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Prototype: A Community Center for the Slums of Sao Paulo, Brazil

Andre' Mellone

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Andre' Mellone Thesis Proposal Advisor: Prof. Korman Committee Members: Profs. Gray and Sloan

Prototype A Community Center for the slums of Sao Paulo, Brazil. The starting device for urban improvement.

I. The problem:

There are today more than 180 million people in Latin America who live in poverty conditions. 40% of those in Brazil.

Concrete ideas of the principal problems encountered in the Third world today are: population growth, when it cancels out the benefits of development ;shortages of skilled labor; a propensity to industrialize in luxury and sometimes export sectors, because of low domestic demand for basic industrialized products; and perhaps most of all, the "agricultural barrier", the insufficiency and inelasticity of food supplies and distribution. These are responsible for the exodus to the cities of an unemployed proletariat, one which is vastly unable because of its poverty to cover the demand for basic necessities (compared with these major problems, the need for capital, the level of savings, credit arrangements and interest rates seem almost secondary).

In Brazil, major targets of this "rural exodus" have been the southeastern cities of Rio de Janeiro and Sao Paulo where now the slum problem has reached a boiling point, creating not only an architectural issue for the city, but also a tense coexistence with the population that originally inhabited these areas.

Sao Paulo, a state that alone holds more than 50% of Brazil's capital and industrial force, is of special attractiveness to these settlers. The city of Sao Paulo has right now approximately three million people living in beyond poverty levels.

In the cities that don't have the social infra-structure to accommodate such astounding number of newcomers, means of surviving in the urban environment result in habitations that can be classified within morphological typologies:

1. Homelessness

2. Slums

3. Periphery Developments

Surprisingly, according to researchers the Slum is the category that most successfully responds to the needs of its community.

Slums are a reflector of the country's under development. They are a mark in the structure which society is based on. But can also be referred to as cultural relics, for they represent a genuine expression of the people, since, historically, architecture tradition in Brazil has been linked to international models.

There are a lot of misconceptions about these communities, maybe because they become more like ghettoes within the larger urban context, completely separated in terms of urban figure ground and therefore highly mystified. But once one becomes involved in a deeper study it is clear that the community is intensely organized with a distinct social hierarchy and complex net of social services and support. Detailed descriptive studies of slum communities, often reveal high degrees of organization, with systematic and persisting features of social behavior. Rather than being disorganized, the slum often simply has its own organization, usually a type judged by the middle classes to be unconventional.

Another common misconception is the myth of marginality. Even though slums are viewed as centers for violence, drug pushing and hiding for criminals, the majority of its inhabitants are just common everyday workers, they are the maids, servants, janitors, construction workers, security guards (and etc..) that allow society to be laid out like it is, people who wish for the same societal support everyone does.

On a society so highly unbalanced, rooted in a dramatic contradiction of luxury and poverty, minimal efforts done by the privileged can mean a world of difference for the dweller. It is unnecessary to emphasize how important it is to continue to think about possible solutions to this overwhelming problem.

II. Thesis Statement:

This exercise is based on study, research and analysis. One has to understand the life and the needs of the people living in these conditions. To respond means to understand. The slum is the client.

Thesis could begin to gear towards an investigation of architectural and urban organization (or structure) for the community, focusing on defining public space, social and formal hierarchy as the armature for the public realm, understanding the urban phenomena of the vernacular town and realizing at this point what level of architectural intervention can be successfully applied. Also understanding the kinds of interventions that can have the most positive responses from the community without imposing new and unfamiliar rules to the already existing social network.

The project can represent a prototype solution. Since the slum problem reaches almost every major metropolitan area, the proposition doesn't have to apply to an specific area but instead allow for reorganization and flexibility to be used in different areas and communities.

Past proposals have suggested clearance of these areas and re-settling people at the outskirts of the city in the so called "safe zones"- designated areas of city sponsored pavilions and projects, reflecting a lack of sensibility towards the physical, social economic and even psychological impact re-location causes on dwellers.

So this study could also begin to suggest dealing with the problem *in-situ*, that is, to use architecture to tie back these areas into the larger urban context without having to relocate people. Revitalizing the slums as symbols that reflect an unequally balanced society that, however, could begin to live harmoniously.

My ambition is not one of providing answers to a problem which will still exist many years from now, but instead, hoping that by analyzing the particulars that transform such chaotic areas into homes, we will be able to have useful insights for the development of more appropriate solutions.

III. Topic of project and architectural issues:

Poverty can be viewed through 5 different perspectives: urbanism, economy, sociology, politics and legislation. Architecture can refer to all of them, but my decision is to deal with primarily the urbanistic problems.

The difficulty to fit within official standards and incomplete integration with the urban design classifies slums as irregular forms of habitations that are viewed as extremely problematic by the population and authorities.

Conventional systems have already been tried by governments with no success. Massive housing projects, periphery developments, verticalization of areas. All problems seem to explode in higher intensities in these "safe zones". So now technicians recommend small, individualized interventions on site. Localization and composition of groups can vary a lot, therefore these interventions should contain an array of conceptual and practical alternatives that are ample and revised to help not only specific areas. Flexibility must be an essential element for the community habitat.

The concept of habitat is today centered on the habitation, even though it involves all the infra-structures and services that intermediate between the "individualized living" (activity of sheltering family groups) and the "collective living" (urban inter-relations).

At this moment, understanding the problems involved in imposing a new housing methodology and the dangers of interfering at "single cell" level, an urban move done as public buildings and public spaces appear to be a more sensible solution. Because the urban organization of the slum is so fragile, to deal with a massive housing proposal can have disastrous results, while, for example, a community center immediately related to an open public space can represent the element of change, the building that gives back the sense of place, triggering positive reactions that reach the entire community.

So indeed, the vehicle through which this thesis' ideas will be expressed is a community center that can be arranged as one or more composite buildings, housing the variety of social services needed. These buildings would be, then, composed together to form an open community space that would allow for gatherings and community expression such as folk feasts, sports, debates, etc....

The need to provide community centers for activities which cannot be provided by the individual family is also stimulating related programs of buildings: YMCA's, church-related social centers, country clubs, teen clubs, young adults centers and etc..., but a community center for slums could become a new typological prototype.

Issues:

The subject of community centers is a particularly timely one, because of our forced recognition of the dangerous alienation of large sections of cities from any sense of participation in community decision making or any hope of realizing acceptable goals for the future. The idea of community centers is also a response to the urban legacy the poor communities conceptually inherited (subject that will be discussed later on).

The community center's historic role of building type is first a sense of identity, then a spirit of self-help to tackle community problems, combined with an immediate program of educational and cultural activities based on local needs and interests to enrich the daily life of residents.

It is important to understand the history of the development of urban centers and their communal areas based on the general theory of understanding the precedents before advancing into the future. Urban and community centers possesses relevant and meaningful backgrounds.

Urban Legacy:

To establish a historical precedent for the urbanism of communities such as slums one must think only in conceptual terms for it is obvious that the idea of research and planning are inexistant. It is important, though, to relate the poor communities to other examples so that the applied solutions can be analyzed and transformed to fit the demanding needs of the slum. Also by understanding other "vernacular" communities, the idea of a formalized public center can be reinforced as the chosen architectural intervention, opposed to that of individual housing.

A plausible relation and interesting comparison can be hinted upon looking at medieval towns. When we walk through and experience the streets and squares of towns that had their origins, or were flourishing, in the medieval period we are almost invariably struck by their charm. But is difficult to understand, at first, the beauty, the sense of harmony and of unity, that these towns convey. There is often no style, and no imprint of a master-planner that we can identify.

For the most part, medieval towns and cities were not "designed". Their buildings and spaces are a reflection of the communal life of the period, which in turn was itself conditioned by those physical spaces among which people passed their lives.

