# CHRISTOPHER ALEXANDER IN CONVERSATION WITH REM KOOLHAAS AND HANS ULRICH OBRIST

Rem Koolhaas: You were born in Austria and educated in England. When did you move to England? What kind of milieu do you came from?

Christopher Alexander: My family moved to England in 1938 because of the Nazis. My mother and father were both teachers, my father's still alive, he's 99. They both grew up in Vienna. I know relatively little about my mother's family. I know her father was a banker or something like that. It was a Jewish family but she was brought up as a Catholic. My father's side of the family had a variety of different things. His grandfather was a country doctor on the border of Czechoslovakia.

RK: Are there any Austrian elements in your make-up or character or thinking? Is it in any way important for your life?

CA: Mahler! Mozart! And perhaps a little touch of Kaiserschmarrn. [laughter]

RK: And also Freud and Schiele?

CA: Egon Schiele you mean? Yes indeed. But more especially Nolde and Heckel. The German painters.

RK: We've been looking at your lines, and we want to talk about your lines and your diagrams and trying to probe where you learn to do this. We've been looking at your books, and we want to talk about your diagrams, the lines of drawings and try to probe where you learn to do this. They are in a way expressive diagrams.

CA: I do feel quite strongly related to those painters, and to Klimt also, but it never occurred to me to get help from their work. I just worked, and then in what I did, later I found an affinity, perhaps, in my spirit and in the materials of these men..

HUO: I have to specify. We would like to talk about three books: "The Synthesis of Form", "A Pattern Language" and "The Timeless Way of Building". When we looked at the lines in "The Synthesis of Form" we were wondering whether there is a link to Expressionism.

CA: Not a conscious one. It's not really an intellectual heritage, it's just that what I feel in here [points to chest] probably is certainly more Austrian than English. It's that inner feeling that you have ... how can one put it into words? It's got to do with a state of mind, which is very dear to me. I remember once, I was traveling and for some reason I had to go to Vienna on the way back, and I hadn't been there for several years. I was so excited to be there, literally as I came down the steps of the airplane I got down and kissed the earth (actually the asphalt), which was very strange. What made me do that? It was quite a long time ago, probably in the late '70s

HUO: [showing "entire village" illustration] We were wondering, in terms of Expressionism and those lines, how you made these drawings. They're not made with a computer. There is something of woodcuts?

CA: I made them with a magic marker. You need a firm hand to do that.

## [Laughter]

RK: This is not quite a hand drawing.

CA: This was made before computers. I mean, around 1960 I used to use a computer as big as a building, which all of us used at MIT. But in those days you couldn't use computers for graphics the way it is possible now in Photoshop. I used to make photostats. If I made a drawing I'd make a photostat, and then I would blow the photostat up and then edit it to perfect the purity of a curve. And then you'd go back and forth between the negative and the positive of the photostats, correcting each one with black ink, so one could perfect the white, and perfect the black. That was a way I sometimes edited these things.

HUO: I'm very interested in the idea of books as a medium. In history there has always been architects, like Le Corbusier or now Rem, where the book is not just about their own work but it is a medium. For me they are among the most extraordinary books I know. They are masterpieces, not only in terms of the content but also in terms of the form. This idea of how image and text is associated, that it's black and white, all of that. What gave you the idea? How did it happen? I want to know more about the format and the form of your books.

RK: Did you have a designer, for example?

CA: Oh, good Lord, no! I designed them all myself.

First of all, these books started out with many, many experiments. In other words, the only way I could find out how this book should be, was to make dummies of books, and keep going, until I felt that they were just right, in the hand. That was a very lengthy process in itself. The whole thing went through a whole series of experiments; the weight of the paper, the size of the print, typography, spacing . . . every detail I went through experiment after experiment after experiment. Even for example, something as apparently unimportant as the flexibility. I knew that I wanted it to feel – it sounds a bit pretentious, but forgive it if it is – as if the book could become part of your heart. Very, very close to you emotionally.

