A NEW TOURIST VILLAGE ON THE ISLAND
OF SIPHNOS IN GREECE

by
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A Tourist Village on the Island of Siphnos in Greece.
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This thesis is an attempt to develop a new attitude toward building for tourism in Greece. An analysis was made of the basic tourist trends in the country, and more specifically of the trends related to the islands on the Aegean Sea, and some proposals formulated for the general control of Tourism. A part of these proposals pertains to the development of new tourist villages in various areas around the country that fulfill certain specific requirements.

On the basis of the general proposals the second part of the thesis involved the design of a new village with various accomodations for about 200-250 people on the island of Siphnos.
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INTRODUCTION

One of the severe problems confronting architecture today is related to the scale of architectural operations. It is almost a cliché to say that environmental problems have become too big and that architectural solutions have implications far beyond the physical structures designed. Simultaneously it is a constant source of frustration for architects to realize that the majority of constraints upon a design come from external sources not directly related to the project in hand, i.e. archaic building and zoning codes, unresponsive financial and civic procedures, or, even worse, large scale regional development plans concentrating on the economic sphere, and ignoring, or paying only passing attention to environmental, cultural and social implications. I think that this concentration on financial advances, to the virtual exclusion of other implications, is the major cause of environmental problems today, and that new approaches are needed, which allow for a greater and better balance of priorities.

It is therefore the major assumption of this work that it is the architects' responsibility, as the basic environmentalists of our society, to foresee environmental problems that may appear in various areas, and to take an active part in the formulation of solutions and strategies related to these problems.

As I come from Greece, a country as poor in natural resources as it is rich in history and tradition, and which has had to rely rather extensively on external financial support in order to keep up with more advanced nations, I have been interested for a long time in tourism as a possible important source of income for the country. There is no doubt that there are others which would probably prove more profitable, and in the long run more important in stimulating the over all economy of the country. On the other hand tourism already exists, already has an effect, and is likely to increase both its positive and negative influence on the life
of the country. In addition, tourism touches very definitely the problems mentioned earlier in that it has often led to indiscriminate building of structures unrelated to the environment they are in, and unresponsive to the needs, or the conditions existent in the area. Finally, I have for some time been interested in Greek folk culture and architecture more specifically, hoping that it may provide another beginning for my personal architectural thinking. A large amount of this folk architecture is located on the islands of the Aegean Sea, and is partly a cause for the upsurge of tourism in that area, while at the same time being threatened by it.

With these ideas in mind I started out to develop a plan for some kind of a tourist-community on Siphnos, an island which has a very distinct architectural tradition, and which has not yet been very "touristicated," although it is certainly on the way.

Necessarily my work is composed of many parts. The first one is an analysis of the tourist situation in Greece and some proposals for an overall strategy for its control. The second part clarifies some of the proposals, and puts them in the perspective of the specific area chosen on Siphnos. The third part is the specific design proposals and drawings. Finally, the fourth part includes the conclusions and comments that have arisen from the design process.
CHAPTER I

This chapter is an attempt to examine some of the trends in Greek tourism, to understand their impact on the environment, to speculate on the possible future development of tourism, and to think of some ways that this development might be controlled, accelerated, decelerated or redirected according to the needs of the land and the people. I have chosen two islands on the Aegean Sea for this purpose, two islands that are very similar in every way, except their tourist trade. Myconos and Siphnos are roughly the same distance from Athens, they have almost the same size and climate, they are very similar physically, and yet Myconos is very "touristicated," while Siphnos is still almost completely unknown and undeveloped in that sense. Of course there are differences in many respects, as we shall see later, especially insofar as advertisement and people's attitudes are concerned; those differences I will try to identify in order to find an explanation for that discrepancy.

The study has many parts, and is based on data published by the Greek Tourist Organization, and the Statistics Center of the Ministry of Coordination, on information given to me either verbally, or by allowing me to look through the files of the Tourist Organization, and finally on personal observations on trips to both islands. Much of the data given to me is obviously inaccurate, as the methods used to collect them ranged from the inadequate to the completely fantastic, yet they give some indications of trends, and those I'll try to follow up. In some cases, I shall try to criticize the data itself, but that could be a major occupation in itself, so I'll generally take them as given with changes wherever they are needed. Necessarily, a large part of the study will be concerned with numbers; I hope, however, that I'll be able to show at the same time the significance of these numbers in human and
environmental terms. Also, some of the numbers given will not be directly related to the subject, but I think that they are absolutely necessary for a complete understanding of the impact and importance of tourism on these islands, as well as for a general planning of the area which I eventually hope to develop.

I. GENERALLY ABOUT TOURISM IN GREECE

First of all an explanation is needed. Tourism in Greece, as in most other Mediterranean countries had been increasing constantly and at higher rates every year, until 1967, when the colonels' coup d'etat created an international uproar which resulted in an actual drop in tourist arrivals that year. That drop only moved the curve lower, because generally tourism started to increase again almost immediately, and in 1969 it surpassed the level of 1966 by quite a wide margin. Thus there is a two year lag, a break based on circumstances other than the ones most tourists are interested in, i.e. accomodations, good weather, quiet etc. Incidentally, that break could have been used by Greece in order to rethink, organize, and develop its tourism in newer and more reasonable ways, but nothing in that respect did happen. As a result of the break, and since the results of the 1969 season have not been completed yet, and 1967 and 1968 are quite unclear, I have generally used 1966 as the basic year whenever trends within a year are examined.

Visitors to Greece can be divided into two major categories, people arriving and staying in Greece, making use of hotels and other accomodations, and people who arrive on cruise ships, staying on the ships, making use of the accomodations there, and having contact with the land and the natives only on short trips ashore. The two categories arrived in Greece in the following numbers:

1965: 846,947 - 129,178
1966: 997,628 - 134,102
1967: 848,985 - 147,488
1968: 879,489 - 138,132
It is interesting to note here that the break mentioned before did not happen until 1968 as far as cruise visitors are concerned. My explanation is that the 1967 cruises had been organized long before April 21, the day of the coup d'état, and they went through as organized, while in 1968 Greece was simply left out of the itinerary of many cruises. Such a possibility is also indicated by the falling off of cruise ship arrivals by about 10% between 1967 and 1968.