Incomprehension of the fundamental nature and use of cities leads inevitably to a misunderstanding of medieval towns. For example, it has been remarked, truthfully, that medieval cities had irregular, badly lit streets, that there were no trees and parks, that they were overcrowded and unsanitary. On the other hand , such characteristics have also been considered "charming", "colorful" or "romantic". All of this is beside the point. It could be argued that these qualities made the medieval city a better instrument for performing its primary function, the housing of a community brought together by similar conditions.

It is not my concern to judge the medieval city, and for that matter the slum, but to understand it. The fact that the best known slum areas are crowded only proves that they are successful.

Institutions and Urban Scale:

The interaction of public and private space was the primary factor in determining the form of medieval towns. It is observed that the irregular development of streets and piazzas was in part due to the relative and varying economical political power of individuals (or families) competing within the community for the acquisition of private space. The relative scale of open or build-up space acquired became a direct index of the strength of the competing interests.

Public interest gradually also demanded more than open spaces. The forces of the rapidly growing cities required regulation and control. This was to be expressed through some form of town council, to legislate, administrate, adjudicate and control. Common to all of the town councils is the need for public buildings in which to carry out these functions.

The process of gradual enlargement of public power and the solution of its growing need for public space, open and enclosed, can be traced with particular clarity in Florence where some of the oldest and most significant public buildings of any medieval city survive. The Bargello (1250) as the fortified residence for the *podesta'* and the great symbol of Florentine power the Palazzo della Signoria (or *il Vecchio*, 1300) and adjoining piazza.

Public buildings may be a public necessity, but in contrast to most public spaces, they are not fully accessible or penetrable. In this respect the Florentine cathedral, a decidedly "public" building and as gigantic a block of masonry as was ever inserted into an existing urban environment, presented no problems, whatever in this regard, by the simple expedient of providing two doors on each side of its gigantic nave. And so the story of public buildings and the relationship to their adjoining open spaces continues.

The insertion of public buildings in the medieval town sometimes also represents the moment when the city begins to exist historically. The classic example of Pienza best illustrates this case. Before pope Pio II's construction of his palace, the duomo and bishop's palace the city was practically unknown. But the arrangement of the three buildings in the so famous fashion, making the piazza along main street, not only is considered today the great predecessor of urban planning, but at the time triggered reactions that reached the entire urban structure. Suddenly palazzos along main street were renovated and revalued, the city gained a new sense of place and community and piazza Piccolomini became the greatest referential point of the city's power and relation to Rome.

So by studying and analyzing the medieval urban structure one can begin to understand that to improve the city's quality of life and growing demands, architectural interventions were almost always done on a public formal level. There was an understanding that by constructing on the urban scale, the private realm would be reached positively and indirectly, through the forces of community living.

IV. Statement of Expectation for Final Result:

Of all implied aspects of the problem, the one of physical nature (architecture) proposes the most interesting paradox: On first appearance it seems like an area of free transit, attractive, because action taken by the architect shows concrete, quick results. But in fact this is a dangerous area to work, because by looking only at the effects we mystify the causes. The easiest thing to do in one point, becomes problematic in the long run.

So not interfering directly in the private realm, and therefore preventing the making of irreversible mistakes, my attempt is to create the slum's own appropriate equivalent to the Agora, the Forum, the cathedral dominating main piazza, the Eastern European Korso, or the village green. A building (or buildings) and its adjoining open space that will represent the beginning of the change in the community, a building where people can get the services they need, a place they learn how to improve their streets and houses themselves, a place where they can leave the children safely while at work and a place where they can meet, discuss, vote, decide and celebrate their community.

The hypothesis is that the community center that involves:

.stimulating architectural form

.gathering together of as many institutions as needed by the community to draw people out of their homes

.an easy transition from passive to active involvement, with abundant chances for people to meet and greet

will be a good creation for the future, if indeed these communities are to be saved, and if architecture, for this matter, is really a social art.

V. Program Selection and Analysis:

The program should reflect the needs of the individuals as well as the community, allowing each person to concentrate and achieve a better work performance. This way a higher quality of life can be achieved by eliminating the every day worries of the poor man.

The community center will house the following services:

Child care Wood shop (carpentry) Recycling shop (there are today easy methods of recycling materials used by the community) Bakery Cultural center/auditorium (one of the ways to keep people from marginality is proved to be the stimulus of creativity) Doctor and dentist's office Sports facilities/open piazza (maybe just a soccer field) Community School

V. Method of construction, Identification and development of Vertical Surfaces:

An important issue is the construction technology and method. So it is necessary to develop a list of building materials and construction means that can be matched to reality conditions. Costs and building process are major shapers of the design.

The issue of identification is perhaps the most important in terms of tectonics. One has to develop a building that refers, adjusts, and identifies to its community, so by observing and analyzing the local unselfconscious construction one can begin to develop a systematic method of more permanent character without, however, impose a new order that would interfere with the already existing vernacular, and at the same time allow for further improvement as the community improves itself.

The intricate patchwork of materials can be a resourceful inspiration for the development of composed vertical surfaces that would refer to the surroundings, but at the same time stand out to its importance in the community.

VI. Site Selection and Analysis:

The site does not become the most important issue for this exercise, exactly because the idea is to propose a prototype that can fit in the various slums of the city, but one was chosen to fulfill the projects requirements and to test the ability of prototypicallity.

The site is located in a strip of land between an Avenue of rising business and construction activity and the long river avenue (the avenue that follows the course of the river). Analysis show a difference in the figure ground created by the city fabric (regular rectangular lots) and the slum fabric (almost like a medieval town itself).

The site is also a reflection of what the city is undergoing nowadays. The fast growing of the urban fabric that slowly tries to take over the poor areas and transform them in real estate developments (impossible now because of new legislation giving the people the land in which they live). So by representing this tension between the classes, the location is a good area for experimenting on solutions of connection rather than eradication. After all, the poor community is a much more genuine expression of Brazilian society and should be respected as so. Ultimately the site proposes a good issue: the citizen's right and access to the city.

VII. Resources and references:

Precedents:

1. Medieval towns, for the justification and understanding of a community center as a better architectural intervention, for the comprehension of the public building history, and for the incredible urban legacy that is even today a great source for research, analysis and studying.

2. Medieval squares and their buildings, for the different typologies and cases that can be applied to today's understanding of architectural relations.

3. Slum community of Mendocita in Peru: a community laid out in the universal corridor tenement with adjacent public spaces, much like in Pienza.

4. Slum community of El Agustino: laid out as a medieval hill town, with higher density of buildings at the base of the slope and lower density at higher areas.

5. Sterling's proposal for low income housing in Lima, Peru. Sterling's idea, intends to allow for community participation and expression. He proposes a generalized first level of housing units made of pre cast concrete parts and then each individual can build his own second level out of different materials and necessities. In terms of urban structure, the neighborhoods are separated by landscaped parks in which are schools and community buildings. At the valley ends, where these parks open onto inter-city roads, there are water towers indicating the entry to neighborhoods via a walk through the park. Flanking the inter-city roads is ground for recreation, markets, shops, bus stops, etc...

6. Slum development in Manila, Philippines, by Steven Holl. His proposal is to create a concrete arcade and community buildings marking the main urban structure, public and private routes and leaving the pre established lots empty so the community build itself around the pre existent armature. This allow for great flexibility, individual expression and response to environmental conditions. Example of structure that does not interfere on the housing level, but nonetheless affects the entire place. 7. Hybrid Building, town of Seaside, by Steven Holl.

The hybrid building incorporates commercial spaces on the ground floor, offices on the second, and apartments with a shared courtyard on the third and fourth levels. Holl's idiosyncratic architecture, including a written narrative which explained the disposition of its elements was in marked contrast to the surrounding buildings. The hybrid building's size, scale, and program, within the existing three-score residential structures flanking it at the time of its completion, significantly changed the perception of the town.

