REGIONALISM AND GREEK ARCHITECTURE :
THE ARCHITECTURE OF DIMITRIS AND SUZANA ANTONAKAKIS

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ABSTRACT

Regionalism grew out of the discourse that identified locally-developed cultural entities and their referrent expressions as an object of inquiry whose aim was a more effective way of addressing the issues of development and cultural change.

The work of Patrick Geddes at the turn of the century--set in comparative distinction against the "romantic regionalism" of the character movement--is briefly mentioned as the most valid doctrinal body of regionalist practice and theory up to our days. It sets the stage for the consideration of the more recent regionalist attempts and provides a context upon which they can be evaluated.

The Regional Planning Association of America, their ideas and praxis of regionalism, are discussed in comparison with Le Corbusier's attempt, based on the principles of orthodox modernism, to address the same issue.

Regionalism, as developed in the late 50s and 60s, amidst the crisis facing the modernist future, created what, borrowing Alex Tzonis's term, we call Critical Regionalism. Critical Regionalism is identified as a direction of contemporary architectural practice and is discussed in its concepts and principles, using basically the philosophy of Team 10's movement (especially those of Van Eyck and Bakema).

Greece's interesting and well-developed regionalist contribution to architecture, especially the works of the architects Pikionis and Konstantinides, is discussed and interpreted toward this respect, too. The architecture of Dimitris and Suzana Antonakakis is pointed out as an exemplary corpus which does not get "regionally" isolated in trying to follow an "autonomous, self-oriented, and self-determined path".

The work of the Antonakakises is a strikingly modern body of work which has managed to express in a very tangible way those intangible aspects of culture and rootedness that identify the uniqueness of a place, giving it a humane face and determination. Four case studies are analyzed: Each was selected because it represents an issue of crucial importance in architectural theory and practice, generally, and a decisive moment in the transformation and development of the Antonakakises' architectural thought and method as well. Exemplified by the case studies, their methodology is finally discussed in an overall perspective in order to reveal the critical quality of their project and to argue for the successes they have achieved to date.

Thesis Supervisor: Stanford Anderson
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To my husband Stergios

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Vivianna A. Metallinou
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INTRODUCTION

The broader context that triggered the central theme of this essay was the intense concentration of recent architectural theory, criticism, and practice on the issue of "regionalism".

Present as either a conceptual framework for interpreting several contemporary attitudes in architectural practice (that obviously do not fit easily into any of the established categories of the multiple "isms" that followed modernism), or as a base-theory that structures and directs the practice of "regionally conscious" architects, regionalism culminates in the philosophical orientation of what can be termed a socially-oriented architectural consciousness.

Regionalism is a deceiving word. At times, it had been associated with notions as diverse as locality and specificity, culture and tradition, planning and administration, politics and rhetoric.

Sharing a liberal spirit and an anti-centrist sentiment, regionalism had been associated with movements of reform and liberation; to the same extent, though, it served repressive and fascist regimes, nationalist and chauvinist policies.

Regionalism is, thus, an expression of the dialectics of culture and, in this aspect, it has innervated architecture and its polemics. Regionalism and Architecture met on a level of social responsiveness aspiring to cultural independence of some kind.

Privileging and/or defending individual and local architectonic features against more abstract and universal ones, regionalism was always associated with formal expressions, endorsing a sense of identity and a social consciousness existing among people living in a place which achieves thereby the status of an entity in its own right.

The manifestations of regionalism identified in architectural criticism are essentially examples of a critical re-approach to Modern architecture through the perspective of the traditional values and beliefs rooted in the historic and cultural milieus in

which this architecture is being built. Thus, regionalism is understood from its inception as the expression of a dialectical process.

> It self-consciously seeks to deconstruct universal modernism in terms of values and images which are locally cultivated, while at the same time adulterating these autochthonous elements with paradigms drawn from alien sources. After the disjunctive cultural approach practiced by Adolf Loos, Critical Regionalism recognizes that no living tradition remains available to modern man other than the subtle procedures of synthetic contradiction. Any attempt to circumvent the dialectics of this creative process through the eclectic procedures of historicism can only result in consumerist iconography masquerading as culture.[1]

The fact of a regional expression depends upon the existence of local cultures. The particularity of a local culture develops gradually as the product of specific historical processes; varied factors, such as geographic position, climate, soil types, local economy, populations, and ideas--imported or indigenously developed--provide differentiating elements.

Nevertheless, the emergence of a regional expression immediately asks for sociological interpretation. When we talk about regionalism, we refer basically to a state of mind attained by a cultural group within a specific territorial setting. To be able to create a coherent regional expression that would be identified with and accounted for in its own right, the cultural group that sustains such a development has to have a strong sense of its own identify and sufficient determination to structure this identity into a coherent expression. We thus arrive, by definition of terms, at a sense of political and social responsibility, intrinsically related to the manifestation of the regional culture.

Still, what exactly is regionalism?

We might consider the question as a general one--a matter of architectural theory and historiography, which conceives regionalism not as a manifestation of a particular culture but as an orientation and practice of architectural thought within the discipline of architecture, or it can be formulated as a matter of the specific

expression of a place through the practice of a particular architect (or group of architects). The two formulations, however, can be conceived as complementary: the general one serving as the theoretical background upon which the validity of the particular case can be secured and justified.

A definition of regionalism would nevertheless require dipping into the wealth of empirical material that comprise its data. Formulated as a hypothesis, regionalism tries to decipher the complicated relationships that exist between the sociological factors that, together, constitute the regional identity and the consequent regional architectural expression. As a hypothesis, it points suggestively at further relationships that might be identified on the basis of closer familiarity with the subject; for example, the close analysis of a particular expression. By postulating that social planning "be efficiently related to a cultural-economic unit with definite demarcations",[2] regionalism was generally considered as "a motif for planning",[3] suggesting "the possibility of compromise between political action and natural law.[4] Regionalism's significance depends on the ability to organize its data within a perspicuous frame of reference. Following this, the meaning of "region" depends on a variety of factors that construct its recognizeable image. In a "region" there is always a clustering of environmental, economic, historical, social, cultural, socio-psychological, and political factors. The region may be considered as a place in which "a high degree of conformity between the geographic, economic and cultural contour lines" occurs,[5] or, more loosely, as "an area of which the inhabitants instinctively feel themselves a part".[6]

- Physically, the region is a "natural" or "distinctive" landscape, geologically and physiographically, with unique characteristics of soil, topography, and climate.

- In economic terms, a region follows a homogeneous pattern in utilizing its natural resources and in adjusting its population

to the physical setting; its parts have relative uniformity as to "resource patterns" and "production patterns", or those are notably complementary from one section to another. The whole region differs from other regions in various pertinent economic respects, though without excluding the possibility of interregional dependence (which is more the rule than the exception).

- Demographically, a region's similarities and homogeneities outweigh its contrasts and heterogeneities; it has, compared with other regions, peculiarities as to rate of increase or decrease, age group structure, urban and rural distribution, nationality or racial composition, as in other respects.

- Culturally, it has typical institutional forms, folkways and mores, language forms (a dialect is a linguistic index of the existence of a region, though it may persist after the regional formation has changed or dissolved), standards of living, and special psychological characteristics in the form of typical beliefs, attitudes, sentiments, loyalties, patterns of thought and opinion.

Usually, there is a regional collectivity of interests and behaviors, and a regional level of consciousness. All of these features of an intra-national region reach a state of approximate equilibrium and harmony, giving it a relative homogeneity of features based on a variety of indices. Lewis Mumford also pointed out that "such a region consists of an area large enough to embrace a sufficient range of interests, and small enough to keep those interests in focus and to make them a subject of direct collective concern".[7]

Formulating the notion of a "region" for the purpose of study and research is, nevertheless, a risky endeavor. Indices that define a region are "arbitrarily selected"; or, better, they are evaluated with regard to their significance, their "dependability" and their "differentiation". The principle of selection is based upon the

practical aim of a "greater realization of the inherent capacities of a regional unit".[8]

Regionalism is understood perhaps best as an attitude toward concrete reality poised for action. Among so many "isms" that lend their subjects so theoretical an air, regionalism's doctrine is, rather, that of a moving conclusion, destined to review constantly--if not undermine--all kinds of determinisms that claim to speculate about "abstract man", "abstract culture", or "abstract economy". As one regionalist once enthusiastically outlined: "There are no values in its concepts except of development and capacity; no judgments except in terms of resources and materials; no permanence except in terms of survival through change."[9]

The two scopes that had been outlined so far cover the two kinds of approach to the issue that complement each other perfectly. The theoretical definition gives direction and the basic suggestions to regional research, organizes the discipline in its function; the particular analysis, apart from being a complete endeavor in itself, serves as well as an instrument of control, closing the contact between theoretical evaluation and empirical observation.

This thesis is concerned primarily with the analysis of a particular case. It will try, nevertheless, to locate this particular case within the general theoretical framework of the development of regionalism within architectural history. The instances that have been selected in this historical survey converge mainly upon the major European movements and examples, because they exert a direct influence on our case study's subject. The general discussion (Part I), therefore, should not be taken as an overall review of the regional movement but only a selected aspect of it.

The particular study of Part II concerns the expression of regionalism as developed in contemporary Greek architecture. The work of the architects Dimitris and Suzana Antonakakis, representing an important and critical interpretation of Greek architectural

history is taken as a valid example to address the development of the individual path of modern Greek architecture. This contemporary production, recent as its beginnings are--only since the 1950s--nevertheless has roots of an immeasurable depth in the rich cultural and intellectual history of the country.

The Antonakakises' work, holding firmly to a well-tempered positivism, proceeds to a synthetic reconstruction of the fundamental notions of space, function, human relations within architecture, and architecture itself within society. In so doing, they address afresh the concrete realities of the personality, history, and drama of the Greek milieus they are building.

Their expression cannot be mistaken for a revived vernacular. It is neither populism nor mere contextualism, as it does not fall into a superfluous sentimentalism of nostalgia for a "glorious" past. It is a regionalism practiced very consistently according to a highly structured body of methods and principles and reflects a coherent underlying program based on the regionalist idea. It is the existence of a "program", understood as an agenda of scientific research, that renders their achievement an additional significance in trying to reveal the hidden assumptions and processes that provide for their creative evolution.

PART I

REGIONALISM AND ARCHITECTURE

P A R T I

I knew that architecture was made possible by the confrontation of a precise form with time and the elements, a confrontation which lasted until the form was destroyed in the process of this combat.

Architecture was one of the ways that humanity had sought to survive; it was a way of expressing the fundamental search for happiness.

- Aldo Rossi

1.0 REGIONALISM AND ARCHITECTURE

1.1 The Early Stages

The concept of regionalism and its broad applications accounting for a new social orientation in architectural thought only became possible during the latter half of the nineteenth century, when city and architectural milieus in general had come to be seen as legitimate fields for systematic investigation: something which "could be known empirically". For the eighteenth century theorist, as Tafuri notes, the city belonged to the same category as painting; it was a realm of human creativity lying outside the domain of scientific law and discourse.[1]

The emergence of "the city" as an object of scientific analysis was an event in "collective epistemology" (i.e., of the newly formulated enlightment disciplines of sociology, aesthetics, history, and archaeology), as much as it was a result of objective changes in the condition of cities themsleves. Architectural history, from considering architecture as simply a matter of formal stylistic evolution, began to consider architectural artifacts instead as the embodiment of the whole culture, founded on basic philosophical concepts and shaped by ongoing political and social transformations. The city thus becomes the locus of civic consciousness and the mirror of its community's life-history. As, in the words of Patrick Geddes,

> . . . all history confirms in detail of life and art what language preserves in literal word, that not only 'politics' but 'civilization' itself are essential products, not of the individual but of the city. . . ,[2]

human civilization was now considered the product of unity between humans and the environment, as realized within the unique surrounding of the city. Cities, understood as the uniquely human environment "par excellence", became the place where afresh science, aspiring to the fulfillment of human happiness, developed. Linking the social with the natural and the architectural was the greatest contribution

of environmentalism in the history of science. From that followed the subsequent development of the image of the city and its social personality: the great contribution of regionalism in the field of architecture specifically and of human experience more generally. Following from that, architecture departed from the frozen sphere of the single-building problematic, to enter the world of evolution and adopting a social orientation. As Patrick Geddes puts it:

> Architecture, historically viewed, has seemed too long but a description of buildings, like fossil shells, and corals, past and dead. Yet, as an evolutionary science, it begins anew with living and growing city reefs as we have seen them in their growth overflowing whole plains, ascending innumerable valleys. In this synoptic vision, we have as yet had too little touch with the actual living polyps, yet their presence, their essential activity, their vital needs, have been generalized indeed, but not forgotten.[3]

Regionalism, consistent with its theoretical proclamations, entered architectural discipline determined to define the boundaries of the problems, rather than anticipating the establishment of any final conclusions. The regionalist critique of architecture aimed at an understanding of the architectural act itself: the act of building shelters and monuments, in whose historically varying forms could be recognized the dialectic of nature and culture. Such an attitude demanded a level of categorical thinking, where the meaning of style acquired another dimension. Peter Collins, in his "Changing Ideals", refers to the "insistent and widespread demand" of the mid-nineteenth century "for a new architecture". This quest was directly concerned with producing a powerful, new style, which would reflect the already widely felt changes of the new era. The grip of the academy was too firm for official architectural thought to acquire a critical perspective on itself.

To be sure, regionalist critique originated not with architects but, rather, with those people whom we shall call the regionalists. The work they produced is not what we could call architecture proper but, rather, the framework for a new conception of an architecture

yet to emerge. Granting a new epistemological and ontological status to the relations between social formations and their localities, regionalism invited empirical investigation into the numerous aspects of this newly-defined domain, which we will later on identify as "urbanism". The central concepts in these investigations were "adaptation", "function", "process", and "development" rather than "proportion", "form", "self-containedness", and "permanence". For regionalism, diversity, relativity and change were the norms of its scientific outlook, and under these assumptions form came to be seen not just as a finished product whose role was to embody or express, but as a dynamic property with functional and developmental implications.

Following these points, "styles"--if they were to appear again--ought to return to their past meaning, when, as Louis Sullivan said, "they expressed an organization or crystallization of the thought and feeling of certain people, . . . done or happened more or less consciously, and (in any way) unerringly." Sullivan observed, for his time, that styles had come to be "grotesquely empty of head and heart, concerning the art and the history of architecture as a form of expression". Were we to choose to substitute the word "civilization" for that of "style", he proposed, "that would be a pronounced stride in advance, for it would provide a path for an intelligent understanding of the values of history".

> And from such an understanding, a sure truth would spring: that, there is, as ever there has been and as ever there will be, but one architecture, of which the so-called styles were variants, expressive of differences and changes in civilization.[4]

Sullivan's comparative judgment, by introducing directly the fact of collective consciousness of culture (civilization) as the means to connote architectural sensibilities, broadens the field of architecture from the building unit to the broader-built milieu. The city "naturally" emerges as the superb object for such an understanding,

the greatest human achievement, embodying values from both the natural and the cultural domains. Considered as possessing a life, a history, and an individuality of its own, the city was seen as a living organism, having a morphology and unique physiology with interacting influences between them.

Seen in a broader frame, as an environment, the city was an external, autonomous, impinging world within which people lived, worked, and laid their dreams. In this respect the city was a material setting capable of affecting the conditions of people's lives.

Planning, being directly associated with regionalism's practical aspirations, attracted most of the first regional efforts. At the time, new towns, garden villages, and cooperative developments were springing up as creative responses to the increasing pressures of a shifting economy and growing population. Patrick Geddes's Cities in Evolution signals the beginning of a "Science of the City", based on an as yet unsurpassed synthetic view of urban phenomena and a thorough integrative approach within the regional problematic.

> Here, then, is the problem before us, on our return to survey our modern towns, our ancient cities anew, to decipher their origins and trace their growth, to preserve their surviving memorials and to continue all that is vital in their local life; and on this historic foundation and on the corresponding survey and constructive criticism of our actual present and forwards to plan out a bettering future with such individual and collective foresight as we may.[5]

His proposed practice of regional city survey was going to provide the solid ground of an intellectually integrated exploration, on which fresh influences would determine the future of each place. The surveys were means towards the realization of the community's life-history, which was recognized not as a dead past, but as being incorporated within the present activities and character.

> If we want to be city-builders, we must first be archaeologists-historians. Like Troy, we must excavate the layers of our city down-wards, into its earliest past - into the dim yet heroic cities over and upon which has been built; and thence we must read them upwards, visualizing them as we go.[6]

Within the process of overall exploration, the geographical survey was an indispensible tool for knowing the characteristics of the place. In fact, it ought to be the starting point of any planning intervention.

Local character was identified as a unique property of each individual place and it could be attained in the course of adequate grasp and treatment of the whole environment--in active sympathy with the essential and characteristic life of the place concerned. To each place was ascribed a personality, "a personality too much asleep (it may be) but which is the task of the planner, as master-artist, to awaken."[7]

Geddes's proposed regional approach sought, by means of comprehending and controlling civic change, to follow the life movements that were proceeding "in changing rhythm, initiated by the genius of the place, continued by the spirit of the times and accompanied by their good and evil influences".[8] His regionalism was more a philosophy of human-structured environment for a well-ordered, progressive pattern of life rather than any strict urban model-theory.

> Happily the more regional outlook of science is beginning to counteract (the) artificial blindness. The field-naturalist has of course always been working in this direction. So also the photographer, the painter, the architect; their public also are following, and may soon lead.[9]

Apart from such enthusiastic predictions--where we should not fail to perceive a naive understanding of regionalism, however--to the architectural mind of nineteenth and early twentieth century, style was entrusted with the linguistic function of naming; a designatory apparatus in the service of cultural memory, present and future.

Much of the discourse in architecture continues under the same spirit even today, and regionalism is usually identified as one of so many styles. It is beyond any question that a regional development will always represent the prevalence of a specific character

of the locality in question, in terms of which its production has been distinguished from other developments. This is regionalism as a fact of culture, and to record it nevertheless engages a necessary and legitimate task. Description alone, however, does not furnish the basis for understanding and control, if we consider the fact that reality is constantly changing. Interpretation and explanation are also necessary to a genuine regional approach, and regionalism, from being only a fact, becomes a conceptual hypothesis, for reflecting on its own constituent elements and their relations. Regionalism, in this sense, offers a theory accounting for the interrelations among the several factors involved in the image of a particular territory. Spatial consideration is a major preoccupation of regional thinking. Human experience is predicated upon geography. Human beings, and all they work with, live with, and create, are located in space. Apart from physical conditions, though, that do influence the character of people and their cultural characteristics, past history and tradition--as well as communication and cultural and human movement, not exclusively predicated upon geography--provide influences which are, especially in modern times, impossible to ignore. Even if regional patterns of mediation between nature and culture were established in a given area, the power of communications and transportation and their results--the mobility of people and ideas--are destined to undo such clusters of identity. A region develops ideas to the same extent that it accepts foreign ones. It is therefore particularly risky to fix regionalism with a conception of total rootedness in a place, accounting for physical features, local materials, native techniques and practices, specific regional sensibilities and forms representing a "style", for the notion might dissolve in one night towards one thousand (stylish) "isms".

On the other hand, it is historical blindness, as Patrick Geddes would have said, not to consider that those factors did play a prominent role in the earlier formative processes of all development. Moreover, vestiges of them would nevertheless survive and find expression in the architecture, no matter how much time has elapsed.

In the process of development, modern processes of production as well as universal tendencies of standardization have divorced architecture from its environment, with the result that architecture began to be considered in abstract terms. This resulted in a crisis in human confidence, when people try to evoke a sense of identity. Inseparably linked with its background, architecture reflects as do few other arts the life and thoughts of a race, a place, or an age. Due to its permanence of character, it can bridge the distances between generations, ideas, conflicting philosophies. When the new environmental ideas were sweeping the earth, changing the image of the world, the Gothic Ile-de-France or the Renaissance of Florence were still radiating their influences across frontiers. And, strictly speaking, there is no reason why the features of a developed style should not evoke the sensibilities of an area than the one that produced it. For, the essence of all great works is always based on an artful and skillful articulation of the basic fundamentals. Regionalistic attitudes underpin the determination to refuse to allow prototypes to turn into cliched imitations. Topographies, climates, cultures, beliefs, technologies, and architectural traditions, no matter how they had evolved, represent the specific identity of one place versus another, and must be secured an organic evolution if the cultural personality of the place and its people are going to continue to exist. Such a view engages regionalism as a tool of control and planning, and the region, in this sense, becomes a tool for "social engineering". It can be adequately demonstrated that consideration of regional units for social engineering may result in the emergence of patterns which might have important consequences for both the culture and the regional consciousness.

Lewis Mumford, in discussing the conditions that led H. H. Richardson to his New England regionalism, observes that this was made possible during a period of "triumphant industrialism and rampant commercial enterprise, loud, spectacular and vulgar", because

> . . . the stern provincial culture of New England kept its grip for a generation: indeed the encouragement and opportunity given to Richardson was a proof of its integrity. And Richardson, in turn, gave back to his adopted region a reassuring sense of stability and strength in the series of buildings he designed.[10]

The situation, however, wouldn't prevent Harwell Harris, in 1954, in addressing "Regionalism and Nationalism", from expressing the view that,

> . . . in New England, . . . European Modernism (in the late 20's and 30's) met a rigid and restrictive regionalism that at first resisted and then surrendered. New England accepted European modernism whole, because its own regionalism had been reduced to a collection of restrictions.[11]

Of course the writers are referring to different periods, with 50 years dividing them, but they draw the common conclusion that regionalism is a matter of delicate balance between spirit and time.

Regionalism cannot be secured on the ground of historical continuity exclusively and even less can it be adequately accounted for in terms of its appearance at any one time. Modernism was universal in its appeal in the period of the 20's and 30's. It developed not in a few discreet European centers where the pioneering avant-garde first emerged, but all over the world.

Because development from stage to stage always involves qualitative jumps, regionalist tactics had to subsume the different stages within the sense of coexisting continuity and gradual transformation that constitute regionalism's essence. Taking this into account, especially in these times of unbelievable flux and mobility, regionalism returns to what, at the beginning of this study, we termed its very essence; namely, to a state of mind that defines a locally-rooted, cultural identity. Such a perspective, looking at it as a mode of collective consciousness, views it as being very close to a social movement. What regionalism can be taken to assure in the architecture of transitional epochs is the transformation of time and place

into the habitual paths and gestures of the people. Its operational techniques might closely resemble what Aldo Rossi describes:

> Forgetting architecture comes to mind as a more appropriate title (for such a task), since while I may talk about a school, a cemetery, a theater, it is more correct to say that I talk about life, death, imagination.[12]

Forms, images, and ideas, in the universal system of architecture, constitute a frontier in flux. Their significance depends on their internal state of development but to an equal, if not greater extent, on the state of coherence existing in the place on which the influence is exerted. The temporal aspect of architecture no longer resides in its dual nature of light and shadow, or in the aging of things. It relies more on the concept of identity--or in the loss of it. For identity is something unique, typical but it is also a choice.

Visual and sensual adaptation to the local features is generally identified with regionalism; yet, this is not regionalism proper but merely some kind of localism limited to homogeneities in areas constituted primarily by isolation, either in space--through lack of communication and extraregional relationships--or in time, as in the case of primitive people or historic societies. These concepts reveal a lot about the contexts where vernacular architectures--the first species of a regionalism due to conditions and not to tactics--have developed, possing a permanent more-or-less vocabulary and a sharp identification with their environment. Mobility and fluidity of population and ideas result in a reduction of visual singularities in the expressions of different places, but, in terms of regionalism, this has little great significance. It is the subtle feeling of the spirit and the way of the place that gives regionalism its uniqueness and not the mere imitation of surface features.

The first attempt in architectural history to extract this "essence" of spirit, characteristic of the highly cohesive achievement of vernacular settings, and to try to apply it in contemporary

practice, was the eighteenth century's notion of caractère ("character"). In shifting the emphasis from the work of architecture in itself to the effect of the work upon the spectator, late eighteenth century practice made possible the accommodation of the powerfully emerging undercurrent of environmentalism within the dominant academic theory of the time. The emergence of the idea of caractère was also integrally related to the development of Romanticism, which had been reinforced by emerging awareness of the environment. Caractère was very much consistent with the needs that the new, free, asymmetrical organizations of the picturesque compositions were putting forward. For, a reconfigured framework of appreciation had to be formulated for these new situations, that the existing aesthetic categories of the academic tradition were not in position to cover. Several instances which were, later on, to acquire a normative significance in the methodological approach of regionalism, were, for the first time, beginning to be formulated there. The stress of the accidental instances that all of a sudden acquired a significance of their own helped another idea to be grasped and start, parallely, to grow: the notion of movement as connected with the appearance of diversified form.

> Movement is meant to express the rise and fall, the advance and recess, with the other diversity in form, in the different parts of a building, so as to add greatly to the effect of its composition.[13]

More than a century later, Moholy-Nagy declared:

> Openings and boundaries, perforations and moving surfaces, carry the periphery to the center and push the center outwards. A constant fluctuation sideways and upwards, radiating and allsided, announces that man has taken possession so far as his human capacities and conceptions allow, of imponderable, invisible and yet omnipresent space. . . ,[14]

bringing movement from the field of aesthetic appreciation to the tangible levels of the human realm. Regionalism will bring back this level in the holistic appreciation of architectural form.

The eighteenth century conception of character gradually acquired a variety of meanings. The idea of character as a congruity of mood to a specific landscape was carried further, and claimed even to disclose purpose. Character becomes the invisible link between type of building and the people who live within, leading the spectator ". . . very naturally, from contemplating the dwelling, to regard the pious character of its inhabitant".[15] Character became a term of multiple implications: class, species, style, behavior, attitudes; everything could be meant by the same word. Across its varied meanings, however, it maintained its specific characteristic of particularity. "Character in architecture as in physiognomy," says Loudon, "is produced by the prevalence of certain distinctive features, by which a countenance or a building is at once distinguished from others of the same kind."[16]

Even if in almost all circumstances a fascination with those "distinct features" overtook the significance of their particularity, the notion of character was finally successful in dissolving the hierarchy of values of the prevailing academic system. The fact that later on took a path to literally necessitate mere differences of style can be explained in the popularity it enjoyed in romantic dreams following their escapism from the critical locus to the lands of Utopia.

Growing discomfort under this situation transformed the conception of character. It had been generally well-sensed that character can hardly initiate itself and is not extraneous to a specific culture, but is partly its result. So, even if the "natural" quality was still preeminent in character conception, it was well advanced in being generally understood as the product of specific circumstances, due to interactions between a given individual, given material conditions, and a given cultural milieu. As Colin Rowe says, "Character became now a quality to be extracted."

Concomitant with this trend of thought was the quest for "national architectures" to symbolize the emerging new nationalities.

The demand for a "characteristic" national architecture, able to embody and express the high qualities and the hidden potential of the people of a nation, can be seen as being as much a derivative of the romantic consciousness of nature and history, of freedom and individuality (considering the personality of each "individual" nation versus the others) as it was also a result of a highly disciplined and rational positivism. "A national expression," says H. Harris,

> . . . is, at its highest, the expression of consolidation. A nation is a people consolidated. The purpose of a national architecture is to further unite people as citizens. Since the nation is essentially a symbol, a national architecture must provide an image of the qualities the nation symbolizes. Like a national literature, a national architecture must evoke images of the qualities people desire. . . . To the nation, therefore, the spirit of an architecture is its most important, its most valuable, its most practical aspect. [And] a national architecture, expressing symbolically the spiritual needs of the people, is therefore much more common than one expressing both spiritual and physical needs.[17]

Regionalism, forced to shape and foster "national" expressions, was, therefore, an imperative of restriction. The inclination of a national architecture to be identified with a particular style of a period important to the nation's historical development, could only support, by reason of association, a "symbolic" regionalism, devoid of any sense of the concrete reality of the evolving spirits of time.

Regionalism, as a "character"-istic attribute of architecture, went through several distinct phases: At the beginning, it was seen as new and poetic and, in romantic fashion, associated with nature. Later on, based on a more scientific approach to reality, it was considered an objective condition. Finally, it was thought of as a symbolic accessory employed to help forge national identity. By then, it had exhausted its creative potential to produce further development; as an epistemologically-grounded discipline, it required a new and clear theoretical basis. The new sense of urbanity that was developing at the time provided the revolutionary framework for

the new science to come. Paths to be followed thereafter, both in Europe and the United States, practically coincide chronologically but not always in substance. The conditions varied enormously and, therefore, despite the more-or-less unified conceptual framework applied, there were bound to be differences in the outcomes of its practice. Even within Europe, there were differences between northern, middle, and southern territories, producing quite different aspects and levels of architectural conception.

In England, France, and Germany, it was the theory of the New Science of the Civics that had been developing in the works of the first regionalists. In northern Europe, Scandinavia, and the Netherlands, due--among other factors--to their remoteness, events of a different kind were dominating the architectural scenes. The whole development, as D. Poryphyrios names it, was a very interesting one, overflowing with material "marked by an innovative rigour and a rare devotion of consciousness."[18] Scandinavian and Dutch architects at the turn of the century, being concerned with a wholesale reconsideration of the practice and products of architecture, were directing their inquiries towards understanding the act of building anew. The combination of classicism with vernacular expressions became the source of a renewed regionalism in those countries, truthful and respectable, able to constitute the roots for a long, valid development--as the course of later events would verify.

The history of architecture demonstrates that not only can a style emerge from an integral regionalism, but that a single architect may create a style that signifies a place--a style as vivid as the physiognomy of its milieu. For the first process, we have as examples the west European cast-iron naturalism, developed in the axis of Brussels and Paris by Horta, Van de Velde, Guimard; the Arts and Crafts movement in England; the Chicago Frame School in America. For the second process, we can adduce the regionalism of Gaudian Barcelona; Richardsonian expressionism in New England; Frank Lloyd Wright's regionalism of the mid-West; the Bay Region style in California.

All of these individual oeuvres nevertheless generally identified as the local expression of a place or region, won significance and appreciation on the strength of their intrinsic qualities and their ability to connote the image of their place.

1.2 Toward A New Architecture: The Retreat of Regionalism

Were we able to go back in time and take a quick look at the architectural scenes of both Europe and the United States at the end of the nineteenth and the beginning of the twentieth centuries, the impression would be of a rich and varied pluralism, ranging from a Beaux-Arts classicism and a Medieval revivalism up to various regional developments, where even the highly innovative modern trends reveal a complex diversity of response and perception. The major issue at stake in almost every debate going on at the time centered on the theme of the relationship between art and industry. Highly individualistic ideas concerning the role of artistic invention, closely linked with Arts-and-Crafts ideals, coexisted side by side with a strict architectural rationalism: the concept of logical and direct use of new materials to solve varied building problems; together with the notion of the architect as mediator between formal invention and industrial productivity, they gave the intellectual atmosphere of the time a powerful and creative impetus of an unprecedented type.

> Let us create a new guild of craftsmen, without the class distinctions which raise an arrogant barrier between craftsman and artist. Together let us conceive and create the new building of the future, which will embrace architecture and sculpture and painting in one unity and which will rise one day toward heaven from the hands of a million workers like the crystal symbol of a new faith.
>
> - The Wiemar Bauhaus, 1919

This highly spiritual proclamation expresses in the most condensed poetical form the ideal of balance between craft and science, and the unity of sensibility and reason. However, apart from a very short period of culmination, this concept had totally retreated in favor of a heavier weight on rationalist and positivist values.

Regional traditions and expressional sensibilities were, in fact, absorbed--perhaps dissolved is more accurate--into the emerging architectural trends which, around 1920, coalesced into the broadly shared qualities of an "International" style. Some of the elements contributing to the synthesis of the interwar period have already been mentioned. They underlie the salient notions operating in the craft/industry debate. Parallel to these, the continuing development of the rational understanding of history and construction, the new imagery called up by mechanization, and the moral yearnings towards honesty, integrity, and simplicity were additional reasons why architecture headed all the more directly toward universalism and away from the close and concrete views of a regional outlook. Detachment from concrete realities, however, might paradoxically be considered as one of the factors that led to the development of the sense of social responsibility that architecture, in the days of modernism, assumed in the name of humanity as a whole. The conception of mass society as the actual "client" of modern architecture as well as the pressing material conditions--full of contradiction and complexity--of the new industrial stage of civilization urged the formulation of a whole new perspective on practice. Under these conditions, housing--continuing the central position on the scene it had held since the nineteenth century--came to represent the paradigmatic object of modernist design and planning.

At the same time, housing represented an ideological conflict latent in the whole effort of the avant-garde. There was a contradiction between the imperatives of homogeneity and universality dictated by both industrial production and the emergent abstractionist ideals, and the ever-existing need for the expression of individuality which the house had traditionally secured, and of which it was always the primary locus. House design (even modernist house design) did, in fact, contradict modernism substantively; it did so by being the means to personalize the individual fragments

of universalism which houses comprise. Moreover, it was precisely for the extent to which it managed to achieve personification of universalism that it demanded to be judged. "Shared themes", after all, says W. Curtis, "are best understood in the light of individual intentions and unique conditions." This critique, however, could emerge only later, when modernism could be sensed and criticized as history; the necessary distancing perspective could not be found during the formative stages of its doctrines. Like most major shifts in the history of forms, the modern movement gave body to new ideas. It expressed polemical attitudes and utopian sentiments but whatever common qualities buildings may have shared within its sweep, they remained the individual products of artists with personal styles and private preoccupations.

The essential relation of agreement and cooperation between architect and the client had always been an essential and determining factor in architecture. "If the architect is too far in advance of his times to have the opportunity to build," says Lewis Mumford, "he will be an architect in name only." But there is also another side to this view; namely, that the great periods of architecture are those in which the client has, "by his sympathy and understanding", brought forth the architect's utmost powers. Perhaps that is why architecture is possibly a better indication of the general vitality of a society than any other art. What we can call the politics of architecture directly related to state and private patronage since the Renaissance, gained a new dimension with the architect's assumption of responsibility for the "housing question" during the nineteenth century. Growing preoccupation with the same matter is also amply demonstrated during the new century.

The emerging new architectural patronage was called "society" and, more recently, "mass society". But, even with this type predominant, in the period following World War I, modern architects found themselves dealing with a varying type of clientele. As Reyner Benham brilliantly puts it:

> The situation facing Le Corbusier, or anyone else hoping to erect modern buildings in Paris in the Nineteen-Twenties, was stimulating, frustrating and complicated. Intellectually the architects might find themselves aspiring to build on a large scale for a new mechanized society, but economically and socially they would often find themselves driven to erect small buildings of a specialized type for a class of patron they suspected as representatives of a dead social order. . . . The combination of intellectual abundance and physical restriction is one of the most striking features of this situation. . . . All in all, this was a promising environment for younger architects to develop a new architecture--except in the matter of patronage. This came, in case it did come, from a small, if cosmopolitan, section of Paris society which was already sufficiently sophisticated visually to accept architectural forms that, however functional and rational, were as unconventional as those of Cubist and Futurist art. In other words, the clientele of Modern architecture was composed of artists, their patrons and dealers, and a few casual visitors to the architectural section of the Salon d'Automn.[1]

Nonetheless, the conception of the whole society as the new client of architecture reinforced consideration of the urban problem as a whole, though in basically abstract terms. In trying to comprehend the logic of the twentieth century city, its inherent structure and its most efficient form, detachment from regional realities and escape from the inevitable limitations of short-term solutions was considered as one way to go but, nevertheless, the urban utopias of the twentieth century that sprang from this modern line of thought were not mere dreams. Rather, they came to signify, as Robert Fishman says, the Mannheimian meaning of the term "utopia", by proposing a coherent program for action--a product of thought that "transcended the immediate situation", and whose realization would "break the bonds" of the established society. Such a utopia, then, <u>invited</u> social mobilization instead of pushing it aside. The "client" had to provide the social awareness that architecture demanded if architecture was to realize those ideals. In this way, architecture entered the mainstream of the social movement, maintaining a close and direct relationship with the social and political issues of its time.

The devastating impact of the Depression in the late twenties and early thirties (especially in Europe) made those movements all the more crucial and their call for wider and more effective changes all the more persistent. The feasibility of architecture alone as an agent of social reform--however efficient, economic and standardized--was raising a serious question as to its role within the given capitalist context of the times. A more total and comprehensive approach was felt to be indispensible to overcome the ever-growing, problematic conditions. Regionalist planning, voicing a wide-ranging and highly critical assessment of society, along with its radically proclaimed planning reform, was reintroduced into the general philosophic discourse of the era.

As early as 1920, a small group named the Regional Planning Association of America (RPAA) was already formed, addressing directly the problem of uncontrolled metropolitan growth and its destructive results on all levels of urban and social structure. Comprising a small group of distinguished architects, planners, economists, and social critics, the members of the RPAA insisted that a new and thoughtfully planned regional form remained the only humane alternative.[2] Having set themselves the task of presenting an important contribution in the field of public housing and an innovative experimentation in community and neighborhood planning and design, the group's greatest collective contribution should have to be accounted for on their overall philosophic view which sought to replace the existing centralized and profit-oriented "metropolitanism" with a decentralized and more socialized form of society made up of environmentally balanced regions. As one recent commentator stated,

> The group's demonstrations of the region as the basic planning framework constitute one of the most important and still unfinished chapters in American planning history, now world-wide in their influence.[3]

The members of the RPAA entered the planning field more as open-eyed social critics than as special professionals. The first World War (I), having in many respects provided an immediate backdrop for the group's formation, also accentuated considerably its political and social sensitivities. This can be adequately demonstrated in the RPAA's active involvement in the housing problem. Their point of view, as expressed in Edith Elmer Wood's program of "constructive housing legislation", featured an alternative to the restrictive legislation of the public authority's schemes. Instead of trying to prevent the erection of bad houses through the establishment and enforcement of minimum standards, a "constructive" program would help provide an active public initiative in building adequate housing units.[4] The important conclusion of the whole idea was the explicit demonstration that regulatory and ordering devices, if not complemented by positive human participation, were at the least inadequate, if not--sadly, most of the time--actually destructive.

Sunnyside Gardens and the community called Radburn were two experimental residential developments, initiated by the RPAA and executed by its members Clarence Stein and Henry Wright, that made some of these ideas visible. The RPAA program of regional reconstruction was--considering the specific historical circumstances--extremely ambitious, but it had hardly any opportunities for realization. The nearly decade-long period of the group's activity (1922-33), however, exerted a strong influence on many later undertakings in that direction, most notably in the New Deal. No administration before or since has been so committed to national planning and, even though it put into practice only disjointed fragments of the RPAA's carefully evolved regionalism, it nevertheless constituted a major application of the idea.[5]

Similar regionalist visions at about the same period--between the nineteen-twenties and thirties--exerted a major influence on the European movements of Syndicalism and Neo-Saint-Simonianism.

These revolutionary movements, springing out of ferment caused by the dissolution of the old social orders, called for--among other things--a more comprehensive and organic approach to the pressing contemporary situation. In the field of architecture and urbanism, Le Corbusier and his extensive regionalist/syndicalist involvement constitute one of the most expressive examples of this parallel phenomenon in Europe. Le Corbusier's project for Algiers and its surrounding region notably manifests the shift in the overall problematic that characterized architectural thought in those years. The concept of "paradigmatic urban elements" ready to be modified and fragmented according to the site of their application gave way to comprehensive regional plans, specifically addressing the contours and economies of concrete areas. Regionalism was reintroduced into architecture, blended with the revolutionary fervor of the social movements that espoused it, as the only solution for the establishment of the "Brave New World".

Substantial modifications, however, began to appear in the ideological perspectives of the Modern Movement. The formal vocabulary that by the late twenties had turned to a strict, austere, stylistic formula--white planar surfaces, simple cubic forms, flat roofs, strip windows--was put under complete reconsideration. "The function of beauty is independent of the function of utility," Le Corbusier will declare in his "In Defending Architecture" of 1929.[6] The search for a new, more intuitive formal approach became paramount. The region, as the locus of human sensibility and the assurer of an organic evolution of the sensuous and ideal human sensitivities, was again appreciated as the source of the poetic and artistic aspirations for architectural form, which were severely restricted by the "machine-age" and mass-production rationalism. Syndicalism espoused regionalism for its potential to assure a more integral, comprehensive approach to a collective future.

The movement's conception of politics didn't refer solely to activities of government (or, broadly, of the State). Its use of

the term expanded to cover all that were concerned with the organization of the community or, even more broadly (though one must draw a line somewhere), with public affairs: politics comprised the affairs of the polis. Syndicalism was as much the continuation of the romantic tradition as Marxism was of the positivist one. Its guiding doctrine was, in Hubert Lagardelle's words, "L'action creè l'ideè".[7]

As historian Peter Stearns delineates, syndicalism stressed three major points:

- complete hostility to the existing capitalist order;
- a belief that economic rather than political means--notably the general strike--was the only successful way to attack this system; and
- a vague conception of a future society with a decentralized power structure, in which local economic units, directed by producers themselves, would be the basis of organization.

This last point, which introduced regionalism into the syndicalist's proclamations, was based on the idea of the human being as an "hôмme réel". The human being was an intuitive, emotional, "biological" being. "Esprit" was as important as "besoin"; art was as important as material quality. Syndicalism, or "regional syndicalism" as it was called later, eventually became an "organic" movement: political and economic change were to emerge spontaneously, growing from cell to region. Organization of the new society would reflect natural hierarchies, whether productive, geographic, or racial. Those were the "natural" frontiers which, as it was hoped, could even ensure world peace.[8]

The syndicalist vision of European reconstruction, by the 1930s, identified three administrative regions: the Mediterranean or Latin Federation; the Germanic Central Europe; and the Slavic USSR. Paris, Barcelona, Rome, and Algiers, for example, would be the cardinal centers in organizing the new Mediterranean region.

Le Corbusier's involvement with the syndicalist movement provided a great impetus to structure his scattered sentiments about such issues into a coherent body of principles written down in his Algiers polemical texts. In addition, his Algerian involvement stands out as the most structured introduction of those themes into the doctrinal body of Modernism. His preoccupation with the city's planning was an intense and quite long involvement. Forming the center of his urban involvement from 1931 up to 1942, it constitutes some of the best instances of a reintroduced regional problematic within the overall preoccupations of the Modern Movement. The intersection of a unique topographic experience with an intense cultural one moved him deeply. His series of proposals offered a striking new way of perceiving urban organization.[9] He called the first proposal Obus ("shell") in order to emphasize the schematic nature of a first approach but, nevertheless, to also connote its creative potential. As it turned out, the name was retained throughout the course of Le Corbusier's involvement, infusing the realistic aspirations of the plans with its poèsie.

Change and adaptability are the notions central to the Algiers proposals; the regionalist ground-concepts of an organic evolution from cell to country impinge as well. Le Corbusier introduced into Algiers the linear organization of the urban structure, permitting organic growth and biological development of the city. On this point, Anthony Vidler notes the "surprising overlapping" of the linear Algiers with the Soviet planning schemes of the early twenties.[10] An almost complete submission to the organic order implicit in the natural landscape alludes to a new lyricism of attitude towards the environment, either human or natural. This new environmental awareness greatly influences the design approach, pointing it towards a reinterpretation of the relationships established between nature and artistic form.

The recognition of the existence of a Mediterranean cultural self-consciousness pushed the inherent possibilities of a regional

planning effort to a peak. Out of enthusiasm for the revelation of this autochthonous force, its generative capacities were carried to almost utopian extremes. All the major aspirations of regionalism were manifested in the Algiers' proposal: the catalytic importance given to the cultural milieu and its values, both material and ethical; the principal attention paid to the city's economic structure and processes, as well as the use of its political status--in this case, in the hypothetical structure of the Mediterranean region--in propagating the symbolic union between East and West, through the scheme of a "cité d'affaires".

Essential modifications, though, were nevertheless apparent, introducing new elements into the doctrinal body of this "modern" regionalism. What Le Corbusier had from the first minute realized, and history simply affirmed, was that the implementation of such a plan would have to be imposed from above.

> In the present administrative state, only the highest authorities of the country can permit the necessary innovations, create the useful precedents, authorize the ignoring of old regulations, permit the plan to enter into life.[11]

This was a significant alteration of the standard previous regionalist proclamations, that opposed any authoritative intervention in the regional pace of growth. The Algerian experiment was, in a sense, a rejection of substantial regionalist assumptions that had been provided by an evolutionist outlook on reality. The schism generated with the development of the Modern Movement could not be overcome in a single move. If an effective regional development was to be started, the Geddesian "civic survey" that was proposed half a century ago as the guiding light in realizing civic change had to replace the artist-genius that modernism posed as the only agent responsible and able to understand the spirit of the age and propose solutions. The "decreè of death", as Le Corbusier named it, disbanding the planning commission of Algiers, signals also the

moment of death of the attempt to submit regionalism to a deterministic conception of architecture, totally devoted to the heroic manifestoes of the earlier period.[12]

In a broader context, the parallel failure of the RPAA's idea--espousing a more straight notion of regional reconstruction, threatening the perennial notion that metropolitan growth was good and speculative development necessary regardless of the consequences--reveals the reasons why the regionalist alternative never achieved a level of practical coherence. The kind of public intervention that a true regional planning effort required could never be accomplished directly, as it conflicted with the substance of the laissez-faire system. Both attempts, however, if nothing else, helped to exemplify this substantial issue of hegemony (which has been implicit in my discussion so far) and to direct future attempts in confronting the problem through more complex and sophisticated tactics.

1.3 Critical Regionalism

Clearly, by 1950, architectural practice and its symbolic aspirations were facing a catholic (across-the-board) crisis. As Tafuri says:

> If architecture [was] now synonymous with the organization of production, it [was] true that beyond production itself, distribution and consumption [were] the determining factors of the cycle also. The architect is an organizer, not a designer of objects. This assertion of Le Corbusier's is not a slogan but an obligatory directive that connects intellectual initiative and the civilization machiniste.[1]

Re-examination of the state of contemporary architecture by means of considering its tactics anew is widespread in the criticism of the time. Rationalism begins to be identified with what it really is; namely, the product of Western mentalitè, breaking down the universality of its roots and thereby its hegemony. The mental outlook "shared by primitive and eastern man"[2] becomes recognizable as the missing link for a wholeness of approach that human civilization had to pursue if civilization was to be total. "Experience is slowly showing us that the rationalist and exclusively materialistic attitude, upon which the latest phase of western civilization has been grounded, is insufficient," Geidion admitted early in the 50's. "Full realization of this fact, can lead us slowly towards a new hybrid development--a cross between Western and Eastern."[3]

Philosophy had always been involved in architectural discourse, to support the search for sources of unity within its doctrinal body. But, in addition to any other source of unity that it might have, architecture, by being the visual result of a process, must also rely on a visually related body of principles. Based on these presuppositions, then, and on the reconfigured framework of a new world-wide mentalitè, the question of the new form of contemporary architecture gradually took shape. Cautiously avoiding "hovering" labels of style--much more an international one--, it focused

attention onto the relationships existing between common mental outlooks and their expressions in built form. Rediscovery of the reality of multiplicity, the significance of the particular, and the validity of the diversity in the human world, all these within a uniting context of the environment of each development constituted the ground for the return of a more conscious and sophisticated regionalism into architecture and, in retrospect, were implicated in the very formative stages of the modern style. As Giedion would suggest in 1954:

> Now that we are separated by several decades from the birth period of the early twenties, we are able to discern that certain regional habits and regional traditions lay concealed within the germinal nuclei of the various contemporary movements.[4]

The period between 1928 and 1956 was one of the most fertile ones in the history of architecture and was culminated by the CIAM movement.

The Vicissitudes of Ideology: CIAM and Team 10

1. The idea of modern architecture includes the link between the phenomenon of architecture and that of the general economic system.

2. The idea of 'economic efficiency' does not imply production furnishing maximum commercial profit, but production demanding a minimum working effort.

3. The need for maximum economic efficiency is the inevitable result of the impoverished state of the general economy.

4. The most efficient method of production is that which arises from rationalization and standardization. Rationalization and standardization act directly on working methods both in modern architecture (conception) and in the building industry (realization).

5. Rationalization and standardization react in a threefold manner:

(a) they demand of architecture conceptions leading to simplification of working methods on the site and in the factory;

(b) they mean for building firms a reduction in the skilled labour force: they lead to the employment of less specialized labour working under the direction of highly skilled technicians;

(c) they expect from the consumer (that is to say, the customer who orders the house in which he will live) a revision of his demands in the direction of a readjustment to the new conditions of social life. Such a revision will be manifested in the reduction of certain individual needs henceforth devoid of real justification; the benefits of this reduction will foster the maximum satisfaction of the needs of the greatest number, which are at present restricted.

- La Sarraz Declaration,
Congres Internationaux d'Architecture Moderne, 1928.

The 1928 CIAM declaration, signed by twenty-four architects, representing France (6), Switzerland (6), Germany (3), Holland (3), Italy (2), Spain (2), Austria (1), and Belgium (1), emphasized building rather than architecture as "the elementary activity of man intimately linked with evolution and the development of human life." CIAM openly asserted that architecture was unavoidably contingent on the broader issues of politics and economics and that, far from being removed from the realities of the industrialized world, it would have to depend for its general level of quality not on craftsmen but on the universal adoption of rationalized production methods. Where four years later Hitchcock and Johnson were to argue for the preeminence of style as determined by technique, CIAM emphasized the need for planned economy and industrialization, denouncing as it did so efficiency as a means for maximizing profit. Instead, it advocated the introduction of normative dimensions and efficient production methods as a preliminary step towards a rationalization of the building industry. Thus, that which aesthetes would regard as a formal preference for regularity was for CIAM the initial prerequisite for increasing housing production and for superseding the methods of a

craft era. The La Sarraz document took an equally radical attitude to town planning, when it declared:

> Urbanization cannot be conditioned by the claims of a pre-existent aestheticism; its essence is of a functional order . . . the chaotic division of land, resulting from sales, speculations, inheritances, must be abolished by a collective and methodical land policy. This redistribution of the land, the indispensable preliminary basis for any town planning, must include the just division between the owners and the community of the unearned increment from works of joint interest.[5]

Despite the generality and its claimed universal applicability, though, the tone of the CIAM period remained always dogmatic, revealing a very narrow conception of both architecture and town planning. Rigid functional zoning of city plans, with green belts between the areas reserved to the different functions, and a single type of urban housing, were their unequivocal commitments.

Early in the 50's, the political authority of the CIAM was severely challenged from within by the formation of the TEAM 10, which first appeared in the ninth CIAM meeting held at Aix-en-Provence in 1953. Stressing the search for the structural principles of the urban growth as the basis of a new attitude towards urbanism, TEAM 10 challenged in substance the functionalism of the Athenian Charter. Their belief in a programmatic and social evaluation of the city remained intact. The reaction was directed mainly against the utopian idealism of the old guard. They sought to substitute for it an equally ideal notion upon an anthropological mysticism, though. However, their critical drive to find a more precise relation between physical form and socio-psychological needs accomplished a great deal for re-orienting architectural thought toward a regionalist outlook. The phenomenological categories of house, street, district, and city proposed by the Smithsons--the continuous functional depiction of the urban structure developed by Candilis, Josic & Woods(1963) or the anthroposophic analogies of Van Eyck--all were attempts to introduce the possibility of an empirical approach along with the essay at a redefinition of the most appropriate

form for each occasion. Among the members of TEAM 10 itself, differences of opinion and approach were substantial.

Aldo Van Eyck was one of the major figures within the team and his influence on its philosophy as well as on the philosophy of more recent architecture was profound and broad. Coming as he did from Holland, where a coherent emergence of localized "schools" has had a long history and tradition, he centered all aspects of architectural conception around a keen understanding of "place" and "occasion", understood as formalized reductions of "space" and "time". Imbued with anthropological awareness and concern throughout, his approach can be aptly named "anthropocentric regionalism".

> It's all so obvious: we must evolve a richer tool--a more effective way of approach--to solve the environmental problems our period poses today. These problems will not remain the same, but they concern the same man, and that is our cue. We can meet ourselves everywhere, in all places and ages - doing the same things in a different way, feeling the same differently, reacting differently to the same.[6]

With the belief in the efficacy of the new technological civilization rendered totally obsolete, the return to an anthropological ground of validating life acquired new significance. Focus is directed at the archetypal notion of the human substance underlying the existence of any human being, as well as upon the ways it is transformed under the influences of "place" and "occasion". The task of the architect is to emphasize these coincidences rather than insist on a process of abstraction removed from reality: "architecture need do no more than assist man's homecoming."

Oriol Bohigas mentions the impact that the structure of primitive residential settlements have had on Van Eyck's conviction regarding the possibility of a new cultural and natural freedom handed to the people through structured space. "This freedom," Bohigas asserts, "demands a certain participation of the user in the design task and above all, in the ultimate realization of the artifact."[7]

Van Eyck, as well as Bakema and many other architects of the same stripe, are categorical regarding the obligation of the architect "to define in space his [or her] personal opinion about life". This participation, however, according to Van Eyck, should never be extended beyond the point of its formalization within the discipline of architecture which, through its geometric laws and symbolic references, assures the coherence of its structuring elements with natural law.

The second general characteristic of such a new "regional" philosophy is its dedication to the act of building. The "generality" of its anthropological preoccupations--that seemed so determinant in the new direction--is being counterbalanced with the "particularity" of the building act. The effort is to accomplish built meaning; ". . . so get close to the meaning and build" Van Eyck asserted flatly.

The new movement didn't reject the tradition of the Modern Movement in toto. It didn't propose a whole new theory about architecture. But, it did create a base for re-establishing the lost values and concerns from which the Modern Movement had slid. And, "to discover anew, implies discovering something new," Van Eyck noted in the Otterloo meeting:

> Translate this into architecture and you will get new architecture--real contemporary architecture. Architecture implies a constant rediscovery of constant human qualities translated into space. Man is always and everywhere essentially the same. He has the same mental equipment though he uses it differently according to his cultural or social background, according to the particular life pattern of which he happens to be a part.[8]

Van Eyck's ideas and writings, shared by a large number of architects--close in a chronological and philosophical but not exclusively geographic sense--brought about a significant change. Along with Louis Kahn's poetico-existential structuralism of the times, Aalto's expressionistic experiments, and the ethical revolt of the Brutalists in England--to name but a few of the most formalized approaches--these movements helped foster grounds for a new elementary

approach towards the appreciation of "the subtle procedures of synthetic contradictions", as Kenneth Frampton phrases it.

What keeps a central position in the minds of all proponents of the new critical regionalism is the binary nature of the modern state of life and its dialectical processes. The half-century-old Geddesian categories of "paleotechnics and neotechnics"[9]--similar to H. Odum's developed distinctions of "technic- and folkways",[10] or what Paul Ricoeur terms "Universal Civilization versus National Cultures",[11]--constitute the basis for understanding the current situation. There is no claim or aspiration in substituting the one as superior to the other, an attitude favored by the heroic periods of the beginning of the century. The failures of those attempts remained so vivid in mind for the effort to be abandoned, leading to a return to fundamentals.

> The elements required are simple: walls, roofs, doors, staircases. . . . In the combination of these elements one may stimulate the relation of man with light horizon, trees and spaces. Each man has the right to be in contact with that phenomenon called total life and it's through constructed volume that it may be attained.[12]

The meaning of the built artifact is identified with the will of its inhabitant (real or hypothetical, but nevertheless considered) to establish his personal relation to and opinion of "total life". Toward this end, architecture should make sure that "the fear of total space" is being transformed "to a respect and confidence in this space". Accomplished buildings will take over a didactic role in the continuation of the battle for the new environment, if the right choices had coordinated their execution. These are the choices existing between:

Creation or routine,
way of living or aesthetics,
freedom or dictatorship,
simultaneity or hierarchy,
integration or chaos,

Town-planning or administration,
structure or decoration,
function of architecture or functionalism,

in Bakema's words.[13] The architectural periodical, Forum, in its first collective publication after the war, in 1949, wrote:

> The period 'to possess' is being replaced by the period of 'to be'. We measure space by means of 'house' as we measure time by means of hour and day. Splitting of the atom will become construction of a new labour process; by imagination we can transform the wonder of total space with sun and stars into a habitable environment. Imagination turns 'battle against' into 'to be familiar with'. New is always social.

The new approach is elementary--hence based upon fundamentals--and starts once more from the bottom up. Space, architecture's principal medium, has no existence unless in the image of a humanly conceivable "place". The place/space conception, then, introduces the parameter of "time" into the design process, for "cosmic time" does not exist, only history, which comprises the coming together of the million minutes of the everyday occasions that fix space and time into the memory of people. Human beings, under those presuppositions, introduce their metric scale as the measure of all things. "Place", by extension, becomes the house, and the city, and the realms in between. Boundaries are dynamic in that they render visible and active the relationships among things. With their binary nature--material and psychological--they are capable of partaking of both the "spatial" and the "human" realms, achieving their fusion. Boundaries become the material existence of the in-between space and, from an abstract line in the task of dividing, they are transformed into a state in accomplishing the task of joining. Boundaries are culturally specific and culturally determined, and are even more finely specified at particular conjunctions of place and occasion: In the way each place, with its corresponding social context, lays out its boundaries, expresses its inner sense of identity.

For the "northern" Van Eyck, what matters is: "not space but the interior of space--and [even] the inner horizon of the interior", while Mediterranean Konstantinides would claim for his "life-vessels" the utmost articulation of both inside and outside, according to the outdoor life style determined by Greece's temperate climate.[14] Ambiguity--the natural result of this simultaneous coexistence of the presence and absence, of anticipating and remembering--renders space the deep essence of architecture. Boundaries, by becoming space, transcend visibility and are able to soften the hard edges of any division. The street, the neighborhood, the city, become one total extended inner-outer realm. Architecture and urbanism thus become one inseparable entity: "a twin-phenomenon", in the words of Van Eyck. Using the metaphor breath--its alternation of in and out--he comes to speak about

> . . . unity and diversity, part and whole, small and large, many and few, simplicity and complexity, change and constancy, order and chaos, individual and collective; with why they too are ignorably halved and the halves hollowed out; why they are withheld from opening the windows of the mind. . . . What has right-size is at the same time both large and small, few and many, near and far, simple and complex, open and closed; will furthermore always be both part and whole and embrace both unity and diversity, not as conflicting polarities or false alternatives; these abstract antonyms all carry the same evil; loss of identity and its attribute, monotony.[15]

These words restate the same conscious quest that scientific regionalism had put forward as the only way out of the dead-lock faced by modern civilization, as developed almost half a century ago. Reciprocity and relativity between and among all measurable and non-measurable phenomena, a simultaneous thought of their synthetic contradictions is what the several approaches of critical regionalism started to realize. Architecture, having reached with Modernism a level of an unsurpassed dense and intricate analysis, was in the position to once again focus attention outside the sterile scientific domain of its discipline, if all that knowledge gained

were to be absorbed in and for life. It was not a question of rejecting Modernism; this was (is) the most precious heritage any period would like to possess. It was an issue of fighting back with moral strength its false and deceiving images. And, such a stance, if it was to be taken up, required once more a conscious and strong state of mind.

* * *

In relying on comprehensive ways of considering reality and stressing a holistic approach in the discussion of all problems, regionalism, as we have already seen, has offered a revolutionary alternative that reflects the ever-changing and evolving relationships generated by human environment. As an organized complex, the human world is seen to be composed of structural levels, each level semi-autonomous in its existence and mode of operation, while all levels are seen to interact with one another to form an integrated whole. The wholes are "more than the sum of their parts"; they form levels of reality irreducible to their constituent parts. Tactics of mere separation, then, cannot provide a complete spectrum of reality. Wholes are also extended in space, as to contain the parts within them--i.e., topological inclusion--and they are functionally effective in that, although they themselves are made up by parts, they have the power to shape and condition the state and development of the parts--i.e., functional dependence.

In short, the holistic perspective of the regional approach posits the existence of macro-formations which constitute the environments of the individual artifacts and human beings. Holism is, needless to say, a philosophical position associated with organicism, the broad theoretical orientation which approaches any given subject under the general concept of organism and life. Holism implicates organismic analogies, and organicism brings in a holistic perspective. The two share the same epistemological content.

This established, the "anthropocentric regionalism" that we identified--for instance, in Van Eyck's approach--as well as the "organical" references mentioned in relation to architectural processes--i.e., the constant reference to the phenomenon of "total life" and their connection with Regionalism--are all seen as historically correlated and justified. This should draw us to conclude that those manifestations do not simply illustrate an idealistic, humanitarian shift of architectural thought and criticism in a period

of crisis of their concepts and values. They reflect, rather, the evolution of this underlying path of development of thought, that reaffirms the fundamental epistemological interdependence between the concept of environments and that of organism.

Just as the general idea of "environment" presupposed and arose along with the idea of life and organism, the possibility of environmentalizing artifacts was correlated with the emergence and development of an organismic approach towards the human world. Artifactual environmentalism, thus, being the situation that permitted regionalism as a method and attitude to be developed on scientific domains, is in its deeper level prompted by the same logic that operates throughout the entire process.

Life poses itself as a mediator between the phenomenological world and its transcendental order "that the architect as master-artist has to reveal".[16]
Architecture, as the thoughtful making of spaces ". . . is not a filling of areas prescribed by the client. It is the creating of spaces that evoke a feeling of [an] appropriation [of life]."[17]
Life is also the factor that sustains that paradoxical proposition of regionalism; namely, that regional culture is at the same time a world culture, too, holding within its restless unfoldings the possibility of the simultaneous existence of both.

With the universal transformations of modern civilization in mind, regional understanding, passing through the processes of cross-fertilization and reinterpretation between rooted traditions and universal influences, represents a dialectic realism of a critical architecture. To analyze civilization's synthetic structure, the mind has to dig deep within the logic of its particular units, as the only way to reveal both the internal processes and their overall integration.

PART II

REGIONALISM AND GREEK ARCHITECTURE

P A R T I I

In Search of Identity

Our country is closed in,
all mountains,
that day and night have
the low sky as their roof.
We have no rivers,
We have no wells,
We have no springs,
only a few cisterns --
and these empty --
that echo,
and that we worship.

A stagnant hollow sound,
the same as our loneliness,
the same as our love,
the same as our bodies.
We find it strange that once
we were able
to build new houses,
huts and sheepfolds.
And our marriages,
the cool coronals
and the fingers,
become enigmas,
inexplicable to our soul.
How were our children born?
How did they grow strong?

Our country is closed in.
The two black Symplegades
close it in.
When we go
down to the harbour
on Sunday to breathe,
we see, lit in the sunset,
the broken planks from
voyages that never ended,
bodies that no longer
know how to love.