Considering the points of entry, and the transportation means by which tourists arrive to Greece, air is by far the most important with 53.4% of all arrivals, followed by cars and tour buses with 21.1%, ships with 18.4% and railroads with 6.1%. Part of the 18.4% of ship passengers was by ferry boat from Italy, and therefore there is a substantial number of cars and buses to be added to the automobile traffic, but here the statistics are too muddled to be easily dealt with. The statistics above are of 1966, but the percentages seem relatively stable with only a small loss to sea traffic gained by railroads (2% in 1966-1968) as a new, rather fast, and clean line was instituted in 1968 between Athens and Munich.

Coming to some absolute numbers, in 1966 receipts from the tourist trade were about 143,458,000 dollars, which meant that the average amount spent by each tourist in the country came up to about $150, a rather high amount in relation to the standard of living there, and to amounts spent in other countries, according to Tourism officials. At the same time, the average stay per tourist in Greece is about 11 days as compared with 13-14 in Spain, and 8-9 in Italy, so the average expense per day should be about 12-15 dollars.

This is a very high amount by Greek standards, and therefore tourism is becoming more and more important as a source of income, especially, as we shall see, in areas with few other resources like the Aegean Sea islands.

To accommodate the influx of tourists which in 1969 reached 1,259,000 people (up 15% from 1968), there has been a continuous building of hotels, motels, hostels, and even simple additions to
private houses, an effort which, however, has not been consistent throughout the country, or even in the most populated areas. The effort has been essentially based on individual initiative, and therefore only half successful as individual entrepreneurs tend to build in areas where the demand already exists, rather than trying to create the demand elsewhere as well. That, coupled with the fact that tourism is still very much a seasonal thing in Greece (about 80% between April and October), has resulted in chronic underutilization of hotel facilities, even to the point of closing for the winter, and the case of "sawing in the summer to eat in the winter." Still the tendency is mostly towards building larger hotels and in touristically developed areas. Characteristically, the statistics show persistently an average of 2-3% increase in hotel numbers per year, while the increase in room and bed numbers is at least 6-8% per year.

Finally, a short word about tourist tendencies in Greece. It used to be that tourists would come to Greece for the sake of its antiquities and expected to see the natives dressed in togas, and speaking in iambic pentameter, but I think that this has changed very much, and now the essential reasons are the climate, the people, the sea, and the sun. I do not have statistics to show that, but through personal contact with many tourists, I have been left with that impression. No doubt, the ruins are seen, and admired, the Parthenon photographed under all the possible conditions and angles, but they are almost afterthoughts, while the essential thing is still how to get to the beach. This is very important, because although its proximity to Delos may have made Mykonos known in the first place, it has now completely overshadowed the ancient Holy Island, and I was not overly surprised when last summer, not one of the people I met on Mykonos had been to Delos, or intended to go.
II. FACTS OF LIFE ON AN AEGEAN ISLAND

The statistics included in this part are specifically about Siphnos and Myconos, but they can be viewed as trends existent in the whole Cyclades. They are statistics done before, and including 1961, and therefore they do not include the impact of tourism on the islands. However, as a general rule, the same or similar conditions persist on most islands with very few exceptions.

Both islands are rocky and are set in an area which is at the same time tremendously windy throughout the year, and quite dry. They have an average of 15 to 20 inches of rainfall per year and only about 50 to 60 rainy days, a fact that has not allowed agriculture to develop very much. At the same time they have very mild temperatures (average 18.5 degrees Centigrade - January: 11, July: 27) which has been helpful in developing some specific crops. In addition, Myconos' soil is volcanic, a fact that contributed very much to the Myconians' early turn to the sea, and other occupations rather than agriculture.

In spite of the difficult conditions, in 1961 about 50% of the active population of either island were involved in agriculture, while the remainder were about equally divided between services and industrial work. Still, the cultivated area of Myconos' 86 sq. km. was less than 20% with another 40% given to pasture areas, while of Siphnos' 74 sq. km. about 15% was cultivated and about 60% was pasture area. Considering the population of Myconos at about 2,500 and that of Siphnos at about 1,000, we come up with about 5-7 thousand sq. meters per farmer, an area absolutely tiny by any standards. And at 5 work days per year per 1,000 sq. meters, we have a fairly sizable part of the population active only about one month out of the year and idle the rest of the time, and with a very small source of income at the same time.

Turning to industry, Myconos has been lucky in finding a good market for its textiles which occupy about 66% of its industrial activity with the rest taken up by some chemical products and some mining. Siphnos, on the other hand has tried to concentrate on
food production, some wood and cork industries, and extraction of non-metallic minerals. Still, for Siphnos, agriculture is by far the most important source of income, and its industry is itself pretty much tied up with agricultural products.

Now, what do all these numbers mean? Some more should be added before a long explanation. It comes as no surprise that between 1951 and 1961 there was a 12-20% population drop throughout the Cyclades. Birth rates were low (17%), death rates high (8%), but it was essentially migration that was the main cause of this drop (20-50%). Although immigration was very low compared with other parts of Greece, about 1,000 people moved to other parts of the country, from the Syros province alone (where Myconos belongs)!

The meaning of all these numbers is clear. We have here a situation where practices and ideas two and three centuries old are perpetuated today because of lack of information and direction. In spite of the adverse conditions of the soil, and the climate, those people insist on agriculture as a major source of income, with the result of both under development of the islands' potentialities, and poverty for the inhabitants which would tend to increase if all other factors remained the same. That is, with the population increase, farm sizes would decrease and eventually there would be a point where the land would not be able to feed the people on it. There is no doubt also, that, with their very few and antiquated means, the farmers on those islands accomplished miracles, but they have used every tiny piece of land that could be used, and still the problem persists.

As I mentioned before, a solution was found early enough in some islands by migration and turning to the sea as a source of income. But those solutions tend to create their own problems as migration to the cities, and especially Athens, contributes to the usual urban problems, as well as to the hydrocephalic situation of a city of 2,000,000 people being the capital of a country of 8,000,000 people; similarly the move of a large proportion of able bodied men to the merchant marine deprives the islands of the services of those men, not only as workers, but also as husbands.
and family men. Finally, even this solution does not answer the problem of the underoccupied farmers that remain on the islands.

