- A. There is a really important phenomenon, which I'll try to XX communicate to you; and what is more interesting about the whole issue is that people, and especially architects, either ignore it or they don't pay attention to it, maybe deliberately. So, there is anX urgency for everybody to get in touch with this phenomenon and understand it deeply.
- T. What is this messianic statement again; a phenomenon, which although being of great importance, is ignored by most *Xof the people, and then there is an urgency......
- A. O.K. Keep cool and let me go a little bit further.

 This phenomenon I'm talking about, as any phenomenon, is built simple upon observations concerning the common essential characteristics embodied in some things, and which lack completely from others.

- T. They are such an important cultural and traditional element, we were almost brought up with the theater of shades. It was like another shool on the streets and on the empty lots; almost every night, so much fun, and so great truths xxix were said thriugh the voice of these figures.
- A. Nobody can dispute what you are saying. But, don't tell me taht you, by yourself, are making these figures because you have an emotional link with them. You could take a photo of one of them, there are thousands of them in the books, and put it up on the wall. But you don't. And if I tell you to go to that corner

- and buy some of them, oyu are going to tell me that I'm completely crazy, or even blind; -you'll tell me that they are extremely ugly; it would be like an impious act. And I don't disaggree with you.
- T. When I make these figures I always consult this great book I have. It comprises the best of the old figures; nobody, it seems, is able of doing such nice things today. Then, when I start cutting MAKE one of them, I pay extreme attention on the shape that each piece of the figure has. That's very important. And is but also how they get together to form XXXX a part of the body; and then the whole figure. Because, as these pices are movable, they create an infinite array of shapes on the screen, not only the figure itself, but also in relation to the next figure; the white shapes on the screen. So, I think of this, too. But, the most important, and the most difficult at the same time, is when I drill or cut off very smaal holes within each piece. They are so small, but at the same time they have to have a very distinct XXXX, clear and good shape. But, also the XX; whenever I cut off a hole I always pay attention XX not only on its own shape but on the shape that the space between and next to the wholes has; you see them on the screen, a black and white pattern that shapes the hat and the coat of the figure. And then, when the time for color comes, that's a hell; even it is hard to consult the book. I can never attain the beauty of the colors that we see in authentic figures; that is a mystery how they did it - and I'm sure it was not so hard. And maybe, this subtlety of colors has to do with the material they used to make the figures -mainly camel skin; That's why I never buy ready made figures. The people who make them know are not concern with these issues But now, let's come back to your phenomena.
- A. The phenomenon I'm talking about relies a lot on what you said just now on the geometry of theses figures. The fact that they are beautiful is beyond the issue of liking or disliking them. They are beautiful because of the way they are done, because of the attention that it was given to the shape of each one XXXXXXX

Another example that comes to my mind is the map of Rome made on the 18th century by Nolli. *You can look at the map as an image of the city at that time, but also you can look at it as a really beautiful object by itself; you don't need to associate yourself with the actual place to appreciate the beauty enclosed in that piece of paper. What the relationship between building and open space is; it seems to me they did it under the same frame of mind as you *XX* shape the pieces of your figures, and the holes within these figures......

- A. I better make two points clear to you. First, it is not simply the mere geometry of the bilding; it is that geometry you, y yourself, were talking about, how, when you make something something, you pay attention on the formation of every single thing you introduce, smaall or large, how everything looks just correct on the place you put it. And you realize how different this is from the geometry XXXXXX the american grid system for town planning is based on; there is a definite and explicit geometry there too, but so distant from the geometry we are talking about.

- T. This connection between quality and geometry.... it seems true as I'm recalling things of that specific geometry; they embody, what you call there in Berkeley, "the quality without a name", and also they seem to transcend the issue of subjective liking or disliking. However, I have a hadr time to bring these two things together; when I find myself in touch with things or places which have such a quality, I never recall my geometrical knowledge to analyze them; I just feel it, I enjoy it, I have a great experience. Now, from the other point of view, when I feel like becoming a historical scholar, I get into the ge geometrical analysis of these great buildings, and a lot of interesting aspects get unrevealed. These people they were r really great masters; they knew a lot, and XXXXX the way they were handling the space was KKKXX so simple and so complicated at the same time. But, this is past, now we have to deal with our present mess.
- A. But, although you find both the quality and the great geometry of these buildings undeniable, you just keep the quality for your own enjoyment and spiritual calmness, and you enclose the geometrical properties into your historical papers. You have never thought how we can learn from them, not for any other reason but for just mending our present mess.
- T. That would be really funny if we could start building XX in Thessaloniki buildings which come from the traditional macedonian architecture, or from the neoclassical XXXXXXXXXXX early twentieth century mansions. I hope you are not serious......
- A. You went too far from what I was suggesting. My point was if and what we can learn from what we consider as an undeniably objective phenomenon; if there is a real body of knowledge there

that has to be learned, learned in order to be used and not studied for expansion of general knowledge.

The question is what can you learn from the geometrical properties that the figures of Karaghiosis have, which could broaden your knowledge when dealing with buildings.

- T. So, your are saying that the & different geometrical forms of things of profound quality manifest the same deep geometrical properties, the properties of a good geometry, and that there is something useful to be learned from them and to be applied in our everyday practice on making things.
- T. In such a case what are we going to do with the functions; e everybody believes that function determines the form. And now you tell me to ignore function and to deal with the form of the building only from its pure geometrical aspects...... I realize it's not exactly this; it is that you have to deal with the building from the point of view of these geometrical properties of the good geometry, then the building will be profound and beautiful.

