

Lecture 27

December 4

Now this last week we are going to deal with the general implications of having a pattern language. To day I would like to discuss with you what it might be like to be a professional operations~~xxx~~ing in the world where the pattern language existed as a real endity. I have only a few points to make here and then we will have discussion fairly quickly. Now lets get a concrete picture of what it would be like to be a designer in a world where the pattern language existed. At one time I thought that the people who would be p creating the pattern language would have to be different people than the people who were engaged in the everyday design of build^Sing and parts of cities. I don't think that is true now. In fact it seems fairly certain that is unrealistic and not a good idea. So that the normal ongoing development would go something like this: you are faced with the design of a particular ~~xxxx~~ building, you draw on all the material in the language which is relevant to the situation as you currently encounter it,, You ~~xxxxxxx~~ devote all your schematic efforts that is that 10% of the normal design ~~xxx~~process that is given to schematics to the development of one or two or three new patterns which are not accounted for in the body of material which is given to you,you ~~xx~~ do make an effort to generalize that material sufficiently ~~xx~~ so that it can be used by somebody in a situation different from the one inwhich you are operating and you contribute that material ~~xxxx~~ back to the language. So that in this sense every designer would be involved with thi~~s~~ construction of the language as well as its use. I supose there will be some people who tend to spend more of their time invention patterns and other people who spend more of their time using them. Now under conditions where this would sort out this enormous methods of operations the main things that would change I don't think would be ~~xxxxxxxx~~ institutional that is again at one time I thought the professions would need change radically to accomodate this kind of thinking I don't think that is

implement it.

Student:

Chris: Yes, to some extent you are. Well, there are two difficulties. One of them is the actual words that you use to ~~xxx~~ describe the patterns. That I think in the ~~xxxxx~~ catalog will for the time be informal. At some point, as soon as the re-naming process becomes operative, we might use those names. I doubt it actually, I feel the informal way of presenting the material might be best. The fact that your dealing with the patterns as atoms and that the connection between them is totally obscure there is nothing you can do about it. There is no way in which you can try to build a sort of ~~xx~~ rudimentary classification into the catalog, because that does get back into all of those questions and there is just no hope of doing it sensibly. So to some extent, people who use the catalog are going to have to live ~~xxx~~ with that fact that if they want to get serious about the material they're going to have to seek access to the memory. Your quite right - in fact its going to be rather difficult to deal with because the catalog will of course be very long. It may be that at some point we can invent a way of representing the material which is indexed according to the current classification in the memory, if that's how you want to view it. But I can't visualize that, its a possibility, it might be necessary.

Student:

Chris: Yes, but that's a pretty unweildy process. In other words, somebody who's really, who's right in the middle of a design problem, I don't think is at -- it would be very very awkward to get the whole access thing done remotely by letter. You see, I think its one thing if you have access to a terminal so you can fiddle around and get that stuff out immediately, but so long as we're on the mailing level, then I think its going to much more realistic that someone will simply have the stock of patterns at his disposal in his own office. Maybe I didn't understand your question right.

Student:

Chris: All I'm saying is that at some point it will be necessary to have that available long distance. It does involve computer technology. That isn't just a little thing x that you can do, we intend to do it, but that's the same as the second thing that I've described.

Student:

Chris: By the way quickly - the stuff is not being sold for profit - its a pure - just a matter of our costs x so --

Student:

Chris: That's an important subject - but it has nothing to do with what we're talking about today.

I don't think a clients any more likely to make that mistake than a designer. We're all subject to that difficulty.

Student:

Chris: That's why I said that the centralized system of distribution is very unfortunate because it carries over all kinds of authority like that. There is absolutely no sense of that at all. As I read out here we intend to send the material out with every critical comment that everybody sends in, unedited. It doesn't seem to me necessary to invoke authority at any point. It's not clear to me where that has to be done. One could make the same argument in physics - you could say at certain points somebody has to be authoritarian, but in fact that's not true, because it becomes evident that certain things are not really very good ideas and I think it will be come evident in the same way if this sort of discussion maintains itself fairly strikingly.

Student:

Chris: It's possible. I'm not a great believer in machines, I doubt if they could do that. I mean, it's possible - you know these devices are pretty dumb. It's

possible, I suppose that at some point in the future if we understand more about linguistics to do that.

