making buildings and communities which really live

TOURISM IN ANDALUSIA

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1. This Spanish hill-town is an example of pattern language.

This project is intended to solve the present deterioration of the Spanish tourist areas. We propose to undertake a combined program of research, development, and construction, which will create a workable model for the repair of all those Spanish coastal areas which are now being destroyed by tourist development. Our work will have three main components:

The process
We intend to develop a planning and building process which can be applied to all Spanish tourist areas, both for the development of new communities, and for the repair of existing ones.

The new site
We intend to apply this process to the creation and development of a functioning tourist resort on a 10 hectare virgin site outside Malaga. This will have 112,000 m² of construction at the end of seven years.

The repair site
At the same time, we intend to apply this process to a 10 hectare sector of an existing tourist community, to show how the process will also be able to repair a damaged environment under normal economic conditions. We intend that this sector will be in its 'repaired' state by the end of seven years.

The essence of our project lies in the interplay among these three components. We shall develop *the theory* in our work on the process, at the same time that we develop *the practice* in our work on the construction sites. Both will be going on, in parallel, for

the full five years, so that the theory of the process can benefit from the practical experience in the two construction sites, just as much as the development in the construction sites is guided by the theory of the process.

It is our fundamental assumption that the reason for this devastation lies in the processes of development and planning, which are now generating the environment. We assume, therefore, that the only kind of solution to the present process which can solve the problems, is one that goes to the very root of these processes, *and specifies alternative processes which will do a better job.*

In short, we intend to leave the Spanish government with the following:
1. An archetypal tourist resort community, where this process has been applied in its purest form, under government control.
2. A sector of Malaga, or some other coastal community, where this process has been applied to existing real conditions, and has demonstrated its capacity to repair the existing environment.
3. A process which has been demonstrated and effective under real conditions, and which can therefore be applied throughout Spain.
4. A team of architects and planners who have been trained by us, and are in a position to implement this process, and continue its development.
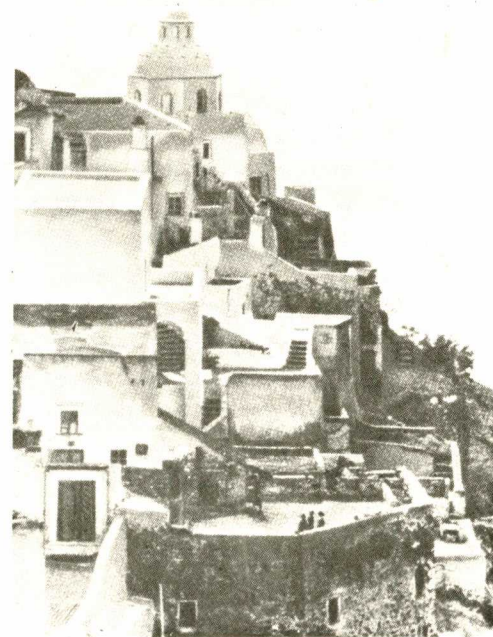
The process
The first component of our work is the development of the process itself. As we have said already, the process will be developed and presented in such a way that it can be transplanted from our two test sites to other sites all over Spain with only minor modifications. And, as we have said, this one process will encompass both the problems of new development, met on the new site, and the problems of repairing old development, met on the repair site. It is a fundamental part of our theory, that these two processes are indistinguishable, merely facets of a single larger process.

Our work on the process will be based in large part on the theories and procedures developed in the last eight years, at the Center for Environmental Structure. This work is presented in the various appendices which are listed below and are available from C.E.S.

1. *The timeless way of building*
2. *A pattern language*
3. *The Oregon experiment*
4. *The Canary Islands project*
5. *The Modesto clinic*
6. *The life of Berkeley*
7. *Grass roots housing*
8. *The experimental building system*
9. *The Walnut Creek project*
10. *The architect-builder*

During the period 1975—1980, we shall define the process for the Spanish tourist problems in several new volumes — possibly three or four — which will deal, in their totality, with the development of new and old communities. These volumes will not only cover the problems of tourist development in Spain, for the Ministry of

Information and Tourism, but will also, simultaneously, contribute to the world wide problem of urban development, by providing models for the more general case: the development of any town which is satisfying and human.