But yet I don't understand how this body of knowledge which will tell you all these things, is going to deal with function; functions are so important.

A. This body of knowledge does not ignore function, function is there..... The main principle, where this body of knowledge upon is based is that if you take care about the geometry of the building, if you take it straight, and correct according to the good geometry, then function is going to happen there appropriately.

XX

- T. Let's say that I believe what you have said so far. But now I cannot really see what this good geometry consists of; I mean, on what way, directly, this is going to be helpful to me when I design a building. If there are thousands of geometrical rules, sizes and proportions, good shapes and bad shapes for every element of a building and for any specific kind of building that would be rather restrictive, it could hinter my creativity....I wouldn't like this.
- A. The context of the good geometry is not explicit on the level you are talking about; but does not deal with form on a formalistic manner, but completely the opposite; it deals with issues that have to do with what generates a good geometry -under what s state of mind you approach something you want to create, what is the process on doing something like this, on what do you really pay attention to when you are doing something, on a nutshell it deals with the fundementals, the essence of the good geometry, -with what stands behind the beautiful forms. there are thousands, millions of beautiful shapes, and forms and patterns, but for all of them there is only one deep geometry.
- T. Although I think I get your point, what you said seems so abstract; Why don't you give some XXXXXX concrete indications of what you mean exactly.
- A. There is one deep rule which shapes the entire good geometry, and this rule says that whatever you do you have to bring it on the state of wholeness; everything has to be a distinct w whole

- T. But, everything we see around is a distinct whole, isn't so?
- A. Not really. Because for anything to be a complete a distinct whole, at the same time it has to be part of a larger whole, to whose wholeness it contributes and from which it is unsep unseparated. And this is an operational rule. If you don't pay attention to this there is no way that you can bring something on the level of the profound quality.

- T. What you are saying is as simple as that.
- A. That's true; and it is so simple because it only demands to pay attention on what you are doing, to make it look just right, the right thing at the right place......

T. So, the good geometry you are talking about is the geometry which attempts and attains wholeness. And this was part of the everyday life of people on different times in different places. And now we stand so far from it. We never think on those terms, but maybe only in some cases when we do something for ourselves. It is hard to approach architecture from this point of view, it asks for much more than we offer on our evryday life of p practicing architecture.

Now I can see what you were saying in the beginning about people and specifically architects ignoring it or not wanting to deal with it. There is an extremely important human aspect related with this which I don't know how to grasp...

- A. The question is not how, but if you want or if you should do so. By the time you decide to adopt such an attitude is not X hard any more you to function under such a state of mind; the problem is to want to function like this. And it is clear that people avoid it generally.
- T. I know why people don't function like this; it demands more e effort and concentration, and you have to reveal yourself, and people prefer to keep things which relate to them personlly

just for themselves.

A. That's correct. Because they feel they will become vulnerable if they do things which relate to them personally. And the g good geometry, the attainment of wholeness mainly embodies this feature and is guided by this: *W in order to do something which is really profound you have to be guided mainly by your feelings, your inner self.

And this is what people avoid or are scared of; it is not the qualities of the good geometry.

Plateau 1

The phenomenon is presented to the new person involved in the dialogue; the way the phenomenon is presented at this stage is that the fundamental way to go about distinguishing things which are profound from things which are not is through testing them against the <u>feeling</u> they produce, or looking at them as the <u>mirror of one's self</u>.

Plateau 2

The new person has already got the idea of what it means to approach something through one's feelings and what it takes for something to be the mirror of the self.

Now new examples are presented to him in order to choose the right thing according to these criteria.

On this stage his attitude is as following: He knows what he has to pick according to the presented ideas, but he says, he would be the other thing because of personal reasons and experiences.

Now, XXX it is time to introduce a new aspect of the phenomenon; that of <u>objective and universal quality</u>... that a thing is profound beyond personal liking or disliking.

Plateau 3

At this stage, the new person having overcome the issue of s subjective judgement, is within this frame of mind that guides him on picking the right thing from the examples presented to him. He XX seems happy with this but not completely satisfied.

He knows it is so, but he is asking constantly why is it so; he wants to know more on the essential characteristics of these things.... he has understood the connectedness but he needs more.

More examples are presented to him, where the explanations given are based on XXX the idea of a "being", on simplicity, on not-separateness and distinctness at the same time, on wholeness.

Plateau 4

At this stage the new person not only can recognize the phenomena but he feels confident since he has a basis of explaining them.

However, he recognizes the following fact: that the things w which manifest these phenomena are so different and so basically similar at the same time, that he now wants to know where their fundamental similarities emerge from.

Now, the properties are presented to him, as the fundamental sourse of their XXXXX basicXXXX similarities.

Both, the geometrical properties and the properties of color are presented through positive and negative examples.

Plateau 5

almost

Now, the new person knows everything XXXXXX concerning the recognition of the phenomena and their fundamental basis of reliance.

Then, he comes with the following question: Assuming that one knows that a thing in order to be beautiful and profound it has to be whole and simple, not-separated and distinct at the same time, like a "being" XXXXXX.... and in order to be so it has to embody all the properties.

I understand this is necessary, but is this enough in order to succeed; how I can manage to \$\omega\$ tie successfully all these thing in something I am doing.

So, it seems that now is the appropriate time to talk about the state of mind somebody has to be in, in order to succeed to generate something profound; so, discussions on the egoless state of mind, on child like attitude, on what it XX means and what it takes to do something just right without worring for the consequences.

The examples could be based on things which embody the properties on a deadly manner.