Student:

Chris: I see what your saying. Your saying that for instance Architectural Forum right now gets ~~things~~ sent automatically to every professional office, and your saying that it would be a good idea to send this material automatically.

Student:

Chris: Yes that's very interesting and it is very important I think.

Student: Something about a journal - very new in ~~cons~~ concept

Chris: The main --- well the difficulties with journals are -- first of all there's a fantastic publication lag in many of the major journals, it's now 18 months to 2 years. which is absurd. & For instance on the frontier of the scientific fields they don't use the journals at all anymore. They entirely operate on the basis of lab reports, which are circulated because every molecular biologist knows the 25 other people in the world who are working on his field and he automatically sends his report to those 25 guys and that's it and the journals are purely for history. There not doing any thing anymore. So in a sense the idea of taking the items and making each one of those available on an instant xerox basis there is probably a slight advance there. Of course the content - there is also the difference whereas - see a journal the content even in a scientific journal is of a fantastic variety of kinds - whereas here there is an effort to make all the ~~kinds~~ content comparable. That may seem dogmatic, I don't know, when it starts. Well, I ~~would~~ wouldn't go out of my way to profitize anyone. Because I think that would be a waste of breath. But I am interested in the design community as a whole beginning to have a similar way of working. I'm very interested in it happening, you know you never succeed in convincing an existing generation of anything - it always is just a matter of people dying off. That's true.

Student:

Chris: Well, medicine is probably the closest sciences to what we're taking about. Because in medicine you do have practioneers at many many different levels, all the way from GP's down to specialists and it is these same practioneers who are submitting journal papers to the journals. There are also people who do nothing but research and I suppose that there will be that in our field also. In medicine it seems - I think the point is that it's clear enough in medicine that the pay-off is worth - it makes it worth while. In other words, everybody recognizes that if they don't bother to test the new drugs that have been sent out and to submit reports about the efficiency ~~x~~ of ~~this~~ this drug compared to that drug, and this surgical procedure as ~~an~~ opposed to that one, nothing ever moves forward. In that sense that is what I meant about throwing out the garbage - they get rid of ineffective procedures fast and improve them all the time and that - it becomes a sort of social responsibility on the part of the individual. That is one of the changes of attitude which has to occur here. We have to recognize that when we're doing a design, we are responsible to all other designers, not just to ourselves and to the client. That's really the critical change of attitude right there. But it is like science in a -

Student:

Chris: Well, its true - it is much clearer to them just what precisely what ~~thxxx~~ their doing. -- No I tried to give a very crude discussion of that. The whole issue that there can not be an algorisms. That's the same as ~~a~~ saying ~~thxxx~~ there can not be any automatic applications of patterns. I think that that is clear. I know that I didn't succeed in proving it and that we only just touched on it and discussed around it. That's the core of the whole idea of the language. I think it would be very obnoxious if there were algorisms but luckily the subject is much to complicated and there can't be.

Student:

Chris: That is precisely the same thing. There are no procedures for scientific discovery.

Student:

~~Chris: Oh, that's right. It should be obvious but it's not~~

true now. I do believe that there would have to be certain fundamental shifts of attitude and those I can summarize. There are three:

The first one is that it would have to become clear to every designer that design is the invention of structure rather than the creation of objects. Now that is a change of attitude which is fairly familiar in the intellectual ~~xxx~~ world today. That is in the majority of disciplines people are beginning to recognize that abstract - the abstract structure behind a phenomenon is closer to its reality than its object or the actual phenomenon itself. You get inklings of this even in the science fiction novels where people talk about reconstituting a whole organism at a distance simply by recognizing that the organism is in fact a pattern of information which could be reconstructed. Now that is pure science fiction, but it conveys the attitude that I am talking about. In architecture particularly less so in planning since the profession has come out of a craft ~~position~~ tradition with a primary focus which has always been the object that you made it is ~~st~~ still at the moment the case that people regard themselves as unsatisfied if they have not produced an object that they feel it is only a complete object that can be discussed evaluated and that is it the only thing worth making. Now it is fairly clear that running through the material that I have been giving you that the prime object that you manufacture as a designer are ~~abstract~~ abstract structures and that this and that the entire body of ~~abstract~~ abstract structure which is created by a group of people in forming a language like this would then - that would be the object of interest it would have almost automatically ~~xxx~~ repercussions the world of objects but this is - it ~~xxx~~ sounds slight but from the point of view of the mentality of the people concerned I think it is a major shift of focus. Perhaps we could bring out in the discussion just ~~h~~ what that means. I am not sure just how to put it to ~~x~~ you because I ~~don't~~ don't know just what extent it is obscure and to what extent it is clear,