HUO: The image text relationship is very interesting – the images are not explained they are kind of ambiguous.

CA: Yes, as far as the relationship between text and picture . . . I always felt that in writing, I was talking to somebody and showing them things at the same time, so I simply tried to make that fluidity actually happen on the page. It was quite conscious, that part.

HUO: I have one more question about the book. They have a lot to do with my world, the world of contemporary art, and they've been inspiring artists. I was very curious about the images, because you use all kinds of images. To some extent it reminds me of Gerhard Richter's Atlas and also of Hans-Peter Feldmann's encyclopedias. I was wondering to which extent you work on your own iconography. Do you have

your own archive? Do you have a classifying system?

CA: No, I'm not a very systematic person. I keep it all in my head. My desk is pretty chaotic. I lose things all the time. Of course, we had to search for years for those pictures, for years. Normally, even when I'm writing something, as soon as I get serious, I start with the pictures. I have to think about what will convey the idea ... When I give lectures the part that is the most draining is having to get the pictures in an approximately accessible form.

RK: In sequence?

CA: Well, I always give lectures which are completely spontaneous, I don't write them out or anything. And so I write myself a little bit of htm code so that as I'm going through and talking and thinking about things, and I suddenly realize I need that one, I can find it while I'm on my computer and giving the lecture, and then put it on the screen. And then I can actually make exactly the right picture to the right point ...

RK: A fluidity ...

CA: Yes, a fluidity which does not obstruct my thinking by some pre-set sequence like in PowerPoint. I never use PowerPoint, exactly because it has that problem.

RK: What is interesting is that the word you have used most frequently, is one that surprises me, the word "fluid" because you are a system-builder, and the preference for fluidity over rigidity is to some extent unexpected. Something I really like in the book – where you simply give instructions on how to read it in one hour, even though you've just explained that you've been working on it for years. I think that is a beautiful way of slaloming through something very complex. You have this tolerance for, not superficiality, but for a speedy way or an emotional way of getting through it.

[time elapses, CA pours water]

CA: Sorry, I'm a slow thinker.

RK: Is that true?

CA: Very, very slow.

RK: Is your life showing advantages of slow thinking?

CA: One of the reasons I'm successful is because I'm so careful, I'm very, very careful. Until I know something, I don't pretend that I know it, . . . that kind of thing.

Anyway, what I'm trying to get to is the physical because the physical organisation of buildings and the city is the main thing which really holds my attention, and I'm extremely much aware ... I don't want to be aggressive about it, but the physical nature of the city has not yet been tapped at all, that is – what the geometry actually is and should become, is still a mystery. I'm struggling very much with this now. I mean, even the *language* for morphology doesn't really exist at the moment. You probably know I've written about morphogenesis. So the question is: how does the generating process actually create the form of a building, a neighbourhood, a

window, a city . . . whatever. To me, that's the whole ball game. It seems ridiculous, I'm 70 now and I haven't hardly started. But that's the way things are.

#### [Laughter]

RK: I was asking about the advantages of slowness. There are of course also disadvantages: you said that the thinking has barely begun, but in the mean time while people like you or even us are thinking, developments are taking place beyond our control at such a speed that you wonder whether thinking even can be applied to something at this kind of acceleration.

CA: I agree, it's a very significant problem, whether it is velocity or sheer numbers crowded together or numbers of components, we have not yet found a way of addressing those numbers.

HUO: One of these things that I'm fascinated by which is related to numbers, is this idea of you before becoming an architect, being a mathematician. I've always wondered to what extent your use of diagrams and numbers has to do with that. You have done so many things, you're a builder, writer, designer, mathematician. You see yourself foremost as a scientist. So I was curious if you could talk in relation to those diagrams and numbers about your background as a mathematician.