Plateau 6

Now, the process is defined through the main goal it wants to attain, as <u>simplicity seeking process</u> and as <u>inner light seeking process</u>,

Plateau 7

Now, since the new person knows what is he looking for through out the process, he wants XX to know something more operational.

The first question he is asking is on what he mainly has to pay attention to, while he is doing something.

So, the discussion is orientated on the structure of the thing and on preserving and respecting the existing structure, as the necessary condition to be accomplished, if somebody wants to ensure the fact that he is on the right path.

Examples of the same character as that on the seminar room can be shown.

Plateau 8

Now, the new person is saying: I realize the importance of preserving and respecting the existing structure of the given through out XX the transformations I am taking; but, X this mainly tells my what not to do.

Now, I want to now more precisely, if possible on operational terms, what I have to do to bring something on the state of wholeness.

Therefore, the discussion is orientated now on the centering process, on the four levels of wholes.

presented
The examples XXXXXXXXXXX focus mainly on real things.

Plateau 9

Plateau 10

At, this moment, since the new person knows more or else everything that he needs in order to do something profound, there is a discussion on the one rule that underlies the whole process.

The example can show that only paying attention to this one rule a building can be shaped.

Plateau 11

The geometry as the guiding principle for the design of buildings.

· OC+ . 27, 1980



This whole subject would be clear to me, if I knew XXXXidea 1. How much emphasis has to be given to the XXXX that there is only one process which generates profound things. The question does not refer to the essential feature of the process, like that the process is guided by a strong feeling for what has to be done, or that the process can generate profound things only if the person is paying attention on each thing single XXXXXXXXXXXX he is doing and only if he is testing the produced thing against the feeling it induces, or that it is generally accepted as useful to know the properties and to try to embody them within the thing you do, or that each single act during the process should contribute to the entire thing and should try to enhance its wholeness and not-separateness, and so on.....

The question is if : a) there is the need for all these ideas to be brought within the form of a concrete operational process, and b) if so, this is going to be the process or a version of the process.

In other words, how specific can you be on this? And, is this going to be really useful.

This question came to mind because of not being able to come with a clear operational procedure which embodies whatever has been said so far in a simple manner, and because of the different, slightly incomplete versions of the tentative process.

The answer to the question is that it might be more helpful and more real to say that there is no one single operational procedure to be followed, but that there are the essential features which shape the process of creating something profound,

that these issues have to be understood deeply, and that this knowledge and this understanding is going to take different procedural forms in different people; that the success of the creative process really hinges on the deep assimilation of these XXXXXX essential issues.

I am saying this because I think that a definite operational procedure might turn out to be more inhibiting than helpful, and because, so far, all the versions of the tentative process we have, helped me on understanding the thing, on giving suggestions on what should not be done, but they never guided me step by step, saying what I have to do next.

we assume that

2. If all these essential features are going to shape the limits

of the ground within which different operational procedures

will happen, which of the features XXXXXXX are considered to

be more important XXXXXXXXX than the others, and which seem to

be more helpful than the others.

The essential characteristics of the process are:

- the idea of wholeness
- the properties
- the structure of the thing
- transformations
- the "being"
- the structure of nothing
- feeling
- paying attention to each single act
- simplicity
- egoless state of mind
- distinctness and not-separateness at the same time

What I consider to be the most important XXXXXXX issues which need to be emphasized are the idea of wholeness and the properties, because, from the one point of view, without them no progress can be made, and from the other point of view, they are enough complicate.XX Their importance relies on the fact that one has to know and understand these really well before one attempts to do anything.

In terms of what it seems to be more helpful, I see it within the course of doing something, and on this respect the issue of feeling and the issue of making something distinct and not-separated at the same time, I think have the power of guiding the process.

3. The process is emphasizing mainly the geometry of the product, and this geometry is mainly based on the properties. Given the fact that this geometry of space is based on the 14 properties how the geometry is built up from these properties; what XX has be XXXXXXXX to known first; what aspect of the geometry is dependent are on others, what XX the interrelations among the properties.

Two proprties could be sort out as having the power of organizing the whole: centers and alternating repetition.

Beyond this, I think that if somebody understands well the p properties centers, positive-negative, symmetries and good shape, then the rest unfolds more easily. Somehow, it seems that these properties form the basis of the geometry.

5.Is it true that if one designs a building by only paying attention to the geometry of the building that then other factors, of energy and economy like functionality, efficiency soundness of the construction, will be somehow ignored. How all these things come together?

this problem

Or XXXXXcould lead into compromises?

Not-separateness is the profound geometrical aspect of the One Value; and this is so, only in cases when not-separateness is generated by a deep personal feeling for peacefullness and egolessness.

Not-separateness, the profound aspect of the geometry, and at the same time the deep aspect of a real feeling for peacefullness, they melt into each other, in a process which generates a beautiful world.

The concept of a whole.

A whole is an entity coherent and distinct in itself.

A whole is an entity deeply connected to the world around it.

A world made up of wholes; a world where everything is distinct in itself, and at the same time not- separated from the world around it.

Both the amount of distinctness and not-separateness increases at the same time in a world which is made up of wholes.

Distinctness make the thing unique, one.

Not-separateness ties the thing with what stands around it, within an inseparable whole.

And the same rules stand for the elements which compose the thing.

Now, you have really understood what I have said to you so far, since you know how to build a real and right and beautiful have building; not in a superficial sense since you really understood deeply what it takes

-to figure out how the gutter in the roof has to be shaped, so that it can be 100% certain that it is going to work.