Now the second change of attitude is by far the most important. That is the attitude of constant hammering away criticism and reputation of other people's ideas. Now that is -- that single attitude ~~is~~ has been entirely responsible for the success of the physical sciences. Commemorate with it there has to be a kind of non-ownership of ideas. So long as an individual feels himself to be identified with the ideas which he produces then he is not prepared to subject that idea to a tramping because it would feel too much as though he himself were being criticized one of the most successful things that has happened in field like biology and physics is that the hypothesis that are invented people have succeeded in making clear and a disassociating themselves from these hypothesis so that they are prepared to criticize their own hypothesis to begin with but above all they are prepared to be subjected to the most intensive kind of criticism. They are prepared to devise critical which will actually get rid of the suggestions. Now it sounds highly negative the fact ~~that~~ is quite the reverse it is profoundly constructed and has been able to get rid of garbage. This is essentially what is not happening in the design profession today. There is no mechanism by which things that do not work are ~~or~~ rejected once and for all. So that the attitude - I made it clear in an earlier lecture that you couldn't possibly have this sort of attitude unless you had ~~atomic~~ atomic objects which would be the focus of the criticism and reputation/ⁱⁿ and that sense the individual patterns serve that function. It is impossible to take a whole building that somebody has produced and subject it to any kind of searching criticism because every facet of it that you pick on will be justified in terms of some other facet and you will even though you will ~~feel~~ feel that your criticism has been effective you will never succeed in making an effectively convincing argument about it that will stand in the minds of the person that created the thing. So that it is only when everybody

agrees that it is possible to abstract the items of consideration and separate them from one another that they can be subjected to this very very intense buffeting.

Now there is another aspect of this whole thing which is again ~~ax~~ commiserate with what I have just said and that is the idea that you are prepared to ~~xxx~~ take somebody else's ideas and either use it the way it is if it is right or modify it slightly if it is slightly wrong. At the moment one might almost be going to an extreme to say that the primary value held by designers is that of being unique or ~~it~~ different that the whole expression of creativeness and inventivity is focused on this idea that you can make something which is quite different special more wonderful than what somebody else has ~~nd~~ made and ~~nd~~ under those circumstances it becomes almost indecent to borrow ideas there are hidden flavors of plagiarism associated with the idea of borrowing somebody else's ideas in the ~~design~~ design profession and apart from the fact that you are regarded as a plagiarist ~~if~~ if you do it you are also regarded as being weak minded and not very inventive. This is absolute nonsense and would have to change - it would change automatically if a language of the type that I have just described were generally understood and accepted but it would have to change. So that as a whole the activity of design would become a much more social process ~~in~~ in the sense ~~that~~ that we would be happy to take precisely those items which our fellow designers have created and were clearly valuable and each one of us would be ~~xxx~~ adding one or two drops into the bucket and that would be explicit. It is of course true anyway but it is hidden ~~today~~ today and it is not acknowledged and not respected. The third change of attitude would be similar to the second but the dialogue between ~~client~~ ^{client} and designer would become much much sharper and much more democratic if you want to put it that way that is, I've mentioned advocacy planning once or twice. There is at the moment often quite a bad breakdown of communication between designer and ~~client~~ ^{client}. The designer