CA: Actually, it was guite simple. In England one specialises much earlier than in America. So by the time I was 15 I was already in the track of science and mathematics. I had expected to become a physicist or a chemist. I was very fortunate, I got my entrance to university a year early. I then went to my chemistry teacher and said "look, I don't have anything more to do at school, but I have to stay here for another year, so I want to pretend to be a research chemist so I can find out what kind of life that is. So can you set me a problem so that I can experience it." He was a very nice fellow. So for a year, I worked on a rather abstruse problem of chemistry. I got completely fed up with it. It was completely boring, drove me out of my mind. During that period, one day I came to an exhibition of architectural photographs in school, I went in there and had a look round and I thought "wow, this is amazing. The people who are making these things are doing the same thing I do when I paint, only they're making a living from it. So that's what I'm going to do." I was still only 16 or 17. My father was horrified when he heard this. He was always very helpful to me, so he said: "look, if you go straight into architecture now you'll waste your life. You won't know anything, and you won't be able to do anything." So I said "What do you expect me to do?" And he said "I tell you what - go to university and do mathematics or physics and *then*, when you have a degree in one of those, do as much architecture as you want." It was very kind of him, incredible. He changed my life with that one moment of advice. Without that advice, I'd be nowhere today.

RK: I would like to come back to the diagram. Are you aware that the diagram as an issue has been dominating the last 10 years of architectural discourse. The next question is, do you follow architectural discourse?

CA: I am not sure I understand. What do you mean? The path that has been taken, as opposed to the act of building buildings?

RK: The path that has been taken, you can explain it in many ways. But modernity or modernisation would be one way of putting it. Many younger architects in the past 10 years have thought also that the diagram would be a way out of the path taken in terms of making it less formalist.

We have been looking at pages like this [shows page] with complete fascination. We are completely seduced, still, by the language and also by the method. We were wondering, it's not unlike some literary movements emerging in the '60s. For instance in France, Georges Perec decided to write a novel that was missing the letter E.

HUO: The movement is called Oulipo. They also wrote books of lists, the movement was very much about the idea of constraint. Were any of these movements important for you? Oulipo, Fluxus, other artistic movements of the '60s which have to do with the dematerialisation of art. There were lots of lists and instructions. In one way it was no longer about the object, it was about giving instructions so that the user can make the art. If I think about the pattern language, it is almost like a "Do-It".

CA: During the late '50s and the early '60s, the main people I had dialogues with were anthropologists and psychologists, because I wanted to understand how form came about from society, because I felt it was very much contaminated at that moment. I thought "ok, if I can find out what's happening..." It's funny, because in those days it was quite common to look at primitive societies all over the place and nowadays they don't even exist any more. It is incredible how fast that happened. . . Anyway, so I went to India for the material, it was in the appendix of this book. I lived there for seven months. When I came back – this is a strange story but it will tell you something about my character. I came back to Harvard. One day I got a letter from the Gujarati government: "We're familiar with your work that you did while you were living in Gujarat. Now we have to relocate a village because of a big dam project. Would you be interested in being the architect of this village?" So here I was, I was, in my mid-20s. It was you might say a fabulous commission. So I wrote back and said: "I'm honoured and definitely very interested, but I have to think about it a little bit and I'll let you know in a couple of weeks."

I thought about the whole thing, carefully, and realised that even though I had made these diagrams to define the key aspects of the village, it would mean nothing for me to design it, it would have to be the people themselves who used the diagram material, to create the forms of streets and houses.

RK: Program their actions, in a way.

CA: Yes, if I could give them the material in a way they understood it well. But even though I spoke a bit of Hindi, I didn't feel that I understood Indian people, their inner way of looking at the world, at all. I loved it there in India very much, but I noticed during my time there that there were amazing disconnects. Completely strange things would happen and I'd have no idea what they meant, but still they were happening. I thought about this, utterly different from my experiences in Japan where I always felt I knew what was going on even though some people consider it a very mysterious country. Since I did not understand the Indian people well enough, I thought it would be absurd for me to build for them, because that would only continue the tradition of modern architecture, where architects are constantly

buildign buildings without truly understanding the people who are to live in them and work in them. So with great sadness, I wrote back and could not accept the commission.