The process itself will hinge on seven features which distinguish the process from the present standard processes of architecture, construction, planning and land management.

1. The pattern language
2. Particular patterns for tourist areas
3. Small increments
4. The process of repair
5. The architect-builder
6. User design
7. A new building process

In order to make it clear to the reader, why these seven features are necessary, in our opinion, to any satisfactory solution to the problem of tourist development, we shall now present them, one by one, together with an explanation of the particular problem which they solve.

1. The Pattern Language (appendix 1, 2)
The tourist areas share, with most other parts of the environment in our industrilized society, the fact that the environment is not properly based on human needs. The pattern language provides a system of 'patterns' which define those general spatial configurations which are necessary to a well-functioning environment. The patterns are not dogmatic, but empirically based, and capable of continuous revision and improvement, 1.

The pattern language will be used to replace the present planning and building codes, and the process of administering this language will replace the present administration of planning and building codes.

2. The patterns for tourist areas (appendix 4)
The present tourist areas suffer not only from the general deterioration of . the environment but also, from the fact that, in one sense, no one knows what to do while on holiday. In short, the actual function of the tourist areas, and the kinds of spatial arrangement which are particularly needed in tourist areas have not been well defined.

We have, and will continue to develop, a particular collection of patterns for tourism which try to go to the substance of the matter, and provide an adequate, nourishing social and physical environment for people who are on holiday.

The tourist patterns, or some version of them will be included in the general pattern language defined above, and will in part change not only the spatial order of the tourist areas, but also their activities.

3. Small increments (appendix 3,7)
One of the reasons that the tourist areas are devastated is that the actual increments of construction are so large. They are either very in physical bulk (15 storey hotels), or very large in extension (developments of hectare upon hectare of tourist bungalows). We have established beyond any doubt in our previous work that the environment can only be brought to order when its growth takes place in small increments. Specifically, we believe that no one increment of con-

struction should ever include more than 10,000 square feet, 2.

This does not restrict the total development that can go forward in an area. It simply means that instead of building one hotel of 1,000,000 square feet, it is necessary instead to build 100 separate buildings, on different sites, of 10,000 sq. ft. each.

We intend to make it a fundamental restriction on all development, that it must go forward in increments of 5–10,000 square feet, at a time.

4. The process of repair (appendix 1,3,6)
One of the reasons tourist areas are devastated is that each new development destroys more land, and no new development helps to improve the previous situation, nor to solve the problems created by earlier developments.

We have established, in our research, that no environment can maintain itself in a satisfactory state, unless every act of construction is actively helping to improve the situation which exists.

This is particularly relevant in those tourist areas which have suffered massive damage and will require repeated and continuous doses of repair before they return to being the healthy and well functioning parts of Spain they once were.