presents a whole scheme to the client and the discussion which follows as the client begins to object to various features of it has the same sort of flavor as the discussion between designers when ~~xx~~ they only have whole objects in ~~wx~~ front of them to discuss. That is that each feature seems to be justified in terms of other features; it is too difficult to abstract out clearly which features of the form ~~are~~ are doing which job and above all there is not much ~~xxxxxxx~~ acknowledgment of the fact that the client is often as good a designer as the designer. The kind of process which I envisage and which would follow as a consequence of this language being used is that the various patterns that seem relevant to a particular building would be scrutinized by the client to begin with before any synthesis of these patterns even began -- that the client would then be in a position first of all to discuss, criticize, object to individual patterns on their own merit and he would also be free to make pattern statements of his own to cover areas which he felt had been left out. Now again the point of value is the explicitness of the connection between the particular pattern feature and the particular problem which it is solving because at the ~~xxxxxxx~~ moment it is true that architects sometimes get their clients to be quite explicit at the level of performance. They do succeed in getting clients to draw up activity charts, to state performance standards, to state the requirements. What they do not succeed in doing is involving the client in the process where the physical organization is related to the specifications. In fact if anything there is an attempt to create the impression that the designer is the mystery man who ~~mx~~ can make that jump and the client has just got to sit there and take it for better or for worse. So I would expect that under the conditions that I've described there could be a very much more open discussion between designers and clients. In fact in many cases I could see

the clients themselves stating a substantial number of the patterns which they thought ~~xxx~~ ought to be present in a building and the designer would then be the one in pointing out to them things which they've left out, showing other patterns which are available. He would have the function of putting these things together but he would bring the client in in a much much more real way to the process of design. Now there's one further thing to discuss - the matter of specialization. If you sit down and think carefully about what's got to happen in the design profession you would very quickly come to the conclusion that there have got to be more specialists -- that people have got to be able to go deeper into ~~xx~~ different problems rather than all trying to operate at a very general level. But at least so far specialisation has been of a rather fragmentary ~~xxx~~ sort. That is, specialisation has been more equivalent to fragmentation because the individuals who become specialists in various fields are no longer then able to talk back to the people who have specialised in some other direction. Now the language would certainly enhance the possibility of someone getting deeply concerned with a particular kind of environmental problem. So in that sense specialisation I think is fine -- ~~xx~~ there's nothing in the language which says ~~xxx~~ anything much one way or the other about it but it certainly permits it and encourages it. On the other hand, fragmentation --- it goes a long way to overcoming that because one could require that the individuals who specialise in different fields do all state their knowledge in the same way-- that is so that somebody who is an education planner, let's say, whose primary concern is the actual organization of teaching groups, very far from what we consider buildings -- the human organization of teaching groups -- could state his conclusions in patterned form. So could a heating and ventilating engineer; so can a traffic engineer; so can a specialist in any particular form of housing, so that it gives these individuals the opportunity to be very, very greatly ramified, that is, go as far as they want in some particular direction while still

maintaining a connection with the body as a whole, so that this has a further -- it suggests that the range of people who are expressing themselves in patterned form would be greater perhaps than the rather narrow range of people that we see now constituting the core of the design profession. And it would be possible under these arrangements. Now those are the changes in attitudes. They are really rather slight in a way, but they are deep. Now as far as how to implement this is concerned, in what form would this language exist, where would it be, how would we distribute it, how would it be available? Now rather than talking abstractly about that, the easiest thing I can do is give you a rather quick summary of the Center for Environmental Structure and its activities. This is a corporation which a small group of us started about 6 months ago. It has the sole --- its sole intent is to create a pattern language -- an environmental pattern language, and we are going to operate in the following manner. Each pattern..... we will be constructing the language in a specific place, of course. Each pattern in the language will be recorded in a catalog which has a short summary of that pattern in it. This catalog will be distributed to anybody in the States or in England that wants it on a regular basis. The number of items in the catalog will probably be growing fast. Anybody who wants any particular patterns writes for those and pays for them. Now on the inside each pattern actually has a folder in which it is sent out, and on the inside of this folder ~~xx~~ it says: "It must be understood that the pattern presented here is in no way definitive. It ~~shak~~ should be regarded as a ~~hypoth~~ hypothesis subject to free discussion, criticism, reputation and change. If you have any data or arguments which ~~xxx~~ make it clear how the pattern can be modified, please send them to the Center. We will include your comments with future issues of the pattern under your name and modify the pattern accordingly." Now this is a very, very crude way of getting rapid feedback and rapid improvement of the pattern. It is more efficient than a normal academic journal because you do not burden each