- Giorgos Seferis,
  Mythistorima, 1900-1971.

1.0 REGIONALISM AND GREEK ARCHITECTURE

Part II presents a "particular case" of regionalism through the examination of a particular manifestation of regionalism in Greece. The work of the architects Dimitris and Suzana Antonakakis, representing a line of development consistent with a regionalist problematics and in continuous evolution through their practical experience, is going to be the vehicle of this examination.

Before discussing their contribution, however, it is essential to take a backward glance at the historical and cultural context that nurtured regionalist ideas in Greece, and to take a look at the first exponents of Greek regionalist architecture, as well. The Antonakakises' work continues a path of self-proclaimed regionalism based on the work of such previous architects as Pikionis and Konstantinides, who themselves picked up a thread of evolution stretching back to another leading figure, the architect Aristotelis Zachos.

Zachos, at the turn of the century, worked primarily in northern Greece, and especially in Thessaloniki where, due to its late liberation from the Turks after the Balkan Wars of 1912-13, the neoclassical embellishment so characteristic of the new Kingdom of Greece had not asserted itself; no more had it had the chance to touch the rest of the northern cities and towns. These northern areas of Macedonia and Eperus, having shared since the seventeenth century a rich tradition of masons' guilds whose fame extended well beyond the boundaries of the vast Ottoman Empire in the north and east, demonstrate to this day a precious and flourishing practice of indigenous, so-called "Traditional Macedonian" architecture. The strong presence of the Byzantine civilization, along with the continuous urban character that most of these northern areas had experienced, is manifested in the numerous churches, monasteries, and other ecclesiastical buildings as well as in the "traditional" residential quarters that survive in all the major northern cities.

Thessaloniki especially claims one of the bigger--if not the biggest--collection of prime Byzantine monuments. The dense and highly structured urban fabric of these areas provided the unified framework within which a generative attempt for a new native expression would be more likely to appear and grow.

But the major trend in late-nineteenth century Greece comes from the "rediscovery" of the folk tradition. This fact became evident late in the century, when the social and economic unification of several sectors of Hellenism made possible the realization of the first large Kingdom of Greece. The cultural unity that has been promoted through the foundation of the first Greek University in Athens lent further strength to the administrative and economic development of the country. The formation of the Independent Kingdom, by putting an end to the intellectual diaspora of the Greek scholars that had been occurring ever since the Turkish occupation period, provided the necessary conditions for the beginning of a new spiritual life of the country.

Besides northern Greece, another part that would prove essential to the course of future development of the country were the Ionian Islands. Their unification with Greece--much earlier than the annexation of Macedonia and Eperus--introduced an unprejudiced and liberal spirit for the appreciation of the whole Greek tradition and not just the classical past that had been persistently stressed by the Bavarian royal court and the feudal aristocracy of the first years of independence (1833-1909). Aspiring to hold the country's intellectual life exclusively to classical Greece, the emergent Greek nationalism insisted on an ahistoric use and "purification" of every contemporary expression, toward the crystallization of the "Big Idea" of a revived classical Greece. Byzantium and its "filthy character" are totally rejected as a representative period of Greek history, not to mention the complete neglect shown to the popular civilization of the time of the Turkish occupation.

The Ionian Islands also transformed the basic feudal organization of Greek society, by introducing the clear and definite social formations that they developed under conditions paralleling those of the socially advanced West. Ideas began to evolve, sometimes following, sometimes preparing the ground for a liberal reform movement that was beginning to emerge.

The ethnic problem finally became a critical point of departure for re-establishing the value of the folk tradition. Disregarded by the official State, this tradition (as we have already seen when we looked at Macedonia) continued to develop in the northern areas and in the islands. It is on the island of Zakynthos that the poet Dionysios Solomos (1798-1857) was born. His oeuvre, no matter how fragmentary as it is, represents a new phase for hellenic self-consciousness which the poet consults to "learn and consider national what is true". Solomos didn't live to see the unification of his island with Greece, but a whole line of followers continued his effort, trying to make his work known to the Greeks of the Kingdom, either by simplifying his poetry or by applying it to the actual socio-political conditions. All of them use the folk language (the demotic) which is considered the only means of direct and honest expression. This is the so-called "Eptanisiaki Scholi", the Heptanesian School which, in the period between 1850-1875, began to influence the so-called "Athenaiki Scholi", the Athenian School, ultimately transforming it completely.

The geographical bonds between the islands and northern and southern continental Greece (Eperus and Peloponnesos), the intellectual figures who either lived in Athens or remained in constant contact with the capital--G. Tertsetis (1800-1984), A. Valaorites (1824-1879), and Andreas Laskaratos (1811-1901)--act as intermediary links and, finally, the islands' unification with the mother land (1864) contribute to this intellectual revitalization.

The writers of the Athenian School, whose oeuvre develops between 1850 and 1875, have in fact actual realistic interests. Their language, certainly not demotic, is nevertheless not archaizing. All of them were inspired by the Strives of Greek Independence. The chroniclers of the War of Independence, with their efforts to represent historic reality, instinctively understood the ethnic problem, triggering (or "sparking") the development of a historical consciousness which the historians of Independence will expand even more.

The reaction of Greek and European historians to Felmereier's theory about Greece, which called into question the continuity of the Hellenic nation and denied any connection between modern and Classical Greece, gave this consciousness a "shot in the arm". A phenomenon common to all new states, the "Big Idea" searches for its support into history. Spyridon Zampelios, for example, defends the continuity of Hellenism and rehabilitates the Byzantine reputation which had been devalued by the admirers of the classic antiquity. Konstantinos Paparregopoulos, in his classical work History of Hellenic Nation from the Ancient Times up to our Epoch (1860-1874), gives the most complete formulation of this idea of continuity, in trying to trace the unity of Hellenism throughout the centuries. The unidirectional conception of this work does not subtract anything from the generative value of the idea which, for its time, constitutes progress. It is, in the final analysis, a reaction to the exclusive worship of Classic Antiquity, since it stresses attention to all historical periods of the Greek people.[1]

This same idea promotes the study of contemporary Greek folk life, including attention to customs and literature. In 1871, N. Politis (1852-1921) published The Study of the Life Style of Contemporary Greek People, and establishes "Laography" (folk sociology), which has as its aim the search for the vestiges of the past within contemporary folk life.

This whole development constitutes, then, another progressive step: the idea of the return to the past is set against the effort to discover the past within the present. This kind of intellectual dynamics is thoroughly reflected in Zachos' work, as manifested in the first decades of the century. He painstakingly--and with an almost Piranesian perseverance--recorded the innumerable variations of indigenous architecture (Fig. 2,3,4). The integration of the structural principles of traditional building techniques which he discovers, as well as the critical use of the formal vocabulary of the local traditions is manifested in his architectural projects (Fig. 5). Holding firmly to a noble and austere Byzantine Classicism reflecting the indigenous milieu of northern Greece that we earlier on pointed out, Zachos nevertheless introduces an innovative and, at the same time, highly regional national style for Greek architecture.

In 1917, the year of the devastating fire in the city of Thessaloniki, which destroyed the whole central district, Zachos participated in the International Committee formed by the Venizelos Government to work out the new urban plan for the second largest city of the country and the reconstruction of its devastated section. The Committee also included the planner Tomas Mawson; the architect/archaeologist/Grand-Prix-de-Rome Hernest Hebrard; the young Greek architect, newly returned from Hoffman's office, Kostas Kitsikis; the Director of the National Technical University Angelos Ginis; and the French hydrolic engineer J. Fleyber. The outcome of this undertaking included the first modern plan in Greece, outlines for a modern Building Regulation Code, and several proposals concerning the reconstruction of the central zones of the city. Of these,only the project for the City Hall area, in the center of the town, representing the first attempt to combine the architecture of single buildings and the urban fabric in between them, was carried out but only partially. To the limited extent that the project was actually

realized, it left traces evident in Thessaloniki to this day. (Fig. 6) "The new city plan was distinguished by a high level of academism, which was nevertheless dedicated to the effort to promote the magnificent Byzantine monuments of the city."[2]

Zachos's project for the ecclesiastical administration building in Sparta reveals the same "regional Byzantinism"; however, this work departs toward a more simplistic articulation of form, holding seeds of a late Hellenic-Art-Nouveau composition. (Fig. 7)

The path and direction taken by the younger architect Pikionis (1887-1968) was similar; however, it added references to the developing Modernism of the teens.

> To understand and appreciate Pikionis work, the criteria usually applied to architecture may prove inadequate. The quality and importance of his rich contribution as teacher, architect and intellectual, centering in his search for a 'neohellenic mode of expression', demand a more general approach.[3]

Pikionis came to architecture fully aware of the intellectual problems of his times and "unspoiled" by formal training in architectural schools--which, at the time, were noted for eclecticism. He was trained as an engineer in Athens Technical University and as a painter in Munich and Paris, not entering the field of architecture until his last year of study in Paris. He took lessons and attended Chifflot's Studio, receiving his Diploma of Architecture in 1912. His instinctive approach to "the simple people's feelings", enables him to understand the full meaning and value of popular art, and makes him try to integrate its forms into the complex and contradictory contemporary conditions. The synthesis of those contradictions becomes for him the major artistic problem to be solved.

Pikionis had been a true pioneer, beginning an honest and deep critique of modernism. Van Eyck believed "he ought to have been considered as the first member of Team 10 , and Mumford unhesitatingly includes his work as one of the best examples of regionalism.[4] He builds his first house in 1923 (Fig. 8) and the second followed in

1925 (Fig. 9). Regarding the second house, he explains in his "Autobiographical Notes" of 1958:

> I was inspired in its design from a representation of an ancient house in Priene, reconstructed in drawing by Orlandos. When I saw it I said to myself: this is Greek and does not have elements that belong to a particular category of time and place. The square of the windows, the long openings through posts and beams, the elimination of the roof extension, were all achievements that were approaching the solutions of the Modern Movement; you could nevertheless find them in our vernacular tradition too.
>
> When I studied this movement, I saw that only one step separated me from it. If most of us accepted it by that time, it was for these reasons: namely, that it was severe and simple and governed by a geometry of a universal scheme, possible to symbolize our epoch.[5]

His fresh outlook helped him discern the impasse of modern architecture as early as 1930 (Fig. 10): "It was then that I thought that the universal spirit had to be combined with our ethnic one." Being himself a very sensitive painter, in following Cezanne's pictorial breakthrough, he was led beyond Western mentalitè and ideals towards more esoteric and transcendental Eastern and Byzantine ones.

What Giedion in the introduction to the Japanese edition of his Space Time and Architecture regretted not having taken into consideration, the Greek context--as we previously discussed with Zachos--was naturally providing the anxiously searching minds. In 1932, Pikionis completed his elementary school in Lycabetus Hill in Athens (Fig. 11). When it was finished, it did not satisfy him, and he tried a new tack with the Experimental School of Thessaloniki (Fig. 12) in 1933-35, which signalled the direction that all of his following work was going to take.

> It is true that Pikionis with his ornamental feeling--which is a basic characteristic of popular art--and with his understanding of the attraction that form exerts upon its servants as well as the materials demanded by this technique, of the

simple stone of the Greek mountains, of the slate stone or the brick; he managed with his ornamental games to revitalize an authentic artistic trend.

Based always on the purposefulness of form and space, something which constituted the beginning of popular creation too, he brought closer to our senses the attractive picturesque quality of the variety of spaces and volumes and surfaces, and made richer with kindness and purity the formal scheme, the line, the color.

Thus, this naive romanticism of the old . . . tries to return to the primitive source of artistic creation, the pleasure in good, authentic material, the simple form enhancing it, the honest taste which creates without pretention and conceit.[6]

Pikionis gave examples of solutions which may be said to constitute hallmarks in the evolution of contemporary Greek art. He was able to do so because he considered art and architecture as a complete whole and understood their substance as the formal outcome of a collective artistic consciousness filtered through the centuries and through the people's sensibilities.

The reformation of the path-approaches to Acropolis and the hill of Philopappus, of the years between 1951-1957, was the realization of an ideal place made for the occasion and not another of the cold, cold examples of everyday architecture. To say the least, this meticulously carved piece of self-consciousness and self-realization represents, literally, the path of Greek architectural consciousness towards the future. (Fig. 13)

Parallel to the search for the indigenous inheritance, the influence of developing rationalism kept a firm hold on Greek architectural expression of the period. This is the direction which the other leading figure of Greek regionalism, Aris Konstantinides is realizing. The vision of a unitary geometry and the organizing power of a universal grid, crystallizing an order of superior validity felt to transcend the mere geometric or symbolic nature of architecture and to express themselves equally in the essential effectiveness of traditional life and in the authentic rhythms of nature, was what Konstantinides realized in his regionalist works.

Younger than Pikionis and with a sophisticated rationalism fused with a vernacular commitment, he established a cognitive ground for a regional approach in modern Greek architecture that turned out to be of great importance to succeeding generations of architects. His buildings grow out of the natural setting and allude to an austere classicism, yet with a burst of archetypal primitiveness and a spare meticulousness. The summer house near Sounion is quite simply a protogenic piece of high regionalism (Figs. 14,15,16). It evokes a feeling of sensual and earthbound rootedness that springs from the classic simplicity of its forms, depicting the volumetric compositions of the rocky and naked environment, the local stone of which climbs the walls to support the concrete slab of the ceiling. "We can conceive of a house with only a roof, but a house consisting of walls only, without a roof, cannot give us shelter or protection from the elements."[8] Architecture for Konstantinides is the device human beings invented to protect themselves from the elements: "It's first and foremost a shelter, and this means principally a roof and the frame supporting it at a certain distance from the ground."[9]

Positing the framing structure as the decisive element of the art of building, Konstantinides asserts that architecture is essentially a matter of the intersection of inside and outside; it is the organization and interplay of enclosed, semi-covered, and open-air spaces--rooms, courtyards, porticoes, patios, and loggias--that can be assembled within the enveloping frame-structure of the building. Support elements such as columns and walls, resembling and depicting the physical qualities of natural prototypes--trees, rocky surfaces, forests, walls--are granted an ontological status in his notion of architecture, while the roof is the "rational" device, totally subject to the human ability to make it stand "at a certain (desirable) distance from the ground". Uninterrupted horizontal roof slabs, extendable to long dimensions, were made possible by modern concrete techniques, and signify one of the largest single

advances in the art of building in general. Konstantinides's roofs are always made from exposed reinforced concrete and they are placed in such a manner as to intensify their distinct ontological quality and to underpin the difference between their role and that of the supporting elements (Figs. 14,15,16,17).

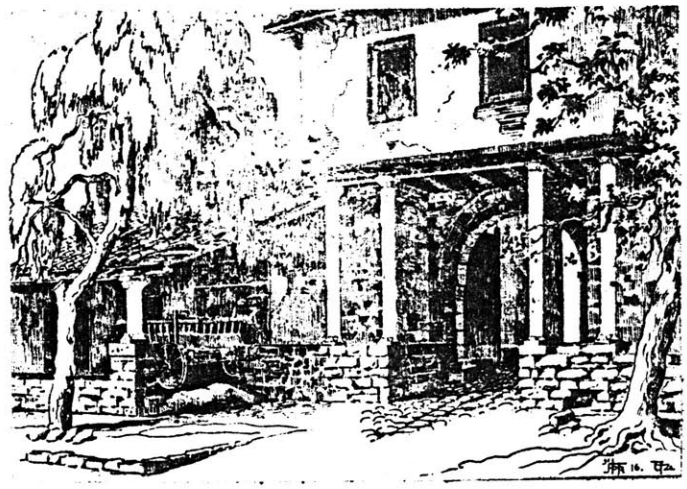
The categorical levels of architecture make Konstantinides's analytic approach easier to trace and follow than that of Pikionis, with his esoteric pathos and self-consciousness. The origins of Pikionis's mysticism are elusive and can only be interpreted by those who possess similar deep knowledge and sensitivity. Pikionis's way demands a "katharsis" of the soul. Konstantinides duplicates this sense of deep esoteric consciousness (which he possesses to an extreme degree) with the universal rationale of an architecture based on abstract geometry, canon, and order. He manages, thus, to give an organizing coherence to his otherwise highly abstract, and--to the same extent as Pikionis--esoteric criticism of contemporary architecture.

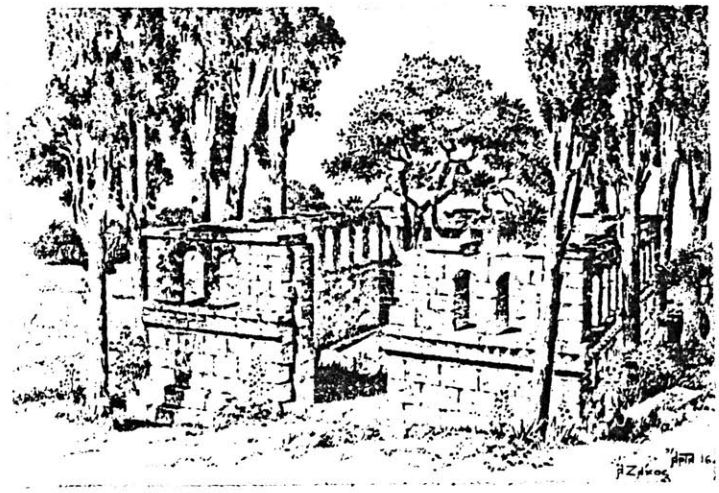
The development of critical regionalism in Greece follows attitudes which reflect to a great extent the paradigms and work of the leading figures mentioned above. Pikionis, in his quarter century of teaching at the National Technical University of Athens, was the spiritual and intellectual mentor of two generations of architects. He shook up the students' preconceptions and imbued them with the values of il commune e proprio ("the common and proper", the motto of the poet Solomos), by which was meant responsiveness to the vernacular sensibility of the people. Such a sensitivity alone could be depended upon to generate honest and true artistic and architectural creation.[10]

Konstantinides, by his series of public buildings--mainly museums and hotels that he, as the head of the Technical Department of the National Organization of Tourism, was able to either build himself or whose construction he supervised--was able to communicate

his message to a similarly large audience, and exercised, by means of concrete, realized examples, a direct influence on the practice of contemporary Greek architecture. The regionalism of Dimitris and Suzana Antonakakis essentially realizes the unification of these two approaches, which gives their effort a particular seriousness and a special meaning. Besides that, their extensive building and the continuous development of the normative aspects of their architecture elevates them to the status of important figures in the development of Greek regionalism in particular and Greek architecture in general. Their theoretical and practical work will be analyzed in the following chapters.

Fig. 1 HISTORICAL MAP OF GREECE





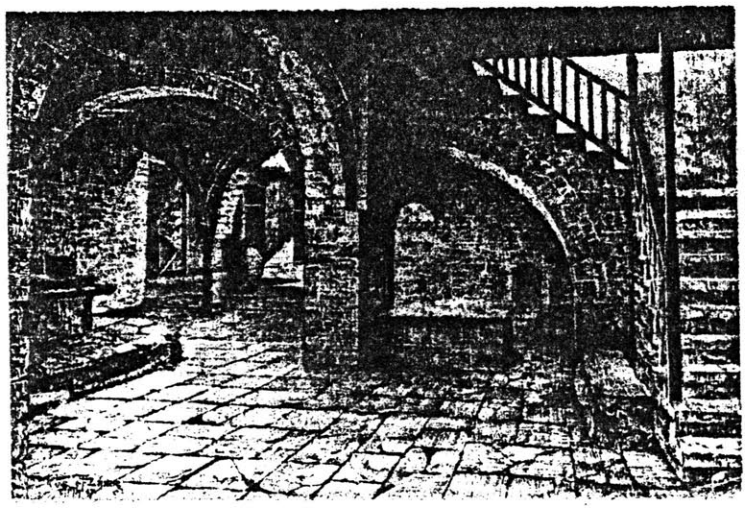


Fig. 2
Aristotelis Zachos, Architect
Drawings from the town of Arta
1916-17

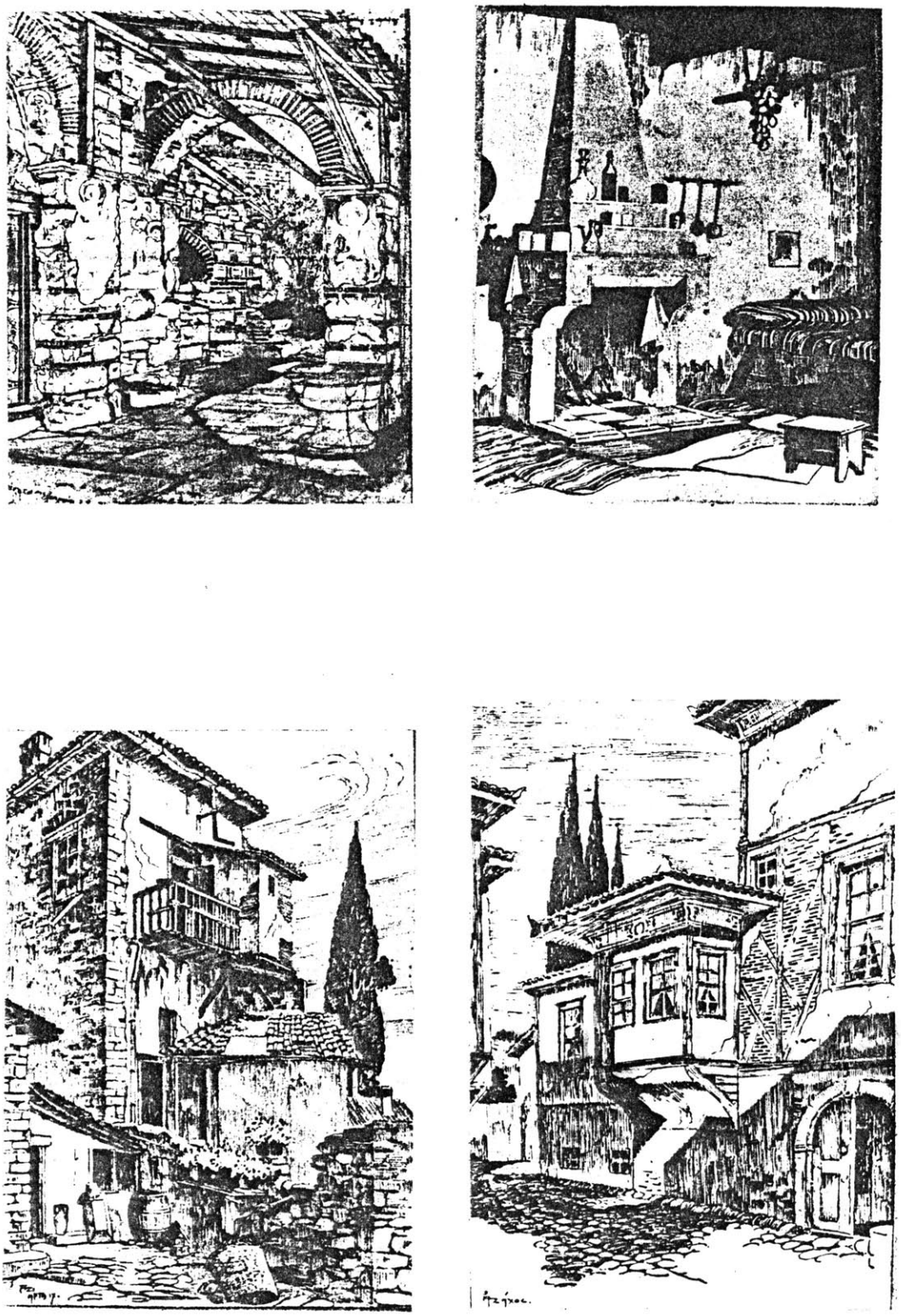


Fig. 3 Aristotelis Zachos, Architect; Drawings from the town of Arta c1917

Fig.4
Aristotelis Zachos, Architect; Drawings from Cyclades c.1920-24

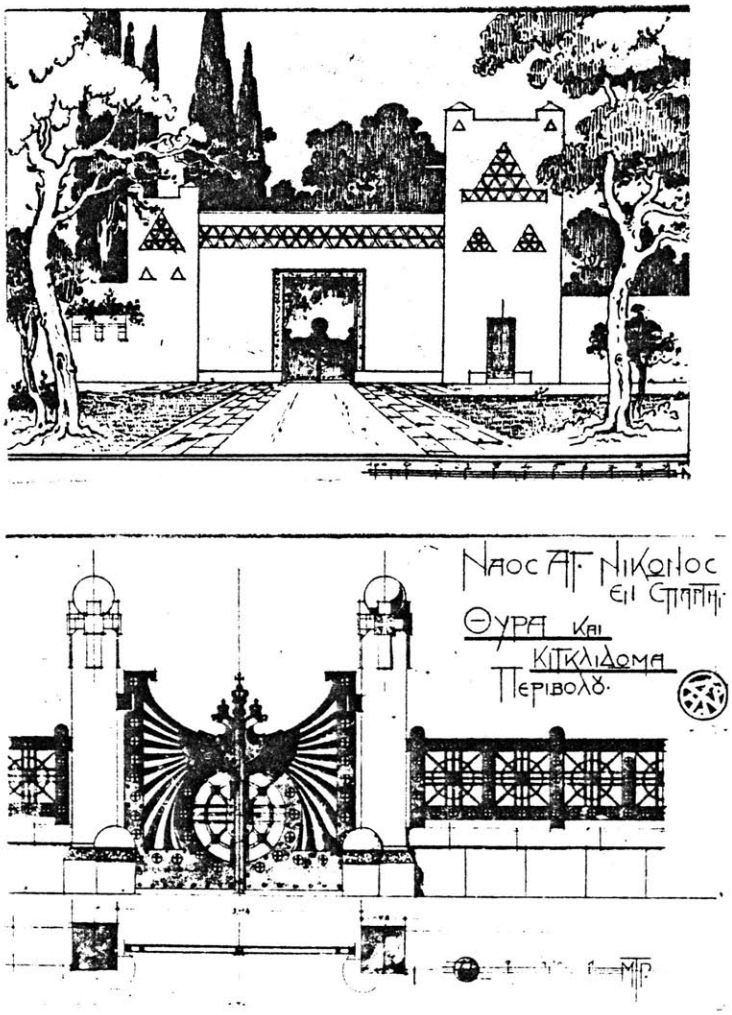


Fig. 5
Aristotelis Zachos, Architect; Projects for entrance gates c. 1925

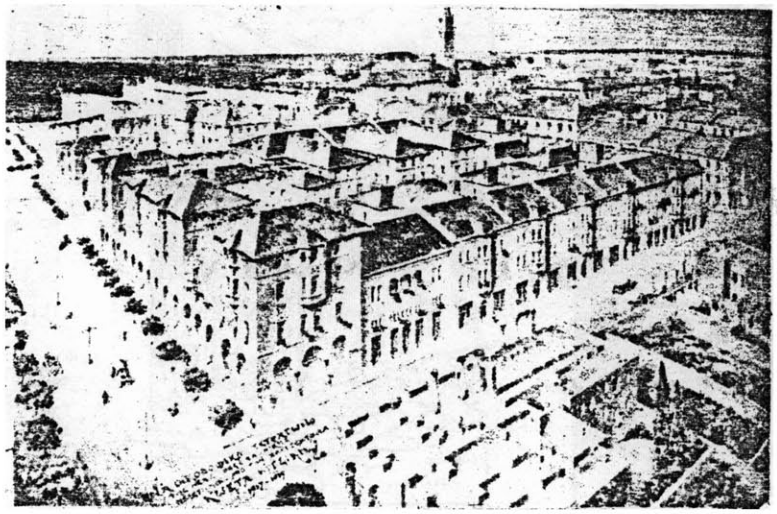


Fig.6-a
Thessaloniki, Proposal for urban blocks; Planning Committee 1917

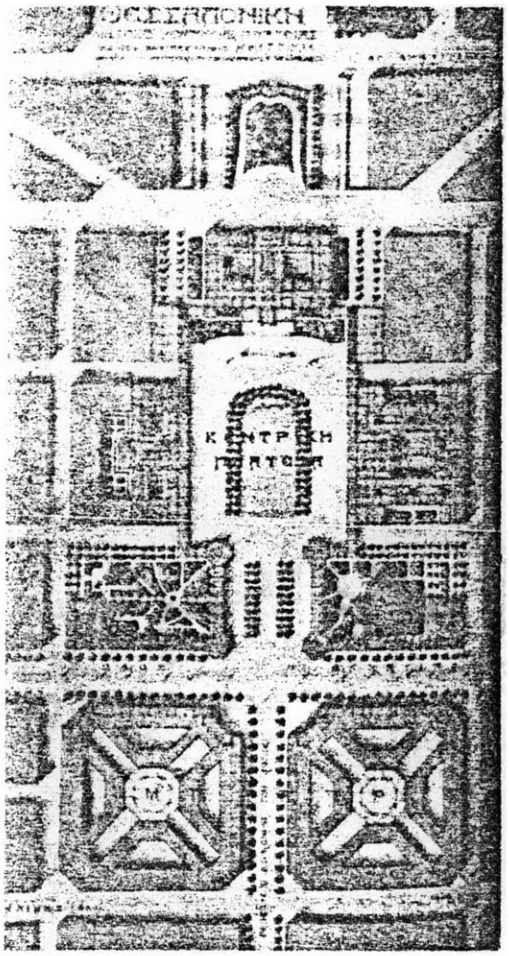
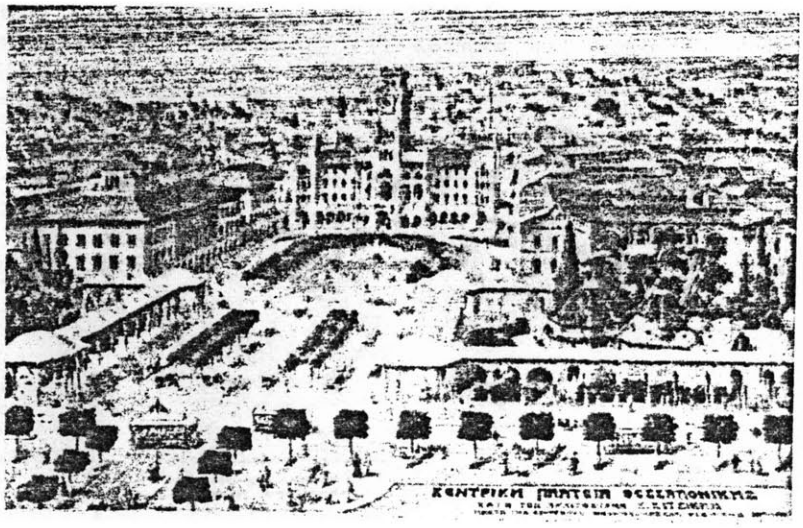


Fig. 6-b
Thessaloniki, 1917; Proposal for the City Hall
Antonis Kitsikis, Architect



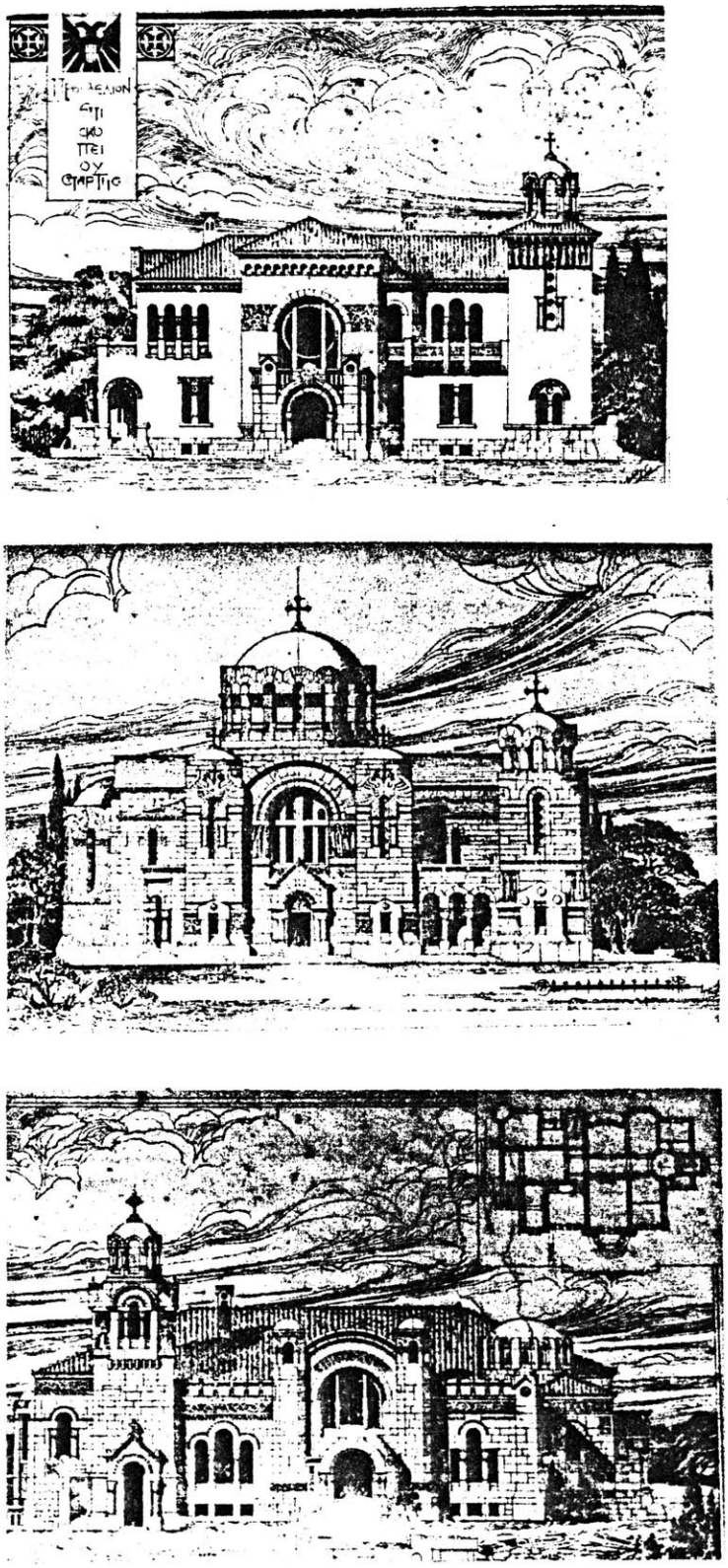
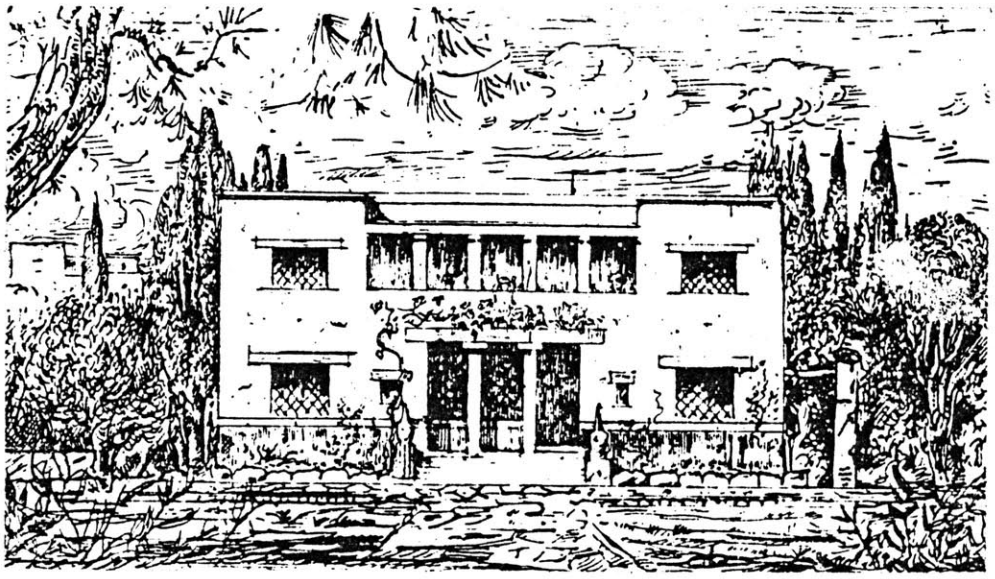
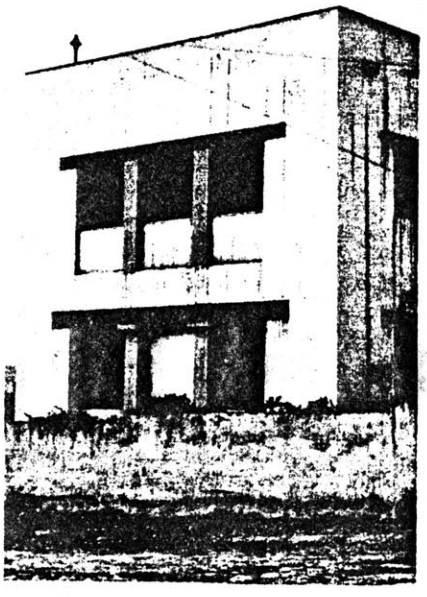


Fig.7 Sparta Ecclesiastical Administration Building. Aristotelis Zachos Architect c. 1926

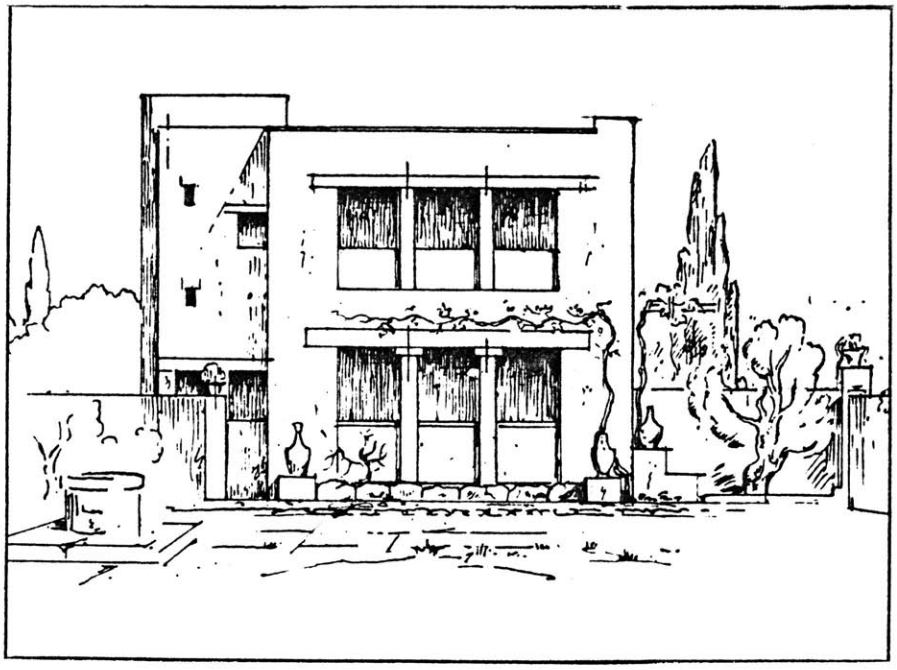
Fig. 8 House at Neon Faliron, Athens. Dimitris Pikionis Architect, 1923



a. Facade Proposal

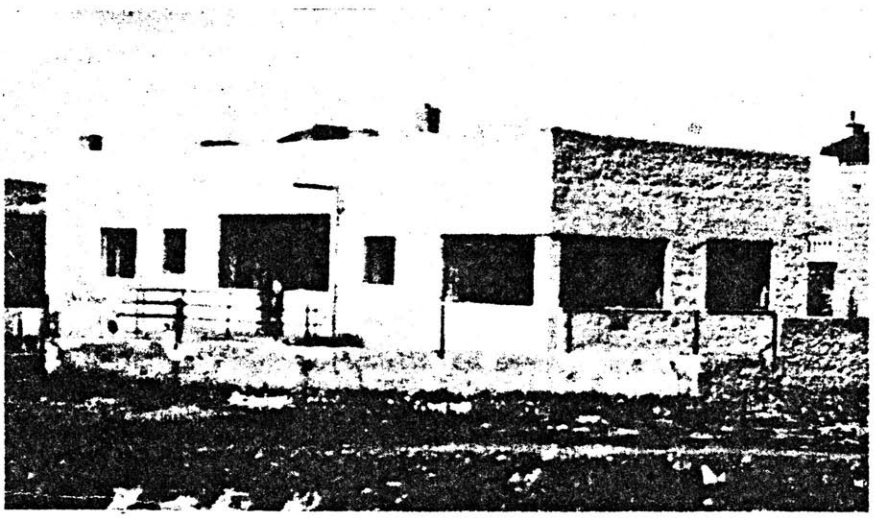


b. View

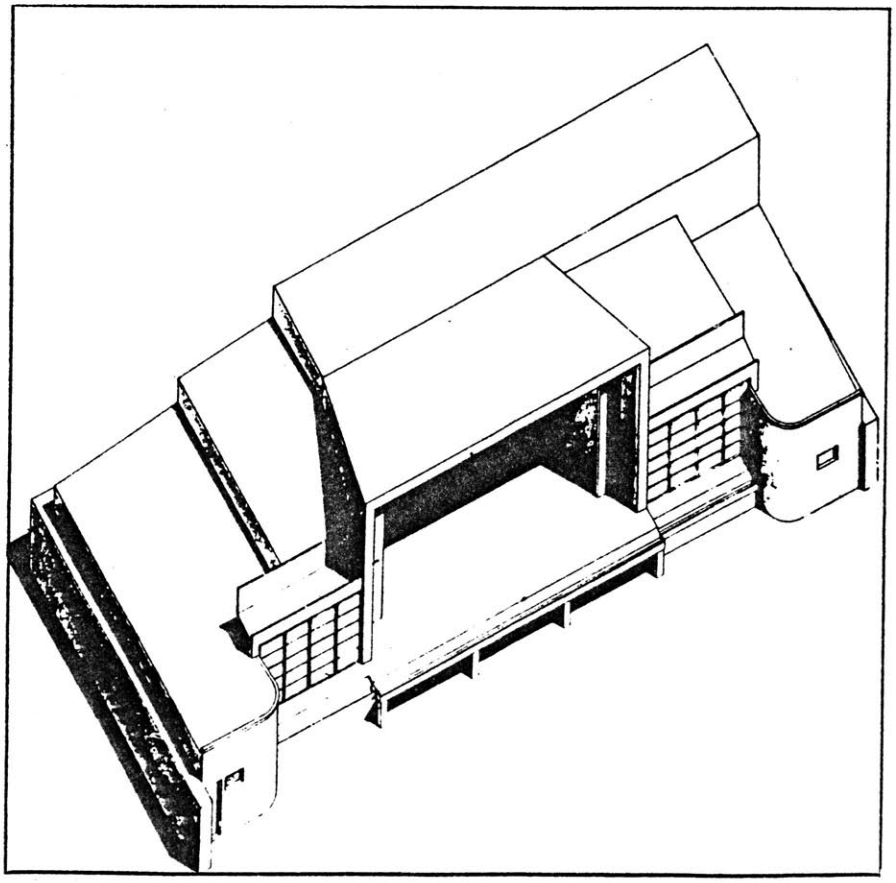


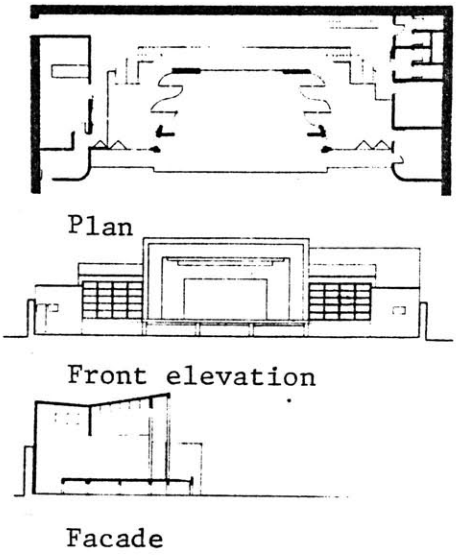
c. Side view

Fig. 9 Karamanou House in Athens. Dimitris Pikionis, Architect, 1925



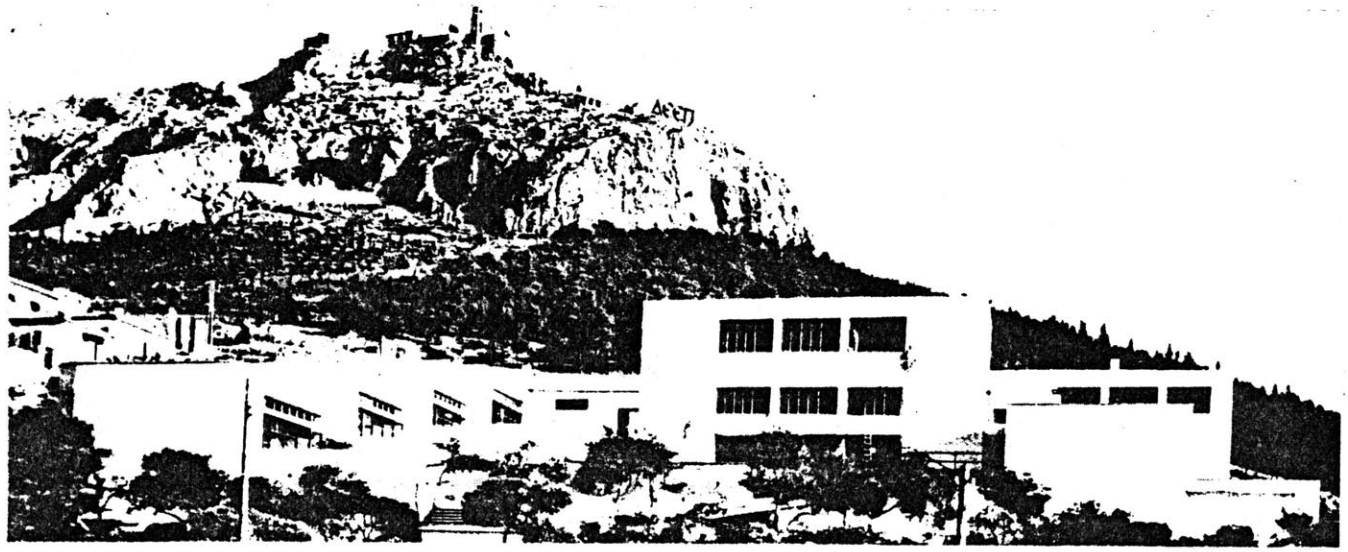
a. House-studio in Athens, 1927



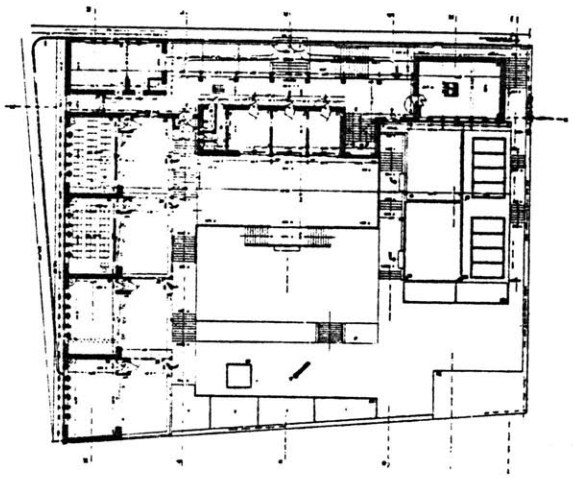


b.Open-air Theatre in Athens, 1933.Axonometric drawing

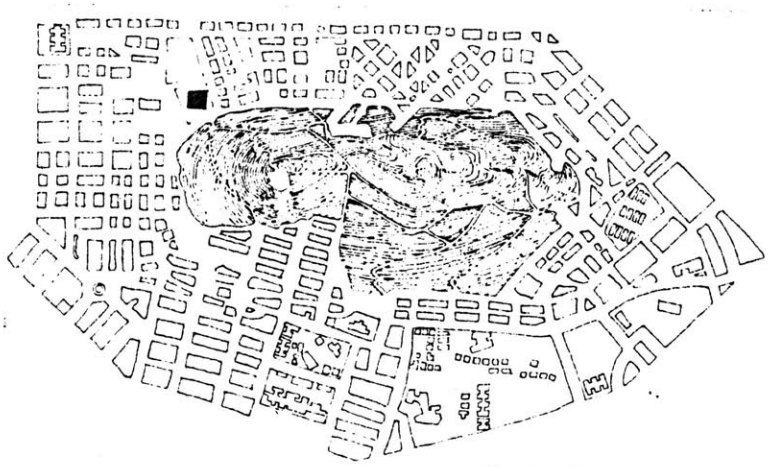
Fig.10 Works around 1930. Dimitris Pikionis Architect



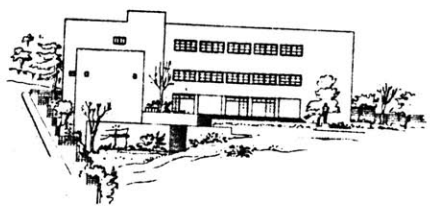
a. Side view from the courtyard



b. Plan



c. General location



d. Facade

Fig.11 Primary School at Lycabetus Hill Athens. Dimitris Pikionis Architect, 1932

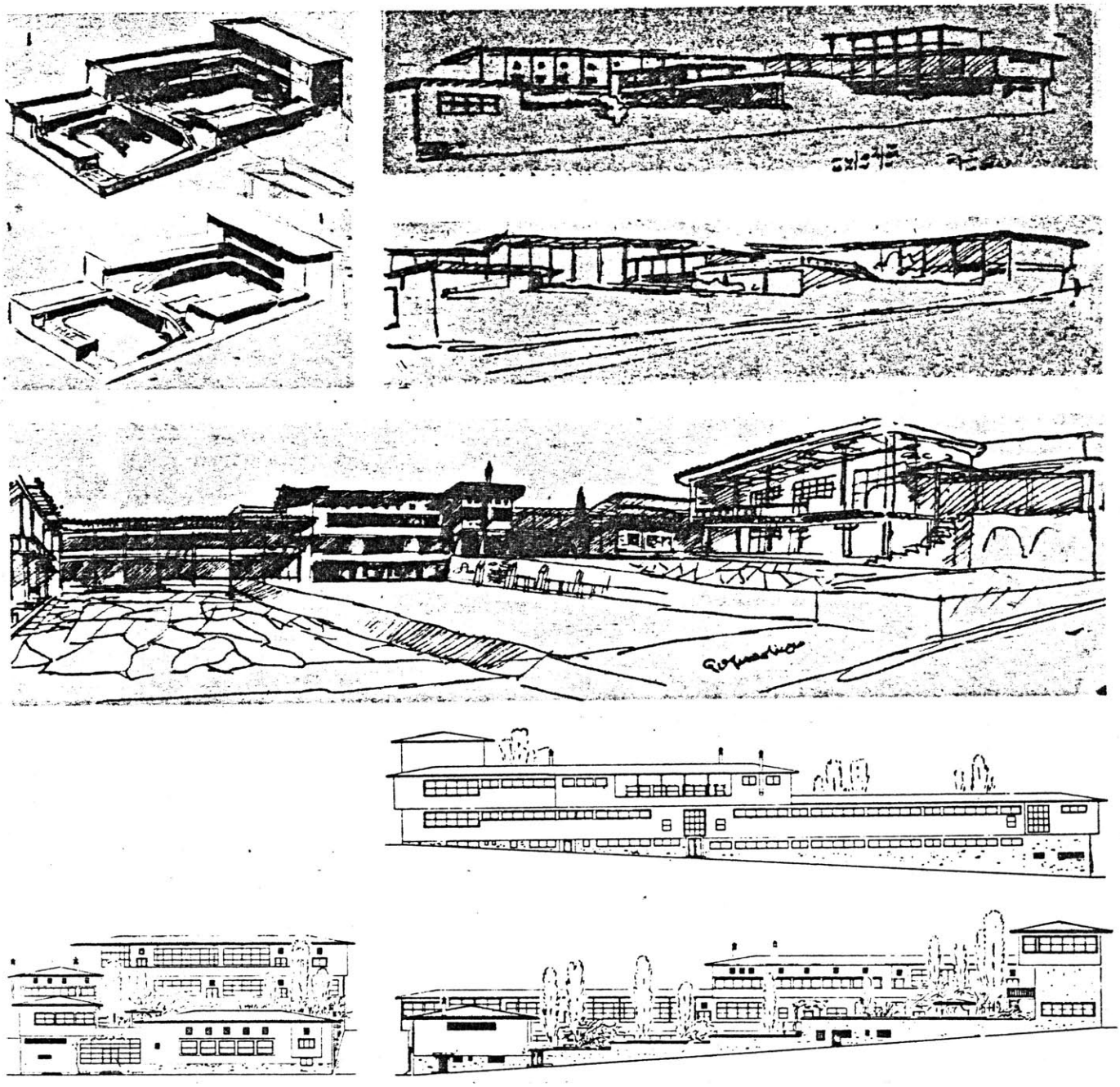
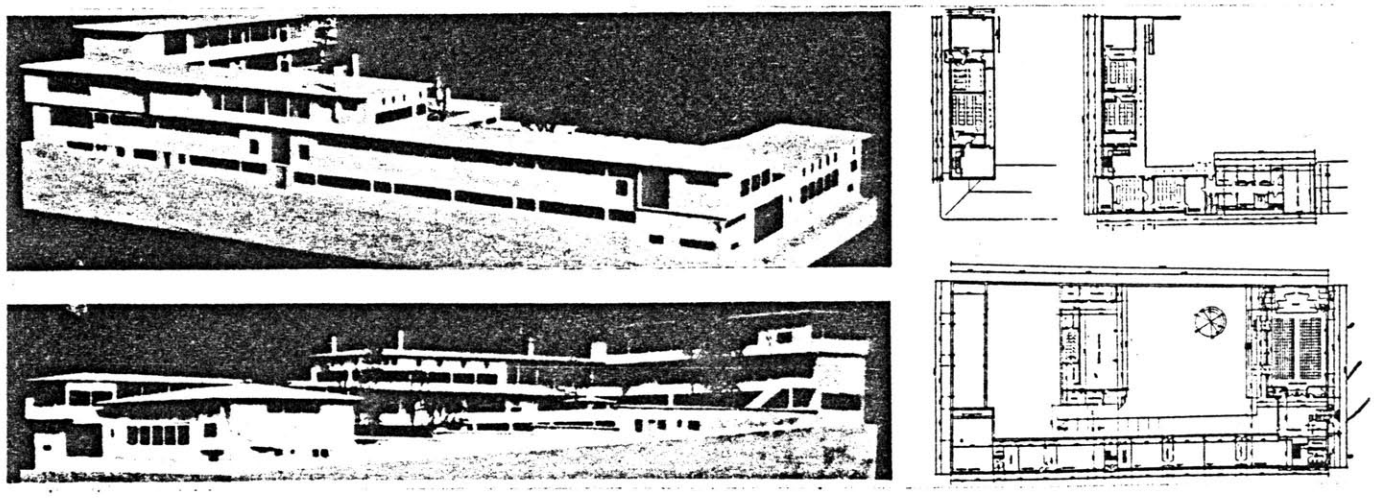


Fig.12 Experimental School of the University of Thessaloniki, Dimitris Pikionis 1933



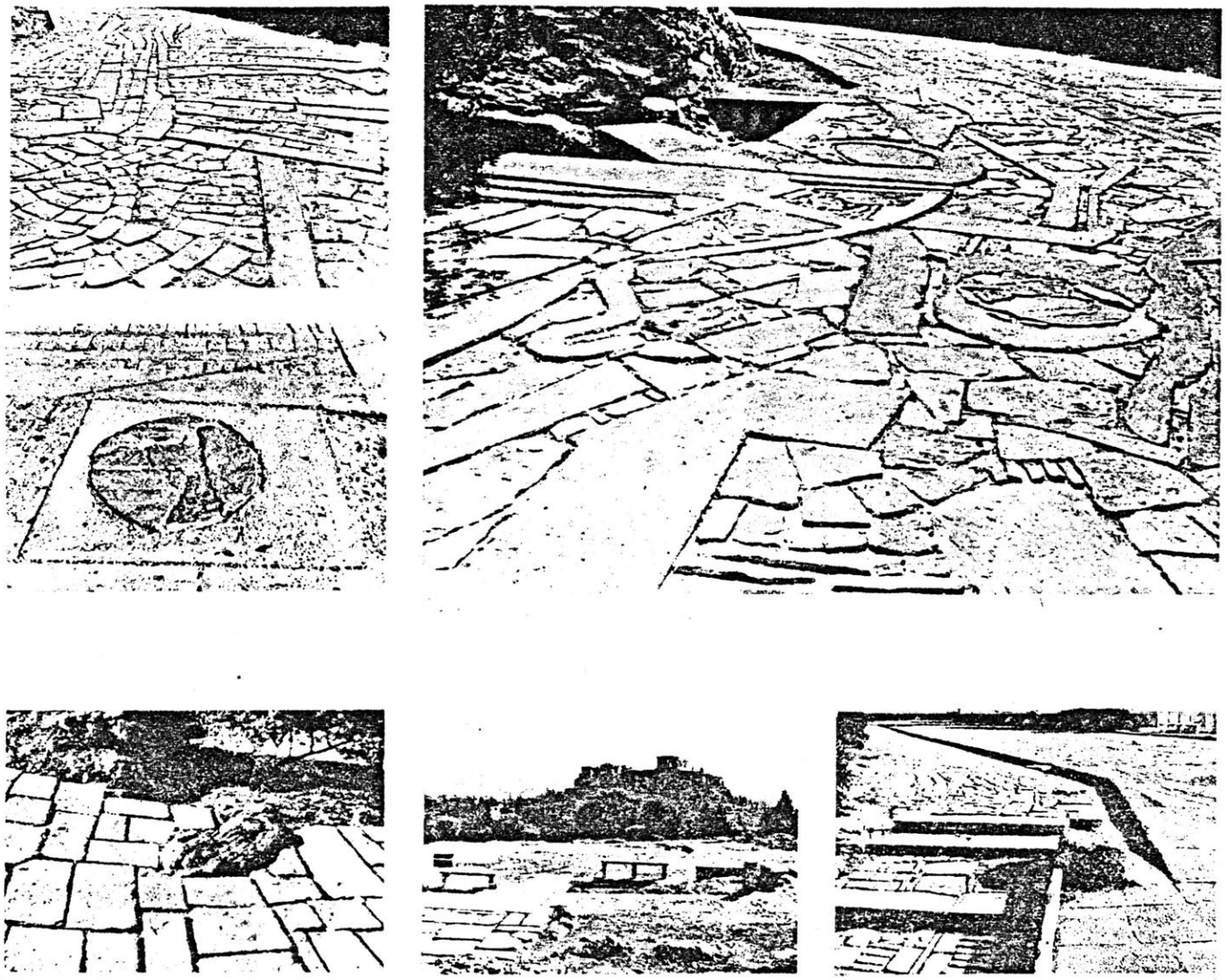
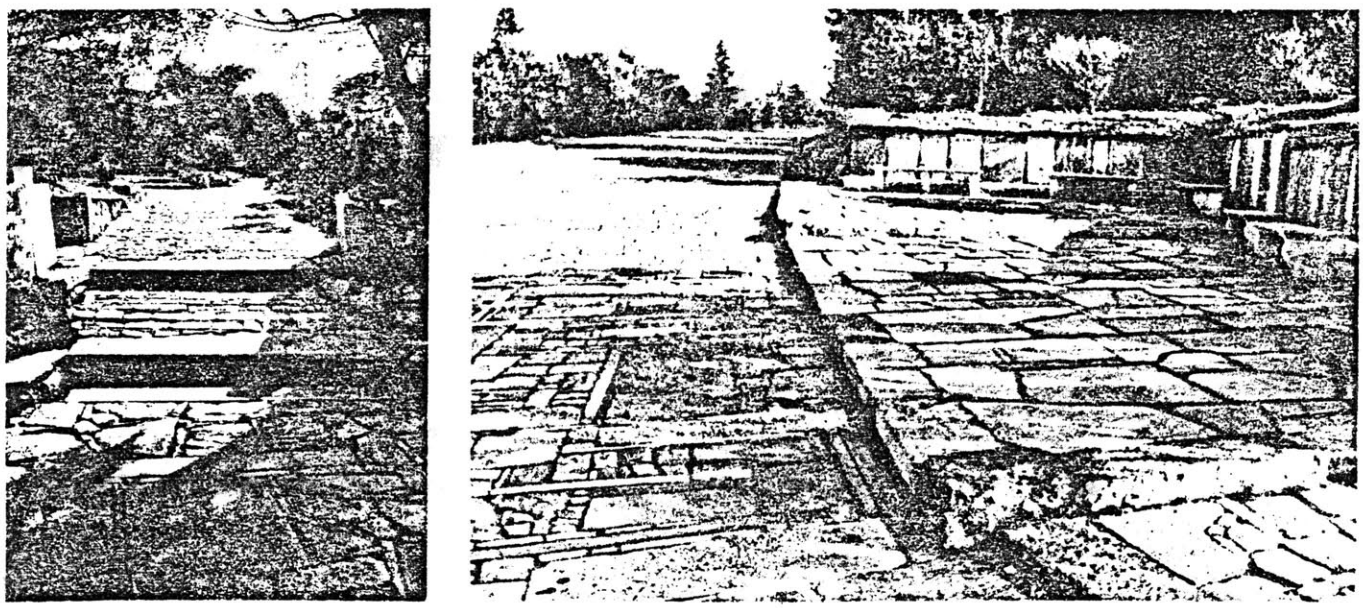


Fig.13 Paths around Acropolis Athens. Dimitris Pikionis Architect, 1951-57.