In mentioning all these problems and existing conditions, I assume basically one thing. That, although work, or financial progress, or money may or may not be positive values, the possibility for them, and the freedom to choose whether to work, or not, must exist. That is, the Siphniot farmer that has always worked from dawn to dusk for one month per year, and has spent the rest of his time in a coffee house talking politics, must have the opportunity, which he now doesn't have, to direct his abilities to another task, if he so chooses. If that is to become possible, a complete reorganization and planning of the use of the resources, including beauty, of the islands must take place, a task that is beyond the limits of this work. It is sufficient to say here that if such a replanning were to take place and since beauty is one of the resources they have in abundance, tourism and how to stimulate and control it should take a rather important position. I do not advocate that it should become the only, or even the most important source of income; in some cases it could not, in others it should not, but in most cases it could become an important source of employment and income.

III. TOURISM ON MYCONOS AND SIFHNOS

In general the tourist activity on the two islands follows the general pattern set in the whole of Greece. Some characteristics, and some trends, however, deserve special attention.

A. MYCONOS

According to the statistics based on hotel use, in 1966 35,369 overnights were counted, made by 10,993 people in 436 rooms. At the same time, according to the tickets sold on the boats going to Myconos there was a 55-60,000 person traffic to and from the island. Even if we lower that estimate by 20% to allow for traffic by the natives, and by other Greeks who find it easy to take multiple
trips to the island throughout the year, we are still left with about 45,000-48,000 people arriving on Myconos throughout the year, and staying an average of 3-4 days each on the island. If that number were spread about evenly through the year, maybe no problem would exist, but tourism is a seasonal phenomenon as seen clearly in graph number one. In fact, not only are the tourist numbers higher during the summer, but the periods they stay are much longer as well. If we consider the yearly numbers, for every tourist that stays in a hotel on Myconos there are another 3-4 who have to find accommodations elsewhere, and that means private houses. And using this average in for example July, 1966 we have 1,654 people staying in hotels, and about 4,000-5,000 staying in private houses. (In fact this average could be higher if we consider that hotels are adequate for the winter, therefore houses are not very much used, and therefore the yearly spread of house staying tourists is confined to a smaller number of months and each month has a higher number to accommodate). Even with the above numbers, however, we have a town of 2,500 people having to accommodate 5-6,000 people for a short period of time, a problem at least difficult.

When we look at the overnights the problem becomes even more difficult. Again taking July, 1966, we see that Greek tourists stayed on the island for an average of 13.3 days each, while foreign tourists stayed for about 3.2 days, and in general those numbers are higher where we consider private houses, where room prices are much lower usually than the hotels (about $1 vs. $2-5 each day). I would say that the 13.3 days per Greek tourist are not typical, although there are a number of people that stay on the island for one or two months during the summer; similarly I think that the average per foreign visitor is rather low, because although there is a continuous turnover of 2-3 day visitors, there are also large groups that stay on the island for much longer periods of time. Even if we take those averages and apply them to the numbers we have, we come up with 2,400 overnights, which spread out throughout the month leave 800 people to be accommodated in private houses per day in addition to the ones living in hotels and hostels of
all categories. This number might seem high, but last summer in one day 1,500 people were left without a room or bed, and the town hall as well as the area's school buildings had to be opened so that they would have a place to stay!

If the sleeping problem is big, the eating is even bigger because to the former numbers we have to add about 100 cruise ships and about 40 yachts with their passengers who sleep on board but make use of all the other facilities of the island. The numbers in this case become absolutely staggering and almost unbelievable, because at 800 people per cruise boat and about five per yacht, we have another 80,200 people converging on the island in the month of July. Fortunately, most cruise boat passengers have their meals on board, but they still come ashore to shop, go see the sights, and go to the beach.

What are the effects of such a population explosion on the island, which we must remember only had 2,500 people in 1961, and could only have another 1,000 by now? Financially, there is no doubt that the island is doing very well since, if all other figures are correct, certainly more than one million dollars were spent on the island in 1966, and probably much more than that. However, there are many other problems which are created and which in a way have started destroying some of the charm of the island.

Transportation on Myconos is minimal. The town is small and its streets narrow, so no cars or buses can move through it, except for the waterfront area. At the same time, some buses are needed for transporting people to the beaches, and to other villages. Originally, there was no need for more than two buses which, with careful scheduling, and some help from a taxi and a few motorcycles, were perfectly adequate for the island's needs. With the influx of tourism, the numbers have increased by at least four times and still they are completely inadequate during the summer, while remaining idle in the winter. On the same subject, the existent roads are impossible, narrow and dusty and uneven, making the ride in an overloaded bus into a chore and a walk from the beach to the town into a nightmare of sweat and dust. Simultaneously, they are
not completely adequate, and leave rather beautiful areas of the island unreachable by car.

Land prices on the island have skyrocketed with two results. One is that only very wealthy people can afford to buy land, and since also the cost of construction is high, the new private buildings tend to be large villas, built on similar lines with the rest of the town, but in a different scale. The other is that new hotels tend to be larger in order to cope with the cost of the project, or else much more expensive. In addition, people that rent private rooms are also trying frantically to add to their houses, and since the town's structure is very tight, they usually have to build upwards, thus destroying in a way the original character of Myconos. Furthermore, in their hurry to build before the new season starts, they do not particularly plan the new structure, and they build in the most easy way possible: concrete, thus slowly introducing new formal elements in the area.

As I said before, those islands suffer from a lack of water and this is another problem that could almost remain unsolved forever. During peak months Myconos buys water from other areas, particularly Athens, and sells it when large use of it is made, i.e. showers or clothes washing. That has been a continuous reason for complaints from people who do not know about the difficulty and a resentment for unfair reasons.