Annotated bibliography:

Books:

Rudofsky, Bernard. Architecture without architects. A survey of vernacular building through time , covering a vast array of cultures.

Jenks, Charles. Architecture 2000, predictions and methods. A guide ranging from the unselfconscious to self-conscious tradition in architecture.

Correa, Charles. The new landscape. Indian author talks about slum development in Bombay and compares it to cases around the world.

Clinard, Marshall B.. Slums and community development. A complete survey on the many topics involving the study of slum development. From history to sociology.

Perlman, Janice E.. The myth of marginality, poverty and politics in Rio de Janeiro. Specific focus on the low income population in Rio and Sao Paulo.

Oliven, Ruben G.. Urbanizacao e mudanca social no Brasil (Urbanization and

social change in Brazil) A description of historical roots of the problem in Brazil and

A description of historical roots of the problem in Brazil, and dealing with present problems and proposed solutions.

Earnshaw and Mowl. John Wood architect of obsession. Guide to Wood's work, King's Circus and Crescent, public response and urban results.

Payne, Geoffrey K.. Urban housing in the third world. Survey of methods and solutions. Analysis of present situation.

Lloyd, Peter. Slums of hope. Speculation about the future of the slum and what can be done.

Hardoy, George E.. Shelter : Need and response. specific case studies of the poor community housing.

Segre, Roberto and Rangel, Rafael Lopez. Architettura e Territorio nell'a America Latina.

Braudel, Fernand. Le Temps du Monde (The perspective of the World). Commentaries on civilization (17th and 18th C.)

Turner, John F. C.. Housing by People. Survey on how to acquire autonomy in building environments.

Caminos, Horatio and Turner, John F. C. and Steffian, Johna. Urban Dwellings. Research on specific poor communities in Peru and in Boston.

Saalman, Howard. Medieval Cities.

Russel, Josiah C.. Medieval Regions and their Cities. Description of urban life in the medieval era.

Moller, Clifford B.. Our Urban Legacy Medieval Towns. Description on how medieval urban pattern reflects the vernacular capacity for building.

Bordone, Renato. La Societa urbana nell'Italia communale (urban society in communal Italy).

Accounts of urban life within the context of medieval cities (urban codes, hygiene, street life, etc..)

Sternberg, Eugene and Barbara. Community Centers and Student unions. Survey on the building typology.

Magazines and Articles:

GA Global Architecture *Engelius, Mark.* Byker redevelopment.

Cartas Urbanas (Urban Letters, architecture magazine) Santos, Nelson F.. Five ways to look at habitation of the poor in Latin America.

VIII. Thoughts:

Slums reflect the passage of time without adequate response.

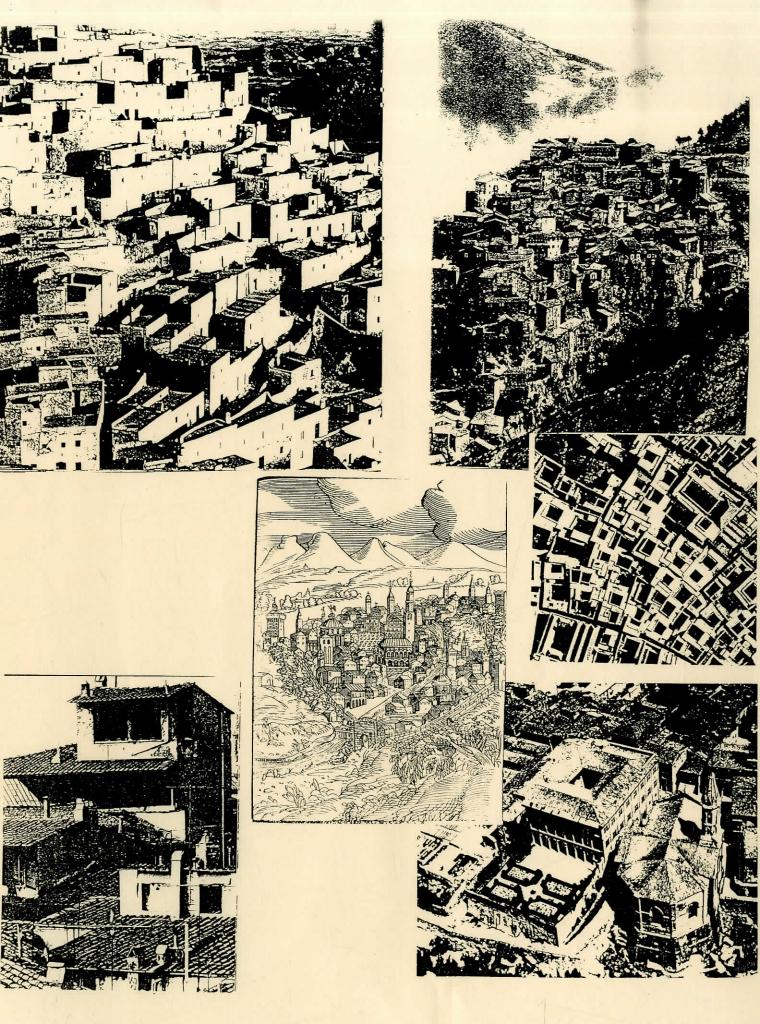
Slum houses constructions that can last from a few minutes to more than 20 years.

Building transcends functional requirements by gathering the meaning of a solution.

Are time, culture, programmatic circumstance and site, specific?