We shall implement a process, then, in which every act of construction must play a part in helping to repair the damage done by previous acts of construction, or to repair those unintentional mistakes, left as fall-out among the various previous projects.
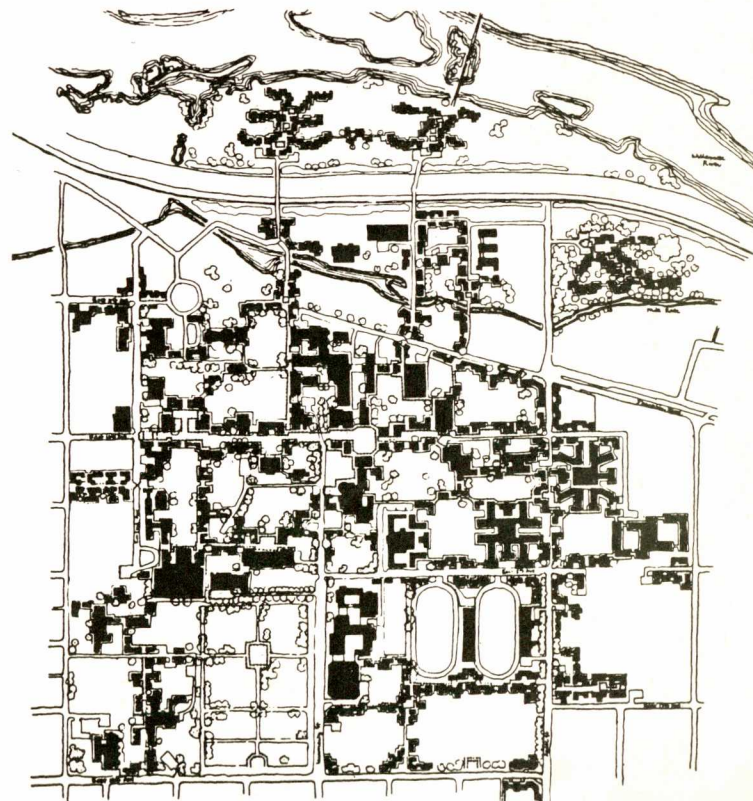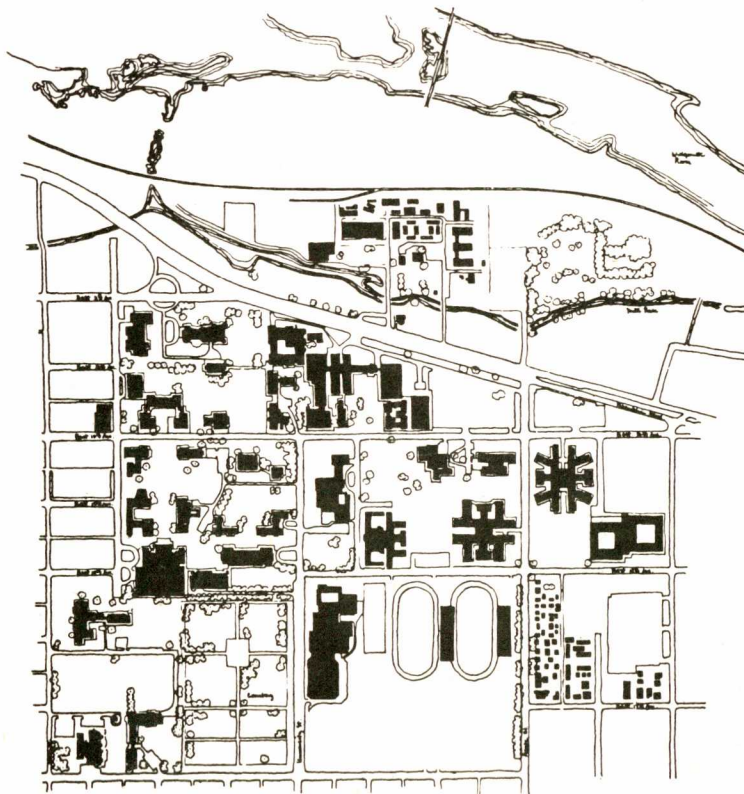
2. In the University of Oregon master plan, C.E.S. implemented theories of development increments of under 10,000 square feet. The university's original master plan on the right consists of large-scale development; the plan on the left illustrates the alternative effect of smaller development increments.
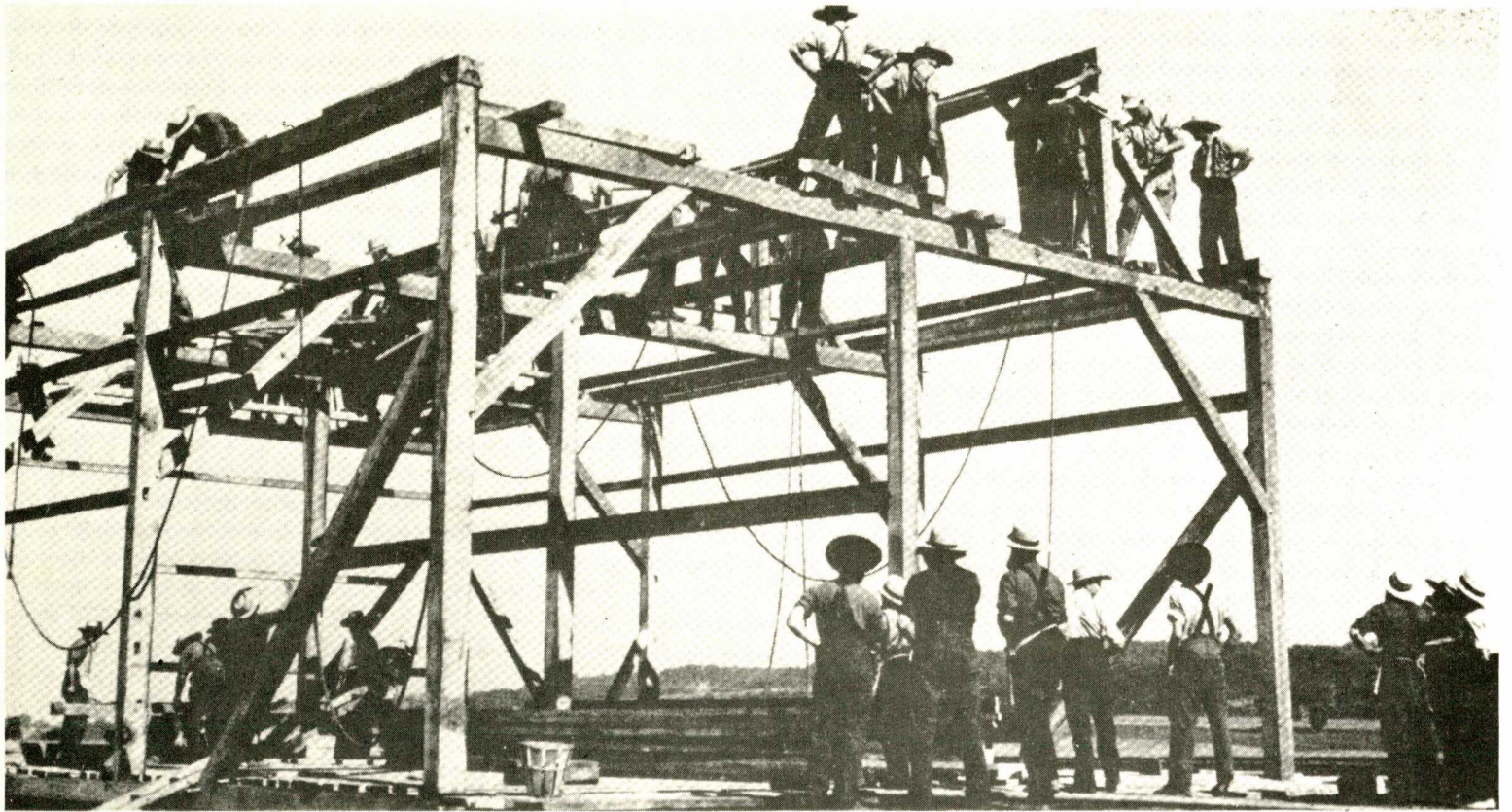
3. The 'architect-builder' is envisioned as a central figure with responsibilities for design and construction in a small sector of the community.