The popularity of Myconos and the expectations of high profit have also resulted in a seasonal migration to the island of people whose occupation is generally related to tourism. Apart from the innumerable nightclubs, discotheques, and bars that have opened in the past three years, and which have all done pretty well, apart from the large amounts of tourist shops selling everything from Myconos rugs to small windmill models, Myconos has also attracted a large amount of boutiques and clothes shops that utilize the textiles made in the area. Thus tourism has generated a triple effect in this case: more of a seasonal population needing accommodations, more of a commercial activity on the island which also needs space, and finally more industrial activity in its textiles which is in fact the only year round effect.
As could be expected, the biggest effect of tourism is on the Myconiats themselves. As their island was poor they had very early turned to the sea for their income, and the island had managed to become rather prosperous from its merchant marine. Also its proximity to Delos made Myconos a stop on the way to the antiquities and let it become known much sooner than other islands. When the first influx of tourists came, the Myconiats had already acquired a sort of a cosmopolitan outlook, and were ready to accept the new and strange, for them, look of the foreigners. At the same time, they were ready to do as much as possible to be hospitable, and to make the stay of the tourists comfortable and enjoyable. They were curious and questioning, but their inquisitiveness was easygoing, so that the visitors were not offended, and returned to the island, as well as spread its name, Thus the island became known as a beautiful spot with beautiful beaches and tremendous architecture, and where everybody could pretty much do whatever he wanted without questions, or curious looks. So the architects and artists came first, followed soon enough by the jet set, and then by everybody. The Myconiats remained in their place and accepted the invasion very happily because of the money that came with it. Their life and customs changed very little, but many other characteristics underwent immense changes, especially as far as hospitality is concerned. In a way, after a while, although still they enjoyed the fame of their island, they became tired of all the strangers, Greek and foreign alike. The hospitality and good nature that used to be a special characteristic of the natives, now has given some way to greed and an attempt to "take" the tourist, a characteristic that was probably forced on the Myconiats, first by the other entrepreneurs that reach the island each summer, and second by the floods of tourists, and special conditions they create.

Thus, prices go up, the island becomes more exclusive as far as land ownership is concerned, but also more known, and more touristed by all kinds of people that are attracted by its freedom. It becomes richer in money, but less rich in its natural beauty since new building without thought is destroying the existent
formal structure without creating a new one, since the beaches and waterfronts become overcrowded with people, since it will not be long before many more buses arrive to take the overload of tourists, and new wider roads are created for them which in turn will allow more cars to be used on the island, which will need more roads, etc., the story being well known. At the same time the Myconiats are becoming more callous, more indifferent, more interested in making money "now while we can" without too much thought to the long range effects of tourism on their island. Three things should be mentioned here to the Myconiats' credit. The first is that construction, although speedy and careless, has managed to some extent to remain close to what already exists, but abominations have already appeared, many of them, and are more than likely to continue appearing. The second is that in spite of their changes in character, the people have still managed to keep their sanity, their customs and their way of life. They are, in fact, more likely to influence the tourists than be influenced by them, and that may be one hope for the island. The third is that, somehow, crime of any size has not appeared on the island yet. Some petty thievery, yes, but even that is so small that people often leave their doors unlocked without any thought to it. The last two, in fact, are the reasons it is possible for the natives to go through the winter months without any special difficulty, since their life basically remains the same. Still, I think the long range effects are yet to be seen, especially with the younger people, and with changes in the over all economy of the island.

B. SIPHNOS

Turning from Myconos to Siphnos, we find a situation that Myconos probably faced a long time ago. The statistics and information are completely inadequate in this case, and they can be seen on graph number two and table number two, so I will not spend too much time developing and explaining them. It is, I think, sufficient to note the immense difference between Myconos and Siphnos, and also that, as in Myconos, there is a huge discrepancy between figures.
shown by the port arrivals, and the figures shown by hotel use, which again shows that private houses are being used. Almost everything follows the same patterns already seen on Myconos, with one notable exception, that the percentage of Greek visitors in relation to total visitors is much higher here, something understandable since the island is very little known outside of Greece.

Siphnos is still a touristically underdeveloped island. Unlike Myconos, it is not a stop for cruise boats, nor do many yachts stop there. Part of the reason for that is that the major towns are built at the top of a series of low mountains, and far from the sea. Also, the island is rather fertile, by Aegean Island standards, and its people have been more land directed than sea, and therefore are not completely prepared to accept, or rather to encourage tourism. There are no night clubs, no fashionable clothes stores, no souvenir shops except for a couple of very small ones, not even any sizable restaurants, and thus the only night-life is concentrated around two coffee houses in the center of the major town. Of course, these are not the only things that tourists look for, nor the essential ones always; they are important enough, however, for most people, as they could provide some respite from an otherwise very quiet existence.

If transportation on Myconos is poor, on Siphnos it is non-existent. There is a bus that travels from the port to the villages on top of the mountain, and them is scheduled to go to some minor villages every now and then. Thus, any visiting to various areas on the island must be done on foot, or else by using one of the two cabs that also exist there. The problem that is created is fairly difficult, because most accomodations are on the villages, and far from the sea which everyone wants to enjoy. The road joining the port and one of the beaches with the major town is well paved, but the rest of the roads are quite bad and difficult to drive on. Also, as on Myconos, although the paved road goes through the town, there are no ways to drive to most of its parts, and the town is hilly. What I am trying to say by that, is that there is an added difficulty here which tends to exclude older people.
Tourism has not had the time, or the chance to do any harm to Siphnos yet. Land prices are quite low, although already rising slowly, there is a small shortage of beds mostly out of the indifference of the people there and lack of initiative, rather than an actual lack of space or beds, and there are no waiting lines for dinner usually. For the time being there has been no attempt to do much new building, although that is starting too, and whatever has been done has been rather careful and planned.

The Siphniots are still rather tied to their soil, and their work there, and see tourism pretty much as a side occupation. They have not changed at all, and still regard everything as hospitality rather than as a business transaction. Tourism has been low and has not had time to generate new business, commercial or industrial, but it is certain that sooner or later this will start happening too. And, I think that when it happens it will be again entrepreneurs from other parts of Greece that will see the opportunity, rather than the Siphniots themselves who have not yet completely realized the financial impact that tourism can have.

II. FUTURE

The increasing importance of tourism as a source of income is perfectly obvious, as well as the fact that it will keep increasing as leisure increases, and as methods of travel become more efficient, quicker, and cheaper. It takes now about eight hours to travel by boat to either Siphnos or Myconos, and the experimental helicopter line to Myconos was not paying for itself and was discontinued, but it will certainly reappear when the demand appears strong enough. In fact, in spite of Greece's tendency to run behind the times in most anything, it is very likely that in a few years helicopter service will replace boats used for the trips to the islands, and boats will be only used for cruises and merchandise.