· Graphic Presentation Precedents

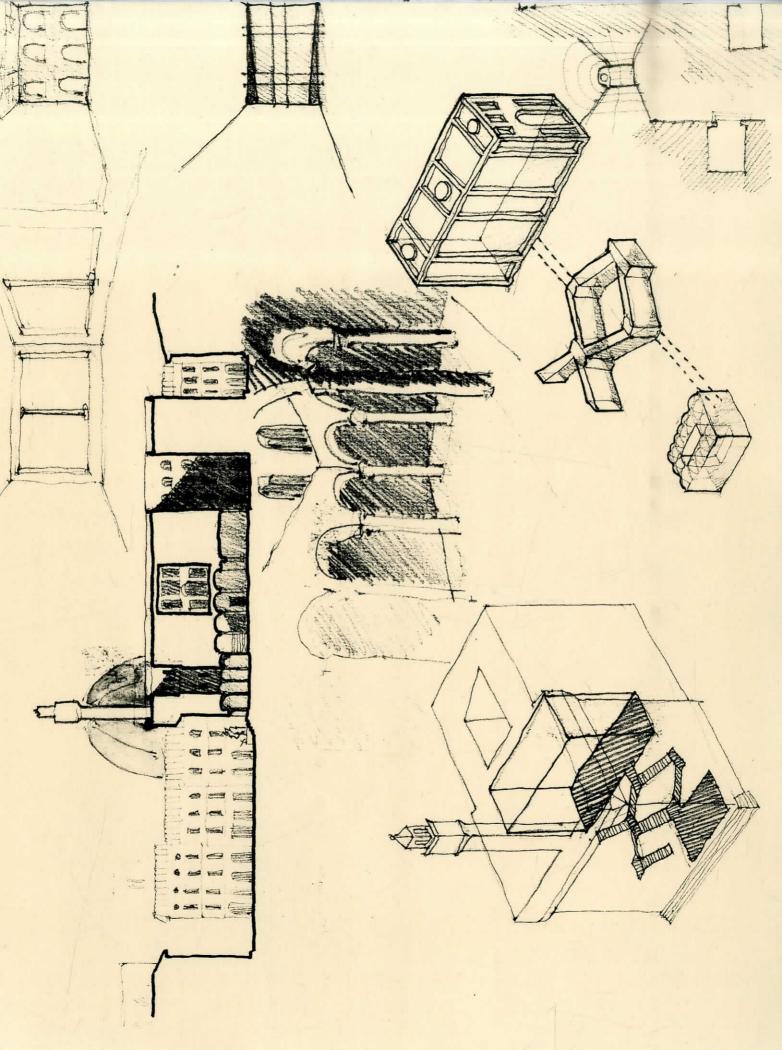
Part I Urban Jegacy

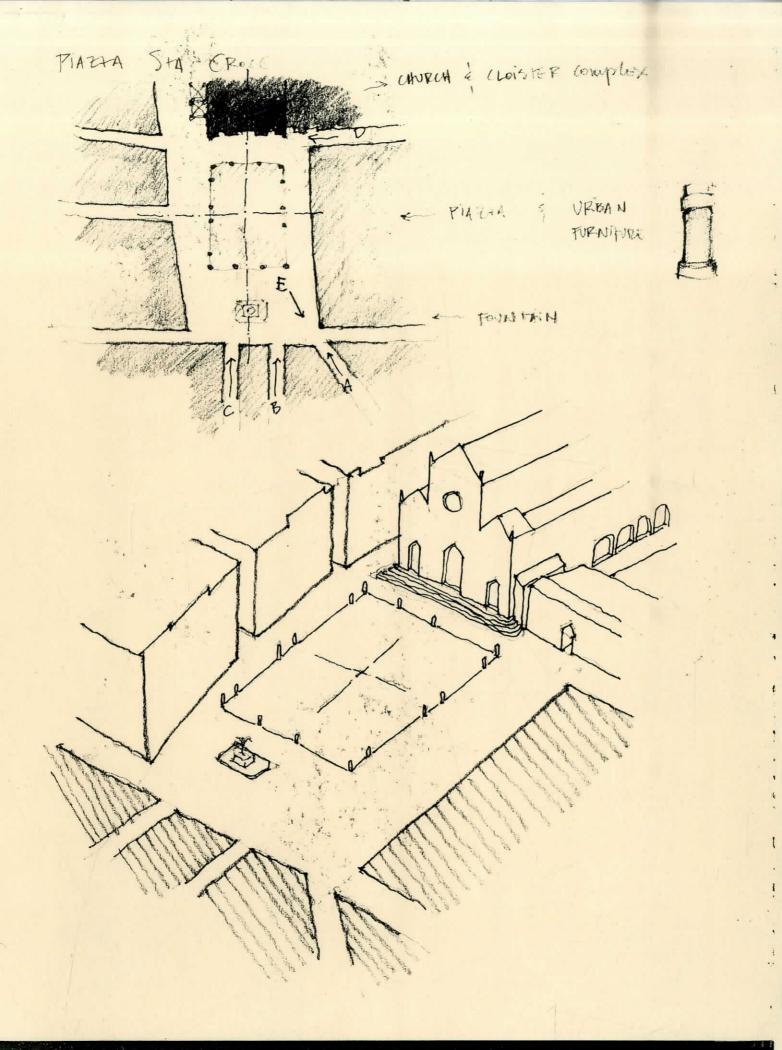


Manakuch - downtown (Manocon) example of rity that demonstrates the uninnsal organization of main shuts, public spaces and mutic mildings.

Florence - Sta. Croce questime The area of Sta. proce in florence hours two important praggas, relevant to this study. Fiazza della Lignoria. in the example of public timic space to which , pala 33 Vicitio relates to and Prazza Sta. Groce in the example of religions public open space dunch to which the relates to. The. how is also an example of neighborhood identification space, bing originmally, Pazzi's family, parish church.







Vienza - Coloto Vicunga is modeled on the damic conidor tenement. Main struct comucto Palazzo Chinicati to Talaggo ; Freganze and the 7. chinati Two public piazzas I della Signoria and del Pnomo) are not directly comect to Main street but filtered through a block of buildings.

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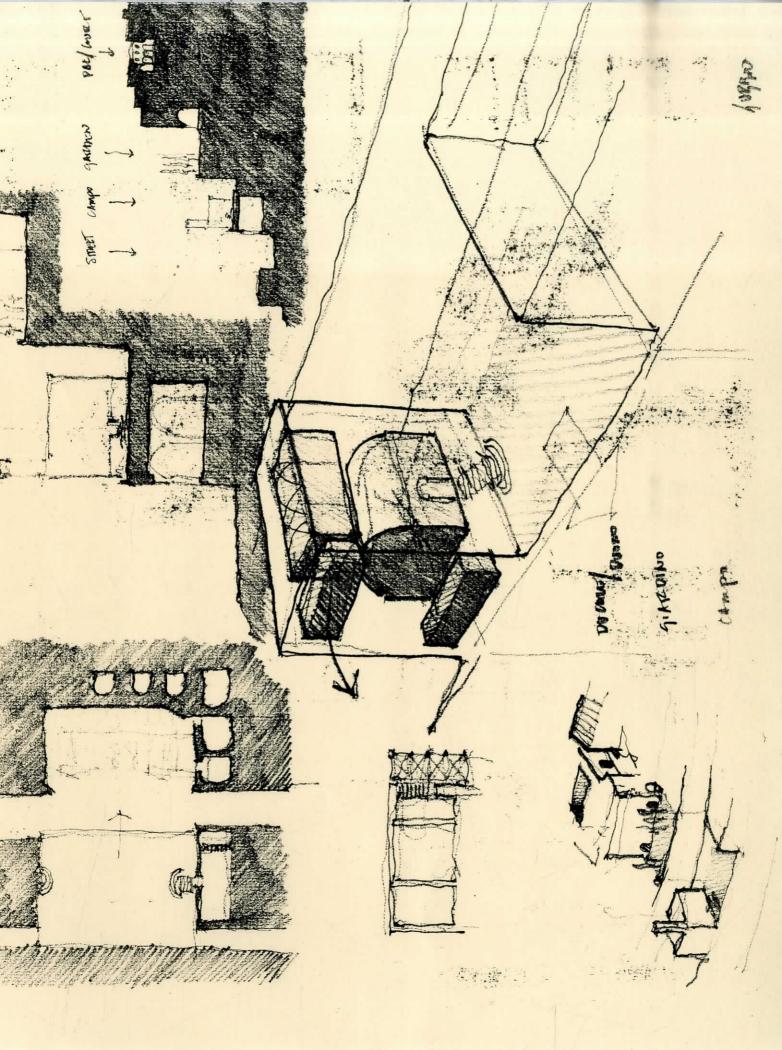
Mundocita, still reflect the untral consider model. The basic organization was Kept onen when the city grid admonued and involved it. The main public spaces are directly related to the street, much like in Tienza



MENDOCITA

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Hum tommity of El Agustino Jina, Pem. Hall Forum example of poor community still comparable to mechanal models. One important station city that comer to mind in gathio.

