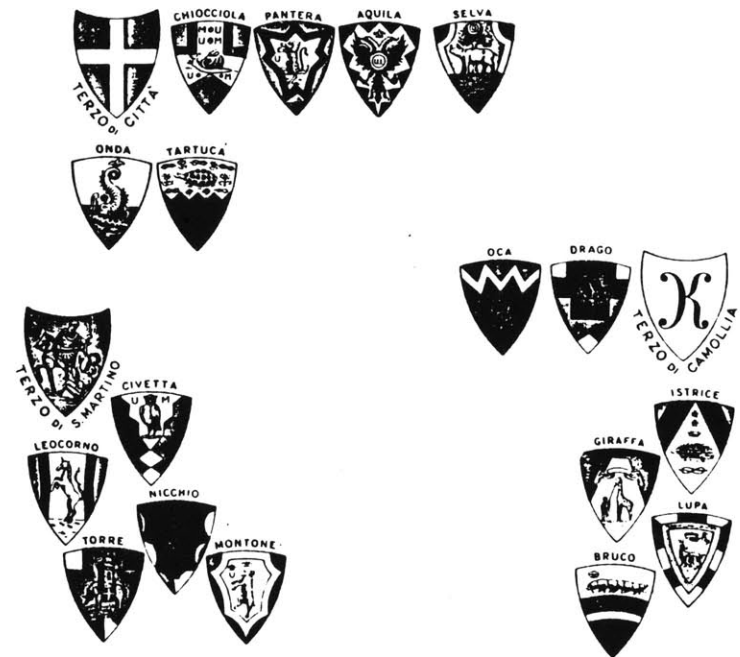
MEDIEVAL PATTERNS

Afterwards, due to this concentration of territorial domination, many of the contrade -the small administrative districts into which Siena is divided- took their name from one single dominant family living within them. The division were more or less kept intact until today.

The life of the contradas

When in most of the endangered European cities, the creation of inhabitant's committees becomes a necessity to preserve the quality of life in the neighborhood (see introduction), the phenomenon of the contradas as a political force within the city leads one to believe that they are the

custodian of their patrimony. The people of the contradas are attentive to the qualities of their quarters. They all meet regularly in the "house of the contrada" which is usually a cafe linked to their museum and their chapel. As Gans says, "these urban villagers know the limits of their territories".



MEDIEVAL PATTERNS

" In the Piazza del Campo
There vervena grows.
Long live Siena !
The most beautiful of cities.

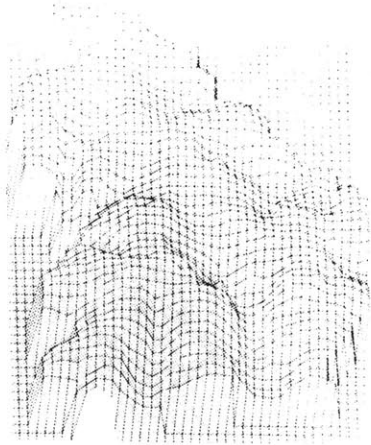
Long live our square
The tower and the chapel !
Long live Siena
The most beautiful of cities."

The lyrics and the Sienese songs speak of the history of their contrada and of course the number of Palio's they won. Whatever deep divisions may rend their society, in the Palio the inhabitants become one people. The Palio is a five day festivity that happens twice a year and celebrates this "unity of being". Through the Palio, the Sienese discovers a personal and a corporate identity. One has to see one of those horse races to

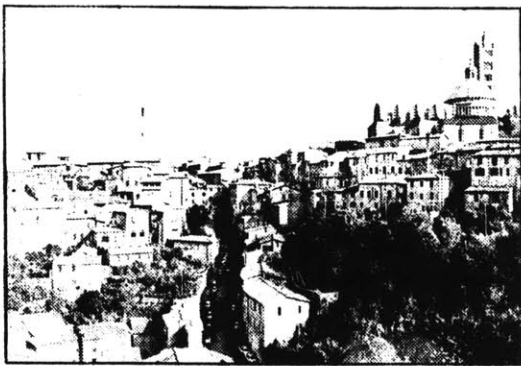
feeling this emotion that emanates from each neighborhood. In the same time, it is striking to see how the combination of the contrada colors and songs forms an extraordinary "ensemble" in the unique and beautiful Piazza di Campo.



28. *Effervescence during the Palio.*



29. *Sieneese topography.*

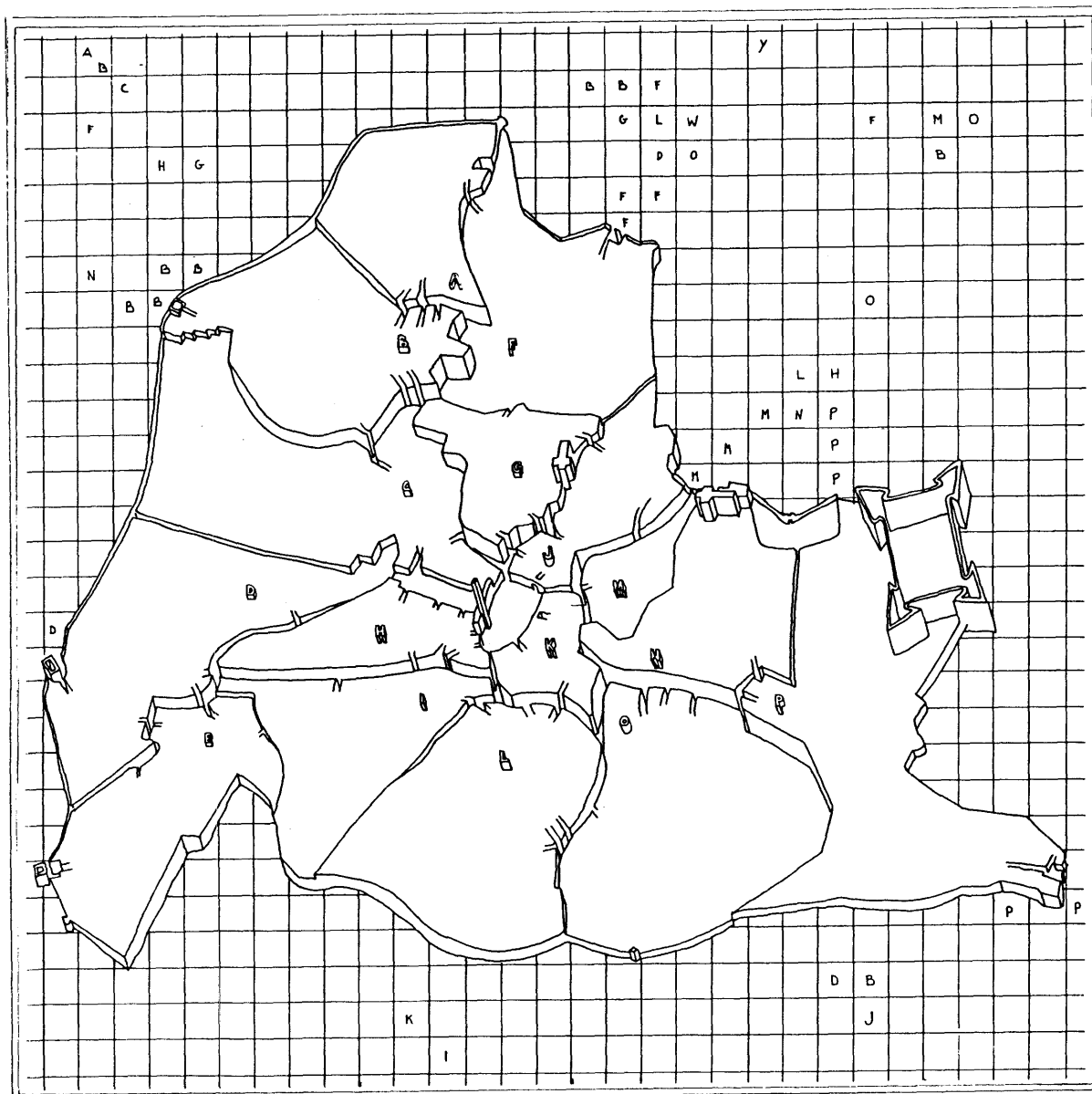


30. *Via Fontebranda leading to the Piazza di Campo.*

The topographical limits of the contradas

The edges defined by the Sieneese valleys and contours are often the contrada's boundaries. As explained above, those limits have a strong social meaning. The points of access, where one level begins and another ends, is accentuated by the number of subtle gateways within the city. (next page) The houses of the non-nobles and the poor were to be found in the valleys and they could easily be dominated by the noble fortress which was at the heart of each family group. This is still true in a way; the contradas which are the upper part of the town have still the reputation of being rich. The fact that the valleys are still used as cultural land can maybe explain this difference.

MEDIEVAL PATTERNS

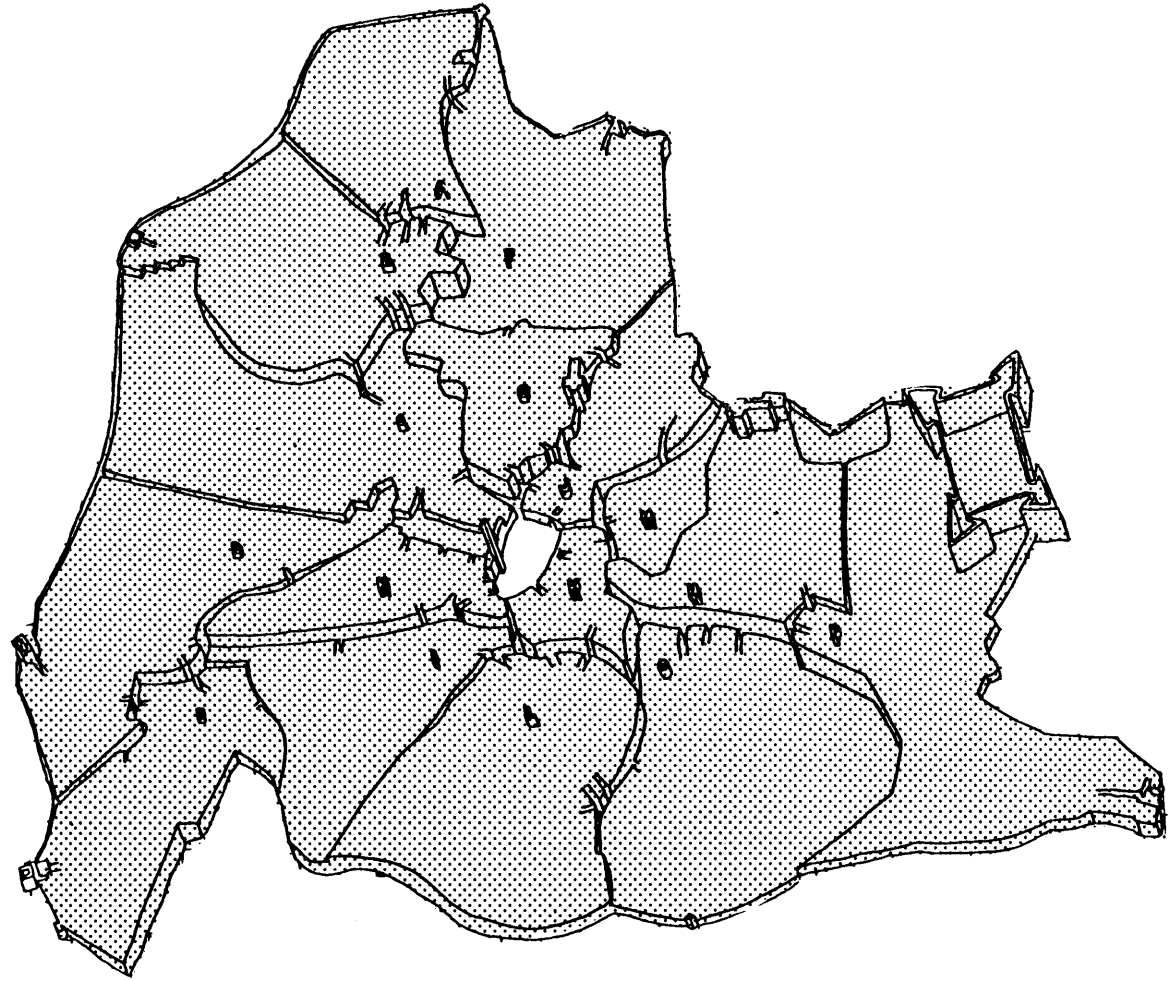


31.

Sketch showing the differences of altitude between the neighborhoods. These topographical limits were probably at the origin of the actual limits.

As the sketch tries to express, each contrada has some "members" outside the city walls.

PIAZZA AND CONTRADA



Footnotes

FIGURES

5. in "Sienne la bien-aimee"
p. 75 see ref. in bibliography.
6. Photo by Arthur Leipzig. Spain.
10. in "Villages and Towns" see footnotes
from previous chapter.
11. in "The story of Siena and San
Gimignano". p.146. opcit.
12. in "Villages & Towns" opcit.
p.47
13. *ibid.* p.54.
15. in "the story of Siena and San
Gimignano". opcit.
16. in "Siena, the city of the Virgin"
ref. in bibliography.
- 18-19. in "La vita privata dei Senesi
nel dugento" by Zdekauer. see
bibliography.

QUOTATIONS

- A. in "Urban Open Spaces"
' Open Space: Freedom
and control: Changing social
customs are reflected by use.
by Stephen Carr and Kevin Lynch.
p. 9.
- B. in "Towards an Urban Manifesto"
Donald Appleyard, Allan Jacobs.
p. 14. March 1980.
(Not published)
- C. *ibid.*
- D. *ibid.*
- E. *ibid.*
- F. in "Urban Open Spaces"
' The collective perception
of cities" by Lawrence Halprin.
p. 3.

URBAN SPACES: ROLE AND SIGNIFICANCE.

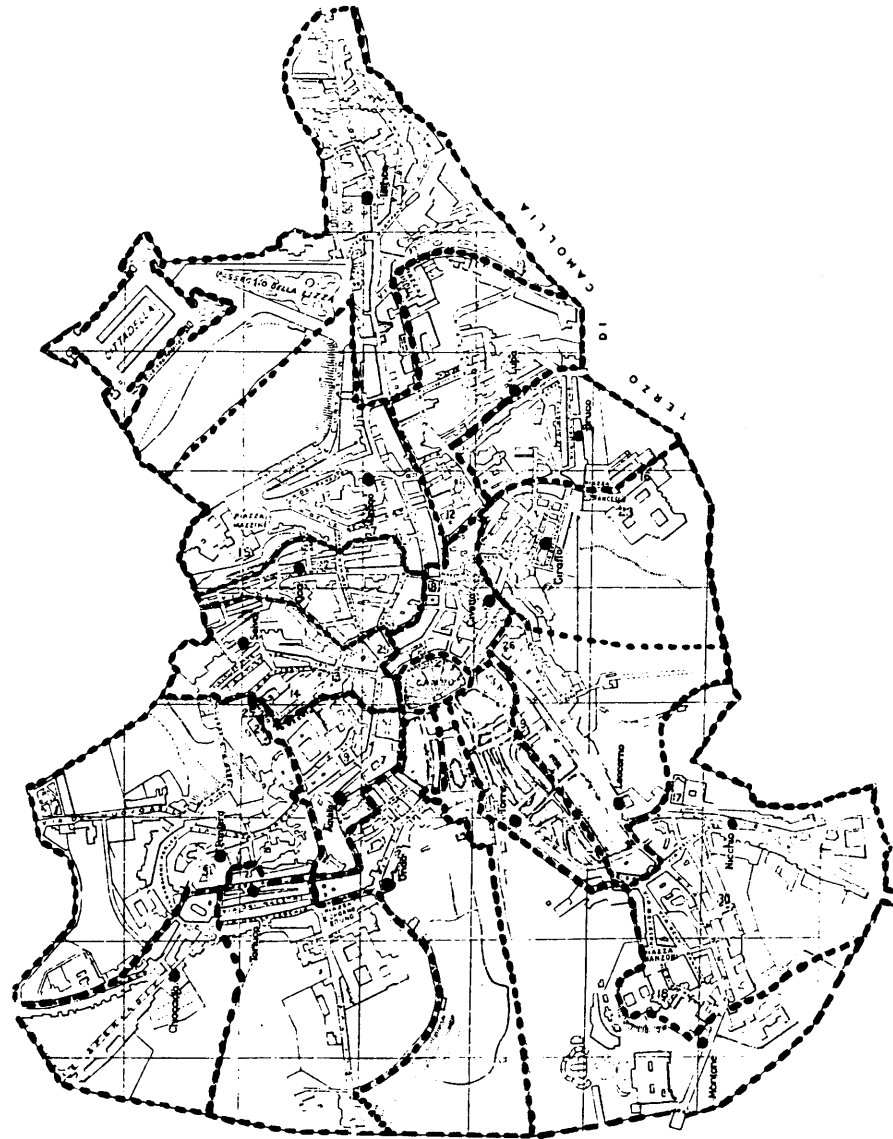
The contradas of Siena were constructed and articulated following a set of rules, norms, and culturally defined conventions, that allowed for an urban society that was integrated from both an economic and social point of view. The contradas of Siena do not exist autonomously of one another. While they all have characteristics that make them unique unto themselves such as cultural specificity and economic specialisations, they are nonetheless united by the center of the city - the Piazza del Campo.(sketch on previous page)

The Piazza del Campo does not belong to any single contrada, it is a "neutral territory,"

PIAZZA AND CONTRADA

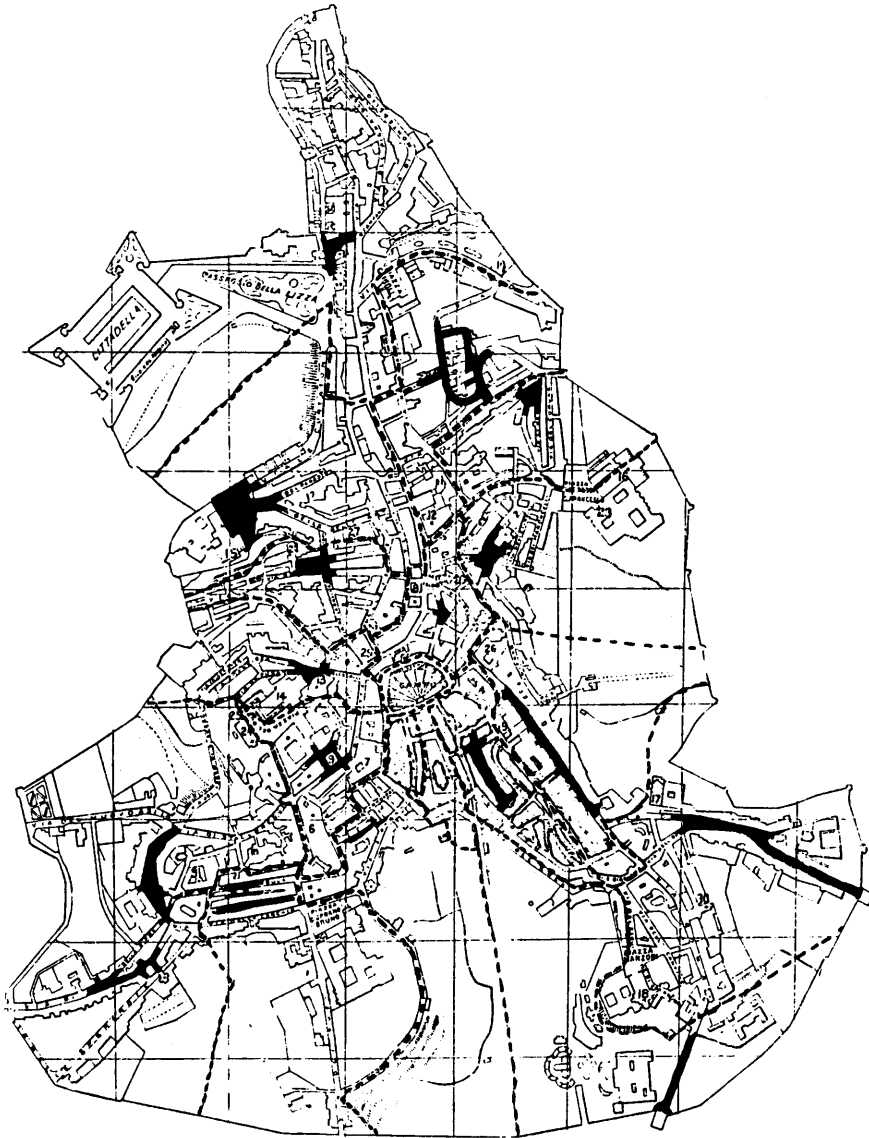
However, the different contradas and the Piazza del Campo have an internal organization which fulfills all those functions relative to the entire city, which are not provided by the individual neighborhoods. For instance, it provides the administrative functions of the city, the symbolic and historical functions, etc.

If the contrada can be defined as quarters within the city, it is due to their integration with the center, and relationship among themselves. This simultaneously internal and external relationship is made possible by the public spaces - the streets, the squares, the steps of the cathedral...



1. a. The houses of the contradas are located near the internal structuring public spaces.
- b. The limits of the contradas are located in the articulating public spaces.

URBAN SPACES: ROLE AND SIGNIFICANCE.



