

December 6, 1967

* I haven't, in all the developments so far, on the question of aesthetics and I know a lot of you have been rather concerned with that - I think you feel that I've given it short shrift. So both this lecture and the next will deal with it. The next one in particular will deal with it from a rather a ~~particular~~ peculiar point of view. Now to start with as you must have realized, my assumption is that there isn't - it is not necessary to introduce anything over and above the pattern language in order to deal with the problem of making things beautiful. The examples both natural examples, like an oak tree which is clearly generated by a system even more rigid ~~xxxx~~ than a pattern language, and an example of ~~fol~~ folk architecture whether its barns or Georgian houses or African huts, all buildings which were generated purely by a pattern language make it clear that it is sufficient but they don't explain why and they don't really go into the whole question and that is what we must do today.

The key content of what I'm going to say today, has to do with this meaning. I think it can easily be shown that purely formal views of aesthetics - trying to ~~make~~ make things nice * by injecting special kinds of relations into them - will get you ~~xxxx~~ nowhere and that any reasonable theory of what an environment does to us from an aesthetic standpoint must be almost entirely wrapped around a subject of meaning.

In a sense, a successful building or a successful city is simply a very very dense concentration of meaning and that in some ways that is the most important aspect of it. That is of course, we have been talking about functional problems so far and some of the functional problems have been quite subtle, some of them have been rather mechanical. ~~xxxx~~ I'd say, if I were put to it in the end, that the meaning of a successfully constructed ~~an~~ environment is probably more important than any of these detail considerations. I do believe that the meaning is built entirely out of them.

Now, the first thing to get clear is that each, and I state this dogmatically, that each persons life is an ~~x~~ incessent search on the part of that individual to find, or to create, a coherent picture of his world. What we really have to investigate is the part that a city or building can play in that individual's attempt to do that.

The first thing that I want to create a sense of is the fact that experience, our experience, our day to day experience, is lived very very largely through images. That is, its not so much what we experience as what we think ourselves to be experiencing or what we picture ourselves to be experiencing to be the key fact in day to day life.

I'll give a simple example. Suppose that you were walking down a place that you thought was California street and every detail of the visual arrangement, the smells and sounds, were all correct. And then suddenly you discovered that in fact it was merely a facade, it had been built in a Hollywood lot and that actually you were walking around in a cardboard environment with nothing behind it. It's quite clear that at that point the effect on you - your experience - would shift totally. So that in that sense your experience has far less to do with the immediate ~~xxxxxxx~~ _____ that are coming in than with your picture of what is going on. The most extreme examples of this, that I know ~~xx~~ of, are the studies of pain ~~x~~ in soldiers where I'm not quite sure which battle front this was ~~x~~ from, but there were indications that soldiers just off the battle front with very severe wounds would experience quite different amounts of pain according to whether they knew ~~x~~ that they were going to be shipped home or not. That the identical wound would produce severe pain in people who had the idea that they were staying and substantially less pain in people who knew that they were being shipped off back to the United states.

In this -- if we accept the fact that we do live almost entirely through images of the world that we create, through these pictures that we're fabricating all the time, then we need to discuss a little bit what happens when these pictures

begin to break down and is it true that we are engaged in a kind of constant effort to create more and more meaningful pictures which we can live through.

One example, a rather dramatic example, I think, of the way in which one is fabricating these pictures at a tremendous rate is something which many of you have probably experienced, namely your having a dream and the dream ends with some kind of a ringing and you wake up and find that actually the door bell or the telephone is ringing. The dream is operating so fast that within the first few milliseconds that bell actually starting to ring you have already started to construct a picture which weaves it into the dream in a sensible way.

There is sketchy evidence for the fact - for the difficulty - one encounters when the picture of your world begins to break down. Again a very very homely example, is the ~~phenomenon~~ phenomenon of sea sickness which you probably all know. People who are sea sick are recommended to go on deck and its often thought that the reason they are recommended to go on deck is because of the fresh air. In fact, the significant part of going on deck is that you can once more see the horizon, so that you can orient~~x~~ yourself successfully and the picture of things which was beginning, with respect to orientation in this case, is ~~beginning~~ beginning to break down in the hull of the moving ship gets a chance to bring itself to order again. Once you can right your picture of things, your physical symptoms disappear. The best literature on this kind of subject, that I know of, is discussed in a book by Goldstein called "Human Nature", Chapter called "Anxiety and Fear" and he distinguished these two very carefully, fear being a fear of specific dangers to an organism, anxiety something which is the condition of not understanding the stimuli which are coming in. This is not something which is peculiar to human beings, apparently dogs for instance, he discusses at length, exhibit severe anxiety ~~x~~ if confronted with stimulus material which is totally foreign to them or to their previous experience. Even simple things like strange configurations like sheep for instance, if suddenly brought into the room where a dog is will get the animal to back away and howl in the corner.