- to place a window in a room, so that it feels just right from all different aspects; in terms of the light coming through, in terms of sitting next to it and looking outside, in terms of creating a place next to it, in terms of making the whole room nicer....
- to decide what exactly the space between a door frame and the wall coming perpenticular to have has to be exactly, for any relevant reason you might think of.
- to see what the color of a wall is
- to figure out where the main staircase of the building has to be, so that it becomes the most natural place you walk towards, as soon as you enter the building.
- the to find, with preciseness of the last inch, what the size of a room has to be.
- where exactly to place the fountain in the garden.
- to see the exact spacing of the collonade that surrounds the courtyard.

And, of course, there are thousands of things like things you how to do have learnt so far from what I have told you.

I did not give But, I did not tell you thousands of rules, thousands of instructions specific for each case.

On the contrary, I have laid out some rules and laws which apply to all of them; and you have to know all of them at the same depth to do any of these tasks; and you have to use all of them at the same time to do anything which is really profound.

I laid these things to you one by one on a specific sequence, but this sequence is of no importance but for understanding the issue the best.

And finally, I think that all of these things can be summarized into one rule:

That is, that though any of our XX building actions, we have to try to increase the amount of not-separateness in the world around us; and at the same time, the amount of not-separateness between us, ourselves, and the world around us.

And these two thing advance together on the same path and sustain each other. One of them makes no sense without the other, and more than this, one of them cannot be attained without the p presence of the other.

Wholeness

- The need for wholeness in the world around us.

 The idea of wholeness can be explained generally in terms of something being coherent in itself and strongly tight to its surroundings. (at this point)
- XXXX The first attempt to define wholeness as the quality without a name. WXXXXXXX So, the personal dimension is attributed to wholeness. Also, wholeness is not merely a concept but aquires properties as real, beautiful, profound.....
- The first attempt to make wholeness operational with the development of pattern_languages. Emphasis on the functional aspects and on spatial relationships.
- The need for something more on both aspects: what is the relationship between the person and the thing, and what the thing itself has to be like.

The mirror of the self

feeling as a criterion

everything resembles yourself

egoless state of mind

the one value

The geometric properties

for

types xx creating unbroken wholeness

The color properties

inner light

Not-separateness

and the one law: any of our building acts increases the amount of not-separateness in the world around us; and at the same time the amount of not-separateness between us, ourselves, and the world around us.

And these two things are unseparable, they advance on the same path; none of them can be attained without the presence of the other.

order as a form of not-separateness wholeness as a form of not-separateness distinctness/uniqueness and not-separateness

The creation of wholes

centering process
creation of centers
creation of symmetries

The structure of emptiness

structure preserving/enhancing transformations.

The <u>objective</u> is to produce <u>the mirror of the self</u>.

The centering process as a means to attain this.

So far the centering process was formulated as follows:

When somebody tries to create a center, one has to pay attention not only on this center itself but on another center of comparable size next to it, to the smaller centers embodied to this one center, to the larger center this one center belongs.

OPEN QUESTIONS

- _ Is there always a list of centers?
- What is the generic structure which underlies the development of centers?
- To what degree do you know the structure of something before you start developing it.
- What do we mean by generic structure -elements (centers), their location, their relationships (centered type, infinite array....)
- What is the needed amount of structure to be known before development, and what is the final amount of structure needed?
- Given a center, what do you develop next? another center of comparable size, a smaller one, a larger one?

A center close to it, or far from it?

What is the sequence of centers?

- Does the development of a center tell us (suggests) the next XXXXXX center to be developed? And if so, on what way?
- Are the centers produced one by one, paying attention to each one of them separately, or is there any case where a center is born unintentionally, as a result of the creation of another center, and should it be so? (symmetrical or asymmetrical relatioship among centers)

A NEW DEFINITION OF CENTER

A center is a field of concentration of other centers, and is itself also playing a role in a larger field of concentration.

- Is there any structure to this field?
- What is the role of the center to the larger field of concentration?

When you make something look at the centers (partial, existing, and potential) in what you have, pick one of them, and follow this rule, by trying to modify the whole structure in such a way that this one you have picked, follows the definition more exactly after your act than XXXXX it did before!

Keep repeating this until you cannot see anything further to do.

- What is the center I pick? Could it be whatever of them, either partial, or existing, or potential? small or large?
- Or, is there a definite sequence that has to be followed?
- Is there any relative importance played by the centers being partial, existing, or potential? MXXXXXXX
- Does the development of a center necessarily goes through these stages consequently: potential-partial-existing.
- Is it necessary for some existing centers to be there for some partial to start emerging

In the begining we have what: a field of potential centers, or a potential center

Is there any moment in the whole development that there are only partially developed centers; should it, or should it not?

Is it possible that the development of all centers follows follows the scheme: identification of all potential centers, then development of all identified centers partially, then full development.

That is, all centers find themselves at the same state of development at any moment of the process.

Or, is it necessary for the good development of something that some centers are fully developed for some to be partially defined and some just hinted?

This means, that the potential existence of a center depends upon the development of a specific center (is there any one to one dependency among centers). That means, that in order for a center to come to friution it needs the in advance existence of another center to hint on this, otherwise it might not emerge.

And is this known in advance of the development or not?

If it is not known, then the sequence of centers is very important as to what centers are generated and to what of the potentially existing centers did not emerge.

If it is known, then maybe the sequence of centers is not important.

All potential centers identified behorehand:

What do we mean by "identified"?

- is the total number of the potential centers only known?
- or, are they known as distinct elements
- or, more than this, their approximate location is known

Is the form and the quality of the end product determined by the sequence of the developed centers?

If the centers are identified before hand, as C1, C2, C3, C4,C5, C6, C7, C8, C9, C10.

there are two extreme cases in terms of knowing or not knowing in advance the exact sequence of centers.