2. Public spaces at the level of a small community.

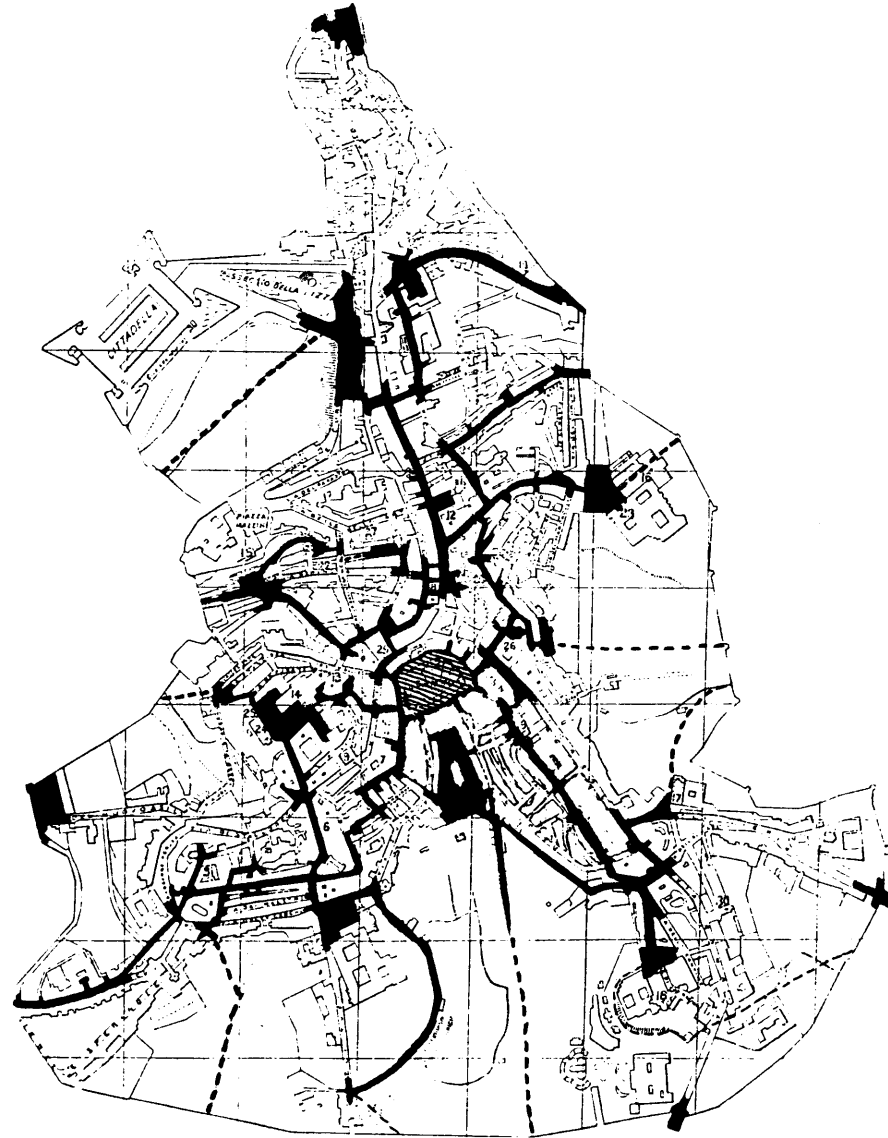
Their role in the evolution of the city performs a dual function. First they provide an internal structure, creating centers for the creation of neighborhoods, and giving an identity to the quarters. Secondly, public spaces articulate the city, linking the different contradas into an entire whole. The Piazza del Campo, for instance, links many different contradas together. Similarly, the Via di Sopra, links the peripheral neighborhoods to the Piazza del Campo.

But the role and significance of public spaces in the city goes beyond this dual and fundamental function of internal structuring and articulation. Public

PIAZZA AND CONTRADA

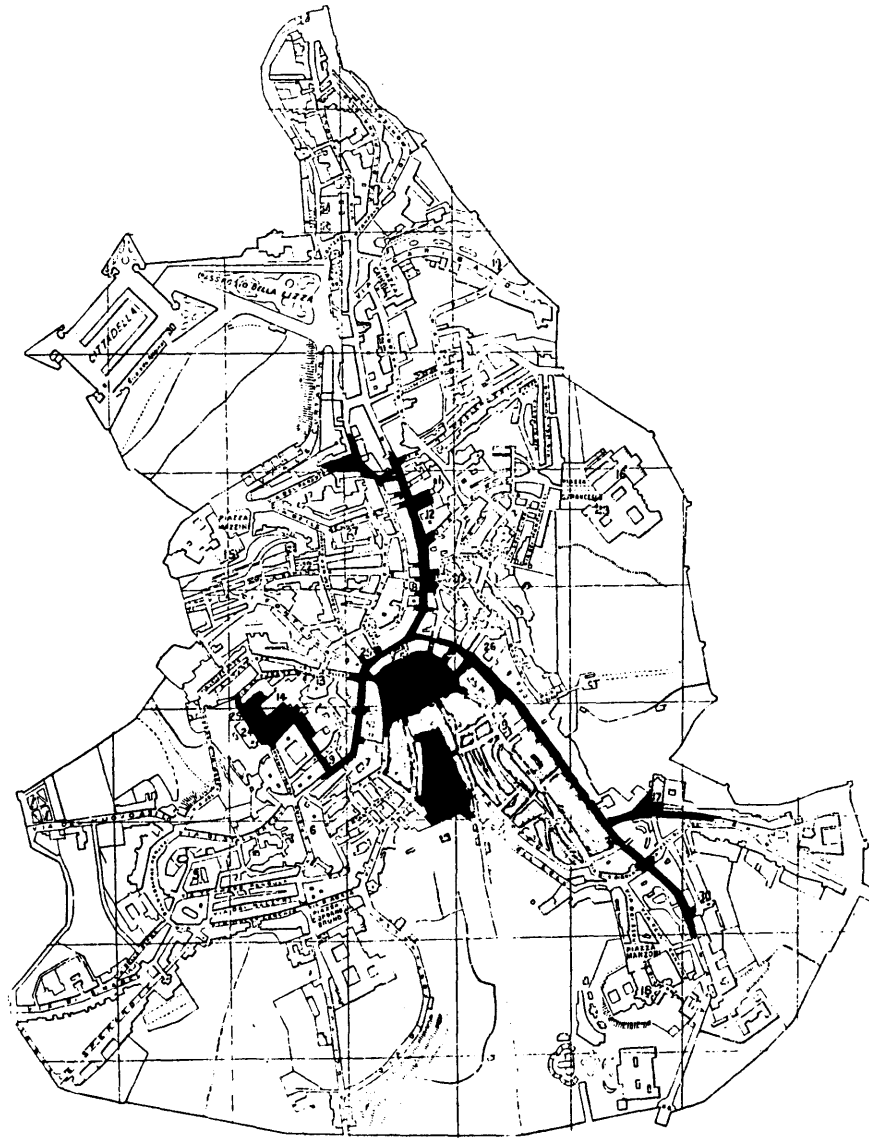
space is also the extension of housing. It offers what the private units in a dense city cannot. For instance, the squares and their benches replace the private backyards which are fairly rare for each dwelling unit. Only public spaces can permit recreation areas and places for meetings, for having discussions on the terraces of the cafes, etc.

Aside from the roles described above, public spaces also play an important cultural and symbolic role. In order to create a purpose, a spirit for a city, the articulating public spaces must be symbolic spaces or contain symbolic elements showing their adherence to an integrated society or totality. At the same time, the public spaces of a city



3. *The articulating public spaces between the neighborhoods.*

URBAN SPACES: ROLE AND SIGNIFICANCE.



4. Public spaces at the scale of the city:
catalyst spaces for dense interchanges.

help to develop a typical urban culture as opposed to a village one characterized by a culture based on autonomy, freedom, lighter social control, and a multiplicity of interactions.

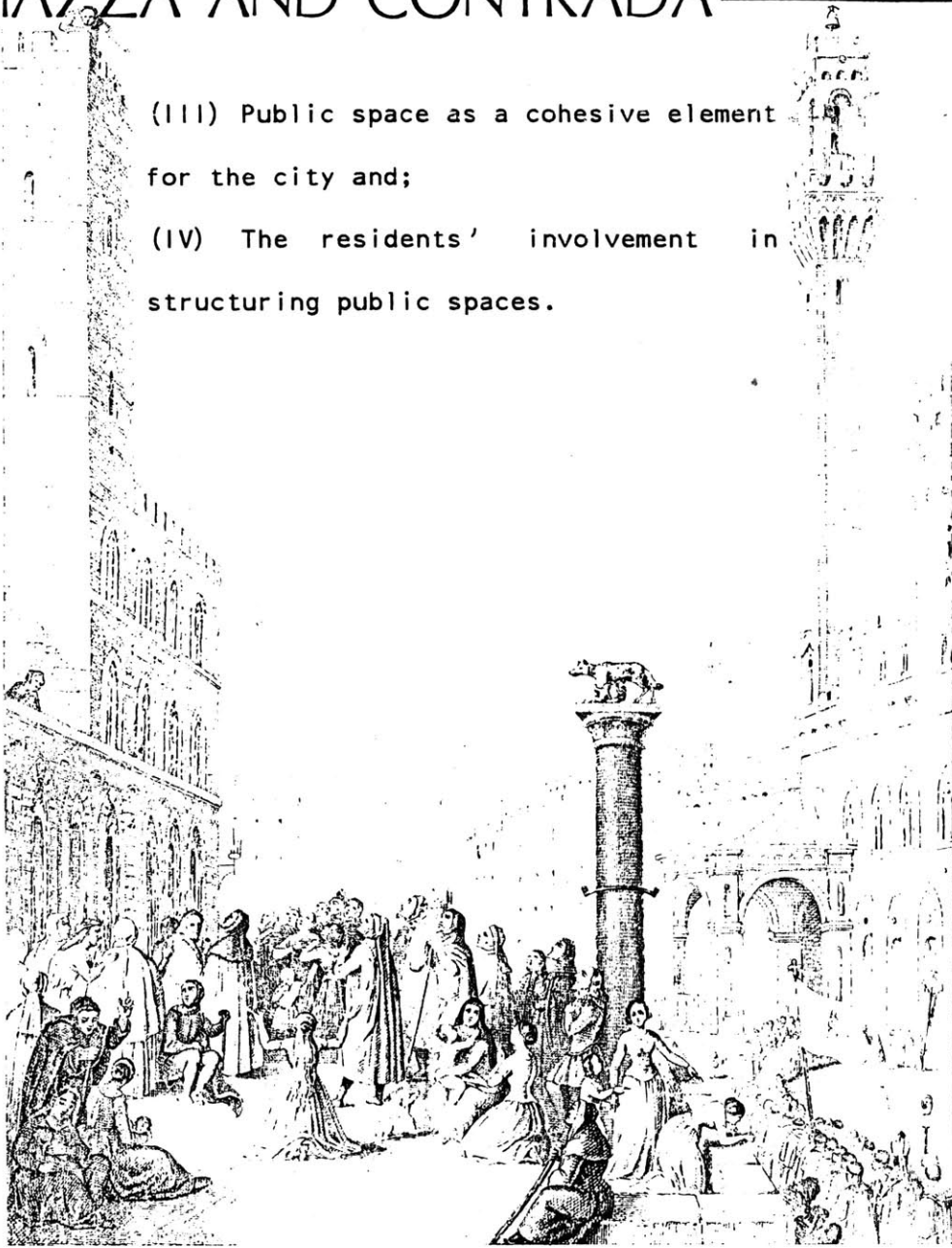
The purpose of this chapter is to define more precisely the roles public spaces play in a city like Siena, in order to provide guidelines for urban designers and future projects within a city. Three particular roles will be analysed in the following sections:

- (I) Public spaces as a generator of neighborhood life;
- (II) Public space as an extension of private dwellings;

PIAZZA AND CONTRADA

(III) Public space as a cohesive element
for the city and;

(IV) The residents' involvement in
structuring public spaces.



5.

1.PUBLIC SPACES AS A GENERATOR OF THE NEIGHBORHOOD LIFE



6.

In Siena we have seen that the contradas were at the base of the organization of the city. This analysis of Siena's evolution should allow us to define their common characteristics. To summarize these are: (a) the autonomy of the contrada by its multiplicity of functions (b) the presence of well-defined limits, (c) a level of comfort as well as a physical and social importance, and (d) a symbolic and cultural identity. For each of these points, public space has a role to play.

PIAZZA AND CONTRADA

a) The autonomy of the contrada and its multiplicity of functions

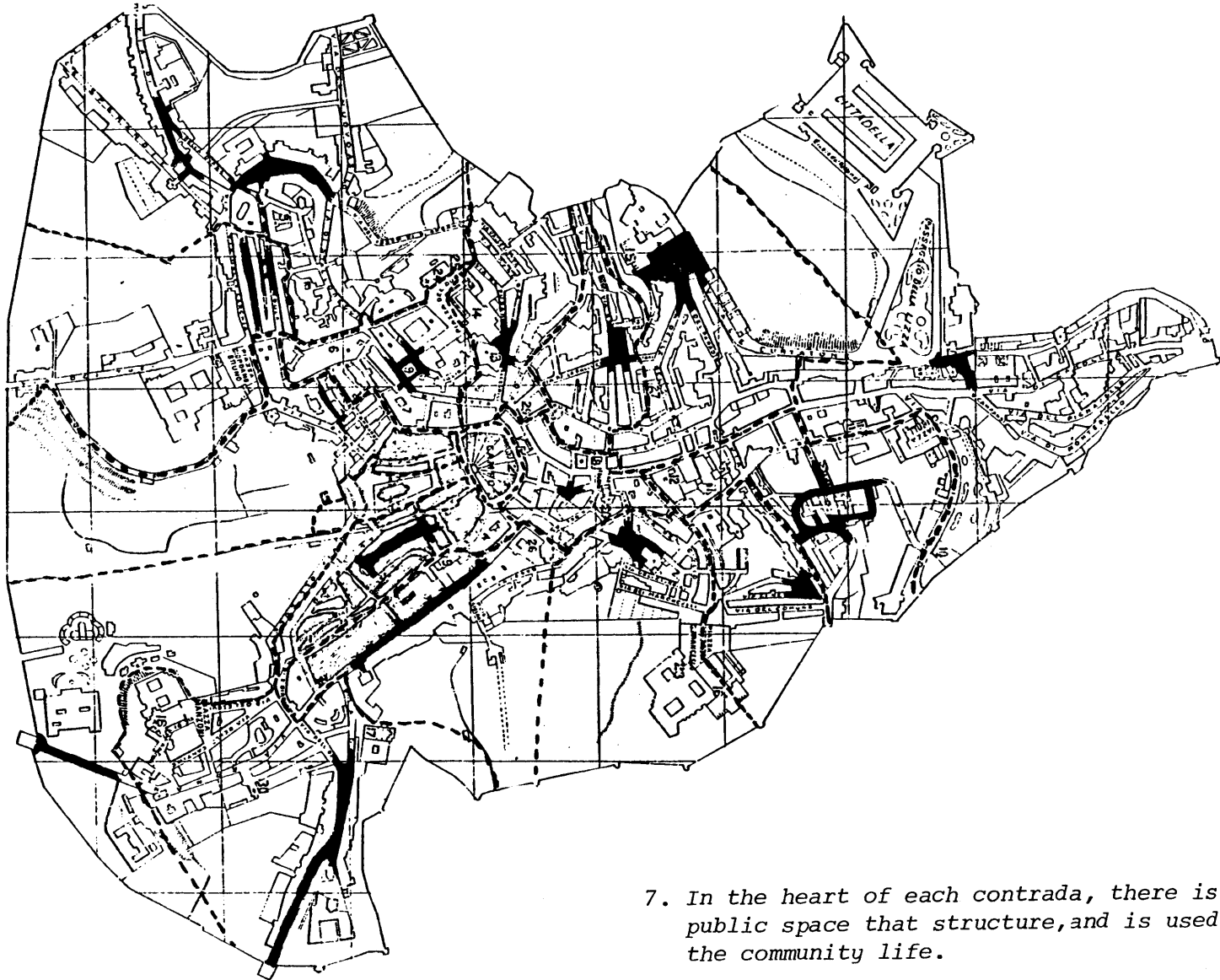
The neighborhood concept is based on the functional complexity of a restrained community. This community must have relative autonomy, and must have within its' boundaries all those functions relative to day to day living, such as working, trading, green space, local administration (the house of the contrada), public services, etc. All these functions are mixed alongside or upon public spaces.

Work, in particular, will determine the degree of complexity of a neighborhood.

For example, each quarter should have a balance of specialized commercial activities such as craftsmanship, small industrial enterprises, and a reasonable number of offices. But "functional complexity" does not exclude quarters known for their specific commercial, economic, or mostly symbolic functions, (i.e.: jewelers, banking, fashion strip, historical area, etc.). Nor do specialized quarters mean isolated quarters as the Athen's Charter of the C.I.A.M. explains in its points 77, 47, and 41:

- (77) The keys to urbanism are to be found in the four functions: inhabiting, working, recreation (in liesure time), and circulation.
- (47) The industrial areas must be independent of the residential areas, and seperated from one another by zones of vegetation.

THE SUPPORT OF THE NEIGHBORHOOD LIFE



7. *In the heart of each contrada, there is a public space that structure, and is used by, the community life.*

PIAZZA AND CONTRADA

(41) The places of work-factories, craft workshops, business and public administration offices, and commercial premises - are no longer rationally located within the urban complex.

The essential condition for a well balanced multiplicity of functions is to have, to as great an extent as is possible, the presence of the inhabitants in their neighborhoods to circulate, work, or participate in recreation. Restructuring or creating public spaces should be thought of in terms of the multiplicity of functions described above.

At this point, the structuring role of public spaces should be reiterated. For it is this aspect of public space that

allows for diversity in urban functions and generates a sense of community and neighborhood. They are the collective property of the inhabitants. One has to live there to feel fully at home. The others, the strangers, are only passing by and are welcomed into a territory which is not theirs. Public spaces at the center of the city, such as the Piazza del Campo, are collective spaces for both residents and non-residents. Although all feel "at home", it is still the inhabitants who are essentially the guardians of the collective memory.

THE SUPPORT OF THE NEIGHBORHOOD LIFE

In the same way, we can also define the 'articulating public spaces' as collective property, places where the stranger feels as comfortable as the resident. I have learned from Jane Jacobs that a street in a city needs three main qualities in order to accomodate strangers and keep public peace. (1) There must be a limit to the stranger domain. In other words, the public space, open to everyone, has to be differentiated from the private or social space used by the local residents. (2) The public space must be constantly exposed to the inhabitant's looks: the street must have eyes. (3) The sidewalks must be constantly in use - day and night - by people that are there for different reasons.

b) The need for well-defined limits

As limits of the contradas or quarters, articulating public spaces were adapted to the diverse modes of circulation and urban functions relative to but outside the neighborhood. Articulating public spaces serve mainly to connect quarters among themselves, as well as neighborhoods to the center. For this reason, they accomodate well traditional modes of circulation. But the contemporary problem is that cars can hardly be mixed with this means of circulation.

Using the example of Siena again, two types of interaction can happen at the

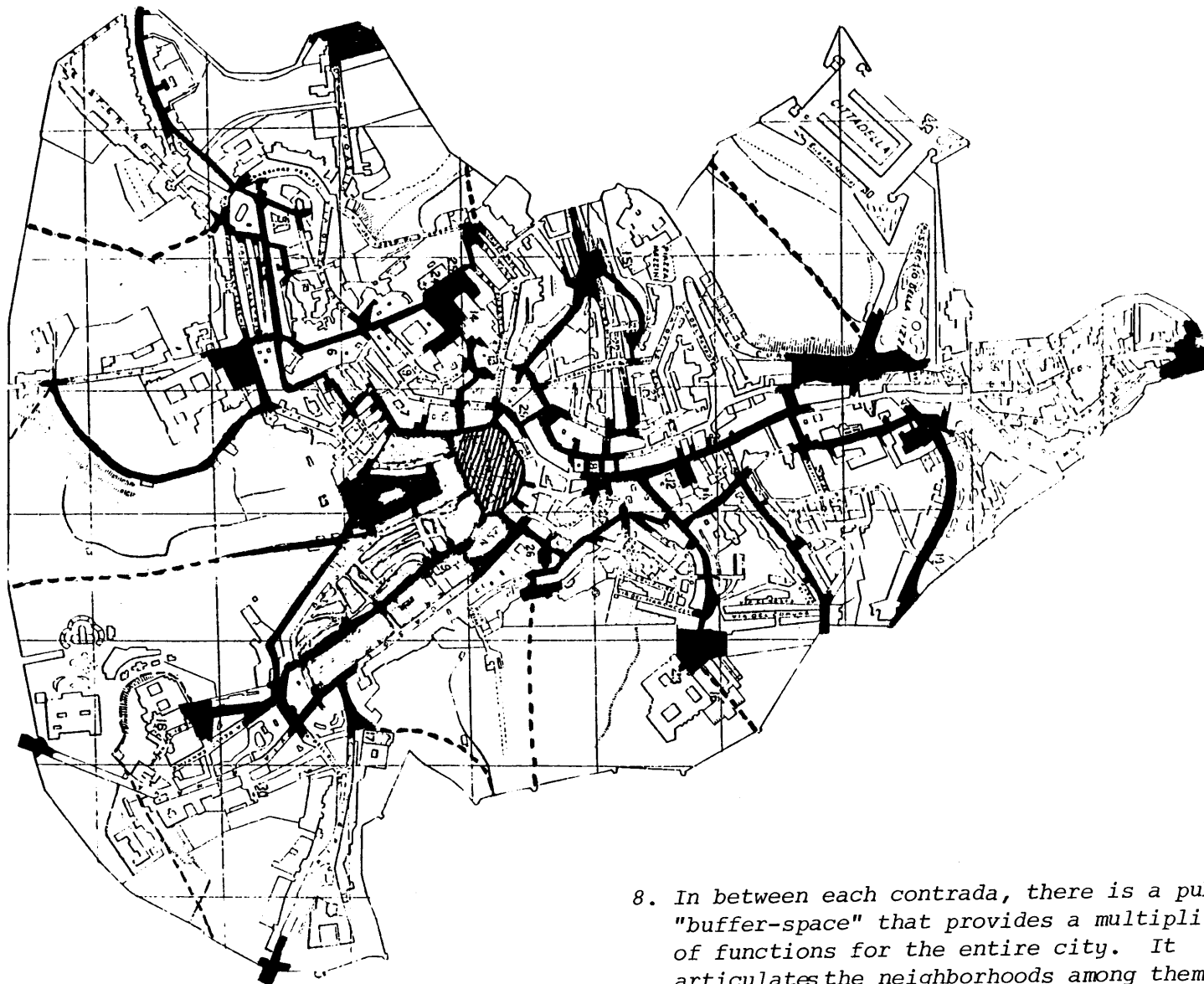
PIAZZA AND CONTRADA

boundaries between contradas: social and antagonistic. Since these articulating public space are collective by definition, it is usually there that the fights between clans take place. We can also recall the conflicting phenomenon of the Palio horse race, symbolizing at the same time the rivalry between clans and contradas, and the unity of the entire city as it takes place at its center - the Piazza del Campo. This is not a phenomon unique to Siena. Steve Carr and Kevin Lynch, in their article, "Use is an Indicator of Social Growth and Change,"(A) describe a similar conflict in Medieval Islamic cities.