I said in my letter, "I'm terribly sorry but the only way I can do this project is to have the people do it, and I don't think my communication with them will be profound enough, and what will happen is that something rigid will follow instead of something fluid. I am bitterly disappointed that I have to give this project up because it's the first really serious commission I've ever received. But on careful thought, this has to be my answer." I was stunned by this decision, and I was annoyed with myself. But I could not see how to do it.

In the months following this event, I realized that what I had done with the diagrams was not enough, and that I had to create a whole language which would liberate people, and give them both the freedom and the knowledge to make buildings for themsmelves, in their own way, just what they truly wanted.

RK: You said you need to think about it – how did you think about it? It sounds as if it was simply an intuition that had to mature.

CA: It was like that, I had an instinct almost immediately that it would not be possible to build the kind of thing that I believed ought to be built. I had to think about it very carefully.

RK: Was it the first time that you thought about a model of intervening in architecture where you were more somebody who would stimulate others than be yourself, whether others could be the agents of a critical way of thinking?

CA: I never viewed it like that. What happened, very simply, is that I thought and thought about it, and the only way that that could happen would be to give these diagrams to the people, and actually have such a wonderful rapport with them that they would understand and they would be able to carry them out. And it was out of that that I began dreaming about patterns, because patterns are a more explicit instrument for the use of a person. So that came directly from that.

RK: Would you say that the diagram therefore is also a way of communication beyond language, which was maybe in those early moments of globalization, a crucial device? An anthropological tool, also?

CA: For me it was something a little bit different. Although my origin was in anthropology, my physical desire was that of the painter or the builder. I was trying to find paths from the anthropological source to the actual thing, the building form, and the neighborhood form, and I'm still looking for those paths now, and still doing it in practice.

Think how important this is, and also how difficult it is. First of all, there are six, seven billion people now on Earth. It's quite impossible to create a humane environment in which all those people can live well, unless *they* (not we) are controlling their environment. Only then will people be comfortable, and at one with the land and towns around them. But to do that, one needs an extraordinary and sophisticated tool, some kind of wonderful generative process that can interact with exquisite sensitivity to people, and their desires. The current machinery of

architectural production and the developers' production is far too crude and far too cumbersome to do it right. In most cases it does more harm than good.

This is where the use of generative processes comes in. By generative processes I mean new kinds of processes that include pattern languages, but that also include other vital elements – above all, an infrastructure of power-sharing among people, so that people get some measure of control over the processes that produce buildings and the public environment in cities. It also needs a revolution in the construction industry, so that construction itself is directly harnessed to the production of organic and highly-adapted organic structures which allow the variation needed for things to fit together in their unique circumstances, and allows builders to make all the needed adaptations without using or needing blueprints in their 20th-century form – all without increasing cost.

So, generative systems are capable of doing for the environment what DNA does for an embryo or a plant. I think the Pattern Language was an interesting first attempt to make such a thing, but I don't think it's good enough to do the job. First of all, there's the whole thing about the technics of this. What might a developed form of this look like, how might it be propagated, how would the construction arise. Those are all important questions. The last few decades have been dominated by the idea of DNA. Biologists are now beginning to realise that the shape of plants actually does not come from the DNA. This is really remarkable, the DNA guides the process but the actual shape comes from the literal unfolding of the geometrical object that is the growing plant. So, these morphogenetic ideas are much much more powerful than what was in the Pattern Language. I'm trying to formalise them now.

RK: How and where? With a computer?

CA: Of course in a computer, in part.

Just to give you an idea of what I mean by generative system: You see, one of the most interesting building projects that I ever did, a very primitive one in Mexico . . .

RK: The Mexicali workers' housing?

CA: Yes! I achieved a unique building system which I have not yet ever been able to replicate again in other contexts. The system was unique because it enabled buildings to unfold step by step, thus allowing each individual house to be different according to its family, and yet cheap, simple, and ordered in its process, so that money was not wasted, and the steps could be simply and directly carried out, for all these different houses, without the use of drawings.