Apparently because even at that level the animal is incapable of constructing a ~~xx~~ coherent picture of his world.

The idea that a city or a building should play a part in creating this clear picture of the worlds of those that inhabit it is a fairly familiar one in architecture. There is a lot of talk of course about just producing clarity for ~~xxxxxxx~~ its own sake, I'll say something about that in a minute. The most penetrating essay on this subject that I know is one by Joseph ~~xxxxxxx~~ Rykwert called The Idea of a Town, which is well worth looking at, but he points out that in antiquity or in the classical Hindu architecture, the same is true in the middle ages, he doesn't discuss that I think, the town and indeed the various buildings within it were anchored in a clearly understood way through man's conception of the larger world - the universe. Now this is a very particular kind of a ~~x~~ thing where there is an actual ~~x~~ representation, a symbolic representation so that the form of the town to some extent helped to make ~~x~~ man's world coherent.

These things I think have been badly understood by modern architects. There is on the one hand a series of efforts being made by various writers to describe purely formal properties which are supposed to help create clarity. Kevin Lynch is one of these, he advocates certain specific geometrical devices which - nodes, edges, which is used in the way he described are supposed to make an environment more clear. There are other designers who have tried to inject specific symbolic ~~xxxxxx~~ content into buildings - the TWA terminal is an example - it's a very very common kind of thing that designers talk about and try to do.

Now these things seem to me _____ (oddly?) misguided in view of this whole picture of anxiety in a product of a situation where somebody can not understand his world, or his life within his world. It seems clear that the only way to remedy that situation

is to make use of the pattern material which we've been talking about, in the sense that every pattern deals with some specific functional aspect of life and in a sense that I described in my lecture about Erickson, that we do hope ultimately that the patterns as a whole will cover the whole of life. Now, in that sense it's reasonable to believe or to think of the pattern language, the patterns within the language, as forming a picture of life.

If you take that view, let me equate for a moment the problem part of a pattern, The problem statement, ~~with~~ with the idea of meaning that I've been talking about so that its the functional background of a pattern is the meaning which that pattern carries, it would then be reasonable to think that the most meaningful environment would be one in which all the patterns, each ~~bearing~~ bearing a well understood relationship to some facet of life and every facet of life being covered, in which all the patterns are represented and there are no other patterns present. After making that kind of statement and expressing the obvious implicit hope that an environment constructed according to a proper pattern language would begin to take on those meaningful image, symbolic aspects that a city needs in order to provide the kind of coherent framework I've described, if we operate with that assumption, then the last point - that is the question of why formal properties seem to be connected with beauty in buildings becomes fairly clear.

I've already mentioned the fact that a simple form is usually capable of containing a great many more patterns ~~&~~ in it than a complex form. In order to get into the environment the full density of all the patterns that have any functional meaning whatever. It's clear first of all, that one is going to have to simplify things greatly, simply to pack all this material in. At the same time you have another fact which I think I can illustrate best with a rather simple picture, and that is that the moment that the environment begins to contain any relationship other than those specified by the patterns, it will immediately begin to take on this quality

of being not comprehensible and unclear because of its irrelevance. ~~Now~~

Let me give an example of that which may surprise you. Mathematically speaking if one looks at these two shapes - and I speak ~~at~~ now only about the perimeter - if you compare a square with a circle the most important difference is the following: That every point on the circle is equivalent to every other point - in the sense that the transformation of this thing - sending it into its self which can identify any two points - there all the same kinds of points. But in the case of the square every point from here to here is different - in terms of its relationship to the whole. And each one of these kinds of points which appears along that line there is repeated eight times.