"In those small interdependent communities, in which we have lived for most of our human history, the use of the shared space was an integral part of the social order, like obligations of kinship. Sanctions that enforced these rules were immediate and unwavering, for maintaining spatial order was essential to the social order. Conflicts occured, if at all, at the territorial boundaries, where one group faced the other."

Emphasizing the external qualities of the quarter, these collective spaces create a type of social service, allowing for a high multiplicity of functions. One of the most well known examples of a network of articulating public spaces is given by Haussmann's restructuring of Paris. The new avenues, boulevards and "articulating squares" were fringed with diverse functions and allowed many means of circulation.

THE SUPPORT OF THE NEIGHBORHOOD LIFE



8. *In between each contrada, there is a public "buffer-space" that provides a multiplicity of functions for the entire city. It articulates the neighborhoods among themselves.*

PIAZZA AND CONTRADA

c)The neighborhood comfort

The level of comfort of a neighborhood refers to the capacity the community has to incorporate into its urban fabric and public spaces, all the features of urban life: economic, socio-cultural, recreative, and symbolic.

Appleyard and Jacobs isolate five physical characters necessary to encourage or create a "livable urban life":

"(1) Livable streets and neighborhoods, (2) some minimum density of residential development as well as intensity land use, (3) an integration of activities- living working, shopping- in some reasonable proximity to each other

(4) a man-made environment, particularly buildings that define public space (as opposed to buildings that, for the most part, sit in space), (5) and many, many separate buildings, with complex arrangements and relationships (as opposed to few, large buildings)." (B)

These considerations are leading to a new concept that serves as a basis for understanding 'good' public spaces. This concept is "neighborhood comfort."

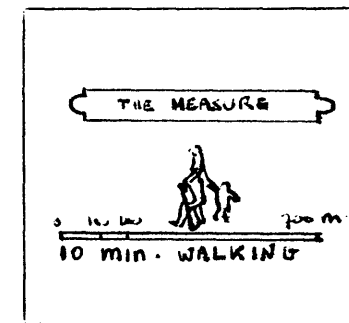
It is Leon Krier that first developed a method of analysing the physical and social size of quarters. Krier shows that the general activities, described in the passage above, are only possible (in the same time and place) within a structure composed of streets, piazzas and blocks. He defines the level of a

THE SUPPORT OF THE NEIGHBORHOOD LIFE

neighborhood's comfort with four parameters: (1) dimension of the quarter, (2) the number of streets, (3) the number of piazzas or public spaces, (4) and finally, the number of blocks. The level of comfort is relative to the neighborhood's capacity to allow autonomy of the community, greater chances for interactions, etc. It is not the comfort of the dwelling itself that we are concerned with here. However, as noticed in "Towards an Urban design Manifesto" (), the size of the dwellings and parcels do influence the minimum density necessary to support city life, which they estimate to be fifteen dwelling units comprised of 30

to 60 people per acre. The maximum density which would still provide "gracious urban life" (C) is forty-eight dwelling unit per acre.

A. The physical and social dimension of the quarter.



9.

PIAZZA AND CONTRADA

The walking distance between two points of destination, in all historical cities, defines the social and physical dimensions of a neighborhood. This distance in Siena is approximately 2,400 feet (800 meters).

The superficial measurement of the ideal area for a quarter is, according to Krier around eighty acres with a population of close to 15,000. Beyond that limit, the community risks social hypertrophy; and beneath that limit, the community risks isolation and becoming a sort of ghetto.

B. The number of streets

Historical examples such as Siena prove that a number of streets and their length in the quarter can increase the level of comfort in the neighborhood. It multiplies the possible interactions among the inhabitants. The best example is probably the bi-annual dinner festivals of the Sieneese contradas held in their long, narrow streets or their piazzas. A large number of streets favors a multiplicity of functions. It favors more sunlight, more street corners which act as a deterrent to speeding.

THE SUPPORT OF THE NEIGHBORHOOD LIFE



10. Siena: many streets and squares

C. The number of piazzas

Obviously, the greater the number of public squares, the greater the degree of social and economic interactions in the neighborhood.

Concerning articulating public spaces, their number emphasizes not only the cohesion of each of the quarters, but also the unity of neighborhood to the whole city.

D. The number of blocks

The number of blocks, and consequently the length of the streets are also indicators of the multiple activities of a quarter. As a small unit, blocks permit a diversification of a circulation flow as well as more flexible pedestrian paths.

It is remarkable that in many highly attractive centers, the number of streets were not sufficient and it was necessary to create pathways through the blocks. In short, as the number of streets, blocks, articulating and structuring spaces increases, the comfort of quarters and neighborhoods increases in equal proportion.

PIAZZA AND CONTRADA

E. The restructuring of public spaces to emphasize the neighborhood's identity.

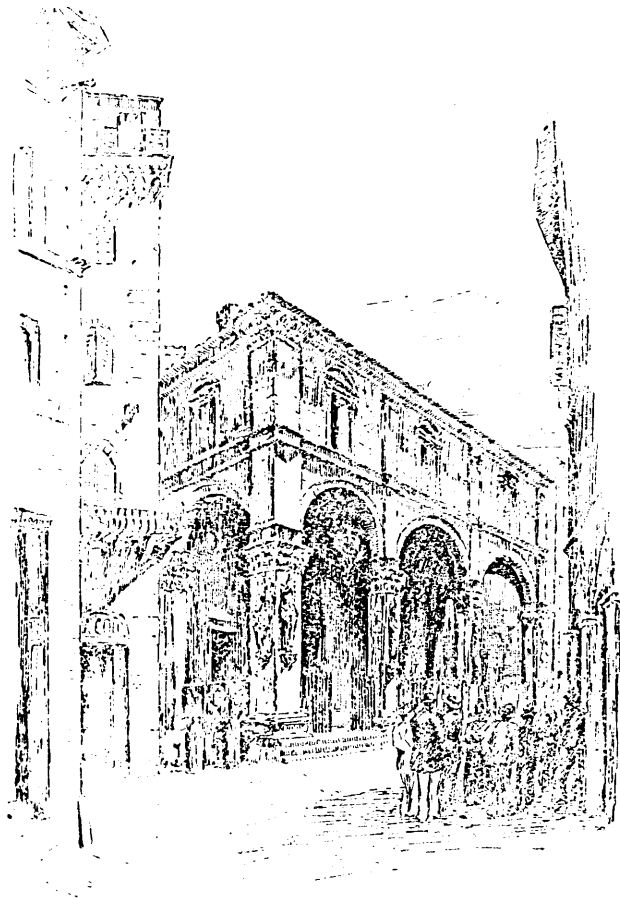
Apart from the socio-cultural characteristics of a complex quarter, the identity of a quarter expresses itself through 'places' or 'objects'. These could be a nice square or fountain (Fontebranda), a gate (Porta Romana, Camollia in Siena), a statue or a tower (torre di Manga on the Piazza di Campo).

A good example of an object particular to a Sieneese contrada is the little sculptured elephant, topped with a tower, which is the symbol on the flag of the contrada della Torre. All these places and objects create the feeling of

belonging for the inhabitants because

they possess those symbolic characteristics that are the memory of the quarter or even the city.

Urban "renewal" often destroyed buildings, monuments, etc., in order to build for present needs. This kills the past and erases memories. The rehabilitation of public spaces, on the contrary, reinforces the feeling of belonging to a community, to a culture. As will be seen in the concluding project of this study, maintaining the symbolic buildings of the site as well as the general aspect of the valley on which it was constructed, was the main criteria for the project guidelines.



11. LA CROCE DEL TRAVAGLIO

Why are public squares not used as much as before? One possible answer is the multiplication of both the production and distribution of new equipment for private use such as the television, mass communication networks, etc.. Another is the car, which probably had the most striking effect on the relation between private space, the dwelling, and public space.

PIAZZA AND CONTRADA

In modern society, the house, the apartment, has taken on greater and greater importance. It is here, inside the private dwelling, that a series of activities which previously took place outside, takes place today. Beyond the European experience, Appleyard and Jacobs describe the more pervasive, large scale problem of privatization and the loss of public life:

"Cities, especially American cities, have become privatized, partly because of the consumer society's emphasis on the individual and private sector, creating Galbraith's 'private affluence and public squalor', but spurred on immensely by the spread of the automobile.... The public environment of most American cities had become an empty desert, leaving public life dependent for its survival solely on planned formal occasions, mostly in protected internal locations." (D)

In one way, public space was finally privatized by the number of private objects (i.e. cars, televisions occupying it); in another way, private space (i.e. private gardens surrounding four facade houses) became increasingly necessary in order to create those qualities public spaces had lost. This phenomenon, common to many European cities, has been avoided in Siena for a number of reasons.

One of the major reasons is that the circulation network around Siena was created in such a way so as to preserve the city - there is no ring encircling the city walls. As a result, the time it takes to go from one part of the city

THE EXTENSION OF PRIVATE SPACE

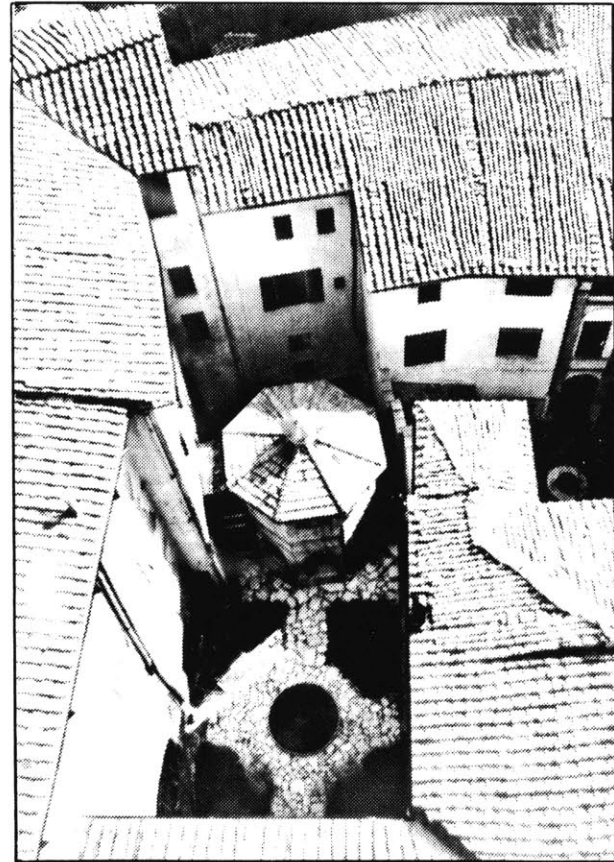
to another is longer by car than by foot. This 'anti-functional' quality of the circulation network is quite typical of Siena. The Medieval curved streets were not designed for cars and were hardly changed for today's use. The streets are narrow and for that reason often one way. Pedestrians have no sidewalks and present constant human blockage for the few cars and mopeds. This organization of one-way street makes it almost impossible to reach another part of the town by automobile. As soon as a driver penetrates the city, he will be led to an open air parking space, from which he must proceed by foot.

In a dense and mixed city like Siena, public spaces take on an important role. The small, superficial dwellings are one of the main causes of the intense urban life. Despite the social and economic transformations that occurred in Siena, public spaces were not destroyed as in other European cities. This is certainly due to the fact that the post-war economic boom did not 'hit' Siena, but also to the fact that higher cultural values are given to those spaces. It is very clear in Siena, that public spaces exist to provide what housing cannot.

PIAZZA AND CONTRADA

a) Inside the block

The inside versus the outside of a block is balanced by the quality of each. If public space is progressively destroyed, as explained in the introduction, the use of the interior of the block can also become the extension of the private dwelling. One urban trend pursues the idea that the interior of the block should become progressively public. This fails to recognize the role public spaces should have, as it leaves the streets and the squares for automobiles only. In this analysis, the interior of the block is understood as being private-



12. *Sharp difference between public and private...*

THE EXTENSION OF PRIVATE SPACE

- a place for eventual commercial and small industrial activities, mixed with private use.-

In many cases, the interior of the block contains the functional activities of the mix of uses which have a public front on the street: back kitchen of a restaurant, backyard of a workshop, etc.. Sometimes in Siena, the inside of the block provides what the public space does not - Nature.

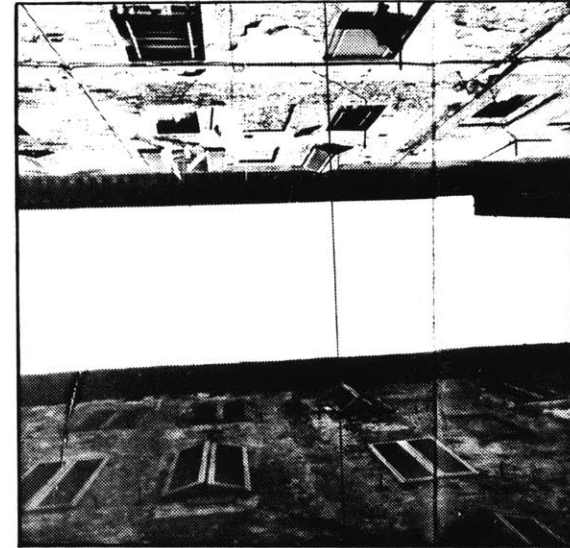
b) The facade

Public spaces do not just work in their formal qualities alone. What is happening beyond the facades is primordial. As explained above, the interior of the block sustains external activities. Not all public spaces are enclosed on the pedestrian level by shops and workshops. The house and its simple facade are the walls of the public room, with the sky as the roof. The inhabitants are the regular users and witnesses of the diverse activities on the public domain. (See Jane Jacobs)

PIAZZA AND CONTRADA

The Sienese facade has qualities that give opportunities to the dweller to communicate with the activities taking place on the streets below. The houses are three or four stories high so that a person on the fourth floor can still recognize somebody on the street. Balconies are a general rule for the facades enclosing the Piazza del Campo. Their purpose, of course, is to allow more intense participation in public life than would be permitted by a window.

On the street level, the facade forms a straight angle with the pavement, and there are one or three steps that mark



13. In general, the houses are four stories high.

the entrance to a distributive hall. The play of shadows inside that type of hall, and the physical obstacle of the steps, are enough to symbolize and differentiate the public from the private domain.

c) The nature in the city

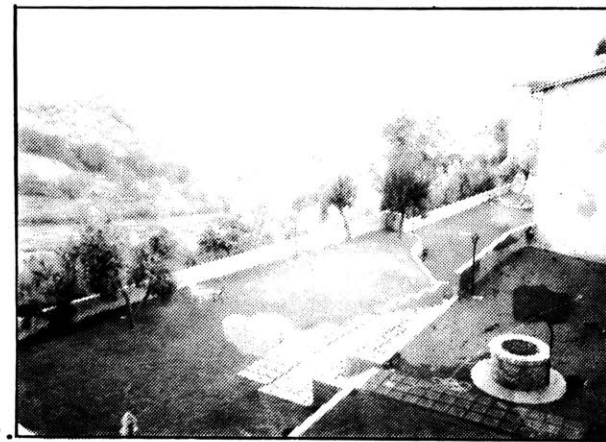
As noted above, public spaces should provide what private units or dwellings cannot. In a dense city where urban functions are intimately mixed, it is impossible to extend a private garden to every dwelling. As it was observed in larger European cities, it was hand in hand with the Bourgeoisie that Nature appeared in the cities. Grand boulevards and avenues were then associated with the idea of the 'promenade.' It was at the end of the 19th century and the beginning of the 20th, that large public parks were created. Most of them were poles for the development of new neighborhoods.

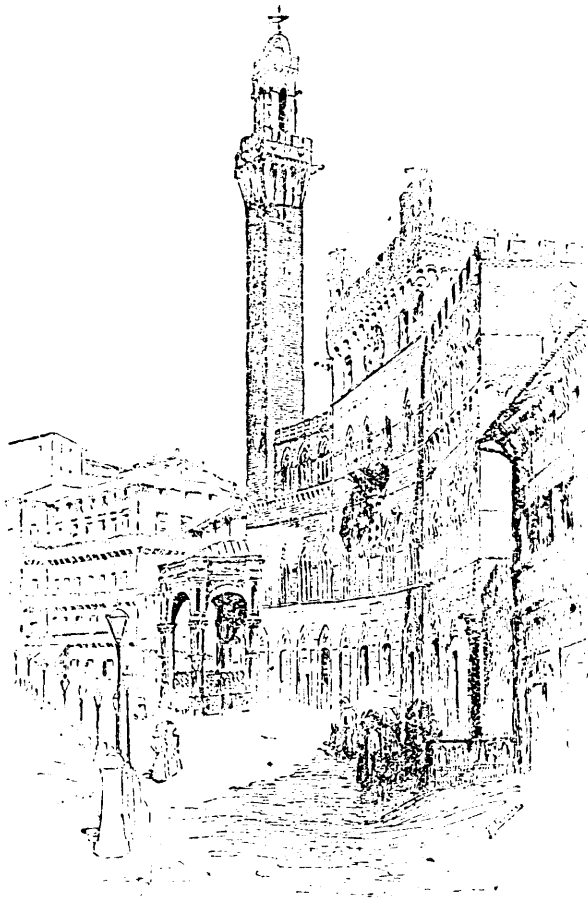
They had the role of articulating the different parts of the city, and of attracting investments on the perimeter.

The car, facilitating the access to nature outside the limit of the city, contributed to the destruction of green space in the city. The gradual destruction of the nature in the city, reinforced the de-population of the dense quarters towards the suburbs. This exodus partly destroyed what it was looking for. Most of the suburban developments destroyed highly valuable planted domains, and the proliferation of individual houses transformed the country-side and annihilated its' identity.

PIAZZA AND CONTRADA

If this evolution cannot be applied to Siena, it is first of all due to its size. To cross the city by foot, from one gate to another, does not take more than 30 minutes. The nature of the country-side is visible from the gates of the city, so that it is not really necessary in the Sienese public spaces. As seen in the reading of Siena, the role of the green valleys do probably compensate for the lack of nature in the streets and the squares. The valleys can be seen from all the streets running at the edge of the hill or at the end of a street, just like a painting. From the hills, it is also possible to see over the walls into the country-side itself - Toscana. 14. *The proximity of the countryside.*





15. THE PALAZZO PUBBLICO

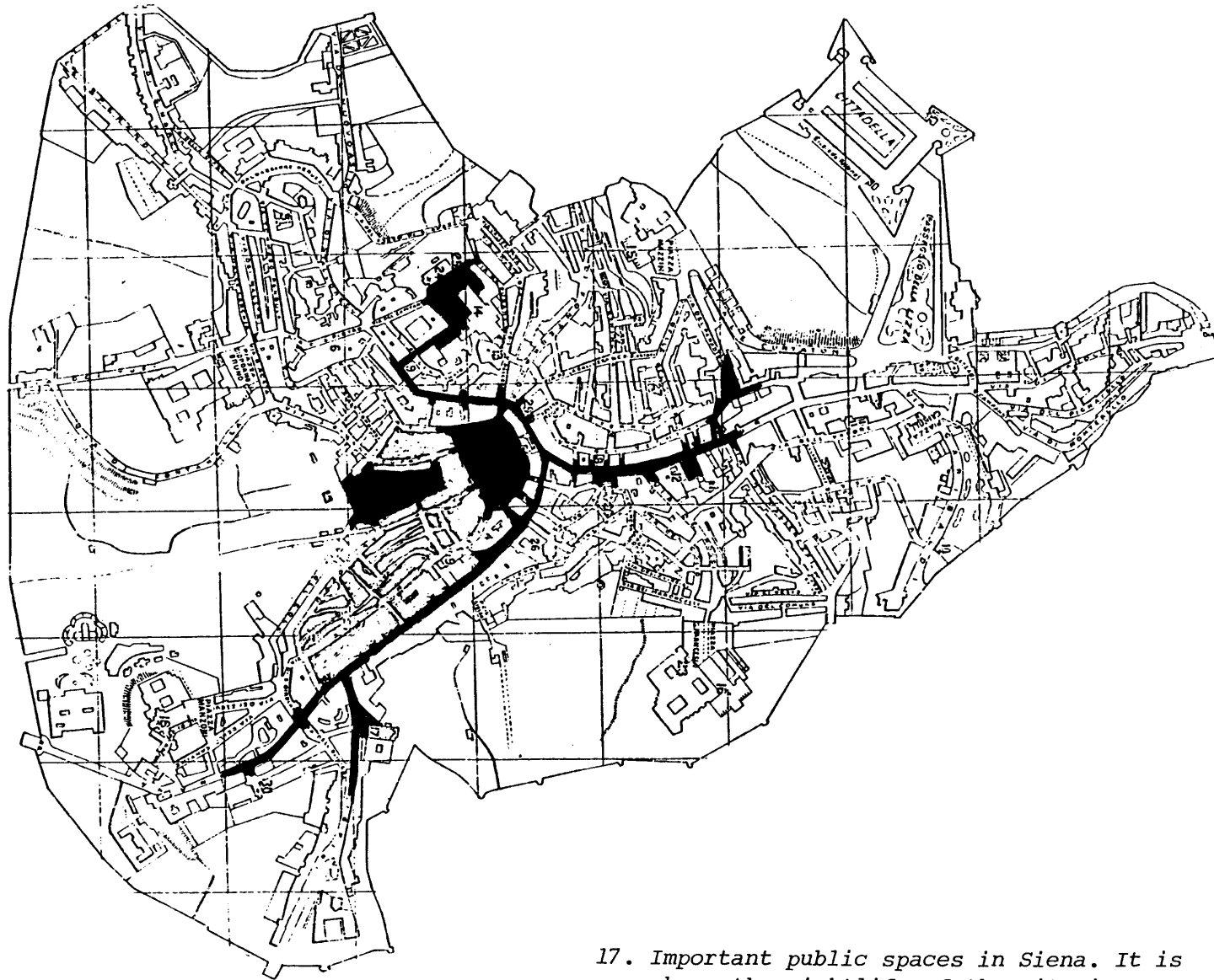
"A city is not so much a construction as a landscape of open spaces. It is a choreography of spaces, an ordering of movement through which we move and live our urban lives. The structuring of that open-space system places an indelible and permanent legacy on a city and its inhabitants; grids, diagonals, loops, curvi-linear streets - each formation sets a quality on the movement of people within the city; it marks them forever, influencing what they do, establishing a character for our lives." (F)

PIAZZA AND CONTRADA

The 'choreography of spaces' is a fundamental concept if one tries to grasp the personal identity, evolution, and quality of a place. Besides their particular function in structuring spaces for neighborhood life, and in articulating the quarters within a city, public spaces must play a larger role on a city scale. The main difference in abstracting from the particular to the general level, is that both the structuring and articulating spaces must be organized to create a cohesive urban totality. Only then can public spaces create the perception of , and feeling by the urban residents of belonging to a larger city community.