- 2. there is nothing that demands a specific sequence of centers

That is at each stage of the development, there is a free choice among the potential centers to be developed.

3. Another case could be:

All potential centers identified beforehand

but, the question is: Identified how? As the total number of centers to be developed

As distinct elements

There is an other case:

It is known beforehand that the general structure of the equence is has the following scheme:

what the difference will be if I start with a just and of C2

what the $(C1,C2,C3) \rightarrow (C4,C5) \rightarrow (C6) \rightarrow (C7,C8) \rightarrow (C9,C10)$

So, at each stage of the development the choice is limited among the available centers.

Here the arbitrary choice is reduced, since the available choices at each stage is determined behorehand, and it is limited in number.

The centers, whose emergence depends on the existence of other centers are not known beforehand. So, even if we think we know all the centers before the development of something, we are mistaken; there are always some centers which are going to emerge, already and whose existence depends on the centers we know.

What do we mean by generic structure?

The generic structure of something should define some of the potential centers of this something; The definition can be an identification of the centers, maybe their approximate location, maybe their approximate size.

The generic structure of something could (has) to be hinted by some already existing centers.

However, the generic structure of something should not determine

-it cannot determine- all the potential centers; it should be
neither very loose, so that it does not disappear after some
transformations occur, nor very rigid, so that new centers can
emerge, and the already potential centers can adjust themselves.

Also, the generic structure of something has to establish the relationship among the different centers it identifies; however, should be some minute changes might occur on these, although they XXXX followed.

So, the generic structure XXXXXXXXX the XXXXXXXXX centers as identifiable elements, the relationship among the XXXXXXXXXX centers as centers. It might also determine the approximate number of each one of the centers, and it might also define the approximate

defines

location of some of these centers.

REFERENCES

However, through the process of transformations, **** some new centers might emerge together with the previously defined centers. The number of the ****** finally emerged centers might change, and the relationship among the centers could be overlooked in some cases.

The generic structure sets the groung for transformations to occur.

The generic structure also sets a rather loose field of concentration of centers of centers with the intention that the field KEN should be intensified.

The generic structure might define only these centers which are XXXXXXX undispensable for the structural (minimum) definition of the outcome.

Taking the grid as an example, its generic structure defined the lanes, the blocks and the gardens enclosed by the blocks, new all of them of compatible size; the rest of the centers emerged during the process.

The question is at what point of the development of something its generic structure should be defined.

At the very very begining when everything is completely homogenious, or at a later stage, after some important centers have been d established. Taking the grid as an example, the generic structure of this area was introduced only after the two major key-points, the bath and the church, had already been established. Maybe, without the bath and the church the grid could make no sense.

-A cluster building

-B cluster space

-C _eighborhood square

-D lane

-E street

-F main square

-N neighborhood

Each center has a specific name.

The centers belong to different levels of scale.

F is on the highest level of scale.

N is on a higher level of scale than A,B,C,D.

D is on a lower level of scale than A and C.

C is on a highrlevel of scale than A and B.

- A and B are introduced as complete entities in one single act.
- -A and B are always established at the same There are centers which always accompan t_...e; they accompany each other.
- B is enclosed by A, and it is smaller than A.
- -When an A is positioned it is known that is going to it belong to a specific N.
- -a new A is located within a N in such a way so that a D is formed between As; D is on a lower level of scale than A.
- -a C starts being created when at least two A_{S} and B_{S} are already established.
- -when a C is hinted the next A and B come to pin it down.
- -a new N starts with the establishment of a new A and B.
 - And the new N starts to be created at the time when the already existing N is approximately 50% complete.
- -an E stands between A which belong to different NsE is of a higher level of sca-shment of another center of a higher

There are centers which are established as complete entities in one act.

some each other; therefore, they emerge at the same time.

Ocassionally it happens that one of these centers is smaller than the other therefore, one is enclosed into the other.

Every new center belongs to a larger center or hints to a larger center.

Centers which belong to the same larger center create between them new centers WMXXM of a lower level of scale.

There are centers which are not established as completed wholes in one act; they are hinted by other center which are already there.

A center which is just hinted calls for new centers to emerge to pin it down and make it whole.

A new center of the highest level of scale starts to emerge when a smaller center which belongs to it is established. And this can happen only if the already existing centers of this higher level of scale are almost half complete

When a new center hints on the establi-

le than D; it is on the same level of scale level of scale, then the new smaller as A.

- -D usually leads to C
- -B is enclosed by A
- -B leads to C or D
- -there is no B in contact with F
- -it is rare that a B will open up to a E
- -it happens occassionally that E is in contact with C (but not often)
- -There might be more than one A and B introduced in the course of one act. These do not necessarily belong to the same N; they either enhance the existing N which need enforcement, or they introduce a new N.
- is formed usually piecemeally in parallel with the establishment of As. However, it Happens that a C can be created all at ____ formulated unless the other smaller once together with the establishment of As.

center has to be connected and separate from its adjacent on the same level of scale center by another center, which belongs to the same level of scale as these centers.

There are some functional relationships between the established centers; and these functional relationships remain constant; they are the same every time they occur.

There might be more than one centers introduced in one act. It is not necessary that these centers lie side by side or belong to the same larger center; they are positioned at these parts which most need enhancing.