That system consisted of first of all, some special corner blocks. The procedure was really simple. You drive a steel stake to form corners of rooms and houses. You have freedom – you can put them where you like as long as they fit some very loose conditions. Then there's a special block that we manufactured, that was put down over that bar. That block establishes the corners of the rooms and the buildings in a more definite way. Then other blocks fit into a slot in each face of the corner blocks. The blocks are all cuttable, so you don't have to be restricted by the dimension of blocks. Then the walls go up. You lay in the windows as the walls are going up. Then you put a ring beam around the walls. The ring-beam form was very special, having

two pieces of wood, which were kept apart. So then I had the families weave baskets, over each room, using lathing strips – long strips of wood with a cross section of about 30mm by 5mm so they are quite flexible and very easy to bend. These strips made a basket with a weave about 1 foot square, and the strips were trapped by the ring beam. Then, when the concrete was poured into the ring beam, it was firmly fixed. One could crawl around on these things. And finally a concrete shell was poured over the basket. Of course each one took its own shape, because if the room had a funny angle here, then the vault that was formed by it took on a different shape. So in the end, the process alone actually was responsible for the form of the house.

HUO: So there was no script?

RK: There was a script.

CA: There were two kinds of scripts.

RK: I would even say that I hear a contradiction. The first one seems satisfaction at the purity of a process, regardless of human interference with it. The second one, an ambition to empower people to take a certain range of decisions themselves. Not that I want to exaggerate . . .

CA: No, you're not exaggerating, it's an interesting point, but it isn't quite like that. Look, my real aim is: I want the earth to be beautiful again.

RK: That's a very beautiful statement.

CA: To be beautiful, of course it has to have in it the nature and spirit of all the different people and all the different places. The purity of the unfolding process that can inspire them and that they can work with is very important in that it's elegant and simple, and that it actually works. The beauty that I'm talking about – when I say I want the earth to be beautiful – has to do with infinite differences. The nature of what is done is different in different situations and places. Also according to what hands were on it. But still, the power of it comes from the elegance of the generative code that makes it possible. I don't think it's a contradiction.

RK: To make the world beautiful again is a very forward looking ambition. Why and when did you introduce the word "timeless" and how does that relate to your earlier work? Is "timeless" a concept of your thirties or earlier or always something that was critical to you, can you explain what generated it? Because it's a very ambiguous word and means very different things in the hands of reactionary people who want to be in a timeless world, like Prince Charles for instance.

CA: Well, it wasn't ever widely used before I used it as the title of "The Timeless Way of Building".

You have to remember that I reached a lot of conclusions in those years, which were Zen-kind of considerations. I felt that the truth of these things was coming from the inner core of the person, and in that sense ... I mean if you look at Zen as an example – there are others like it – the truths it deals with are not about the Victorian era, or the Ancient Greek era, or the 22nd century era, they are just basic things

about what's flowing in here [points to chest] and I became aware, while I was writing. *The Timeless Way of Building* was written before *A Pattern Language* but *Pattern Language* was published before *Timeless*.

RK: So they are simultaneous.

CA: Yes. I was working on both those things from about the late '60s onwards.

Anyway, the point is ... I think I have to deal with the smile on your face a moment ago.

[Laughter]

Because you are trying to drive me into a little bit of a corner.

RK: No, no, not at all.

CA: I need to say something about that. Some people, many people actually, perhaps of a conservative disposition have gone in the same direction where Prince Charles has gone. In that direction, or style, it is the image of something which is of concern. I am amazed, actually, that he is willing to put so much effort into such a trivial purpose as the image, for example building houses that look like old houses. He once wrote to me and said "I've just been in Bombay and the slums are so wonderful, they are completely spontaneous and people are doing what they want to do." And I said, "Yes this is what I've been telling you. So are you prepared to do a project like that?" He never had the courage to do it.