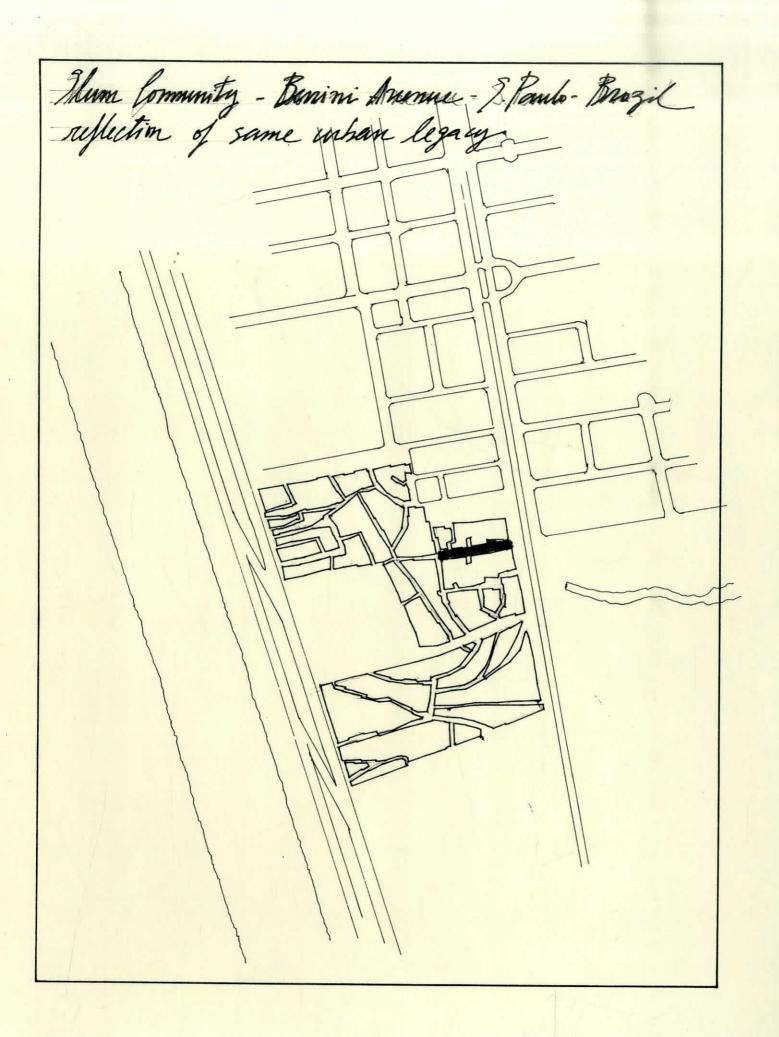






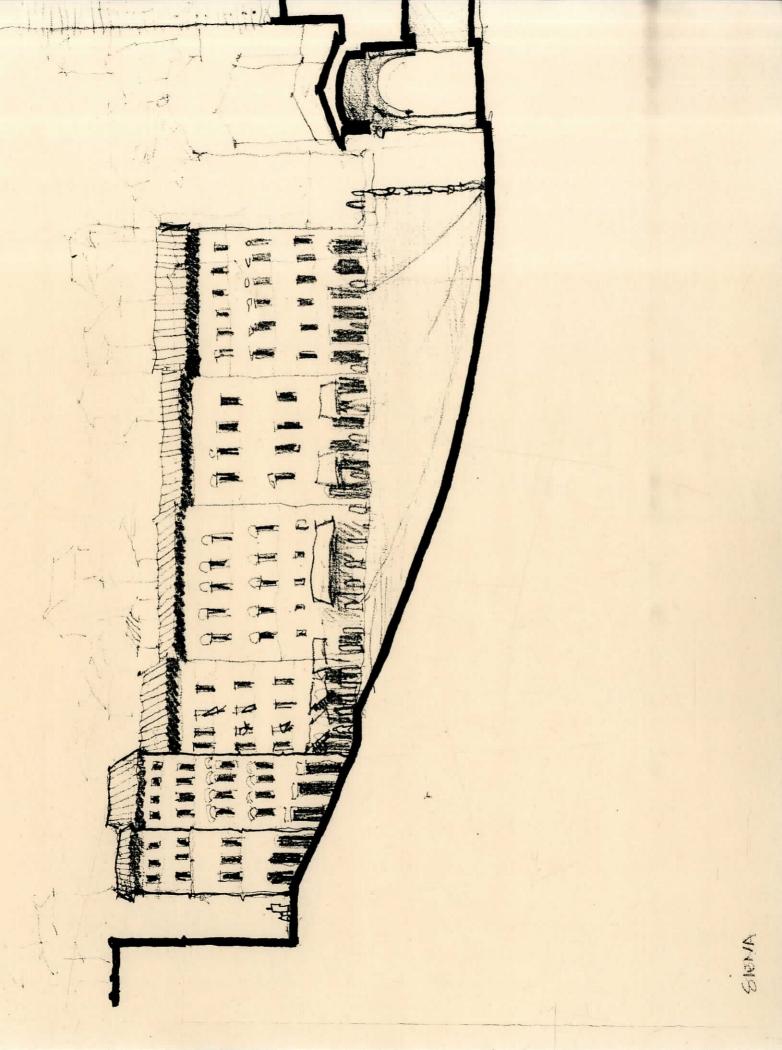
EL AGUSTINO (Hill)

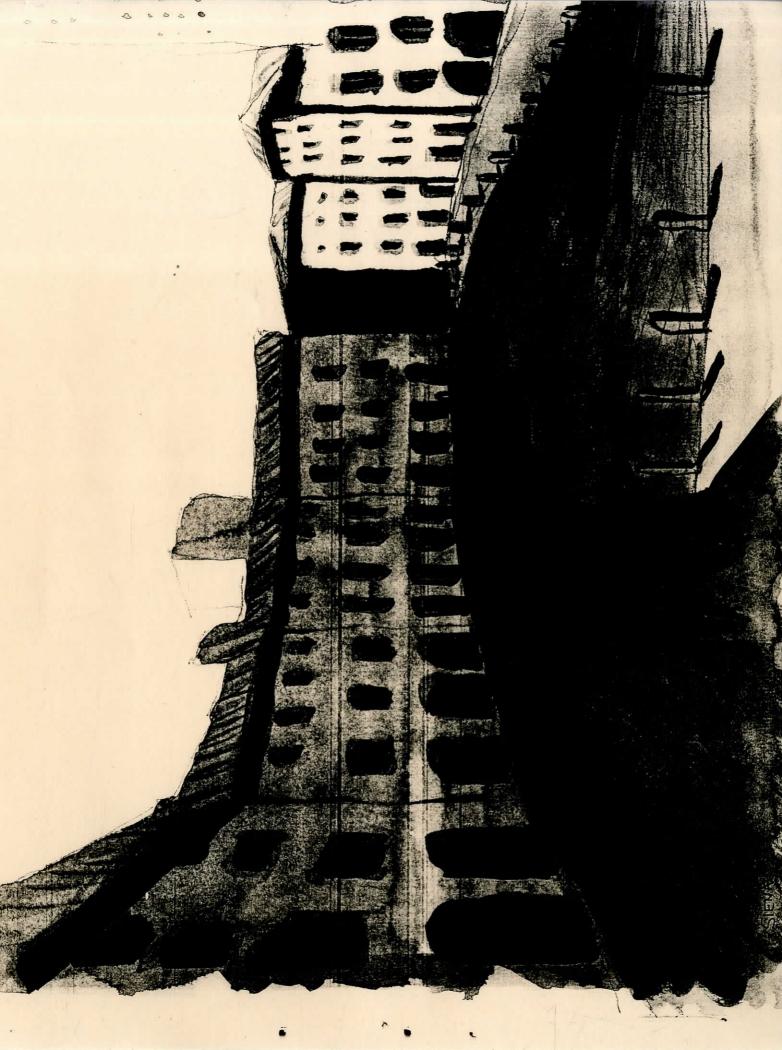
[163]



Part II Community Spaces and their buildings

Trazza del Campo in Siena relation ship with Palazzo Roblico - Givic Piazza Tiazza del Campo is also used as grounds for commity expression, for example the famous fast of the Paglio.