There are centers whose existence upon other centers of a lower level scale; so, these centers cannot be centers are there. There are two ways according to which these centers emerges either they emerge piecemeally in parallel with the establishment of the smaller centers, or they can be introduced on their complete form at the same time

- -the introduction of a A and B is always ompanied by a new D or E or C.
- -a C might extend an already established C; a E might extend an already established E.
- -there is one C for each N. there is one F as concerning the whole. there is one B for each A.
- -F is established after 50% of the A and Bs have been introduced; and it is defined These centers of the centers are like by As belonging to different Ns.

as the smaller centers

There is no case that the introduction of a new center is completely selfcontained; it always induces and establishes new centers.

Each center is composed of more than one center. But, there are some centers which seem as if XXX everything has been created in order to induce their centeredness and wholeness.

the void.

And it might be that they emerge not as an idea but XXXXX they are induced by what is existing there.

There are basically two questions we have to ask ourselves for the ongoing work. First of all the question, what can we tell others about the centering process, which will improve their work, their design, making it more and more whole. The second perhaps much more ambitious but the more important question is, what do we tell each other for improving our own work, given any problem we are working on right now.

To solve the parking problem in the Venezuela project is one of these problems. Assuming courtyard type blocks with 2-3 stories buildings leaves us with the question what the centering process tells us to solve this problem. Assuming one car for each family, and each family in one story, læxxx we felt first that most of the cars could actually be parked on the streets. REXEXERNATE Parking on the streets did not feel strange to us, it rather felt o.k. Taking the example of a block we counted the numbers of parking spaces needed, and came to the conclusion that roughly 80 % could park on the streets and the remaining 20% had to be included inside the block. By placing little additional parking areas inside the bocks9 6-8% parking lots) according tomthe centerin process we could place additional 10 -15 % of the remaining 20 % needed parking lots. This solution seemed to be the best according to the cp. Observation: There seems to be a relationship between the broken MXXX size of a block and the XX allocation of a small parking lot. Certain Blocks were sosmall that it did not feel right to allocate a parking lot at all, only when the block reached a certain size, it felt right to allocate a parking lot inside the block.

The different patterns concerning parking in the pattern language 11, 22, 93, etc emphasize a limitation of the car and the establishment of other means of transportation for smaal areass. The question then is if other means of transportation than car can successfully be applied for the Venezuelean city. It appears as if the car is a dominant element in Latin American societies, making it difficult to establish other means of transportation, ie bikes, motor bikes or very small cars (like the Fiat 500). It is for this reason that we accepted the car for each family, being parked primarily on the streets. But this needs futhther study and probably simulation in threedimensional models.

HOW DOES THE CENTERING PROCESS HELP ON THE LAYING-OUT OF PART OF THE MOSHAV IN ISRAEL.

this part will include 15 houses (2,500 sq.m.)

public bldgs (1,200 sq.m.)
synagoge 150-200
kindergarden 100
cafe 50
office 50
workshops 350
small clinic 25
shop 80
guest apartments 320

The public buildings are clustered mainly on the primary nodes. (public land)
The houses are clustered around secondary nodes. (common land)

There is the question of how many mp rimary nodes are needed to accomodate the public functions.

The answer has to be based not only on the space available on each primary node, but also on the distribution of the public functions on the moshav, not only according to what will be built today, but taking into consideration the future expansion to the moshav to about 100-200 houses. Another consideration is what the actual and needed balance between primary and secondary nodes has to be on this first phase.

Then, as concerning the houses, the question is what is the best size for the cluster of houses. It is clear that a cluster of 15 houses is too large. But, they could be accommodated in two clusters of 7 to 8 houses, which can be fully completed. The other solution will be if 3 clusters of 4 to 6 houses each are formed; and with the possibility of these clusters being extended in the future. And the oter possibility is to start 4 clusters of 3 to 4 houses each, which will be completed in the future.

CENTERS TO BE PAID ATTENTION TO ON THE PROCESS OF LAYING-OUT THE CLUSTER OF HOUSES.

Basic features of a cluster of houses in the Israeli project:

A cluster of houses is usually elongated; it is extended along the contours of the site, so that it can have the maximum possible contiguity with the cultivated fields.

Its narrow side is always attached to a primary node or to a main path. It has low density.

The elongated side of the cluster is oriented either north-south or east-west.

A cluster of houses consists of the houses, the common land, and the private gardens.

The common land of the cluster as a field of centers:

intensified.

The common land as an entity is a center. In order to accomplish this on a basic level, the common land has to have a positive good shape and a reasonable size. This will attributed to the common land by the location of the houses in relation to each other and in relation to the open space.

The common land is a field of centers; it is composed of many other center of a smaller scale; these atribute to the common land different levels of scale.

It is not completely clear up to what degree this field of concenteration of centers in the common land can be identified beforehand. However, there is a number of them which can be defined; this does not necessarily imply that all the KKK common lands consist of the same centers, or that the its centers have the same articulation and the same relationships the to each other; the variety of the context of KKKK clusters influences the way the field of centers in each cluster is transformed and int

The field of centers in the common land, which could be identified beforehand is:

- Gate to the cluster: That is the point of transition from the public space (primary nodes, main paths) to the common land.

> This decision has to take into account the centers which already exist in the public space; that is the point of arrival and of departure of the main paths, the areas of view,

> > for

- The entrances to the houses: Because of the need xx transition, the common land will be transformed at this area to a more secluded area place. This need for transformation of this area can be accombished successfully only if this area of transition is treated like a center.
- Porches of the houses facing the common land:
- Openings of the houses

facing the common land: Because of the different character of the rooms xxxxxxxxx where the openings are, and because of the different degree of privacy needed in each case, the space of the common land xxx next to these openings has to be approached carefully and with specific consideration in each case.