16. *Piazza del Campo.*

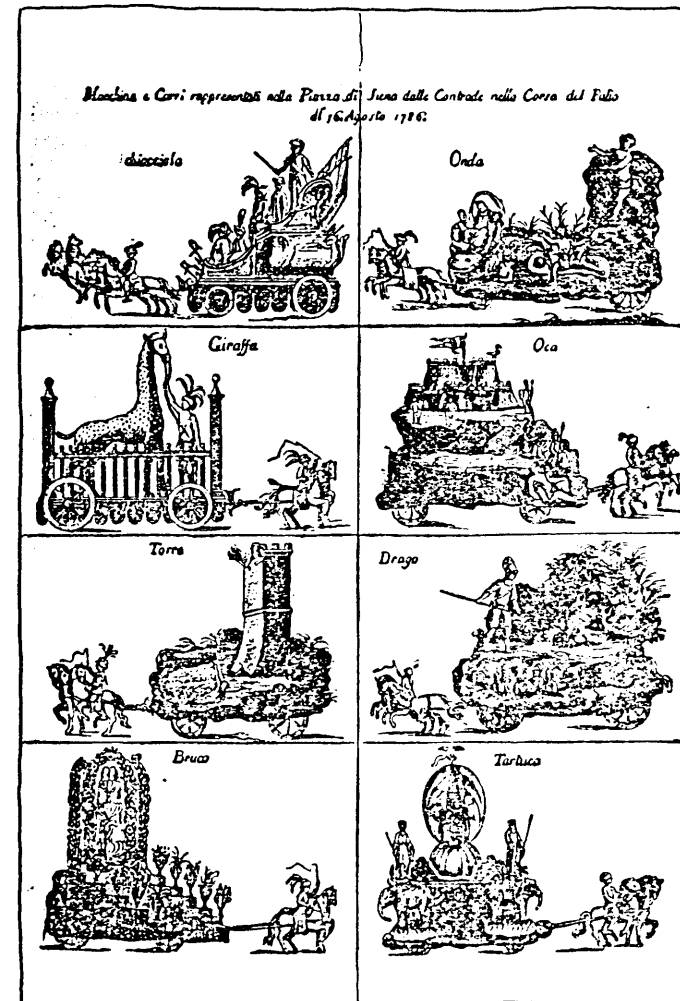


17. Important public spaces in Siena. It is where the nightlife of the city is concentrated.

PIAZZA AND CONTRADA



18. Costumes of the contradas



19. Symbolic structures for each contrada. They were shown during the Palio.

In general, the existing public spaces in Siena are satisfactory for most of its inhabitants. But some residents have divergent views on particular places. For instance, the site studied in part four is most convenient for the slaughter house which uses the facilities of the local fountain. However, the road that passes near by the slaughter house is in close proximity to the limit of the city, (because of its economical location for trade with the countryside). The residents who live close-by complain about the

nuisances created by the smell this small industry produces. This example demonstrates two general characteristics of participation: (1) Participation will always be conflictual. (2) Rehabilitation of public spaces can only be done with the residents' involvement.

Divergent views on the use of public space can bring conflicts not only between shopkeepers and residents, but also between the city interests and the different quarters. In a mixed use area, conflictual situations seem to be unavoidable. It has been demonstrated in theories based on experience, that this type of setting creates change.

PIAZZA AND CONTRADA

Change, if not in form, at least in use. (see the ecology of streets by Stanford Anderson) This is also true in the case of Sienese public spaces. Although, it is a fairly static and conservative city, the features of modern society did have a significant affect on public spaces. As explained in section 2.3, the transportation system had to deal with and respect the city fabric, the presence of buses and cars in the streets and piazzas changed their usage. The people who profit the most from these spaces today are mainly the visitors and delivery trucks. The pedestrian is in constant 'conflict' with those vehicles. It is not surprising then to see that the highest

concentration of 'walking people' is found in the only piazza that doesn't allow any motorised traffic - the Piazza del Campo.

It seems that the only people who would benefit from, and therefore have an interest in restructuring public spaces are the residents themselves. For this reason, this section deals solely with resident involvement, in order to develop a hypothetical participation concept discussed later on.

To analyze resident's involvement in Siena is both difficult and easy at the same time. Difficult in that we are dealing with the Sienese public space in

CONTRADA: THE CUSTODIAN OF THE PATRIMONY

its totality as well as in its' diversity. In other words, not only with all of the contradas which form the Commune of Siena, but with the diversity of each individual quarter. Easy, because resident involvement has always existed through the contrada / clan system. The network of interaction between citizens, their contradas and the commune seems rather complete.

If we disregard these fundamental characteristics, we would risk a fragmentary analysis of the problem and arbitrary guidelines for the restructuring of public spaces.

Due to the small periods of time spent in Siena, it was impossible to work out a series of concrete propositions with the population. This is why I.L.A.U.D. limited the study to two case studies representative of the diversity and globality of the Communa di Siena.

The selection of the study areas was chosen by representatives of the contrada, thus of the residents, and aided by the city-planners. It is through these architect-representatives that the meetings were organized, the problems exposed, and the city officials invited, etc.. In the more popular neighborhoods, the worries of the representatives of the contradas is

PIAZZA AND CONTRADA

understandable given the natural fears developers provoked among the population, whether their intentions were good or bad. In the middle and upper-middle classes, the contacts are not necessarily made with representatives. It could be the residents themselves, especially shopkeepers, tradesmen, bankers, etc. However, the architects of the commune would still be present at the meetings.

It seems important that the resident representatives chose the means of intervention. (see the end of the introduction). They are living there, they know the problem more profoundly than any exterior group and even more

importantly, they will have to deal with the restructured area once it is finished! The ILAUD study areas were undertaken in popular neighborhoods and thus the information was given to us on the site by the architects and residents of the contrada.

During the first phase of contacts, the choice of the area to be studied was made and the intentions of the population concerning a new program for that place, clarified. Afterwards, in place of a synthesis of the gathered information, a graphic phase was undertaken to represent our observations concerning the city and the site itself.

This "reading" period is explained further in the relevant chapter.

CONTRADA: THE CUSTODIAN OF THE PATRIMONY

The contacts made during the first weeks, and the willingness of the commune to give us information and documents on the city, were particularly helpful in understanding the city structure and its evolution as well as the particular problem of the contrada under study which was apart of a larger set of problems. Those problems and characteristics were elaborated in the section 'Siena as Context.'

The most interesting phase of the resident involvement process was the final presentation of the student's sketches during the last weeks. It provided a range of solutions, sprawled from one extreme to another, from

minimalist interventions to conceptual thinking. Animations of the site were presented through media such as theater and video. During the public presentation, new ideas were stimulated for the rehabilitation of the area and above all, a dialogue established between the students and a larger part of the population. In that sense, the goals of I.L.A.U.D. were achieved.

The actual stage of completion reached in the projects could be described as an intermediate 'test' of a project before reaching its' final stage. This intermediate step should be regarded as an important one as it involves the residents at a crucial decision level in

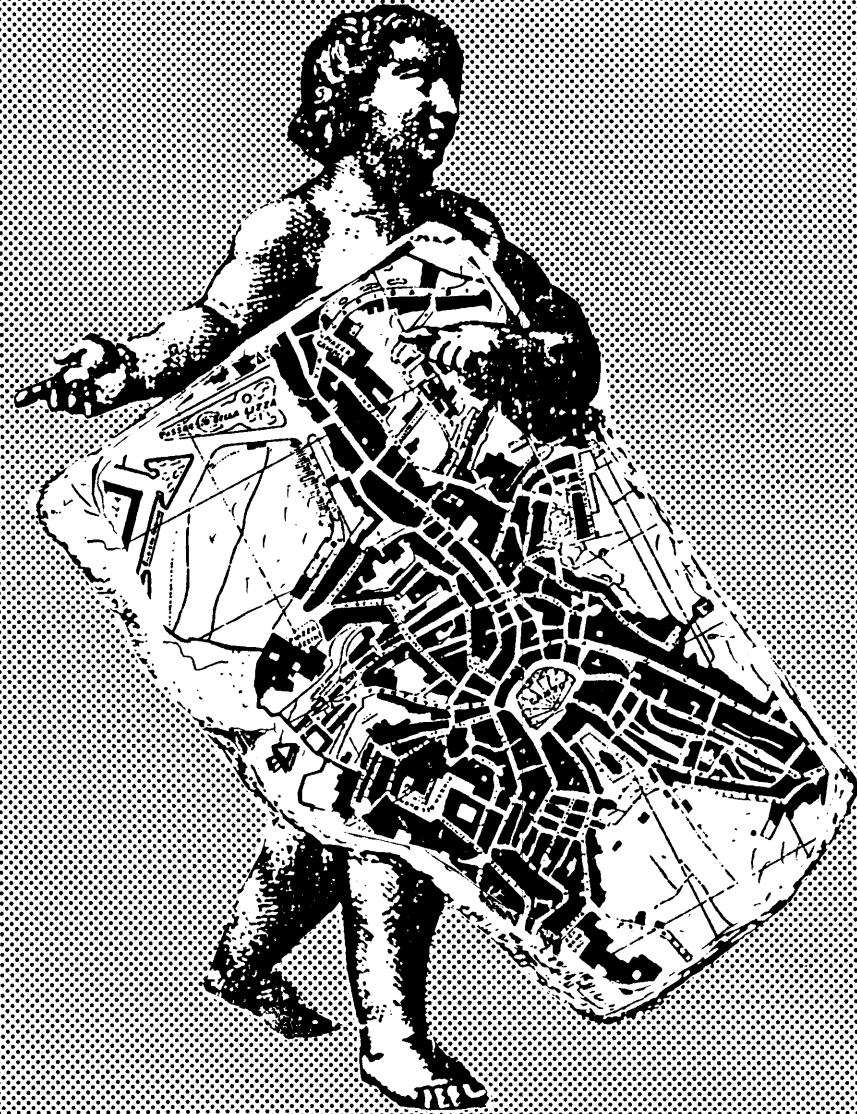
PIAZZA AND CONTRADA

the making of their environment. In addition, it appeared that the sensitivity, motivation, and the quality of the remarks made by the population were 'catalysed' by the possibility to criticize, positively or negatively, the proposed solutions.

It is remarkable that the process of involvement did not stop with the public presentations. On the contrary, it created a dynamic process which made the project more well known. This active involvement of the population could be transformed into a strong claim concerning their public spaces.

In conclusion to this section, it appears that the way the problem of public space, its quality, its use, was handled, was an excellent and effective mean of creating contact with the community, and in making them conscious of their own power over the quality of their lives.

FROM THEORY TO PRACTICE



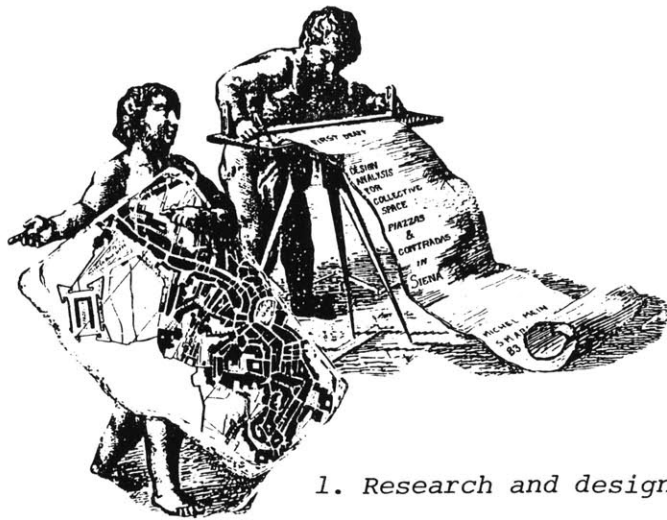
Footnotes

FIGURES

- A . Drawing by Elizabeth Cordoliani.
- B. Agora of Assos.
- C. Drawing by Robert Krier in
" Urban Spaces". see bibliography.

QUOTATIONS

- (-) in "A Pattern Language"
Towns. Buildings. Constructions.
by Christopher Alexander.
Oxford University Press, 1977
New York.
- (=) Notes of the author.
- A. C. Alexander, p.89
- B. *ibid.* Pattern No.53
- C. *ibid.* Pattern No.61
- D. *ibid.* Pattern No.106
- E. *ibid.* Pattern No.114
- F. *ibid.* Pattern No.36
- G. *ibid.* Pattern No.120
- H. *ibid.* Pattern No.124
- I. *ibid.* Pattern No.160
- j. in "Urban Open Spaces"
see previous chapter.
- K: in "Site Planning" by
Kevin Lynch.



1. Research and design.

At I.L.A.U.D., the first weeks were spent "reading" the city and the two specific sites to be studied by the teams. (Fontebranda and the Brucco) Research and Design was worked in simultaneously and the outcome was the development of solutions and proposals for these two sites by various teams of students.

The premises on which the International Laboratory of Architecture and Urban Design is built allowed me to get much closer to the way urban interventions work on a neighborhood level.

INTRODUCTION

To have the studio in a context as Siena raised particular questions that were addressed throughout the project:

(1) Why are some medieval towns so attractive as a model for urban planning?.

(2) What were the environmental and sociophysical conditions that led to a specific hierarchy of public spaces?.

(3) What were the patterns used in the traditional european city that made people identify with a square, a quarter of their city?.

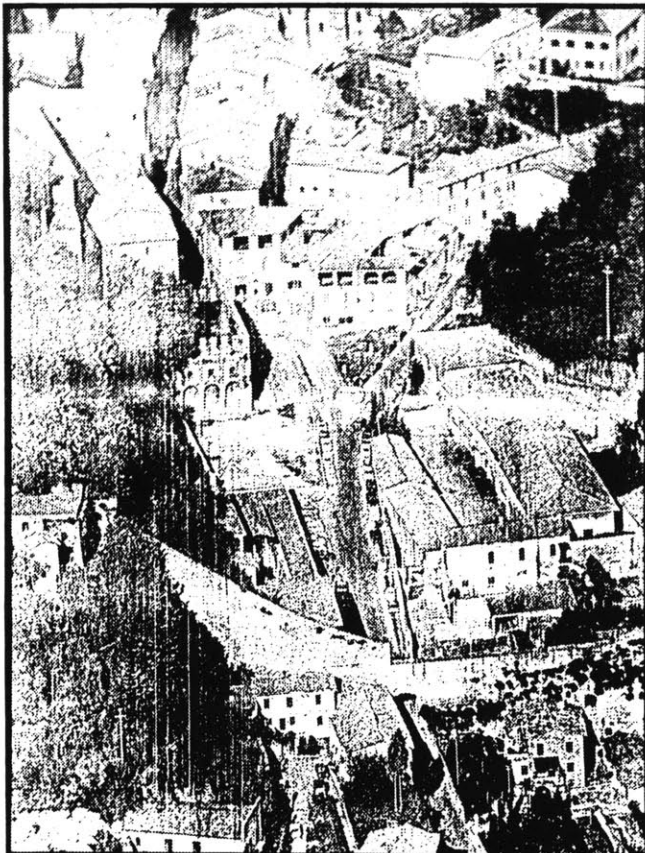
The purpose of this last section is to address the application of the previous topics in the context of adaptive reuse and a complete landscaping of the site.

The goal of this investigation is to discover how patterns as "hierarchy of open spaces", "network of paths and destinations", etc create as catalyst for a sketch design.

If places are to become references for a project, one needs to look beyond the actual experience and analyse the specific qualities of their physical form.

Through drawings, description of the site and analysis, I will attempt to clarify the physical qualities and use potentials of the valley of Fontebranda. It will be performed by a set of guidelines and patterns, and a design test will determine their implications.

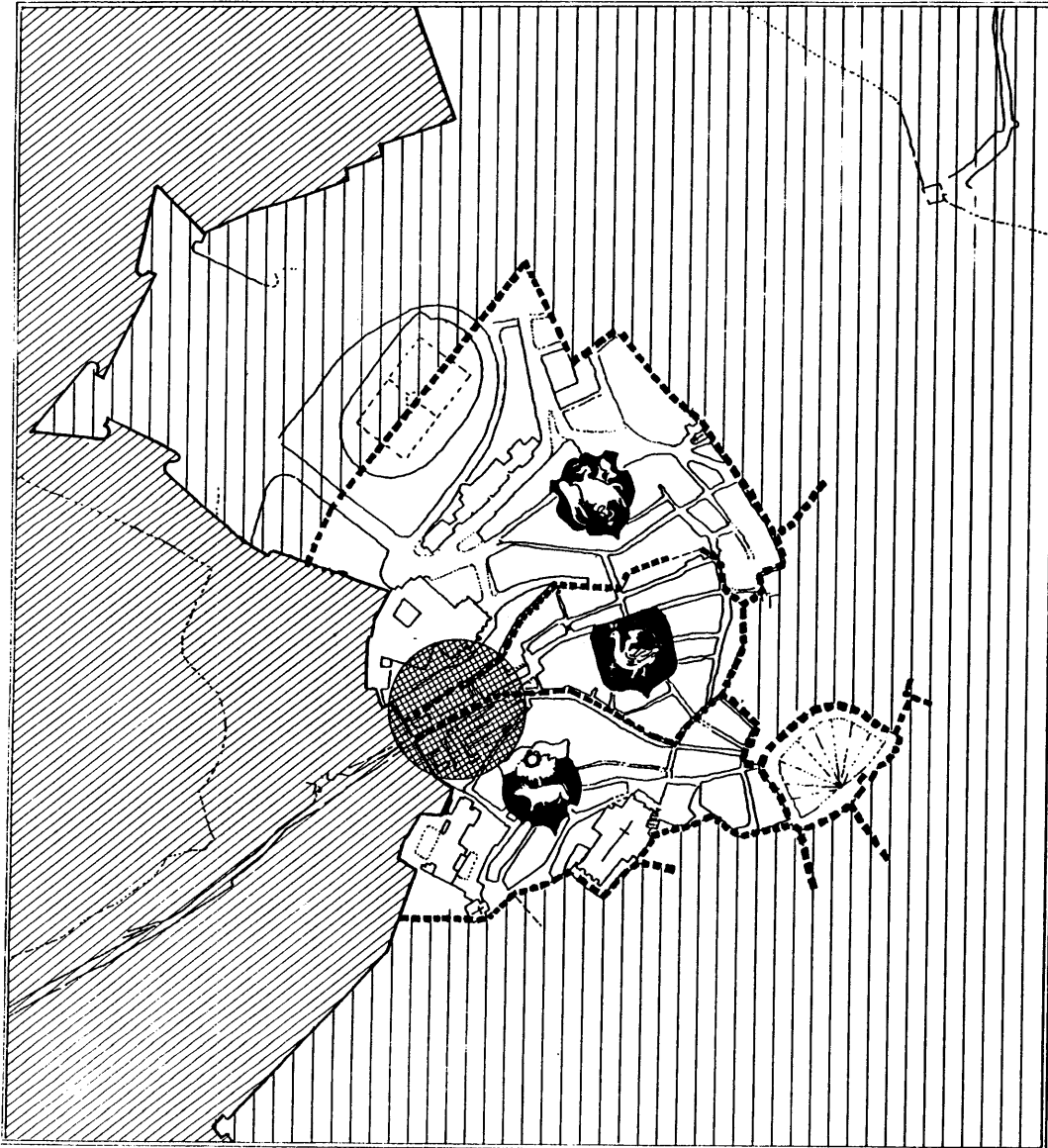
READING


FONTEBRANDA Siena

2.