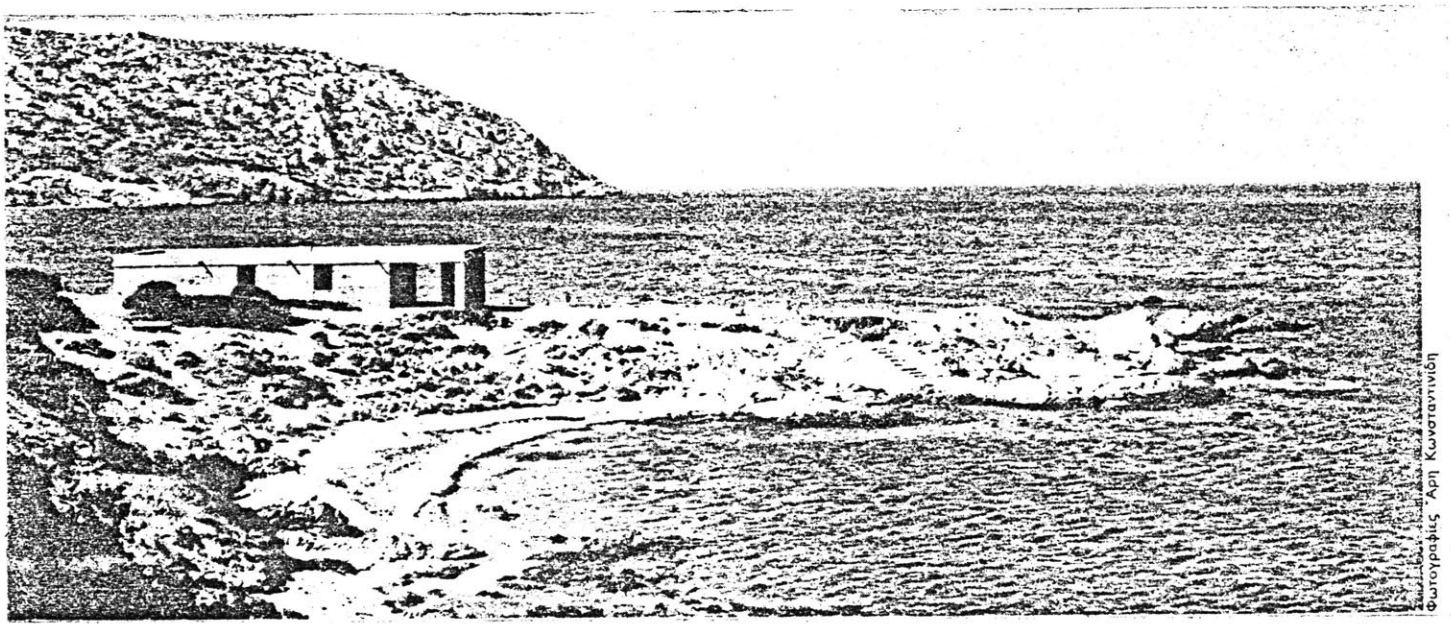


Fig.14 House at Anavyssos, Sounion. Aris Konstantinides Architect 1962

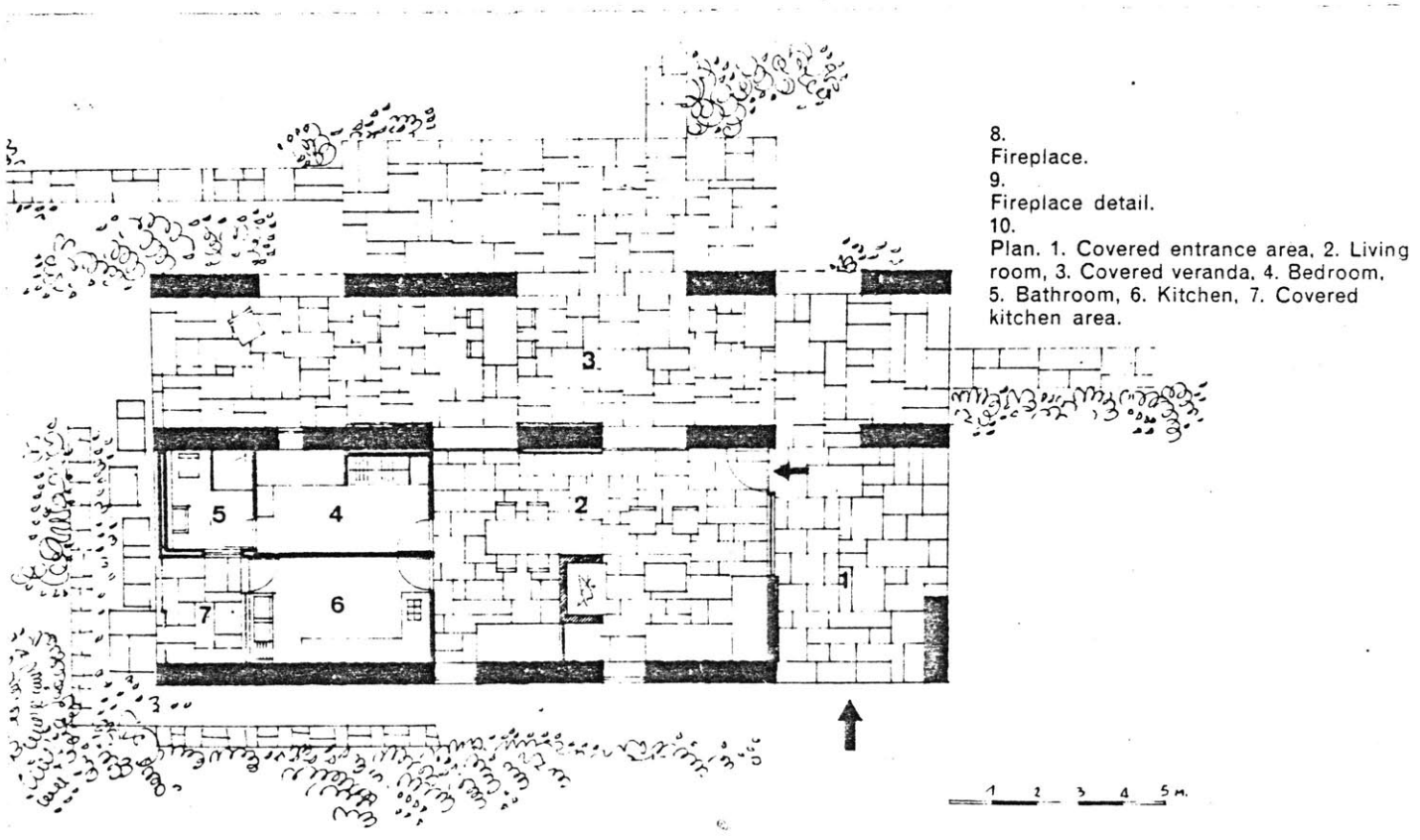


Fig.14-a Ground Floor Plan, House at Sounion

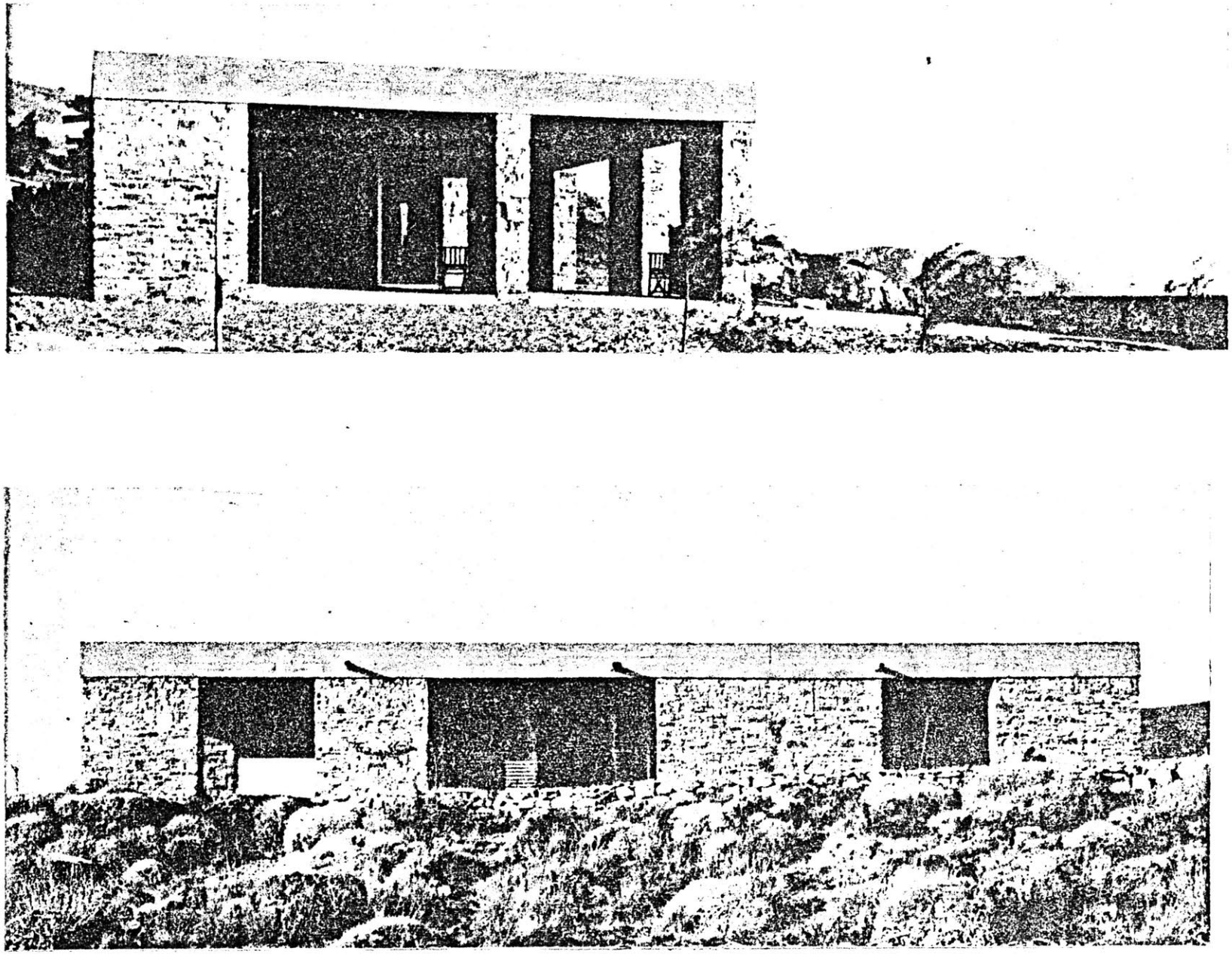


Fig. 15 House at Anavyssos Sounion. Aris Konstantinides Architect. Facades

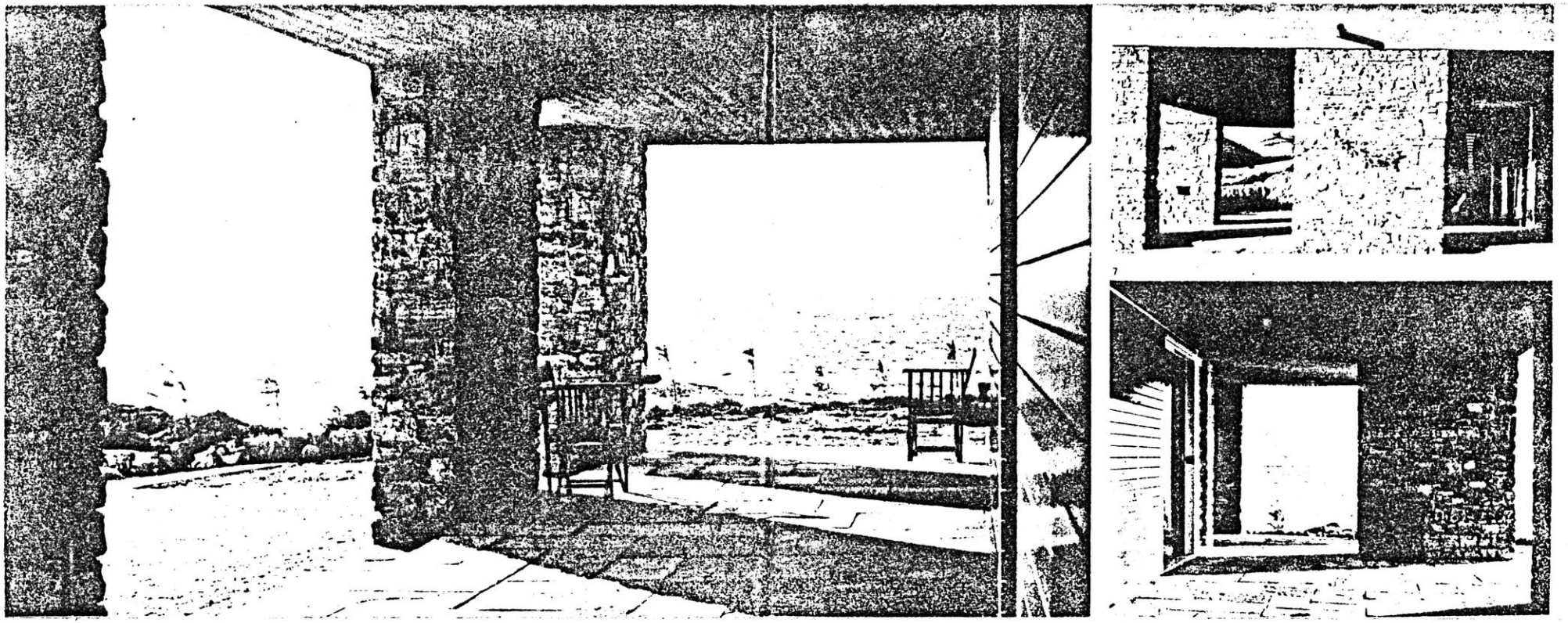


Fig. 16 House at Anavyssos, Sounion. Aris Konstantinides Architect. Views of the covered porticos

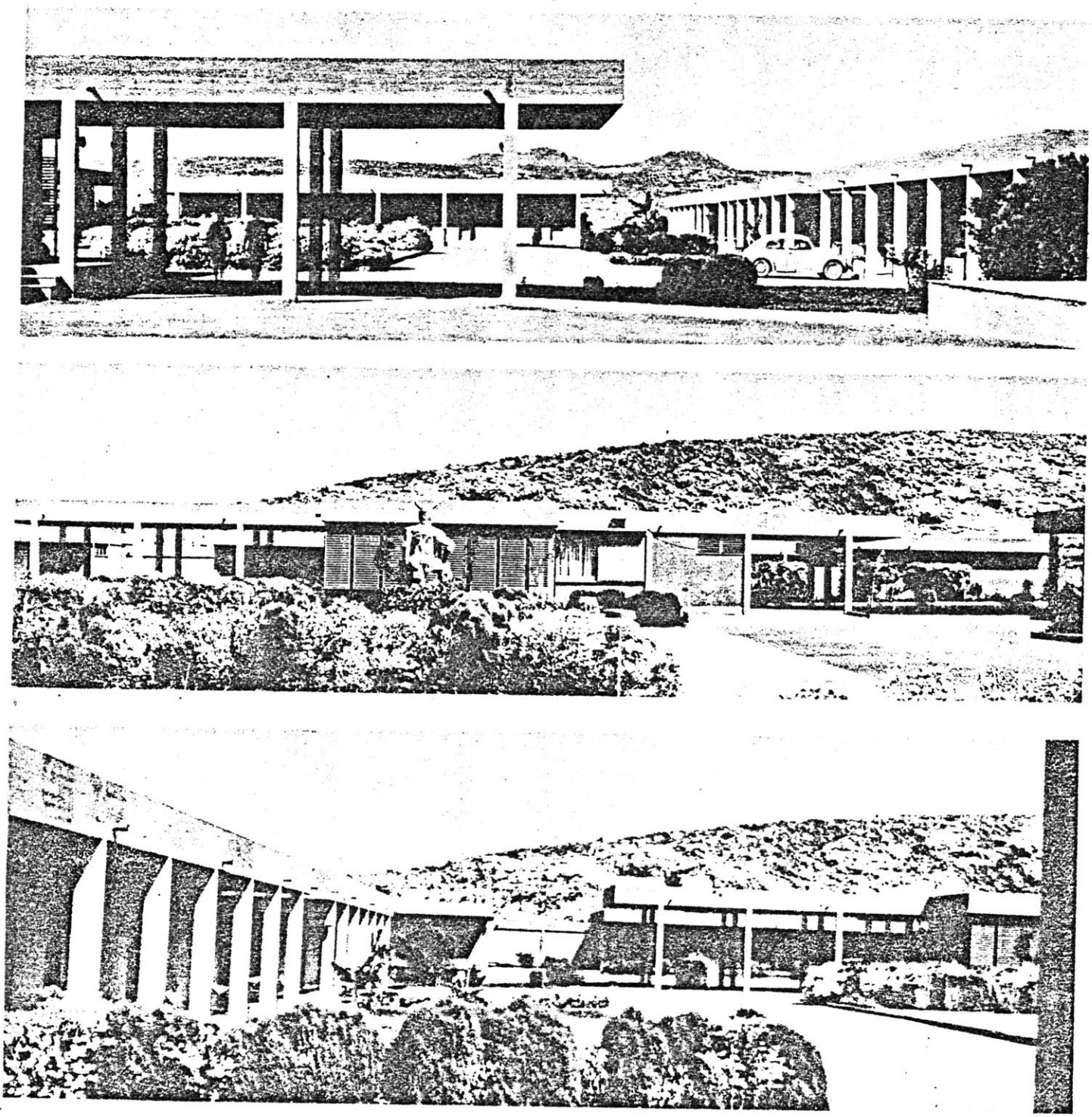
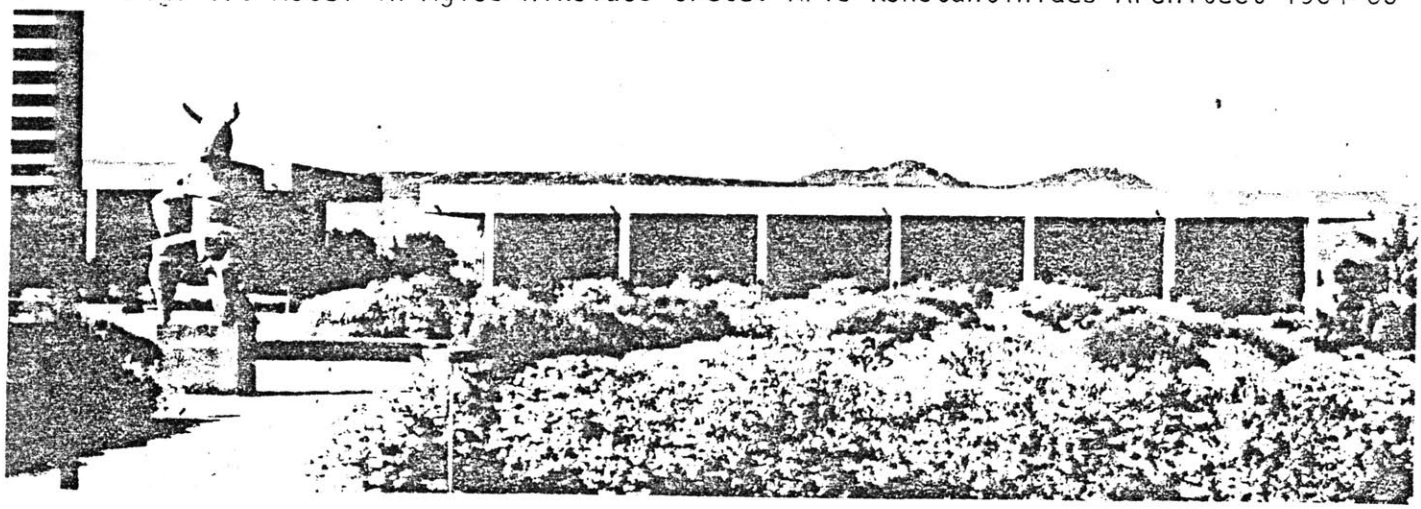


Fig. 17. Motel in Agios Nikolaos Crete. Aris Konstantinides Architect 1964-65



2.0 DIMITRIS AND SUZANA ANTONAKAKIS

Dimitris and Suzana Antonakakis are both of Cretian origin. Dimitris's parents were Aristidis Antonakakis (1900-1983), born in Odessa, Russia, of a Cretian father and a French mother, and Kaity Paleologou (1892-1981), from Naxos Cyclades. Aristidis Antonakakis was an employee in the Eastern Telegram Company in Chania and a professor of violin in the local music academy. Dimitris was born in Chania in December 1933. Following the death of their father, the family moved to Athens, where Dimitris completed his elementary and secondary education, attending the Experimental School of the University of Athens (1939-1951). He entered the School of Architecture in 1953 and received his degree in 1958.

Suzana's parents were Anastasios Kolokythas (1906-1979), born in Alikianos Creta, and Froso Vardaki (1906-1978), born in Chania. Anastasios Kolokythas was a lawyer and a member of Parliament. Maria Suzana was born in Athens in July 1935. She completed elementary and secondary school in Athens (1942-1952), and entered the School of Architecture of the National Technical University of Athens in 1954. She received her diploma in 1959.

Dimitris and Suzana married in 1961 and have two children, Aristides and Aikaterini. In the course of their work, as they became conscious of the great advantages of collaboration which, in their own words, "enriches each team-member's experience and pushes collective effort forward", they organized in 1964 an architects' atelier, now known as Atelier 66, which has ever since joined all their efforts.[1]

> Since the early years of our studies and professional activity, we have worked under two main influences: The first was defined by information about international modern art and architecture, as it was expressed in the School of Architecture of the N.T.U. of Athens through the teachings of Michelis, Ghikas, and the decisive presence of J. Speyer, professor at I.I.T. and a visiting professor at the N.T.U. from 1957 up to 1961. Speyer's original personal manner introduced us to the methods

> of working and the teaching of Mies van der Rohe, as well as to the international debate of that time on architecture and art.
>
> The second influence found its origins in a more general attitude that prevailed at that time in Greece, an attitude that searched the essence of the Greek cultural heritage, rejecting superficial imitation of traditional forms. The deeper meaning of the work and teaching of Pikionis, as well as the clearness of the work of Aris Konstantinides, exercised an important influence in this direction.[2]

The images conjured by those descriptions reflect the general cultural situation in Greece since the first decades of the century, with the dichotomic conditions introduced with the revitalization of classicism. The painter Yannis Tsarouchis makes one of the most sensitive remarks I have seen concerning that milieu:

> I was born in Pireas, in a neoclassical house. I was brought up in two other houses, also neoclassic, in Pireas. Two magnificent houses. Then we moved to Athens, to a house which was also neoclassical and later on to another one by Zëller. For me, home was only neoclassical. I cannot claim that I liked all these houses completely. I wouldn't be honest if I said such a thing. They attracted but at the same time they pushed me away. . . . When, later on, they started to tear them down, one by one, I felt that they were tearing off my life. It was something more than an aesthetic reaction what I was experiencing. It was like the sudden deaths of close friends.[3]

Neoclassicism and Green sensibility were joined on a level of mythical dimension. It was not beauty or proportions that communicated their relationship: Neoclassical houses were always felt to be a scenography, imported, untouchable by the common people. It was the responsibility of the specialists--the architects--to undertake their completion.

It was the deep roots of classicism, though, that helped this architecture restore deeper bonds with the Greek places, to be developed into a true, national expression through a broad spectrum of building solutions and expressive ways from the popular neoclassicism up to the official neoclassic architecture. So, when

in searching for the truth the new beliefs started demolishing neoclassical buildings, what Tsarouchis calls "The Middle Ages in Greek Architecture" began.[4] The abrupt process invited aesthetic evaluation of the neoclassical style and also made possible the conscious recognition of the schism.

Patroklos Karantinos, another leading architect of the period, vividly describes the intellectual atmosphere of those "Dark Ages":

> I will still not forget the time, that together with Pikionis and Panagiotakos, still students at the School of Architecture, we were walking around the courtyards of the popular houses of Aegina, or were drawing stones and tree-branches if staying in our refuge. During our evening walks, Pikionis would tell us, while looking at the golden horizon of the sunset . . . about Ruskin and Solomos and the great ancient civilizations, whom we envisaged as high, unreachable tops, and ourselves were ecstatic, small and helpless; dissolved in the face of their grandeur.
>
> The admiration of the past, springing out of an intense sentimentalism quite often caused us unhappiness and a feeling of chaos. We were feeling like shipwreck survivors, searching for light and help from the past. The past held a value and beauty that the present lacked.
>
> And we wondered whether we should stay away from all these, in a small town, exclusively ours, somewhere in Aegina, and live with the simple and pure people, worshippers and nostalgean of the great past epochs of art.
>
> This negative attitude towards life, however, must be considered for its time--after the pseudo-classicism and after the foreign influences that dominated every cultural aspect of the country--to be a sign of progress, an awakening; because it was the first step of renewal, a shift in the search for a new road.[5]

Whether this new road would have as its sources of reference the traditionally developed regional patterns of expression, trying to influence them with the rational and positive logic of modern times, or the reverse, would bear an obvious determining influence on the visual configurations of the products, but would not necessarily constrain regionalism as a mode of expression.

The pattern of approach which the Antonakakises' work develops can be said to follow the first pattern, relying on the critical appraisal of the autochthonous tradition, that once constituted the indigenous, local civilization. At the same time, however, their consciousness is dialectically shared; universal modernism is acknowledged and appreciated for reflecting the current status of life. Their tactics proceed through deconstructing the doctrinal body of modernism in terms of values and images proposed by the prevailing paradigms of Greek cultural inheritance, while the overall process possesses a cognitive structure of its own. It is this cognitive scheme that I label "critical regionalism"; it can be sensed as reflecting "the subtle procedures of synthetic contradictions" that constitute our modern inheritance.[6] Kenneth Frampton, in his recent "Prospects for a Critical Regionalism", stresses that the term identifies ". . . those recent regional 'schools' whose aim has been to represent and serve, in a critical sense the limited constituents in which they are founded."[7] Following this assumption, regional expression holds strong referential indices, both structural--on the level of categorical thinking--and formal--out of a critical consideration of the traditional vocabularies it intends to evoke.

The harsh split that produced the total separation between processes partaking in the cultural workings and processes contributing to the civilizational development posed the exigency of a critico-dialectical consideration of both of these statuses, in order to find a way out. The problem of "enriching" the current stagnant vocabulary of architecture by means of reintroducing the "historical" solutions once given to respective cases included the risk of producing merely another personal vernacular reproduction. Selective processes, if they were to be effective, had to be grounded on a clear vision of some ultimate goal, one that could be judged and accounted for in a historico-socio-economical context. The whole issue, then, refers the process back to the level of

categorical thinking, readdressing architecture to "place creation", to the critical yet creative redefinition of the concrete qualities of the built world and the act of building itself.

Under the assumption, then, that architecture is considered as the field of pursuit of human happiness--as the meaning of the term "place" implies with its predominant static and qualitative properties[8]--it immediately becomes an object of poetic and philosophic speculation, its geometry being surpassed by the act of "inhabiting". Architecture, thus, becomes predominately the realm of the house--which is in retrospect the locus, where the redefinition of architecture takes on shape and substance.

The career of the Antonakakises has so far been typically regionalist inasmuch as they had sought to reconstruct the volumetric sensibilities of the Aegian vernacular space-structures, the sustaining framework of the indigenous pattern of living, and the regional imperatives to production techniques and resource patterns. They use these as means to mediate the impersonal instrumentality of universal rationalized production.[9] Furthermore, they have begun a reconsideration of the contemporary role of the profession itself. Their theoretical conclusions on this point are directly applied and tested in their practice. They seek to reestablish the lost sense of architect-client relationship. By revitalizing this relationship, the dialogue between human beings and architecture--dwellers and habitat--can recommence. Different models of the client role have been tried out with an eye toward strengthening the users' input in the design process: These range from cooperative patronage and management of urban apartment complexes to designing for an individual client, who participates directly in formulating the functional program, disposition of space, and the specific character of the place desired.

By focusing attention on and crystallizing the role of the user, another effect on the finished product is called forth. An ambiguity obtains as to whose authority--architect or client--

governs the meaning of the building; ideally, the building that results is invested with meanings only in use. The pitfall of architecturally fixing the meanings of a dwelling is overcome in favor of allowing an active process of use, significance and experience to unfold.

This dialectical openness is incorporated into the actual building of the project. The Antonakakises make a point of ongoing collaboration with the builder-mason on-site, allowing modification of the design to emerge from the vicissitudes of the process of actually realizing the plans. The result brings to their building a freshness and a sensuous feeling of reflective immediacy.

The anthropocentric consideration of every architectonic dimension constitutes another major direction of the Antonakakises' work. "Habitat" and "quality of life" become virtually interchangeable terms, enhancing the possibility for a state of completeness of both.

> [Architecture] carries the advantage of materializing its statement of dialectical relations, and has therefore a directness of information. It can help make visible the necessity of substantial changes in everyday life--specifically, the need for reconsideration of the conventional models of habitat and inhabiting.[10]

The Antonakakises believe that the house--or unit dwelling--is a microcosm of the city. They extend this thinking to characterize the human relationships and roles played within the domestic unit; these parallel the structures of the city--for example, the living room corresponds to public squares, individual bedrooms to different houses.

> Habitat is drawn on the paper under the [debased] criteria of a conception of the quoidian, where the user-habitant does not possess the space--possession having nothing to do with the issue of ownership. Internal space is fractured according to market prototypes, to be later delivered "legible" to the passing, anonymous future buyer.

> The residents of today's city are the everyday people of our epoch, who consume the habitat like laundry detergent. Incapable of substantial criticism, defeated by all kinds of authorities and suppressions . . . they find themselves outside the rules of the game: resigned, passive viewers. Their participation begins and ends with bargaining over the percentage of ownership or the price per square meter. After this follows the selection of the finishing materials, with a particular attention to the hygienic quarters.[11]

This address by Suzana Antonakakis, to the seminar on the "Contemporary Habitat" in 1981, includes much of the current polemic on which Greek regionalism establishes its point of departure. Lacking perhaps the glamour and flair of large architectural projects--habitat had never been monumental--the home buildings on which critical regionalism exercises most of its practice represent, from the viewpoint of day-to-day relationships with human beings, are the points from which architecture itself is generated.

Every space that architecture shapes is meant to be habitable. Among all architectural spaces, though, the "house" represents a very special form of human habitat. It expresses, in a particularly primitive manner, the notion of stability, giving to daily life the sense of continuity that comes from being rooted in one specific spot. According to Gaston Bachelard, in The Poetics of Space, the house is

> . . . a body of images that give mankind proof or illusions of stability. . . . The house in which one was born engraves forever the hierarchy of the various functions of inhabiting. We are a diagram of the functions of inhabiting that particular house and all the other houses are but variations on a fundamental theme.

The effort to draw out these models is the chief goal in the architecture of the Antonakakises.

Such a task is not achieved through any simple and direct way. It requires a complex approach, often oblique or subtle, so that the most basic ideas may be rendered without sacrificing the layers of meaning that are not consciously apparent. Their methodological

approach, then, has to touch on a variety of levels, with the predominant concern being to provide for a coherent and clear frame of compositional tactics that would accommodate the winning of architectural reality.

The elements of their architecture--few, clear, and forming a recognizable itinerary in the formal exploration of the object--being operationally derived from functional imperatives, and also subject to their own inherent logic, are orchestrated in a way as to best permit a genuine variety of kinds of experience. It is an eminently anthropocentric regionalism: Their buildings are servants of the human process of imparting meaning and life to their forms. Professor Dimitris Fatouros, commenting on the quality of their work, says that:

> The work of Dimitris and Suzana Antonakakis is not only outstanding as architecture; it also offers a creative way of thinking about the organization of space that is valuable for Greek as well as for international contemporary architecture.
>
> In their work the elements of space, materials, cost, geometry, and social criticism are combined in a multi-varient and consistent logical structure.[12]

3.0 CASE STUDIES

3.1 House at Glyfada, Athens

3.1.1 Introduction

The search for the lost significance and meaning of the human habitat, be it the single family house or the block of flats more common to the urban reality of today, is the central theme throughout the oeuvre of the Antonakakises. With their cultivated sensibility in and insistence upon considering the meaning of space instead of accepting its designated functions as standardized through the processes of production and consumerization, the Antonakakises have become severe critics of the dominant models of modern housing and the design processes behind it. In recollecting their efforts and experiences, and reflecting on the results and conclusions of their long involvement with the problem of human habitat, Suzana Antonakakis said:

> . . . Living Room, Wardrobe, W.C., Veranda, Hall; words imported from abroad, foreign words, foreign spaces, words that do not connote uses, life situations, life juices, care, love, sweet light, cool for the summer, or heat for the winter. Without any romantic feeling for a return to the past, simply as an experiment, I give some words from the traditional architecture: chimoniatiko, kalokairino, mayerio, liakoto, stegadi, avli (literally, winterplace, summerplace, cooking place, solarium, roof, yard).
>
> The model has been applied by the production proces, the legal framework, but has been given added momentum by actions on our part. Considering finite the limits of our freedom, even in situations to where there exists a possibility of overcoming them, we don't dare to; and thus we remain pathetic viewers of a process where our choice to not participate, to stay out, is accepted a priori as given.
>
> Thus, while we ought to be in a state of constant awareness, in our everyday practice we instead continue to design to order, to inhabit to order, to think to order, and to consider political--and worthy of discussion--only those matters that we

> classify as belonging above a certain level of significance--what we designate as significant from that which we do not deign to concern ourselves about. Many times we even justify ourselves in this attitude theoretically: we point to the history of architecture and claim that we choose our mode of practice according to a principle of simplicity. The usual situation, though, behind this simplicity is that this is in fact naiveness or laziness. . . .
>
> The imbued 'potential' complexity that exists behind the 'deads' is what makes them simple, natural, as if they had always existed. . . . Recording time in space is a process connected with action, with life occasions. As a practice in design, such an attitude demands a care far beyond the articulation of the shell boundary; it demands, on the level of design, a special attitude which attributes the very first role, beyond every analysis and categorization:
> a. to the study of the movement (internal and external circulation) which constitutes the biological quality of the work;
> b. the search of that kind of particularity and uniqueness in the designing of the spaces, which will invite a sense of intimacy and appropriation.[1]

The Glyfada residence demonstrates the first application of a way of designing that would constitute a point of departure for future developments concerning the articulation of spaces, and the handling of materials and details of construction. Built in the early years of their practice (1959-1965), the house marks a definite end to a period of experimentation with form and iconography that reflected vividly the influences they imbibed during their education. Even if they honor Mies van der Rohe as the main influence on their architectural development, the references to the formal poesies of Le Corbusier are undeniable. Apart from the several references that we may identify, the innovative rigor of the house places it at a high level of formal individuality.

3.1.2 Analysis

I

The Glyfada house is one of the first collaborative Antonakakis designs. Earlier (1962), they had designed, together with Kostis Gartsos, a double house in Athens and, also with the collaboration of Gartsos, an apartment house in Athens (1961-62); neither is of any major compositional or formal importance to their own thought.[2]

In 1962, when the house was built, Glyfada was still a sparsely populated suburb of Athens, with a lot of open (unbuilt) spaces, quiet streets, and a feeling of littoral sensuousness permeating the atmosphere. The richly vegetated site was rather narrow by comparison to its length. It was thus possible to place the house a little back from the frontal line, providing the space for a transitional margin between the public and the private realms. The existence of the plants, the size of the lot, as well as the character of the surrounding neighborhood, conform with a longitudinal plan which opens to the front and the back and closes in privacy along the two vertical sides of the neighboring properties. The design was made in the years 1962-63 and the house was built between 1963-1969. The Glyfada house had been published in the journal Design and Art in Greece,[3] almost ten years after it had been designed.

II

The plan of the ground floor of the Glyfada house is a basic rectangle, with only the space of the dining room protruding towards the back yard (Fig. 18). The spatial organization aims at the realization of a perceptual--even tactile--unity (whenever possible) between the communal areas, which constitute the major point of reference of the house's whole movement pattern. The living room, with its two-storey high open space, receives the opening of the study of the second floor as if an internal covered courtyard,

achieving the fusion of the two floors into an interwoven continuous space. The second floor, containing mainly the volumes of the individual rooms, is arranged in a longitudinal zone crossing the principal rectangle at a point two-thirds of its length and projecting strongly, into the depth of the site (Fig. 19).

The main entrance, fitting within the zone of the crossing wing, extends in the front yard with the construction of a pergola to a free-standing portico along the borderline between the site and the street. Within the body of the house, however, the entrance retreats, creating a niche that marks another transitional point of the incoming path. A narrow landing space gives the incoming guests a sure indication of the end of the entering journey and prepares them to experience the inner private realm. The low ceiling gives this entrance landing a feeling of protection and a sense of intimate scale. Further in is a main entrance hall which gives access to all of the spaces on the ground floor. From there, one can turn to the right, entering the living room, or continue straight ahead to enter the formal dining room or, before that, to either take the stairs leading to the second floor or take the narrow corridor leading to the informal living room. The informal living room can be also approached by a set of low steps from the main living room. The two spaces, apart from their different ceiling heights and floor levels, are also separated along their common side by the fireplace construction and a series of built-in sofas (Fig. 21).

Again, from the hall, one can turn to the left, to a well-closed system of walls that gives access to the service areas (kitchen, pantry, staircase for the basement) and the guest room with its separate bathroom. Since the public rooms are left open without doors or enclosing surfaces, their visual communication is more direct, and they call the attention of the visitor to themselves.

The lighting and the spatial articulation of the central living room makes it the most inviting and stimulating point of the house.

With its large, double-height windows, the protruding inner balcony of the second floor, and the strong textural articulation of its stone walls, the living room is unquestionably the center of life of the house.

The way the light has been handled is of key importance to the dynamism of the spaces throughout the house. Light penetrates every space, giving it intended directions toward the inside or the outside. The central hall is lit directly from the window of the staircase and indirectly by light emanating from the dining room.

In line with the buffer space of the dining area and the hall exists a small window "carved" on the stone wall facing the entrance, which receives and liberates all the condensed tension of the transitional central space (Fig. 22). Since the several communal areas have no doors, their spatial distinction is achieved by means of changing the ceiling heights, the floor levels, the paving surface, or by varying the lighting. A basic feature of the house that unifies the first floor is the continuous strip of skylights where the walls meet the ceiling. This continuous flow is not even interrupted by the columns of the concrete skeleton which has been placed inside, some distance away from the walls. The light entering through the skylights creates a feeling of lightness and suspension, seeming to liberate the ceiling from its weight and giving to the stone walls a primitive and earthy appearance, making them look like sculptural pieces in the context of the rest of the house.

Almost all of the spaces in the ground floor open into patios, which surround the main volume centrifugally, organizing the outdoor space into clusters of use. The living room opens onto a patio in the front, which is separated from the street by a planted zone. With its big, double-height openings, that permit a close connection with the outdoors, the room gives a feeling of a covered courtyard. The informal living room opens onto a patio on the back side, semi-covered by the extension of a balcony facing the back yard. The formal dining room and the kitchen open onto another

patio to the west, also facing the back yard but visually separated from the other back patio by the body of the dining room interposed between the two. A zone is created in this way, where outdoor and indoor spaces alternate in a rhythm following the pace of the internal distribution.

The circulation pattern is very centrally structured, referring all directions to the central hall, which afterwards radiates them according to hierarchies of use. The central hall also gives access to the staircase for the second floor. Its vertical, rectangular shape stands at the crucial meeting point of the two macro-volumes of the building (the frontal orthogonic of the intersecting protracted volume of the second floor), binding their spaces together. The staircase has a squared spiral form and leads, after three flights of stairs, to a mezzanine study, opening with a balcony onto the living room of the first floor, and continues for another short run to the central area of the bedroom wing, which is used as the sitting room of that level. On the second floor the three rooms are arranged linearly and they communicate through a corridor-balcony on the west side.

All spaces open onto private balconies following more-or-less the radiant pattern of the ground patios. The master bedroom opens to a shaded balcony which develops over the main entrance of the house in the south. The sitting room opens onto a covered balcony on the west side; in a circular manner, the northern room opens to an open--but nevertheless framed--balcony to the north, overlooking the back yard, and the in-between room to its own independent balcony facing the east corner of the back yard, which can be also reached from the northern end and the sitting rooms. At a little lower level than the main second floor, stands the study, which has an outdoor and an indoor balcony overlooking the back yard and the living room, respectively.

Generally, the Glyfada house reveals the persistent preoccupation with the three-dimensional articulation of both enclosing and

enclosed space. While alluding to a Corbusian ideal it, nevertheless, comes close to the three-pronged Wrightian objective of the destruction of the "box-like" spaces; the creation of a continuity between the inside and the outside; and the identification of the building with the ground.

III

The elevations of the Glyfada house convey a sense of a place of serene and interesting complexity. When one approaches the house from Foivis Street, the rich vegetation across the street border obstructs a clear view of the frontal facade. Nevertheless, the characteristic hollow-brick-built parapet on the top of the deeply set-back main entrance--marking the focal "beginning" of the house--is visible from far away, as there are also the large, two-storey-high openings of the living room.

The aspect that gives the best view of the building in toto is the unbuilt site in the west. The agrarian landscape and the stressed horizontality of the house bring to this view a profound calmness and serenity. The notion of horizontality is stressed with the continuous line of the skylights just below the ceiling of the first floor. The demarcation of a parapet zone, that runs around the second floor, is another device that stresses horizon-ality. It is defined and composed of hollow bricks (creating a graded filigree pattern) when there is a balcony, or simply incised upon the outer walls when the space behind it is enclosed. Last, there is the cornice which runs along the periphery of the building, framing open and closed spaces, individually protruding room-volumes and connective transitory spaces, into a basic rectangular form.

The other two elevations hardly can be seen from any point, since the east side is built very close to the neighboring property and the rear view can be seen only from inside the back yard of the house. The general view of the simple white-washed forms and the

horizontal strips of either the openings or the framing cornices readily suggest that the house should be classed as belonging to the modern movement. A more detailed consideration, however, reveals a number of unusual aspects of spatial and formal articulation.

One of the most striking characteristics of the house is the varied techniques used to combine the several horizontal layers "cut out" from the building's outer surface. One has the feeling that it is as if a tender skin had been stretched over the nerves and muscles of a body. The skeleton-like quality of the visible concrete structural system intensifies the skin metaphor.

The house boasts many other distinguishing touches. A regular reinforced concrete column grid underlies the whole structure of the building. In all cases, however, it remains unemphatic. The columns act as subservient bearers of the up-turned or regular beams facilitating a varied set of floor and roof planes which, in turn, mark spatial zones and establish a system of natural light.

This pervasive gridual structure is flexibly, but nevertheless systematically, employed as the frame for the enclosing surfaces of the upper floor that we have mentioned previously as the most characteristic detail of the work. The next strongest feature is undoubtedly the white-washed masonry walls of the ground level. In contrast with the wall system of the second floor, they dominate and often obscure the columnal frame. Rising directly from the ground, these masonry planes relate the building visually with the land, at the same time giving it a sensuous, tactile dimension. Yet, they are always stopped about one foot short of the slab above, thus always denying their own implicit strength while restoring the integrity of the concrete frame.

The Glyfada house marks the beginning of an experimentation with the use of "double materials", that will be continued in many later projects. Combining stonework and concrete brings to a close proximity traditional and new industrial techniques. It is a fusion which the Antonakakises will achieve repeatedly in their work. Apart

from connoting the production processes, the use of "double materials" reproduces strong significatory indices for the building. Stone used to be the traditional building material for almost every place in the country. According to the quality, durability, and the type of stone available, the architecture of every place acquired specific characteristics, which became identical with the character of the area versus other "characteristic" regions. Thus, by introducing stone walls into their buildings, the Antonakakises win for their buildings a direct level of iconic identification with their environments. Having paved the channel to a critical memory, they then proceed with careful application of old and new techniques to the articulation of formal elements and details of construction. All these can be seen in the way the stone walls have been combined with the strip skylights on the ground floor; in the way the strip windows of the second floor are covered with shutters resembling traditional wooden shutters (Fig. 25); in the way indoor and outdoor space has been handled to recall levels of accessibility to nature that traditional domestic architecture had developed to a remarkable degree--for example, in the corridors of the upper floor, the covered verandas, and the open balconies.

Among one of the most characteristic architectural elements, already mentioned briefly, is the cornice that frames the building's volume and the visual differentiation of the volumes of the various rooms. The top cornice--corresponding directly to the longitudinal parapet-zone which belts the house at about the center of its total height--creates a kind of framing structure which helps to integrate the otherwise irregular and free organization of the house. This also facilitates the corollary principle of "formal duplicity" that they employ, depicting iconically the nature of the house as the place of individual and communal interactions put under the dominant scheme of collective control.

Space articulation in the Glyfada house is conceived very clearly as a hierarchical sequence of spaces, following a categorical

distinction of public versus private functions. Overall, the house is organized on the basis of a communal pattern of life where the rooms stand as the only individual units out of a continuous web of open "public" spaces. Those public spaces interlock with each other by means of a split-level system that provides for each place a corresponding individual ceiling height. Inventive devices using light and volumetric arrangement are engaged to enhance the atmosphere of each of the communal and transitional spaces. The white plastered walls of the interiors, flanked by the white-washed masonry walls of the periphery, reflect all together and with extreme rigor the alterations and varieties of the exterior light, enhancing the complementary qualities of spaces through the different light conditions.

IV

Investigating the historical architectural significance of the Glyfada house, several themes come into mind.

The period in which the house was designed coincides with the period in which Team 10 sets out to reassess the tradition of the modern movement. The attempt to establish a new order--both sensuous (the Brutalists) and significatory (Kahn)--permeates every single spirit mood. The authority of the modern movement's disciplines, however, is never substantively challenged. This much is aptly evident in the Glyfada house, too, where the Corbusian precedent is immediately brought into focus. Apart from this first consideration, though, there is also the particular historico-cultural context of the country, which has to be taken into account. The conflict originating at the beginning of the century between a westernized civil culture and the autochthonous tradition of the Greek people--carrying with it all the restrictiveness and misfortune of the national history--foregrounded for the artist (and to a lesser extent the critics and the general public) the question of "Greekness".

The work of the painters Tsarouchis and Diamantopoulos comprise two instances wherein the problem of "Greekness" was worked through successfully in purely "artistic" terms.

Odyseas Elytis's introduction to a 1958 exhibition catalogue on the work of Yannis Tsarouchis suggests something of the meaning and value of the enterprise:

> A rebel cannot be a classic at the very same moment. But Tsarouchis can make this true. The very same day that this painter dared to search for Hermes not on the Olympos mountain but in the 'Olympos Cafe', a myth descended from the books into life, while the eye of the artist was obliged to attend the world differently. In other words, neo-hellenic reality--distorted up to that time by a deceitive philology--once again took its natural place within the plastic interests of our time. And the painter, located within the space that this reality defined, assumed the responsibility to find the unique expression that corresponded to its specificity.[4]

Similar to the architectural search for a reassessment of modernism, this contextual regional search was not aiming at an abolition of a tradition but at its rediscovery.

On the basis that it proved able to manifest the hidden principles of tradition, this search can be considered as classical. It was not an attempt to reach the perfection that the term implies, but with the long, systematic and laborious process of development on which it embarked (and that it still continues), it approached closer to the humble secret steps that one must follow to discover the truth. The Antonakakises joined the search when the lights of the first achievements were already indicating the beginning liberation of the ethnic spirit. They joined the effort in their field, stepping carefully on the sparse traces that the anonymous masons left behind all over the country, while at the same time never doubting the correctness and the necessity of modern architecture.

During the early 60's, similar trends of thought appeared in many regional areas in Europe. The individual practices of the members of Team 10, especially Van Eyck's and Giancarlo de Carlo's,

must be mentioned here. The rich regionalist production of the architects of the Italo-Swiss region--Schnebli, Galfetti, Carloni, Atelier 5, Scarpa, Gardella--demonstrated a strong provincial cultural production which, however, remained virtually unpublished. The regionalist school of the Catalonian revival centered in Barcelona also reveals a development that originates from a similar state of mind, one aware of the processes and goals involved in a regionalist orientation. In Greece those same years, Aris Konstantinides is practicing his "classical" regionalism while the Pikionian paths have been carved in the Acropolian hills. Within this context, the Glygada house is built in the tradition of and is indebted formally to both the orthodoxic modern movement and the Greek character.

On an iconological and iconographical level, the Antonakakises, through the use of specific architectonic elements, achieve a very personal and independent interpretation of both the International Style and the Local Identity. Their indebtedness seems to be more to certain architects (Corbusier, Mies van der Rohe, Pikionis, Komstantinides) than to a general "style" or some vague "local" character. The kind of successive developments that the Glyfada house will initiate can be traced clearly in their later work and this is another additional factor in the importance of this house for both the architects themselves and for the course of Greek regionalism in general.

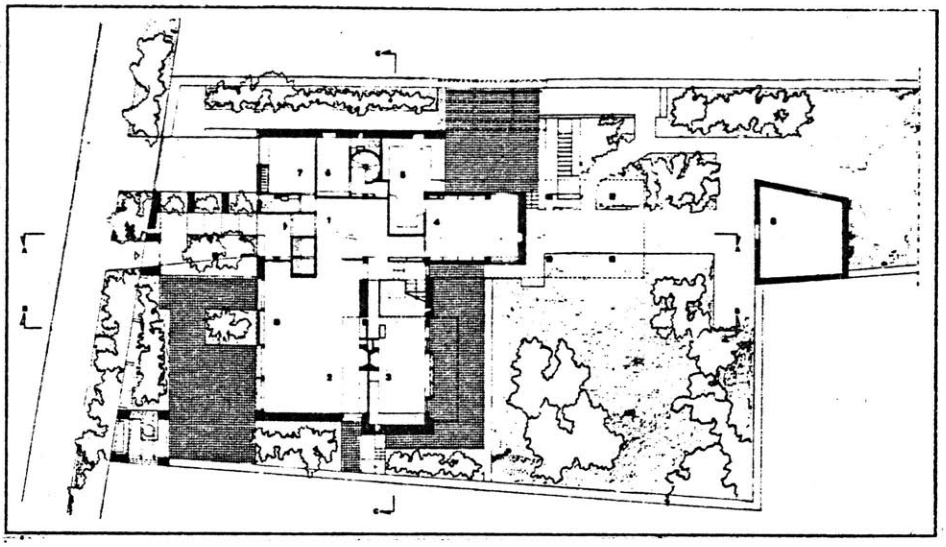


Fig.18 Glyfada House
Ground Floor Plan
D&S Antonakakis Architects

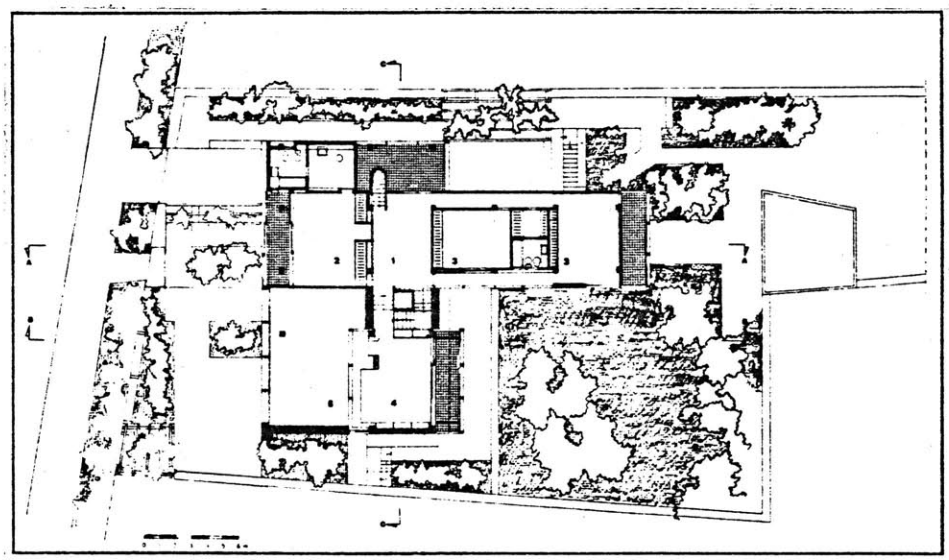
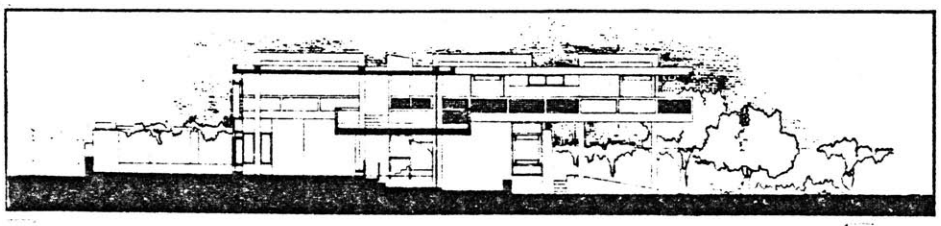


Fig.19 Glyfada House
First Floor Plan
D&S Antonakakis Architects



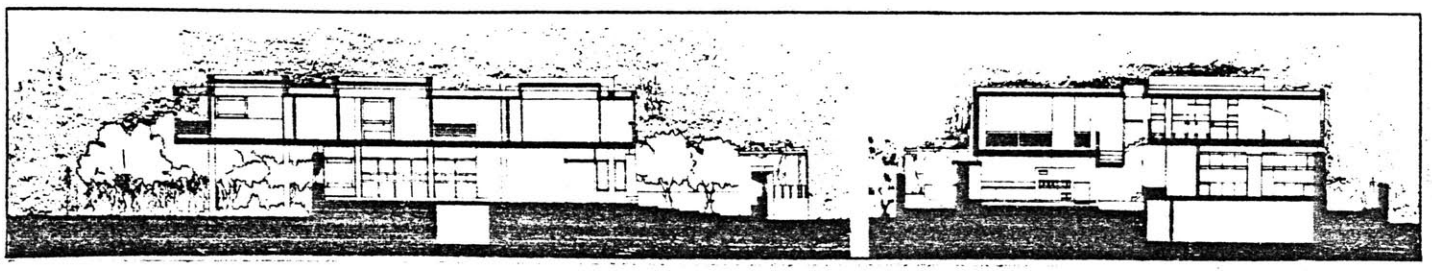
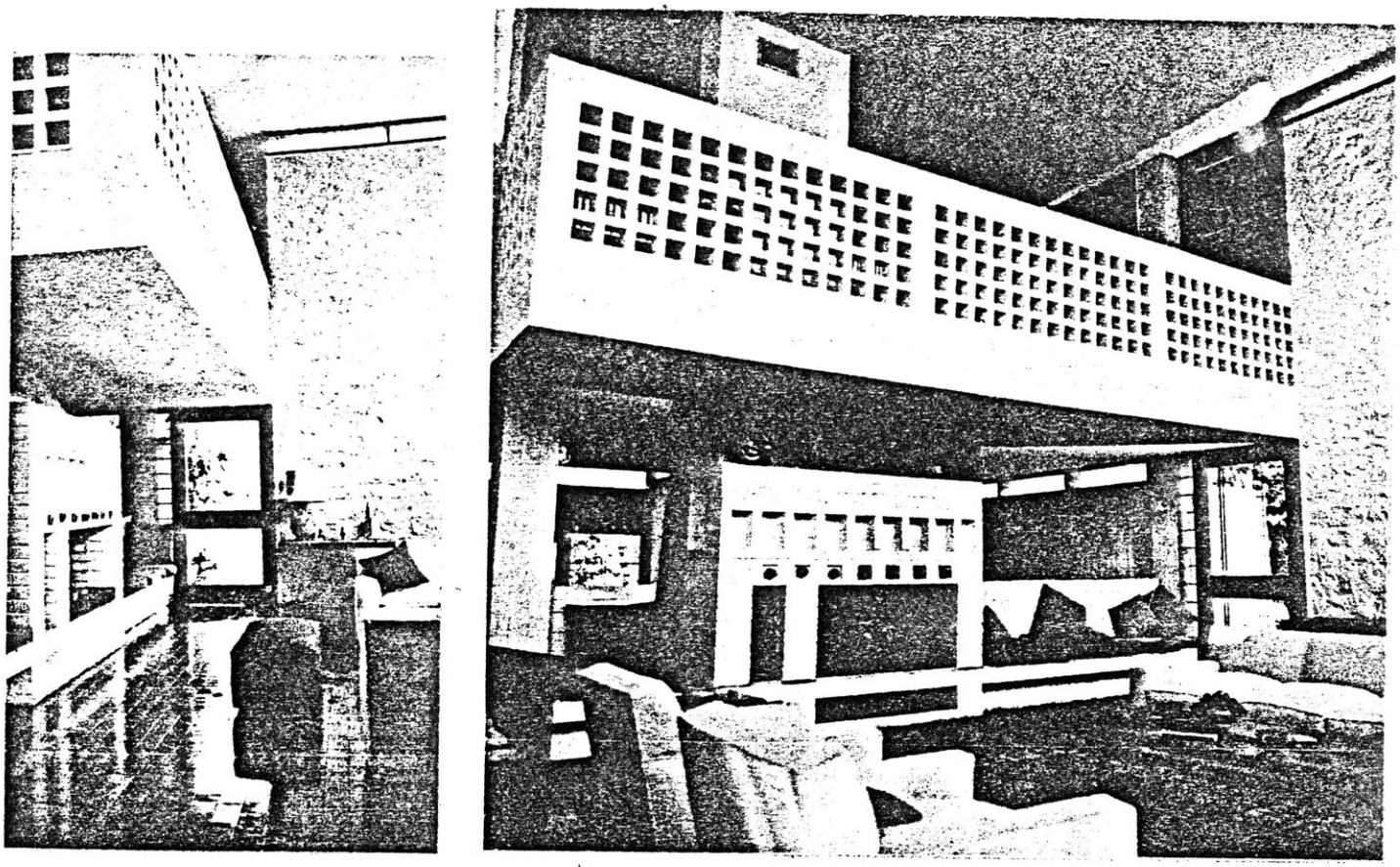