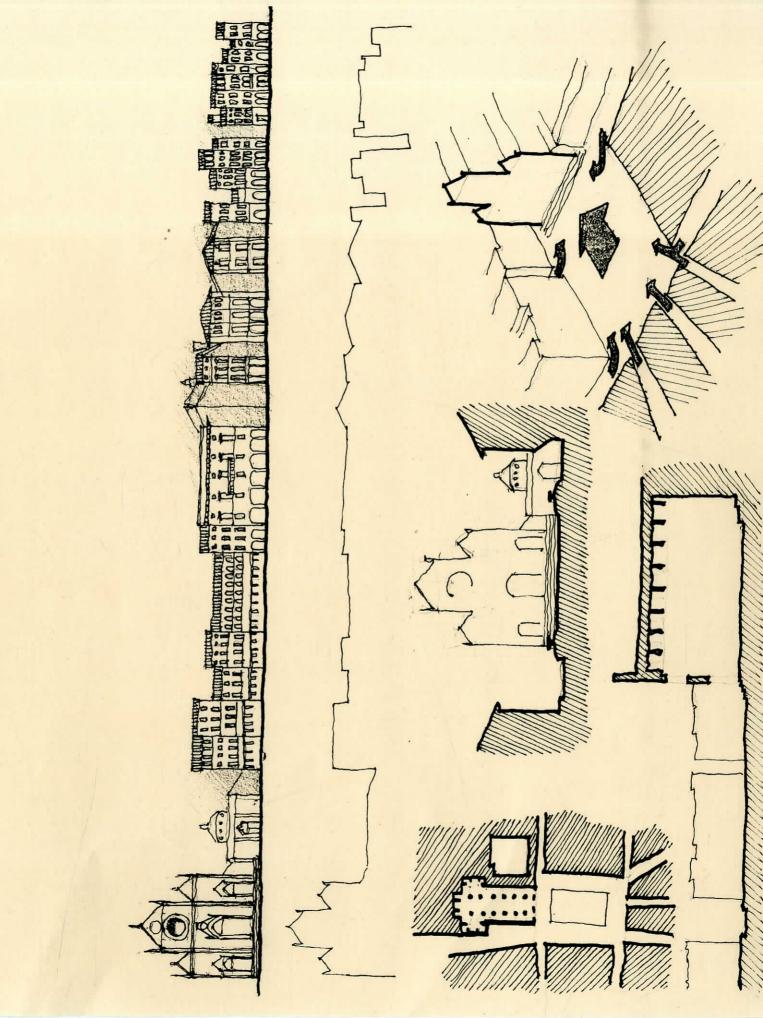




Piazza San Marco - Hemia - Religions piazza prasson for for church. The place is alroan example of hom the public space com be the quatest representer of the comunity.

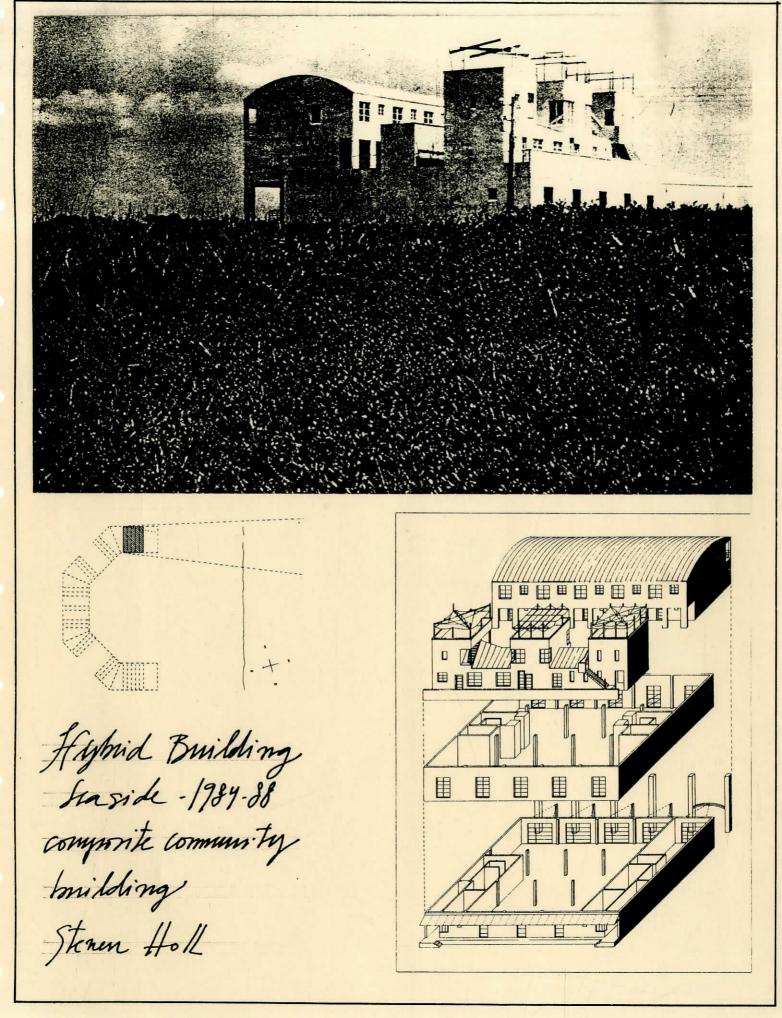
- Viazza Sta Groce - Finnze (Mighborhord) Joyn to chunch - Religions piazza The Cover reflects the idea of the piazza as a reference to neighborhood. Uniginally Paszi family's church, it represents that section of Alounce, opposed for example to Som brezo other sector and the other family. TI TO TO T

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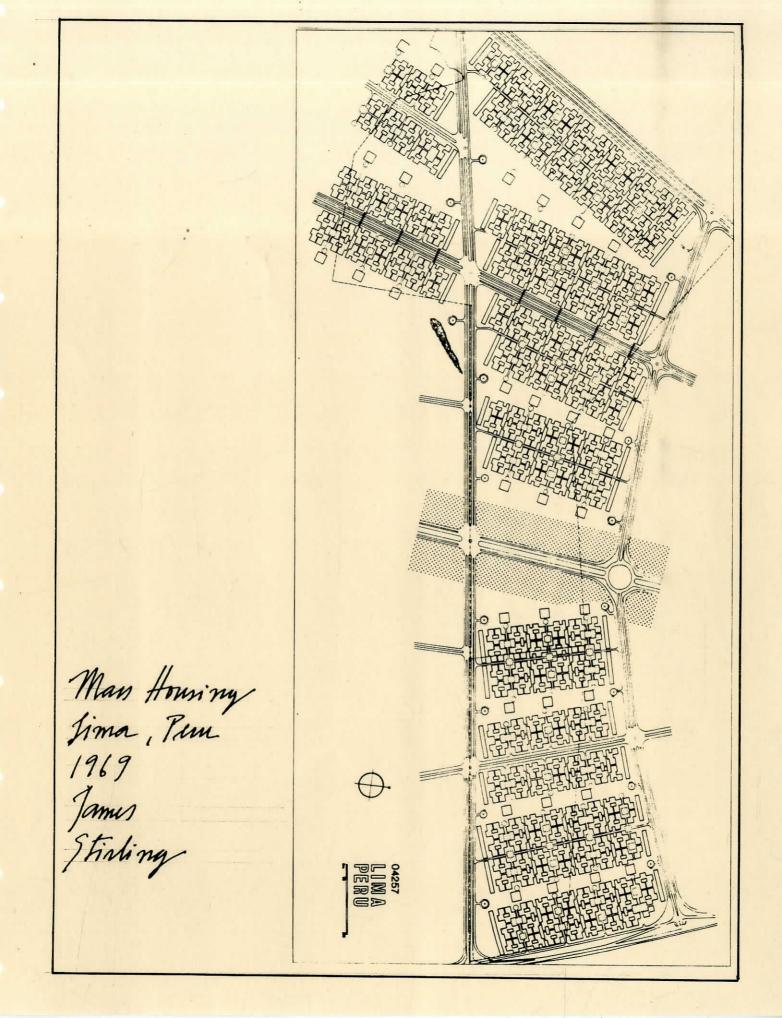