The reading of the site-the valley of Fontebranda- is part of the reading of the entire city. The following patterns describing the characteristics of the place and its built elements are first analysed. Afterwards, by understanding their components, we will attempt to understand the failure of this space in fulfilling the needs of the inhabitants. As shown by the different maps delineating the articulating public spaces between the neighborhoods and the internal structuring public spaces of the contradas, the site condense most of

FROM THEORY TO PRACTICE



3. *The valley of Fontebranda
is part of three neighborhoods:*

- Drago
- Oca
- Selva



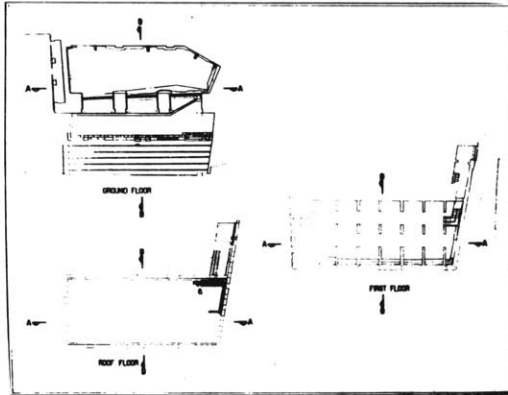
*The countryside and
the new developments.*



*The surrounding city
fabric.*



The city wall



4. *The fountain of Fontebranda.*
 1. *Ground floor* 2. *First floor*
 3. *Rooffloor.*

5. *The covered Fonte-branda.*
 Note the difference in level.



those features: it overlaps on three contrada territories, it is an articulating public space and still, it is where the identity of the contrada di Oca can be recognized.

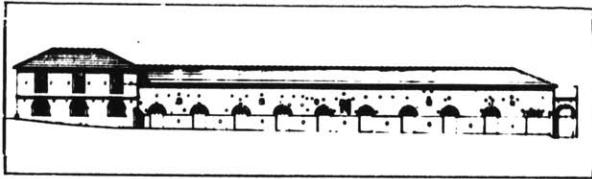
Fontebranda is the lower part of the town, craddled by two steep slopes and bounded by the city fabric on the east and by the wall and its gate on the west side. The entire complex is tied together by a series of landscaped pedestrian paths:

on the paths between San Domenico (North) ad the Duomo (South), the gothic fountain is an historical monument and place that commemorates the need for the town to have constant water supplies.

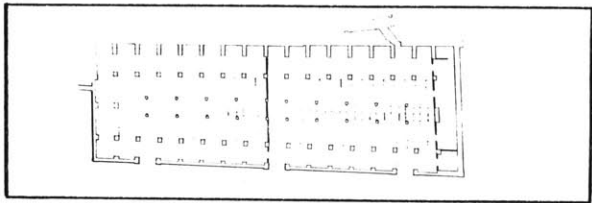
FROM THEORY TO PRACTICE



6. Location of the valley of Fontebranda; close to the Piazza di Campo and at the edge of the city.



7. *The slaughter house. Elevation.*



8. *The wash-house. Ground floor.*



9.

The slaughter-house is still in use but proves to be a constant nuisance for the local residents.

The wash-house is closed and the basin that existed a few years ago has now been paved to accomodate the needs of the inhabitants for their traditionnal dinners before and after the Palio.

Now a neglected "pocket" at the bottom of the town, this place once had, at the beginning of the century, a tremendous activity due to the multiplicity of its functions. The gothic fountain, the wash-house, the slaughter-house were the elements of the identity of Fontebranda.

FROM THEORY TO PRACTICE

With the loss of these functions—due to "progress"—, the valley articulated by the Via di Fontebranda has lost its social function, as it is no longer the place of gathering or festive meetings.

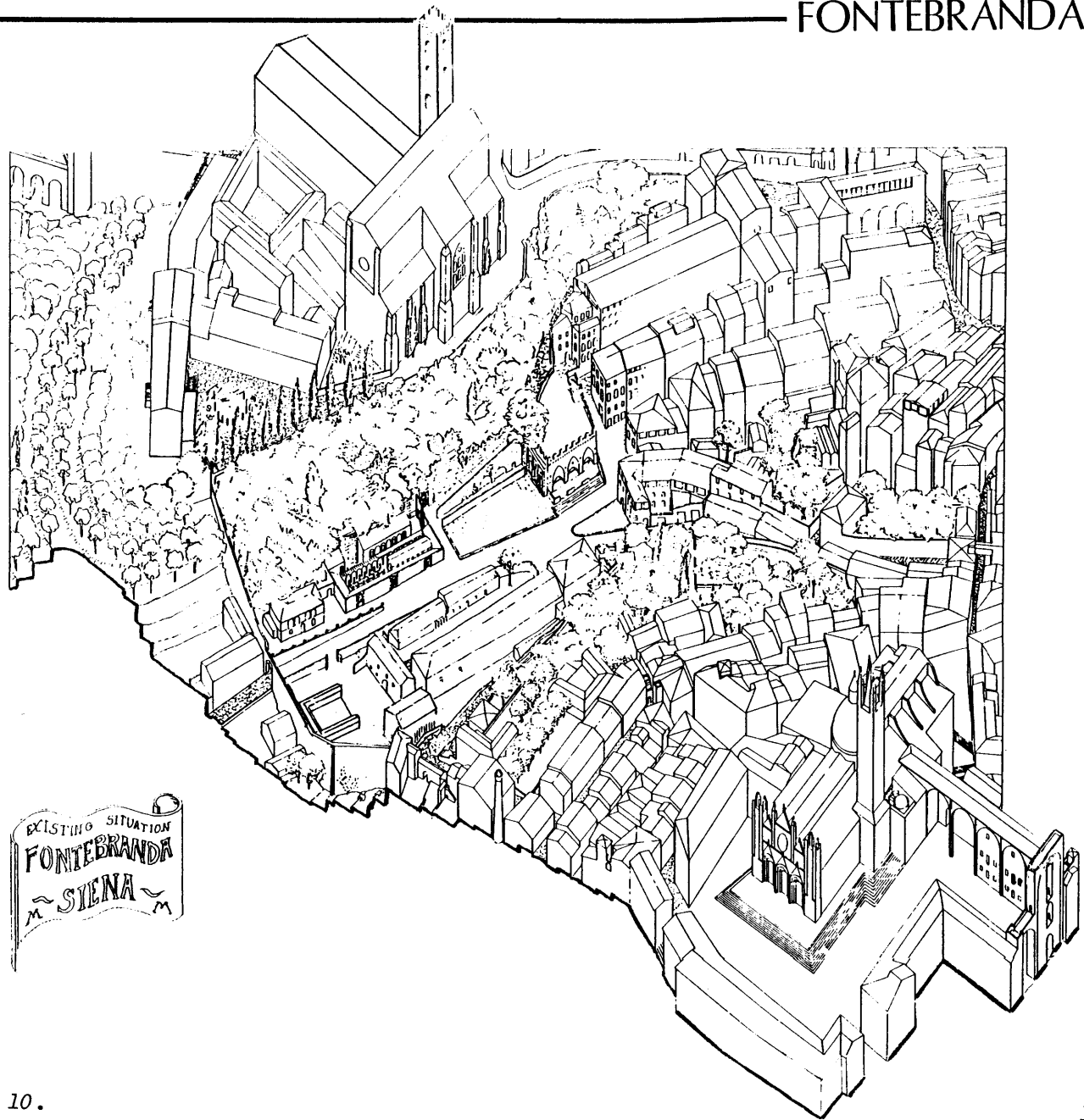
Besides this brief description, a more subtle approach to the site can be undertaken when we analyse its patterns in terms of needs and supports. The needs encompasses the physiological, psychological and social requirements. The supports are the physical and spatial elements designed to facilitate those needs.

(A) -Needs: The contrada di Oca (see map) needs a public space that would emphasize the uniqueness of their neighborhood.

-Support: Two symbolic buildings, the fountain and the house of Santa Catarina, are already on the site and are part of the identity of the place.

(B) -Needs: The limits of di Oca are not clearly defined. They need to be emphasized to recover the full identity of the contrada.

-Support: the two slopes of the valley, the wall and the edge of the city fabric enclosing the "pocket" between country and



EXISTING SITUATION
FONTEBRANDA
~ SIENA ~

FROM THEORY TO PRACTICE

city are the first elements of a possible redefinition of their public space.

(C) -Needs: The access to the site has to be emphasized, but, acknowledging the limits of their domain, the place has to be used firstly by their inhabitants.

-Support: Two pedestrian paths are now leading to the site and are merely enough for its future use. The traffic flow leading through the bottom of the valley and leading to the near-by Piazza di campo is a nuisance.

11. *The gate to Fontebranda.*

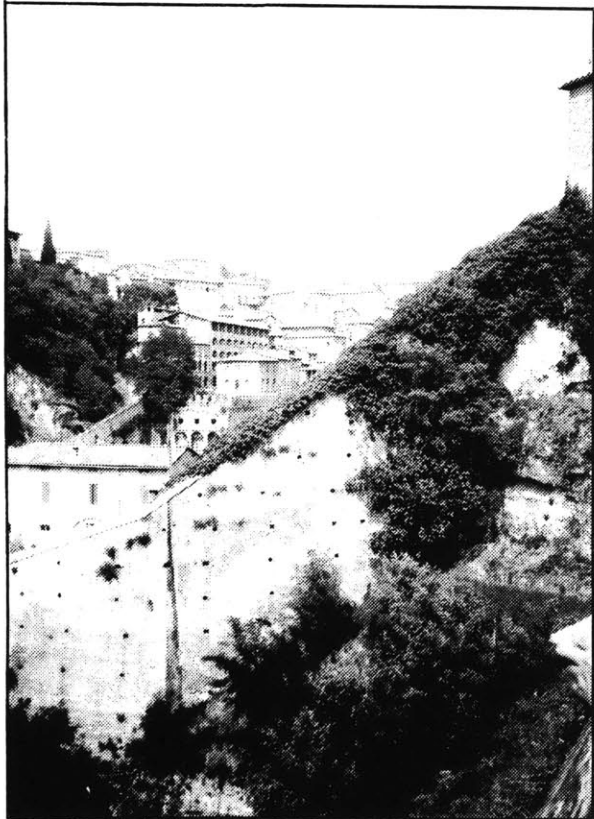
12. *The slaughter house and the pedestrian path leading to the Duomo.*

13. *View of the "buffer-space" between the gate (back) and the city fabric (front).*





13.



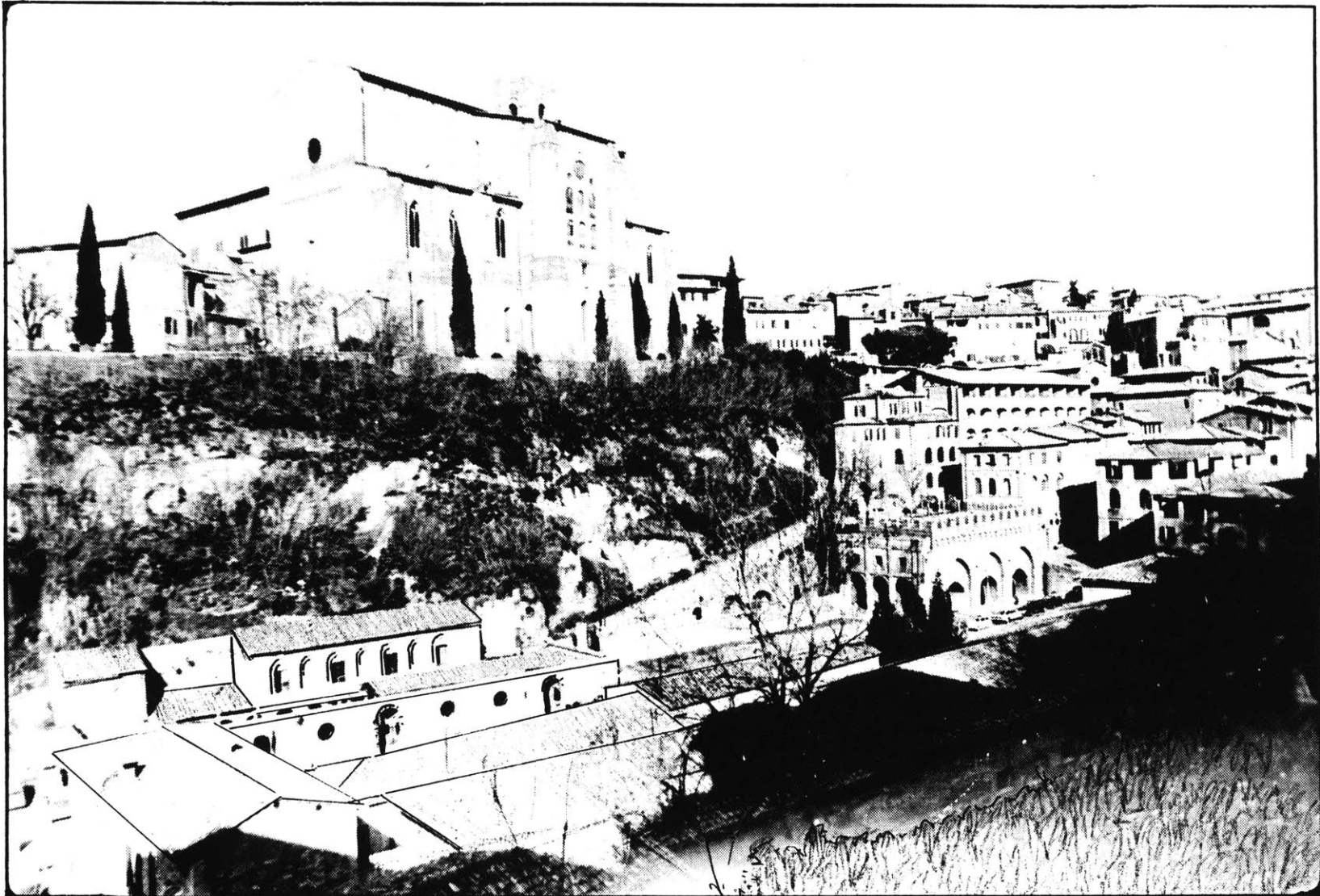
14.

(D) -Needs: The washhouse and the slaughter-house have to be converted for more actual needs. The suggestions of the inhabitants is to rehabilitate those buildings as part of the Sienese University complex, as a Traveller's Inn and as some commercial and cultural facilities.

-Support: Due to their design, these buildings, which, for the most part remain intact and quite strong, nevertheless need some new construction around them to complete their program

14. View over the city wall into Fontebranda.

— FROM THEORY TO PRACTICE —



15. Fontebranda and the imposing mass of San Domenico. View from the path leading to the Duomo.



16. House of St Catherine.

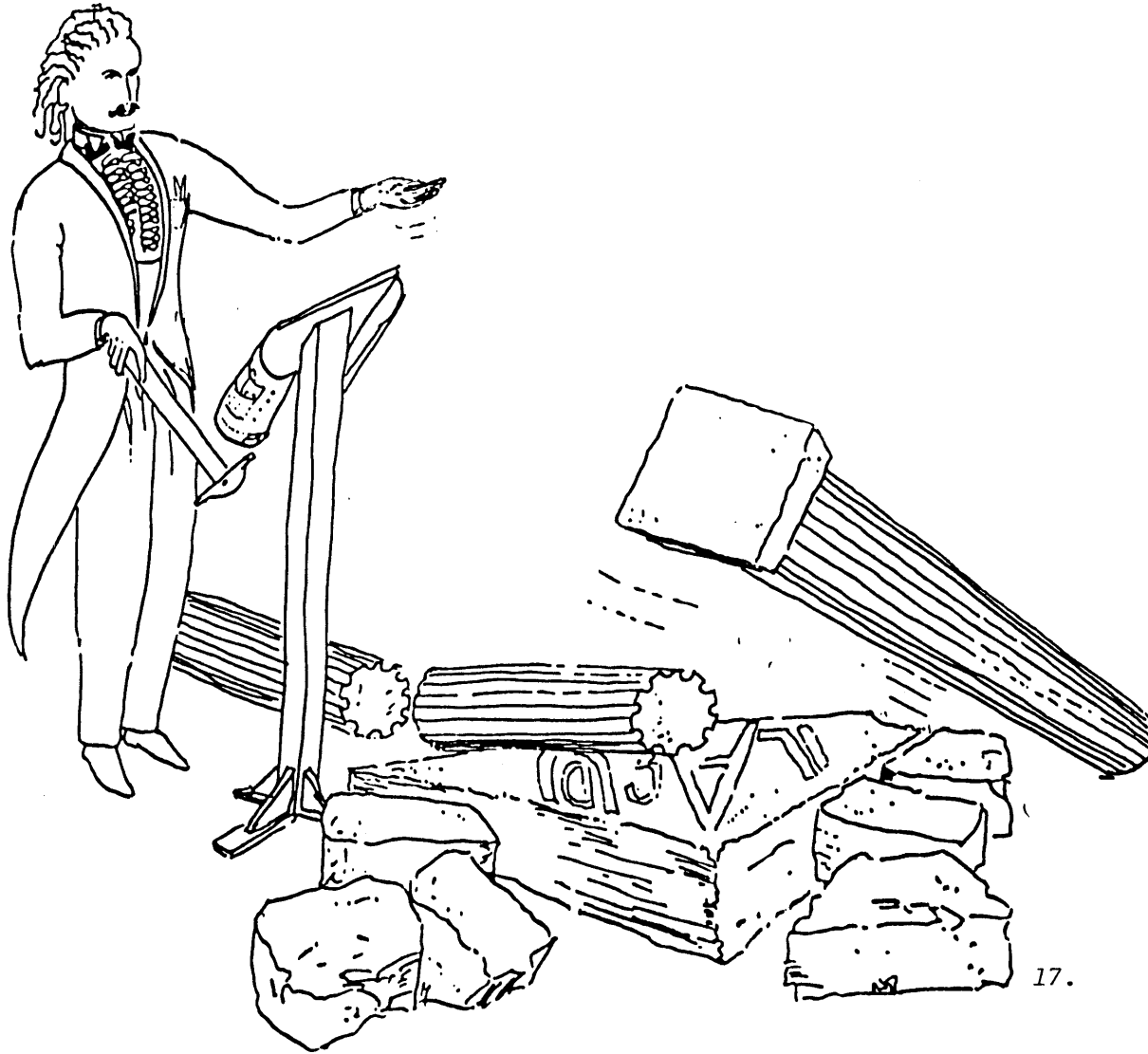
St Catherine had a strong influence on her time.

The contrada di Oca still venerates this place.

(E) -Needs: The connection with the new development outside the city is clearly not made. Since the site is one of the entrances to the city, the rehabilitation of Fontebranda could lead to an higher degree of publicness, with the resultant sense of loss of identity of the contrada.

-Support: For this reason, a hierarchy of public spaces has to be provided. These spaces should be grades on a scale of public to semi-public, and be able to incorporate a variety of uses

FROM THEORY TO PRACTICE



The following guidelines are developed from the patterns described above. The continuity provided by those patterns are part of a larger set of continuities concerning the totality of the built neighborhood. The guidelines are the root of the city fabric and the patterns described in the last section are common themes that occur in varied relationships.

At the outset of the design investigations, I began with the following goals. Together they formed the mental framework for approaching the site problem.

(1) The intentions were to recognize the specific qualities which give a character to the environment and enables people to identify with it; that is: to assume the contradictions of the site which consists of an internal structure for the contrada di Oca as well as an articulation between the limitrophe quarters. Also to recognize the limits of the contradas and use them as generators of the landscape design.

(2) The design of the buildings should be studied in context as a serie of buildings which act upon each other, reflecting the intentions and the aspirations of the inhabitants over time.

— FROM THEORY TO PRACTICE —



18. *View of the city at evening. To the right the Cathedral; to the left, the monastery Church of San Domenica; centre, the tower of the Town Hall with in the foreground the wall of Fontebranda.*

(3) The design should also be conducted by the "behavior settings" as described by Kevin Lynch:

" Since the behavior and the overt purposes of the actors are regularized, it is easier to record and understand their significance. Recording the territorial and temporal limits of behavior settings, their relative stability, and the nature of their participants furnishes us with the basic elements for which sites are organized." (K)

Thus one goal was to provide a flexible program for the site which creates a structure allowing for a change in human needs.

(4) In order to understand an historical site, one should appreciate its setting and recognize its evolution through time. The existing built forms result from successive layers of building and

inhabitants. Each layer is a response to the previous order. A careful reinterpretation and use of forms will, thus, limit the design.

(5) And finally in the specific case of Fontebranda, it must be clear in the design that the space at the bottom of the valley is a "pocket", serving as buffer-space between the city and the countryside, just behind the wall.

The following section- sketch design- is the result of many constraints and limits I set for myself. They were described in the chapter Piazza and Contradas as well as through the previous guidelines.

FROM THEORY TO PRACTICE

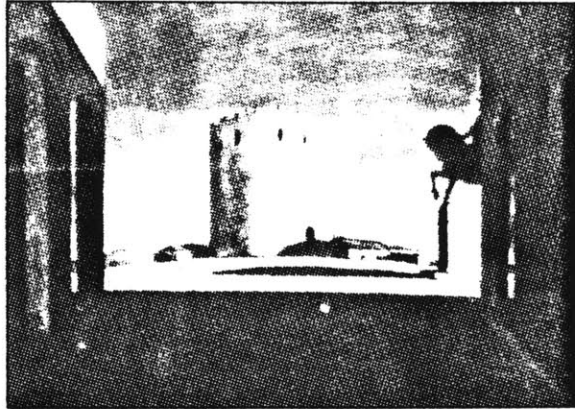
In de Chirico's "Piazza d'Italia", the significance of space and city appeals to our subconscious. As Robert Jensen writes in his article "Dreaming of Urban Piazzas" :

" There seems to be a difference between the piazzas we build in reality , and the piazzas we have in our minds. It is indicative that we call them plazas or sometimes piazzas. Our own English word "place" won't do...The word is at once too common and too diverse in its meaning to designate what we want in a urban center downtown". (J)

The white palaces, the tower, the statue of Giorgio de Chirico are elements which are constantly decomposed and reassembled among themselves and form places that opens onto a mysterious countryside.



19. Giorgio de Chirico :
"Piazza con Torre", 1914.



20. Giorgio de Chirico :
"La Torre rosa", 1913.



21. Giorgio de Chirico : *"Piazza d'Italia", 1913.*

The opening and the isolation of these architectural elements refer to places like Pisa. But the composition is unique and non reproducible.