Fig.20 Sections AA,BB,CC Glyfada House



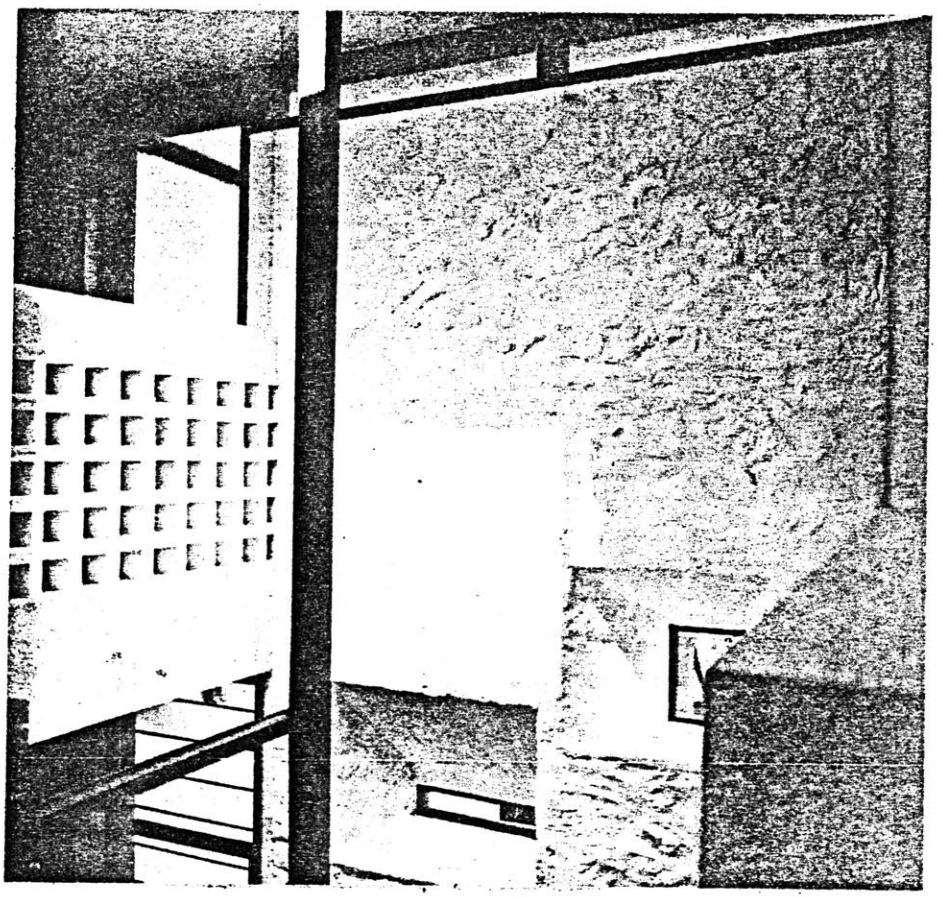


Fig.21 Glyfada House
D&S Antonakakis Architects

Interior Views of the study balcony

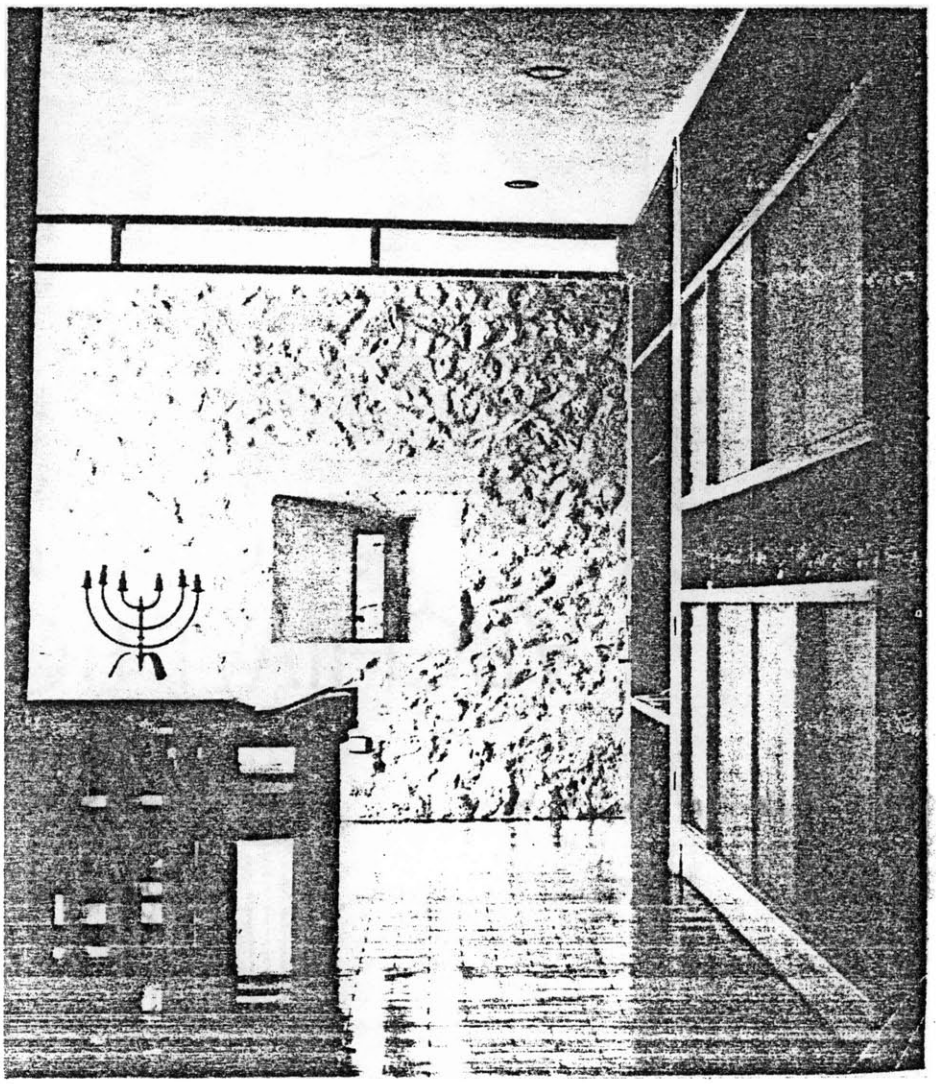


Fig.22 Glyfada House. Interior view of the dinning room and its carved wind

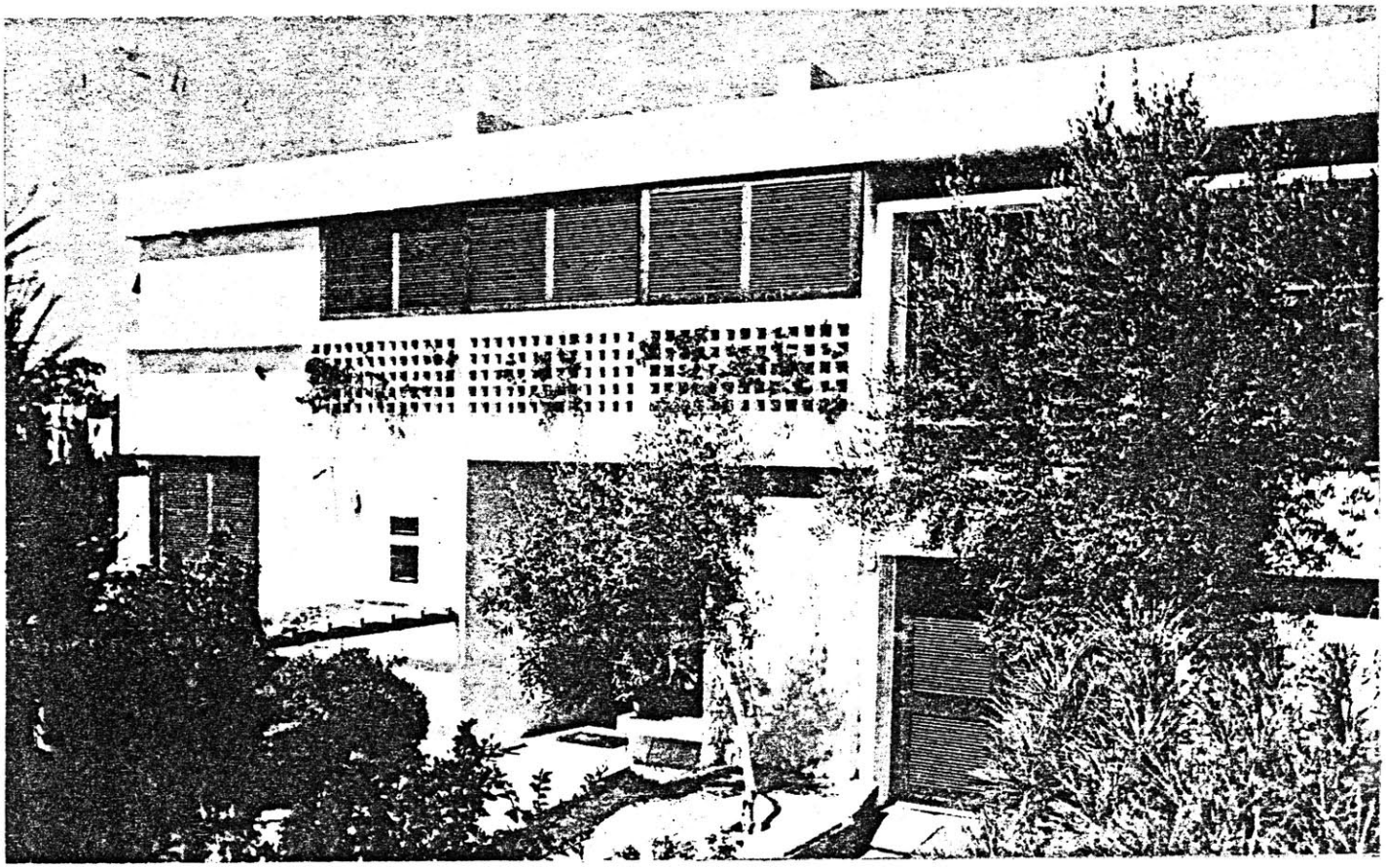


Fig.23 Glyfada House, view of the entrance

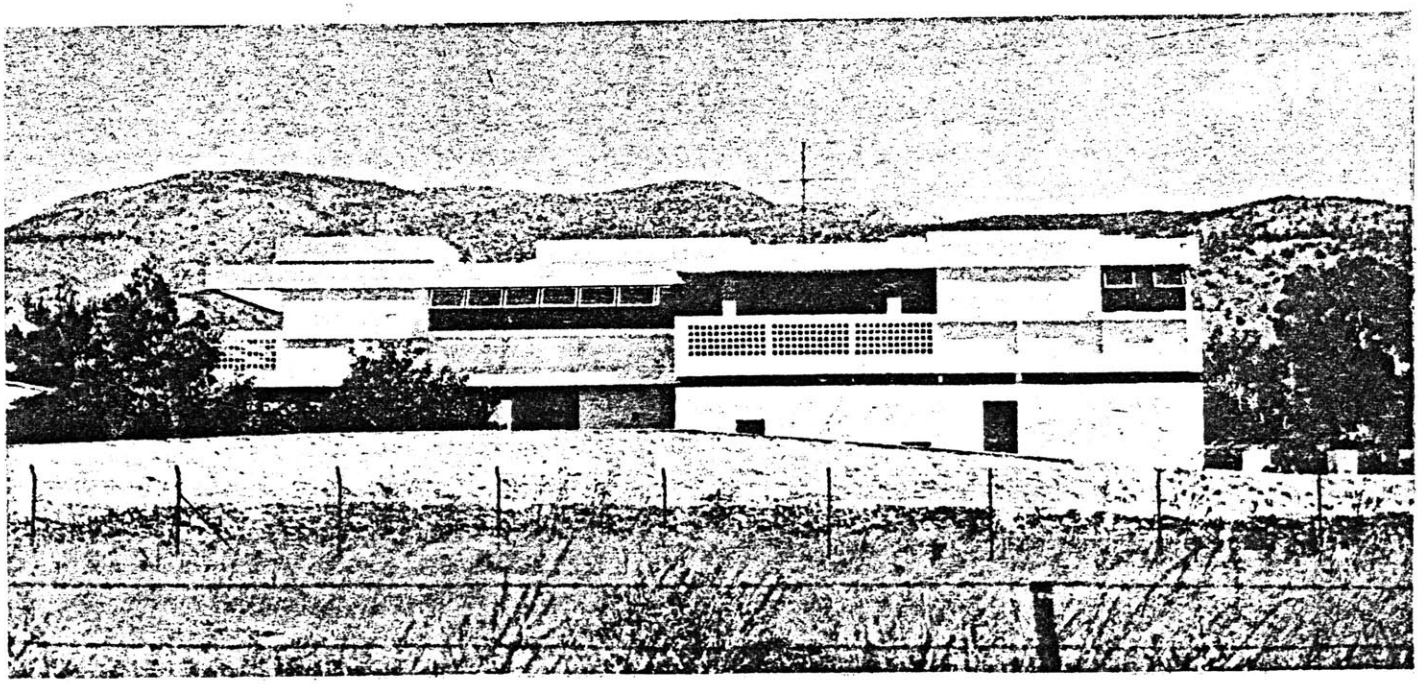


Fig.24 Glyfada House, view from the west

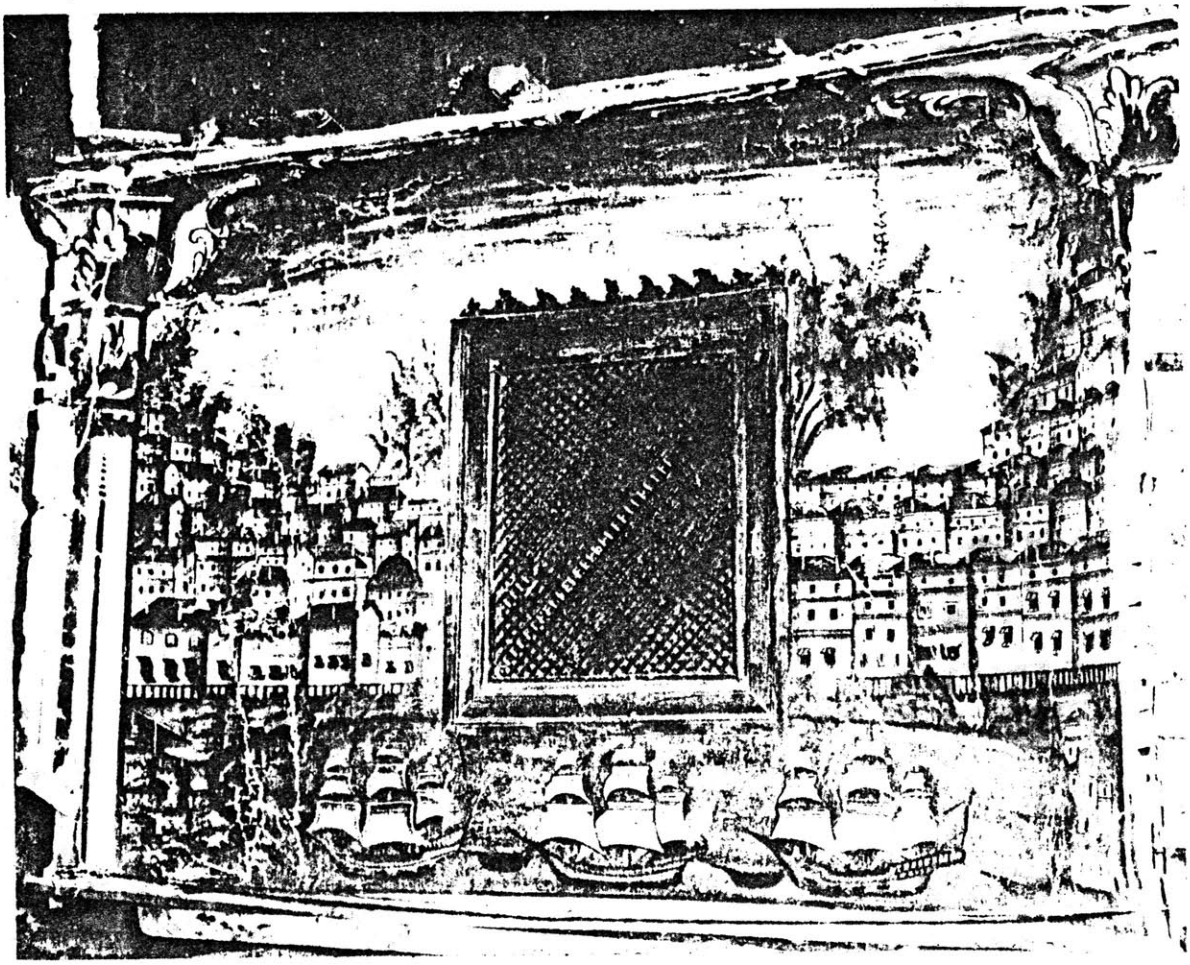


Fig.25 Mural from a traditional Mansion house

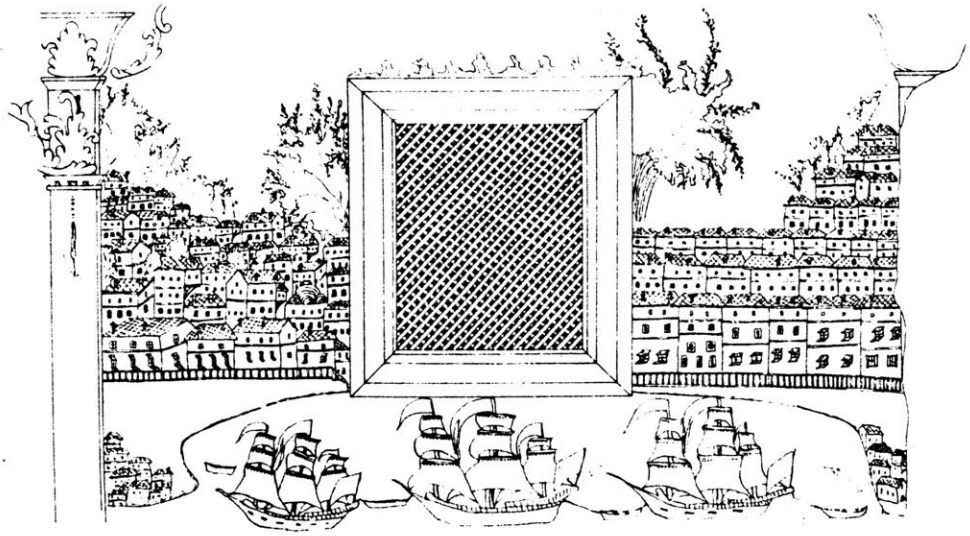


Fig.25-b Drawing of the mural

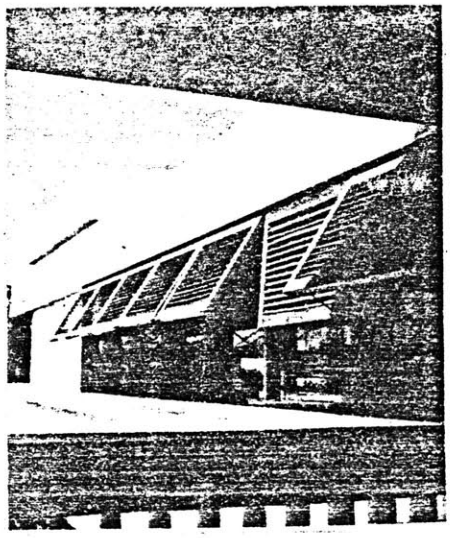


Fig.25-c The Glyfada house-shutters in the bedroom wing

3.2 Archaeological Museum of Chios

3.2.1 Introduction

Growing out of the efforts at democratic reform which the liberal government of Georgios Papandreou was trying to realize in Greece--for the first time since the end of World War II and the Civil War that followed--were the timid but nevertheless substantial 1964 efforts at cultural decentralization. The extant model was that of a hydrocephalous capital which monopolized all cultural activity and all creative potential from the provinces.

The program outlined by the Archaeological Service during those years, by contrast, would set up zones of peripheral development, based on several provincial capitals, where museums would be built according to architectural competitions on a panhellenic scale that began in early 1965. The architectural competition for the Museum of the town of Chios was one of the first and was held in the beginning of 1965. The first prize was awarded to the entry submitted by Dimitris and Suzana Antonakakis and Eleni Goussi-Desylla. The team reworked the winning proposal and, by the end of the year, they submitted the final design of the building on which construction began in 1966, to reach completion only in 1970, following a long interruption in the work.

The Museum of Chios represents a critical point regarding both the developing methodology and style of the architects and to the broader architectural dynamics of the country, of which the Museum is, at the same time, a manifestation and a stage of development. Placed in the context of the attempt for a balanced cultural development of all the parts of the country, sponsoring Museums for a number of towns, which, though peripheral, nevertheless had long and continuous urban histories, had two major goals:

- First, the attempt to back up independent local development of the towns and the broader regions, of which they constituted the social and economic centers;

- Second, the attempt at the full expansion of all available resources toward an increasing productivity of the country and diminishing the bursting problems of under- and un-employment and countering the cultural and social backwardness of the provinces.

Chios--like the other provincial centers where Museums were sponsored--provided, if not an a priori insurance, at least a suggestive affirmation that regional planning in those areas had great potential to bring about results.

The economic and productive system of Chios was highly distinctive. Due to the cultivation on the island of a special gum-bush (masticha), which was in great demand all over the Western world up to the beginning of the modern period, the island had been wealthy for a period lasting for centuries. It also held special administrative privileges under the Sultan during the Ottoman occupation period, which reinforced the establishment and development of many urban settlements dating back to medieval times. Chiotians also controlled--together with the Hydrians and Spetsiams--almost the total marine commerce of the Aegian and the broader Mediterranean region, an additional factor contributing to the long-standing economic well-being of the inhabitants. This is reflected directly into the urban built fabric of the town of Chios (12,000 inhabitants). Its houses are generally large, two-storey structures, built from native stone; some are stuccoed, others left with their stone walls exposed. The other basic characteristic of the island are its fruit and citrus yards: Chios is famous for its citrus fruit production, and the relatively big orchards with their six feet-high stone walls attached to the houses is a distinctive characteristic all over the island.

The big mansions of the late nineteenth and early twentieth centuries, reproducing a regional marine neoclassicism (visible most of the time in its frontal elevation only, as the rest was enclosed by the high walls of the surrounding orchards) added a touch of

finesse to the prevailing earthy warmness and primitiveness of the stony environment of the town. Middle-class houses, with their generally exposed stone work, were white-washed only on the frames of their openings and on the low structures surrounding the entrances of the house: stairs, parapets, pavement frames. It was a gesture practiced in extension of the white-washing of the interiors and "traditionally" reached as far as a bent arm holding a paint brush could reach the outer surface from the room inside. Thus, the scene that Chios presented in the mid-60's, due to its complete isolation and neglect by the official state, the total separation from the island of the rich shipowners who remained only as spots in the urban landscape--the mansion of Chandris, the house of Goulandris--and the comparatively well-being of the rest of the inhabitants, along with the peculiar situation of "men-lackness",[2] was one of a low and serene pace of life growth, concentrated on its internal workings. Traces of modernizationing were not to be seen, and the urban fabric was more or less coherent, with a strong contextual integrity.

Within this context, the sponsoring of the Museum constituted a crucial and critical moment. It would be the public building that was going to organize and promote the rich local history of the place and initiate the cultural participation of all its people. Combined with the educational reform that had started around the same time, and the general democratic upheaval of the country in 1965, the programmatic aspirations of the Museum provided the ground for a humanistic and romantic framing of the institution and the way it was intended to work. And it was more-or-less in this way that it was addressed in the Antonakakis-Desylla proposal.

3.2.2 Analysis

I

The Museum site, a 2.5 acre plot, is located in the southeast part of the town, at some distance from the center, on a major street opening directly into the harbor promenade walk.

It directly faces the second Primary School of Chios, a modern building of the rationalist pure style of the late 30's, next to the "neoclassical" building of the Commercial School of Chios, further down toward the sea. The Primary School has no tall surrounding walls while the Commercial School is enclosed by a six feet-high yellowish stuccoed periphery. The rest of the neighboring sites were, at the time of the commission, occupied by small middle-class houses, giving a sense of small scale to the whole area. The site itself had an incline of 10% from the west to the east, totalling approximately 40 feet of difference within its limits. With its ascending ground and the position it has at the end of the city, the Museum could command a panoramic view of the harbor and the surrounding area.

The plan that was awarded the prize passed through a second revision at the end of 1965 by the architects and the final plan was ready for construction in early spring of 1966.

In comparing the two stages of the projects, the differences between them are seen to concentrate on the plan, concerning the resolution of the difficulties springing from the modular system used, which comprises the characteristic element of the building.

The Museum building was published in the Bulletin of Greek Architects Association,[3] in Architecture in Greece[4] (the first version), in Archtektur und Modern Form,[5] and in Architecture in Greece[6] (the final version). In discussing the years 1965-1967 of their activity, Dimitris says of the Museum project (1965-67):

"In the area of application, two buildings--of great importance to Atelier 66--the Museum of Chios and the Hydra Beach Hotel complex at Hermionida, begin to be constructed."

These were the years that Atelier 66 was founded, after the successful collaboration of many of its first partners in several competitions for public commissions.[7] Experience of the collective effort confirmed the inherent belief in its value, leading to the formulation of the team approach and expressing, according to Tzonis and Lefaivre, one of "the collective characteristics of regionalist movements."[8]

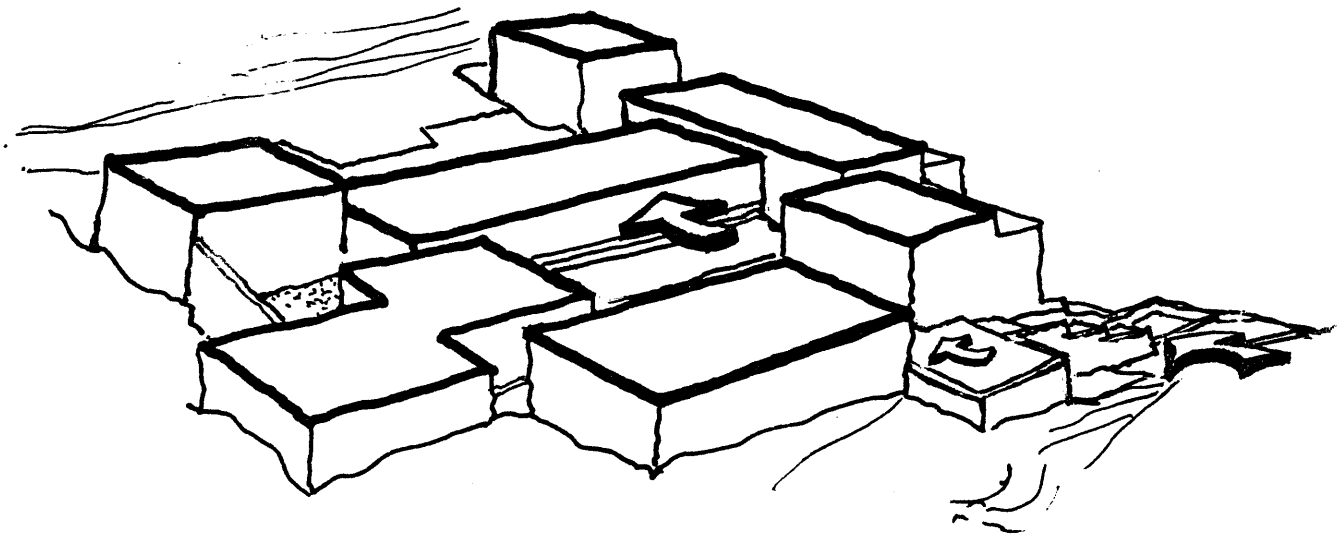
II

The formal theme of the traditional indigenous village as a structuring system for both urban and architectural form comes to mind as the first views of the museum appear as one approaches the site from the northeast.

> A series of modular prisms are made to climb, descend, bypass each other as if in a suspended, syncopated dance following the hundreds of local buildings that preceded it, only skipping a step here and adding one there.[9] (Fig. 26)

Developed with high stone-built peripheric walls around a central open courtyard, through which one is led to the main entrance in the center of the building, the composition presents an allegoric "public" privacy. Ascending the street toward the stairs leading to the central courtyard, the blank, high stone walls surrounding the peripheral modules achieve the volumetric synthesis of the structure. (Fig. 27) (See scheme on following page.)

Forming a glass-panelled, two-sided, open stoa, the central hall of the Museum constitutes the linking element between the public and the more private areas of the building (Fig. 28). From this hall, the "public" way turns to the right, entering the first exhibition room, which is composed of three 14 X 14 m modular units



Scheme 1: The Pathway to the Entrance

combined, and from which one can enter the second exhibition space which has also a half-storey opening into its two-storey-high modular space.

The third "public" room is approached from the courtyard; programmed for temporary exhibitions, it can thus have a schedule independent from the rest of the Museum.

Turning left from the main entrance and following the covered passageway to the central stoa, one bypasses the porter's quarters which open to the other side of the hall to enter a small reception hall which gives access to the curator's room, the workshops, and the rest of the storage space and service areas. There is an attempt to have each function occupy one or more distinct modular units, in order to best express the generic idea of the structural scheme, which is: The structural unit--the 7 X 7 module--comprises the modular unit and, in turn, is combined to constitute the basic functional unit (14 X 14 m.). But this is not always possible to achieve.

We list here the full description given by the architects in the publication of the Architecture in Greece, 1972.

Data:

The site is at some distance from the town center. Its lower, eastern part has a difference of 12 m from the western part, which lies next to the road leading to the harbour.

The building includes: (a) Entrance, curator's office, and living quarters, porter's quarters; (b) Exhibition rooms: 1. Prehistoric, 2. Archaic and Classic, 3. Early Christian, 4. Byzantine, 5. Post-Byzantine; (c) Temporary Exhibitions room; (d) Workshops; (e) Storage.

Design Principles:

a.) Integration of the building in its environment (scale, landscape-town, materials);
b.) Penetration of public areas into the Museum;
c.) Creation of a successful circulation pattern linking covered, semi-covered, and open-air spaces;
d.) Flexibility in the projected future extensions; and
e.) Simple construction.

Because of its distance from the town center, the Museum had to develop as an independent pole of attraction, and an exciting, inviting stop at the end of a walk. For this reason, the layout is open and flexible, spreading out to cover a large area. The public road penetrates into the central courtyard; its orientation determined the general plan of the Museum. The scale of the old town surrounding the Museum, with its one- or two-storey houses, its small courtyards and narrow streets, suggested a structure built with identical unity, 14 X 14 m, on a 7 X 7 m module. These dimensions were dictated by the demands of the exhibition rooms for lighting, circulation, and presentation of the exhibits. The same module will be

used in the projected future extension, which will add another 600 sq. m. of exhibition space and a large room for theatrical and musical performances. The exhibition rooms open to courtyards for open-air exhibitions, which follow the overall layout module.

Materials:

Load-bearing structure of exposed reinforced concrete with inverted beams.

Stone masonry for all interior and exterior in-filling walls.

Local marble for interior flooring and sea pebbles for the courtyards.

Oregon pine doors and windows of permanent furniture.[10]

Basic problems in the design were caused by the modular system on which it was based, and included compositional difficulties as well as structural ones. The revisions that carried the first plan to the form of the final scheme took care of the fundamental compositional problems (Fig. 29). The strict logic of the modular model used in the initial design permitted the combination of two 14 X 14 units at the maximum. This uncompromising stance was scrapped in favor of a freer stance that allowed larger agglomerations of the 14 X 14 modules as function and imagination dictated. The intermediary "foreign" elements--notably the corridors--that had been employed originally to realize the circulatory and combinational functions could thus be dispensed with. Their role was fulfilled instead by a free distribution of the 14 X 14 modules following the functional imperatives of use and circulation. This "loosened" attitude, achieving the organicity of the whole via the disposition of modular units, speaks to a twofold aim: It obeys the architectonic rule generating the compositional tactics and honors at the same time a new way of conceiving the organic continuity of urban life. The image of the Museum is achieved, in part, by breaking up the scale of the units into their constituent modules.

A disadvantage of the absolutism of the modular system is that it creates no intermediary spaces to reconcile the form of the Museum with that of its urban context. Perhaps this task is accomplished, however, by the uniform continuity of the masonry surface that covers the building in its entirety and identifies it with the surrounding urban fabric which is also strikingly characterized by pervasive masonry surfaces.

The modular system posed a greater difficulty in the attempt to create a fluid and continuous internal pattern that would unify the discrete spaces. The first step in refining the design toward that end was the externalization of the skeleton frame of the modules

Beams deliberately made visible from the outside impose a gridual reading of the entire structure, literally stamping a vivid impression of the strict geometric determination that controls it. It is as if the "natural" geometry of the urban tissue that surrounds the Museum had been condensed and abstracted onto the white planar roofs of the building (Fig. 30).

Inside, however, the continuous flow of the ceilings unifies the modular spatial order, tracing a subtle itinerary through the whole space (Fig. 31). Difference of floor levels in the arrangement of the modular units facilitate the insertion of the building's volume into the sloping lot. At the same time, they help control the microscale of the environment; nevertheless, they interrupt the continuous path and intensify the individuality of each assembled unit. The architects, while fully exploiting the multivalent experiences of space permitted by the modular system--it cuts the phenomenology of navigating the space into framed instances--are able to overcome its fragmenting effect on the sense of continuous space by means of strips of skylights that detach the roof from its bearing walls. The feeling of lightness and suspension thus created intensifies the sense of continuous flow.

The structural frame of the module is treated completely separately from the rest of the enclosing walls, leading to a clear

formal duplicity. This coherent superimposition of two different structures alludes to a symbolic depiction of the dialectic between the communal and the individual, the containing space and the single room. Furthermore, there is an iconic parallel drawn between the image of the museum and the image of the town, with its tall stone-orchard-walls and the private houses they enclose. The separation of the two structures is also an idea that should have been helpful in solving the construction problems that appear in the borders of the adjacent units. By these means, each unit can be roofed with its own frame-structure and, when two units share a common boundary, a specially extended or shortened stone wall accommodates both (Fig. 26).

The introverted character of the building recalls the typology of a central courtyard house. The constructed part of the first stage of the museum conceptualizes the scheme of a peripheric composition whose "hollow" center is symbolically accentuated by placing within it the "beginning" of the building. At the same time, on the level of visual perception, the dissolved mass of this central unit (permitting visual communication between the entrance court and the courtyard behind) does not distinctly divide the central open space as a bird's eye view of the roof pattern would imply.

Projecting ahead to the final stage when the building will acquire its planned extension, the ultimate scheme will manage to accommodate both powerfully expressive undercurrents that the building holds by virtue of the programmatic belief of its synthetic order--the intersection of communal/individual--and by virtue of the special function of the program generally designated by "museum". On the first level of the synthesis, the vernacular open-centered peripheric scheme is paired with peripheric accentuations characteristic of modern-movement compositions. On the level of typology, the centrally accentuated closed scheme of the neoclassical museum-type is represented typically and literally in the Chios Museum.

Bringing these two schemes together, the final project successfully reveals the intrinsic qualities of both.

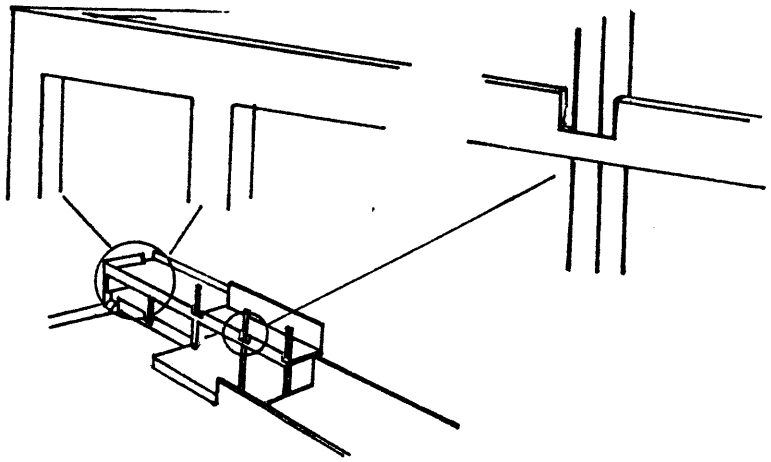
III

The elevations of the Chios Museum clearly express the overall synthetic organization of its spatial order. Intricately related with the compositional and constructive method, the elevations had been already discussed with relation to the plan and the sections.

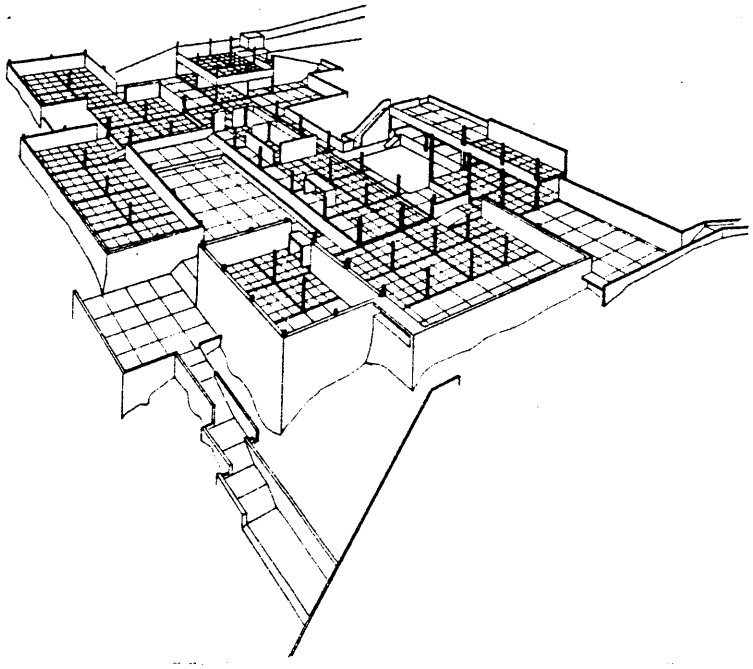
The strong contrast of the ochre-brown colours of the masonry with the white-washed frames and roof slabs--which, from a distant view, form the characteristic feature of the composition--becomes (in a closer view) a harmonic association, based on the textural affinity revealed by the two materials (exposed reinforced concrete and stone work) (Fig. 32). The strong geometric order governing the whole conception of the plan is intensified through its repetition on the gridual characteristics of the openings (Fig. 33).

The other distinct characteristic of the detail-handling concerns the structural formulation of the module frames. The skeleton of each module unit always "contains" the whole volume, following the holistic logic suggested by the organizational tactics of the modular composition. Thus, as each unit is completely finished in itself, so its skeleton is continuous and self-enclosed. The columns extend from the ground to the top, to meet and support the roof--a powerful element in the composition. If a half-storey is interposed, the parapet of its floor is attached on top or on the side of the intervening columns (Fig. 34). The problem begins when the half-storey is extended to form a veranda, where its floor becomes also the roof of the open air portico, that it creates beneath. (See detail a in Scheme 2, following page).

All this detailed concern with the structural integrity of the skeleton, however, is only visible from the interior or from some yards in the exterior where no masonry walls exist. The impression



Detail A



Scheme 2: Indication of the formal problems of the mezzanine balcony parapet in relation to the columnal order

the building gives from the outside is not of a continuous frame construction. The columns, enclosed as they are on all four sides by the stone walls, seem to rest on the walls which, in turn, are considered to be the final bearing structure. The only "obvious" frame is the stoa of the main entrance hall, whose striking contrast with the surrounding masonry makes it appear even more slender and transparent. The hiding of the concrete structure by the stones on the level where the surfaces can be touched (sensuously), is a highly sophisticated gesture to make the building reveal its strong will for identification with the native land, at both scales, the distant overall views and the close sensuous experience.

One of the most characteristic features of the building is the alteration and interplay of inside and outside, the rhythm of alternately opening or closing of inner spaces to the space outside. The organization of the open and closed areas following the strict gridual scheme is paralleled by a scheme of zones that alternates built and open spaces. The theme will be taken up fully in later projects, becoming the controlling issue in the development of the Antonakakis methodology.

IV

In discussing the historical significance of the Museum of Chios, we have already, in analyzing the previous building, mentioned the international architectural context of which the Museum continues to be an essential part. In the Greek context, the work of Aris Konstantinides for the National Tourism Organization, raising buildings in similarly idyllic arcadian places and with similar economic and production constraints (simplicity of structure, use of standardization, low cost for maintenance)[11] constitutes a major point of reference. When Konstantinides's Hostel at Epidavrus is compared with the Antonakakises' Chios Museum, one is struck by several similarities; they turn out, however, to be more apparent

than substantive. A closer analysis brings out subtle and significant differences (Fig. 35).

Konstantinides's Museum at Yannena, winning entry of the architectural competition of 1964, explored the theme of a gridded zoning system, in which the modular system is subordinated to the hierarchical order of the transitional corridor zones (Fig. 36).

In Konstantinides's Yannena Museum, the integration of covered, semi-covered, and open-air spaces is managed visually by the use of a continuous framing cornice, running all over the building. On an overall view, the influences of this building on the Museum of Chios are crucial. And, yet, one must not lose sight of the fact that the Chios Museum constitutes a significant moment in the continuing development of the Antonakakises' own notion of architecture, a development strongly impressed by a regional self-consciousness exercising a severe assault against the degenerated internationalism of the Modern Style. Their indebtedness to the modern movement and especially to the Miesian prototype has never been denied. But, at the same time, the Antonakakises participate in the effort to reassess this modern tradition, trying to generate a new order. Their regionalist commitment imparts a force to their argument, essaying a closer affinity between universal civilizational expressions and regional identities. The same choice can be seen in all their works of 1965-66.

Together with other members of Atelier 66 they worked on a project for a tourist complex at Hermionis, which takes the form of a small village[12] (Fig. 37). Fifty bungalows, a restaurant, and administration quarters were planned and built in the first phase and, later, in 1968, about 250 more rooms were added in two-storey structures. The whole approach to the plan is subjected to the "accidental" happening of architecture; the houses are arranged in a very free composition, and the paths joining them are carved in situ.

In 1965, the Antonakakises worked on a small tourist pavillion at Korakies Chania.[13] The particularly view-privileged site of the project, the limited resources they had to work with, and the simplicity of the program--"a veranda place"--taken together, forced them to a dense architectural statement (Fig. 38). Combinations of stone walls and concrete frame structures take up multiple layers of meaning including aesthetic, sensuous, organizational, and symbolic points. The small pavillion building stands, in fact, as the real predecessor of the Museum of Chios.

The Museum project was followed immediately by the project for the settlement of summer homes in Spetses, winning entry of another architectural competition[14] (Fig. 39). The experience gained from the Museum project and the methodological direction in the organization of space which the architects had taken are evident in the compact composition of the Spetses plan.

Exploring the relationships between inside and outside, nature and architecture, and preserving those aspects that remain valid from traditional life patterns as revealed and structured in built form remain, as always, the major preoccupational principles of their work.

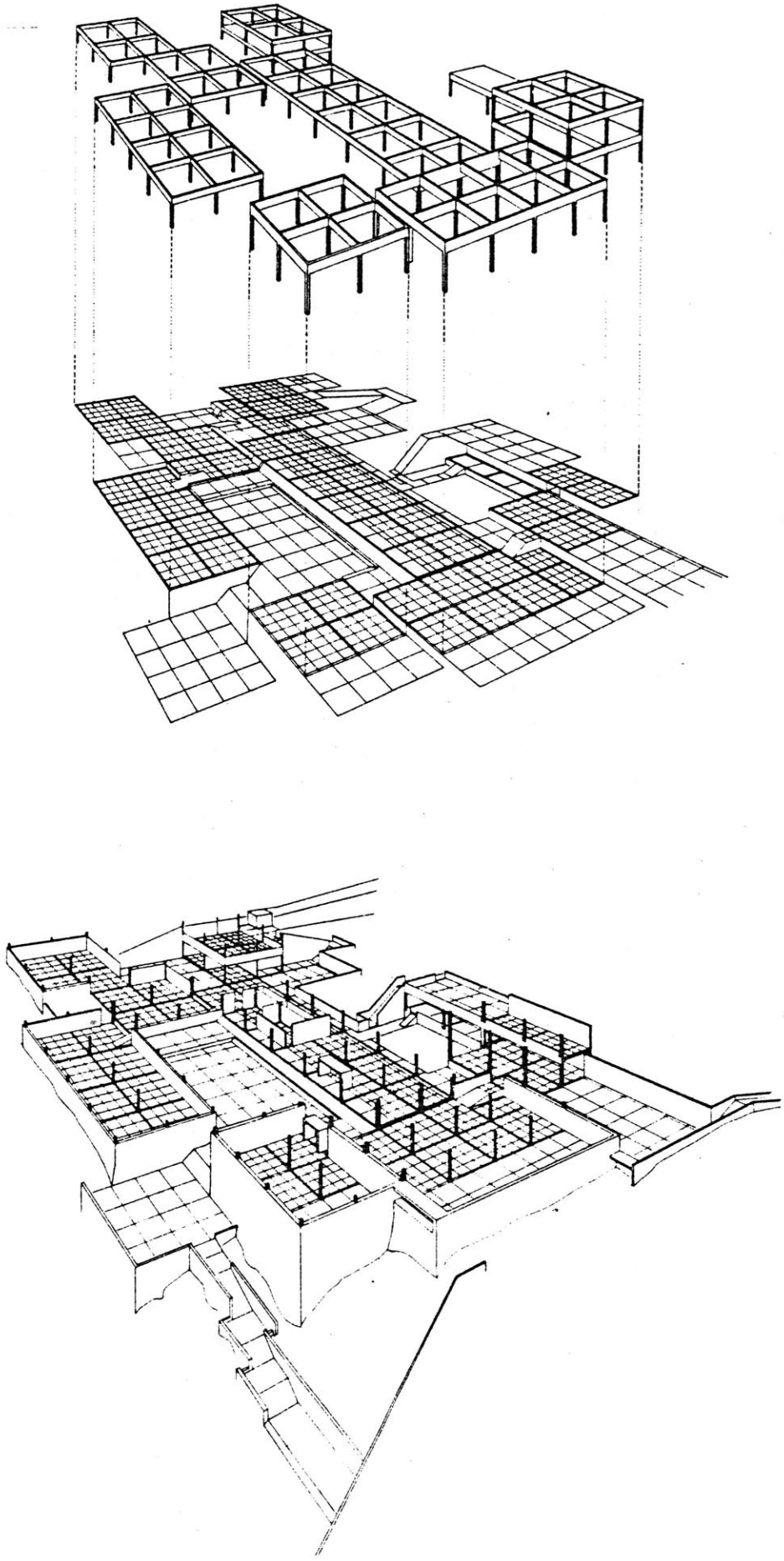


Fig.26 The Museum of Chios. Axonometric Drawings. D&S Antonakakis,H.Desylla

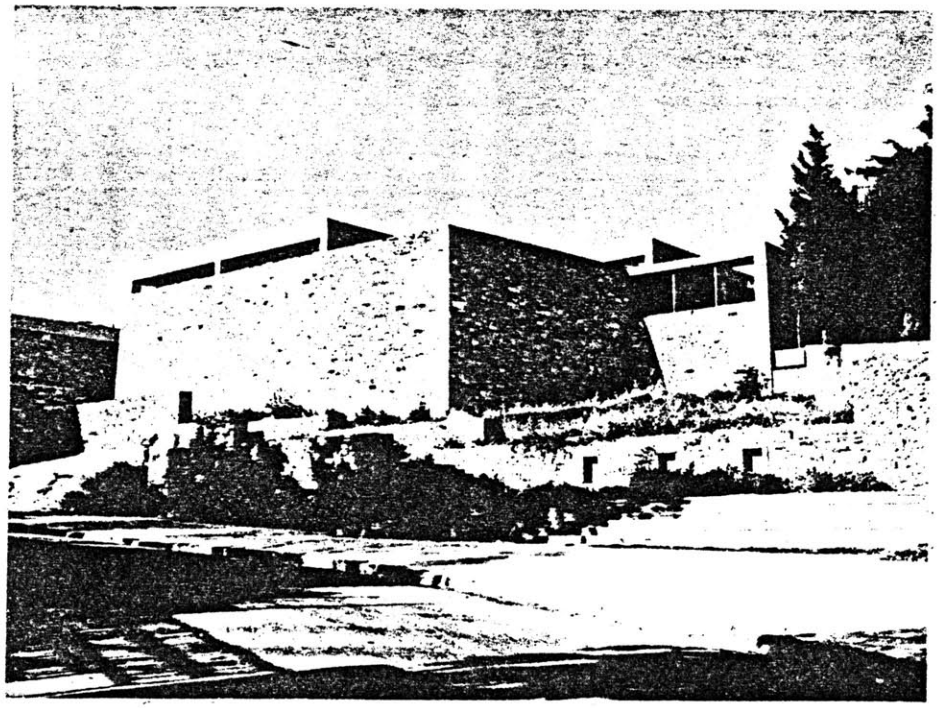


Fig.27-a View of the entrance stairs from the main street

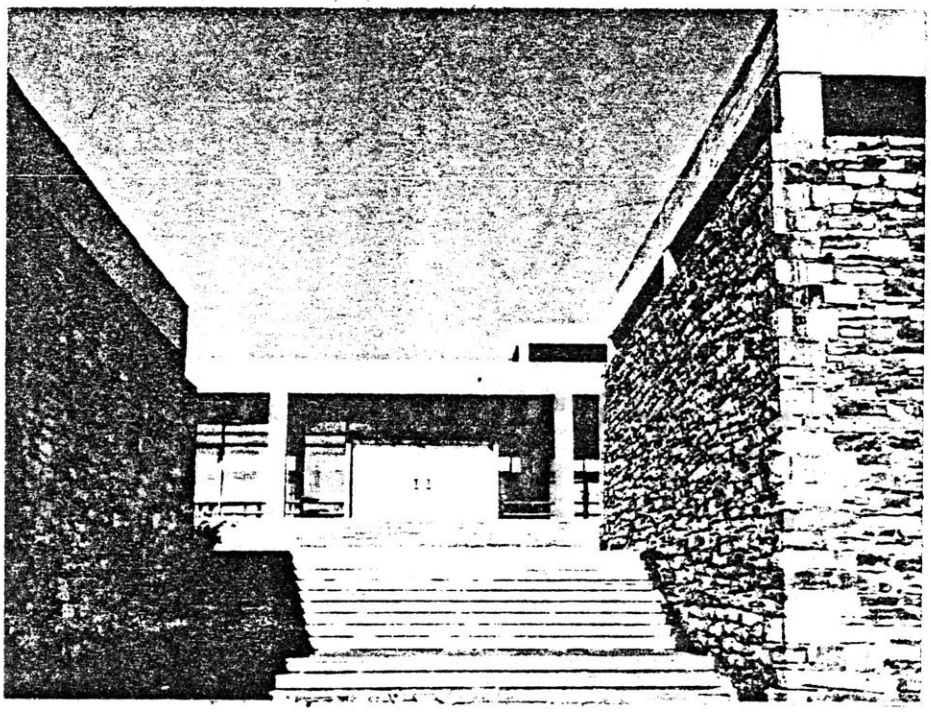


Fig.27-b View of the entrance of the Museum from the first terrace

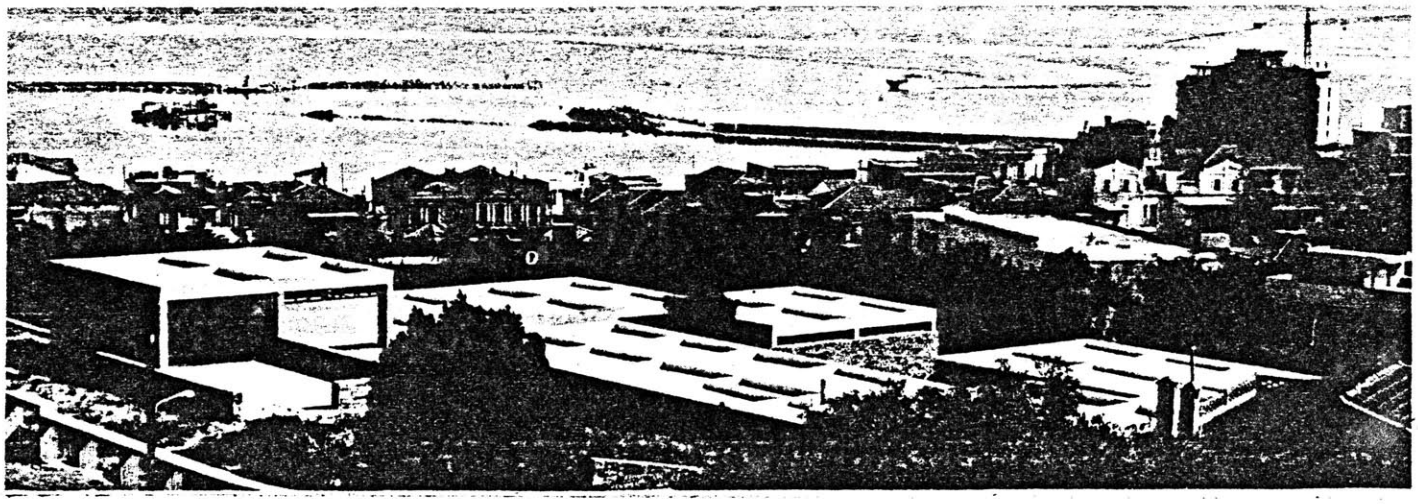


Fig.30 View from above toward the sea.

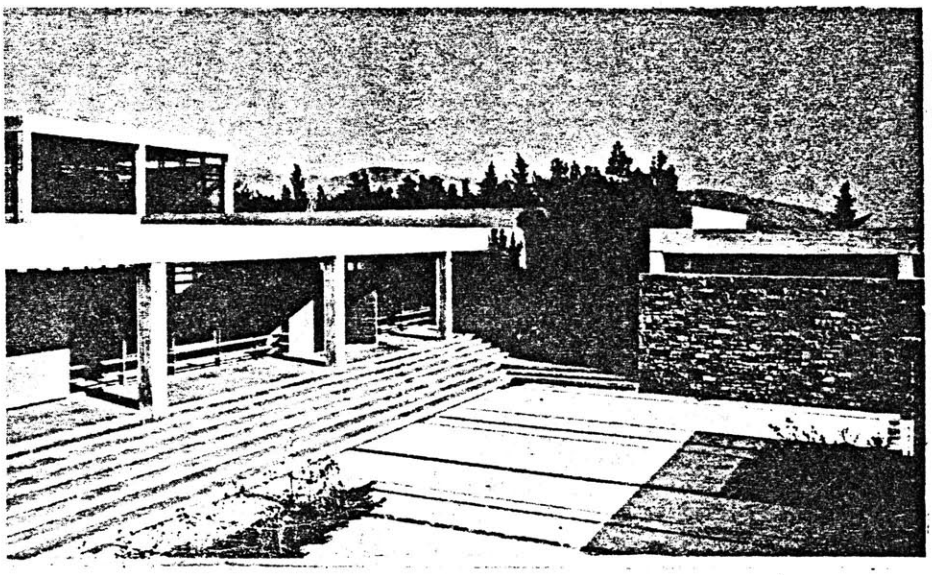


Fig.31-a

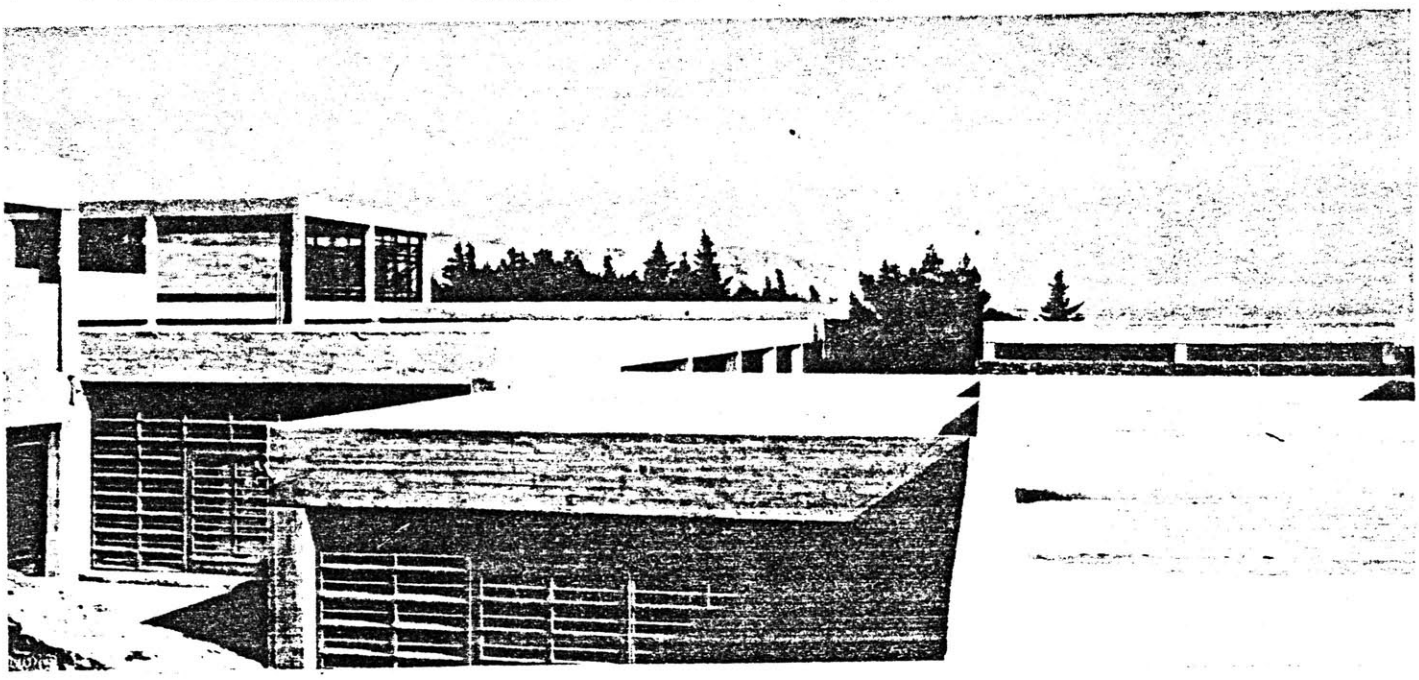


Fig.31 Views from the interior courtyards

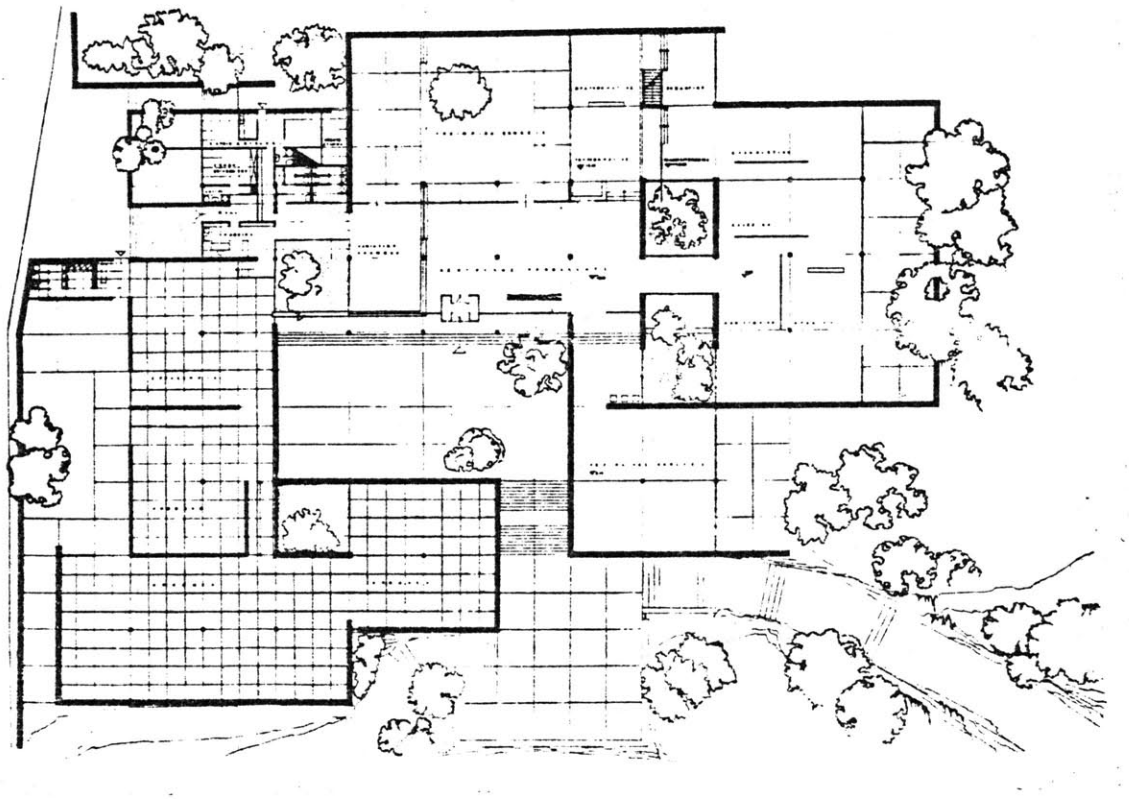


Fig.29 The Chios Museum winning entry 1965. Ground floor plan.

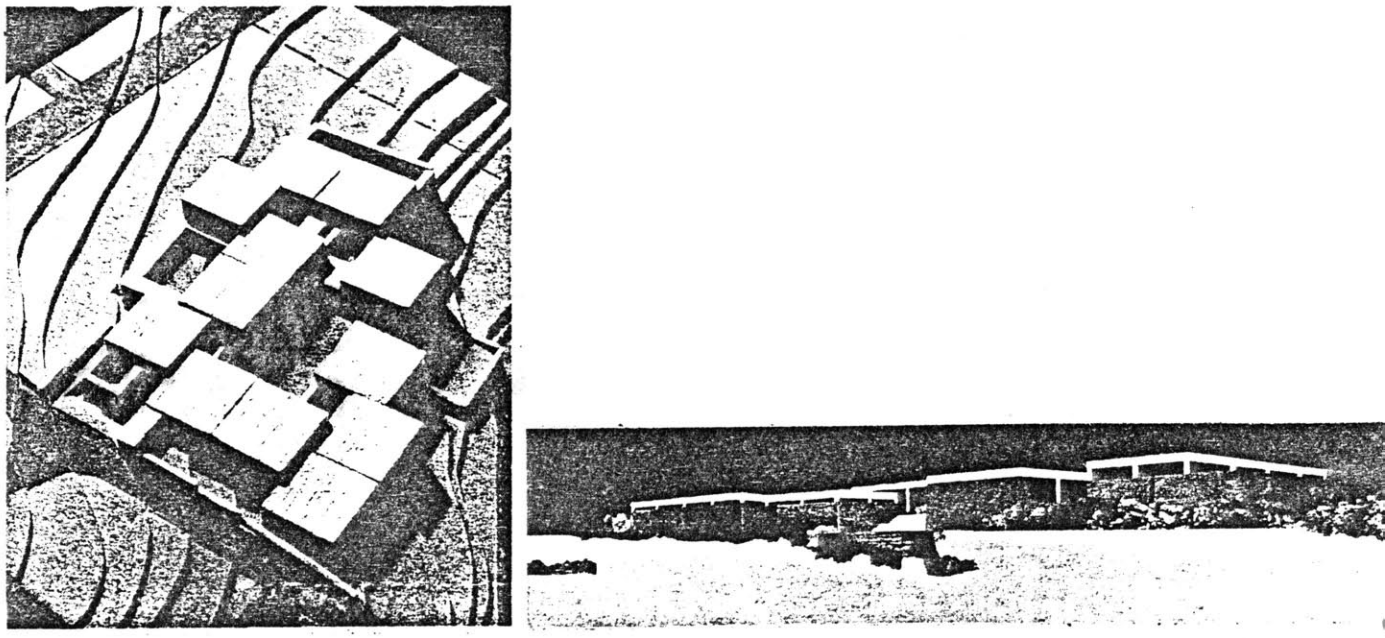
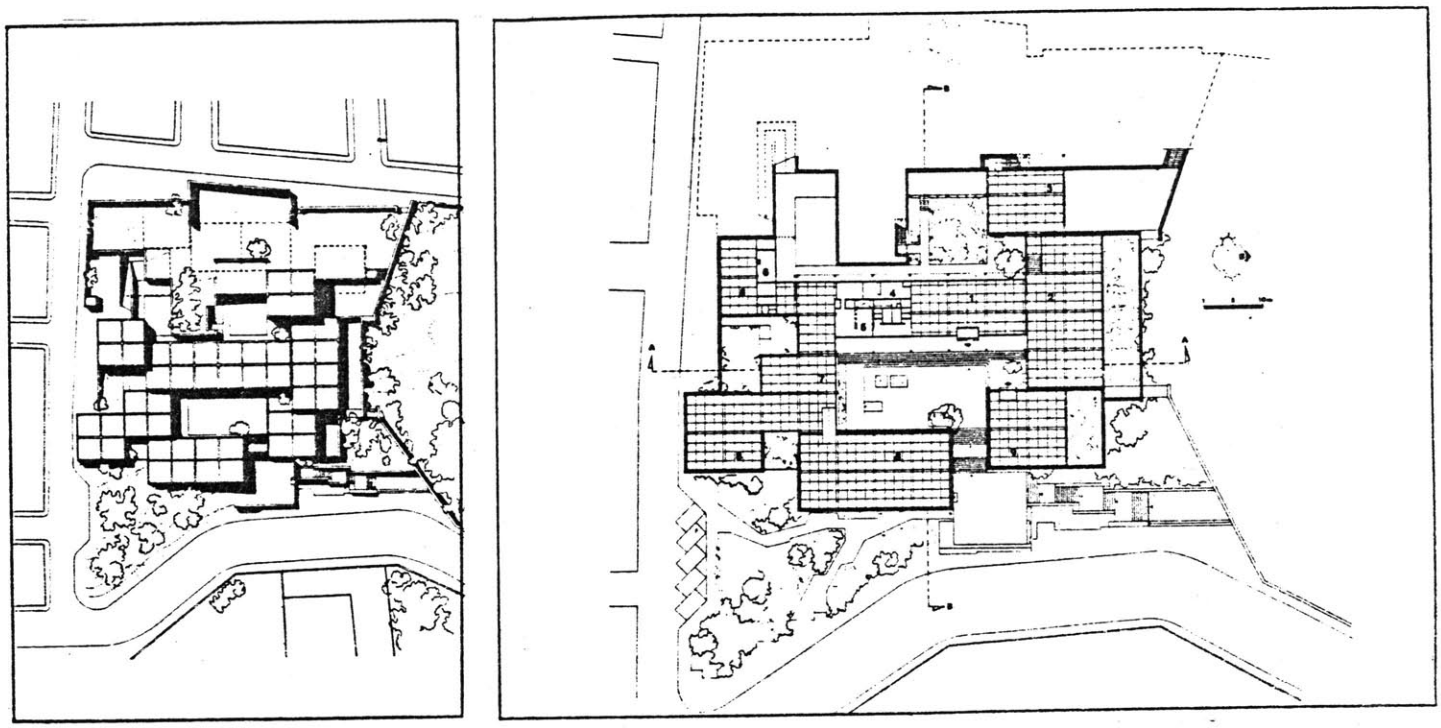


Fig.29-a Views of the model and the front elevation.