5. The architect-builder (appendix 6,7,8)

One of the reasons why tourist areas, and indeed all other areas, are so shallow, so mechanical in character, and so badly made as buildings, compared with the traditional buildings of the past, is that the functions of the architect, engineer, draftsman, building inspector, and contractor, subcontractors, and labourers are all entirely separate.

We have strong grounds for believing that good environments can only be made when all these functions are combined in one person – a modern kind of 'master builder.'

We shall therefore initiate a process in which a master 'architect-builder' is the central functionary, in which the responsibilities for design and construction are combined in this one person, and, MOST IMPORTANT, in which the project itself generates a continuous, and growing stream of people who possesss the necessary combination of skills to do these two jobs in one, 3.

6. User design (appendix 1,3,5,9)

One of the reasons that tourist resorts are so alienated and abstract in character is that the people who work in them, the actual hotel keepers, inn-keepers, the shopkeepers, and the tourists themselves, no longer have any active relation to the process of shaping the environment.

We have established, beyond doubt, that an environment can only come to order when the people who are using it, making it work, are actively engaged in the process of designing the buildings which they use, and also have the power to design, and change, those parts of the public land which lie between the buildings.

We intend, according to the patterns on tourism, to encourage the growth of small inns, with small local inn-keepers, to encourage their participation in the designs for their own buildings, and in their repair; and to give them the power to plan and change the public land between their buildings; and we hope, also to include the tourists themselves in some measure of participation, both in design, and construction.