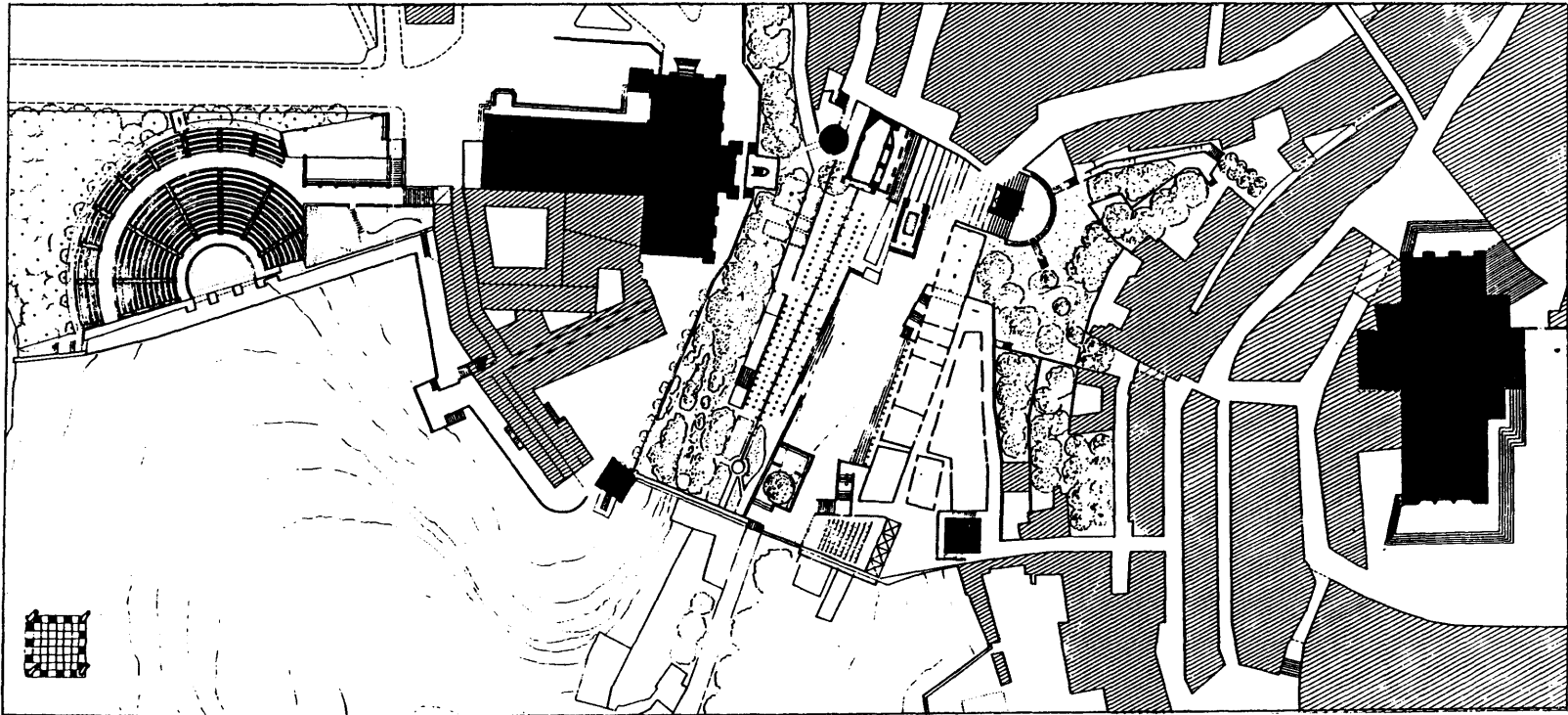
In reference to de Chirico's pictorial compositions, the project is based on a enigmatic duality between closed, finished constructions and isolated elements.

FROM THEORY TO PRACTICE

During the process of considering this familiar place by drawing it, it recalled bits of information that had receded into memory. The actual design of a project in the site enabled me to make a second and more detailed reading; to go beyond my immediate, and sometimes fanciful reaction to a foreign culture and environment. I tried to explore my first intuitions (see guidelines) and to articulate and share my care and understanding of that place.

Below is a list of the drawings followed by a discussion of each.

THE AREA PLAN shows the scale and the location of the buildings in relation to the surrounding fabric of built and unbuilt spaces.



22. AREA PLAN : ground floor of the project and the surrounding context.
(The project of an amphitheatre in the second valley-left- is not explained
in this work.)

FROM THEORY TO PRACTICE

THE AREA AXONOMETRIC shows the placement of the new buildings and their relation with the steep slopes of the valley.

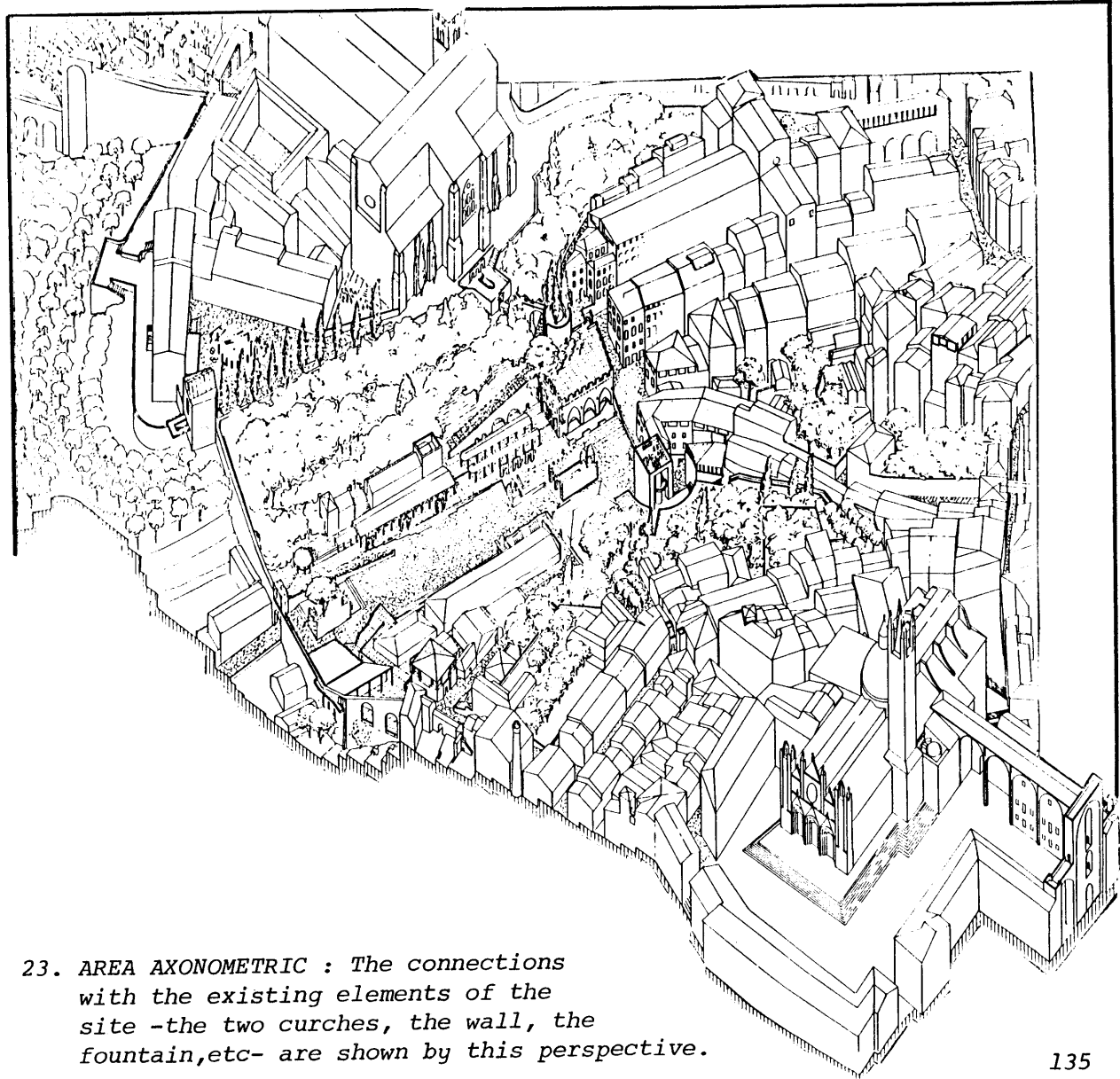
THE PIAZZA SECTIONS show

AA: the relationship of the towers to the site

BB: the experience of moving partly under cover from the major spaces and structures (churches) of the study area.

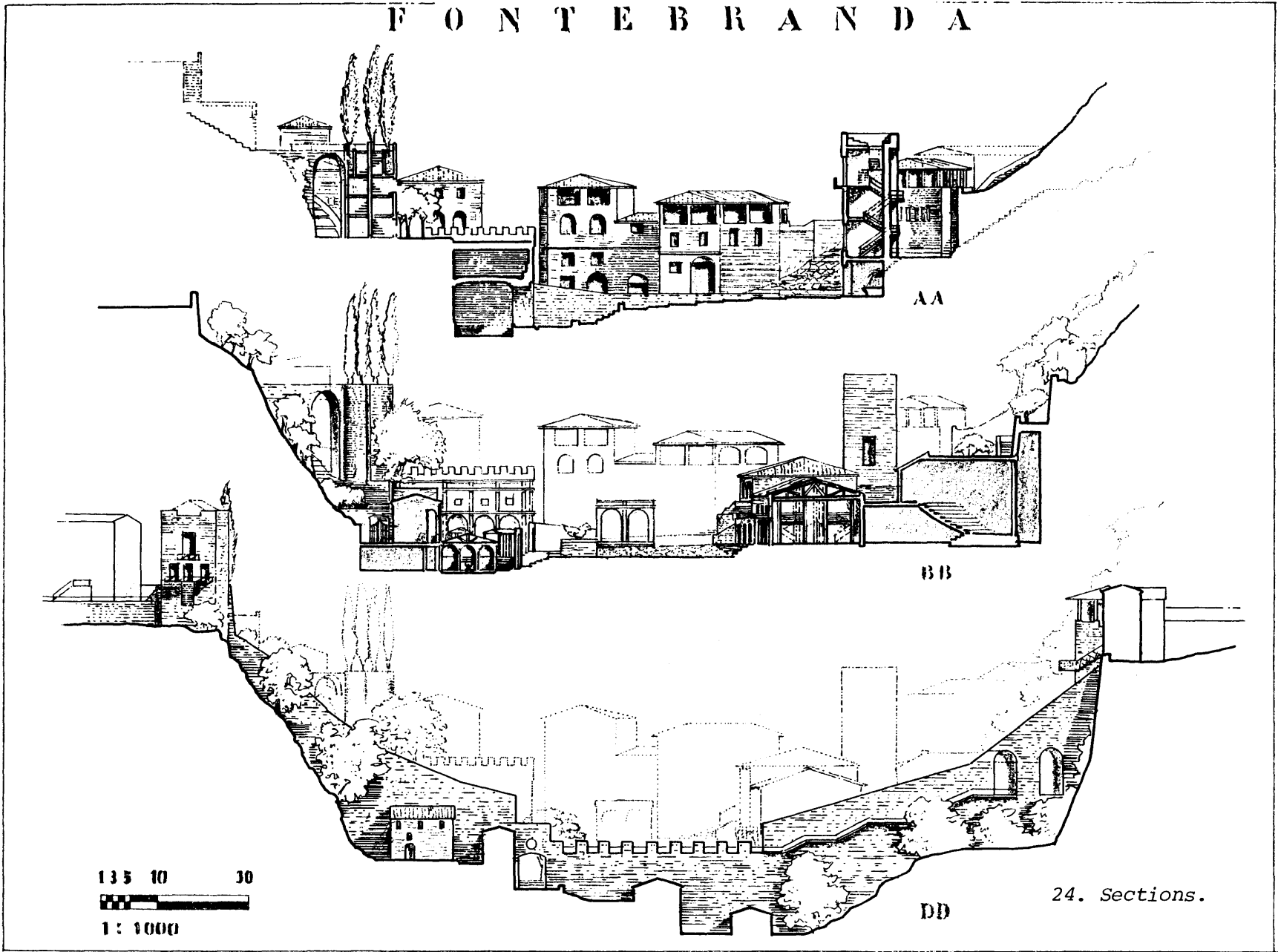
DD: the use of the existing wall and the new skyline given to the valley.

THE PIAZZA ELEVATION shows the characteristics of the walls which enclose the piazza and the facade of the buildings: issue of style, scale and symbol.

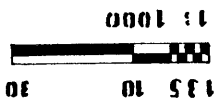


23. AREA AXONOMETRIC : The connections with the existing elements of the site -the two churches, the wall, the fountain,etc- are shown by this perspective.

P I A Z Z A
F O N T E B R A N D A

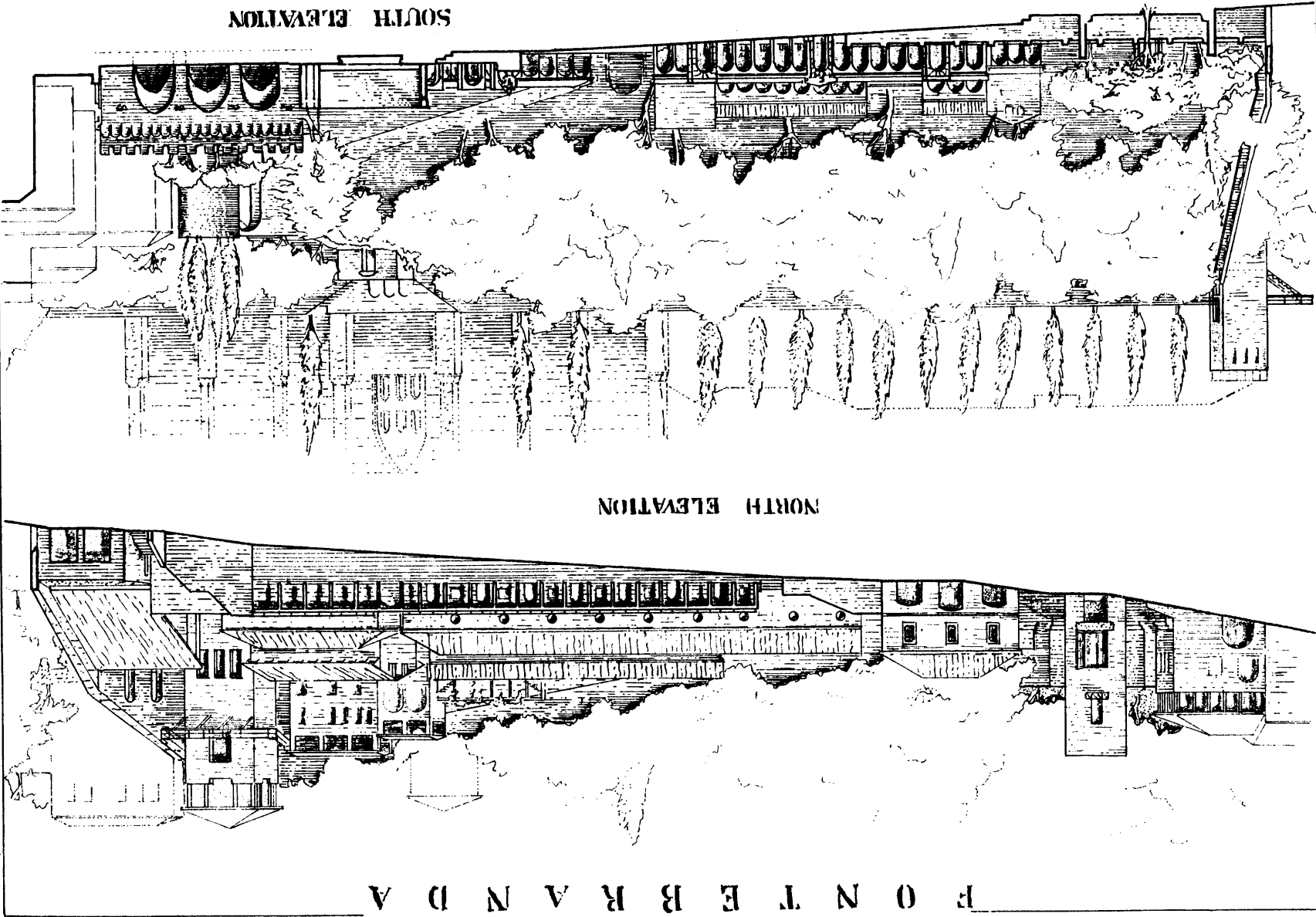


SOUTH ELEVATION



NORTH ELEVATION

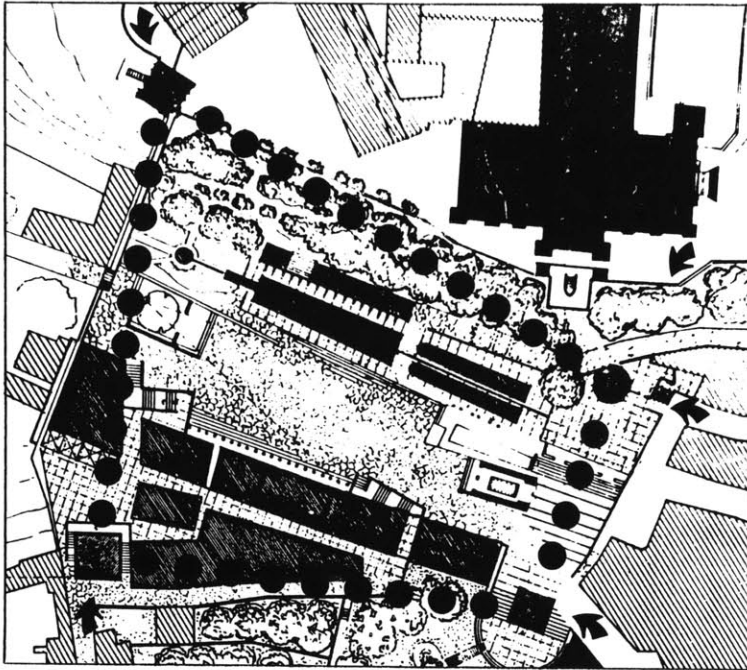
P I A Z Z A I A Z A N D A F O N T E R B R A N D A



FROM THEORY TO PRACTICE

At this stage, it became clear that the site has to be understood as a microsystem within Siena. The valley is a break in the dense city fabric but it provides interesting features as one stands on its edges. As it was described in the section "the city fabric and the valleys", the emphasis was put on the qualities of wide open spaces that allow the view to go from one edge of the valley to another. This typical Sienese feature of "wide-perspectives" within the city walls was important as it was an incentive all along the conception of the project.

The valley can be understood as a "box" which acts as a buffer-space between the city fabric and the city wall with four towers defining its corners. These towers reintroduce the use of the medieval skyline as initially conceived by the Catellare clan (see Reading of Siena). The small public squares at the base of the towers provide transitional spaces leading to the main public space, structuring the neighborhood. In order to "protect" it from being an articulating for the entire city, the small public squares around the towers fulfill this functions : they play the role of small buffer spaces containing more extroverted functions.



26. Diagram: the black dots joining the four towers mark a space defined during the reading of the site as "the box" or "buffer-space" between country and city.

The site is also bordered by two other neighborhoods and symmetrically enclosed by two churches at its edges. The limits of the contrada are now passing through the small articulating squares and the cross from one to another is marked by a gate/tower.

The Via Fontebranda needed a redefinition of its edges which ultimately developed in the Piazza Fontebranda in the project. For this purpose, a pre-existing system of arcades (in the washhouse) was uncovered and an arcade was added to the old slaughter house. These elements are explained later on.

FROM THEORY TO PRACTICE

The scale of this new place is in proportion with the valley and plays a structuring role for the neighborhood. (see Piazza and Contrada)

For example, when one walks in the valley, the imposing mass of San Domenico is striking. I suggested that these characteristics be used in the project. It was the first step of the design to work with strong horizontal and vertical elements. This is why a system of colonnades and towers, emphasizing the organic qualities of the site, appeared later on during the design phase.