One must ask ones self -- so theres a great many more relationships in the ~~at~~ square than in the circle. Now, one must ask ones self when people make a square building is there any specific reason which requires that every point along this edge actually bear a different relationship to the whole. In so ~~far~~ far as there is not, there are irrelevant relationships present in this thing and it may sound far fetched but I believe that every single irrelevant relationship in the environment of that type, however slight that may seem, is capable of building up towards precisely that situation which Goldstein described. Namely one where the relationships present in your environment are as a whole so irrelevant and so complex, that they are anxiety producing in general, not capable of holding meaning.

So, for that reason which has to do with the irrelevancy and the bad of irrelevant relationships and the other reason which has to do with the fact that in order to pack all the meaningful patterns together you need very simple forms. It's quite clear that out of this attitude to aesthetics which is entirely wrapped around the subject of meaning - you do get a crystal clear answer to the question why then do formal properties ~~at~~ play any part in the beauty or in the making of fine buildings. I haven't answered the questions about how to do this. The problem of packaging many, many patterns together in this way - I can't discuss that now - I don't know

how to - I can do it a little - and the problem of making sure that the patterns in the language actually do account for some total of the fabric of life - which is the other requirement put on them by this discussion - I also haven't accounted for. I haven't said how you can assure the completeness of the set,=x though I've given some slight indications of it. But it seems to me that with that kind of basis there is absolutely no reason to expect anything in aesthetics - over and above the contents of the pattern language - and that an environment produced by that language will have those qualities that we associate with beautiful environments.

Student:

Chris: I'll introduce a colored image to try and make the point clearer. Suppose - let me paint these two things - I'll paint this one a uniform color all the way around - a uniform red, let's say - and I'll paint this one two-colored. I'll put red at the centers here and blue at the corners and I'll have an even transition x from red to blue down the side. Just to bring out the factxxxxxx visually that every point on that segment is actually different from every other. That means there are very large numbers of different kinds of relationships present in this form as compared with this one. Because there are more kinds of points. I'm saying that unless a building has reason - I don't want to make a too simple extrapolation I'm not suggesting that buildings should be round - I'm trying to use this as an example of something - I'm saying that any time that there is an x irrelevant relationship in a building we're going to feel it as irrelevant and I'm using this example to show how fine - how subtle that can be - even ~~xx~~ something that is apparently very x very simple. There can be a tremendous number of xxxx irrelevant relationships.

Student:

Chris: Your saying, in other words, that this means - it's very important that some of the higher order patterns be in the language - especially those which - yes, I agree

that - those which have succeed in condensing a great deal of meaning. Yes, this is true.

Student:

Chris: That is very difficult to answer. *

Student:

Xhris: That has definitely happened - yes. I mean in a - that seems to be quite a different question from his .

(Original question)

Before we get off on that I'd like to deal with this thing. Yes, it was how does this whole view of things account for the fact that we do regard things like _____ lets say - which is more or less irrelevant to it the parcel which is totality irrelevant to it - as being beautiful - how come?

I give two kinds of answers. One of them is that the very very dense packing of patterns happens because of the effects that I've described about what simple forms will do - happens to lead to forms which are in a purely abstract sense, very tightly organized. And we get something out of that still. In much the same way that you can sense that something is - an object in nature which you may have no idea of what it is, or how it ~~for~~ works, or what it does, you still react to as to wheather it is - to its beauty.- whether its beautiful or not. I also would like to bring something else out and that is, I suspect that our intuitions - our formal intuitions - are much much more functional than most people usually admit. In other words, that when we see things we are immediately reading into them all the properties that they would have and sense those even ~~xxxxx~~ we may no longer be concerned with them. For instance, Max Jacobson isn't here is he - he just wrote an extraordinary sort paper about the relationships between the three buildings on a typical temple sight. I forget what the three things are called. ~~Thxxx~~ the entrance things go through - and there's some sort of a little building that fits here and then theres the main temple there - a Greek temple site. He has succeed in showing - there's a recurrent kind of relationship which is rather definite - it has some curious ~~xx~~

assymetrical properties and its something that people at an aesthetic level have been aware of for a long time - its been written about - and he's succeeded in showing that it is actually ~~xx~~ derived from five patterns - each one of which makes perfect sense in terms of people standing in such and such a place and other people being ~~abxxx~~ able to walk by without affecting the peacefulness of the people who are stanging addressing the deity - and a whole series of issues like that - in fact it turns out to be a very remarkable functional solution to quite a tricky problem. I suspect that when we see a thing like that we recognize its meaningfulness - ~~xx~~ even though we may not know what the meaning is. I think the converse of that is ~~x~~ slightly easier to take - namely if you see something that has no ~~xx~~ meaning that fact usually hits you fast. I wish I could give you examples I wish I could give you examples about perception to try and make this point clear - I think I ought to.