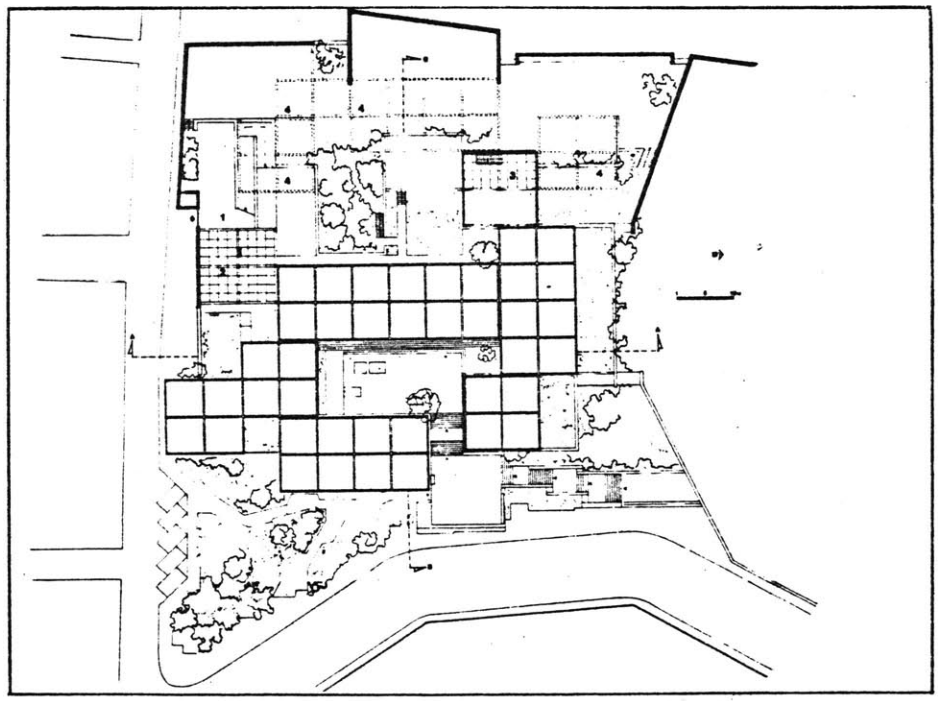


Fig.28-a The Chios Museum
Floor Plans, 1966

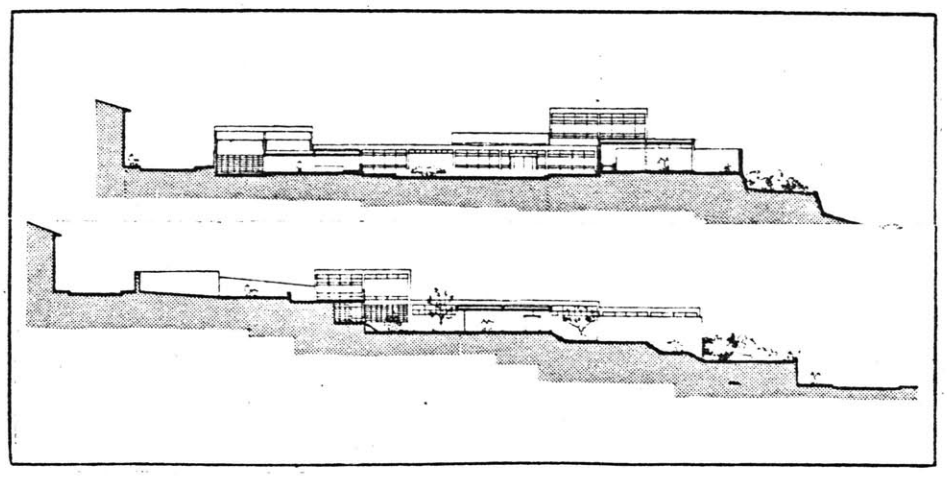


Fig.28-b Sections

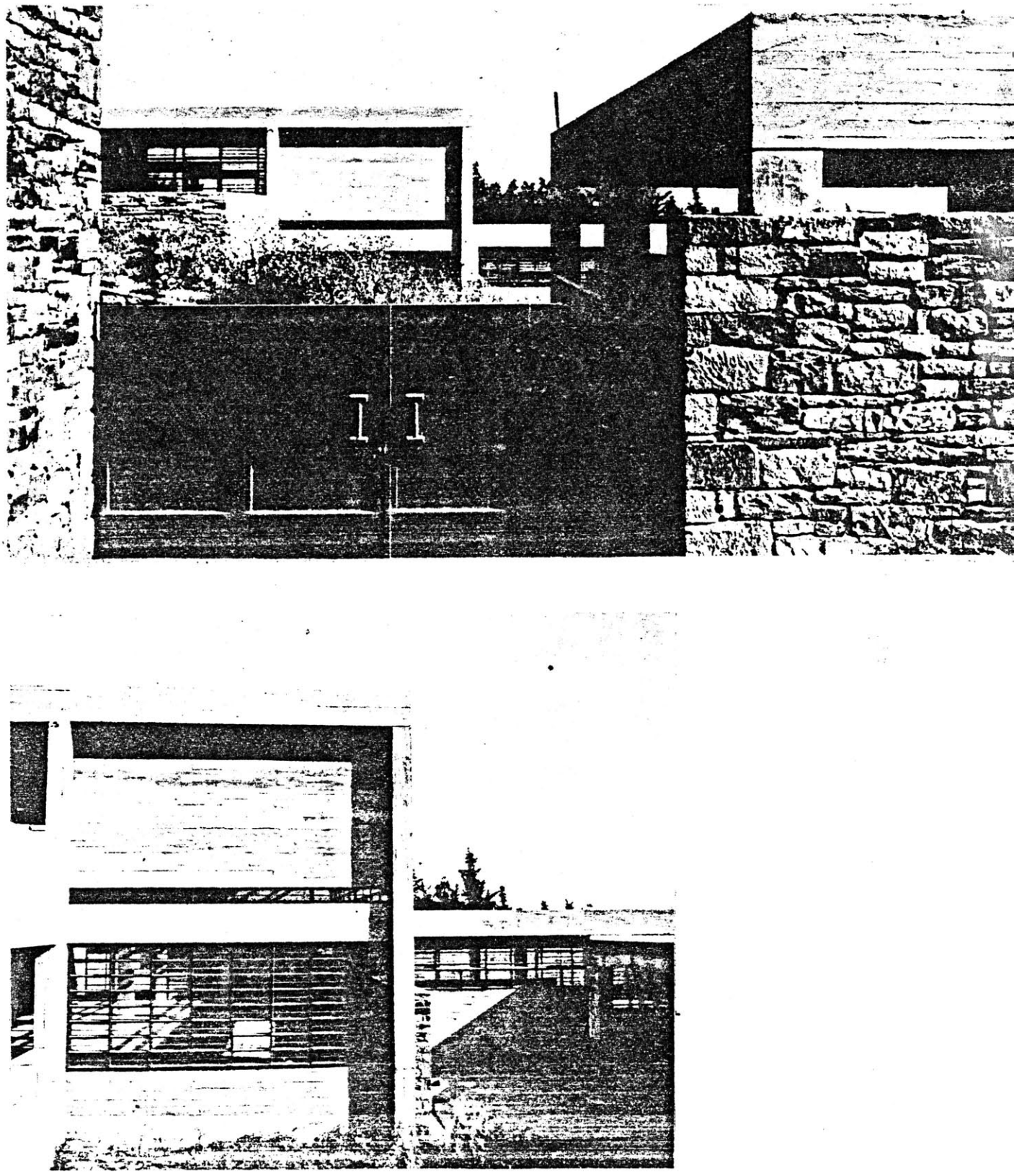


Fig.32 Detail of the materials of the building; Views of the interior yards

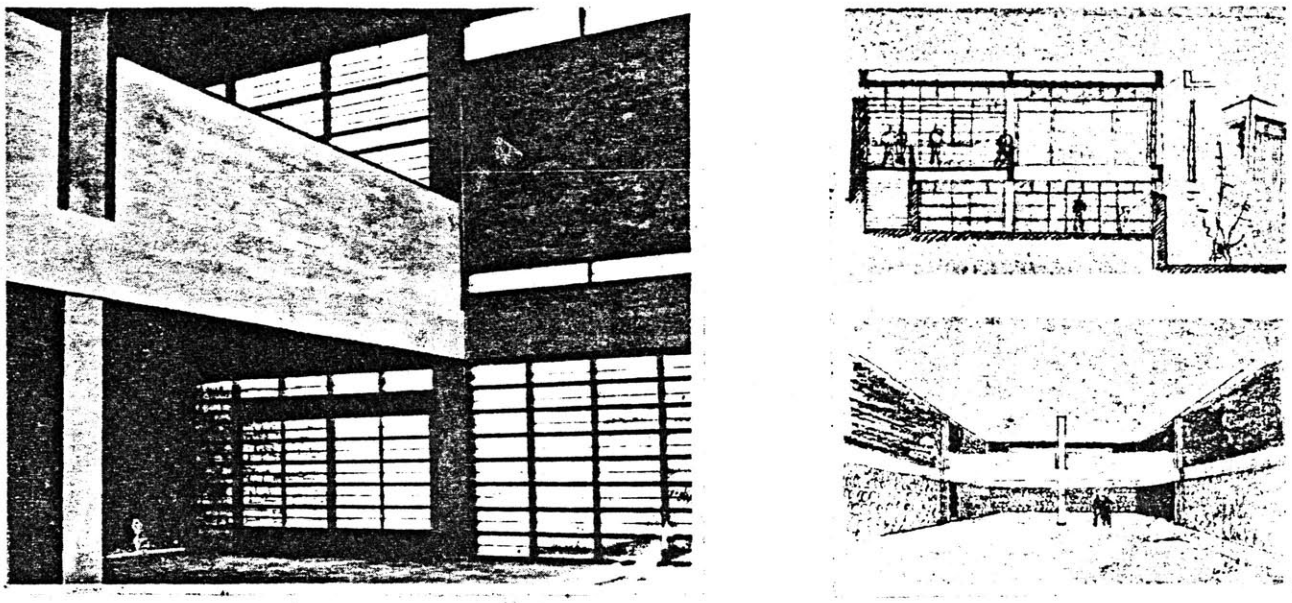


Fig.34 Interior detail of the mezanine balcony and scketches

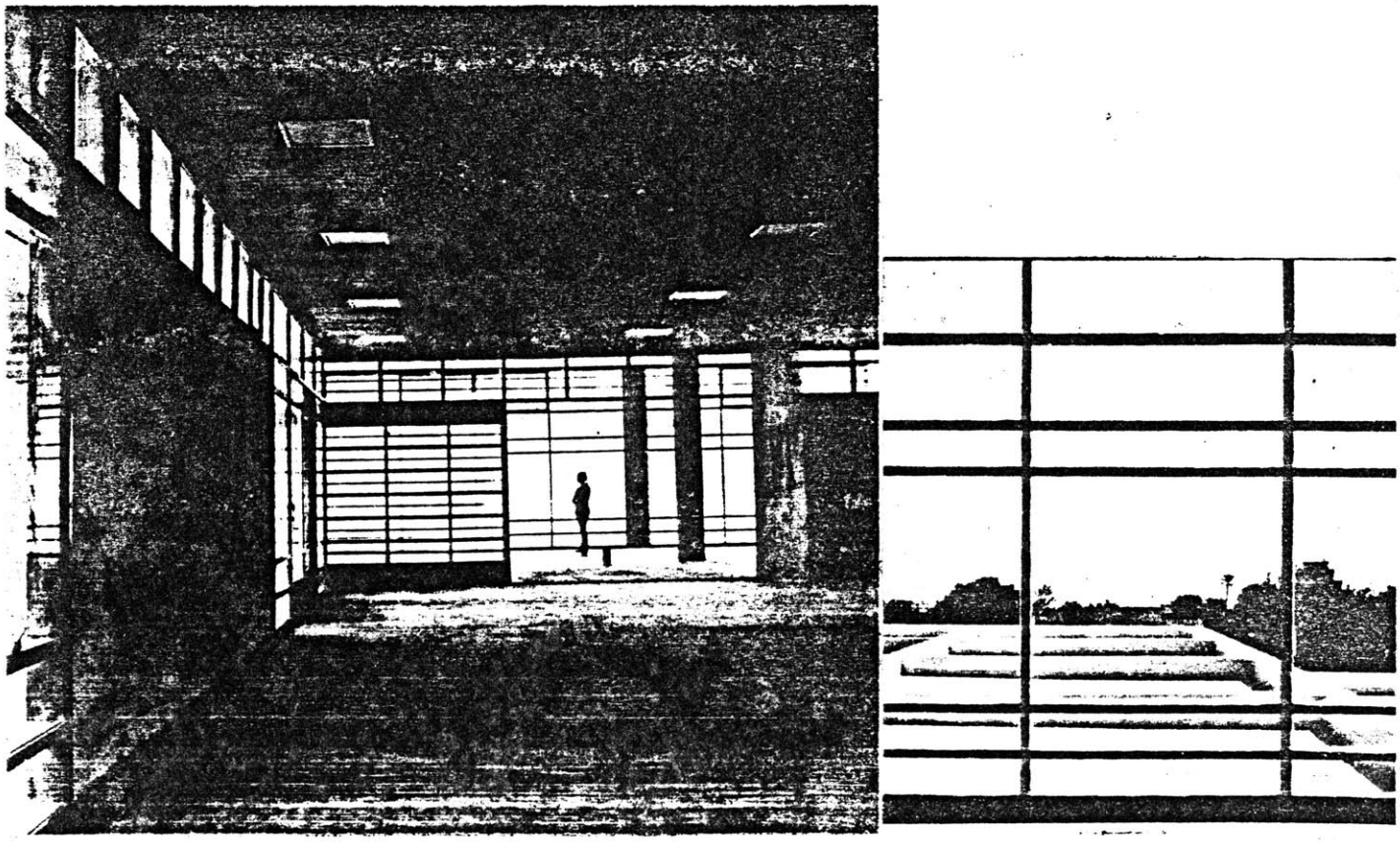


Fig.33 The Chios Museum; Windows and Views

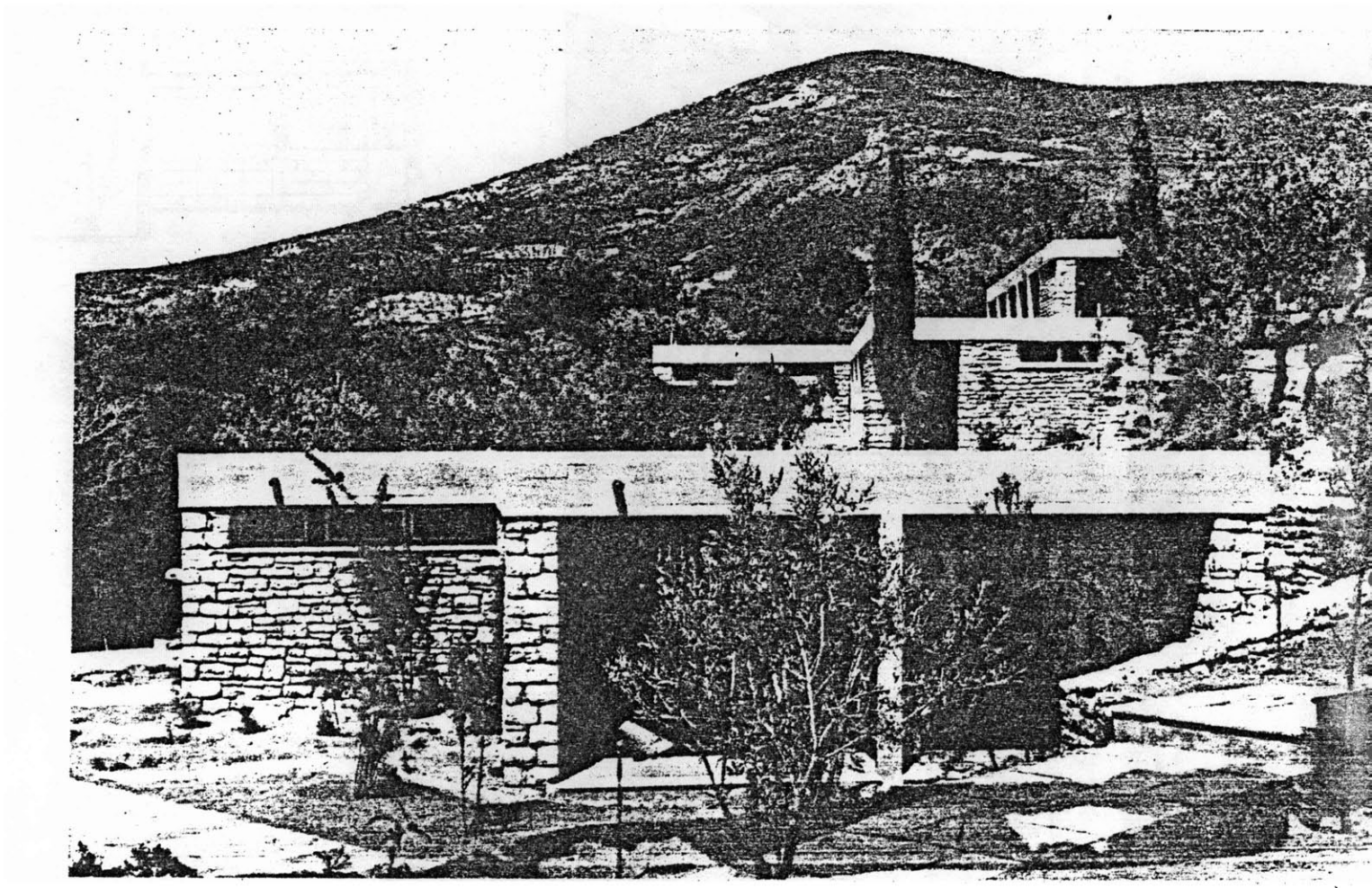


Fig.35 Epidavros Hostel, Aris Konstantinides Architect 1962-63

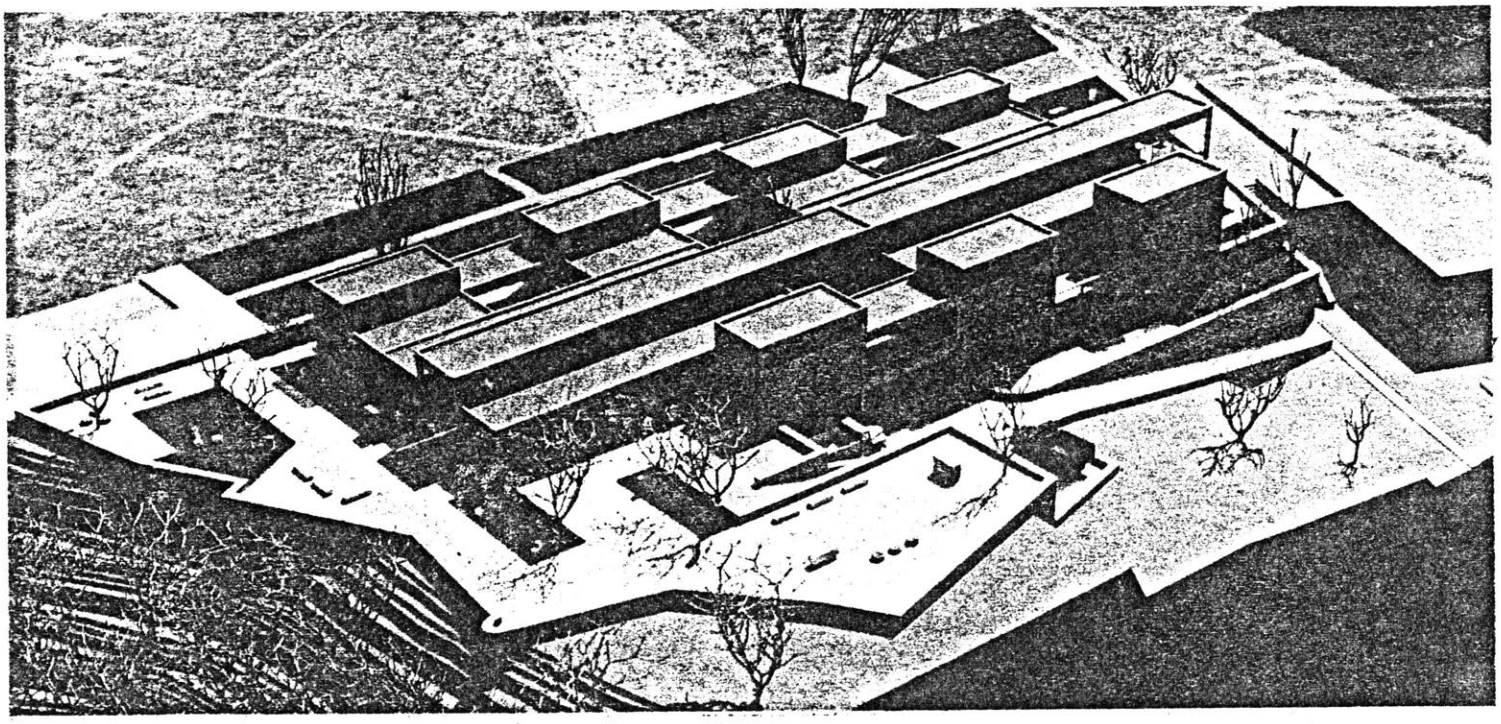


Fig.36 The Museum of Yannena. Aris Konstantinides Architect 1965

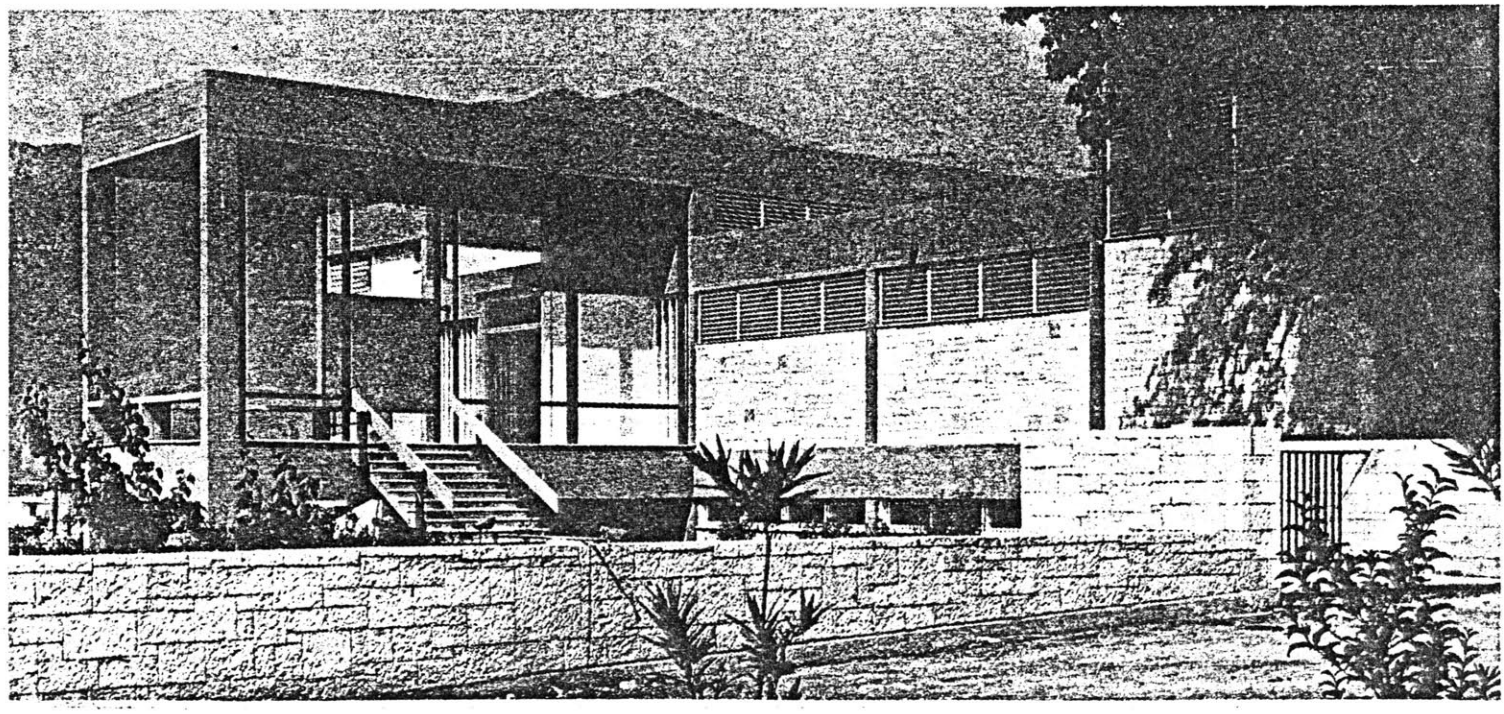
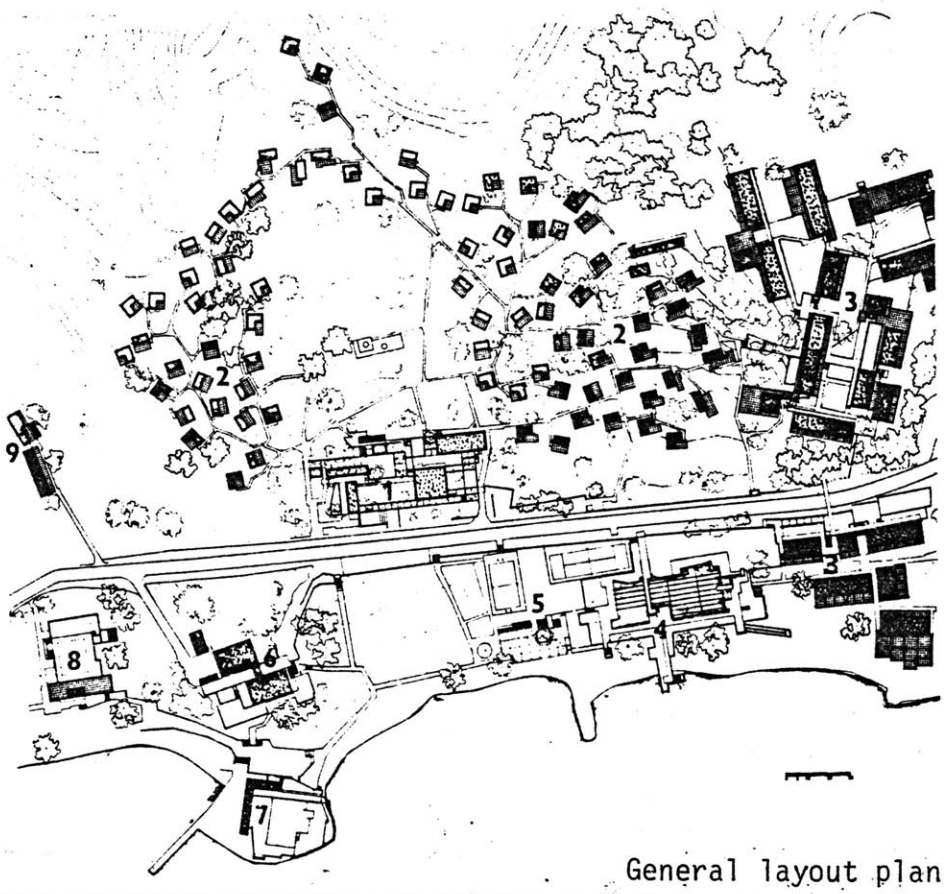


Fig.36-a View of the entrance



General layout plan

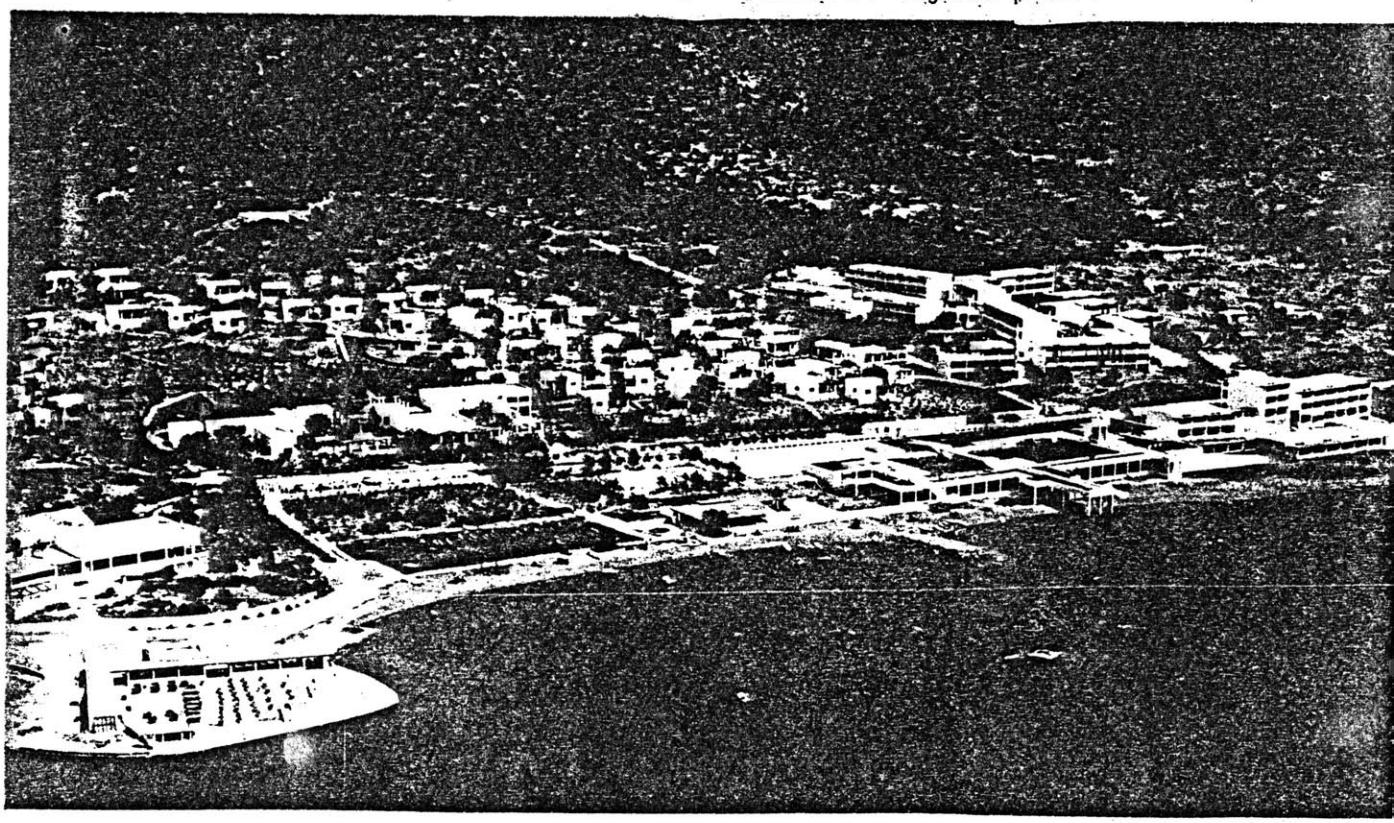


Fig.37 Hermionis Hotel Complex. Dimitris and Suzana Antonakakis Architects 1966

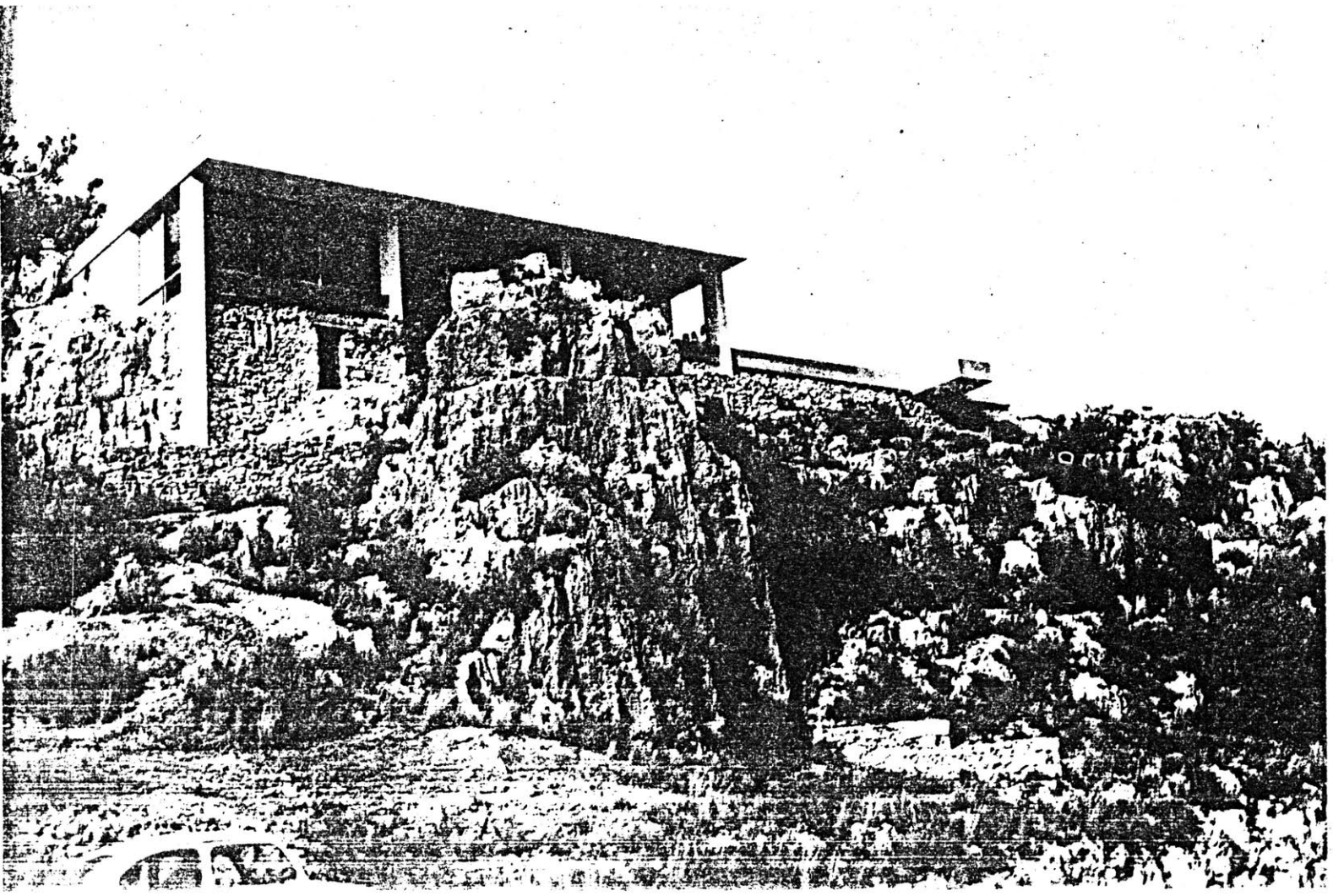


Fig.38 Tourist pavillion in Korakies Chania, Crete. Dimitris and Suzana Antonakakis Architects 1965

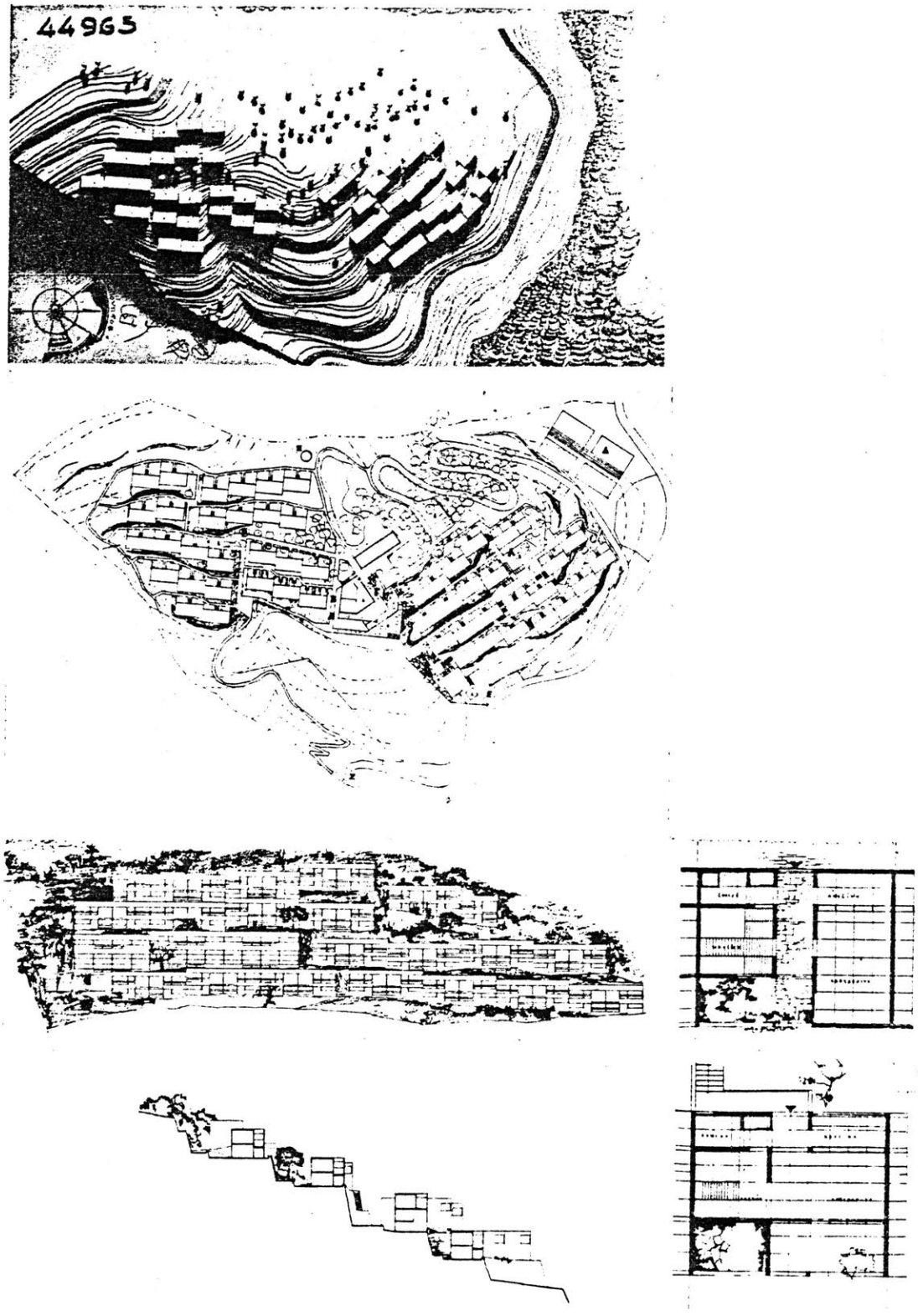


Fig.39 Summer house Settlement in Spetses. D&S Antonakakis,H.Vrontissi and D.Potiris Architects 1966

3.3 Apartment House on Benaki Street, Athens

> The rhythmical openings of the upper bay
> were carved to host birds.
>
> - Dimitris and Suzana Antonakakis
> 1974

3.3.1 Introduction

The problem of urban housing is an issue that has preoccupied the Antonakakises from the early days and their practice and which has undergone a continuous development in their work.

> Urban housing is the crucial problem in Greece today, as it has been for several decades. It is the basic cell of the organism of the city, and the basic element which expresses, obliges, and reflects the neutrality and impersonality of this 'exemplary' prototype for the whole country.
>
> This crucial element--in the hands of the people who use it under the motivation of profit--has been so degraded that its presentation in architectural magazines has become a commonality, deprived of any interest, and finally had to be totally eliminated from their content-lists. And it is an irony to even think that it has been for years now that the apartment house (apart from some scarce exceptions) is not considered an issue of systematic study in the two Architectural Schools of Athens and Thessaloniki, a neglect for which Corbusier condemned the Ecole des Beaux Arts in the years 1920-30.[1]

The commercialization of housing in Greece had undergone a marked change since 1922 and escalated after the end of World War II, with major consequences for the form of house particularly and the city generally. Modernization of the economic and institutional framework of the housing industry in the 50's was considered identical with the source of modernism with its clear and rational positivist ethos.

Modernism's scientific underpinnings were also called upon in the passion for technological progress that seized Greece as an industrially backward country in its effort to remake itself in

the image of the technologically advanced West. In this sense, modernism, as manifested in the Greek urban situation, led to a levelling of traditional architectural sensibilities, in favor of the cold, calculable relationships of capitalist production.

Cities became the personnel reservoirs of the system, providing an ideal ground for turning housing into a consumerist enterprise. Contractors who finance housing construction acted as the sole decision-makers on the problem, dictating the types of buildings and allowing little or no intervention by the architect--while the participation of the prospective inhabitants is beyond imagining. The Antonakakises acknowledge the relationships of this powerful "market function", and they attempt to intervene at the decision-making phase of the process. The contribution of the architect in the total situation is directly related, in the vision of the Antonakakises, to the role of the clients and their involvement in the design process of the building.

The prospective inhabitant of the urban habitat who had been completely ignored under the consumerist system of housing provision, acquires a major role under the presuppositions of a regionalist orientation. As the inhabitants begin to assume an active involvement, their roles also can be expanded into the sphere of contracting. The Antonakakises delineate three basic categories of contracting:

- The first and undoubtedly the most commonly met category is the old system whereby a contractor undertakes to finance the construction of the building through exchanging the land value with the owner for an apartment of equivalent value. In this case, the construction is drawn briefly on the basis of estimated market demands which permit no experimentation with the aesthetic, economic, and social standards of the area that the "market field" has imposed definitely.

- In the second case, the owner of the property, in whole or in part, might become for just once the contractor-entrepreneur for

his or her own house. This condition allows the definition of standards by the owner and permits an organic relationship with architecture.

- In the third case, the building project is undertaken by several people who will live in the apartment house. These people form a collaborative in order to construct their own houses. Each member contributes a share in capital, land, and sometimes labor. They are all closely involved in the construction process, sharing the responsibilities of success or failure and participating in the decision-making process. The Benaki Street apartment was built under the collective system.

3.3.2 Analysis

I

The Benaki Street apartment house is one of the most acknowledged works of the Antonakakises, probably because it constitutes such a diametrically different approach to the Athenian practice of the "prototype". Constructed in 1973-74, the building is located in one of the central and most densely populated areas of Athens, facing the Strefi hill. The contractors were the prospective inhabitants themselves, formed into a collaborative. There were four families; each was to own one apartment, while the architects themselves purchased the ground floor office which was designed to meet the space and function requirements of Atelier 66. Dimitris Fatouros, in discussing the Benaki building, notes:[3]

> The spatial organization--with an elaborate system of different levels within the block and within each flat, and the relating of indoor with outdoor spaces (street and backyard) results in a consistent and cohesive system. This work is, typically, of average cost. It proves how small-scale elements can play a constructive role in the man/environment relationship and how it is possible to transform and use in a positive way the restrictions of the conventional financial and building regulations of a typical urban milieu.

The Benaki house was presented by the architects, along with two other examples of urban houses, in Design and Art in Greece,[4] and discussed in the articles "The grid and the pathway" by Tzonis and Lefaivre in the Architecture in Greece[5] and by Dimitris Fatouros in his critique on the Antonakakises reported in Contemporary Architects.[6]

II

The dense iconographic messages radiated by the meticulously carved facade require a certain temporal span to be understood. This is so because the architects had made possible, within the limited opportunities of the pre-measured urban prism designated

for the place by the General Building Regulation Code the deployment of whole life-myth (Fig. 40). Probably the strongest impression at first is made by the ascending concrete curve of the open-air staircase. It takes the eyes from the base of the building, to the cornice, to the top. It is certainly highly unconventional to present on the very frontal view of a relatively expensive urban area an architectural element that people are used to finding hidden in the rear-most area of an apartment building. The open-air entrance of the building, reminiscent of a communal space for meeting and social relationship, further accentuates the staircase feature. The externalized concrete skeleton of the building and the sensuously carved parapets of the balconies comprise two further innovative touches.

On a representational level, the frames can be described as the static space-creating elements, and the staircase as the dynamic space-penetrating element. Furthermore, the canonic skeleton grid also acts as an organizer of the complex composition of the facade which, without the columnal order, might have been perplexing, if not illegible. Next to the gate-door of the main entrance a smaller gate leads to a minute courtyard in front of the entrance door for Atelier 66.

In spite of the vertical grid of the columns, horizontality remains the dominant feature of the building. The delineation of the facade into a tripartite division, comprising a base, a piano nobile, and a cornice, brings out a highly abstract classicism amidst the indifferent environment of an urban house building. The parallel underlining of the entering moment by the formation of a highly abstract--but nevertheless conceivable--portico-frame in the place of the building's entrance reassesses the neoclassical as well as the Pikionean influences acting on their work (Fig. 41).

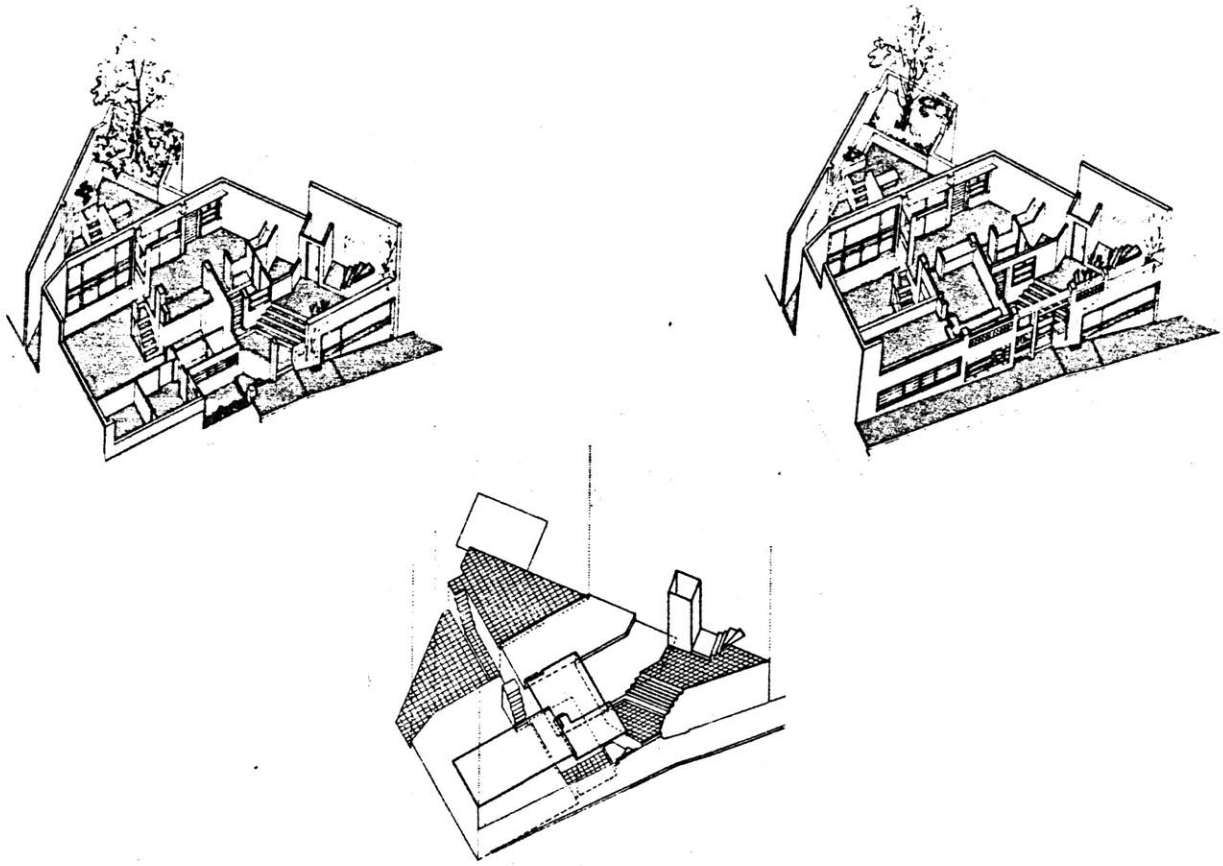
The complexity of the horizontal layers, climbing up and down the volumetric space of each storey and corresponding to the rhythmical divisions of the concrete skeleton in every apartment, express the internal organization of the space. The openings of the frontal

elevation are distributed unequally. On the left side, where the living room spaces are placed, the openings are large and continuous, allowing, when weather permits, direct access from the inside sitting areas to the outdoor spaces. These living-room openings have no shutters (a choice determined to control expenses). The right side of the facade is occupied by multiple architectonic elements: half-height windows, white-washed bays with strip skylight windows and, finally, the strong feature of the staircase. The back elevation is simpler. Here, again, the skeleton frame is visible, organizing the areas of the inside functions on the plane of their outer boundary. Horizontality is stressed by the strip windows that run across the whole back facade in a fashion very reminiscent of Corbusian prototypes (Fig. 42).

III

The interior configuration of each house is very elaborate and light and space are handled with great mastery. Each apartment, except for a small one on the second floor, occupies an entire floor, extending as well to another level. The top floor apartment extends to the roof terrace, with a space for study, and a roof garden for summer outdoor living. The third floor apartment occupies part of the lower level; an interior staircase leads to a study and a small W.C. The first floor--which boasts the greatest height--has been split into two levels.[6]

One enters the building from the communal open-covered front yard, and proceeds either to the platform on the right on which the elevator and the staircase are opening, or to the entrance of the ground floor office. This transitional device creates an in-between space in the margin zone between the street and the house and is, at the same time, an attempt to provide the place with its sign of identical presence, based on the communal character of the "institution" of urban housing (Fig. 43).



Scheme 1: The Entrance-Yard Space Configurations

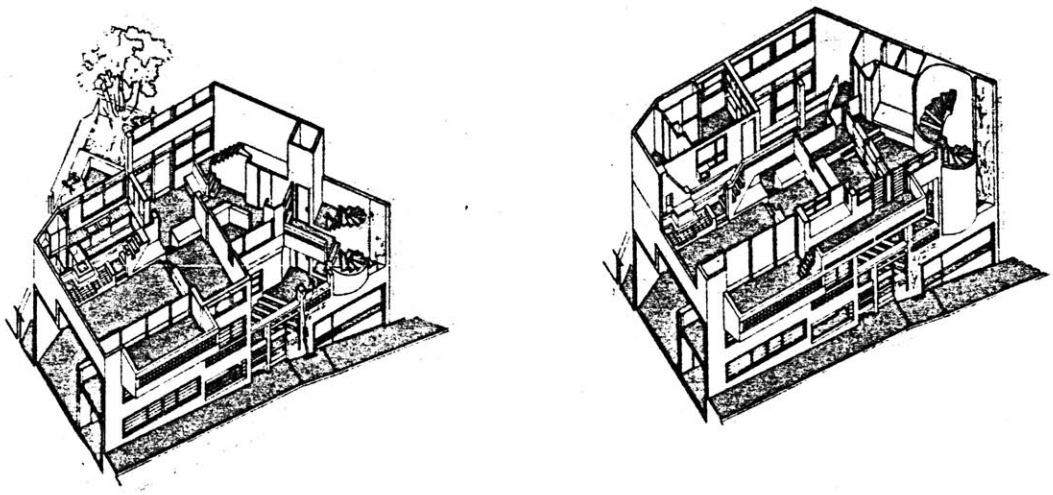
The covered entrance "yard" is given a two-storey height into which the first floor's apartment entrance and balcony open their views. The materials selected for the finishing surfaces in this open-air entrance space, as well as all the low space-regulating parapets around, signal the subtle beginning of an internal itinerary in both memory and present of the moving passenger.

Due, perhaps, to the total absence of similarly handled cases in the Athenian milieu, the effect of this entrance yard is both strong and puzzling. It takes a while in order to convince you that it really exists but, on the other hand, it's not an amazement that dissolves into a utopian escapicism. It is the concrete reality of the local places whose investigation conditions the patterns of

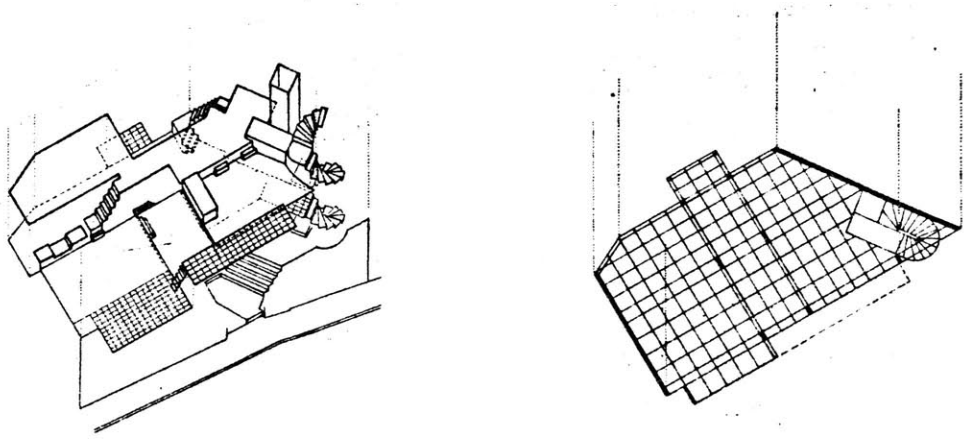
contemporary life and helps re-humanize its processes, that the Antonakakises' work achieves.

In all of the apartments, the living spaces form a unified core that opens on both levels, overlooking the street and the back garden (Fig. 44). Bedrooms, kitchen and bathrooms have direct access to this core zone, which serves as the focal point of domestic life--during both the winter, around the fireplace, and the summer, in the open-air balconies.[7] The spatial quality and the atmosphere of the living areas is conditioned largely by the way the light at different times of day penetrates from the two sides, and by the visual connections that are facilitated through this spine zone. In the first floor apartment, the living area takes on a different character. It is treated as a big, enclosed yard, and is intended to accommodate multiple family activities. Communication channels with the more private zones of the house (i.e., the individual rooms) also cross this central area, organizing its paths. The effect is accentuated further with the windows of the rooms that are opened into this communal space, as if the rooms were individual houses overlooking a common yard. (See Scheme No. 2, following page.)

The principles on which the spatial organization of the house is based are unhesitatingly derived from the Antonakakises' ongoing experimentation with the notion of the "communal" versus the "individual" in architectural space, and the articulation of the differently built realms in sequential periods of time. The model of the traditional social order that realized the highly organic spatial integrity of traditional Greek settings can now be thought of only in connection with family life. This domain is still subjected, in modern Greece, to the communal control of its members, reflecting the old social organization of the traditional community. The Albertian observation of the relational bond between the house and the city that had been dramatically revived by Team 10 underlines a dialectic relationship between the two:



Scheme 2.
Axonometric Drawings of the first floor levels



Scheme 2. Different levels participating in the spatial organosis of the first floor apartment and their zoning pattern.

Tree is a leaf and leaf is a tree
House is city and city is house
A tree is a tree but is also a huge leaf
A leaf is a leaf but is also a tiny tree
A city is not a city unless it is also a huge house
A house is a house only if it is also a tiny city.[8]

This analogue can also be found in the relationships between the members of the extended family type which constitutes the basis of all traditional social formations.

Macedonian traditional houses and mansions of the seventeenth and eighteenth centuries can be pointed to as traditional solutions that in some ways resemble the contemporary apartment block organization. Due to the dense urban conditions of their settings, Macedonian houses occupied small urban lots, usually of irregular shape. Working under multiple constraints, the traditional masons managed to accommodate a highly complex way of life based on strong principles governed by custom.

The relationship between inside and outside was an equally strong preoccupation behind the design of these traditional spaces, and the solutions worked out might well constitute the first elements for a treatise on the subject. The traditional floor layout can be better studied in the more ample space of the mansion houses, whose concept of organization then appropriated for the particular irregular conditions of the middle-class urban lots (Fig. 45). In this typical layout, the organization is clear and simple. A central space, called doxato, axato, crevati, or messia, constitutes the core of the upper floor and functions as a central hall for the everyday activities, and gives access as well to the various living and sleeping areas of the house (the so-called ondades, literally translated as "autonomous entities").

It may assume many shapes; sometimes it is rectangular, its length parallel to the vertical axis of the house and lighted from the two sides; at other times the length of the rectangle parallels the horizontal axis of the house; or, else, it may take the form of a cross whose extremities are arranged into resting places (the

so-called sofades--that is, low recessed wooden divans forming a U). These divans are covered with carpets, blankets, and cushions; they are used by the residents or guests to rest and enjoy the view through the low-placed windows, which sometimes project onto the street to create a cantilevered sort of solarium, called sachnisia. Another distinguishing element in these mansions is the variation of levels in the same area, which serves no function purpose but is introduced solely in order to differentiate aesthetically the various divan-filled corners from the rest of the central hall. The same procedure may be used in parts of the rooms. The basic principle underlying the layout is self-sufficiency for each space, and combination of the spaces to form a whole, whose governing element, however, remains diversity, so that the sofades and ondades appear as individual and isolated pavillions.[9]

It is obvious from this brief description of the traditional examples that the Antonakakises' space-articulations in the Benaki Street apartments allude strongly to these impressively integratedly built prototypes for "lived life". The Antonakakises' appropriation within minimum space of the dozens of stairs, winding and climbing their path through and toward the main space, binds the traditional pattern of the enclosed concentrated schemes with the centrifugal, dynamic movement depictions in the modernist sense (Fig. 46).

Another trend that had been deliberately explored in the Macedonian houses is the strong oriental decorations used in the interiors. This decorative inclination, strongly perpetuated in the Pikionean corpus, has acquired a sculptural dimension in the Antonakakises' interiors. In their case, however, it is a sculpture highly functional, since each space is carved with the purpose of providing additional space wherever possible and to contribute, thus operationally, into the variety of the interior as a whole.

IV

The Benaki apartment house is based on an ideal kind of relationship between the architects and their clients. Reflecting this happy moment of cooperation, the Antonakakises produced a piece of work, consistent with the programmatic beliefs of their humane vision of architecture. Consistent in its design principles, the Benaki apartment house may be taken up and developed as a prototype for contemporary Greek urban settings.

The building constitutes a communal setting for a way of life which acknowledges the contradiction between public and private, personal and communal, and shows profound respect for individual privacy. The kinds of solutions that the floor plans realize address themselves to a series of issues pertaining to the mode and character of family urban life. "The body of images" that in Bachelard's vision "give mankind a proof of illusions of stability" is taken by the Antonakakises to help engrave on the urban habitat-model a hierarchy of inhabiting that would at once be thorough and comprehensive. The social order destroyed under modern urbanity can acquire a level of existence only within the reconstructed form of a tiny city/house.

The Antonakakises acknowledge the essential anti-urban character of modern city conditions and their architecture is unquestionably object-oriented. In conditions of complete loss of the sense of urban continuity (for "urban", read "of the polis"), relationships function in merely analogous terms, rather than in actual correspondence.

The Antonakakises' model of urban habitat represents an attempt to reconstitute the lost sense of community; the urban house has no alternative but to become itself a tiny city. The Benaki Street apartment house succeeds as a prototype of urban housing because it comprises an architectural setting for human activities and relationships that actualizes the house/city analogy, and does so on multiple levels.