Spaces between the houses: When houses don't touch each other, there is

some space between the houses. In most cases it is a very narrow space, just for reasons of privacy; however, they permit glimpes of view, and they are possible ways of going up or down into the farmland. The first issue here is how these narrow -like paths-spaces have to be treated, so that the common land does not lose its coherency, and is not exposed to winds or ... The second issue is that some of these spaces could be more wider, as a place of repose and view.

Generally, these spaces have to be treated in such a way so that they contribute positively to the common land as a center, and xxso that they do not become left over spaces, but, regardless of their size they have the coherency that a center has. How many of these spaces there should be and where is a matter to be dealt with separately for each cluster.

- Small ways leading from

the gate to the entrances: It is another element which, when treated thoughtfully can contribute positively to the field of concentration of centers. Attention has to be paid that the small paths do not destroy the coherency of the common land as a center. They can induce its centeredness when treated as boundaries.

Beyond these elements, which can be defined because of their functional needs, there are xx other elements also, which can xxxxxxxxx induce the centeredness of the common land, like an arcade, or a fountain, or a tree, or an outdoor room. It is rather unclear at what point of the development these elements will come about as centers, if at all.

Now, if we consider, not the common land, but the whole cluster as a field of xx concentration of centers, then there are more things to be paid attention to:

- The houses: Each house by itself is a center, but the location and distribution of houses within a cluster contributes to the field of its centers.

 The distribution of the houses within a cluster has to do with the relationship of the cluster with other centers, like the primary nodes, the main paths, the farmland. Also, it is determined by the view, the sun, the winds, the configuration of the site.

 According to the relationship of the cluster to these elements, its compactness will differ.
- The gardens: There are two necessary conditions for a garden: south orientation and contiguity with the farmland. the relation of the garden to the house differs between the houses being at the edge of the slope and the houses being at the slope. What does it mean in these different cases for the garden to be a center.

- on the existing *xixixxxx* larger field of centers *xxxx* its impact of on the cluster, which is composed *xix* the primary nodes, the farmland, the main paths, and also of the physical situation on the given site, that is, view, physical configuration, sun, winds.
- on the existing larger field of centers in terms of the impact the new emerging center will have on the whole.

The process of laying-out a cluster of houses

The question is whether or not there is a definite sequence of steps to be taken on the lay-out of one cluster of houses.

One possible would be: Define the gate

Lay-out the houses one by one, paying attention to

positive space

Locate the entrances

Adjust the spaces between the buildings

Locate the porhes Place the gardens Trace the paths

Of course, there is no general rule which could be established in terms of the sequence of the centers. However, there could be a rule which could define somehow the minimum and the maximum structure of centers needed for another new center to come into birth; that is the earliest point that a **EXERT** center can emerge, without this being too early, and the latest point that a center can emerge, without this being too late.



A possible procedure of laying out some clusters of houses following the centering process.

That implies that when we first start, we should define roughly the first center at the scale of a street or a square. What we concerning the larger center know at this point is its rough size, its approximate shape, but we should know fairly well what its center is or will be. Also, we know that this larger center, now being in an embryonic state has to become with further smaller acts a field of other centers.

By doing this we become aware of the structure of this larger center, so that the following acts which will introduce smaller centers have to be guided by the attempt to preserve and enhance the structure of the larger center.

Then we go back to the smaller centers:e.g. a building on the of the building square. Each line we draw is going to contribute to the centeredness of the larger center, and at the same time is going to contribute to the creation of a new center. These acts -they are fairly s small acts- are guided by our attention paid to one center at a time, small and large alternatively. It is very important to our attention keep on going back and forth between centers of different sizes. If we just pay attention to the larger centers there is the d danger of falling into "design"; if we just pay attention to the smaller centers -what we are actually doing- there is the danger of failing to establish a coherent and not-separated whole.

Each building has to be a center by itself, it has to contribute to the centerdeness of the larger center, and it has to be created from smaller centers. In order for this to be accomplished we have to shift our attention alternatively among centers of different levels of scale.

Operating like this, a center is built up by small KNNKKYNKKX acts, however small or large ixx the center is. And it is this alternating shift of the attention which helps to make a center a field of other centers, and part of a larger field of centers.

However, the centers are not developed one after the other; wax it is not that a new center is introduced only after the previous one is fully established. After some time, centers start being developed simultaneously, and there is always a back and forth among the existing under development centers. A transformation on a center immediately alters the field of the centers and calls for further transformations in the other centers. However, this procedure of going back to the centers and changing something is added or changed is because of helping to create a new center or of contributing to the centeredness of a larger center. And that this procedure of adding and changing on what is established as a center has to follow the structure preserving and enhancing transformations. This assumes that on the first stages the centers which are introduced establish the structure of the larger center, and that it is this structure that has to be preserved and enhanced through further transformations.

So, we back to a center only when the larger center where this one center belongs to has been developed to such a degree that its structure as a whole is there, but it has not reached the

THE LAST RULE SAID:

"Find the largest center above the one which you are actually dealing with, which is latent on the field, and ask yourself:

-are you doing your thing in such a way so that to embellish the larger center-?"

This rule implies that no center will be introduced unless it is hang off a larger center.

If center A embellishes center B what is the relationship between A and B? Is there a "boundary" relationship?

What is the size relationship between A and B? Cris said that A could and should in some cases be larger than B; it seems more relaxed; also, if it shouldn't, the development would always go from large to small, fact which is not true.

No.

Questions concerning the "entities" and centering

the

What xhm is the spectrum of sizes of the entities that have to be known ahead of time. In one extreme the building or a complex can be an entity; does it have to be known xhm ahead of time and up to what extent, and if so, how does it become useful in the centering process.