Well, I think the same things could be said of suburbs. My feeling is that we are in the habit of - we don't respect our own intuitions enough. If you go into a suburb and you don't like what you see there and you say God, that's ugly, I'm quite convinced that this intuition is a deep appraisal on your part of the fact that what's there doesn't make sense and that you come back saying its ugly because that's the level that the intuition presents itself. But I don't believe that your reacting to formal properties - your reacting to whether it makes sense or not. Let me give an example of that by the way, suppose that I draw that - your response to it will be quite - you have to know what it means before you can make a response to it. If I tell you that's the Golden Gate bridge you'll have one sort of attitude to it and you may begin to reflect how nice the golden gate is and begin to see some of that niceness in there. If I tell you that its the cross section of a new typewriter that I'm designing - then you'll laugh at ~~x~~ it and think its ridiculous and quite rightly. So, its very very important kind of demonstration ~~xxxx~~ to recognize that we don't just react to formal patterns - to abstract patterns. That isn't true, although you can demonstrate that abstract patterns do have certain properties in experiments.

Question:

Reply: Well there are people in our own time like that, me for instance, who ~~wh~~ shove pieces of steel down the outside of concrete columns. In fact well that's, it is very hard for me to discuss Michealangelo I mean in this connection. I mean let me discuss Mise (sp) ~~xx~~ /for a minute in that connection and then we will see if it makes sence to you in terms of your question. I think it is fairly cleat that Mise really fell into the trap of making things which have clarity, simplicity in a purely formal sense and have actually very little meaning. I mean little meaning in terms of ~~w~~ the whole spectrum of life. They have their restricted ~~x~~ kinds of meaning. in terms of production and in terms of his ideas of universal space but they don't really even begin to get into what life is all about so ~~xxxxx~~ his clarification of the situation is quite phoney in that sense. Now it is true that there is -- there is no point in denying the fact that people can be gotten to a point where they will react favorably to things like that. Lots of people like Mise, I thought it was fantastic one time I still have great respect for it in a very certain way. I don't know the same kind of thing might be true about Michaelangelo in his buildings. I think the quality of his buildings is something compared with his -- it is very hard to discuss I feel that as ~~A~~ sculpture he really want making it particularly and I think the very fact that you have pointed out is part of the reason why. It is clear, of course, let me just back off for a minute to the particular view of esthetics I have presented. It is clear that there are many other views of esthetics, any one ~~xxxx~~ of which may be made to tick inside of a persons head -- in terms of his views of esthetics so you can educate a person to like Michaelangelo or to like Mise there is no denying that.

Question:

Reply: I think provided that it doesnt infringe on the meaning of the whole. It is not likely to do much damage. The thing is though that that kind of ~~stxxx~~ stuff is a bit like noise on a telephone. The moment ~~there~~ is more than a little bit of irrelevancy

it begins to drond out the meaning. So you obviously cant go very far along that line but I don't think there is any harm in a bit of it.

Question:

REply: Yes~~that~~ is contrary to it and that I disagree with. I mean there are views like Venturi (sp) believes that very strongly. He ~~dis~~ deliberately does that ~~a~~ sort of thing for that reason. Now, My feeling, again it is eaxier to discuss Venturi than ~~xx~~ to discuss the idea abstractly. My feeling again is that he can certainly succeed in selling his ideas ~~xxxxxxx~~ to a small number of architects and probably to a large portion of the Time magazine reading public because people are prepared. People can be educated to anything . The question is is it a good idea that he is advocating. After all what I have just proposed and the kind of thing ~~xxx~~ that Rightwood is talking about. The necessity of the meaningness of the environment really seems to be a much larger concept than this titilation with deliberate ambiguities and if what I have said this morning is true I should think it would ride that ~~xxxxx~~ stuff out of court obviously because it is more important but I mean it may not be true. I think you have to examine fairly critically ~~xx~~ whether what I said makes sense. But if it does I think that kind of stuff really goes by the board becau^{se} this is obviously more crucial.