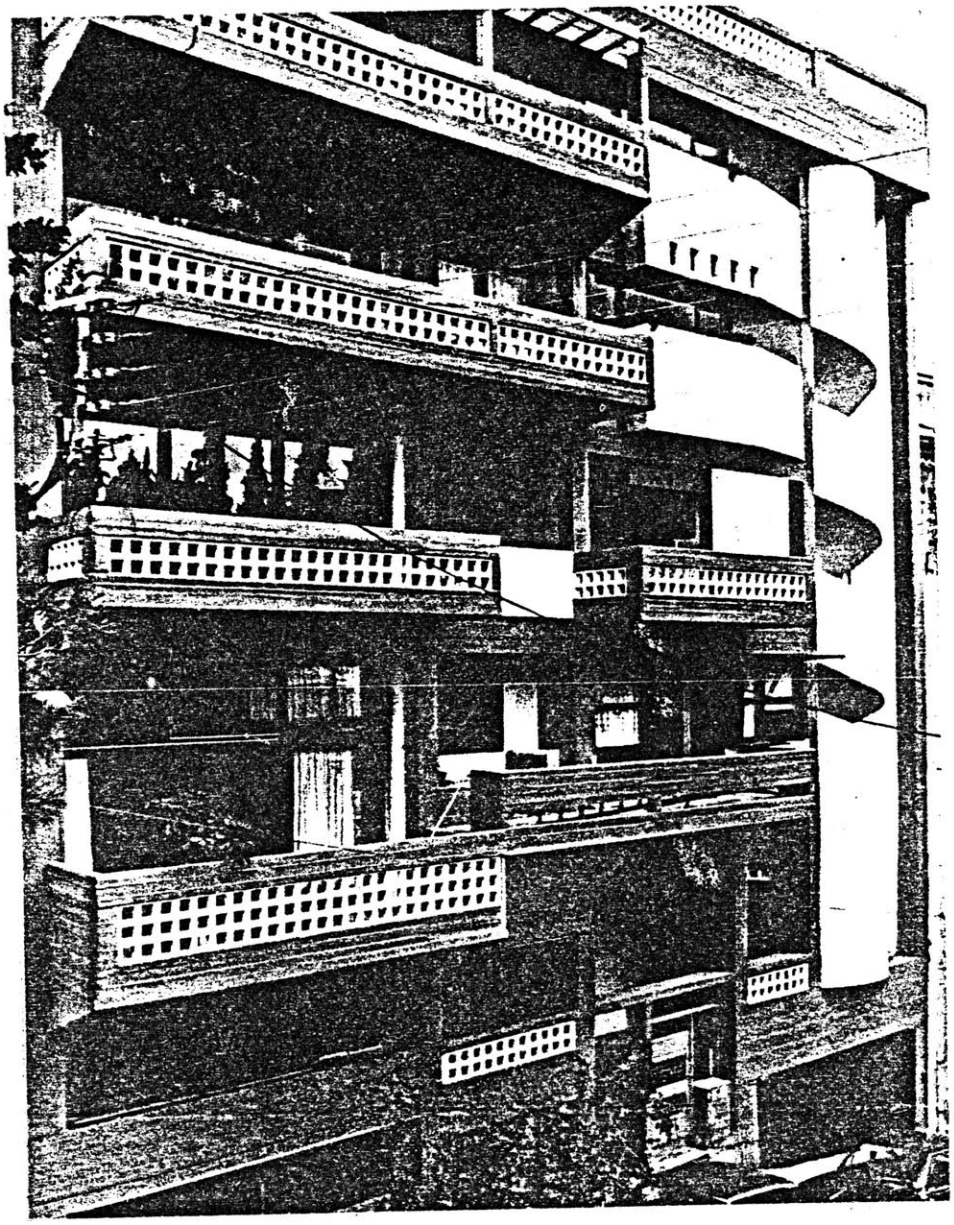


Fig.40 The Benaki apartment house
The frontal facade

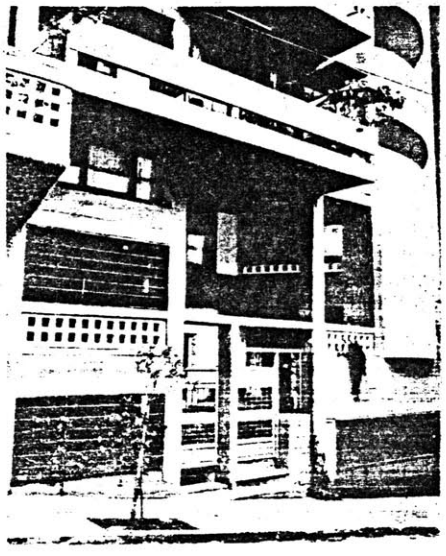


Fig.41 The entrance portico

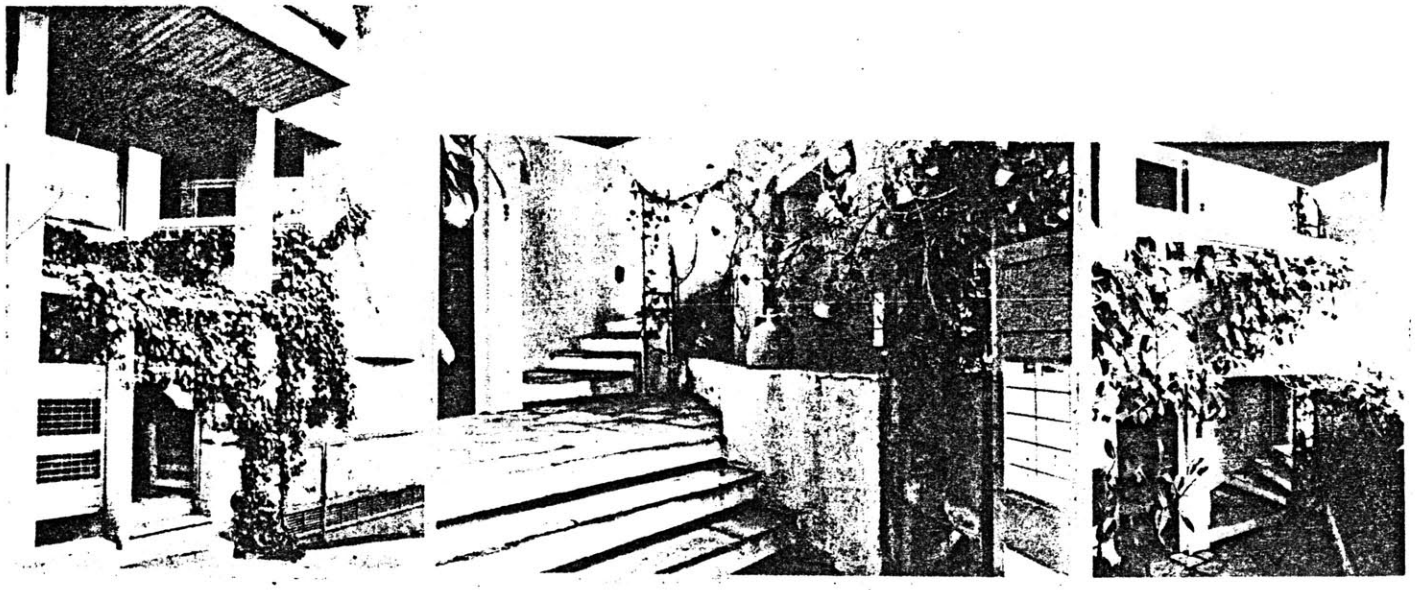


Fig. 43 Benaki Street Apartment house. Dimitris and Suzana Antonakakis, Architects 1974
Exterior and interior views of the entrance yard

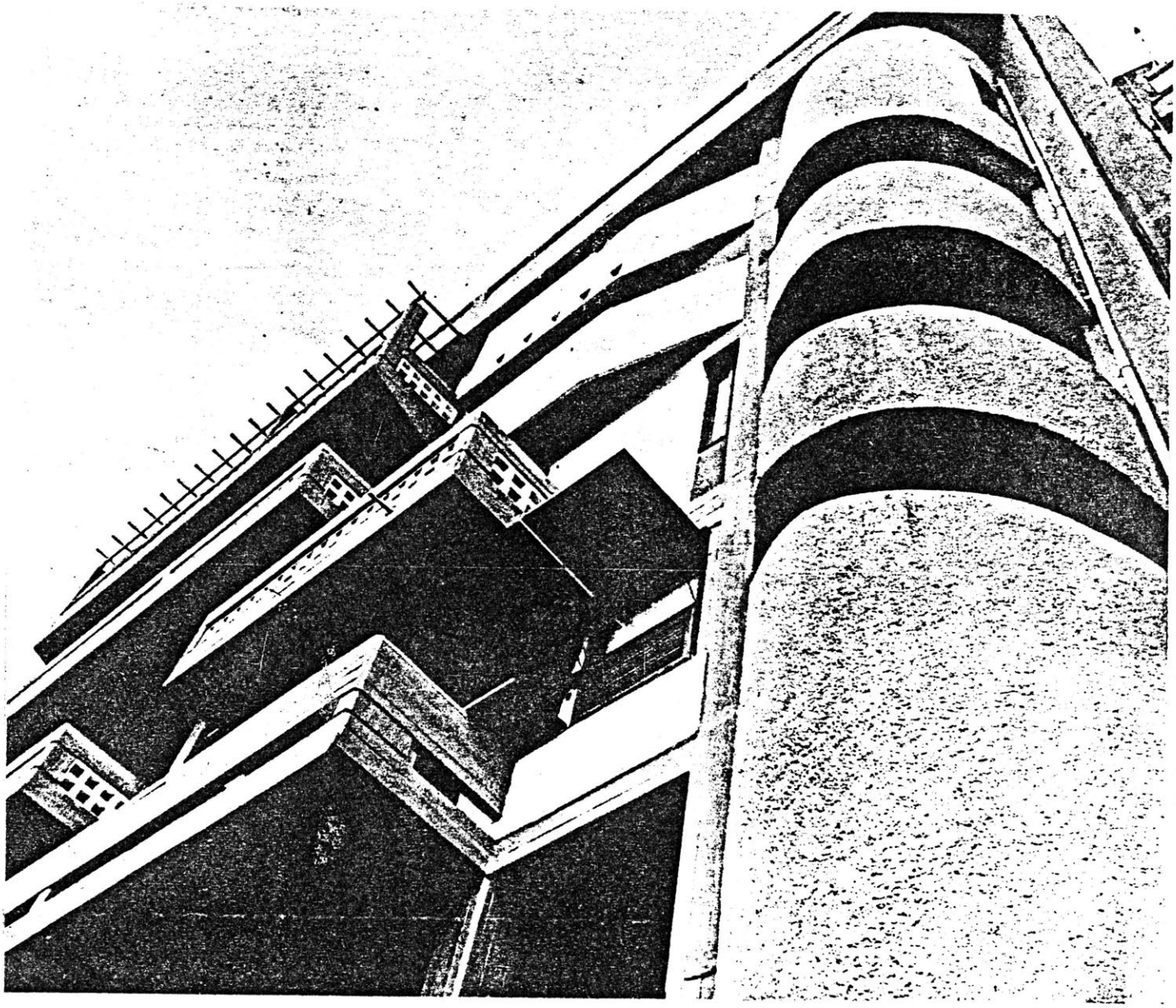


Fig.41-a Detail of the frontal facade
The Benaki Street Apartment House

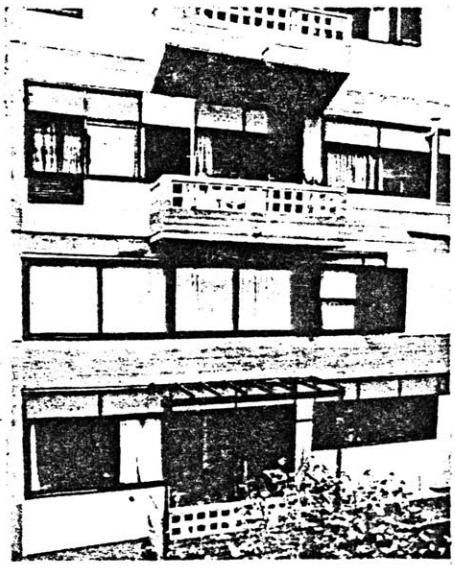


Fig.42 The Benaki house;The back elevation

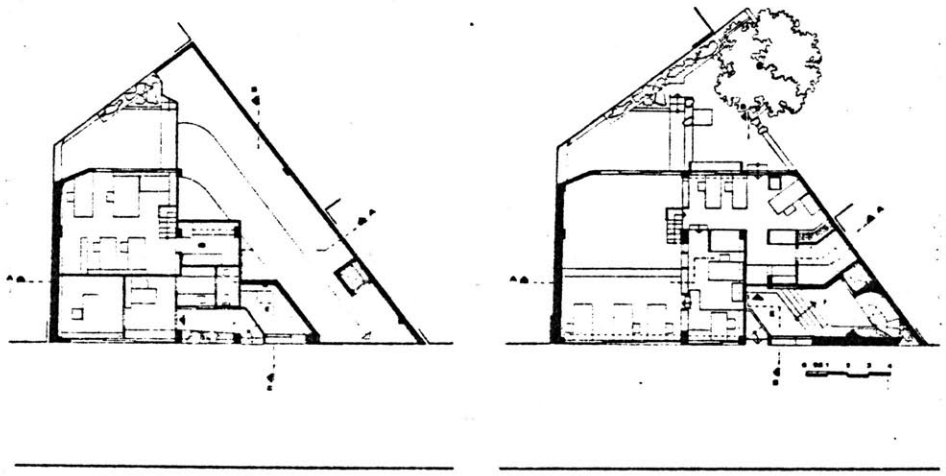


Fig.44-a Floor plans of the basement and the ground floor

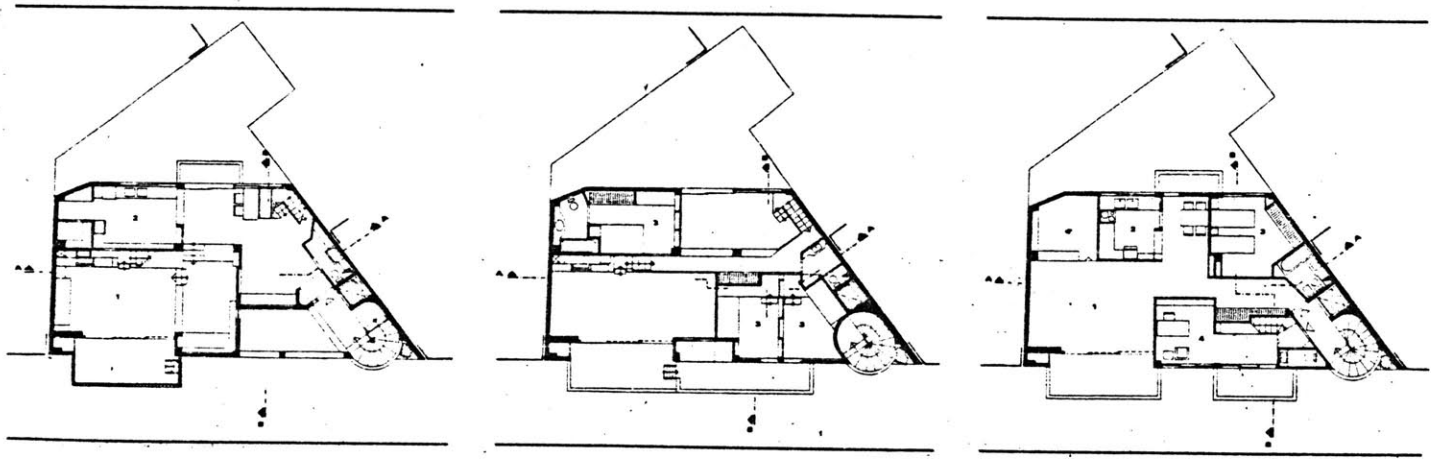


Fig.44-b Floor plans of the first floor apartment

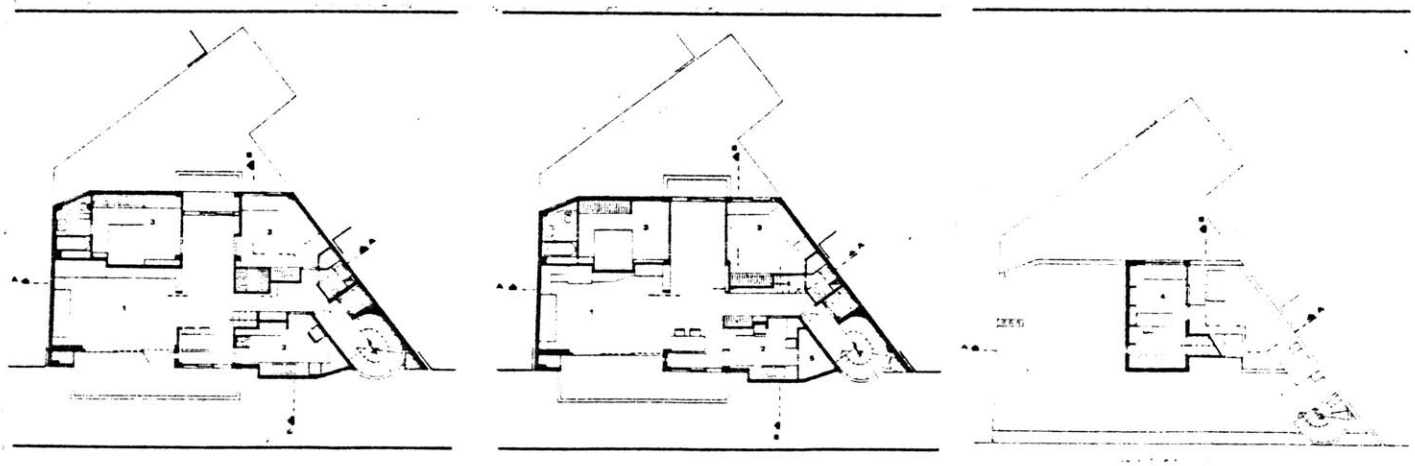
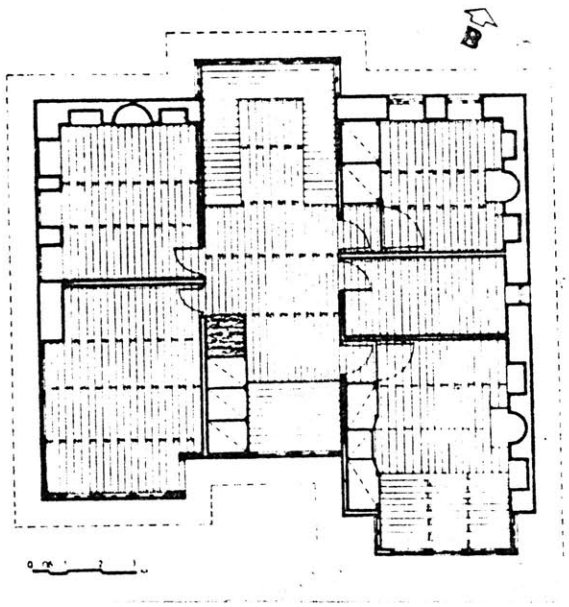


Fig.44-c Floor plans of the second,third and roof top floors

Fig.44 The Benaki apartment house, Dimitris and Suzana Antonakakis Acrhitects 1974-1975



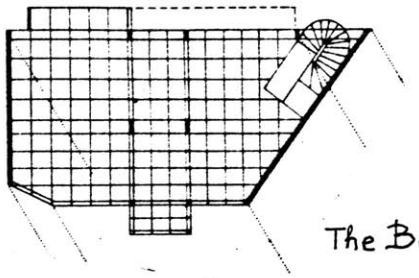


Fig.45-a Typical floor plan of a Macedonian Mansion in Siatista

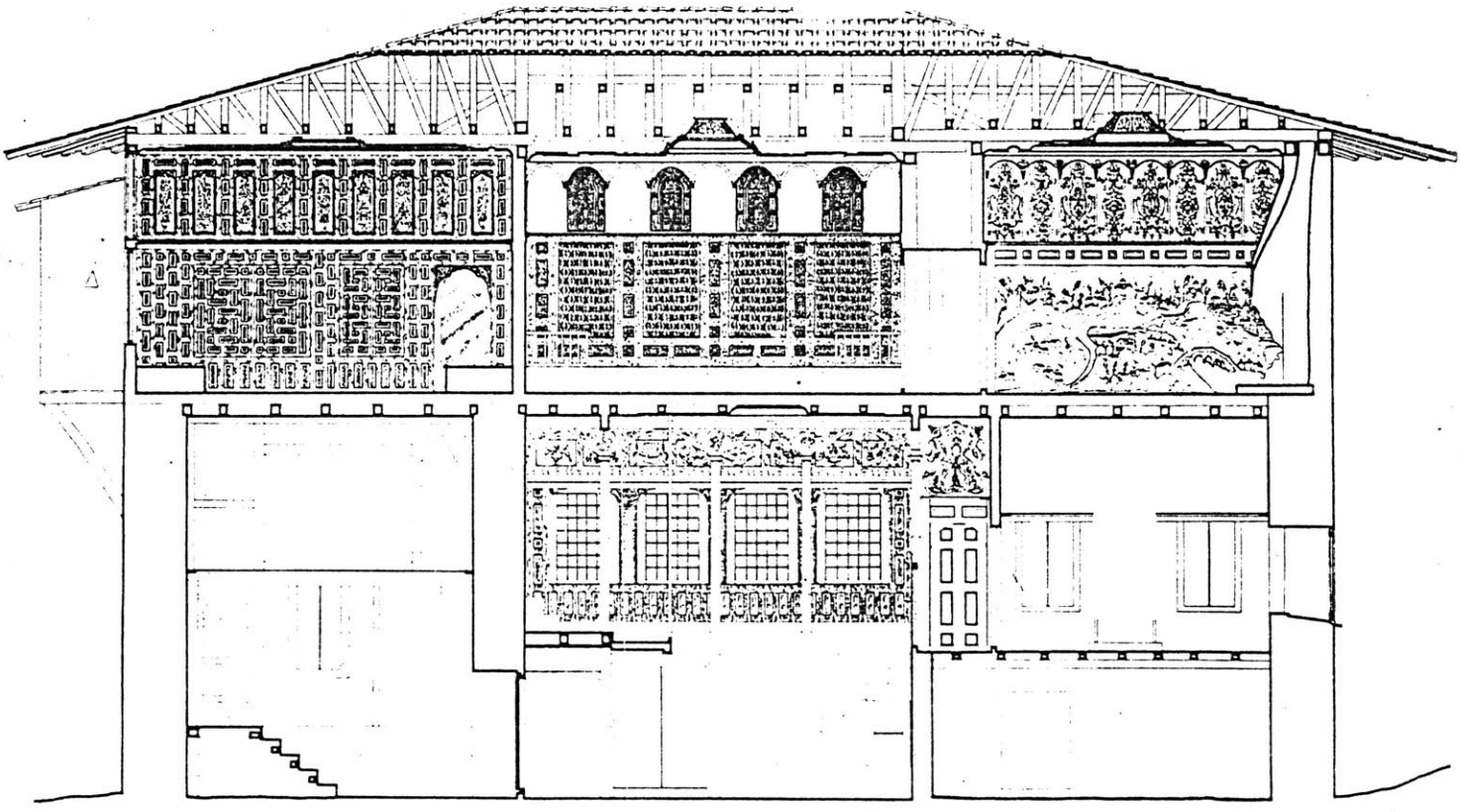


Fig.45-b Cross section of a Macedonian Mansion

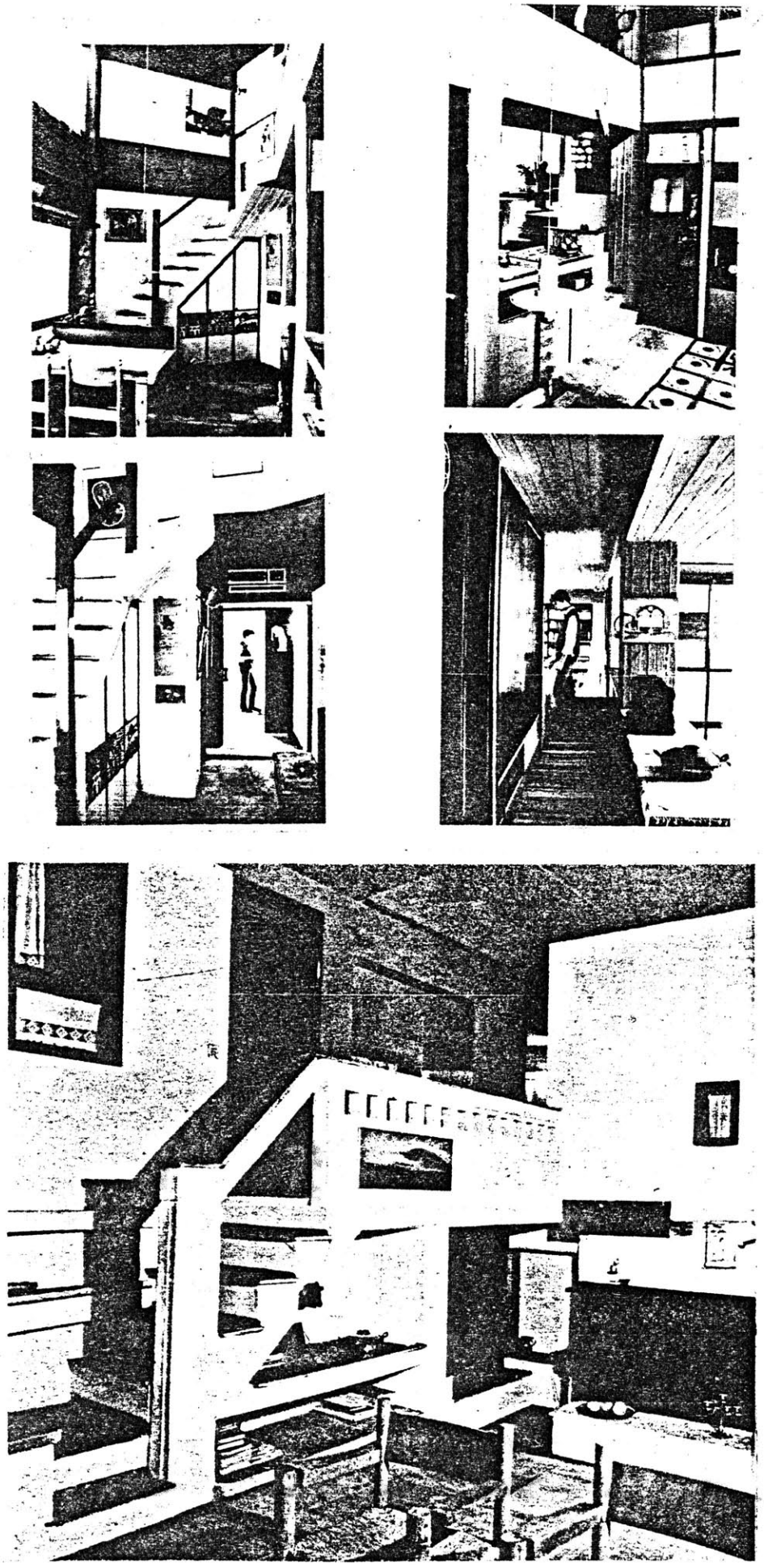


Fig. 46.

Benaki House
Interior
views

3.4 Vacation House at Spata, Attica

3.4.1 Introduction

No matter how fragmentary architectural criticism declared the four basic categories of the Athens Charter to be, the fact is that, in the years following their establishment (and especially the early 50's), the division of life in the periods of "inhabiting", "working", "transporting", and "recreating" had finally become the model for the contemporary life style.

Greek social reality did not fail to meet this rule. Though the factor that imposed the divisions among habitat-work-and-transportation was the universal capitalist system of development, in Greece the differentiation of recreation as a category in itself came from the exactly opposite side: It was basically supported and promoted into an institution by the middle-class Greek family. The fact that vacations were legally mandated for jobs in all sectors, public or private, reinforced the phenomenon.

The secondary residence or summer house posed similar challenges as those manifested some decades earlier in the development of the "first residence". The middle-class working family, having secured their primary, privately-owned first residence in the city, set off to acquire a vacation place in the resort areas neighboring their city. The rising cost of living having placed the hotel-based vacation out of reach of the working middle-class also encouraged the secondary residence trend. The acquisition of a summer house, constituting a secure investment--due to the stability of the demand--promoted land speculation and private contracting in the recreational areas surrounding the urban centers. Vast areas around the urban centers of Athens and Thessaloniki were gradually transformed into "vacational squatter land" at the beginning, and the phenomenon has by now spread to every peripheric countryside adjacent to any major urban center in Greece.. Most of the buildings that are being constructed in these areas are simple prefabricated structures being

built illegally, and whose erection required only a concrete base and a minimal time for the assembly of their parts. It is, thus, useless to speak of the presence of the architect or of the architecture of these summer buildings; a field that would have formed an extremely challenging experimental ground for native Greek types of buildings was simply never handed over to architecture.

The upper social classes, by contrast, always used architects to design their summer villas, which accordingly became the domain where all the architectural imagination suppressed in the urban milieus was given experimental rein. However, architectural imagination was constrained by the often obtuse wishes of the clients, who usually demanded "something unique"--most often this meant a vernacular pastiche fantasy. Thus, the official summer architecture in Greece evolved into what we can term a high-class vernacular, characterized by a romantic exhibitionism and a striving for social distinction.

We do not consider these examples as participating in the expression of Greek regionalism. They constitute the realization of a book-architecture, imitating forms and types without any particular philosophy behind their selection or with any specific problematic engaged up front. During this period, the sixties, nonetheless, Konstantinides built his vacation houses in Sounion, Aegina and Spetses; Nikos Valsamakis started erecting his very Greek modernist houses in the countryside of Athens, and a number of other young architects with similar ambitions and serious concerns started building in both Athens and Thessaloniki.

The Antonakakises and Atelier 66 had undertaken a number of tourist-development projects during the mid-sixties. Those projects were basically competition entries and remained at the stage of proposal:

- Design for Tourist Development of Paleokastritsa, Korfu, with Heleni Dessylla and Dimitris Potiris, 1966;
- Design for Tourist Development in Agioi Apostoloi Beach, Chania Crete, in 1966 with G. Aidonopoulos and Heleni Dessylla;

- Preliminary Design Proposal for the Tourist Development of Fani Beach in Chios, 1968, with Heleni Dessylla.[2]

The Settlement of Summer Houses in Spetses Island of 1966, with Heleni Vrondissi and Dimitris Potiris and the House Settlement in Distomo of 1969 constitute important early endeavors in the careers of the Antonakakises. Their first vacation house came in the late sixties. The most important of them, the house at Porto-Cheli of 1967-68, the residence in Marathi-Chania of 1970, and the Oxylithos house of 1974 were designs where the exposition of the zoning scheme reached a peak.

The Spata residence stands as another decisive marker in the development of the zoning scheme, constituting one of their most outstanding works.

3.4.2 Analysis

I

The house is sited between the villages of Liopessi and Spata, northeast of Athens in the field of Messogeia. The area is famous for its wine production, evident in the vines that appear everywhere and give the environment a mysterious other-worldly appearance.[3] Where the site is, the ground has a small incline and a few olive trees. There existed also a mature olive tree in the lot, which was preserved and outlined as the point of interest of the outdoor space of the house. The site is very close to Athens (about a 20-minute drive) so the house is used on week-ends throughout the year. The design was made in the year 1974 and the house was built between then and 1975. The Spata residence had been published in the journal Design and Art in Greece[4] and mentioned in Alex Tzonis and Liane Lefaivre's article "The grid and the Pathway", published in Architecture in Greece[5] in 1981 and in Wonen/TA/BK[6] in 1981.

II

The floor plans of the Spata residence bring to light the image of a place where wandering and determined paths coincide, experience and variety intermingle, and time renders design its fourth dimension.

The spatial organization of the house is structured around a winding pathway which controls and directs the movement, invites one to experience the place and enhances the principal space. The house has been organized into units, each devoted to a separate function, according to the program.

The family who owns the house consists of a couple with three children: two girls and one boy. Apart from the spaces accommodating the family, they requested a separate guest room that would function independently from the rest of the house and that the communal spaces overlook the south side, because the neighboring property belongs to friends of theirs. The rest of the program would provide a study room and indoor and outdoor living areas.

The site is sparsely cultivated, with a mature olive tree on one side the only "natural" focal point. The architects' chose, therefore, to actually build the site in order to render it interesting. The house was thus organized into three major units, closing the site from the north, the east and, partially, the south, while the west side is perforated by the entrance, closing off the side with three to five feet-high white-washed walls. The units, as they are deployed circularly, create a central open-air courtyard with parterres and the olive tree , while another paved open yard is formed at the end of the south side, designed with a pergola and built-in benches and table as an outdoor dining room (Fig. 47).

The levels of the several units alternate slightly as they lie on the ground, adding a gentle perspective to the view of the outdoor covered spaces. The existence of the second floor with the deep shadows it creates adds another dramatic touch to the atmosphere. The several units are interwoven into the continuous path of the main passage-lane so naturally that the impression is almost that the place had grown physically.

The first unit, which includes the "public areas" of the house, is met immediately after passing the outer gate portico and descending the three large steps inside. The entrance of the house is marked by a curving blank wall on its left and a polygonal white box on the right. Inside, there is an orthogonal hall separated from the main living room, just in front of it, with a perforated wall panel offering visual access but cutting off movement. This built parapet, by separating the areas of the two spaces, also helps the differentiation of their ceiling heights (see sections AA and BB in Fig. 47).

From the entrance hall, one can take a double stair, either toward the informal living room next to the main one, or toward the second floor in the corridor of the children's bedrooms.

The children's wing is a big, square, orthogonal volume, detached from the ground by the creation of a pilotis space and lined up with the main courtyard. This pilotis is built with a low

parapet in its three outer sides, creating a protected open-air place for multiple activities all year round.

On the second floor, the bedroom block consists of two rooms of approximately the same size, both opening on a covered balcony facing east. On its west side, the block is sealed with the corridor-passage. A continuous strip of windows, approximately three feet from the floor, visually links this corridor with the central courtyard, and also orients one in relation to the whole building. The corridor, from the point where it leaves the children's unit, shifts toward the final block, containing the parents' quarters. The unit is a linearly formulated orthogonal volume divided in two by a central sitting hall where the corridor-passage ends and which projects outdoors with a small balcony, linking the internal spaces with the surrounding landscape. The corridor, as it develops between these two units, turns out to be a multivalent space. Widening enough to acquire the width of the parents' sitting hall, it becomes actually an extension of that space, weaving its ascending plateaus into the hall and capturing a glimpse of the outdoor space into its minute dimensions (Fig. 48).

On the ground floor of the parents' quarters is the guest room area with an individual entry, a pathway similar to the upper floor's pathway--only this time opened to the yard--and a large covered open-air patio for outdoor activities.

The parents' room, on the second floor, can be reached by an open-air staircase which begins at the end of the ground floor plateau of the guests' room unit. This side staircase lands in an open-air veranda that commands a panoramic view.

The only space which does not communicate directly with the central courtyard is the outdoor dining yard of the south. It is reached through a path of four descending plateaus starting directly from the entrance portico, and opens with a low parapet facing the site next door to facilitate social contact with the neighbors. It has direct access from the kitchen and the main living room and is so beautifully designed that it pleases the mind of anyone using it and enhances any functions that take place there (Fig. 49).

The movement pattern, as we have seen so far, is circular, running through every unit of the house and open to them. However, it commands so much space that it cannot be taken as a mere "path". It acquires significance on a compositional level. If we consider here the examples of the "Compositional Tradition"--which concerns the expressive value of form and its cultural context--the Spata pathway reveals a commitment to architecture as a cultural object in a social context.

> The pathway, in the case of the Antonakakises, is never an abstract principle of organization, a network through which people only flow. As in the work of Pikionis, the components come out of the concrete lived-in places for meeting that we find in local, popular architecture: doorsteps, passages, courts. They have a memorable shape and notable position in human associations; they have a history and belong to a social life. The pathway is the backbone from which each place grows and to which each place leads. As in the case of the grid, it may control also aspects of microclimate, the flow of air, the view or the course of service lines, but its primary role is to be a catalyst of social life. Every time its circuit is laid down and every time one passes through it, it can be seen as the reenactment of a ritual, the confirmation of the human community and a criticism of the alienating effects of contemporary life.[7]

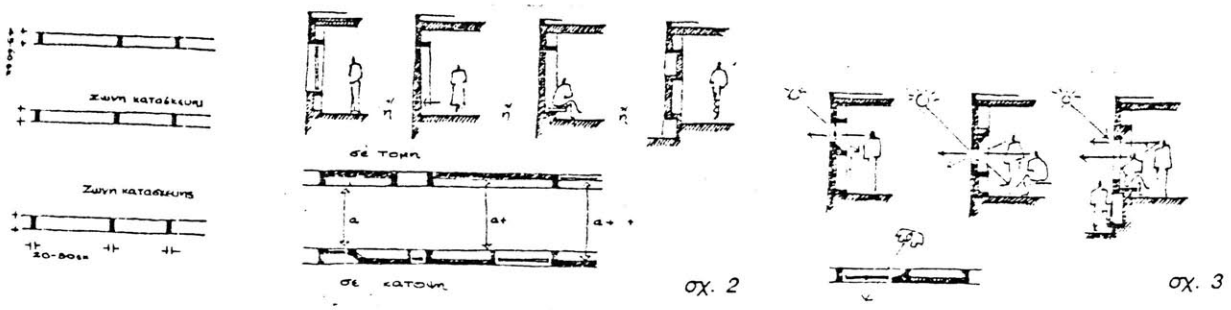
III

To approach the house from the main street one has to follow a private dirt path crossing the surrounding fields. The entrance gate is a simple portico structure surrounded by tall white walls (Fig. 50).

The celebration of the house realm is again stressed with this courtyard entrance marking the beginning of the internal journey inside. Passing the entrance gate, or even standing before it, the image one has of the house complex behind conveys a sense of community and communal order. Because of its additive compositional system, the building does not have a typical facade. Its image is derived by breaking down the whole into its constituent elements,

then building up the notion of an outer facade. The same can be said for the exterior views, only there because the several units are seen without the joint corridor element running through them--except in a few instances--the facade presents a more ordered cubist form (Fig. 51).

The organization of the volumes is based on a structural vocabulary of the slab and the column framing every individual unit box and expressing structurally the inside spaces. The reinforced concrete skeleton, with infilling walls made of brick, realizes what can be named (after Alexander's initial proposal) the "Thick Wall Pattern". It is a device applied into the shell-boundary surfaces of the space to provide for a minimum width for the wall, similar to the width of the traditional stone wall structure. With walls one to two feet thick instead of the usual membrane structures of contemporary buildings, the architects can elaborate their outer (and inner) boundaries, to signal the transition between exterior and interior and add to the complexity of the space. They achieve that without abandoning the reinforced frame; they only use it differently. Holding firm to their zonal organizing scheme, they choose columns of such dimensions that they project from the walls in which they stand, either into the interior or outside.



σχ. 2 σχ. 3

Schemes 1,2,3. Construction Zones and Thick Wall Patterns

The concrete skeleton thus continues to frame the total space, underlying its conceptual scheme no matter how much it is treated as an indoor or an outdoor space. The windows open immediately below the ceiling slabs and whether they reach the floors depends on their place and function. Inside, the concrete slabs are left exposed and they are basically flat, except the main living room ceiling, which has been curved to both distinguish the space's importance and to give a height corresponding to the room's large area.

The indoor spaces are paved with orthogonic acanonic slate slabs, and the outdoor yards are covered by similar, irregularly shaped ones. All of the house is painted white--exposed concrete frames included--and the built-in furniture was also designed by the architects.

IV

When the significance of the building is placed in the methodological and theoretical development of the Antonakakises' architecture, all the points that a constructive critique should stress are exposed so vividly that the task is turned into an educative experience.

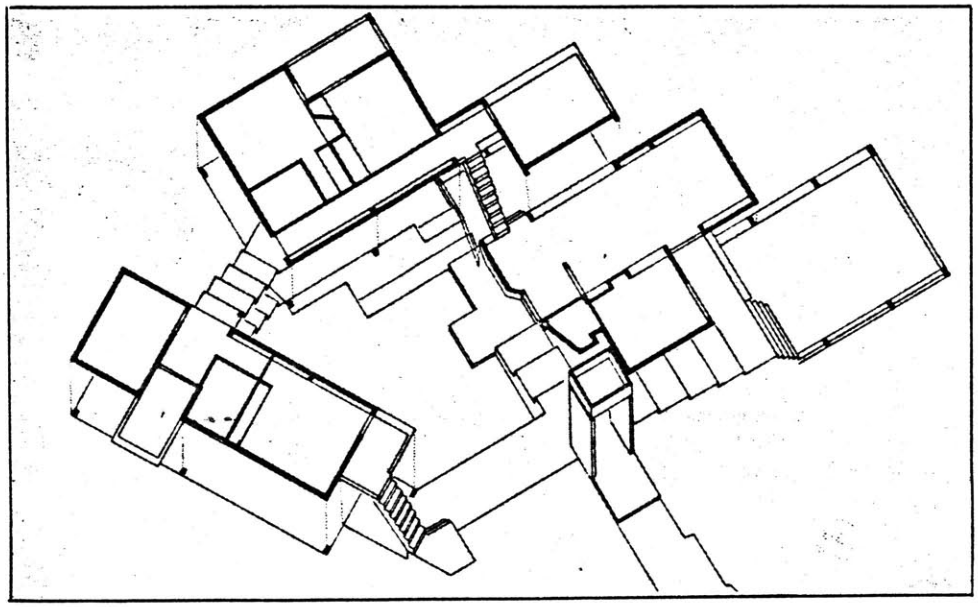
First, there is the notion of the unit/zone, which combines the earlier zoning and modular themes. The zone organizes clearly the structural integrity of the building, while the predominant factor that determines the formation of the unit is function. According to the functional requirements, and considering the life of the family, the units distinguish between the public and the private areas as distributed in the indoors or the outdoor spaces, reproducing--as in the Benaki building, but this time with a tactile clarity--the image of a tiny city, in this case, taking the form of a traditional village. Their elements establish a new context under whose terms they demand to be viewed and evaluated. The standard principles underlying their design methodology secures a

positive scientific background for their forms and gives their research in indigenous form the status of an archaeological inquiry. As Tzonis also mentioned in this regard, from their patterns emerges a new building typology, which is neither arbitrary nor documentary; that is, it is not connected to a nostalgic vernacular, nor does it claim a universal positive value through its formal indices.

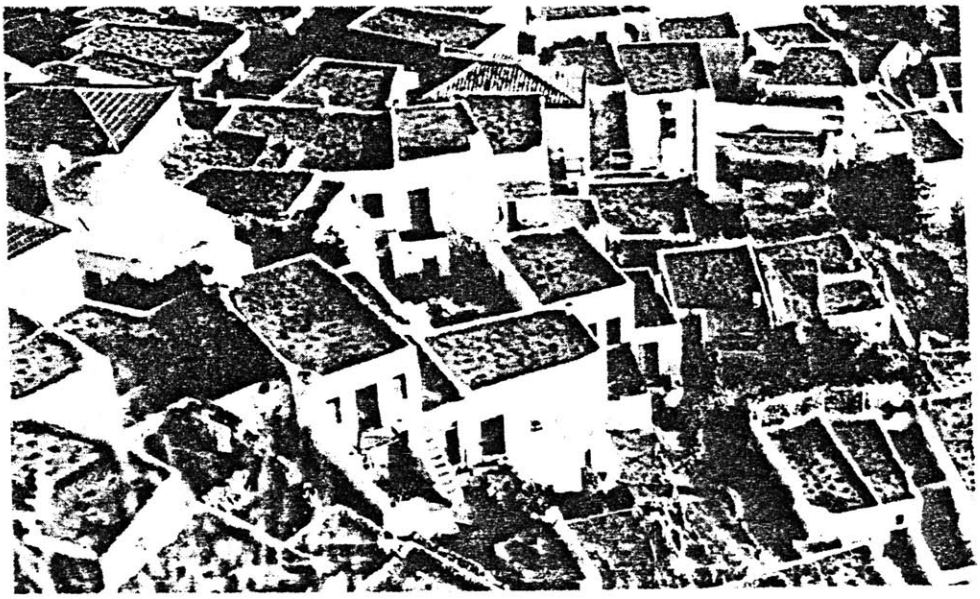
Introducing the passage-lane as a compositional and significatory element in their design, they are able to re-use the additive system of a modular scheme in a freer and more imaginative fashion than was allowed by the gridual pattern. The grid survives within the unit, supporting the distribution of the columns and the other structural elements, but the whole organization is left "uncontrolled" to follow the paths determined by the ground contours or by the human will and presence. The images that such a composition brings forth are the lived-in, concrete images of the native traditional settings, where the sense of community and of communal order is manifested in the coherence of the spatial environment and its forms.

The reciprocal metaphor of the house-as-tiny-city acquires thus a very strong socio-historical background to the Antonakakises' formal experiments. The communal/collective form that they reactivate in the Spata residence can be recognized as the form of a traditional Aegian-village-setting, in microscale (connoting the model of the village community behind as the referent social context).[8] (See Schemes 4,5, following page.)

On the other side, if we consider it as a courtyard house, the type and even some formal and compositional devices they employ are directly congruent with elements of the traditional Macedonian townhouses as developed around a central open-air courtyard, with their covered open-air or closed corridors (the so-called hayiatia) overlooking the yard and the hierarchical social order that underlay their spatial organizations (analogous to the authoritative scheme which remains operative in any contemporary Greek family[8] (Fig. 52).



Scheme 4. The Spata residence; Layout



Scheme 5. Bird's eye view of the town of Skyros, Aegian Sea
Combination of the standard functional unit

The typology that emerges in the Spata residence as well as in the Benaki Street apartment house is also a development of crucial importance to the advancement of Greek architecture specifically and to contemporary architecture in general. It shows a thoughtful and effective way of coping with the antithetic tensions acting on modern life and civilization and on their referent cultural expressions such as architecture.

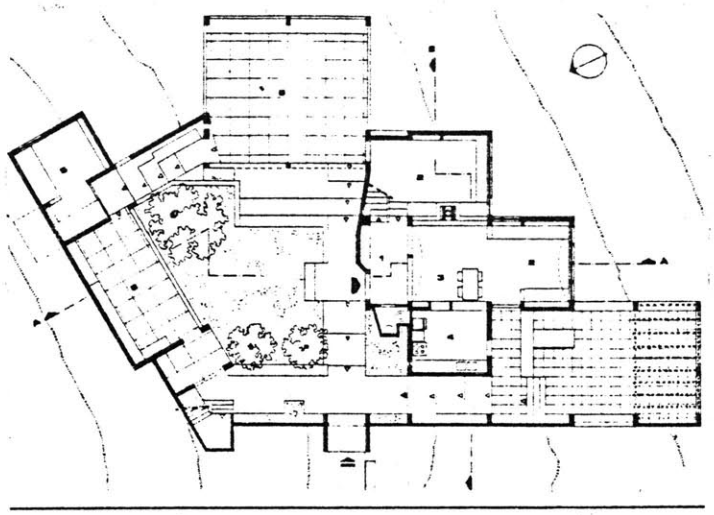


Fig.47-a The Spata residence; Groung floor plan

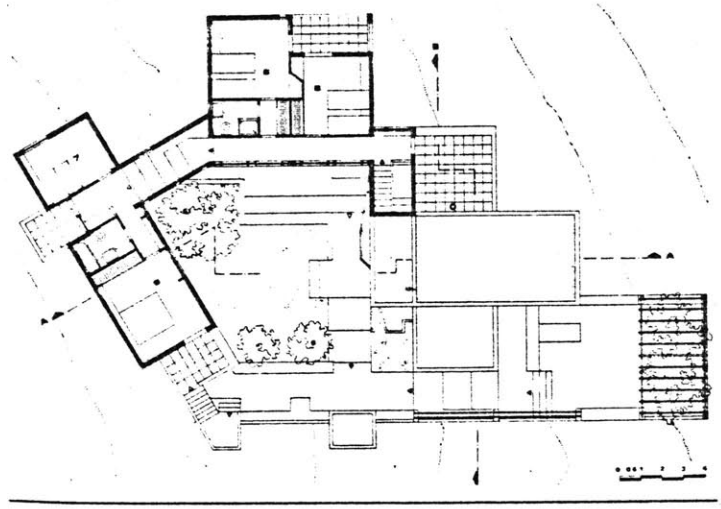


Fig.47-b The Spata residence; First floor plan

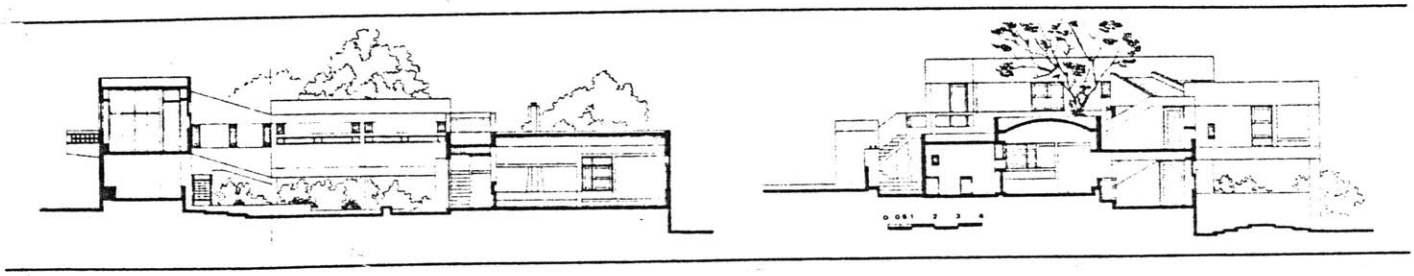
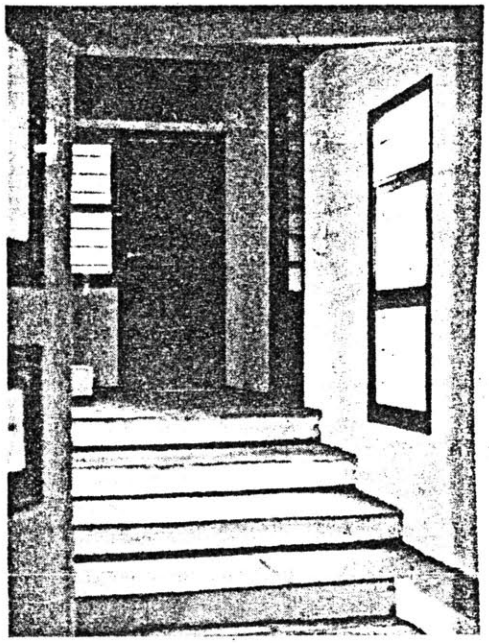


Fig.47-c The Spata residence; Sections AA,BB



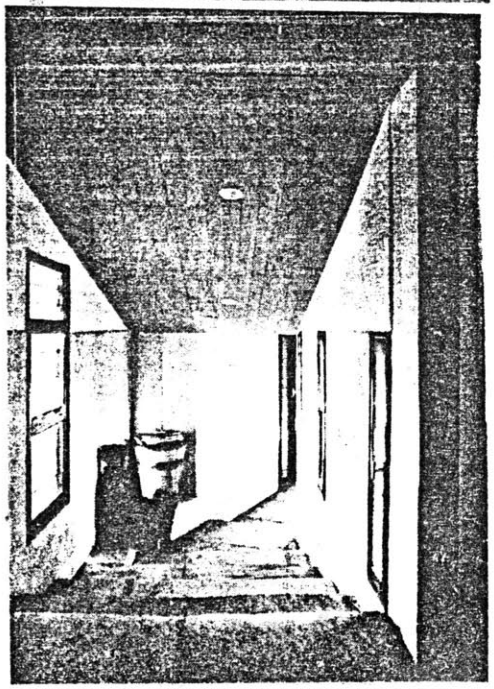


Fig.48 The Spata residence. Dimitris and Suzana Antonakakis Architects 1974
Views of the corridor/pathway

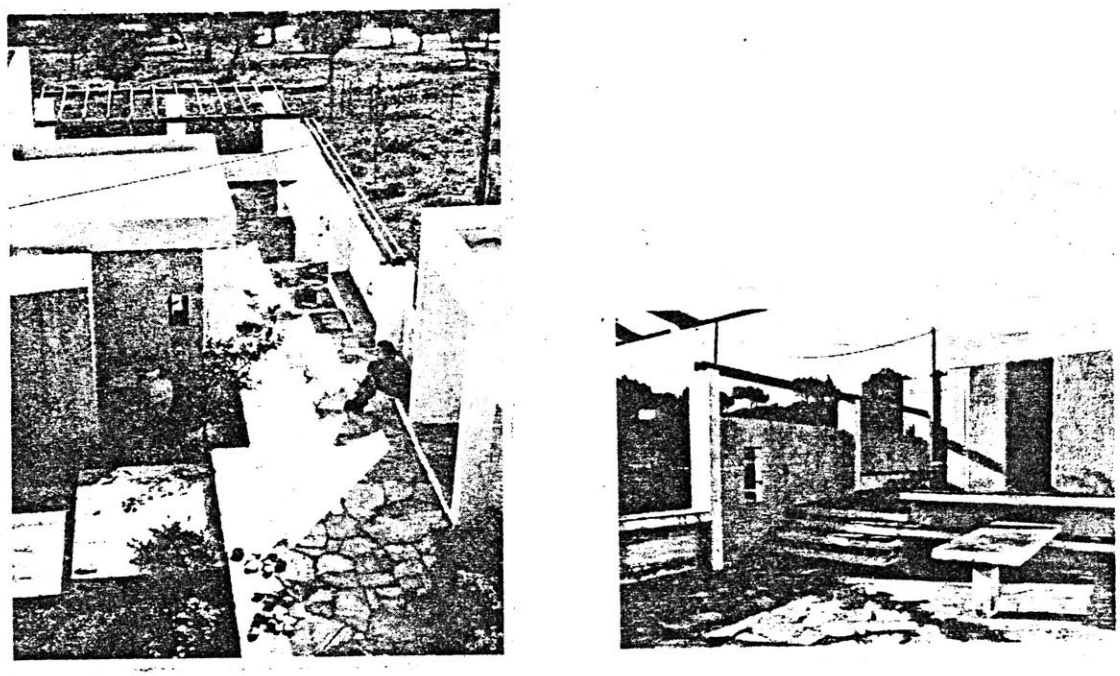


Fig.49 The Spata residence. Views of the outdoor space

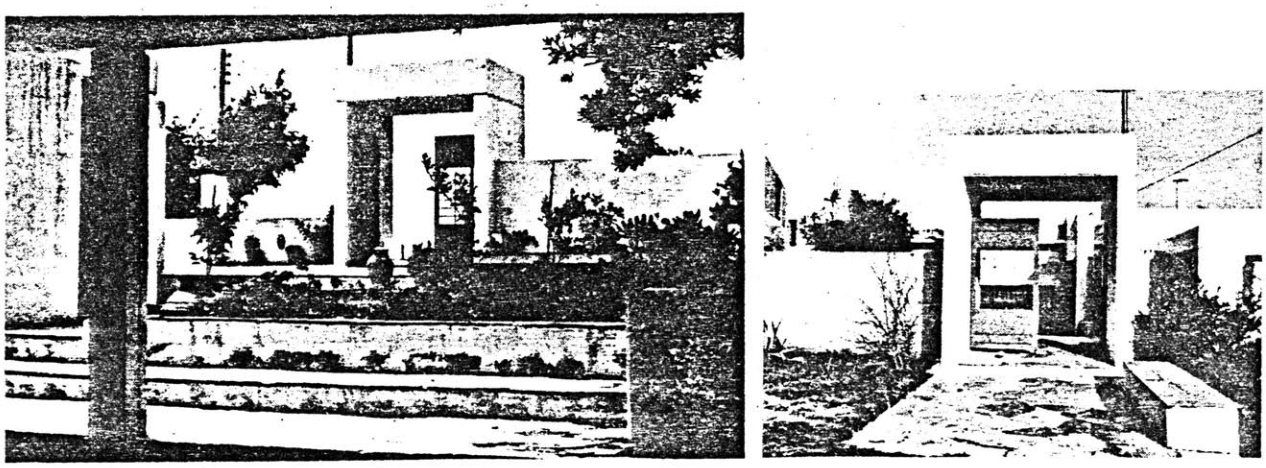


Fig.50 The Spata residence. Views of the entrance portico (Inside and outside)

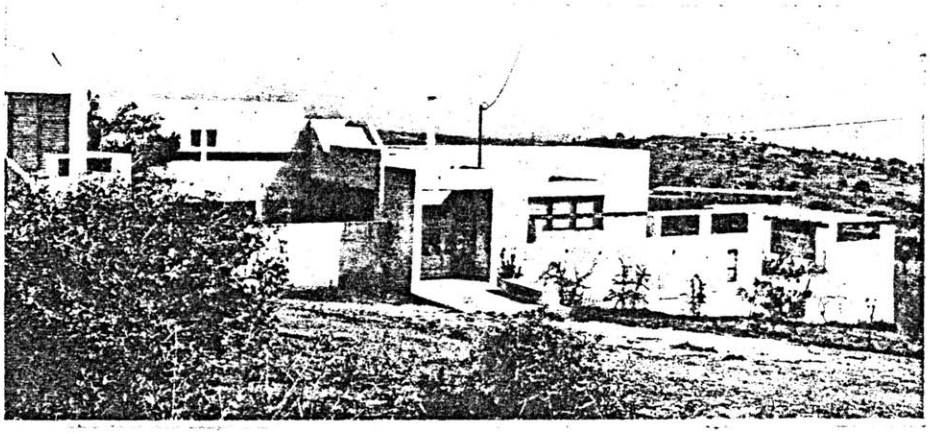
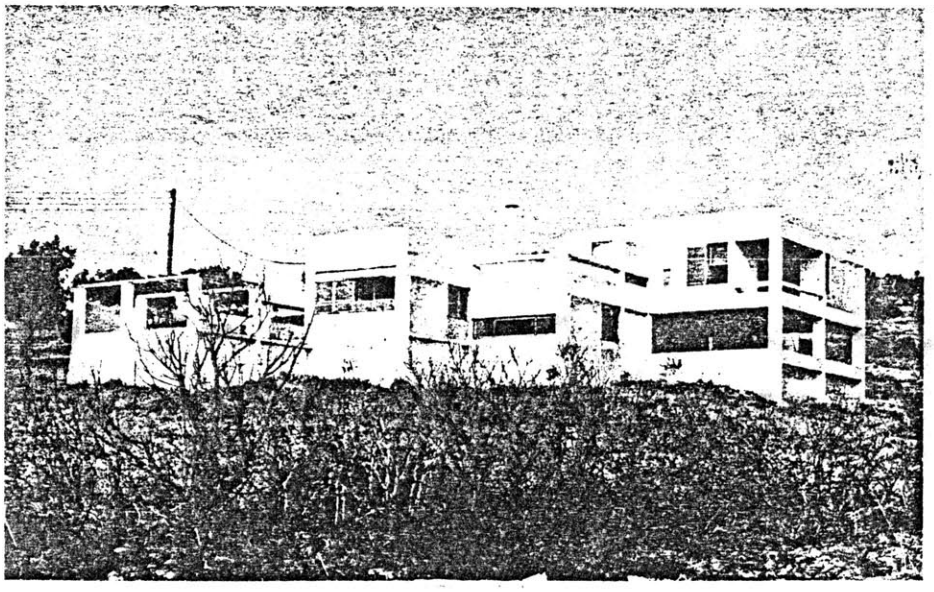


Fig.51-a View of the west side



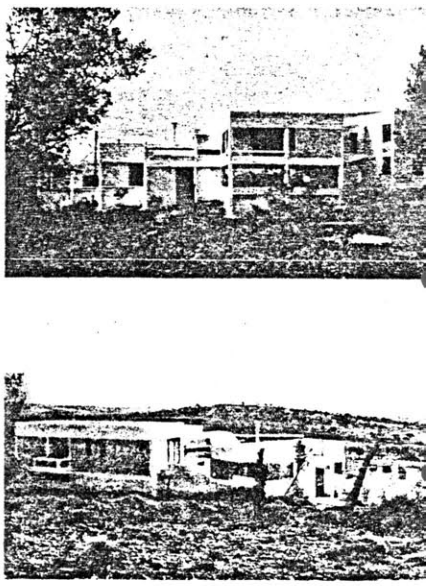
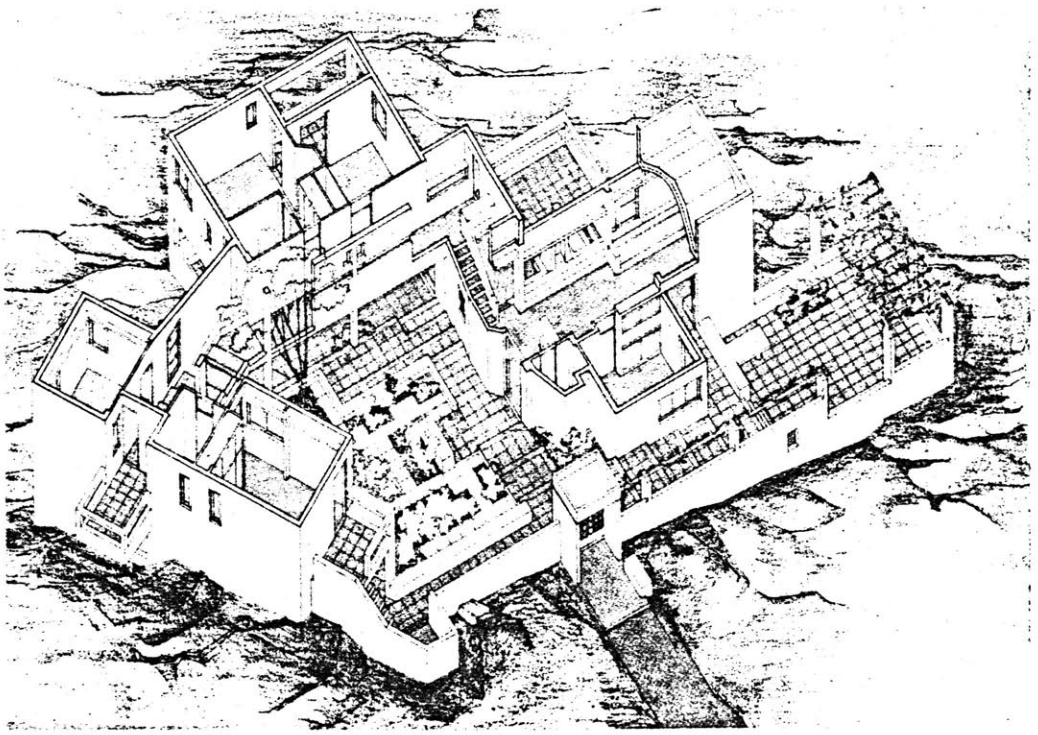
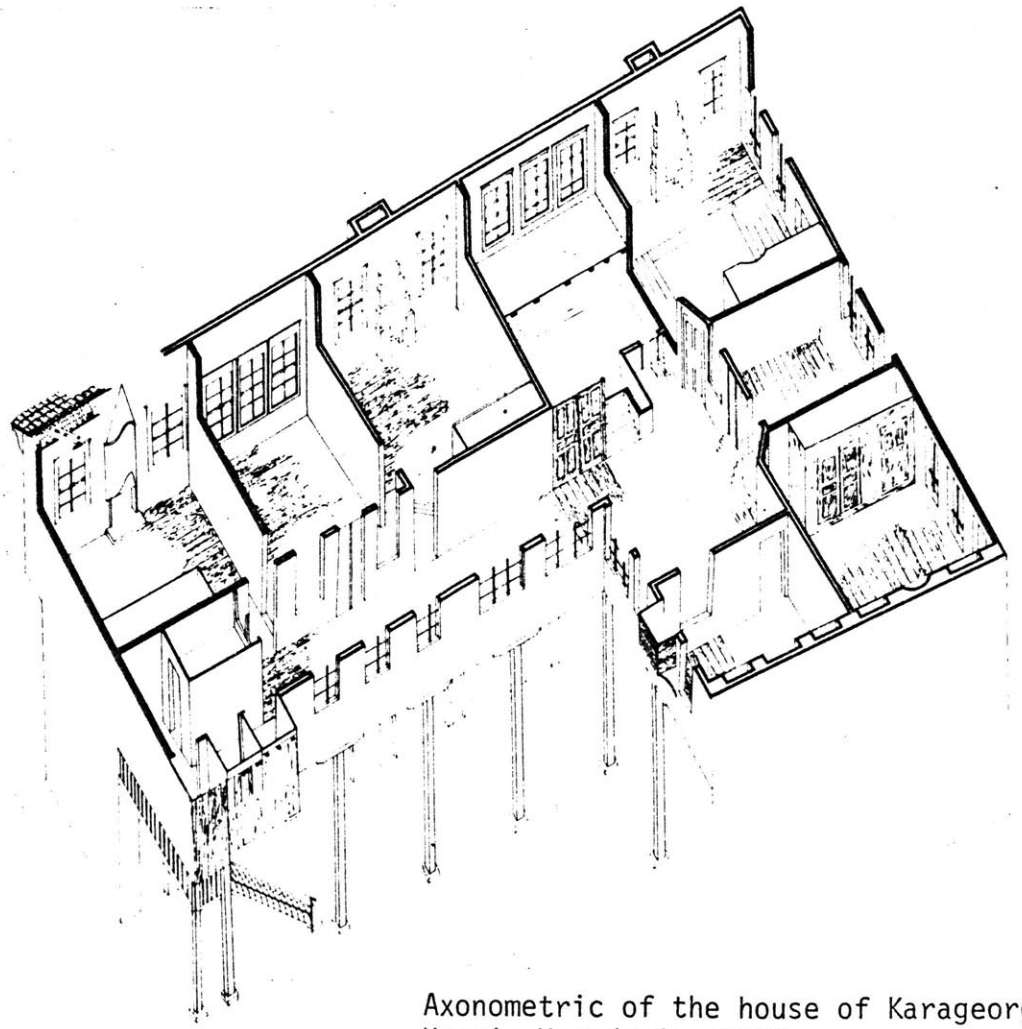


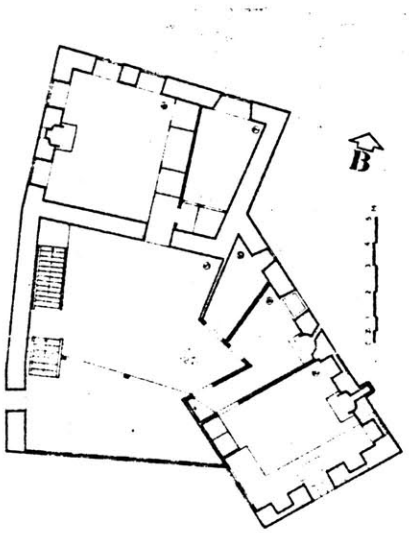
Fig.51-b Views of the south, east and north facades of the house



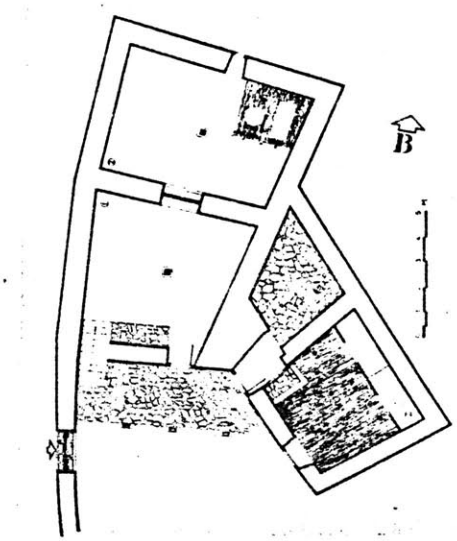


Axonometric of the house of Karageorgiou Brothers
Verria,Macedonia c1800

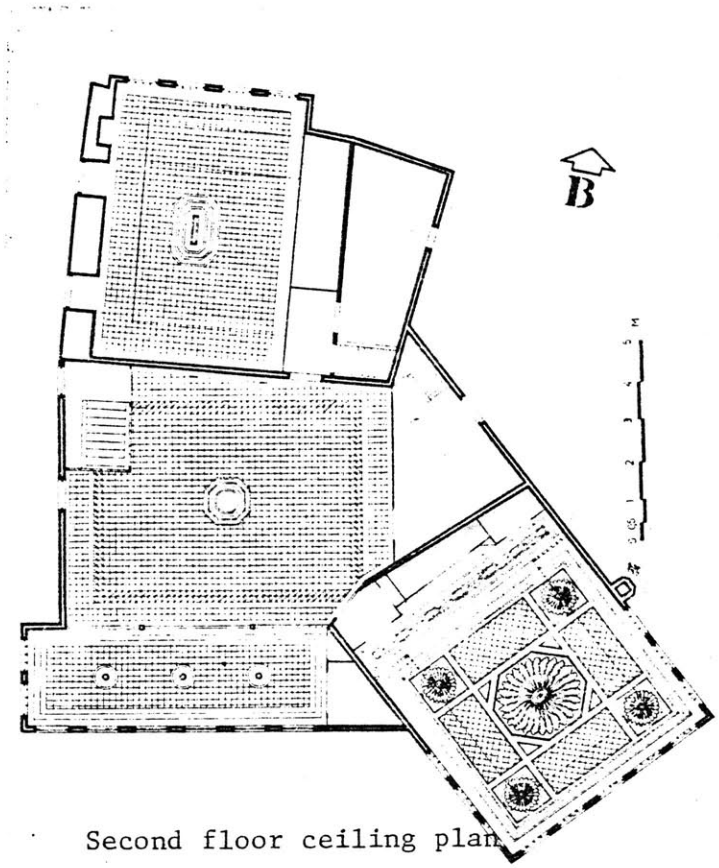
Fig.52 The Spata residence composition compared with a traditional northen courtyard house with internal corridor



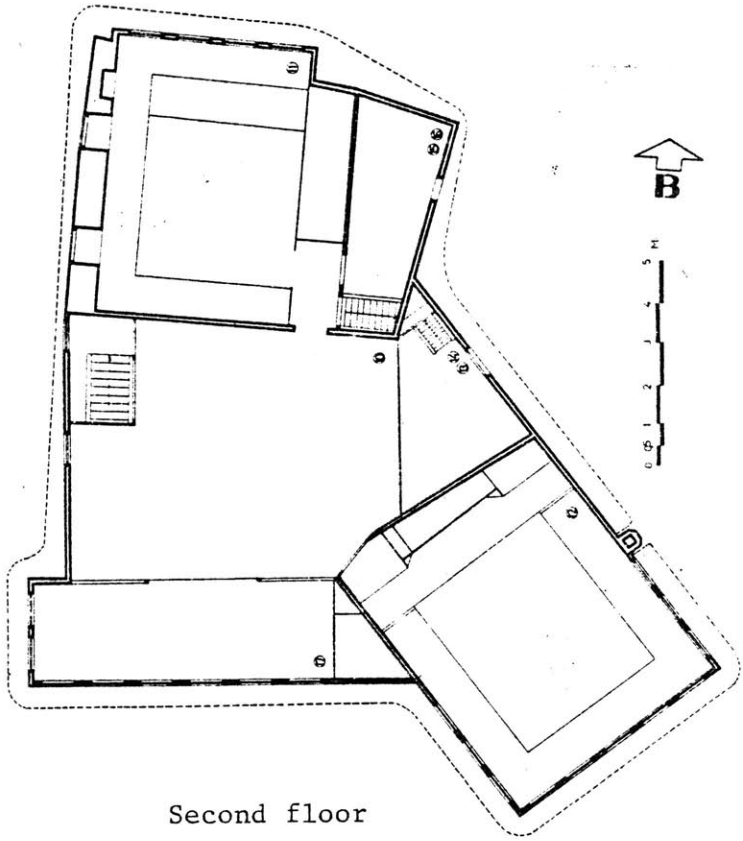
Ground floor



First floor



Second floor ceiling plan



Second floor

Fig.52-a Example of a town house layout from the city of Kastoria
c. 1800

4.0 ON THE METHODOLOGY OF THEIR DESIGN

The Antonakakises' design process can be divided for analysis into two major aspects: The first concerns their characteristic spatial organization understood on a categorical and structural level. The other refers to the typological and significatory aspects that are evoked by a socio-spatial consideration of use and function.