7. A new building process (appendix 8)

Finally, one of the most basic aspects of the environment in a tourist area is the actual construction itself. Industrialized construction – steel, concrete, plate glass – have done enormous damage to the local environment of Spain. These forms are not only inappropriate, but also quite insensitive to process of design, and incapable of retaining the personal imprint on the builder and the user.

For the last few years we have been developing an entirely new building process, made of cheap, durable, simple materials, conceived in such a way that the building can grow organically, from the ground, without sophisticated plans or working drawings, under the guidance of an architect-builder, and even with the help of users.

We shall develop a version of this building process, appropriate to the south coast of Spain, and use it consistently in our own main building project, and try to encourage its use, also, in the surrounding areas. It relies on simple tiles, vaults whitewashed plaster, wood in small quantities, arcades,

columns, all very much related to the traditional architecture of Spain.

The new site

We begin with a short description of this place. 4

Imagine an uninterrupted wild coastline with the nearest road perhaps 600 meters from the water, parallel to the water's edge, fingers of development, stretching between the road and the water's edge, at one kilometer intervals, with open country in between the fingers. One of the fingers is ours. This finger is densely developed, there are no cars, only delivery vehicles, people everywhere. There are no streets or paths as such – only courtyards, so that the movement of the people passes through these courtyards, filled with flowers, fountains, garden.

The courts between the inns are where the life and everyday activity occur: there will be cooking there and eating, workshops half out in the open, cafes, music, shops and shopping, smells of food, half private stairs and terraces which reach down to the courts from up above, where people sit more privately, and even sleep at night under the stars.

Round the courtyards there are inns; low buildings, never more than three storeys high, and often two. Each inn is small, and autonomous; it is run by a family, and has perhaps a dozen beds. Each inn has grown, in its own time, designed and partly built by the people who run it; the inns and courtyards altogether have a rambling, carefree character. The materials are very simple:

4. A C.E.S. proposal for a similar resort development in the Canary Islands.

whitewashed, plastered brick; vaulted floors, and roofs.

The community not only has the principle that all the people who are working there have some connection to the process of designing it and planning it; but a similar arrangement also extends to the tourists. All the tourists who come to stay in this community must work for at least one or two hours every day while they are there. This work gives them a chance to meet, to be together in real situations which can lead to friendship, eating, dancing . . . but above all it is a process by which they have a responsible, not predatory role, in the community itself.

They are free to choose their work; some may work in baker's shops, in building, fishing, arts and crafts, anything, in fact, which is different from the work they normally do at home.

But above all, the central work which will occupy the great majority of them is the care, and perpetuation of a most won- derful garden set at the heart of the community, with trees, flowers and running water, a paradise, a place to dream, an easy, comfortable simple place which can become a wonder in the south of Spain. This garden may need hours and hours of work in it — and all this care will be given to it by the people who come there to stay, under the guidance of a few head gardeners: so that the people who come down to sun them-selves, to swim, to drink, for love, for friendship, start at the core of their holidays with the community to make this a paradise, and spend an hour or two each day helping to create the beauty that they come there for.

For this component of our work, we require that a site of 10 hectares be found, owned by the government, with the under-standing that the government will undertake a tourist resort development there, and that the resort will include a mixture of govern-ment owned and privately owned inns; intermixed with all the usual public services, facilities, shops, laundries, bars, and restaurants; operated under a single policy, which will leave the individual inns partly autonomous, and partly responsible to a single overall management.

The repair site

Let us assume now that the 10 hectare site which is chosen for *repair* includes a usual mixture of roads, hotels, parking lots, bars, amusements, pensions, private houses and apartments, beaches, a few vacant lots . . .

We shall show, now, that the process which we define is capable of grafting on the same structure of courtyards, pedestrian areas, public outdoor rooms, outdoor cafes, gardens, tourist involvement in day-to-day activities, small innkeepers, as will exist in our main project: but of course, in the existing sector, these characteristics will only come to exist partially, and will be modified by the mixture of old environments which they surround and are surrounded by.

We shall show that by constraining all new growth within this sector, and by initiating certain special forms of new growth ourselves, a new environment is born: certain streets get closed, some get partially filled in with smaller buildings, large hotels have smaller hotels and inns grafted on to them, in such positions that the same beautiful courts and gardens and walkways appear within the complex of the buildings: walls grow, gardens flower; fountains are created; outdoor rooms and balconies are added on; arcades are grafted onto the edge of the existing walls and rows of windows; canvas awnings help to create outdoor environments, alongside, and inter-twined with the existing ones . . .