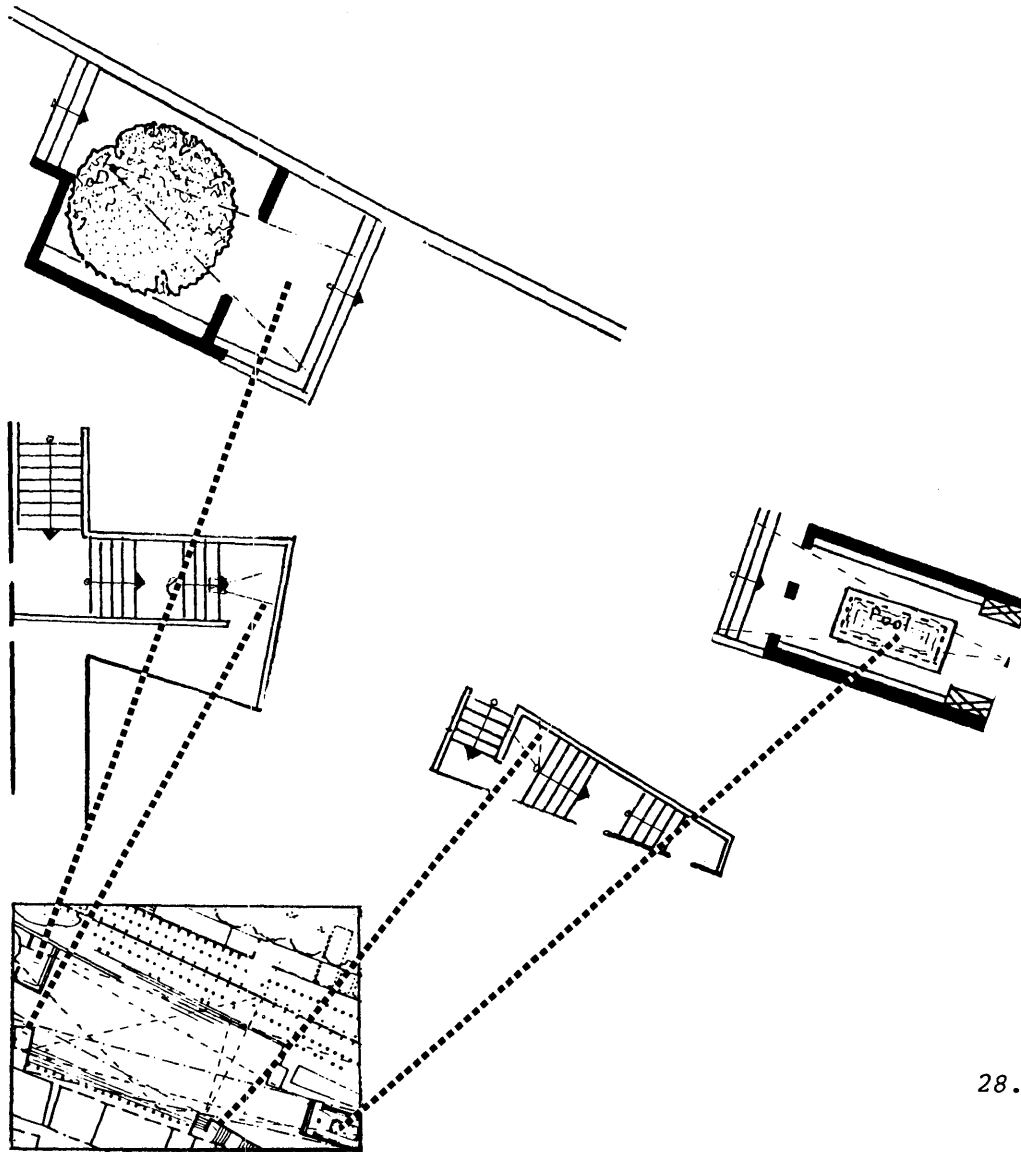


27. *Fontebranda and San Domenico above.*

Eventually, those elements or patterns induced a redefinition of Fontebranda's space.

-The towers created a visual connection among themselves as well as acting as an end point to streets' perspectives leading to the site.

-The arcades were used to link visually and physically the dispersed buildings existing on the site.



But the use of these elements is not sufficient to create a square which has its own, specific qualities. The use of angles (more or less 60 degrees) corresponding to the angle of vision perceived by the eye was the conceptual root for placing structural elements such as the towers, the gateways, the staircases, etc. So, whenever one person approaches the site, chosen angles for staircases, etc, will provide a quantity of different perspectives enlightning different parts of the new PIAZZA FONTEBRANDA. Those visual angles, creating dead angles hiding buildings, depending on where you stand,

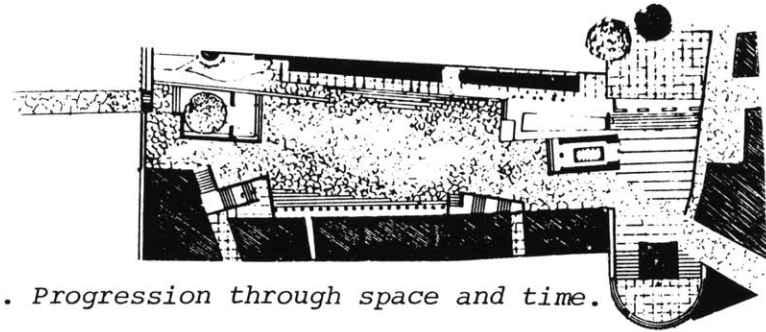
28. *Elements used for the definition of the new square. (Blow-ups of the area plan). Note the use of "visual angles".*

FROM THEORY TO PRACTICE

was also used in the project to restrict the flow of cars. Indeed, as soon as one drives into the site, he understands at once that it is not a place for cars. The cars can cross the site, but the drivers will be confused by the labyrinth of consecutive end perspectives.

This labyrinth-like quality of traffic circulation respects the Medieval fabric of Siena.

Adjacent to this main square is what is conceived as its extension. It was important to create a smaller public space that would be in relation to the surrounding building and the scale of the fountain itself.



29. *Progression through space and time.*

In summary, as one proceeds from the country into the dense city fabric of Fontebranda, one perceives a progression of spaces. Two gateways were designed symbolically marking the transition from one space into another. One is at the limit of the city itself, near the wall and contains a tree which symbolizes Nature grabbing a piece of the stone and brick pavement of Siena. The other one has a pool in its center and is part of the water features surrounding the adjacent square.

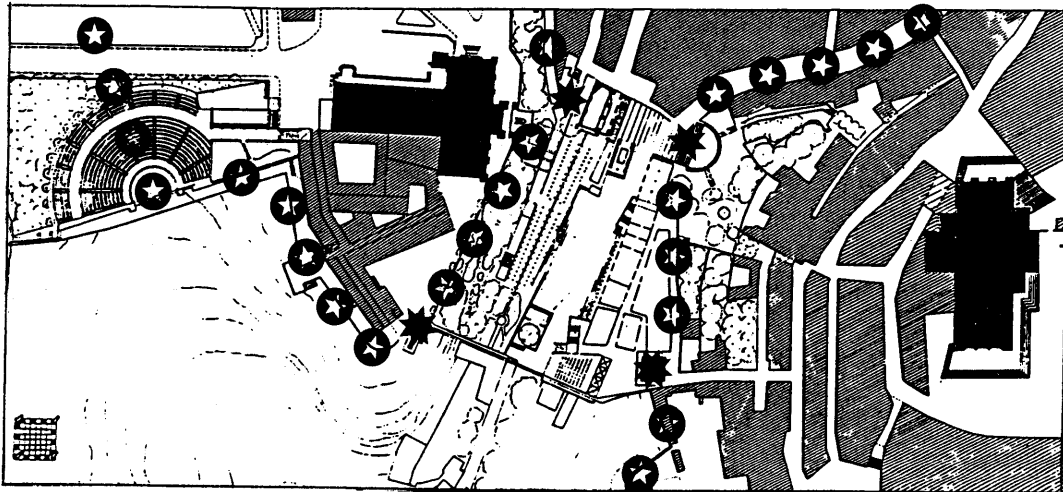
This last section is a reflection on the elements of my design. Those elements will be checked through a serie of patterns selected from Ch. Alexander book "A Pattern Language", (-). During this "test", I have noticed that these patterns are usefull to clarify the intentions of a project. My role will be, all along the nine patterns selected, to add personal remarks about them and to show through some "blow-ups" of the project their application, (=).

The following patterns are organized in a hierarchical order proceeding from the most general to the specific level: each enumerated pattern is dependent on the preceeding one. For instance, the pattern 'main gateways' is predicated on the boundaries of the neighborhood.

- 1-the neighborhood boundaries.
- 2-Main gateways
- 3-Small public squares
- 4-Positive outdoor spaces
- 5-Hierarchy of open spaces
- 6-Degree of publicness
- 7-Paths and Destination
- 8-Activity pockets
- 9-Building edges.

FROM THEORY TO PRACTICE

30.



THE NEIGHBORHOOD BOUNDARIES

-To have a well defined neighborhood, both physically and in the perception of the residents, its access has to be restricted. Consequently, it makes the neighborhood recognizable as a distinct part of town. (A)

30. On opposite page, diagram that shows the limit of the contradas.

⊗ ⊗ the boundaries.

★ the towers playing the role of gateways between the neighborhoods.

=In this design, the boundaries are created by the natural edge of the valley. As it was observed in the 'Reading of Siena', the topography of Siena formed the basis of defining the limits of the contradas.

As it is shown in fig. , the boundaries follow the articulating public spaces of the city. The black stars on the diagram represents the few points where access is possible. They are the main gateways that symbolize the passage of one contrada to another.

FROM THEORY TO PRACTICE

MAIN GATEWAYS

-The gateways mark the point of transition. (B)

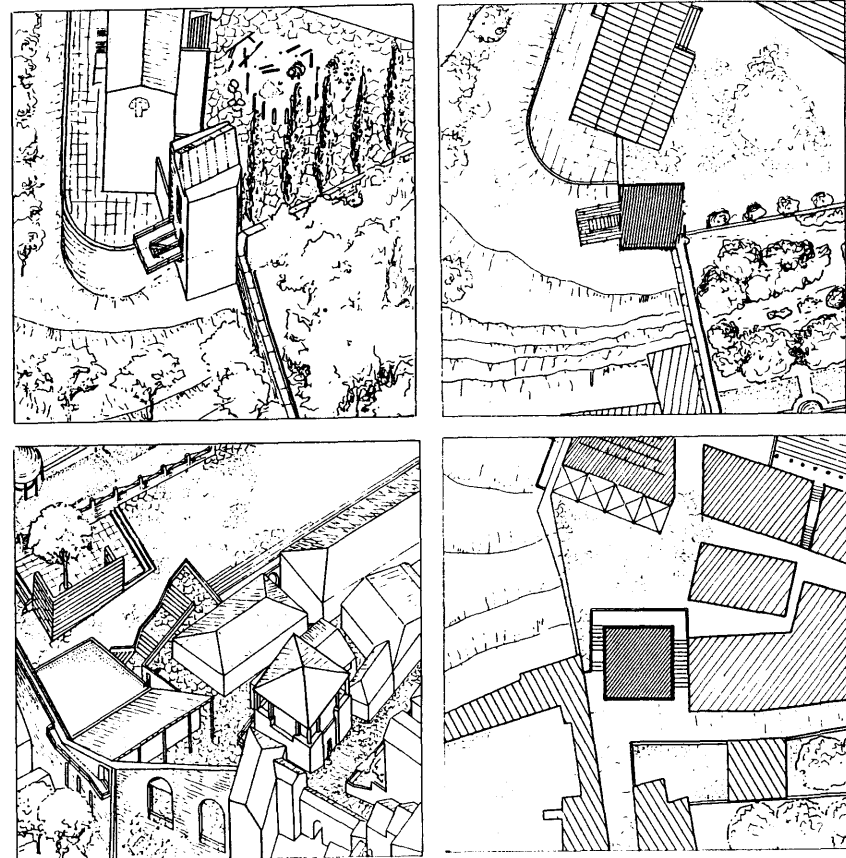
=These gateways are architectural elements -towers- that will make more vivid the boundaries in people's minds.

The towers are located at the edge of the valley and perform different functions:

*They create a new definition of the site by their relation to each other.

*They mark the end of one kind of activity.

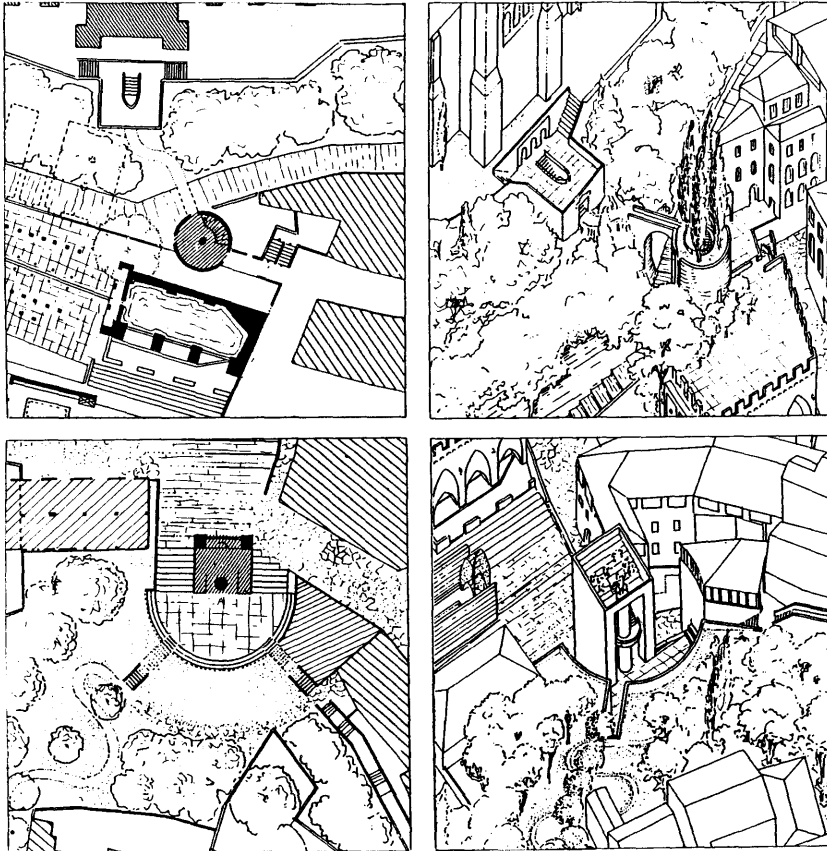
*They establish a new element in the skyline of Siena; and finally



31. North West and South West towers. They are at the edge of the city, looking onto Toscana.

EXPLORATION OF PATTERNS

*they emphasize the crossing of the boundaries forming a transition between the bottom of the valley and the crest of the ridges.



32. North East and South East towers. They mark the end of the old city fabric as well as the two limits for the adjacent square, facing the fountain.

The towers could assure public functions such as cafes and restaurants. The stairs leading up to such restaurants could have openings to look on the Piazza below and the countryside beyond.

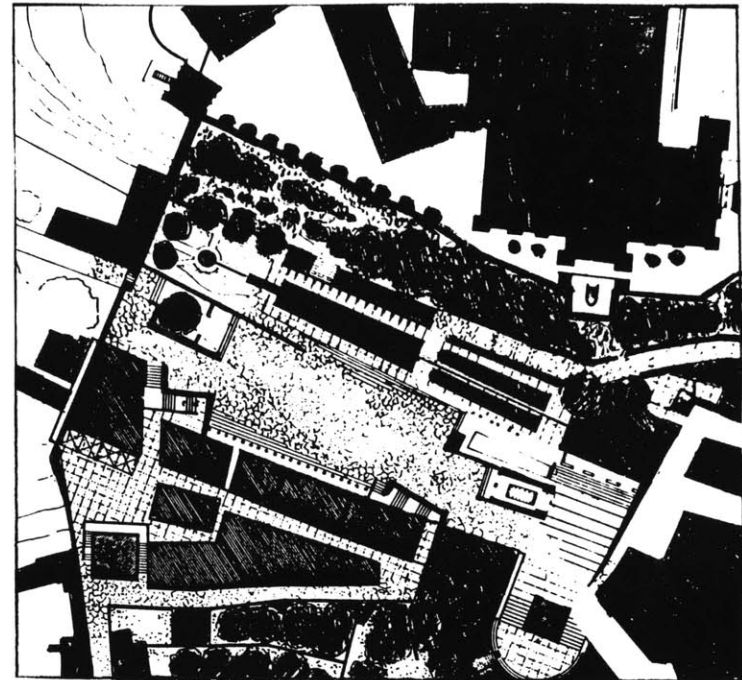
As it is shown in the drawings, each gateway is on the edge of small public squares, where the contradas could come together. These squares are articulating public spaces and are wide enough to contain the common functions shared by the several neighborhoods.

FROM THEORY TO PRACTICE

SMALL PUBLIC SPACES

-According to Christopher Alexander, a diameter of 60 feet provides a good rule of thumb for the size of small public spaces which could accommodate public gatherings and small crowds. It is a distance that recognizes all of our senses as human beings. We can see and hear other persons better in a close proximity. (C)

=In keeping with the proportion of the square, the height and location of the surrounding buildings should correspond to the angle of vision perceived by the human eye (see section 'sketch design')



33. *Variety of public spaces.*

A public space is given a definitive shape by its built edges and can thus become a positive outdoor space.

The square should provide views out onto larger places and therefore be a part of a hierarchy of open spaces.

POSITIVE OUTDOOR SPACES



34. *Looking through
the city wall.*

-There is a fundamental distinction that has to be made between two different kind of outdoor spaces.

An outdoor space is negative when it is shapeless. It is the residue left behind after buildings are placed on the land.

An outdoor space is positive when it has a distinct and definite shape, and when that space is as important as the buildings which surround it. (D)

I tend to agree with C.Alexander's argument that people use more often the positive type of spaces. This point refers back to the arguments developed by Camillo Sitte in the section 'the medieval square'.

=The public squares designed in the project have two properties: firstly, they are partly enclosed, secondly they are open to some larger space so that an hierachy of open spaces is created.

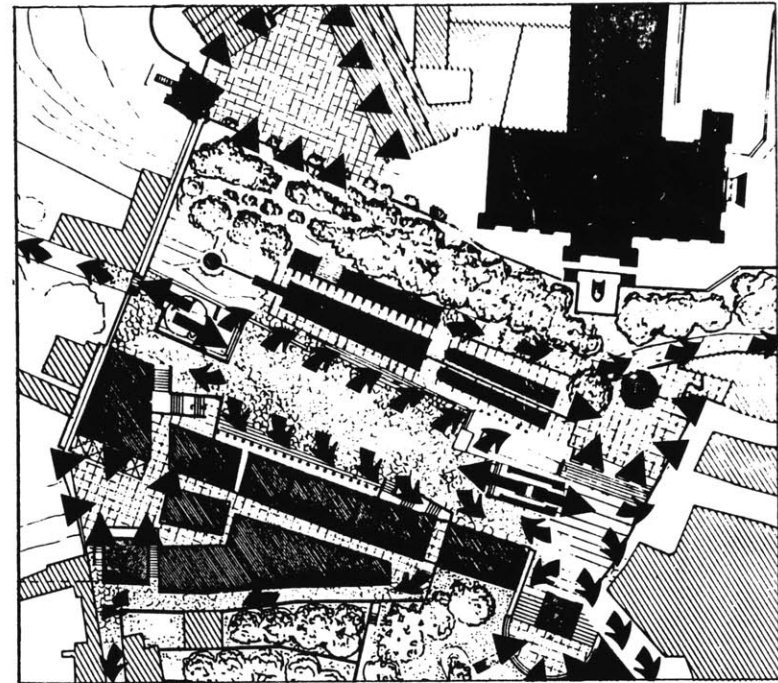
FROM THEORY TO PRACTICE

HIERARCHY OF OPEN SPACES

=The hierarchy gathers meaning on a site where so many different kinds of public squares are created. The relationship between the articulating public spaces and the main structuring piazza were studied carefully.

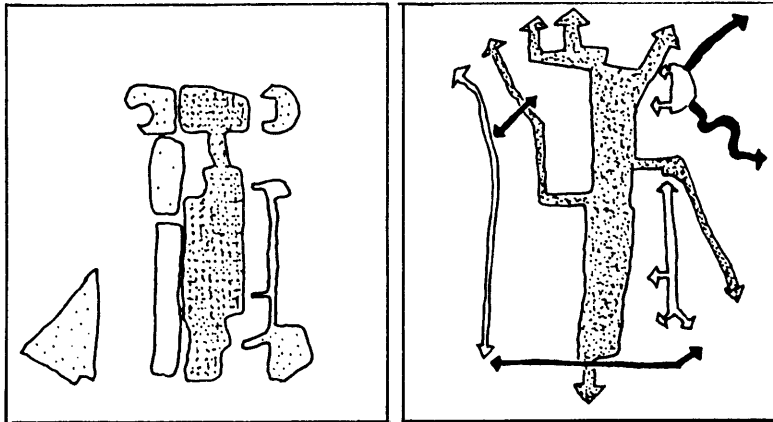
They are articulated by a number of patterns such as gateways and open air stairways. Together these elements physically distinguish one space from another by the different level they create in space.

-These squares all have buildings as "backdrops" and an open section looking out onto the adjacent piazza. The particular design of each squares is created to reach a certain degree of publicness. (E)



35. ▼ 'structuring space' ▼ 'articulating space'
↔ 'gateways'

DEGREE OF PUBLICNESS



36. Hierarchy of spaces 37. Paths joining these spaces.

=A distinction was made between three kind of public spaces :

- 1- The articulating public spaces between the neighborhoods
- 2- The structuring public spaces for a neighborhood.

and 3- The gateways that lead from one to another.

(see Chapter Piazza and Contrada).

-In order to support this pattern, three distinct kinds of paths can be selected, and I quote from Ch. Alexander:

- "1- Paths along services, wide and open for activities and crowds.
- 2- Paths remote from services, narrow and twisting, to discourage through traffic.
- 3- Intermediate types of paths linking the most remote and quiet paths to the most central and busy ones." (F)

(see diagram)

The relevancy of an urban piazza increases if it collects paths on either side, so that it creates a number of criss-cross through the space.