The outstanding feature of their technique is undoubtedly the consistent stress upon the relational aspects of the various realms of built space. Their conception of space begins on the categorical level, distinguishing between open and closed (light and shadow); it then acquires its topological existence with the distinction of the inside and the outside, concentrating much of its force and vitality on the transitional passages between the two conditions.

When light penetrates the inside, or inward-flowing air opens up the interior atmosphere, marginal lines acquire a sensuous--even tactile--dimension which decisively affects both realms. Such a transitional process is only actualized in time; in architecture, the element of time is transmuted into space, and transferring this space into the design allows the drawing hand to convey the space into a livable area. Forms may transcend their nature as forms and become invisible except in certain instances, but space remains the only architectural thing with power to stimulate emotion.

Space permits movement. Movement is always depicted in the human mind (as in free association) as an extended line in the horizontal, either joining adjacent individual points or stretching along one single direction. It is perhaps this dominant conception of movement that explains the association of space with horizontality, and joins movement patterns and space notions in the zone-schemes.

In the years around and following 1960, architectural theory saw a revitalization of interest in structuring the newly gained

awareness of an "enriched" architecture, into a coherent and effective "design methodology". Within the contradictory development of Team 10 (complex as it was), we can point to the failure of simple linear systems such as were initially proposed by the Smithsons in their Golden Lane housing of about that time: They were unsuccessful in their attempt to go beyond the fragmented functionalism of the Athens Charter--the categories of dwelling, work, recreation and transportation--to give way to the continuous grid model, proposed with the Frankfurt and the Free University of Berlin projects by Candilis, Josic and Woods.

As early as 1957, however, Van Eyck's orphanage in Amsterdam depicted spatial continuity through an additive system on a modular basis. Following the notion of "labyrinthian clarity", Van Eyck suggested the additive composition of analogous cells in an attempt to rediscover a "natural" reality in architecture (Fig. 53).

In 1961, Chermayeff and Alexander published their book on Community and Privacy, wherein an attempt is made to reassess modern and traditional architecture. Leveling a polemical critique against the vulgar utilitarian and consumerist aspects of "comfort and convenience", they look back to acknowledge the need for variety in day-to-day life:

> To restore genuine variety, each kind of experience must be allowed to develop for itself under conditions that are special, clearly defined and even physically separate. Without definition and organization, experience becomes chaotic, at best incomplete and inevitably dull.
>
> Such thoughts suggest that in the man-made environment the anatomy of urbanism should be organized at two levels. First, the numberless kinds of experience need to be translated into distinctly articulated and appropriately structured physical zones. Second, these separate zones must be organized in relation to their intensity of effect on each other, in hierarchies, according to their magnitude and quality.[1]

In December 1965, at the winter convention of the Dutch Architects Association, a research team under the name of SAR (Stichting

Architecten Research), founded one year earlier, presented their conclusions along with their proposals outlining a method for designing adaptable dwellings by means of "supports" and "detachable units".

The "support" concept was accepted as an alternative working hypothesis based on the principle of user participation and aiming towards rediscovering the age-old traditional human condition as reflected in the physical environment.[2]

According to the theoretical formulation of the "support" methodology, the dwelling is not a product that can be designed and produced according to the techniques of the mass housing industry. It was thought to be the result of a process in which the user could make decisions within a larger framework of communal services and infrastructure.

Le Corbusier's project for Algiers was perhaps the first manifestation of such a "support" building, with its linear multi-storey viaducts and their carved "pigeon holes" that were to fit the individual units of the prospect inhabitants (Figs. 54, 55). Space in the "support" is organized into a zone/margin system, according to certain conventions. In this way SAR introduced Chermayeff's and Alexander's urban zoning scheme in the design process of mass urban houses, but its low-term impact would expand to cover domains from single buildings to large complexes and entire urban areas. By acknowledging design as a decision-making process and taking into consideration problems of communication, coordination, evaluation, and systematization, the SAR method acquired a social and democratic orientation that was used into even wider fields.

All those development occurring in Europe at the time the Antonakakises were beginning their professional career should--and indeed had--exerted a major influence on their methodological and practical thinking.

In their first large commission--the winning entry for the Museum of Chios Island, in 1965-1966--the additive method of

composition is proposed as the solution to the problems of scale, landscape-town, and materials; how to accomplish most effectively the penetration of public areas into the Museum; and how to make possible the free alteration of covered, semi-covered and open-air spaces; of flexibility in the projected future extension (Figs. 26-34).

Linked to the principles of central European romantic classicism, the Greek version of neo-classicism, as it was finally transformed through its fusion with the native urban vernacular of the period between the Wars[3] and with a similar concern to its European precedent for an ordered and coherent cosmos, echoes its structural and significant presence into the composition of the Museum.[3] The building is devised according to a system of analogous cells, reproducing the structuring volumes of the old town of Chios; and while the module units hold a structural reference and respond to a functional adaptation, they suggest at the same time a hierarchical geometric order that imposes its clarity of reading onto the "naturally" arranged structure.

Spatial continuity follows a pattern of movement through the individual cell spaces, changing simultaneously into covered, semi-covered or open spaces, or producing a variety of experiences by means of simple repeating of the basic unit.

At the same time, this modular system is arranged circularly, in an attempt to reproduce a continuous zone of movement around the open courtyard. After the realization of the Museum, however, the modular synthesis will retreat in favor of more fluid zoning schemes, comprising several functional units. This shift in the compositional tactics of the Antonakakises can be explained if we consider the contradictory development of the forces acting on the productive and symbolic levels of contemporary Greek architecture.

However similar the ideas of the additive system and Team 10's model of the continuous grid may appear at first, when examined on a categorical and syntactic level essential differences emerge in their significatory aspects.

Team 10's model, which includes Woods's "stem" and "web" and Alison Smithson's rather raw "mat buildings", attempted to force the existing mixture of functions into a unifying structure in a way that would be "naturally" complex and flexible. In the additive system--as practiced by Van Eyck and the Amsterdam School--there was an endeavor to produce a formal classicizing structure, compatible with the thesis of Wittkower and with the Compositional Tradition--an endeavor concerned with the expressive value of form and with its cultural content.

We can detect in the modular organization of the Chios Museum an implicit attempt to mix these two approaches. While the building alludes to a formal classicizing structure with its "ad-infinitum" composition (characteristic according to Kaufmann of neo-classicism and in contrast with the concatenation, integration and graduation of the Renaissance and the Baroque systems), it nevertheless explicitly expresses the intention to integrate itself with the close--as well as the distant--urban environment. Toward this end, the Museum is to form "a pole of attraction of the other end of the city by creating a cross-center activity" while, at the same time the Museum should not interrupt the natural pace of the city's growth.

The Museum of Chios bears a resemblance to Konstantinides' Museum at Yannena and Komotini of 1965 and 1966, respectively. Both of Konstantinides's Museums allude to strong classicizing indices and to a hierarchical organization in zones characterized by an elemental structural integrity (Figs. 36, 56).

Konstantinides refers his post and beam structural system to the autochthonous elemental structures--such as shades, canopies, etc., of traditional architecture--which, according to him, represent the basic cells of architecture (Figs. 57, 58, 59). Following Konstantinides, the Antonakakises suggest that the white skeleton frames of their module units are derived from the white-washed frames of the openings of the stone-built Chiotian houses still in view around the Museum site.

Resolving such contradictory forces with a temporary balance in the Museum project, the Antonakakises will reformulate their methodology into the "zoning schemes" which underpin their late work.

"The apparent organization of the Cretian traditional house into zones of construction" struck the Antonakakises while researching the traditional Cretian houses, in preparation for designing a vernacular-type house after the desire of a client (1970), and signals, according to their report, the decisive moment for starting to experiment with zoning patterns.

Zoning organization, though in a nevertheless hybrid latent condition in the Museum composition, had already been tried out by them in the linear organizations of the summer-houses settlement of 1966 in Spetses (Fig. 39)--a winning project immediately following the Museum--and in the Mine-workers' and Administrators' settlement of 1969 in Distomo Boeotias (Fig. 60). The micro-scale of the summer house at Porto-Cheli of 1967-68 forced them to a close and much more detailed involvement with the consequent results of the technique, and they began there the alternation of open-air and covered zones within the limited area of the individual house (Fig. 61).

Relationships between inside and outside have been previously identified in our regionalist exploration as the critical criterion for registering a regionalist architecture.

Intimate connection with nature and openness to the natural landscape had been an archegonal characteristic of vernacular life. Attempts for critical restoration of this unity between inside and outside, between building and nature, is a basic feature of not only Greek regionalism but regionalisms around the world. This search for unity was called "an enclosed Modern Architecture" by Tadao Ando.[4] Working in Japan, while attempting to reconcile the techniques and vocabulary of universal modernism with the now nearly extinct traditional Japanese life pattern, and its characteristic realms of enclosed space, Anto suggests relations between built form and nature be expressed "as a theory of parts":

> I emphasize the background against which a building comes into being. My architecture is definitely modern. And it demands both an overall compositional theory of a kind that traditional Japanese architecture was unable to generate and a theory providing for the life of the individual part.
>
> I create architectural order on the basis of a geometry, the basic axis of which is simple forms--subdivisions of the square, the rectangle and the circle. In addition, I attempt to choose among the forces latent in the region where I am working, and in this way to develop a theory of parts that is founded on the sensibilities of the Japanese people.
>
> My interpretation of architecture has gradually come into being as I have continued producing buildings and is no doubt deeply rooted in intuitions emerging from experience.[5]

Ando, one of the most regionally conscious architects in Japan, was led to a generation of precepts which come close to an idea for a universal model of regionalism. His theoretical writings still explicitly state what the Antonakakises have methodologically sought to formulate in the concept of zone:

> We analyzed the characteristics of closed and open space and became conscious of the value of their complexity in traditional architecture. . . . We try to realize in our practical work and in a comprehensive way principles that are theoretically clear to us. This effort is made not only in large scale synthesis but also in small scale houses and apartment buildings where cost and construction limitation are great and of crucial significance.[6]

The highly distinctive topographical characteristics of the site of the summer settlement in Spetses determined the particular characteristics of the summer-house type, as well as the overall organization of the composition which followed the longitudinal terraces of cultivation existing on the steep hill of the site.

Thus, the first formulation of the zone system, altering open and closed spaces, appeared, one would say, almost naturally to be explicitly elaborated the successive year (of 1967-68) for the summer house at Porto-Cheli.

In this house, spaces of different functions are grouped together and arranged sequentially in parallel zones of open and closed areas, to take best advantage of the orientation, views, and summer breezes. Here the zone goes besides the constructional role of a "support" kind, to be engaged in the discovery of several kinds of relations existing between specific activities, multivalent space and "the specific geometry of the light and nature of the region".[7]

The project for the mineworkers' settlement at Distomo advances the open/closed distinction of the zones into a threefolded type: the open/public; the open/private; and the closed/private (see Fig. 60). Cost and construction optimization lead to a strict organization of the built-up parts. The dialectic between module unit and residual space, however, acquires a level of consistency that resolves the "productivistic" nature of the complex. Open-air public spaces are handled with greater flexibility than was allowed in the houses, permitting them to follow the physical contours. The non-built natural setting of the site, instead of being a left-over of the used part (by means of this controlled freedom), is absorbed into the whole composition. The interrelation between the pathways and the adjacent residences is resolved in terms of total space and the different paths, with their individual characteristic formation, are not merely expressive touches, but punctuations which are essential to the full meaning of the complex.

The manipulation of the unit in relation to the surrounding space leads clearly to the image of the zone, a pattern which becomes the structuring principle for both the urban and the building forms. That the zoning division becomes a continuing hallmark in the Antonakakises' architecture is a direct result of their overall approach to design manifested in a rationalistic and methodologically structured manner. Once the space loses its expressive value, as in the formal schemes of the additive method, or the zoning motif, the space/unit or open/closed juxtaposition, which may be orderly or

confused--that is, geometrically regulated or governed by natural law--becomes the definitive image. A transitional phase between one condition and another acquires both a referential and a substantial significance. Margins of successive zones attain a sense of transparency when the current from the level of abstraction to the level of concrete--and the current from the level of the whole to the level of the parts--flow together and become replete from end to end with a single creative intention. Marginal spaces become capable of stimulating recollections of both realms (inside and outside) as well as stimulating new discoveries in relation to the place in which they grow. Boundary exploration becomes a basic means of establishing the particularity of the building and is the place where "traditional" paradigms and their practices can be invited to re-emerge and be tested under the new conditions.

The link between social realm and spatial integrity becomes almost visible when one considers the dynamics shaping the spatial boundaries. Equilibrium between individual expression and collective orientation, constituting the basis of any formation in urban space, is critically determined by the way relationships between public and private zones are handled. Thus, the area of interface berween the two domains, each holding properties of the abutting zones, becomes a flexible device for their interchangeability over time.

Ownership and responsibility for maintenance can be quite clearly defined by physical and symbolic territorial markers; what can balance is the type of control that is being exercised on space. The example of the spatial organization of the Greek littoral villages, characterized by a communal order which nevertheless permits the full development of individual potential, provides a very attractive model for the kind of order that regionalism aspires to and the Antonakakises have taken it into full account.

> In our travels through Greece since our school days, we have searched to identify relationships between open and closed, public and private space, as they could be found in built environments as expressions of socio-economic and human relations. Our major goal was to express these relationships in our own projects. We realized that the quality of built environment is directly influenced by its treatment.[8]

The most important feature of the vernacular Greek settlements is their highly organized architectural structure which results from a clearly delineated set of values, attitudes and norms that governed their social structures up to 1950, and persist now only in a few remote settlements. There existed in the Greek village a sequence of systems, sub- and supra-systems, which were ordered hierarchically and closely interrelated. The law that governs all the systems, from the individual to the village, and binds them together, is the law of interdependence.[9] This social cohesiveness is reflected in the architectural organization of the traditional Greek settlement, directing the degrees of privacy of all the used space. The settlements present a double ideal of social and spatial organosis ("organization").

Each unit in the fabric when examined in isolation, reveals its uniqueness: With many characteristics in common, they are nevertheless all different, but the overall effect of their juxtaposition is of striking homogeneity and unity. The image corresponds, on one level, to the programmatic vision of a regionalistic future, and on the other, to the material constraints on production: both the straitened possibilities of historical socio-economic conditions and traditional technique and the modern industrial production procedures used today.

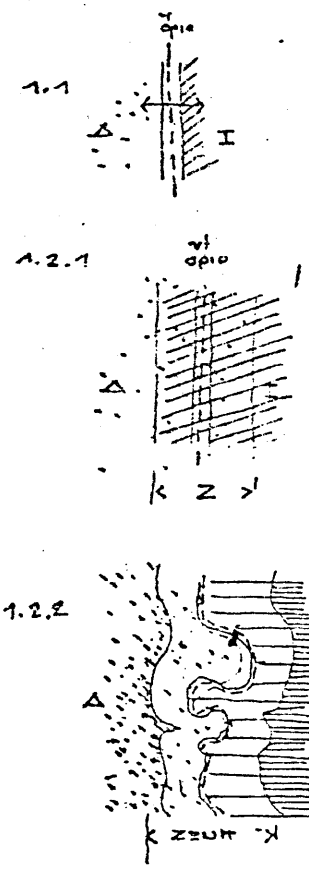
What direct implications for applicability can we draw from the most interesting elements of the vernacular settlement as, for example, the coherently articulated architectural organization that expresses and, at the same time, facilitates the cohesiveness of the social structure?[10] The Antonakakises' response to this question

resembles Ando's "theory of the parts". To the extent that space production can, even to a limited degree, initiate or reinforce a level of social participation, spatial structure is methodologically disintegrated and then attempted to be reassembled again through conditioning the dynamic interrelations of its parts.

To the degree that public and private domains are always distinctively differentiated, their zones of contact possess qualities that render them as spaces in their own right.

Observations on the boundary of contact between public and private spaces has long occupied "Atelier 66" and the Antonakakises in particular. To best convey their conclusions, it is preferable to let them speak for themselves.[11]

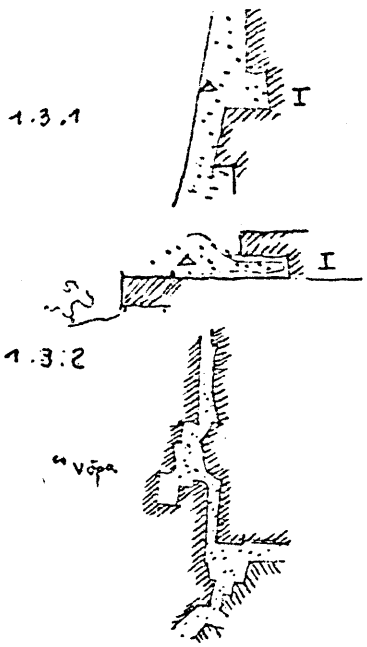
Observation 1.



The boundary separates
two areas
Public-Private.
The more it becomes definite
clear, absolute
the more it isolates us
it alienates us
it suppresses us, it eliminates
potential contact
preserves the existing distances

Transcendence from one
area to the other
is abrupt,
harsh, painful.
There are no half-tones

Despite all this,
characteristics
of one area
influence the other;
they change it
by creating a zone
with special common
characteristics
from both areas,
from both
kinds of action.

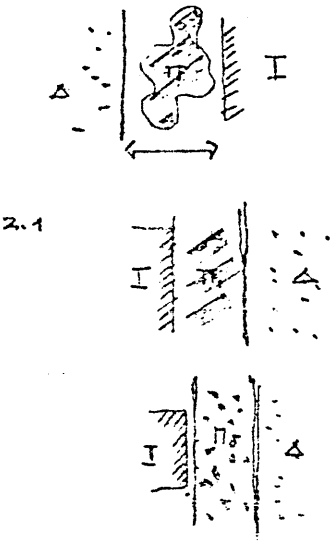


The more
one area intrudes
into the other
the more
its characteristics
influence
the other,
the more
the transcendence
from one into the other
becomes easier
more soft
less painful.
Half-tones begin to appear.

Inter-intrusions
between public and
private domain
are formed in space
in three dimensions:
In horizontal perspective (plan)
In vertical perspective (section)

Complexity of these
inter-intrusions
- enriches variety in the path
  of public space
- imparts identity
  into the private space

Observation 2

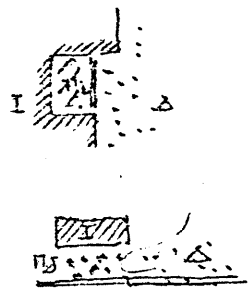


Public and
private space
do not have common boundary

In between them
a third space
interferes
a half-tone
an in-between space
which constitutes
the transitional element
from one space
into the other

The in-between spaces
are being
private
(areas of reduced
privacy)

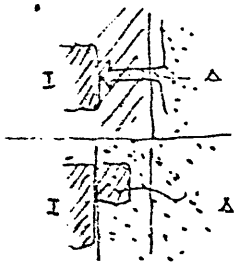
2.2



or public
(areas of reduced
publicity)

and establish
a degree
of Publicity and
Privacy of space.
The in-between spaces
are formed in space
in three dimensions

2.3

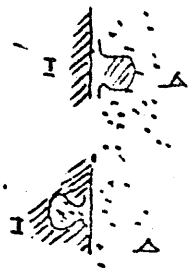


in horizontal
and vertical perspective

The in-between spaces can
be formed
with the subversion
of one area of Private space
into public
or vice versa

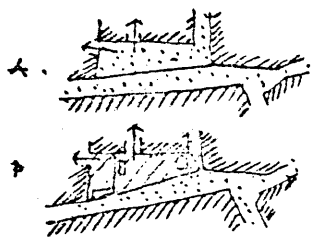
Observation 3.

3.1.1



The boundary takes
one form or another
but has been eliminated
by life.
And this fact happens
when with some
periodic frequency
Private activities
are transferred into
public space,
and therefore one part of it
becomes privately used
or the reverse,
so that a part of
Private space
is turned into
space Publicly used.

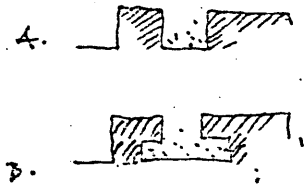
3.1.2



Activities
that transform one
public space into
private or the reverse
determine its particular
character and
shape it accordingly.

Those activities
increase
the complexity
of the pathway
enrich empirical sensibility
make sensible
the existence of life.

3.1.3



When the needs
for public space
do not suffice,
then,
boundaries are expanded
and areas of privately used space
are transformed into
publicly used areas
and vice versa.

4th Basic Observation

All of these activities that permit the formation of boundaries between public and private space are results of human behavior, according to the cultural conditions, social structure, political organization, and conventional norms, which the inhabitants themselves or others established, for the formation of their environment; factors which, it is known, more or less overlap in their practical application.

Today with such extremely hypothetically clear and, nevertheless, impersonal legal and conventional frames for the formation of the environment as, for example, the General Building Regulation, what possibilities for participation are the inhabitants allowed in the city or in their direct private and public environments?

When the legislator and the state designers replace individual participation and mobilization, which is the vision about the human environment they are proposing?

When each of the domains maintains its identical integrity and coherence, change from one state into the other becomes a celebratory event. Within the building unit, windows, doors, and entrance porticoes act as such devices; in the public aspect flexible elements

do likewise. Because of the indefinite nature of the boundary condition, the margin becomes an entity in its own right. As a result of its ability to accommodate a high degree of flexibility and variability, the margin assumes a vast importance to the exclusion of the areas bordering it.

The character of these in-between spaces is determined by what elements (usually these are minimal) are used in configuring the local margin type and what activities and combinations of activities these elements facilitate. The local margin formations determine the character of the place (i.e., the settlement).[11]

To determine the most successful device to manage the transition between interior and exterior space, the Antonakakises were driven to compare their own boundary solutions with those found by indigenous constructions. Noting the influence of Alexander's pattern language--and especially his "Thick Wall Pattern",[13] they began to investigate possible ways of producing a state of variety and complexity of "the margins" of their marginal zones--the enveloping surface of the building. While both traditional mass construction--as well as Alexander's "Thick Wall" pattern--permit a sculptural/carvable intervention in the continuous structural surface of the building, the "unguided" (i.e., not determined by a geometrically defined order) process that those examples demonstrate contrast with the Antonakakises' rational approach to methodological questions in general (Fig. 62). Architecture is, above all, subjected to its own compositional and structural laws; there is an absolute balance between the form and the material of which it is made, a subtle but direct relationship between the process of production and the methodologies directing its accomplishment.

The Antonakakises' shell-boundary approach acknowledges the examples of traditional stone walls and, to the same extent, the modern construction methods of concrete frame and minimal infill elements (employed prevalently in contemporary Greek building.

Their approach reverses the so-called "excavation process", a method of eroding the building's external surface according to geometric laws of composition. To erode, though, is only possible when either the neutral membrane that bounds the building is reconstituted to a level of some spatial depth to allow for a gradual transition between interiors and exteriors, or there exists a preconceived symbolic form for the whole which manifests its existence by the continuity of a perforated surface or by the suggestion of an enveloping structural line.[14]

The Antonakakises chose to actually reconstruct the depth of the enveloping membrane of their buildings by placing the supporting columns perpendicular to the house zones, with the larger dimension extending from the wall into the house or outwards (Fig. 63). What they achieve in this way is an enveloping mass, conceptual rather than real, which relies on the structural frame that supports it to attain a level of actuality. And, the "excavation" of this conceptual architectonic mass, therefore, has to follow a priori the rationality of its composition. This theme of eroding the mass--either of the whole structure to describe a symbolic surface continuity--of of its planar surfaces to connote a dynamic operational shell condition--has many parallels in recent architecture, and has been approached in a variety of ways. Van Eyck has been practicing it since the late 50's--we already see it in the Amsterdam orphanage--but it became intensified in subsequent projects; for example, the wooden house of G.-J. Visser in Belgium, or the four-towered house in Baambrugge (Fig. 64).

Alvaro Siza y Viera applies the same process almost instinctively as a means of securing a formal coherence to his buildings, which otherwise "are profoundly changed or destroyed" as he himself acknowledges in a text of 1970:

> That's only to be expected. An architectonic proposition whose aim is to go deep . . . a proposition that intends to be more than a passive materialization refuses to reduce that same reality, analyzing each of its aspects, one by one.[15]

The Japanese tradition of formalized space provides another context within which the outlining of the structural envelope links the two-dimensional surface planes with their corresponding volumes. Their starting point is not space; space is their destination. It is a framework that is abstracted and conceptualized in geometric lines so as to contain the total mass of the building.[16]

The Antonakakises' approach crosses these lines, close to a syntactic delineation of the structure of the skeleton of their surfaces, which then receives an elaborate treatment of functional determination. They used their reverse "excavation" method to fulfill functional requirements--for example, a divider, cup-boards, benches or niches--or to guide the formal organization of the facade.

But as we showed in the examples from other architectural practices, this method can surpass the level of the enveloping surface of the building and helps organize the whole structure as a complex container for greater formal variety and creative reflection. This is something which not only the formal but, more importantly, the social imperatives of today's urban architecture categorically demand. This direction had been explored tentatively in their apartment complexes.

The "excavation" of architectonic mass has the result of a familiar ambiguity between interior and exterior space, which is quite different from the kind of spatial continuity cherished in the twenties and thirties. However much a portion may be treated as an exterior space, the building unity stands clearly defined, framed, responding at all times to its own syntactic structure.

As the extreme example of this case, we can consider the "linguistic" experiments of any of "the Five". Within the Antonakakises' work, hybrid development of the method can be identified in the house at Glyfada, Athens, of 1962, a work that possesses in latent form most of their later developments as well as other undeveloped points not yet approached. The Benaki Street apartment block in Athens, of 1978, also manifests such intentions.

To a certain degree, this ambiguity between interior and exterior space invites a parallel formal duplicity, that occurs fairly frequently in the Antonakakises' work: the coherent superimposition of two different structures. In the Glifada house, the exterior enveloping frame, in fact, contains the "buildings" of the private rooms, and communal and transitional areas belong to the connecting space. In the house at Akrotiri Creta, not only the room unit but many other areas, too, are given separate roofs of differing height as a way to distinguish their importance in the whole (Fig. 65). This technique is, in a way, a transferred verion of the additive composition, elevating intercellular space to a "compositional" scale and anticipating the "excavation" process.

The most recent development of their methodological approach is manifested in the residential complex at Spata Attica, where the methodological tool of the zone is assembled to follow the typological morphology of the open courtyard house (Fig. 51). A number of traditional--as well as distinctly modern--elements appear in the new composition. To refer first to the organizational principles, there is the new element of employing one of the zones as the connective tissue. The zone concentrating the transitional functions from one space into the other is unfolded into a path which crosses through, or passes by, the places it serves. The corridor develops into the dynamic feature of the centrifugal scheme of the house, adding its paradox to the ambiguity of the constant anticipation of the next step it provokes.

> Since the corridor finally crosses the whole building, it carries the possibility with appropriate openings to inform and orient the visitor in terms of the close or distant views and this happens while moving from one functional unit to the other.[17]

The time dimension inserted into the design crystallizes into the varying ways in which this passageway curves, straightens out, climbs, pauses, descends, or opens to the outside. This element is intended to carry the significatory connotations of the traditional

spine paths of indigenous settings (Fig. 66). The traditional pathway is an element that contributes greatly to the social cohesiveness of a place. The doors to the house and the main living area are always open, and when time allows, the family sits in the yard, which usually has no door at all. This custom facilitates daily contacts and visits and minimizes seclusion and privacy. The walkway, besides its function as the main traffic artery of the settlement, thus becomes, at certain times of the day, an extension of the house. At other times, it becomes the area for commercial exchanges or the center of social activities. Thus, the "spine-street" unites the settlement instead of dividing it and becomes a space that facilitates contacts among its inhabitants. To accommodate all these changing uses that pertain either to the public or to the private domains, the zone of the street loses its definite scheme of a longitudinal zone of standard width, slips into the neighbouring domains, opens or closes to short or distant views; in short, the traditional pathway becomes a polyvalent and multifunctional space gravitating the center of attention of the whole settlement towards its axis.

The feature of an analogous pathway elevated from an intercellular to a compositional element in the organization of the life pattern of the house constitutes a critical nod toward a regional identity in the architecture of the Antonakakises. Introducing "moving time" as one of the decisive factors for "getting to know the general layout of the building", the pathway pattern borrows the Corbusian idea of the "promènade architecturelle". The pathway pattern, however, brings the promènade architecturelle closer to Team 10's practice, which seeks an architecture that grows out of movement and meeting--a search that led to the development of the elements of "stem" and "infrastructure" or to the earlier-quoted concepts of Chermayeff's and Alexander's of an architecture of hierarchy, separation and mixing, target points and exchange knots.

With the pathway, the role which was earlier entrusted to the power of a unitary geometry and its capacity to guide experience by means of a clear superior order, intensified by repetition, is partly returned to the control of the human realm. As in the work of Pikionis, the force of Antonakakis's regionalist argument comes from injecting the modulated and comprehensive reality of modern structural order with the spirits and feelings, memories and associations of traditional, indigenous life patterns.

An equally significant and persistent theme in the Antonakakises' work is the textural treatment of their architectonic surfaces. Following the essentially planar unfolding of the pathway patterns, horizontality turns out to be the most distinctive feature of the Antonakakises' organosis. Volume is sliced with utmost consistency into layers of space, sandwiched between the floor and the ceiling, and nothing is allowed to destroy the sense of horizontality imbued into the whole of their space. Even the cylindrical ceilings of their large "communal" living rooms are made as if the flat slab had been curved in order to add some of the desired additional height (Fig. 67).

Toward this end, the materials of the horizontal planar surfaces--ceilings and the floors--are either identical textures--for example, exposed concrete--or complementary--i.e., slate slabs.

Columns are always depicted as massive supporting elements, "introduced" into the longitudinal unit of the space (Fig. 68). Even successive storeys of one building are slipped slightly apart or detached by means of skylights or a skotia (groove), to appear as separate layers of horizontal space (Fig. 24).

As much as it concerns the continuity of the surfaces from inside to outside or the reverse, this may create an aggressiveness (or, otherwise viewed, a natural "primitiveness") in the interior spaces and upset their atmosphere, but it is undoubtedly a direction toward which the integration of the different natures of inside and outside is most likely to happen.

The general importance of the Antonakakises' work in architectural theory and practice is basically due to their consistent commitment to a socially-oriented articulation of space, form, function, and meaning. The designs of the Antonakakises are deeply rooted in the developments of modern Greek architecture. Continuing--on a higher level--the paradigm of the work of the two other major Greek regionalist figures, the architects Pikionis and Konstantinides, the Antonakakises reflect in their architecture the dialectics of Greek culture and the Greek stage of development in full, participating in "the subtle procedures of the synthetic contradictions" of Greek civilization.

The fact that the Antonakakises' work is basically concentrated on residential architecture manifests their primary concern with the humane aspects of architecture. In designing almost one hundred residences, they were able to set a coherent research program to study the issue of urban habitat anew. In working it out at length, they have achieved a competence of spatial, formal, and functional articulation which allows them to orchestrate the smallest detail to impart meaning to their notions of both regionalism and architecture.

Although most of the Antonakakises' buildings are of low or medium cost, the results are striking for their quality of design and the life-style patterns they provide. Their single family and vacation houses suggest a model of domestic life intricately related with nature and outdoor patterns of living. It is the bringing together of the inside and the outside and the fusion of one state into the other which makes their houses acquire a character different from the one found in the constrained and impersonal urban contemporary buildings. The introduction of the outdoors realm into the communal areas of the house by means of space and light manipulation is a distinct characteristic of the Antonakakises' urban residences too (mainly apartment block complexes). The inside-outside analogy is there coupled with the other two basic socio-spatial

dimensions: the "open-closed" and "private-public" that dominate their theoretical thinking. All the components that structure their threefold relational categories reflect the concrete lived-in spaces of the traditional architecture and create a sense of polyvalent space that brings architecture back to gain meaning from the native collective history and consciousness of Greek land.

The basic compositional principles of their work, the grid (and its transformation, the zoning scheme), and the pathway give their enterprise a methodological coherence and a background for a continuous development. As Dimitris Fatouros says in Contemporary Architects' presentation of the Antonakakises:

> As a result of the consistent use of . . . organizing principles, the architecture of the Antonakakises' presents these characteristics: each work has consistency and is coherent; their different works are coherent with each other (though this does not mean resemblance) and their architecture is economical both in conception and realization.
>
> . . . the Antonakakises do make a continuous effort to define and clarify the ways in which their architectural work is composed; they are scrupulous and persistent in elaborating the problems of socio-spatial organization. This is true of any creative/intellectual work: the gradual clarification of organizing principles also characterizes the evolution of the work of creative architects.[18]

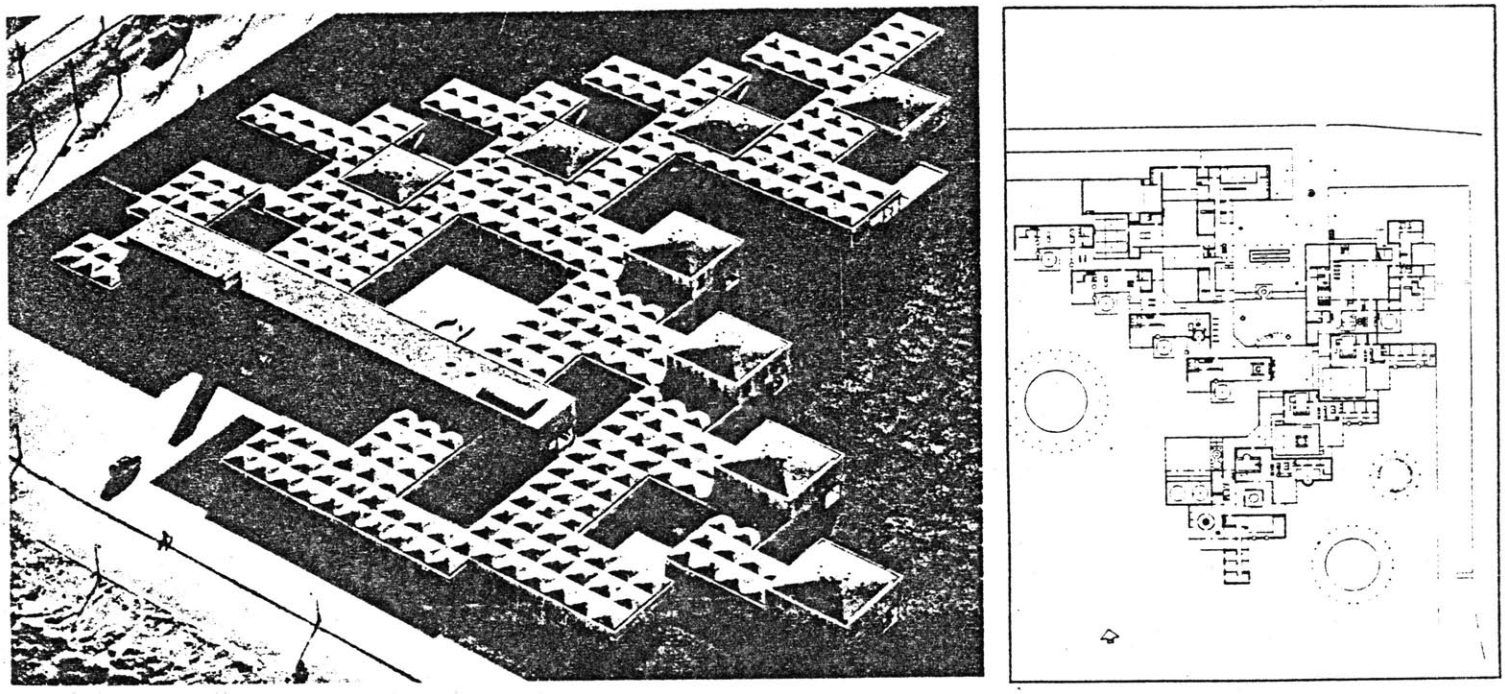


Fig.53 Orphanage, Amsterdam, Holland. Aldo van Eyck, Architect, 1957-1960

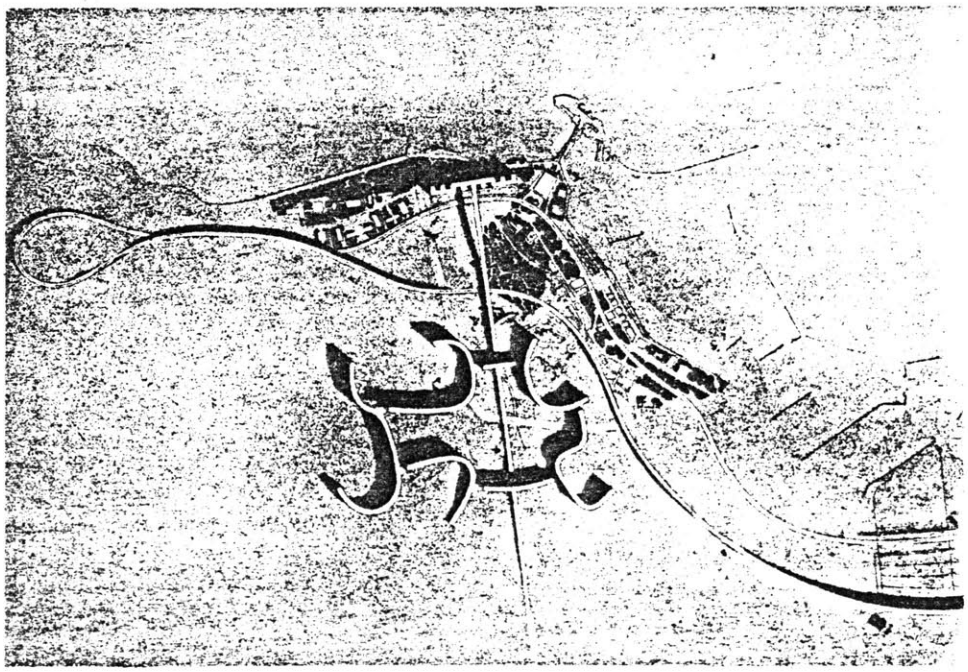
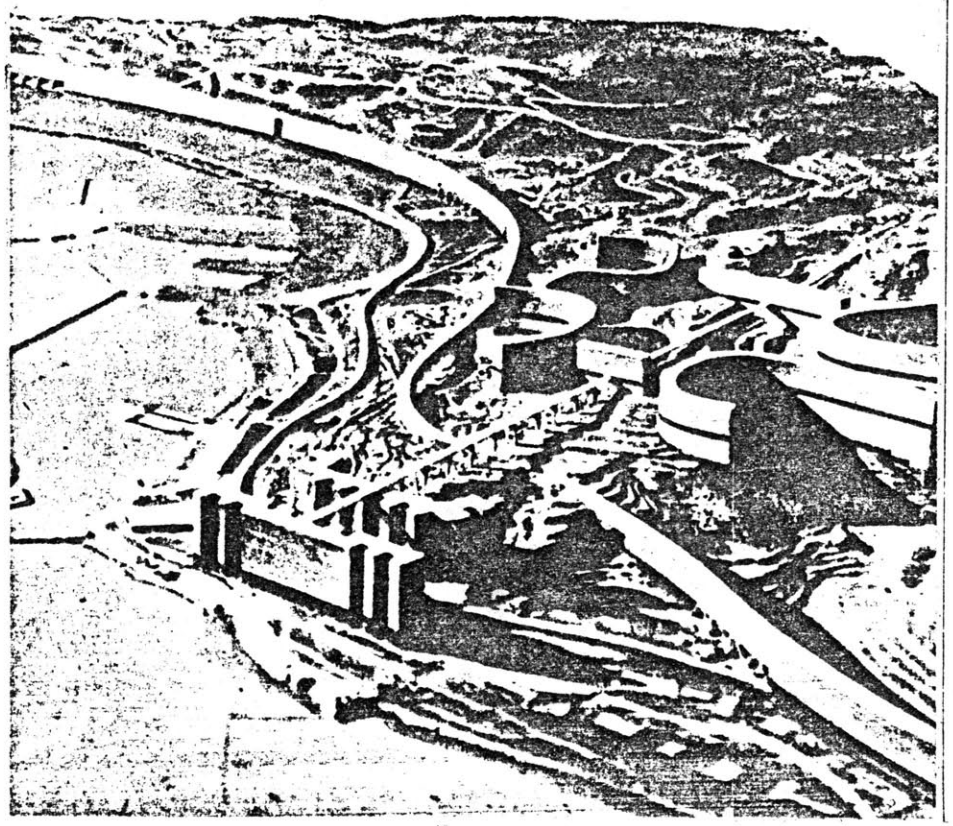
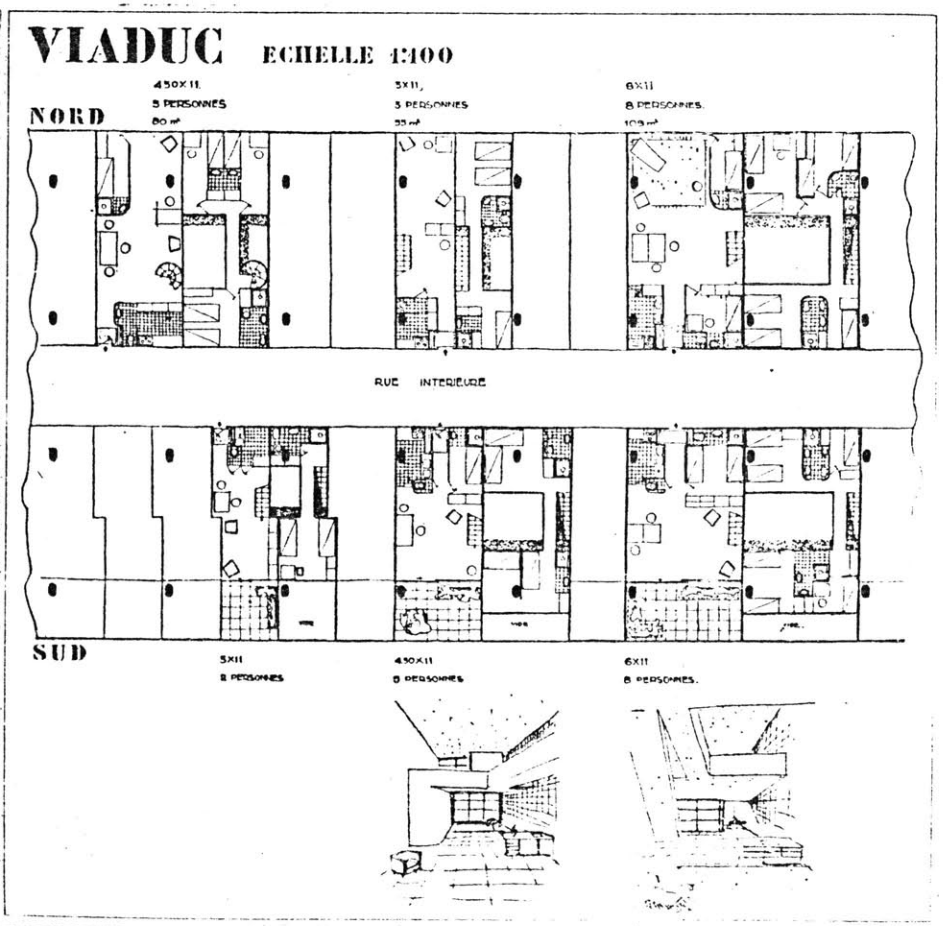


Fig.54 Section of Obus A of the Algiers proposal. Le Corbusier 1931-32





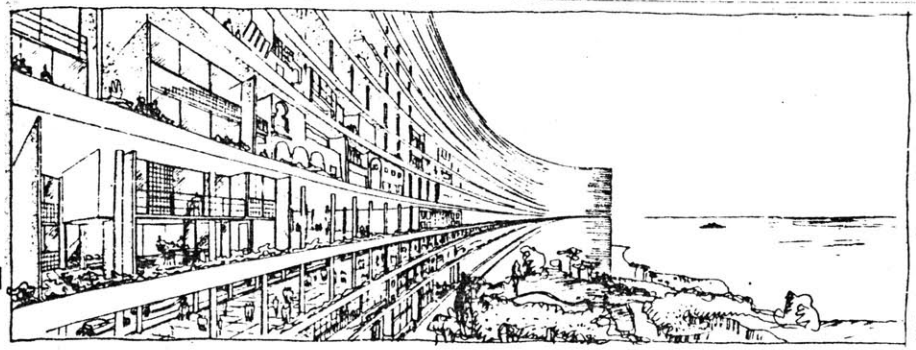


Fig.55 The Algiers proposal
Le Corbusier 1931-32

View of one of the viadacts

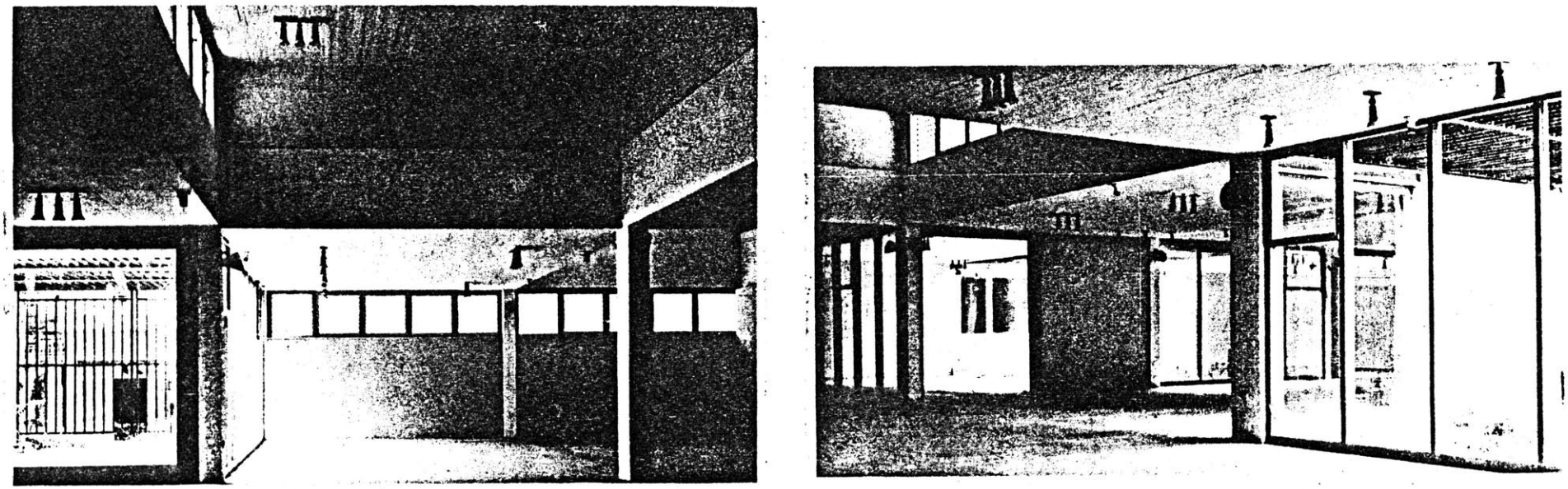
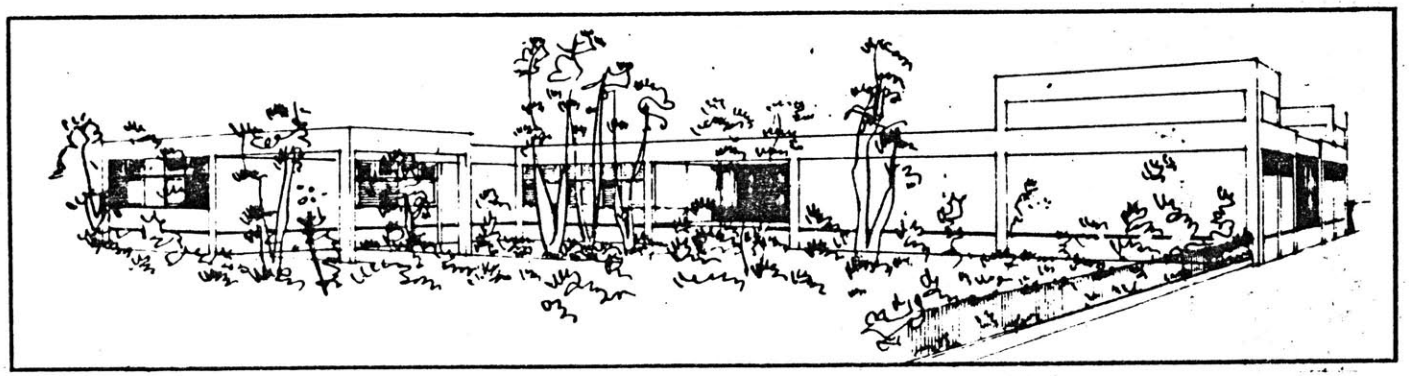


Fig.56 The Komotini Museum. Aris Konstantinides Architect. Views of the interiors and the outer form