As the numbers of tourists become bigger and bigger each year, there is no doubt that the problems already seen on Myconos will start becoming more acute, and spreading to other islands as well.
With tourism being still a seasonal activity, the islands are very likely to become heavily built areas which have large dead holes of inactivity in the winter, while in the summer they strive to accommodate the influx of visitors. Simultaneously, the building activity, planned or not, is more likely than not to destroy the formal balance of much of the folk architecture of the area. In some cases, as in Mykonos, where the town's relatively defined by hills around it, the town may tend to grow upwards, rather than outwards; in other cases as on Siphnos where the town hangs at the top of the cliffs of a mountain range without any real definition, the building may very easily happen without any restraint in any direction, again destroying the balance of the landscape. Then, the relatively easy money made from tourism may turn some of these islands, the ones where there is no strong economy now, to one-purpose areas. That is, the farmers will not spend even those few days working in the field, because they will count on the tourist money for their livelihood, other activities will cease, and the islands will become simply tourist factories. That could be a possibility, but, I think, not a pleasant one, since any break in the tourist trade would leave the islands financially bankrupt. Of course, in some cases tourism would generate other industries as for example happened with the textiles of Mykonos, but this would not always be the case. Finally, probably the worst result of such an unchecked growth of tourism would be the complete step by step destruction and elimination of an existent culture and character of the area, both in environmental and in ethnological terms, by the overwhelming pressure of outside influences.

Because of its financial importance, tourism seems to be necessary for these islands which can now only sell beauty for their livelihood. As we have seen, however, it is a mixed blessing and it is important for some controls to be designed so that the most benefits can happen with the least possible bad effects.

The first, and most obvious control is naturally the transportation and communication with the mainland. From a thorough study of existent accomodations, including all kinds of hotels as
well as private houses, and a correlation with the daily turnover 
prices, transportation could be so scheduled that at no time 
would there be visitors in excess of existent accomodations. 
Moreover, for islands that have not reached the stage that Myconos 
is in already, yearly upper limits could be set so that "tourist-
ication" would happen gradually, and therefore with minimized bad 
effects. Those upper limits would have to be based on accomodations 
again, but also on the existence of other facilities as restaurants, 
roads, transportation, adequate water etc. Assuming that tourists 
are not generally set on seeing one specific island, but would 
be just as willing to go to another one with the same basic 
characteristics, when the upper limit would be reached, they could 
be redirected to another island, or have the choice of waiting for 
the one they want. If this seems like too much bureaucracy, it is 
not necessarily so, since the islands could themselves probably 
set their own upper limits, once some guidelines were presented, 
and the control could be made by travel agents and transportation 
companies. In this way, the major advantage, I think, would be 
that construction and planning could be made on a regular and 
reasonable basis without the anxiety and hurry that exists now. 

At the time there seems to be no zoning code, or any controlling 
agency that can allow or prevent construction from beginning. 
True, some control is exercised by the provincial headquarters and 
the mayor's office, but it is minimal, and does not have influence 
on future planning. With the necessity for construction of new 
facilities and the possibility of abuse being as big as it is, 
controls have to be set up in this respect too. I think that one 
reasonable proposal would be to declare the existent towns as 
national monuments, and allow new construction in them only as long 
as it conformed with the scale, style, material and form of construc-
tion already existent in the area; at the same time other areas 
could be zoned for development, areas chosen because of their 
physical advantages, as well as accessibility to necessary things, 
I.e. electricity or water or transportation, and loans with more 
or less favorable terms, according to the importance of the area,
given to possible developers. This whole process would have to be done on the scale of the whole of the Aegean Islands, taking into consideration the continuation of other activities as well, i.e. agriculture, industry, and the expectations of development for each island as a whole. Then, once guidelines, in rather specific terms, were set, the various advantages could be offered for the development of any one of the subjects within the limits defined by the governmental agency. In this way it could be made certain that areas would not end up living on only one source of income, that development would not be completely random, and that some control would exist on every stage of it. Also, the government would not be doing the developing itself, but would rather be setting upper and lower limits, thus allowing the demand and the market to reach its level.

Finally, one word about the problem that is most acute, but might be the easiest to solve, and that is the seasonality of tourism in Greece. A change of that will have to come after a change in vacation habits, yet some change I think could be made by advertisement alone, by creating interest in the mild winters that take place on the islands, and inducing people to visit or stay there in the winter, much like many do now in Florida or Southern France. That the campaign will have to be long and strong is clear, since it will have to change an old and strong habit, as well as an economy that tends to be geared to that, but the benefits for the country will also be great.

It has been a rather long exposition, and I tried to cover a large amount of subjects all relating to tourism and its effects on the environment. Many of the concluding proposals are in hypothetical and generalized form, because obviously a much clearer notion of the possibilities must exist before a comprehensive regional plan can be formulated. Still, I think the options are clear: either control tourism and its effects, or lose through abuse many of the characteristics that created it in the first place. In the second chapter, some proposals already mentioned become more clarified in relation to the specific island chosen.
CHAPTER II

This chapter is an attempt to evolve a reasonable design program for a tourist village, or a development for tourism, based on some of the statistics and suggestions presented in the former one. Necessarily, although part of this part will also be involved with numbers, my personal estimations and impressions, as well as prejudices, will play a much more major part. My major assumption, based on the former paper, is that tourism is inevitable and also desirable for its financial benefits; it is, however, simultaneously a problem that, if left uncontrolled, may destroy those specific characteristics that make the Aegean Islands such desirable places in the first place. Some possible controls have already been suggested in general terms. Here, I'll try to be more specific, although again the data is not complete or conclusive.

To set the stage let us look at some numbers and trends again. Mykonos, with about 3,000 inhabitants, had to accommodate about 1,600 people in July, 1966 in its hotels, not to speak of private houses. The population of Siphnos in the last census was about 1,000 and, since the island is not enjoying the economic boom of Mykonos, it would be reasonable to assume no more than a 10% population growth, if that. Using the Mykonos average of about 2:1, Siphnos should be able to accommodate a maximum of 600 people within a month, and yet in the entire 1966 it had only 292 tourists, Greek as well as foreign. At the same time Mykonos had about 234 beds as compared to Siphnos' 56 and that of course does not take into consideration the organization of tourism on the island, or the private house beds.