In other words, is there anything like maximum entity or minimum e entity that has to be known in a specific project, and how do we d define it?

In order for an entity to become a center it needs the help of other entities.

In order to transform an entity into a center, the entity needs the help of other entities, the same or different, of the same level of scale. Also, it needs the entity which is larger, and the entities which are smaller.

An entity is an abstract image of something that has to become real in space.

has to emerge at specific pointsxxx the overall process.

The question that we have to solve is to identify a proper sequence of using the entities so that we are always having structure preserving transformations.

In structure preserving transformations we know that we have to create centers and field of centers in such a way so that they respect the feeling of the existing situation. Also, before we start the s structure preserving transformations we have a shopping list of entities.

The first question that we have to ask is: "what is the first center hinted by the situation on that has to be created we the site so that it respects the existing entities structure, and then what the appropriate entities to make this center alive."

It seems that the critical part of the centering process is the first 10% of the steps, if they manage to establish about 50% of the overall structure on different levels of scale. Then the question is what is this first 10% of the **tra* structure preserving transformations, and how the correct ones are recognized, in this respect.

transformations
A tentative reply could be that these first **trap* should have a strong organizing power on the whole, and also that they come from a strong belief that every single one of these **tran* first transformations t truely respects the feeling of the already existing structure.

The design process of the school will kexkaredxxxxxxxxxxxxxxx start and develop on the basis of two given things: a) the entities described so far as abstract images of the pax places which have to become real in space during the design process, and b) the reality of the site, which has a specific structure, which can be recognized through its geometry, its physical characteristics, and its microclimate.

In the first steps, before the actual design process starts taking place these two things can be understood and developed separately; a) the entities will express the needs of the school, not merely functionwise, but in terms of its feeling and of the life that is going to hold and generate, and b) the site will express itself in terms of its structure, which means that the site, on this, still undeveloped phase, because of all its specific features, KEXERIEXX itself and its relationships with its surroundings, KEXERIEXX can reveal itself, when taken seriously and felt deeply, as something that has its own integrity, its own order and EX harmony, its own heart and spine, on a subdued way in many cases.

These two givens have to be handled in such a way during the design process so that none of them dominates the other; we know that the site will be transformed during the design process with the placement of the entities on it, but we have to understand that these transformations on the site have, first of all, to respect the st hinted structure of the site, as it was reversed to us before the beginning of the dexignxprocess lay-out process, and beyond this, they have to enhance its structure on an integral and coherent way. These steps, to be undertaken during the lay-out process through the introduction of the entities on the site we will called structure preserving

CHH

N. P.

transformations.

51

But is not only the actual structure of the site that guides the whole process; the entities themselves, so far abstract images, they have to find their proper place on the site, they have to take their proper form and size, they have to be related to each other on a coherent way. Each entity, afterx by being placed on the site, according to structure preserving transformations, has to become a center, a place with its own substance and integrity, with its own good shape and symmetries, with its own heart, and at the same time it has to be related and interlocked together with the other entities, so that a field of centers will emerge, where every entity has become a distinct center by itself, which, nevertheless, cannot be separated from the rest of them without destroying the harmony of the whole.

Now, a very important question is, how do we start, what the first step consists of, how does it marry together the entity with the existing structure and generate centers that enhance what is there. However, before concentrating in this question, we have to make clear that every following step in the lay-out process is <code>likexthexfirst</code> <code>step</code> as if it was the first step with a different <code>entity</code> or maybe the same kind of entity, and for sure, with a completely different existing structure on the site. Therefore, all the steps of the process

are the same as far as the mental operations and the attitude of the individual who is laying out concerns, and as far as the importance and the role of this specific step in relationship with the whole process concerns.

The very basic success of every step relies on the fact that it has a to be structure preserving and enhancing transformation. There are two possible, equally valid ways to go about it, depending on the actual situation through the evolution of the process.

The first way to accomplish this is to adress the following question:

"what is the first center that is hinted at by the existing reality

of the site, that has to be brough up, so that the new situation,

still respecting the existing structure, will reach a higher state

of order, and which consequently, which of the entities will be the

most appropriate to accomplish this?"

In order to introduce the right entity at the right time you have to recognize before hand which is the center **atx**atx**tax** that exists on the site, either just hinted by the existing structure, or maybe faintly formulated, that needs to be strengthened. Therefore, the sequence of the introduction of the entities won't be arbitrary, but it will be called by the existing needs of the site at the given moment for the hinting of a new counter, or for the pinning down of an already faintly present center, or for the completion of a

well established center.

For this whole lay-out process to be successful we have to understand that what matters is the right sequence of centers, not of entities, b) that some of the centers will be very large, some will be small, some medium size, depending on the actual needs of the time for the cretaion of an unseparated field of centers on all levels of scale, and therefore, large and small entities will enter the lay-out process according to the needs of the existing centers, c) an entity, in order to become a center, it will need to be strongly related to larger centers and to be embellished by smaller ones, and therefore, more than one steps will be necessary in order to bring it to this state. d) as far as the sequence of the creation of centers concerns, they be have to introduced in such way, so that the necessary amount of structure is created at every step, at the points where it is really needed; that means that the need to me enhance the existing structure at every step calls for the appropriate centers, large or small, but always in such a way that there is a balance between kar the contribution of the enhancement of the structure on the whole, and of its embellishment on the small. This constant interplay, of always creating new stru structure on the overall and of embellishing the existing structure locally, is one of the key points of the success of the creation of centers through structure preserving transformations.