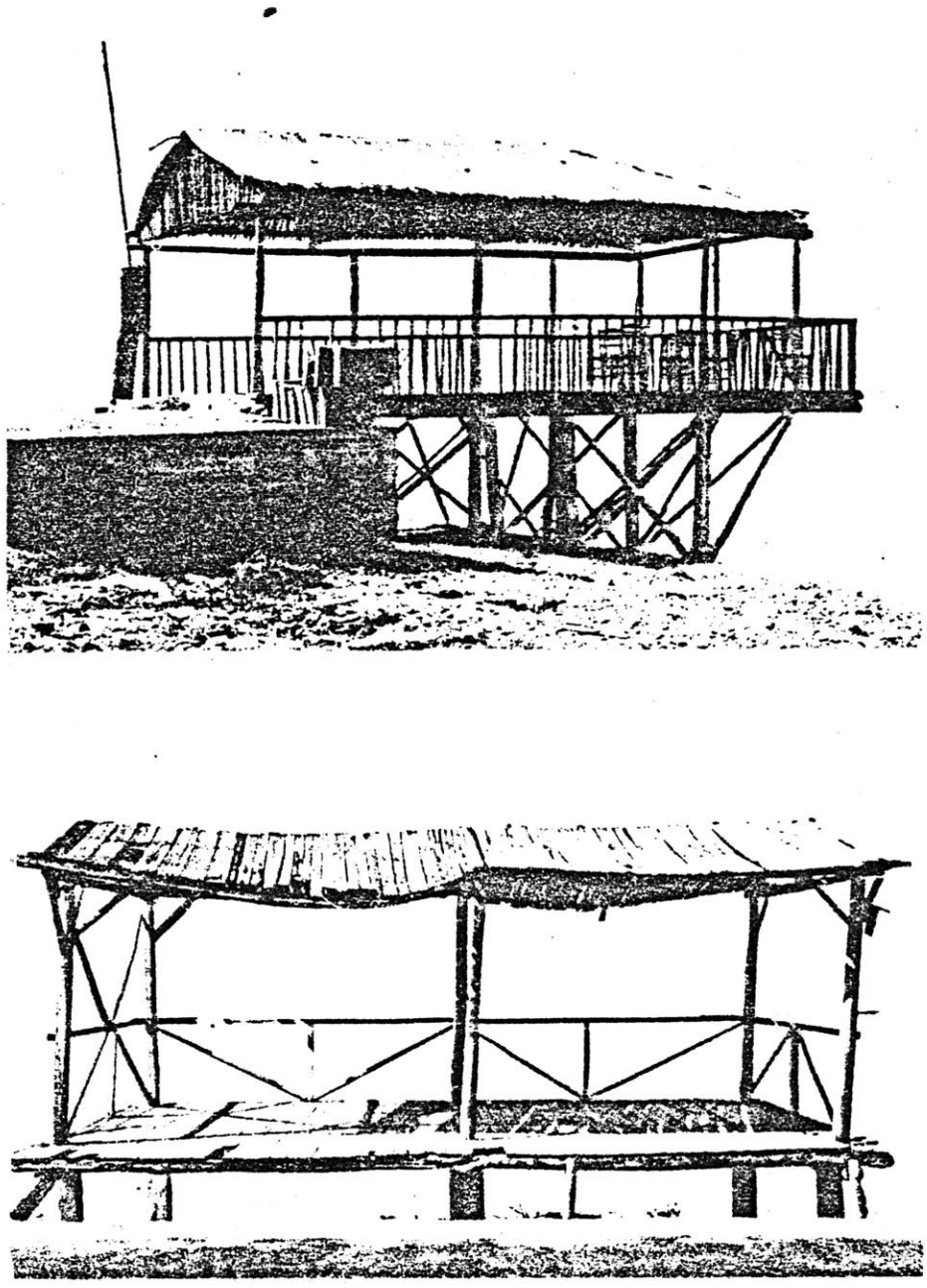


Fig.57 Shade canopies, photographed by Aris Konstantinides

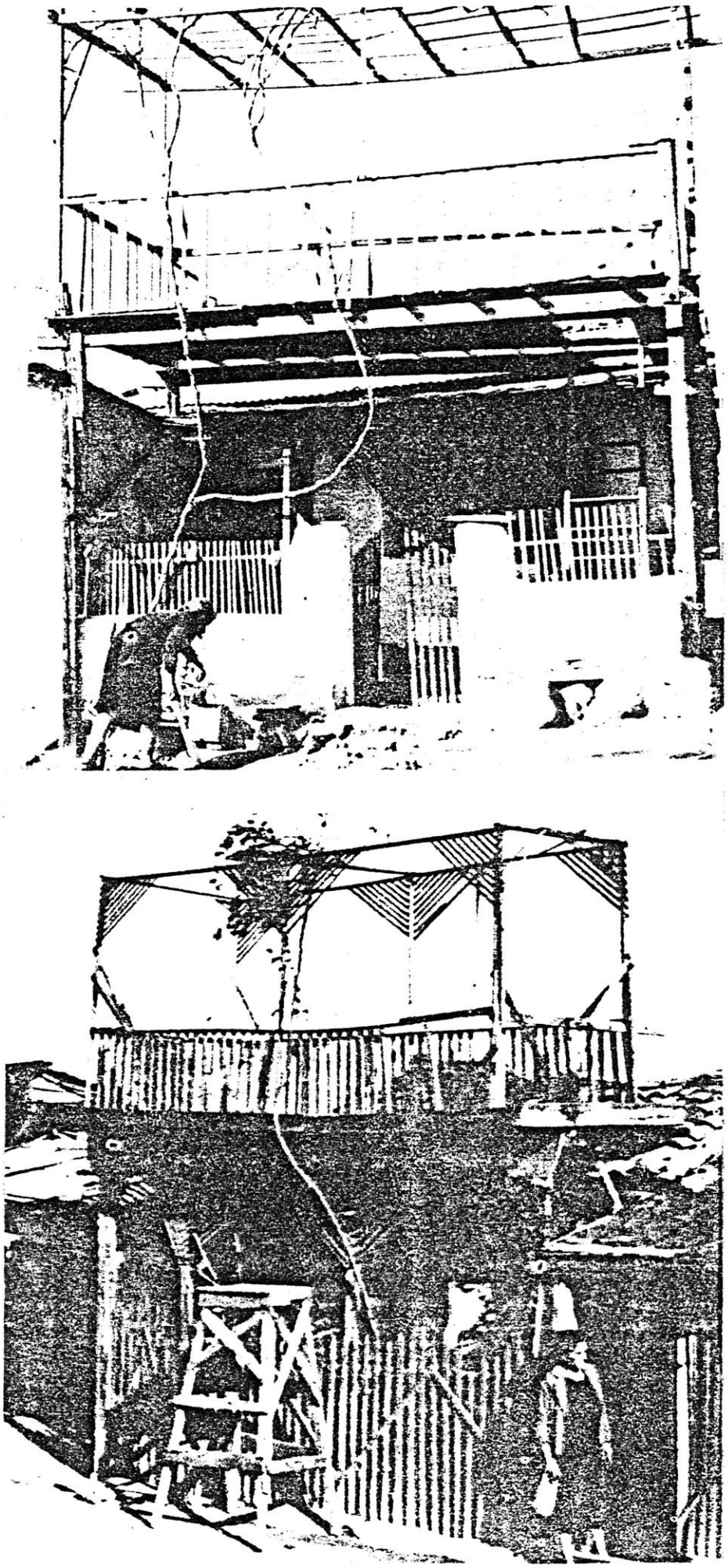


Fig.58 Amateur constructions in the Illissos settlement Athens, 1965

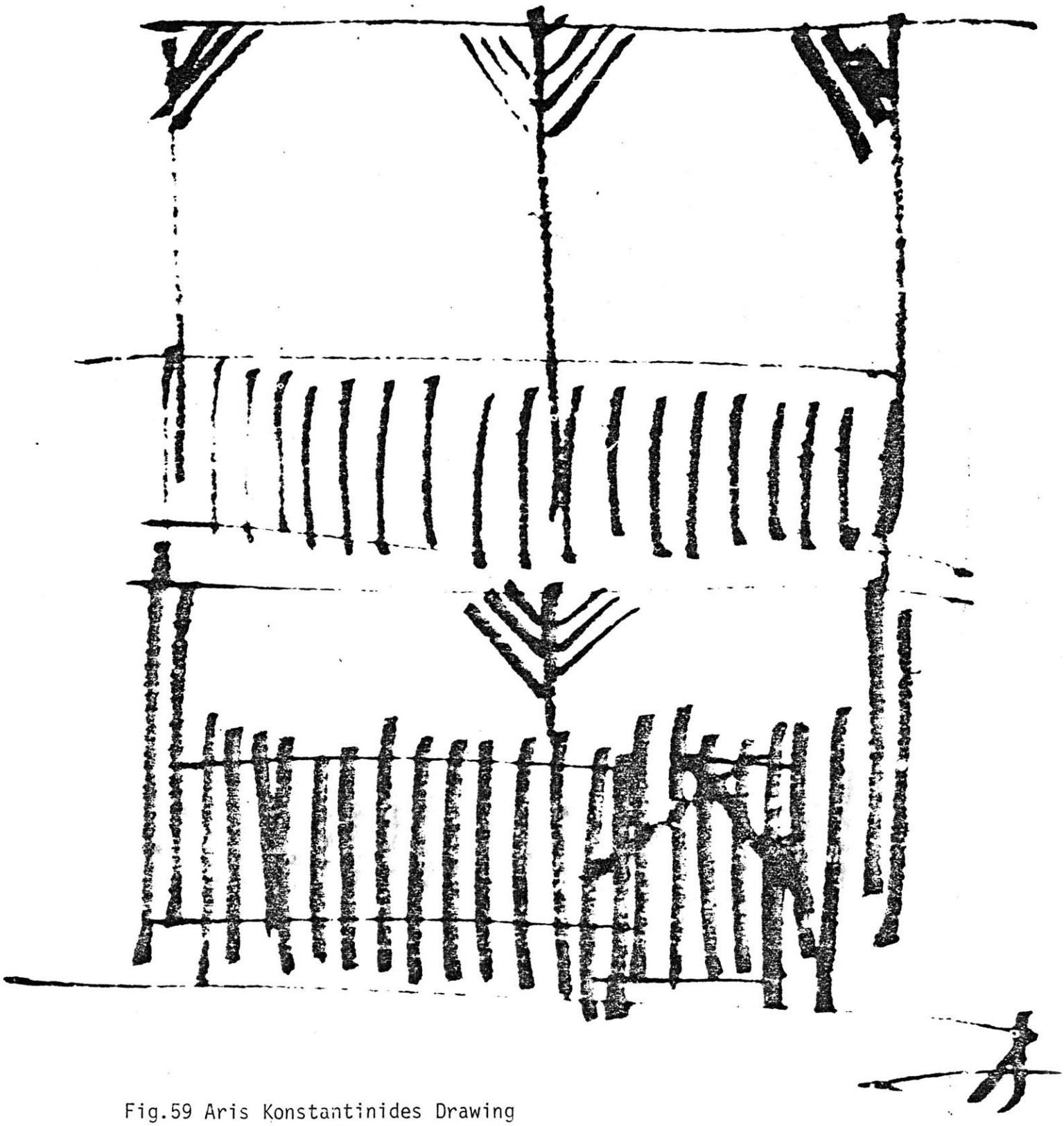


Fig.59 Aris Konstantinides Drawing

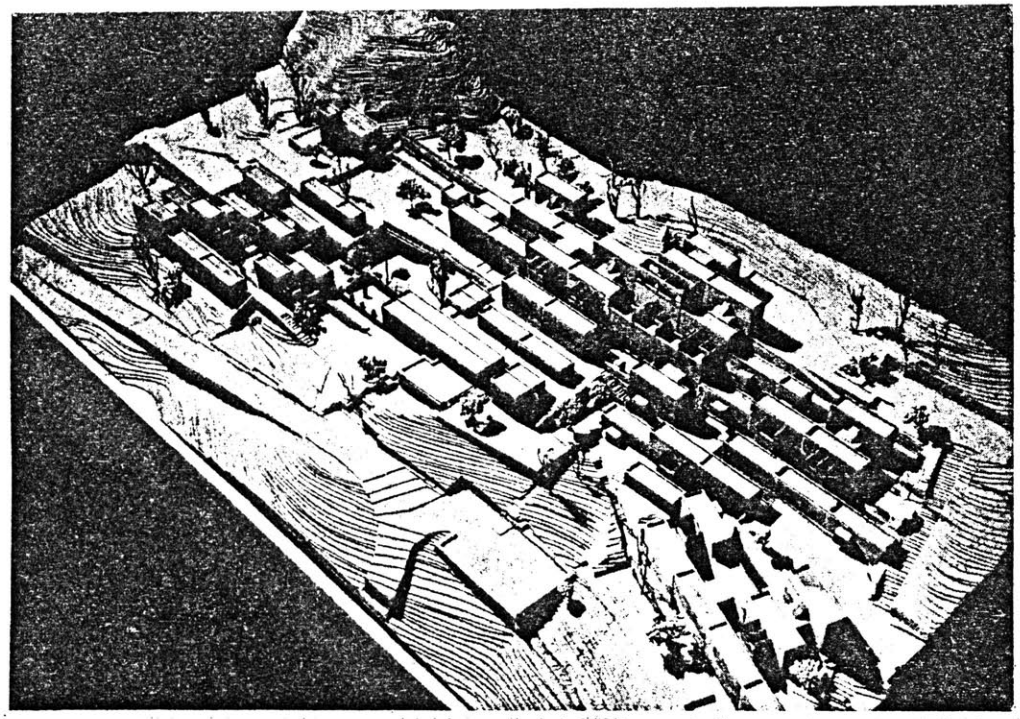


Fig. 60-a Mineworkers Settlement at Distomo. Model

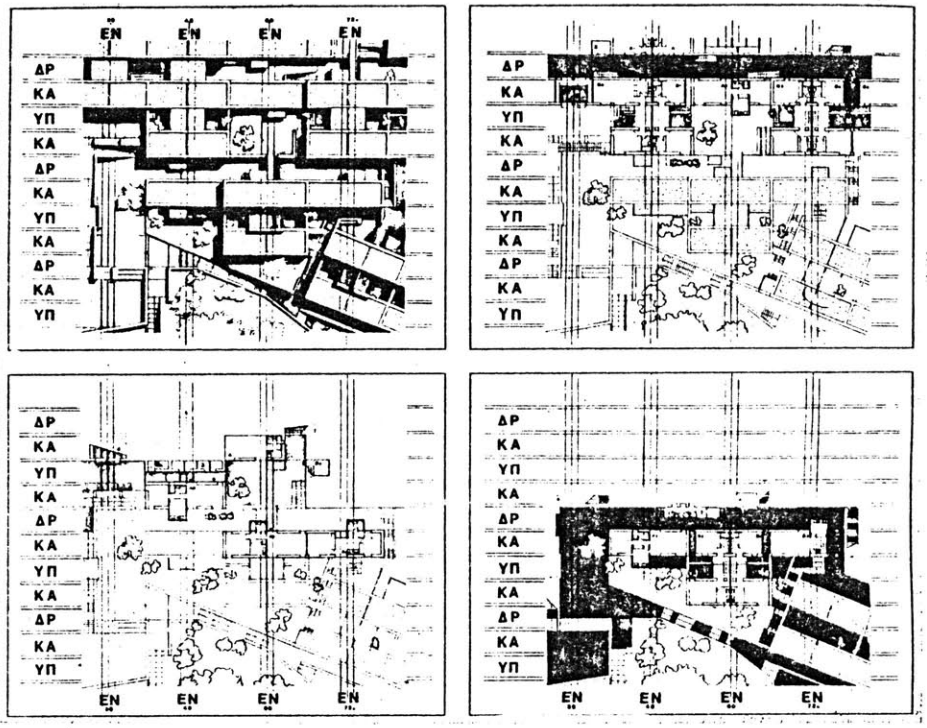


Fig. 60-b Dwelling types on four levels

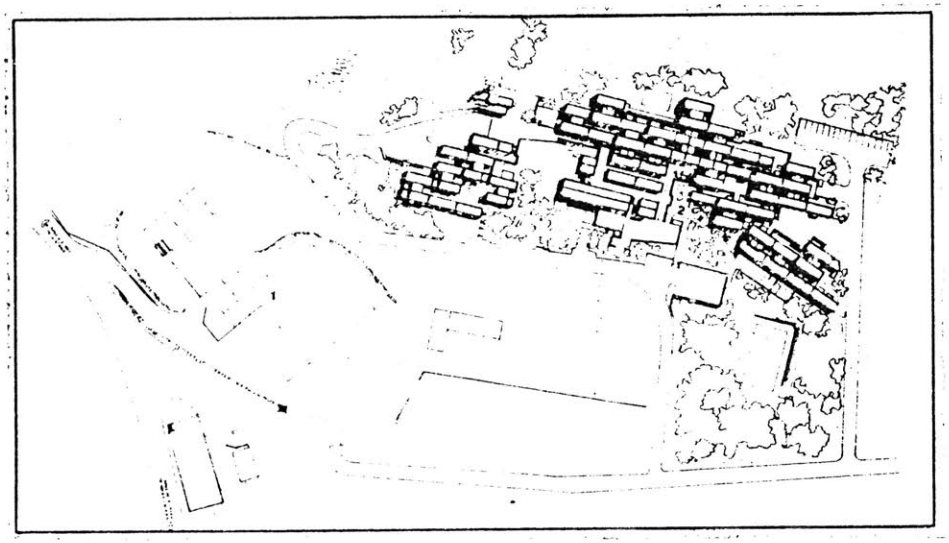
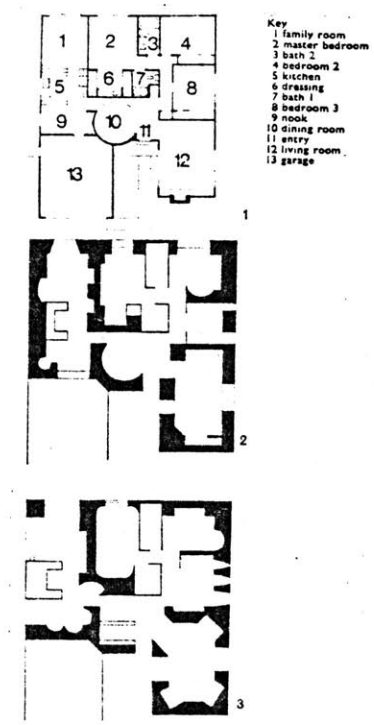


Fig. 60-c Mineworkers Settlement at Distomo
General Layout



1. *Plan of a conventional California tract house*
2, 3. *Plans showing what two similar houses, modified to have thick walls, might be like after three or four years of occupancy. Each has its own characteristic pattern of niches, bay windows, breakfast nooks, seats built into the walls, shelves, closets, lighting arrangements, sunken parts of the floor, raised parts of the ceiling*

Fig.62 Christopher Alexander
Thick Wall Pattern

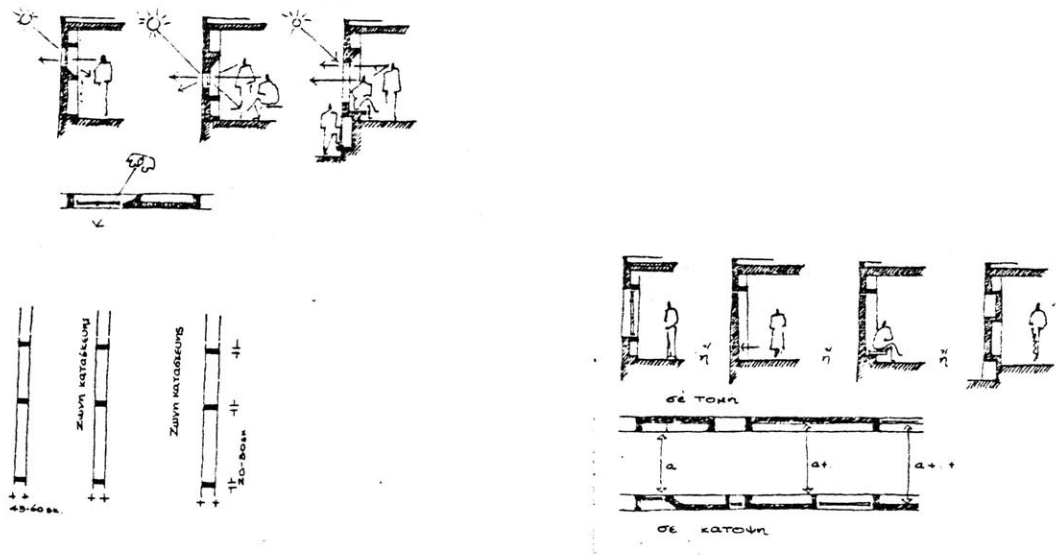
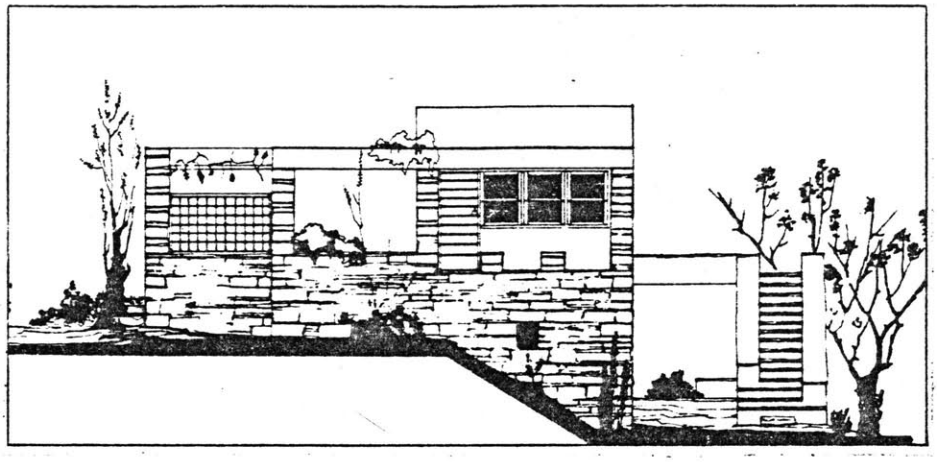
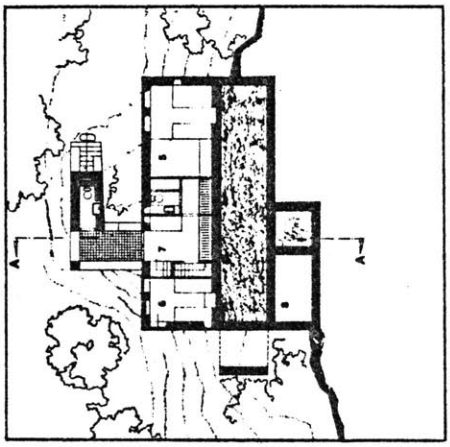
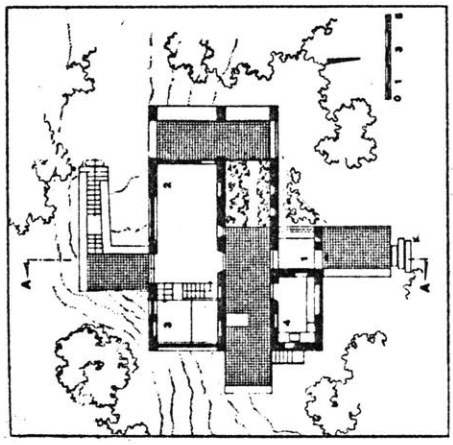


Fig.63 Dimitris and Suzana Antonakakis: Zones of construction







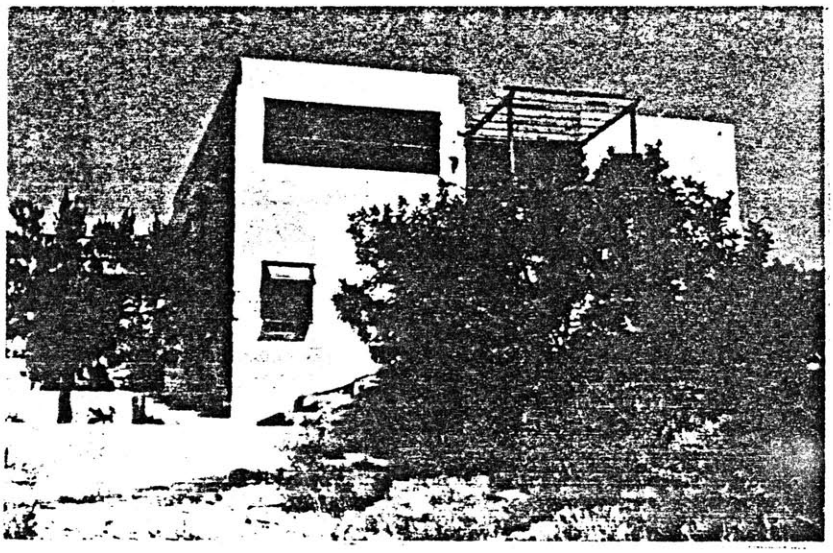
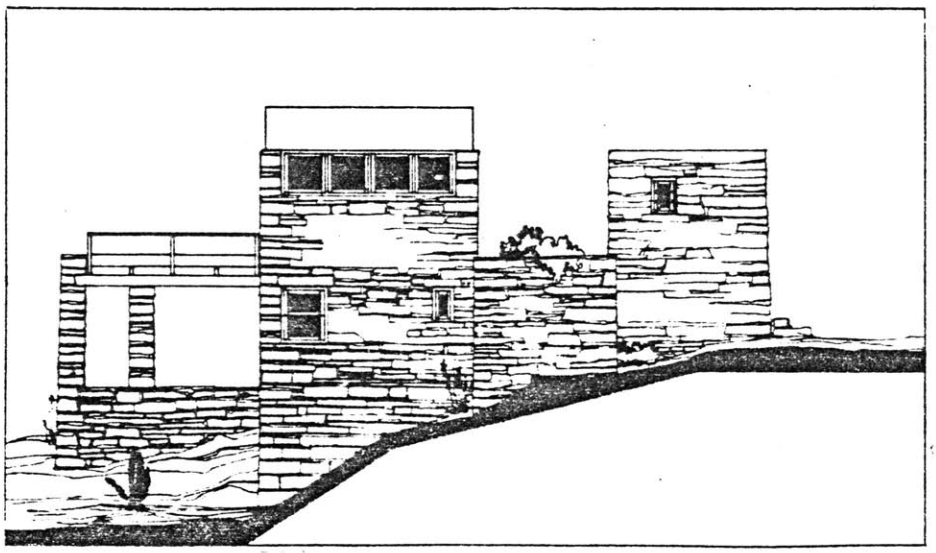


Fig.61 Summer house at Porto-Cheli
Dimitris and Suzana Antonakakis, 1967



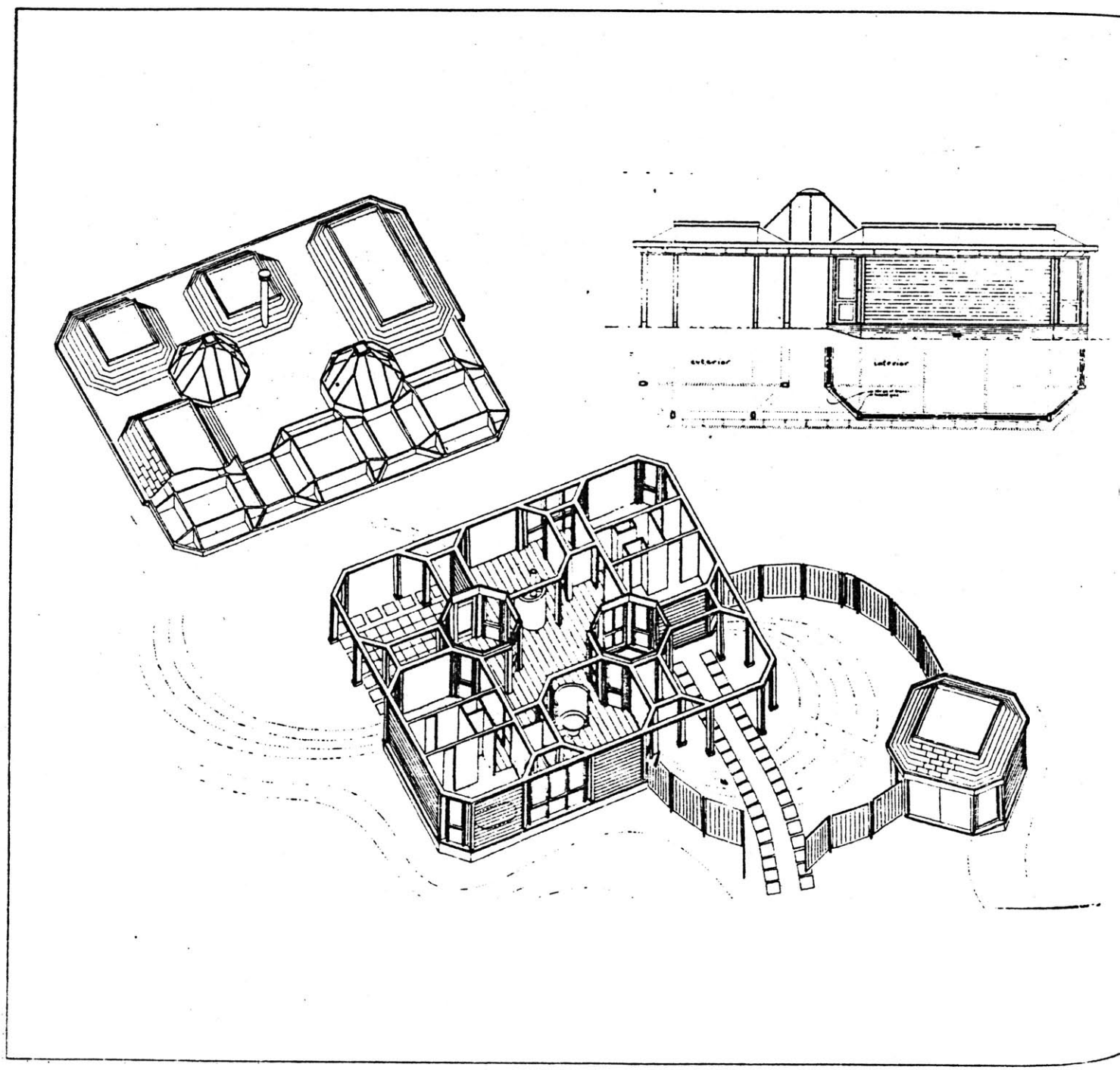


Fig.64 G.J.Visser House, Retie, Belgium. Aldo van Eyck, Architect, 1974-75

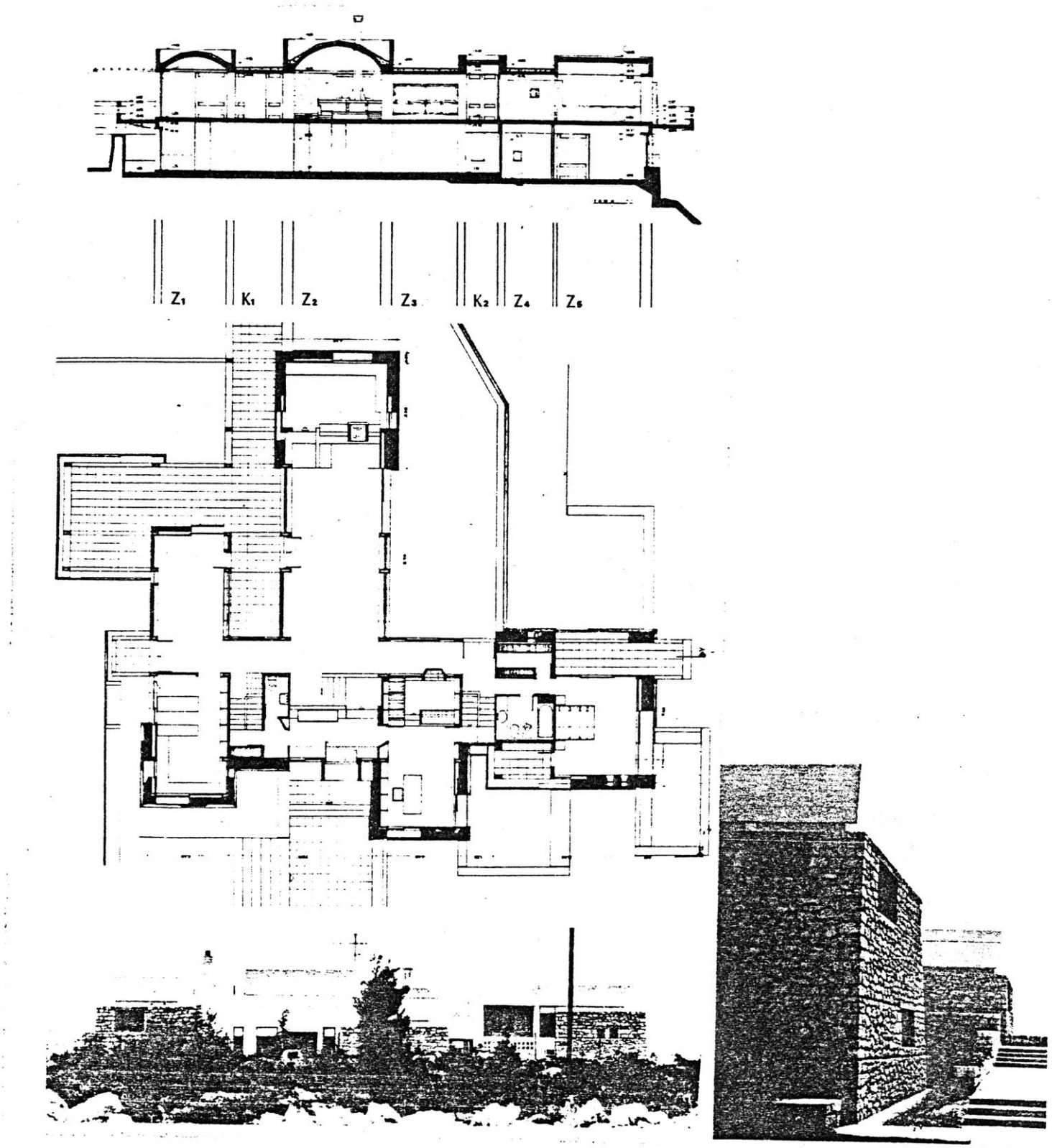


Fig.65 House at Acrotiri, Crete. Dimitris and Suzana Antonakakis, Architects 1974

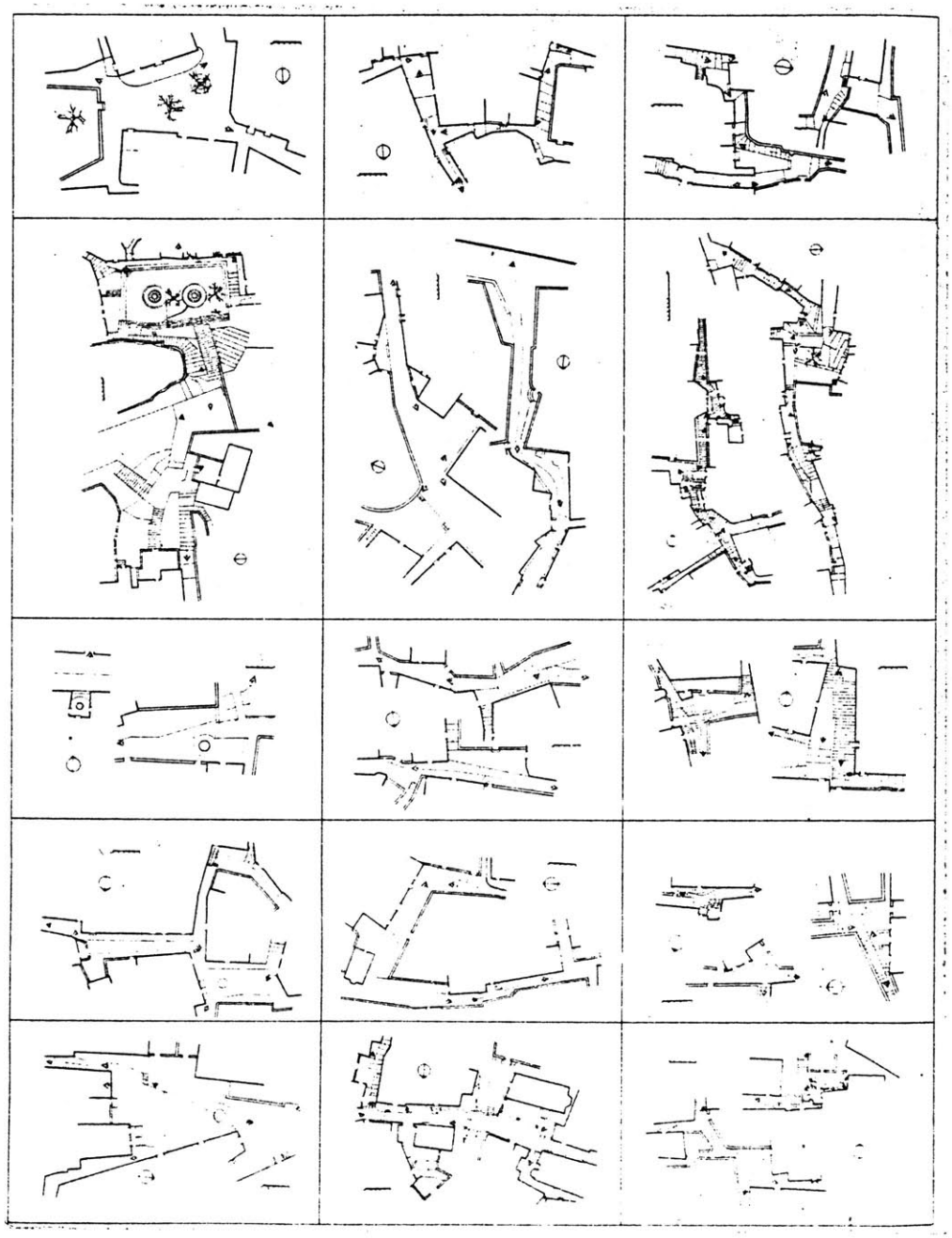


Fig.66 Traditional path-lanes. Measured Drawings by Dimitris Antonakakis form the island of Hydra.

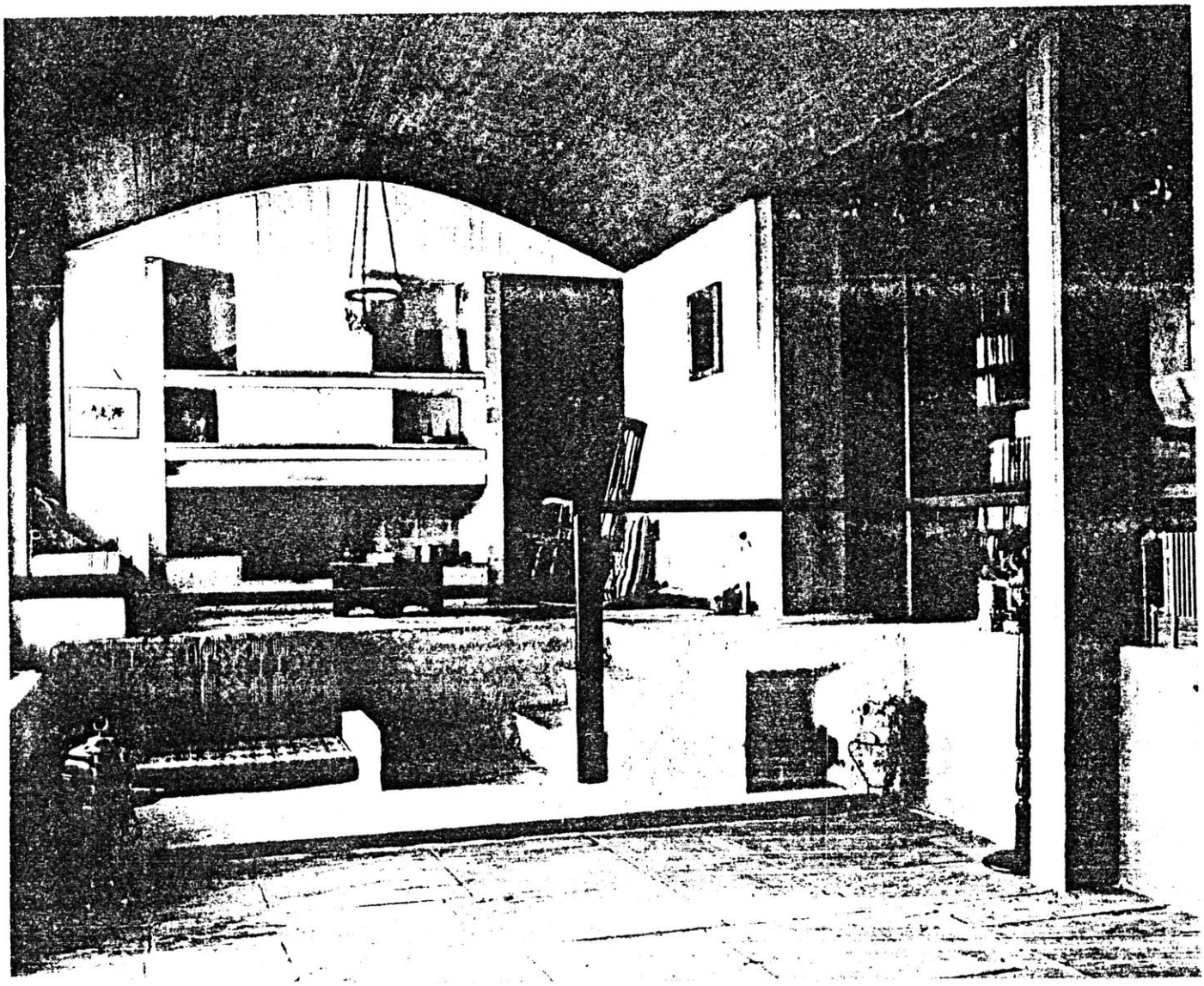


Fig.67 House at Penteli, Athens. Dimitris and Suzana Antonakakis, Architects 1975
View of the interior of the living room; the curved ceiling

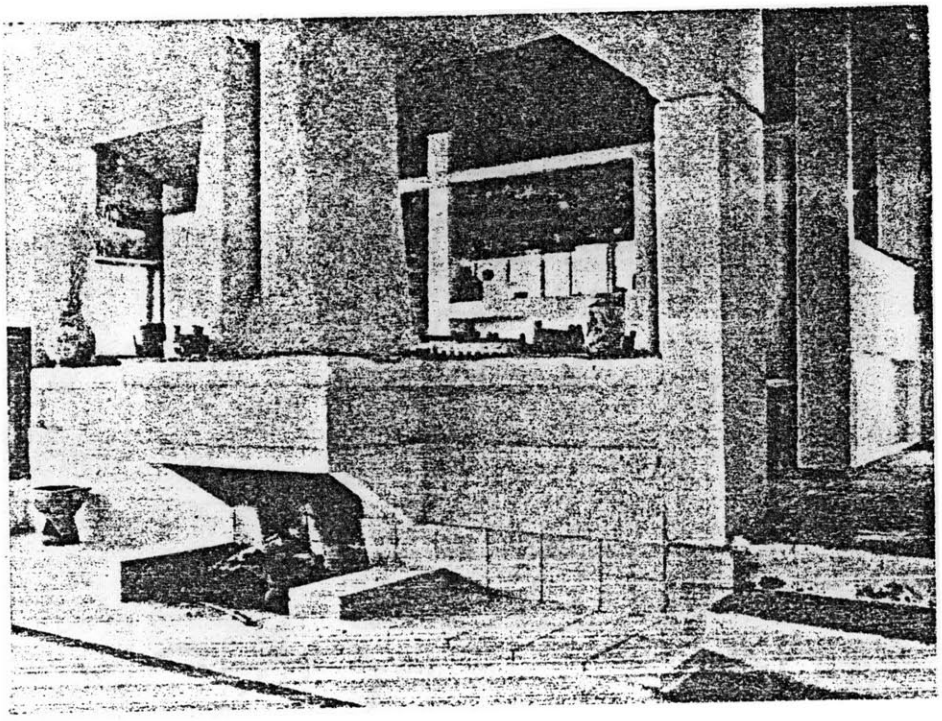


Fig.68 Spata residence. Dimitris and Suzana Antonakakis, Architects 1975
Treatment of the column.

NOTES

5.0 NOTES

Architects

DSA Dimitris and Suzana Antonakakis

Architectural Periodicals

AG Architecture in Greece

DG Design and Art in Greece

INTRODUCTION - NOTES

[1]Kenneth Frampton, "Prospects for a Critical Regionalism," Perspecta, The Yale Architectural Journal, Vol. 20, 1983, p. 149.

[2]Sved Riemer, "Theoretical Aspects of Regionalism," Social Forces, Vol. 21, No. 3, March 1943, p. 276.

[3]"Planning for the City, State, Region, and Nation," Proceedings of the Joint Conference on Planning, 1936, p. 108.

[4]Donald Davidson, "Regionalism as Social Science," Southern Review, Vol. III, 1937-39, p. 209.

[5]Louis Wirth, "The Prospects of Regional Research in Relation to Social Planning," Publications of American Sociological Society, 29-1935, pp. 107-109.

[6]V. B. Stanbery, as quoted in the inner cover page of H. W. Odum, H. E. Moore, American Regionalism: A Cultural Approach to National Integration, New York, 1938.

[7]Lewis Mumford, The Culture of Cities. New York: Harcourt Brace, 1938, p. 314.

[8]H. W. Odum and H. E. Moore, American Regionalism, op. cit., pp. 452, 455, 457.

[9]George Simpson, "Regionalism," Social Forces, Vol. 20, December 1941, p. 186.

PART I

1.0 REGIONALISM AND ARCHITECTURE - NOTES

1.1 The Early Stages

[1]Manfredo Tafuri, Architecture and Utopia. Cambridge, MA: MIT Press, 1976, p. 5,

[2]Patrick Geddes, "Cities in Evolution." In Patrick Geddes: Spokesman for Man and the Environment; A Selection Edited and with an Introduction by Marshall Stalley, New Brunswick, N.J., 1972, Chapter X: German Organization and Its Lessons, p. 207.

[3]Ibid., Chapter VI: The Homes of the People, p. 182.

[4]See Louis Henry Sullivan, Kindergarden Chats, revised edition of 1918, Claud Braddon, editor. Lawrence, Kansas, 1934, Chapter "On the Historic Styles," p. 170.

[5]Patrick Geddes, "Cities in Evolution," op. cit., p. 205.

[6]Patrick Geddes, "Talks from the Outlook Tower," in Patrick Geddes: Spokesman . . . , op. cit., Chapter on "The Fourth Talk: The Valley in the Town," p. 334.

[7]Patrick Geddes, "Cities in Evolution," op. cit., Chapter on "Summary and Conclusion," p. 281.

[8]Ibid., Chapter XVII, "The Spirit of the Cities," p. 269.

[9]Ibid., Chapter I, "The Evolution of the Cities," p. 119.

[10]Lewis Mumford, "The Regionalism of Richardson," The South in Architecture, New York, 1941, p. 98.

[11]Harwell Hamilton Harris, "Regionalism." In Harwell Hamilton Harris, a collection of his writings and buildings, Student Publication of the School of Design, North Carolina State of the University of North Carolina at Raleigh, Vol. 14, No. 5, 1965, p. 28; see extracts of this address, also, in Kenneth Frampton's "Prospects of a Critical Regionalism," Perspecta, Vol. 20, 1983, The MIT Press, pp. 153, 155.

[12]Aldo Rossi, A Scientific Autobiography, The Opposition Books. Cambridge, MA: MIT Press, 1981, p. 78.

[13]Robert Adams, Works in Architecture. London, Preface, 1778.

[14]Lazlo Moholy-Nagy, The New Vision, 1928. Fourth revised edition, New York: G. Wittenborn, 1947.

[15]John Buonarroti Papworth, Rural Residences. London, 1818, p. 45.

[16]J. Loudon, "The Principles of Criticism of Architecture." In Encyclopaedia of Cottage, Farm and Villa Architecture. London, 1833, p. 1120.

[17]Harwell Hamilton Harris, "Nationalism." In Harwell Hamilton Harris, a Collection . . . , op. cit., p. 30.

[18]Demetri Porphyrios, "Scandinavian Doricism." In Architectural Design's Profile 41, "Classicism is not a Style," Architectural Design 52, 5/6 1982, p. 23.

[19]For an overall coverage of these movements, see:

- William J. R. Curtis, Modern Architecture since 1900. Englewood Cliffs, N.J., 1982, Part I: The Formative Strands of Modern Architecture: "The Search for New Forms and the Problem of Ornament"; "Arts and Crafts Ideals in England and the USA."

- Lewis Mumford, Roots of Contemporary American Architecture, New York, 1952, esp., "A Backwards Glance" and Ch. II: "Roots in the Region," pp. 1-27, 83-141.

- San Francisco Museum of Art, Domestic Architecture of the San Francisco Bay Region. San Francisco, CA., 1949.

1.2 Towards a New Architecture: The Retreat of Regionalism

[1]Reyner Banham, "Progressive Building in Paris," Theory and Design of the First Machine Age. Cambridge, MA: The MIT Press, 1982, pp. 214, 216.

[2]This small but influential group (not to be confused with the Regional Plan Association of New York) included Lewis Mumford (b. 1895), the social critic; Benton MacKaye (1879-1975), the originator of the Appalachian Trail; Clarence S. Stein (1882-1975), the chief architect of Radburn, New Jersey, and Sunnyside Garden, New York, and his co-planner, Henry Wright (1878-1936); Catherine Bauer (1905-1964) and Edith Elmer Wood (1871-1948), two crusading housing experts; Stuart Case (b. 1898), the economist; Charles Harris Whitaker (1872-1938), the editor of the JAIA and others.

[3]Michael Hughes (ed.), The Letters of Lewis Mumford and Frederic J. Osborn: A Transatlantic Dialogue. New York: Praeger, 1972, p. viii.

[4]Roy Lubove, "Edith Elmer Wood." In Notable American Women, 1607-1950, Ed. Ed. T. James, Vol. 3. Cambridge, MA: Harvard University Press, 1971, p. 644.

[5]For a comprehensive review of the RPAA's historical profile and contribution to the regional idea, see: Carl Sussman (ed.), Planning the Fourth Migration: The Neglected Vision of the RPAA. Cambridge, MA: The MIT Press, 1976.

[6]Le Corbusier, "In Defense of Architecture." Translated by: George Baird, Nancy Bray, Andre Lessard, Alan Levitt, Oppositions 4, October 1974, pp. 93-106.

[7]See Victor Griffuelhes, L'action Syndicaliste. Paris, 1908.

[8]See a summary report on Syndicalism in Mary McLeod's "Le Corbusier and Algiers," Oppositions 19/20, Winter/Spring 1980, pp. 56-57; also, Peter M. Stearns, Revolutionary Syndicalism and French Labor: A Cause without Rebels. New Brunswick, N.J.: Rutgers University Press, 1971, p. 9; also, F. F. Ridley, Revolutionary Syndicalism in France. Cambridge, England: University Press, 1970, p. 1; and, also, about the involvement with world peace, note Le Corbusier's article on "Truth from Diagrams," Prelude no. 6, June/July 1933, reprinted in The Radiant City. New York: Orion Press, 1967, pp. 192-195.

[9]Mary McLeod mentions that there exists considerable conflict among published texts about the dating and the exact number of the Algiers projects. Le Corbusier himself refers to seven plans: see Poesie sur Alger. Paris: Felaige, 1950. However, only six appear in the Oeuvre Complete or are discussed in the Algerian Press. See Edmund Brua, "Urbanisme a coups de canon, depuis 9 ans, Le Corbusier a tire sur Alger 6 plans-obus, sans resultat." Algiers: TAM, no. 7, September 19, 1942, p. 1.

There are three different schemes for Opus D, the Cartesian "Y-shaped" skyscraper solution which was developed in conjunction with the Commite du Plan Regional. Likewise, two variations of Obus E were developed. In the first scheme, the bris-soleil pattern is symmetrical; in the second, it is based on a division established by the golden section. The following is a chronology of the intermediate projects:

Obus B

Spring 1932: Publication of Guido Fiorini's system applied to Algiers in Savigliano, no. 1-2. Fall 1932: Beginning of second study. December 1933: Drawings submitted to City of Algiers; letter to Brunel.

Obus C

Winter 1933: Published in Architecture Vivante, L'Architecture d'Aujourd'hui. February 1934: Financial survey, J. P. Faure and Lafon. March 20, 1934: Project submitted to Brunel and City Council.

Obus D

February 4, 1938: Official nomination to Comite du Plan Regional. April 7-9, 1938: First participation with Plan Regional (Algiers) and collaboration with Renaud. January 1939: Completion of plans.

Obus E

January 1939: Beginning of the skyscraper studies. June 10, 1939: Plans submitted to the Comite de la Region.

[10]See Antony Vidler, "Taylorizing Architecture," comments on M. McLeod's "Le Corbusier and Algiers," Oppositions 19/20, 1980, p. 53.

[11]Robert Fishman, "Le Corbusier, Vishy." In Urban Utopias of the 20th Century. Cambridge, MA: The MIT Press, 1982, p. 248.

[12]Ibid.

1.3 Critical Regionalism

[1]Manfredo Tafuri , Architecture and Utopia: Design and Capitalist Development. Chapter 6: "The Crisis of Utopia: Le Corbusier at Algiers." Cambridge, MA: MIT Press, 1976, p. 125.

[2]Sigfried Giedion, "The Regional Approach," Architectural Record, January 1954, p. 135.

[3]Ibid.

[4]Ibid.

[5]Kenneth Frampton, Modern Architecture: A Critical History. England: Oxford University Press, 1980, p. 269.

[6]Also Van Eyck, "Otterloo Meeting," in TEAM 10 Primer, p. 2.

[7]Oriol Bohigas, "Aldo Van Eyck, or a new Amsterdam School," Opposition 9, Summer 1977, p. 24.

[8]Aldo Van Eyck, op. cit., p. 2.

[9]See Patrick Geddes, "Civics: As applied Sociology II." In Helen E. Meller (ed.), The Ideal City. England: Leicester University Press, 1929, p. 170.

[10]See Howard W. Odum, "Notes on the Technic Ways in Contemporary Society," The American Sociological Review, Vol. 2, June 1937, No. 3, pp. 336-346.

[11]Paul Ricoeur, "Universal Civilization and National Cultures," History and Truth. Evanston, ILL: Northwestern University Press, 1961, pp. 276, 283.

[12]B. Bakema, "Carre Bleu." In TEAM 10 Primer, op. cit., 1961, p. 6.

[13]Ibid.

[14]Aris Konstantinides, "Life Vessels," AG 3, 1969.

[15]Van Eyck, TEAM 10 Primer, op. cit., 1959.

[16]Patrick Geddes, "Cities in Evolution." In Patrick Geddes: Spokesman for Man and the Environment; A Selection Edited and with an Introduction by Marshall Stalley, New Brunswick, N.J., 1972, Chapter on "Summary and Conclusions," p. 281.

[17]Vincent Scully, Jr., The Travel Sketches of Louis I. Kahn. Philadelphia, PA: Pennsylvania Academy of Fine Arts, 1978, pp. 117-118.

PART II

1.0 REGIONALISM AND GREEK ARCHITECTURE--NOTES

[1]For a brief review of contemporary Greek History as well as a complete bibliographical index, see: Nikos G. Svoronos, Review of Contemporary Greek History. Translated by Aikaterini Asdraha from the French prototype: Histoire de la Grece Moderne. Paris: Press Universitaires des France, 1972, especially Chapter IV, pp. 89-99.

[2]Kostas Kitsikis, "Thessaloniki, 50 years in Freedom," Architectoniki, No. 35, September-October 1962, pp. 28-30.

[3]J. Liappis, "Dimitris Pikionis (1887-1968)," AG No. 2, 1968, p. 76.

[4]Lewis Mumford, The City in History. New York, 1961, Fig. 10 and p. 79.

[5]Dimitris Pikionis, "Autobiographical Notes," Zygos, January-February 1958, p. 7.

[6]Ibid.

[7]Dimitris Evangelides, "Pikionis and Art," Zygos, op. cit., p. 15.

[8]Aris Konstantinides, "Life Vessels," AG, No. 3, 1970, p. 27.

[9]Ibid.

[10]See Dimitris Pikionis, "Popular Art and Ourselves" (1925), "Sentimental Topography" (1965), "Autobiographical Notes" (1958), "Mortgages from the Greek Tradition" (1964).

2.0 DIMITRIS AND SUZANA ANTONAKAKIS--NOTES

[1]In Atelier 66, where Dimitris and Suzana Antonakakis are currently working, the following architects have also participated since the time it had been established in 1965:

G. Aidonopoulos	Architect N.T.U., 1963	1969-67, 1978-82
D. Antonakakis	Architect N.T.U., 1958 Ass't Instructor of Architecture, 1959-64 Instructor of Architecture, 1964-78 Lecturer in Architecture, 1978 Administrative Committee Member, 1982-83, Greek Architects Ass'n. President, Ass'n of Ass'ts and Instructors (E.D.P.) at the N.T.U., 1975-77 Vice-President, Central Adminis. Committee, of E.D.P. of Greek Universities, 1976-77.	1965
Heleni Goussi-Desylla	Architect N.T.U., 1960	1965
Suzana Kolokytha-Antonakakis	Architect N.T.U., 1959 Adminis. Committee Member Greek Architects Ass'n., 1971-72 President of the Dept. of Architecture of the Technical Chamber of Greece, 1982-84	1965
Dimitris Potiris	Architect N.T.U., 1959	1965-67
Heleni Tsarmakli-Vrontissi	Architect N.T.U., 1960	1967-72, 1980-82
Kostis Hatzimichalis	Architect A.U.T., 1968 M.A. Urban & Reg'l Planning, U.C.L.A., 1976 Ph.D. Reg'l Planning, U.C.L.A., 1980 Sr. Lecturer, School of Architecture, A.U.T., 1982	1968

G. Antonakakis	Architect, Universite de Geneve	1970
A. Monemvasitou-Antonakakis	Architect N.T.U., 1969 Instructor N.T.U., 1971	1972
M. Babalou-Noukaki	Architect N.T.U., 1970 Instructor N.T.U., 1971	1972
A. Noukakis	Architect N.T.U., 1970	1972
Heleni Moreti	Architect N.T.U., 1970	1972-75
A. Polychroniades	Architect A.U.T., 1968 Diploma of Planning, Institute d'Urbanisme de Paris, 1970	1975
N. Vaiou-Hatzi-michali	Architect N.T.U., 1974 M.A. Urban Design, U.C.L.A., 1972 Instructor, N.T.U., 1982	1975
D. Rizos	Architect N.T.U., 1971	1978
Th. Fotiou	Architect N.T.U., 1969 D.E.A. en Geographie Urbaine, Paris X Nanterre, 1982 Instructor N.T.U., 1972 Vice-President, Central Adminis. Committee E.D.P., 1978	1979

[2]DSA, in Contemporary Architects, p. 37.

[3]Yannis Tsarouchis, Tsarouchis, Macedonian Center of Contemporary Art, p. 107.

[4]Ibid.

[5]Patroclos Karantinos, in "Opinions about Pikionis," by 40 architects, scholars and artists, Zygos, January-February 1958, p. 19.

[6]Kenneth Frampton, "Prospects for a Critical Regionalism," Perspecta, p. 148.

[7]Ibid.

[8]See, Kenneth Frampton, "On Reading Heidegger," Editorial Statement, Oppositions 4, pp. iv, v.

[9]See Paul Ricoeur, "Universal Civilization and National Cultures," in History and Truth, pp. 276-283.

[10]Suzana Antonakakis, "Habitat and Quality of Life; Time Dimension in the Design Process," Bulletin of Greek Architects Association, No. 9, November-December 1981, p. 50.

[11]Ibid., p. 51.

[12]Dimitris Fatouros, "Antonakakis, Dimitris and Suzana," in Contemporary Architects, p. 37.

3.0 CASE STUDIES--NOTES

3.1 The Glyfada House

[1]Suzana Antonakakis, "Habitat and Quality of Life." Address to the Seminar of Contemporary Habitat Heraklion, 1981, Journal of Greek Architects Association, November-December 1981.

[2]Dimitris Antonakakis, Memorandum, Athens, March 1978, pp. 33, 35.

[3]DSA, "House at Glyfada, Athens," DG 3, 1972, pp. 36-41.

3.2 Archaeological Museum at Chios

[1]This peculiar phenomenon was because of the type of the work in the sea. It was a period in the 50's in Chios where almost all households in the town were headed by women because the men were away with the ships.

[2]DSA, Helen Desylla, "Archaeological Museum at Chios." First prize in Architectural Competition; Greek Architects Association Bulletin, No. 5/1965, p. 17.

[3]DSA, Helen Desylla, "Archaeological Museum, Chios," in AG 1, 1967, p. 264.

[4]DSA, Helen Desylla, "Museum auf der Insel Chios, Griechenland," in Architektur und Wohnform, No. 9, 1971, pp. 336-37.

[5]DSA, Helen Desylla, "Archaeological Museum, Chios," in AG 6, 1972, pp. 144-150.

[6]They participated in three Museum competitions:
The Chios Museum (1965: First Prize)
The Komotini Museum (1966); The winning entry was by A. Konstantinides
The Kastoria Museum (1967: Second Prize) with G. Aidonopoulos, H. Desylla, H. Vrontissi.

- In the Tourist Development proposal for Paleokastritsa, Corfu (1966: First Prize with G. Aidonopoulos, D. Potiris).

- In the competition for the school building of the Filekpedeftiki Etairia in Thessaloniki (1965: Third Prize) with Helen Desylla.

- In the competition for the Reception Building of Thessaloniki International Fair (1964: Second Prize) with Helen Desylla.

[7]Alex Tzonis, Liane Lefaivre, "The Grid and the Pathway. An Introduction to the work of Dimitris and Suzana Antonakakis. With Prolegomena to a history of the Culture of Modern Greek Architecture." AG 15, 1981, p. 164.

[8]Ibid., p. 169.

[9]The previous reference to their neoclassical attachments and the Compositional Tradition.

[10]Aris Konstantinides, "The Architecture of the Xenia Hotels," DG , , pp. 122-126.

[11]Hotel at Hermionida, AG 8, 1975.

[12]Tourist Pavillion at Korakies, Chania, Crete, AG 1, 1967.

[13]Summer House Settlement at Spetses, AG 1, 1967.

3.3 The Benaki Street Apartment Building

[1]A deep and precise account of the development of the commercialization of housing and a discussion of the results of this process in the metropolitan area of Athens is being presented in George Sariyannis, "The Commercialization of Housing. Its effect on house and city form," AG 12, 1978, pp. 108-116.

[2]See "Three Athenian Apartment Houses," Atelier 66, DSA, Architects, DG 8, 1977, pp. 58-59.

[3]DSA, Contemporary Architects, p. 87.

[4]"Three Athenian Apartment Houses," op. cit., DG 8, 1977, pp. 58-73.

[5]DSA, Contemporary Architects, op. cit.

[6]This is mostly from the architects' own presentation of the building in DG 8, 1977, p. 66.

[7]Ibid.

[8]Aldo Van Eyck, St. Louis, 1962, in TEAM 10 Primer, p. 42.

[9]This reference had been extracted from N. Montsopoulos, "Comments on the Interior Space and the Form of Macedonian Mansion Houses," AG 8, 1975, pp. 150-154.

3.4 Vacation House at Spata, Attica

[1]For an overall view of the interesting architectural projects that were built in the period between 1960-1970, the most valid reviews are the journals Architecture in Greece and Design and Art in Greece.

[2]For description and discussion on the works, see Dimitris A. Antonakakis, Memorandum. Athens, March 1978, pp. 30-32, 55-59.

[3]The vines are green and vivid from spring to the end of August. The rest of the time, the bare, dark old branches and stems that they expose present unbelievable aesthetic combinations amidst the stony grey ground and the view of the fields is a rather Biblical one.

[4]DSA, "Two vacation houses in Attica; Shell-boundary and Interior Circulation," DG 10, 1979, pp. 75-77.

[5]Alexander Tzonis, Liane Lefaivre, "The Grid and the Pathway. An introduction to the work Dimitris and Suzana Antonakakis. With prolegomena to a history of the culture of modern Greek architecture," AG 15, 1981, pp. 173, 175-76.

[6]Tzonis, Lefaivre, "The Grid and the Pathway . . . , in Wonen/TA/BK, October 20-21, 1981.

[7]Tzonis, Lefaivre, "The Grid and the Pathway. . ., op. cit., AG 15, p. 178.

[8]Orestis Doumanis and Mariella O. Doumanis, "Indigenous Greek Architecture. The Architecture of Interdependence," Design and Art in Greece, 8, 1977, pp. 19-25; Maria Xyda-Karamani, "Nine Elements of the Vernacular Architecture of Skyros," DG 8, 1977, pp. 49-51.

[9]Nikos G. Moutsopoulos, The Popular Architecture of Veria. Publications of the Technical Chamber of Greece, Athens, 1968.

4.0 ON THE METHODOLOGY OF THEIR DESIGN

[1]S. Chermayeff, C. Alexander, "Anatomy of Urbanism," in Community and Privacy, 1961, p. 117.

[2]N. J. Habraken, "Introduction to the English Edition," in Variations: The Systematic Design of Supports. LAP, MIT, 1976, pp. 7, 10, 14.

[3]The architectural form which characterized the Greek scene of the period between the wars was unquestionally the accidental form of the hovel built on the outskirts of the towns and in the rural settlements. It was an architecture which finally did not develop to a coherent form in spite of the "sount" and "modern" compositional principles that it was based on; that is, the flexibility and adaptability of the space of the building, as dictated by the functional and economic possibilities. Constituting a primitive ever-expanding habitat growing according to the tenants' financial position and needs, this "urban-vernacular" re-introduced the characteristic scheme of the room "cube" composition which can accommodate constant additions, horizontally or vertically, with the provision always for a small area for a garden.

The total lack of town planning and of an existing organized urban tissue, except in specific cases as the towns of northern Greece and of the islands, left the development of urban space in the hands of the several developers, land-holders, who started dividing the land into small lots. The uncontrolled building of the expanding urban space, or what can be better stated as the discrepancy between town planning and architecture, was the cause why those settlements were deprived of the possibility to acquire any vital spirit either as wholes or as units.

For a discussion on Greek architecture of this period, see S. Amourgis, "Greek Architecture of the 20's and 30's," AG 2, 1968, pp. 146-149; P. Koulermos, "Critical Thoughts," AG 2, 1968, pp. 142-145; A. Symeon, "The Status of Contemporary Greek Architecture," AG 2, 1968, pp. 36-40.

On Greek Neoclassical Architecture, see: The Commercial Bank of Greece, Photographic Archives of Neoclassical Architecture; Aris Konstantinides, The Neoclassical Houses of Athens, Athens, 1976; John Travlos, Neoclassical Architecture in Greece, Athens.

[4]Tadao Ando, "From Self-Enclosed Modern Architecture Towards Universality," The Japan Architect, No. 31, May 1982, p. 12.

[5]Ibid., p. 9.

[6]DSA, Contemporary Architects, p. 37.

[7]See D. Pikionis, "Sentimental Topography."

> Light has created this world. Light is
> supporting and fertilizing it.
> This is the source that makes it appear
> in our material eyes in order to gain
> light from our soul. . . .
> On top of this still geometry of the earth,
> there is the ever-moving state of the Ether and Light.

The climate, that is the movable geometry of one place, is a derivative of its relative placement on the planet. This place determines the respective point of the place in reference to the sun, which is changing according to the epochs.

[8]DSA, Contemporary Architects, op. cit., p. 37.

[9]Orestis V. Doumanis and Mariella O. Doumanis, "Indigenous Greek Architecture. The Architecture of Interdependence," AG 8, 1977, p. 20.

[10]The answer that the Doumanis suggest in the above-mentioned article reads as follows: "Unfortunately, the answer to this question is none. Since the Renaissance, Western culture has been heading towards unfettered individualism, breaking away from the bonds of social institutions of obligations." . . . p. 24.

[11]D. Antonakakis, "Observations on the Boundary of Contact between Public and Private Space," Chroniko 73, pp. 169-171.

[12]Dennis M. Jesson, "The Dynamics of Place in Greek Littoral Villages," AG 8, 1977, p. 37.

[13]Christopher Alexander, "Thick Wall Pattern," June 1967, in AD 7, 1968, pp. 324-326.

[14]Oriol Bohigas, "Aldo Van Eyck or a New Amsterdam School," Oppositions 9, p. 35.

[15]Alvaro Siza y Viera, "Catch a precise moment of flittering image in all its shades," A+U, December 1980, p. 9.

[16]Jun Aoki, "Compositional Theory in Japanese Residential Architecture since World War II." I. Theory of Formalized Space, The Japan Architect, November-December 1981, p. 9.

[17]DSA, "Two Vacation Houses in Attica," AG 10, 1979, p. 72.

[18]Dimitris Fatouros, "DSA", Contemporary Architects, p. 38.