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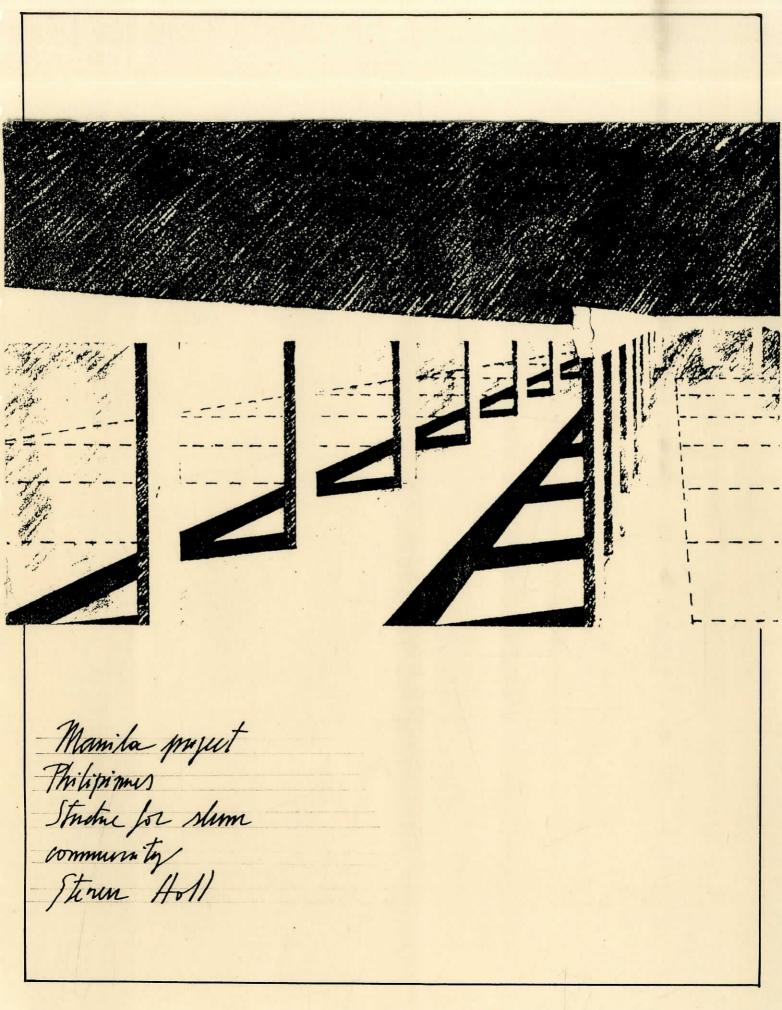
Part III contemporary Procedents



division of Junctions DAD unity proposal n p Π Π T private houring Aru space F **新聞**[2] communial space



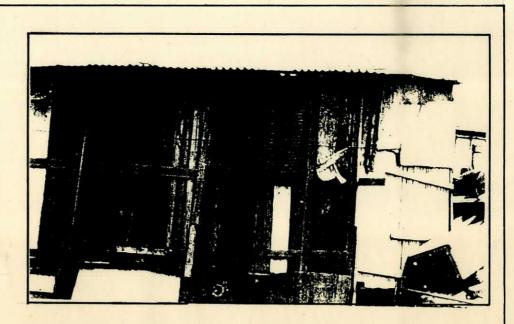
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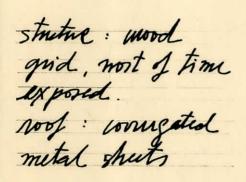


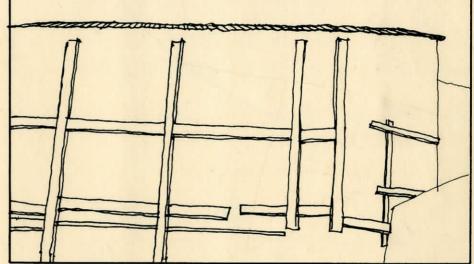
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Part IV construction analysis and suggestions.

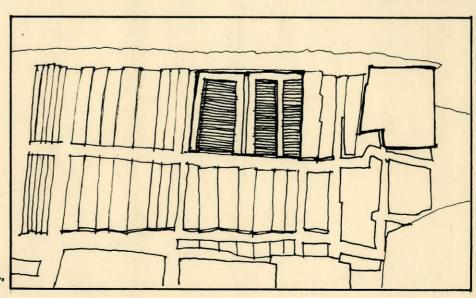
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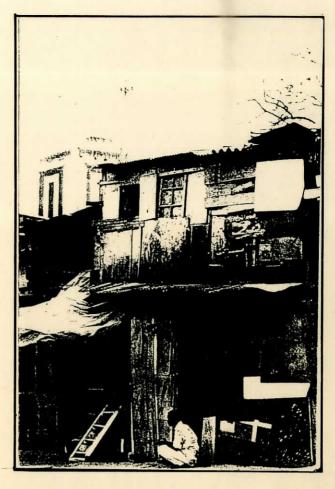






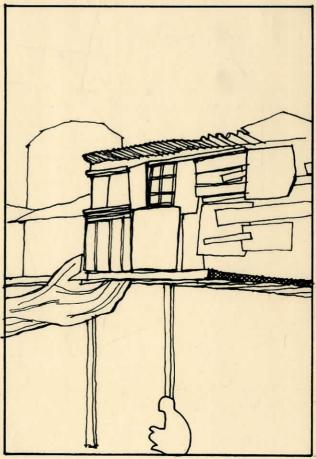
in chonne: unst away of materials mostly wood plates and condhound, nailed to the inside of structure





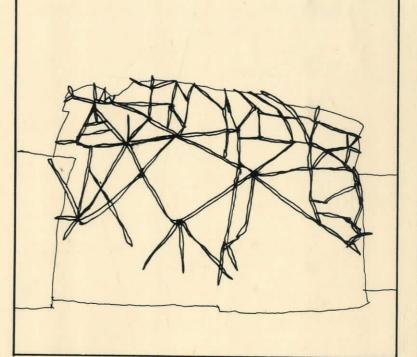
two storey shelter

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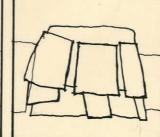


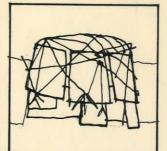


plastic coul tensile estructione expressed on ontride, indication existance of internal supporting structure