Now, it is unreasonable to expect Siphnos to reach overnight the relative sophistication exhibited by Mykonos, on the accommodation problem; yet, even if we take the national norm of 20% increase in tourists per year, and don't consider at all the impact of overcrowding on Mykonos which will send people to other islands,
nor the effects of advertising, Siphnos in 1970 will have to take care of at least 500 tourists, and, if last year was any indication, many more than that. Five hundred tourists may not seem such a large number when compared to the crowds of Myconos, but we have to remember that they represent only hotel guests, and there will be a peak month, July or August, when the large majority will arrive, while the rest of the year will be relatively quiet. Furthermore, these people will not only need rooms and bathrooms, they will also ask for souvenirs, for food, for telephone calls, and for transportation, none of which the island is prepared to offer. The result is likely to be dissatisfaction and hard feelings, bad advertisement for the island, and essentially the beginning of hardening of the inhabitants and looking at the tourists as tourists rather than guests.

As I said before the Siphniots are not particularly aware of what impact tourism can have on their life, and they are still very much involved with their other occupations, unlike the Myconiats who, while keeping their own life separate from the tourists' still switch to tourist activities as soon as the season arrives. Furthermore, Siphnos has a rather high percentage of Greek visitors who are regular on the island renting houses in the summer, and staying for relatively long periods of time, while the owners retreat to a farm house, or to a relative's houses for the duration of the summer. (That usually is in keeping with farm activity which is rather high in that period too.) This has also been a factor in keeping touristic conscience from developing on the island, since those people tend to mix with the inhabitants, and become Siphniots themselves for as long as they stay.

Not having the exact numbers of rooms available, restaurant accommodations etc., all the various small facts that would allow me to develop specific suggestions in numbers for taking care of the problem, I shall have to go on a more theoretical basis keeping in mind only two numbers: 250 people that Siphnos will probably have to accommodate in July or August, 1970, and 600 that it could probably accommodate eventually in a similar month.
Both numbers, let me admit immediately, are highly arbitrary; they are, however, based on some data and I think are reasonable in relation to this study.

One suggestion made in the last chapter is number controls through transportation, that is an attempt to check the tourist flow into the island by not allowing more visitors than it can take care of. This is, however, only a short term proposition, and it is thought of only as a control to give the inhabitants more time to adjust to the growing demand for accommodations. I would have to say that at the present stage, the island could not afford more than 100-150 visitors per day, and that is a very high estimate considering the relative lack of important tourist accommodations like restaurants, and transportation.

Considering that the influx of tourists will be higher than the island can presently take care of, expectations are that the villagers will feel the pressure of tourism and a building activity will follow with results as generally noted in the last chapter. It is important therefore, that apart from transportation control, some long run solution must be sought which will give the island both the financial benefits and the increased awareness that will come as a result of the meeting of different cultures, while at the same time avoiding the bad effects of tourism.

What do tourists want on Siphnos? Chances are that they have heard about the island and expect little in terms of night life; they certainly, however, want the contact with the natives, the freedom to walk around and look at the architecture, or the natural beauty of the island, the chance to sit in the sun and munch grapes or figs, the possibility to go swimming at any time without a tremendous difficulty in transportation, and the opportunity to search for, and find remote areas, small spots for swimming, or sitting around, that are their own discovered havens.

What can the natives expect from tourists? Again, apart from the money, they can benefit from the contact itself, from finding out about things unknown to them, but they can also want some privacy, some respect for their own way of life, and the chance
to show that they also have a culture worth preserving and actually reinforcing.

To reconcile the two tendencies, it is evident that some separation must be achieved between the two elements, separation that is not rigorous, but rather on a low level so that contact can be achieved on higher levels if so desired.

As I said before, to avoid the random and unplanned building activity that follows tourism, the villages themselves must be considered national monuments, and special areas must be designated as tourist sites to be developed and used.

What should be the characteristics of such a site? The first and most important needs are an immediate accessibility of the sea, and proximity to the main villages of the island, Apollonia, Catavati, or Artemon. Since most of the tourists' life is centered around the sea when on those islands, proximity to the villages may be only in terms of an easy transportation system that would allow quick movement from the tourist area to the village. Now, if this is left at that we have nothing but a de facto segregation of the two elements with contact only minimal and far apart.

So, the tourist site must not only include accommodations for tourists on a completely remote area, but must be placed in an area already relatively settled so that a core of Siphniots can exist. With the building of the tourist site, this core must be given the opportunity to expand itself, thus the tourist accommodations must be supplemented by accommodations for the villagers, or rather for new villagers, and the two must be integrated in such a way that there is no particular difference between the Siphniot houses and the tourist site. In this way, what should come to being would be a new village which would respond to the island life, but would offer also what the tourists ask for, some sort of a town center with restaurants, bars, coffee houses, souvenir shops, clothes shops, and some sort of tourist area for water sports, etc.

The accessibility of this area from the villages is important, but it is also important to have it accessible by sea with a small
harbor both for ships of the line, and especially for yachts that might stop there overnight, for supplies, or even for longer periods of time. For purposes of dirt and water pollution by the ships a separation between the beach and the marina, or harbor must be achieved, probably by even keeping large boats completely out of the area.

One area that satisfies all the requirements mentioned is the small community of Fairos in the southeast part of the island. It is composed of a small number of houses, set in a roughly semicircular way around a small bay open directly to the South. The houses are built almost on the beach, and are protected from the predominantly northeastern winds by a low hill behind them. A small quay already exists which can accommodate the few small boats that are likely to land in the area, and there is a small adjacent bay which could easily be transformed into a marina. Finally, there are two roads linking the community with the central villages, both, however, in very poor condition.

Now how can the site be transformed, built up, so that it will respond to the various necessities mentioned? First of all the structures-units must allow for three different types of visitors: the ones that will stay for a short period of time (less than a week) and who could be basically accommodated in a small hotel, the ones that will stay for more time (one to four weeks) and who would prefer fairly private bungalows-units with a few more comforts than simple rooms, and finally the ones who will stay for more than a month and would therefore be happy to rent a house for the duration. In addition to that some allowance should be made for house buying, either by Siphniots who would want to move into the new village, or for anybody else that would want a vacation or even a permanent residence in the area.