Question:

REply: I have one comment about that and this is t think fairly important. The idea of patterns seems peculiar to alot of architects. I have not yet met a layman who found it peculiar. My impression in dealing with clients and laypeople has been that they are incredibly thursty for God sake to get back to a situation to what is being said about buildings and cities gets to grips with what ~~thex~~ their lives are all about. I feel in that ~~xx~~ sense that these - I mentioned last time the part that the patterns could play in advocy and in the relationship between designer and client. The ~~xxx~~ prospect of being able to get back into the situation whate everything that is done makes fairly literal common sense I think is so appealing to some people that I doubt - you are right that there is a lot of that stuff going on at the moment - but I don't know if it would persist in the light of this possibility.

Question:

Reply: God I think that is most unlikely ~~and~~ no and I am not talking about some kind of scale from zero information up to a lot of information and in terms of this information content, and somewhere in here is a good place to be I have heard that, that is the theory that you are talking about. No I am definitely not saying that. In fact it isn't too difficult to show that this theory is complete hogwash. That of course is true that a colossal amount of information coming in is damaging and as you said that none is. Any hope of getting at the problems of esthetics by determining where you are on this information amount coming in. That can be shown quickly. It is a rather specialized subject and I - let's talk about it outside. It is very easy to give examples - that's not true - there is no prospect in that theory. I am talking about meaning not amount - that is the basic difference. I am talking about whether or not you succeed in creating a picture which put things together completely and it is a picture of you and your life in your world. Can you succeed in that that has nothing to do with how much information is at stake.

Question:

Reply: No it is just that that model since it deals ~~w~~ only with quantity of input doesn't come to grips at all with the question of whether it is coherent. whether it is ^{fit} ~~put~~ together whether it makes sense which is what is at stake. I may be misunderstanding you.

More of student:

Reply: Let's talk about it after because it is liable to get confusing here.

Question:

Reply: Let me make an analogy. I mentioned Goldstein's rather sharp distinction between anxiety and fear. Now fear has to do with specific functional problems for the individual organism and the danger that is in them and the danger is the situation where you just don't know what you're dealing with. Now there is an analogy here between Goldstein's view of this distinction. There is a similarity in the whole problem of function and the whole problem of clarity. See clarity has to do with function ~~has~~ has to do if you - let me make the analogy function has to do with getting rid of the problems that are solid problems

that have to do with survival in some sense. Clarity has ~~a~~ to do with making a picture of those things and it cannot be one of them so this goes back to the issue of objectives also some people I think wonder why aesthetics or ~~beax~~ beauty or clarity couldn't be entered in on a list of objectives and I think the reason is precisely this that it is a concept of a completely different order that cannot be included as one of the items on a list of functions. Lynch's attempt to do that is making this confusion.

Question:

Reply: It sounds like I said something confusing which you are responding to in a way that I don't understand.

More of student:

^E Reply: You are saying that somebody might -- let's go back to Erickson for a minute suppose there was a world where most of the large scale problems of life had a kind of physical representation in the fabric of the city. You are saying that somebody might live in that city and not realize that he was a reasonable representation of life. Well I can't imagine it. So I cannot answer the question.

Question:

Reply: I don't know how to do that Murry Silverstein, ~~wax~~ we were just discussing this the other day, and he wants to know ~~x~~ whether there was some way in which you could show that cities and that parts of cities are today associated differently in people's dreams. Well, let me ~~a~~ kind of say clearly what he suggested. His idea ~~wx~~ was this fact that at one time in view of the kind of ordering nature of the city in ~~wxw~~ that it was tied into the religious principles. The chances are that in so far as cities appeared in people's dreams they usually appeared with a connotation. All the things in ~~deax~~ dreams have all kinds of emotion whirling around them and that they probably came in on the good end. He was wondering whether it was ~~possibx~~ possible to show that where people dream today where cities enter into these dreams that it might be shown that they always enter in with a generally negative connotation to the dreams. This struck me as very interesting I am not sure how to do it. It also struck me as quite plausible. I don't what your experiences are in that