And, as we shall show all this repair is only effective when the planning process is intimately connected with the building process: so that the same kinds of simple local materials, cheap but beautiful, the same connection between the users and the process of design, the same connection between the architects and artesans, that make the main resort a beautiful and lively place, also succeed in taking over all the horrors of an overdeveloped tourist hotel sector and gradually transform it and make it part of the old, original heritage of Andalusia.

Finally, in the new site we have described the possibility of building and growing a fabulous garden, so beautiful that it gives its name and character to the whole site. In the repair site, we seek a similar focal point, but much more dense and urban in its character: an area which grows naturally from the activities which now exist within the site, and intensifies them violently to create a clash of forces and activities that will give the entire site their name. It might be a circus, literally, a continuous circus; it might be a market, very dense; a riding school; it might be the intense meeting ground for Andalusian gypsies and their music. What-ever exactly, we cannot tell until we see the site itself; it must grow naturally from what happens there.

For this component of our work, we require that an identifiable sector of Malaga, or one of the other nearby towns, be set aside as a redevelopment sector, with the understanding that all planning and building codes, all ordinances which concern the use of streets and the control of private land, be replaced with a new system of ordinances, based on the process described below.

We shall look for a sector in which there are at least some vacant sites; and we shall assume that most of the development will come from private individuals and develop-ers. However, we seek to supplement this with government funds for construction in three categories:
1. Government insured loans for private developers building within the project area.
2. Funds for certain special projects which might be so experimental that private developers will not undertake them.
3. Funds for development and improvement of the public land between buildings. This fund will ultimately have to come from local taxes: but before the city accepts the process we shall need to rely on government funds.

Organization

There will be two levels of organization:
1. One planning group, responsible for the entirety of both sites — a total area of 20 hectares.
2. Eight builder's groups, each responsible for a neighborhood of 2.5 hectares.

The planning group will undertake all theoretical work needed to define the process, will oversee the planning and growth, both of the new site, and the repair site.

Each builder's group is associated with one particular neighborhood, of about 2.5 hectares. While a neighborhood is under construction, the builder's group will include about six qualified architect-builders, each with an apprentice. When a neighborhood is in a steady state — completed but in process of repair, its builder's yard will include one or two architect-builders.

It is an essential part of our process, that each builder's group is permanently attached to that neighborhood which it helps to build and repair. In this sense the builder's yard replaces the architects, planners, building officials, and local construction groups.

When a neighborhood starts construction, the builder's group will work at full capacity for about three years. Then, once the builder's group has completed the construction of its neighborhood, it does not undertake other works, but shrinks down to its stable steady state, in which it will be responsible for ongoing repairs of the neighborhood, for the remainder of its life.

Each builder's group is fiscally autonomous, and must include at least one qualified architect, under present law. Each builder's group is responsible to the overall planning group, for accepting the processes laid down by the planning group. However, provided that it works within these processes, each builder's group is otherwise free as far as details of design and construction are concerned.

It is an essential part of this theory of organization, that among the greatest present evils of the architectural practice, are the conditions under which architects and builders build buildings which they are then free to leave. Architects are almost never required to be in daily contact with the buildings they create — and this is, of course, partly responsible for the poor quality of buildings. Under the conditions which we describe here, the builder's group which is responsible for construction, is located *within* the area where it takes responsibility for construction, so that the builders are faced with a day-to-day accountability. We believe it is inevitable, under these circumstances, that builders will take pride in their work, and will do it well.

Further, the builder's group is a permanent part of the *environment,* just as the processes of growth and repair are a permanent part of the structure of an organism, and is anchored in a central physical locus, which we call the builder's yard. The idea of continuous, ongoing construction and repair is concretely reflected in the physical fact that every neighborhood has its own builder's yard.

Before we give the overall growth rate of the construction on the new site and repair site, we shall now state the basic assumptions concerning density and population, and the capacity of builder's groups, as a preliminary to the overall arithmetic.
1. We assume an operating density of 200 persons gross/hectare (including roads, parking, and public open space).