What are some of the initial numbers one should design for under the present conditions in Siphnos? This question is very theoretical, assuming that adequate provision is made for further growth of the site, and is based on the economics of construction, and the present needs of the island, rather than
on the final optimum size of the village. I think that based on the expected numbers of tourists, as well as the natural growth due to the building of the village itself, the original plan should allow for about 250 beds divided into three categories as follows: a hotel with about 50 beds divided into single and double rooms, bungalow-units with about 120 beds, and private houses with about 80 beds. In addition, other general facilities must also be created from the very beginning: restaurants, shops, coffee houses, communications center (telegraph, telephone, mail), and possibly some simple recreational areas: tennis courts, etc. Finally, the beginnings of a marina in the adjacent bay could be created with an access road from the new village.

Of major importance is the transportation system, and for that one of the roads leading to the village would have to be improved. Simultaneously electrical and telephone wires would have to be extended from the central villages to the new one, while the water supply would be provided by a well and pump at the village itself.

I mentioned before that a core of Siphniots live in the area, and they are to be largely both the caretakers and the major beneficiaries of the whole project. Except for specific jobs that would require special skills, the villagers would have first choice on the new jobs open in the community: shopkeepers, hotel work, restaurant jobs, with the remainder of the jobs taken up by newcomers from other parts of the island. Simultaneously, they could buy shares in the whole project, eventually owning the whole site, which in the first place would be built either by a private company or by the government. In this way the development would belong to the community and its workers, and that would provide an additional incentive for a better running of it. No doubt the conditions of the financial agreement would have to be elaborated further than this, especially in relation to the private houses, the final outcome, however, should be that ownership of the land and most of the buildings should come down to the Siphniots themselves, after initial profits for the developer.
The final and quite important question is how can the seasonality of the tourist trade be changed, or else how can the new village be transformed into another capacity in the winter. Since schools follow an opposite seasonality than summer vacations, it would be easy to allow for a possible school for tourist trade in the community during the winter. However, the tradition for campus schools does not exist in Greece, and would be very difficult to accept in the sense of students moving to the area and living there throughout the winter. It would be possible, however, to conduct a sort of community educational center with classes on subjects interesting to the Siphniots and their life. Those classes could range from language lessons, to workshops in leatherwear, one of the island's products, and in spite of a traditional distrust to so-called foreign ideas, I think such a possibility could work. Still, the greatest hope would be that a change in attitudes about vacation would destroy the seasonality in the first place, and would allow for year round occupancy of the community.
In this chapter I am trying to explain some of the reasons leading to the final design of the project. Necessarily many decisions, especially small scale ones were based on intuition or a vision of what the various structures should be like, as well as on the basic considerations controlling the whole project. This is therefore a discussion mostly about the basic site planning, and the ideas or principles that led to it.

There are three basic ideas that controlled the design from the beginning. The first is that as little as possible of the existing village would be changed and that the existent buildings would form the core of subsequent construction.

The second, a corollary of the first, was that the new construction would conform as closely as possible to the existent formal elements in the area both in scale and in building materials.

The final was that the new village present a formal structure very similar to other Aegean villages, yet within this structure allow for the freedoms and comforts tourists would be used to and expect. The reconciliation of those two last requirements proved, as expected, to be a very difficult part of the project.

The first step in the design was to examine the site and find characteristic points that would accommodate specific functions. Some of these functions and the reasons for their placement are shown in the first drawing. Because of the fairly steep slope on the eastern part of the bay which would both protect the houses from the prevailing northeasterly winds, and also allow very typical Greek forms to be created, the basic village was placed in that area, while a more structured unit group was placed on a less steep slope on the west to provide a more quiet environment, visually and acoustically. In between the two main sides, on the flat area was the natural place for some sports fields as well as for the basic service areas:
motorcar service, hotel registration, communications, in
general the town center. Related to the town center are also
shops, the hotel for short term visitors, a restaurant and the
village church. To provide variety as well as distinct areas of
activity this center was designed as a series of interconnected
small plazas, each having a different character and allowing
different activities. Thus the arrival plaza opens up to the
road and the countryside, but leads through an archway into
the main plaza which opens to the sea and is the focal point
of the whole project, or else through another archway it leads
to the church plaza which is connected with the western units
by a pathway.

The main village area was the most difficult part of the
design because at the beginning my intention was to create
some zoning system which then would allow local builders to
come in and build within this system and according to their
own knowledge and traditions. This, however, might lead to
structures that would prove too alien or too uncomfortable for
the visitors, so I decided that the houses themselves would
have to be designed within a predetermined set of constraints.
Those constraints as seen in the second drawing are:

1. A set of zoning platforms that organize the slope of the
hill in a way that will allow building in successive heights,
thus giving every house a view to the sea. Those platforms,
shown by the thin dotted line in the drawing, have their highest
point at the water reservoir, the top of the hill, and get lower
as they move towards the west and south.

2. A diagramatic organization of the pathways suggested for
the village, indicated by the heavy dotted line on the drawing.
The basic pathway is obviously the high one which forms a sort
of spinal cord at almost the top of the hill, and feeds onto
crossing pathways that lead to the center as well as to the
countryside on the East. As would be, with the houses on either
side of it, the major outer edge of the village, but subsequent
building could happen beyond it to a very limited extent.
Both those systems that have been set up must be seen as only diagramatic indications of a town plan. They are hardly sacrosanct and they should serve as directions for the designer of each block who should view them as guidelines setting up the character of the place rather than as absolute limitations. To make that more clear, the houses designed, as shown in drawings 7-9, were based on the same zoning guidelines, but allowed a large amount of changes according to the specific needs of each house.

Similarly to the site guidelines, the houses would also be designed according to a basic diagramatic plan, which again could vary according to the special needs of each house. This diagram, which is shown below, is based on the typical Aegean house, but has been somewhat developed and enlarged to allow for a somewhat more comfortable existence than the usual village house. At the same time, because of the freedom allowed in developing this diagram, I think that the end result could be as rich, if not richer, than the existent order.

![Diagram of house design](image)

Although I have only designed part, I expect that the whole village could be designed according to these guidelines and then the basic drawings would be given to local builders who would use their familiar materials and methods to build the houses elaborating on the basic ideas. That is, although dimensions and basic layout would be the job of the designer, it would be up to the builders
to provide the details, the decorative elements and the smaller characteristics i.e. niches in the walls, fireplaces, chimneys, stairways, subject always to the approval of the designer.