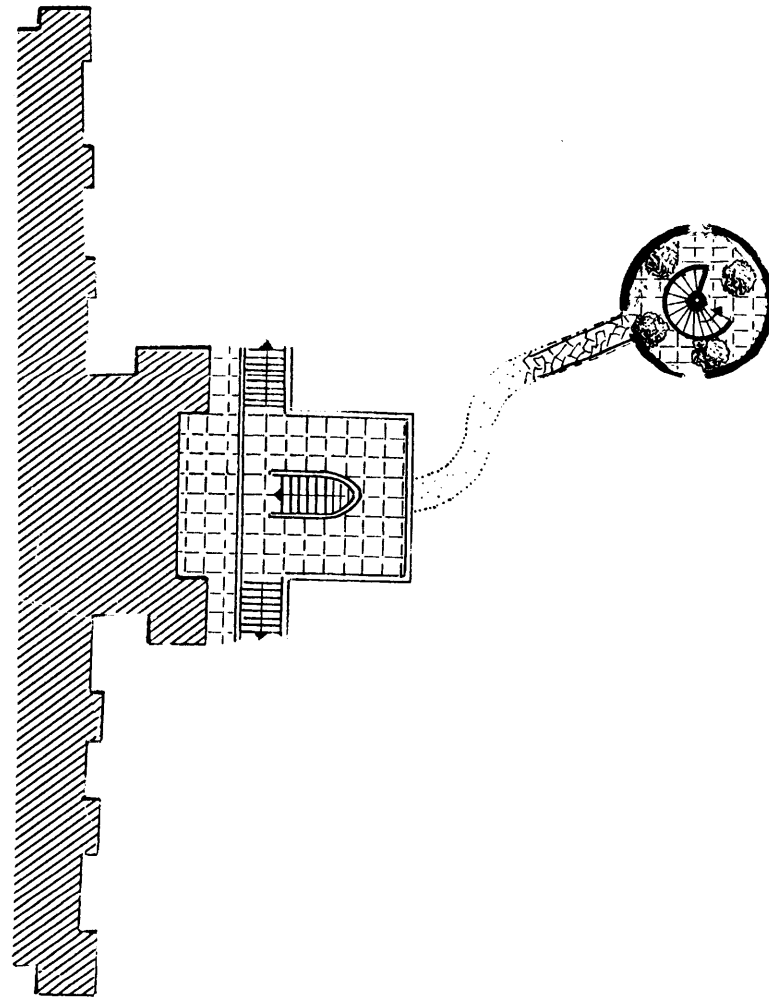
FROM THEORY TO PRACTICE

PATHS ----- DESTINATION (G)

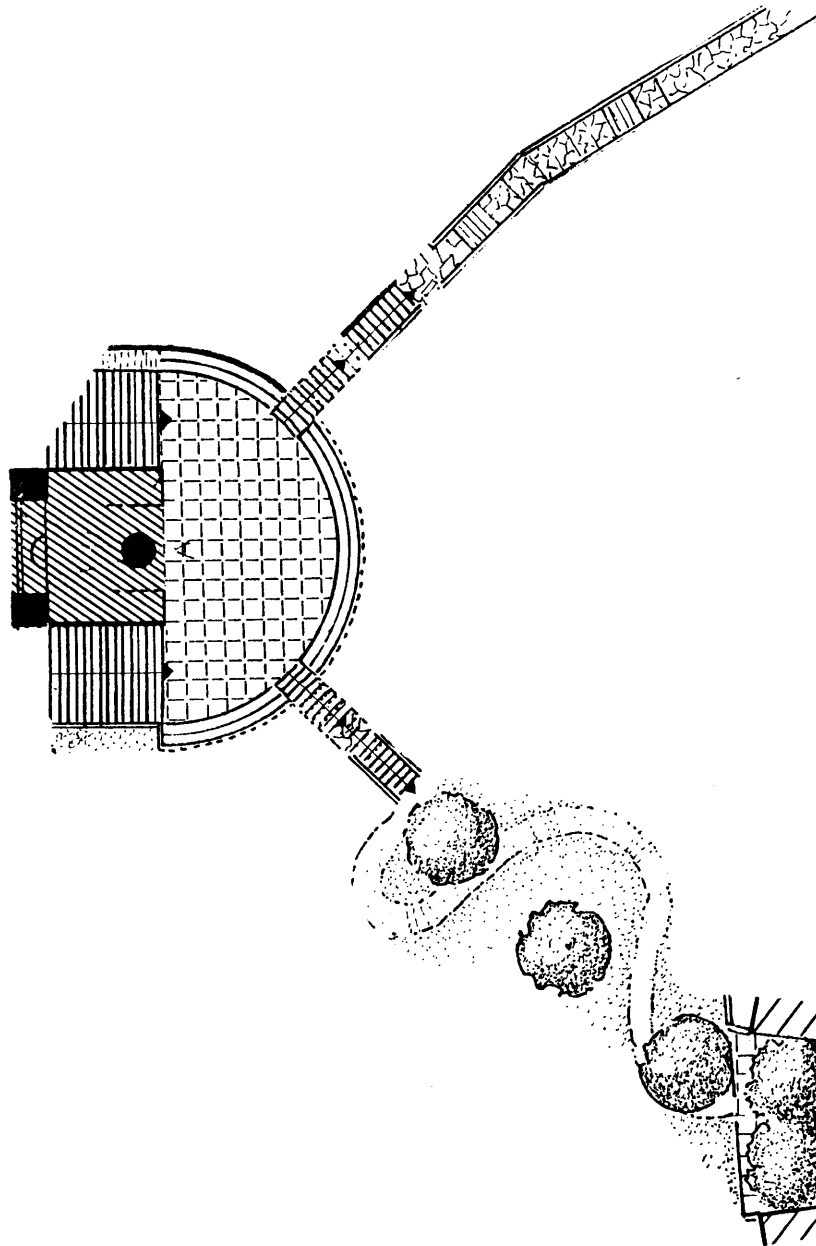
38. *Path from San Domenico to the top of the North East tower. The tower connects to Fontebranda.*

=As people move through a place, they should have choices of cover and paths, choices of outlook, and choices of exposure. They should have the opportunity to linger in places that are on the edge of activities, where they can be seen from the square.

The combination of paths and destination points creates a complex network revealed by the interaction of physical form and human movement inherent in the experience of places.



EXPLORATION OF PATTERNS



Most of the time, the sequence is to move off the path into open space. The walking process is such that one picks up a temporary destination- some clearly visible landmarks-, linger for a time, then walk on.

The transition from paths to place is stressed throughout the project. It presents one of the dichotomies of urban form and is defined by Norberg-Schulze as "the tension between centralization and 'longitudinality'". For the small

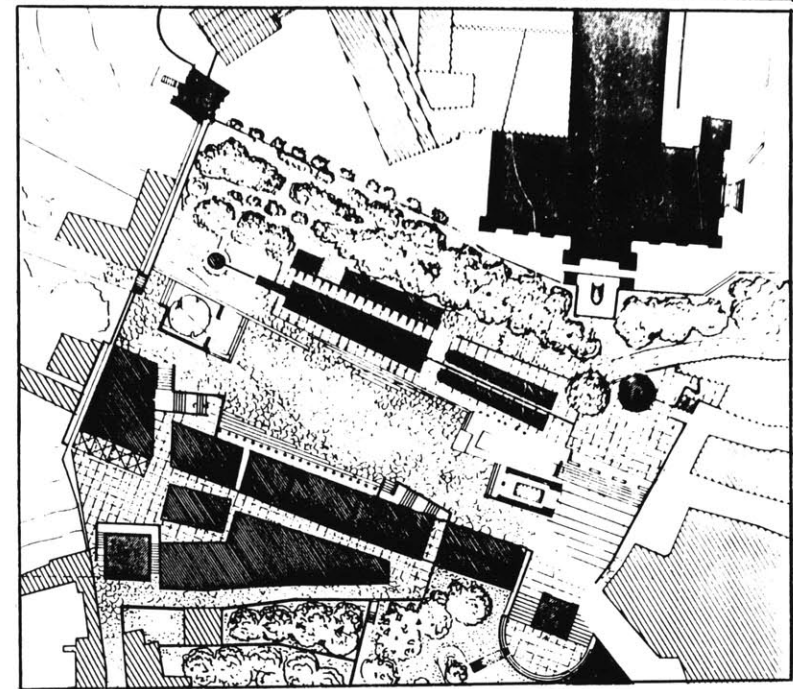
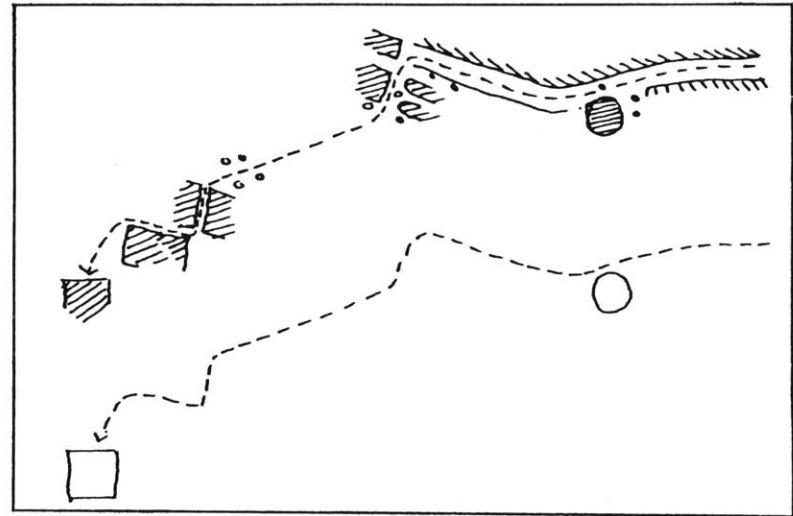
39. Hemispherical square for the school of music. The tower (South East), is part of the school. Two "promenades" link this square with the preexisting paths and squares of the surrounding urban fabric.

FROM THEORY TO PRACTICE

articulating public squares, neither path nor space dominates, but the paths merge into a sequence of separated yet adjacent piazzas. For what is considered to be the extension of the main piazza Fontebranda, the tension is resolved by emphasizing centralisation. Concerning the main piazza, the longitudinal movement is emphasized, reinforcing the experience of paths.

Finally, the paths must link different destinations located on the site. However, they shouldn't be too channelled but should create a field of possible paths leading to different activity pockets.

40. *Path and destinations*
41. *Mass plan.*

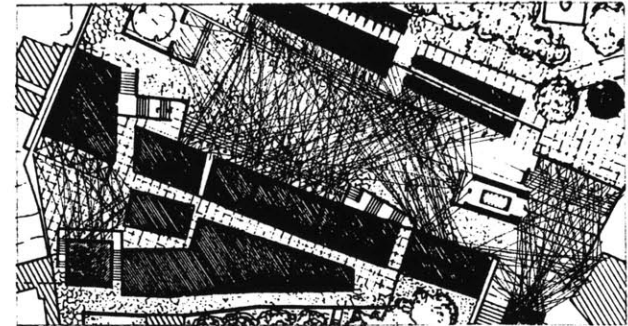


ACTIVITY POCKETS

-This pattern helps to complete the edge of the aforementioned patterns of the squares.

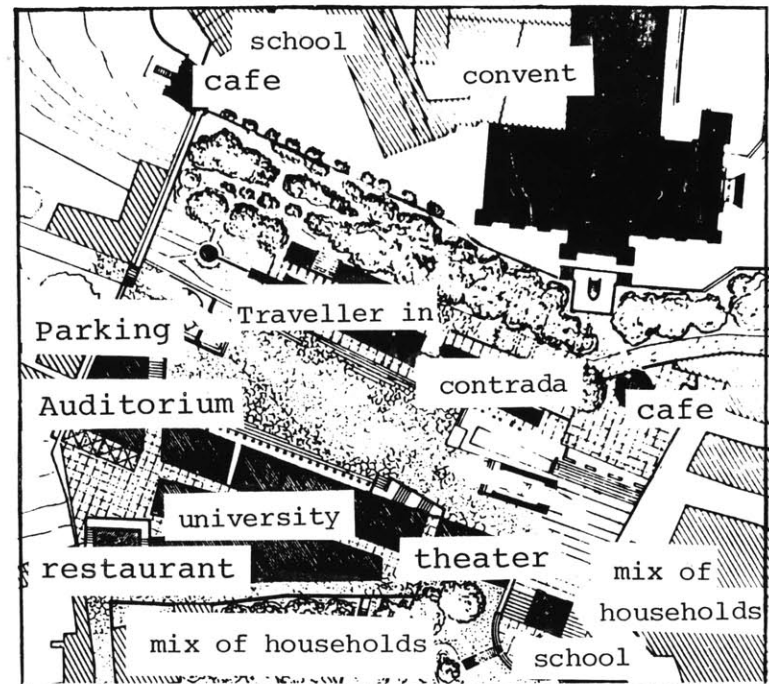
The activity pockets are dependent on the program and functions of the buildings surrounding it. A valuable thing to do with one's own project is to draw lines joining different public points along the perimeter of the concerned public space. (I)

= As it is illustrated, the main square is not completely darkened by the



42. Diagram showing the possible interactions between the different activities .

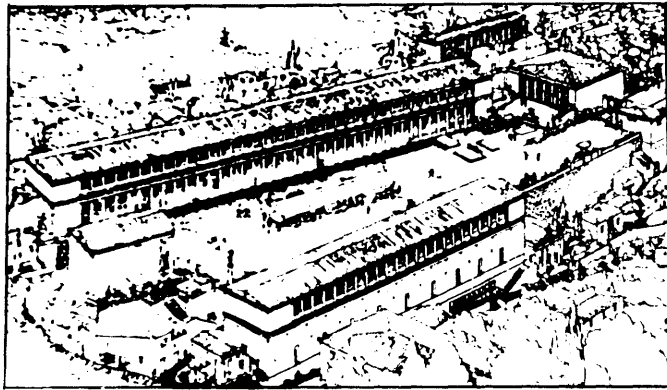
43. Program of activities .



FROM THEORY TO PRACTICE

intersection of the line because the pockets activity alternates with the entrances to the square. We know, on the other hand, that the opportunity for the intensification of a place occurs at the juncture of paths and open space. This juncture is traditionally created by formal arrangements, as arcades etc.

To provide such a transitory space is then the role of the building's edge.



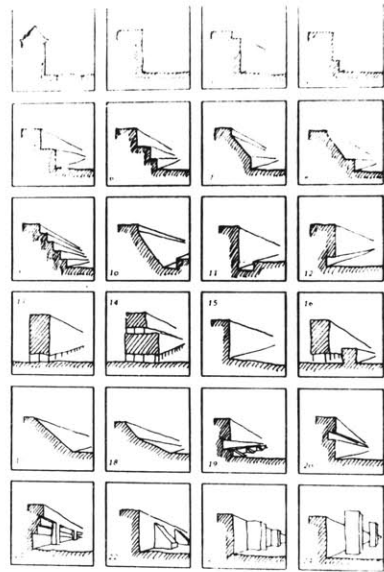
44. Perspective view of the Agora in Assos.

BUILDING EDGES

-Buildings should be oriented towards the public space it encloses, precisely because it is at its edge that people usually prefer to be. (H)

=Although different in scale, the boundary between the building and the public square can be treated as the boundary between neighborhoods. This means that the limits are not a one dimensional edge but rather a three dimensional area where people can meet and interact.

EXPLORATION OF PATTERNS



45. *Building edges.*

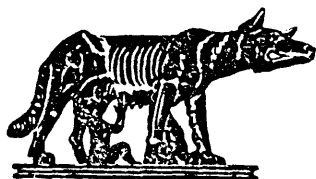
For a place surrounded by arcades as it is the case here, the transition between the building and the city fabric happens within the distance from the pillars to the framing wall.

The arcade is commonly used but a series of other patterns can support or replace the latter. They are used to increase the connections between inside and outside. Balconies, stairs and benches for example can be used to look onto interesting outdoor life.



46. *Giorgio de Chirico: "Piazza d'Italia", 1915.*

FROM THEORY TO PRACTICE



47. Emblem of Siena.

CONCLUSION



CONCLUSION

The focus of this study on public spaces and neighborhood system enabled me to consider and speculate upon broader issues, such as the quality of urban spaces (introduction and overview), the interaction of use and physical structure (Piazza and Contrada) and finally to understand something about the specific successes and failures of the historical centers.

My goal throughout this work was to learn how to look and how to borrow.

But the quality of a place cannot be transported through time and space

without careful reinterpretation. Indeed, the uniqueness of the Sieneese patterns cannot be reproduced within a single design. It needs time, history, people and politics to give a meaningful sense to the city.

What can be borrowed from the experience is an approach that was more or less described throughout the thesis. It insists on a careful understanding of all the "actors" involved but also on a particular analysis a foreign architect can provide as he is living in the city for two months.

Finally, it addressed all along the issue of collective space within the context of preservation and rehabilitation of historical sites.

CONCLUSION

From these insights, certain broad guidelines can be extracted:

a) An open space becomes a PLACE when it has a definite role to play in a city.

b) Structuring places act at the level of a SMALL COMMUNITY.

c) Articulating public spaces are catalysts for the CITY as their built edge will be representative of the entire city and display the public functions of each neighborhood.

d) The INTERACTION between those two types of space will finally be organized into a HIERARCHY of spaces essential for the quality of a more human environment.

e) Most of the evocative places have a centralized limited space that maximizes the tension between the movements of PATHS and the lingering associated with them. Those places offer more possibilities if it includes built definition (steps, ledges, etc), which encourage PEOPLE to use the space .

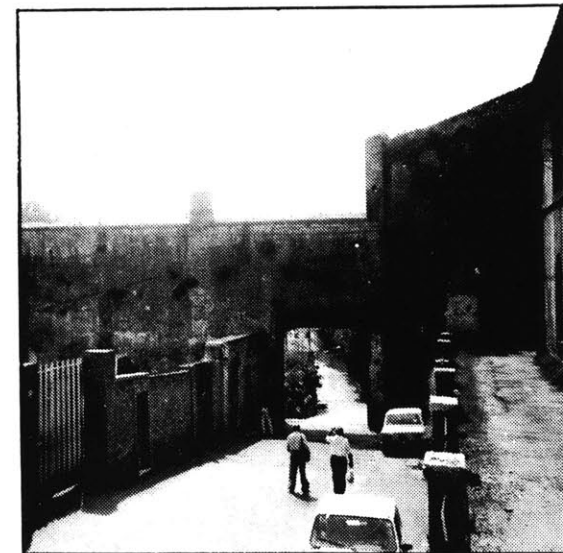
If ,and only if, the urban piazza exists as a part of a fabric that offers a range of spatial opportunities, will its uniqueness become a special place in the overall domain.

CONCLUSION

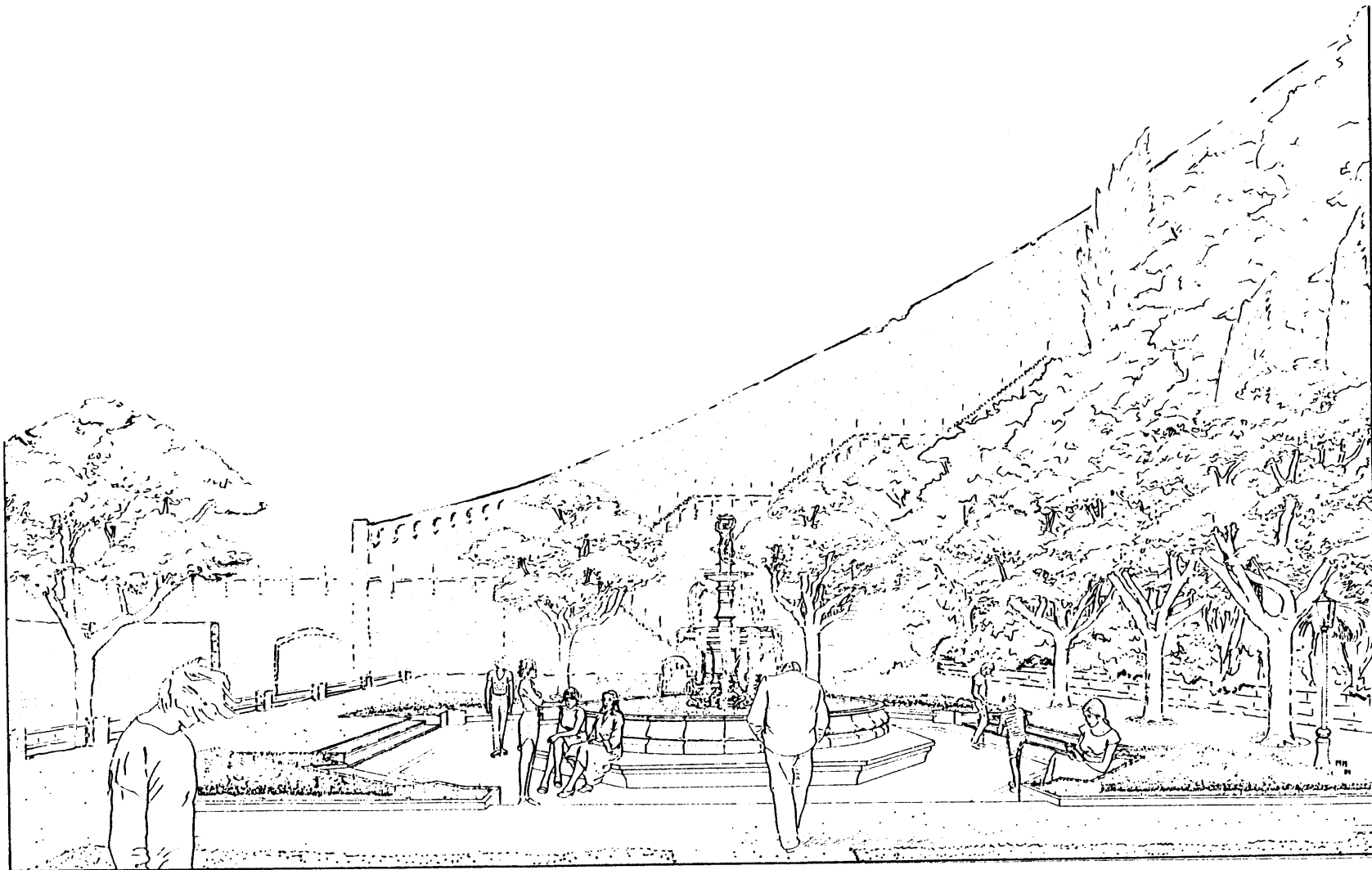
It is argued in this thesis that a sense of urban continuity and community should be maintained in the process of historical preservation. The means is through a series of events generated by patterns and the residents who use those spaces. Those pattern should not be concentrated in one location, but spread out through the city fabric defining the spaces within it. Their use and reuse depends as much on the patterns created as on the strong involvement of the residents.

The methods of observation, drawing, and analysis undertaken in the project are recommended as feasible approach to the issue of "site rehabilitation".

This process allows for the vital participation of the residents in the decision making process of design. This final point brings us back to the premises of this thesis: urban public space can only have meaning if it used by its inhabitants.



48. *The Gate of Fontebranda.*



49. Proposition for a fountain next to the rehabilitated wash house.

CONCLUSION



50. Emblem
of the con-
trada di
Torre.

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