2. We assume that the new site will have an area of 10 hectares.
3. We assume that the repair site will have an area of 10 hectares.
4. We assume that the final population of the new site will be 2000 persons.
5. We assume that the final population of the repair site will be 2000 persons.
6. We assume that there are 50 m^2 per person, gross. (This is compatible with the assumption that each tourist room has a total gross area of 75m^2, that it accommodates 1.5 tourists on the average, and that there are 0.5 local inhabitants for every tourist room, and that this requires a further 25 m^2.)
7. We assume that each neighborhood has a population of 500 persons total, and an area of 2.5 hectares (average).
8. This leads, in turn, to the assumption that every neighborhood of 500 people contains a total of 50 (500) = 25,000 m^2 of construction, per neighborhood.
9. This means that the building density is 25,000/25,000 = 1.00.
10. We assume that each builder's group has the equivalent of six full time builders when operating at maximum growth, and two full time builders when operating in the steady state.
11. We assume that each architect-builder can design and build 1500 m^2 per year.
12. We assume that each architect-builder can train one apprentice while he is working, and that this apprentice will himself be ready to function as an architect-builder after one year's training.
13. We assume that a new group of architect-builders is able to train apprentices, only when they have themselves been in operation for a year.
14. We assume, also that each neighborhood has a natural cycle of slow growth, rapid growth, slow growth, with repair and infill, leading finally to a stable state of repair and reconstruction.
15. For a neighborhood in the new site this cycle looks like this: 3000, 9000, 6000, 1000, 1000 . . .
16. For a neighborhood in the repair site which, let us say for the sake of argument, already contains 20,000 m^2 in 2.5 hectares, the cycle looks like this: 3000, 2000, 1000, 1000, 1000 . . .

Under these assumptions, the following tables show how the growth of the two sites can work and be compatible with the training of new architect builders and the formation of new builder's groups.

From a legal and fiscal standpoint, we propose that the Center for Environmental Structure, in some properly constituted Spanish version, undertake responsibility for the planning process, and for two builder's groups, one in the new site, and one in the repair site.

We propose that the remaining six builder's groups be formed, as indicated on our schedule, and that they be autonomous, both for their operations and in regard to fiscal control. However, we require that each of these autonomous builder's groups be formed under conditions where it is understood, as a condition of their contracts that they be required to conform to the process laid down by the planning group — in short by the Center.

Since this procedure is more complicated fiscally, than it would be if the entire project were administered by the Spanish CES, we reaffirm our belief in the importance of decentralization. The quality and soul which the environment so desperately needs, can only come about when small groups of men and women are sincerely and centrally devoted to the tasks of building — not with the administration of large corporate ventures. For this reason we believe the environment created by theis project will be better if it is created under the decentralized situations which we describe.

There is, finally an important theoretical reason for this type of organization. The process we propose is intended, ultimately, to be copied and multiplied throughout the coastal areas of Spain. If all the buildings in the projects are built directly under our control, this would only prove that we, as a specific human group, are good architects. In order to test and vindicate the value of the *process* — not only the individual architects involved — it is essential that we allow substantial portions of the project to be built by other groups — and to show that, within the process we define, this will create equally beautiful and satisfying results.

Budget

There are nine groups involved: one planning group, and eight builder's groups.

We propose that the Ministry of Information and Tourism should support the planning group, and one builder's group in the new site and one builder's group in the repair site: and that it should also pay for, and operate, all those buildings which are built by these groups in these two neighborhoods.

Secondly, we propose that construction in the remaining six neighborhoods (three in the new site, and three in the repair site), and the six builder's groups needed in these neighborhoods, should be paid for by private investment.

We consider, then, that the project has essentially two overlapping phases. First, a phase paid for entirely by the Ministry of Information and Tourism; second, a phase paid for by private investors, in which the work of the first phase is extended and tested under the conditions of the free market. Thus:

Phase 1: 1975–1981
Planning group, and construction in two neighborhoods, paid for directly by the government.
Phase 2: 1977–1981
Construction in six neighborhoods paid for by private investment, with some kind of government subsidy, or loan insurance. This arrangement to be negotiated towards the end of 1976, as the results of Phase 1 begin to be clear.

A.D.

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