Turning to the units in the western part of the bay we come to a much more formal and specific group of buildings. This part is designed for middle length occupancy: one to two weeks which would be mostly spent on the beach or on the village, rather than inside the unit. Thus, although I have tried to make small plazas and sitting areas around the complex, as well as give private balconies to all the units, the units themselves are fairly small so as to encourage life outside. The orientation here is mainly in getting the morning sun both because of the slope of the hill, and also because I expect that, unlike longer term residents, the short term visitors would be more likely to spend evenings at the village center as well as at the beach. Finally, because of the fairly gentle slope, and the interest in giving to each unit a view towards the sea, the design of this part is much more direct and simple than are the houses on the East. Each unit is a double one with a private bathroom, and it is possible that some units could be enlarged by interconnecting doors to allow occupancy by larger groups.

The third large grouping in the project, shown in drawings 3-4, is the hotel complex which includes the center of the village. This is again a group of smaller semi independent units set up so that they enclose the main plaza. Underneath the hotel units, there is space that is intended for shops and other services needed in the town, as for example a pharmacy, a communications center and an open air restaurant. The hotel registration area is part of the arrival plaza rather than attached to the hotel units themselves, because I expect it to be the main administrative center for the village as a whole. At the same time, the pathways that cross the hotel become part of the general pathway network so that there is no separation between the two and the transition from the public to a semiprivate area is only shown by the change
in the pavement textures. This attempt to allow the public areas to go through a transition stage before they become private runs throughout the project except in a few cases, especially in the western units where the semiprivate nature of the whole group makes the transition less important. Similarly, although the center of the village is at the main plaza, I have made an attempt to make small open plazas in other areas, especially at the crossings of pathways, which then could become meeting places as well. For example, as shown in the upper right area in drawings 7-8 space has been allocated on both levels for a small coffeehouse, and another restaurant which would also have night time entertainment would be placed at the southeastern end of the village so that any noise generated by it could be directed to the sea, and also so that it would form an edge point for the village.

There is no doubt that there are a lot of decisions not covered in this brief description of the project. To cover all of them would require a much longer discussion as well as the whole series of preliminary drawings to prove that "I tried many other ways and it would not work." Also, some decisions were made to comply, though fairly loosely, with building codes pertinent to hotels and tourist developments in Greece. I can only hope that in this short description I have shown some of the considerations that led to the final design and that the drawings can themselves help to answer many of the questions that would naturally appear.
CONCLUSION

This part includes a few conclusions drawn from the whole project as well as some criticism which should help in subsequent work. Though this project is called a thesis it is nothing more than another semester's design work and though the presented product is final, I am sure that there are a lot of subsequent steps which can be taken to improve on it.

This thesis is divided in basically two parts. The first one is the theoretical one which considers tourism in Greece and its effects, and makes suggestions as to how these effects could be improved on, or avoided. I think that those suggestions, though not completely elaborated and maybe somewhat utopian, are still possible and would do a lot to alleviate a problem which, though not acute yet, may soon prove to be very difficult. As I said before many of the suggested ideas have to be much more elaborated and cleared before they can be put into effect, but that will entail much more information on relevant subjects. As they now stand these are general proposals whose purpose is to identify a problem, and suggest basic directions of solution rather than to try to indicate all the specific detailed remedies for it. I think that the very generality of the solutions makes this part successful as it sets up the conditions and an atmosphere that makes the second part of the thesis possible.

This second part, which is concerned with the design of a new type of tourist development, is I think, also successful to the extent that it goes. In other words, I think that the project presents a fairly competent architectural supplement to a new approach to the tourist question. And here is the basic criticism at the same time. The solution remains within the conventional limits of design while a more radical approach would probably have been preferable. One of the major difficulties from the very beginning was the reconciliation of the new structures with
the old, and I think that has been successfully done, but at the expense of allowing the existent order to dictate to a large extent the new one. It is true that changes have been made, and I think that many of the organizing principles are presenting the beginnings of a different, and better approach towards zoning systems. On the other hand, it might have been preferable if the final product was radically different from the existent order, if the changes were so strong that they would present an entirely new approach to the problem, rather than remaining halfway between the two.

I think that beyond this major criticism all other criticism would be very small and unimportant. There is no doubt that there are problems in the final design which could be solved, and improvements that could be made. Considering, however, the size of the project, I think that those improvements would prove minimal and without much effect on the overall design.

Finally, this project was important to me because it allowed me to put emphasis on and to explore some questions which have interested me for a long time. Though this work will certainly be continued for a much longer time, I think that this thesis has set the foundations and the direction which I hope to follow later.
GRAPH I. MYCONOS 1966

- - - GREEK TOURISTS
- - OVERNIGHTS
--- FOREIGN TOURISTS
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GRAPH II SIFNOS 1966

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**TOTALS PER YEAR**
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- 1966: 10393 - 35369
- 1967: 10473 - 31304

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TABLE II
SIPHONOS

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**APPENDIX.** On a regular week in 1969 (August) the boats scheduled to travel to Myconos and Sifnos were:

**MYCONOS:**

"LETO" Departing every day 9:00 A.M.

"OIA" Departing every day 5:00 P.M.

"EPIRUS" Departing Monday 4:00 P.M.

"NIAOULIS" Departing Monday 1:00 P.M. - Saturday 1:00 P.M.

"CANARIS" Departing Tuesday 1:00 P.M.

"ODYSSEUS" Departing Monday 8:00 P.M.

"MIASON" Departing Wednesday 6:00 P.M. — cruise boats

"ORPHEUS" Departing Saturday 2:00 P.M.
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               | Saturday 5:00 A.M.           |
| "CALYMNOS"  | Departing Tuesday 10:00 A.M.  |
| "CANARIS"   | Departing Monday 11:00 A.M.   
               | Thursday 2:00 P.M.           
               | Saturday                    |
A TOURIST VILLAGE ON SIFHNOΣ C A S
2/ SITE PLAN
MIT JUNE 1970
A TOURIST VILLAGE ON SIFHMONS
4/ HOTEL SECTIONS
CAS
MIT JUNE 1970
A TOURIST VILLAGE ON SIFNOS
5/ UNITS WEST PLAN
C A S
MIT JUNE 1970
A TOURIST VILLAGE ON SIPHNOS
6/ UNITS WEST SECTIONS
CAS
MIT JUNE 1970
A TOURIST VILLAGE ON SIFNOS
9/ HOUSES SECTIONS
CAS
MIT JUNE 1970