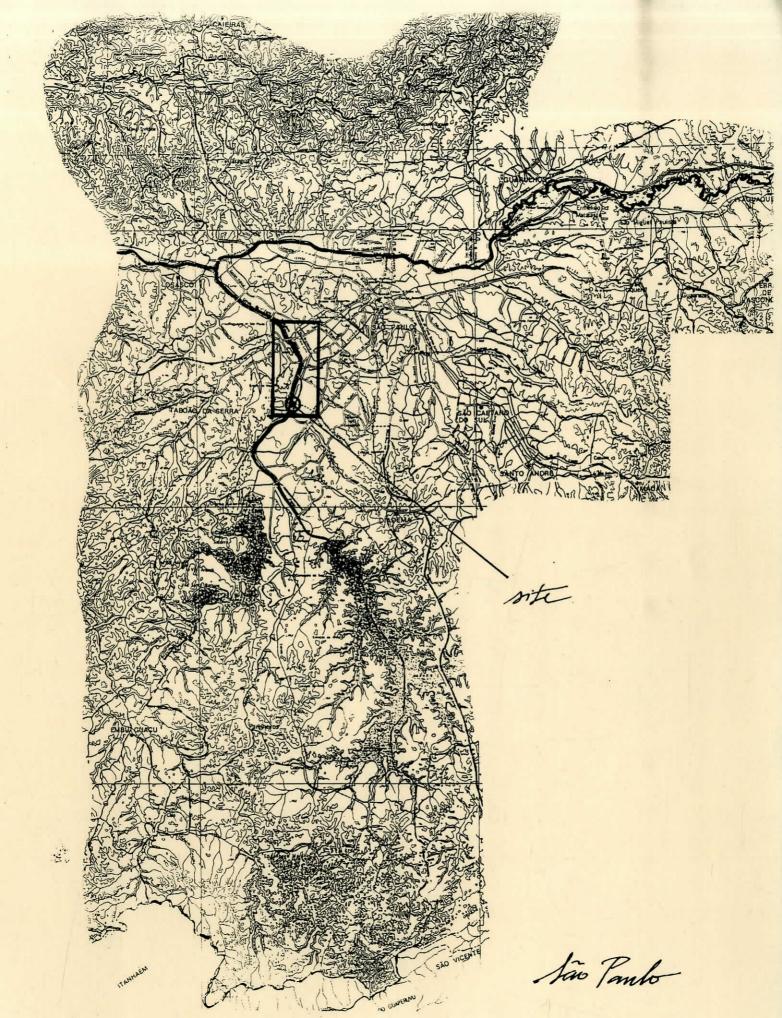


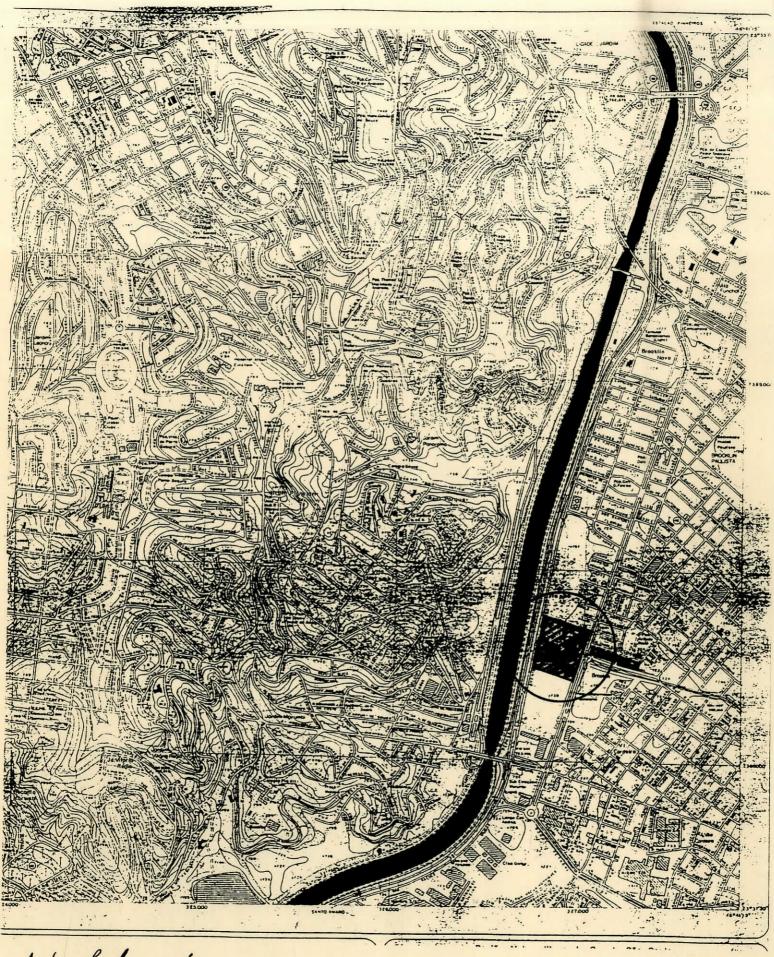


Son a possible interpritation: composition placed on concerts good, shuts one fixed lighter 1. . . . n-d outride or inside reating relief effect

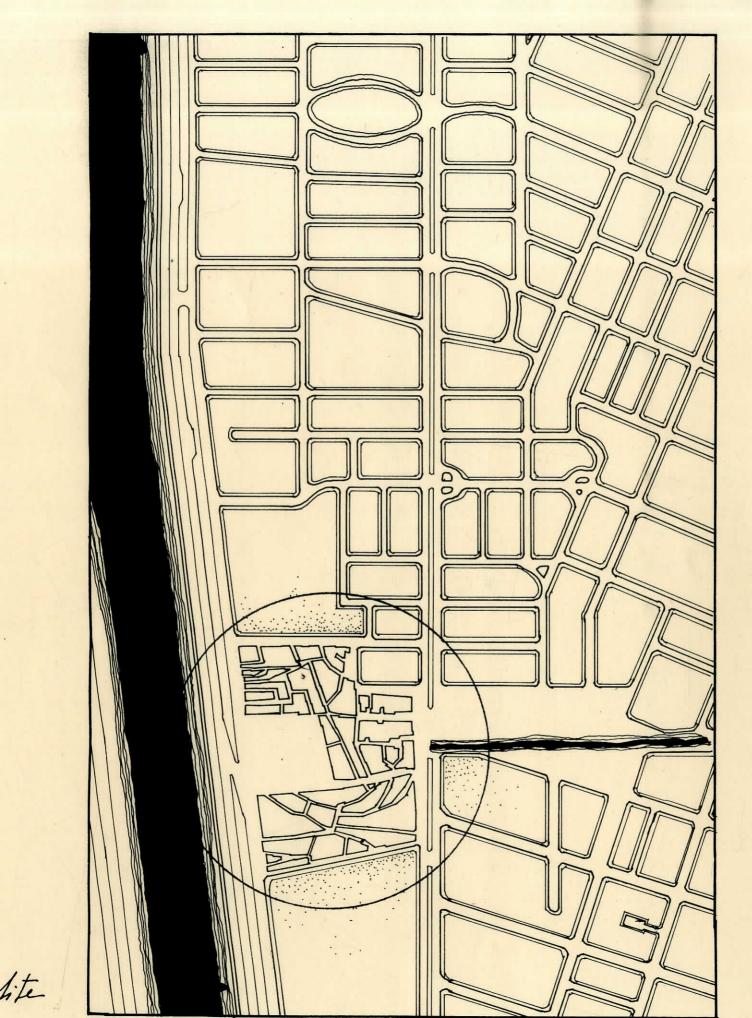
buildings would begin to reflect boal unnearly construction, and roof form and andritiche could begin to differentiate the internention from the boal buildings, but shill giving the neve building its identity as part of the community.

Part V site information

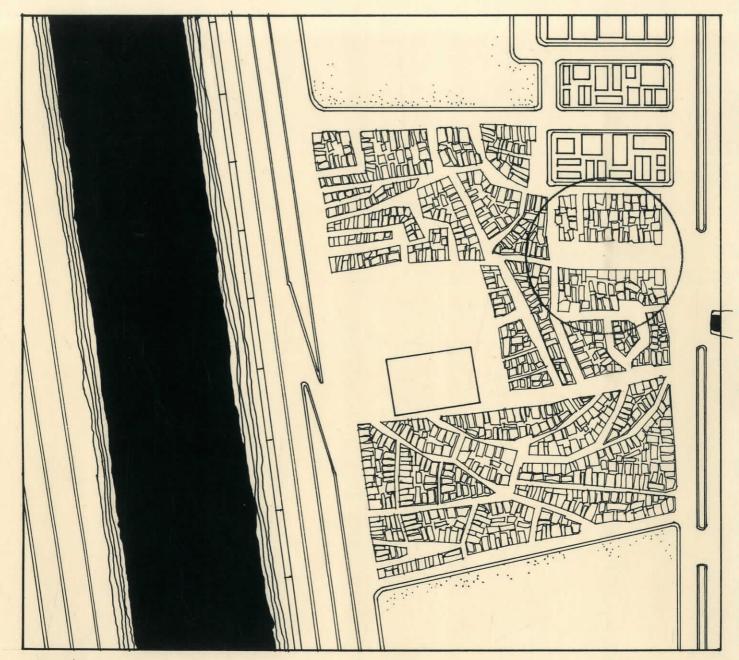




Site Information_



potencial for developing moject - Moin Struct



Site