*Timeless* -- if you wanted to ask me how I define it – would be somehow connected with an archetype, that it has to do with things which come from so deep down that they are cross-cultural. It doesn't refer to history, era or style. It refers to those things that are so deeply shared by human beings, that people of different cultures and different eras and so on will essentially recognize and respond to the same kinds of things.

I think architects of the last, well there's a very funny thing going on: there's a traditionalist movement – the Congress for the New Urbanism (CNU) is an example – which I find rather problematic.

RK: I would hope so.

[Laughter]

CA: It's embarrassing because they're very nice to me, but they don't understand why I don't like what they do. It's very peculiar, and it's the same with Prince Charles – he actually just doesn't get it. Even though he's a good man, a fine man, and well meaning.

I think that the architectural discussion of the last couple of decades has done something foolish. Which is, it doesn't know how to make a distinction between something which is deep and something which is superficial. In terms of, let's say these sort of "timeless" issues. I'll give you the most absurd example: At one point, one of the original astronauts (Rusty Schweikert) came to see me. He was responsible for thinking about the space station. He came to see me, and he said, "I love your ideas, I want to use them in the space station." So I said, "Well that's great. Do you understand what they really are about? Perhaps you can give me an example of what kinds of things you think are important." He said, "I think the way you're using redwood all the time is really wonderful. I want to take some redwood up to the space station." I was astounded, and had to say, "Well, this is really completely crackpot. You don't make something wonderful by sticking redwood on it. For instance, the people who make their own motorbikes, because they love them or the truck drivers who do the same thing with the cabs of their long-distance trucks, they're working with steel mainly. And they just use steel in a much more fluid and plastic way, they play with it, and shape it, and then they make it theirs. Don't you think if you're in the space station it would make sense to find some way to use titanium in that fashion, rather than lifting up a lot of very heavy redwood."

#### [Laughter]

Some people in architecture are afraid of these ... what shall I call them, very deepseated archetypes. And because architects are so panicked about whether or not something they make resembles something old, they feel forced to not do certain things that anybody in his right mind would want to do, because it's practical.

It is a very delicate subject, this one.

The other thing, going back to generative processes for a moment: In a truly morphogenetic process, you find incredible differentiation. If you look at a plant and see the amount of variety within that distance [shows inch with fingers], you may learn a lesson about architecture. This differentiation is also present in all well-adapted buildings and environments. In most contemporary buildings, we haven't learnt to do that yet, but it's going to come, for sure.

RK: Are you aware that there are a whole lot of architects who want to use the computer to not prefabricate things, but to use the ability of the computer to produce an endless number of varied and individual shapes.

CA: There's a huge problem with that. I am aware of this.

HUO: There is a whole generation of people like Greg Lynn or Hani Rashid.

RK: There's an almost biological correlation between differentiation . . .

CA: The question is whether it really is like biological differentiation or not. Because in a computer, of course you can set a number of parameters and churn out endless combinations and variations, but if they don't have meaning they are really just trivial games. For the people that live in a world that is created like that, it is actually frightening. It's not joyful, because it isn't coming from anything actual. You can read the insincerity of it. It's trying to fake the variation between one tulip and another, but it's the wrong kind of variation. Morphogenesis has to do with drawing the real variation from the situation, and that's a much more difficult trick from a computer point of view. It's not playing games with computers, it's a question of having representations of the configurations which are profound enough so that when you draw on them you'll get authentic building variation, room variation, roof variation etc, for really good reasons which make sense, and which are related to the world around them, and the whole to which they belong. And then human beings will feel more at ease and relaxed, because that's what we're all used to in the world. It is this kind of deep variation which is generated by the whole that gives us satisfaction, and meaning.

HUO: That leads to another question, the question of "egolessness". When you talk about the "timeless" way of building in your book *A Pattern Language*. In order to get there, one really must make a building "egoless", one must start with nothing in the mind, and on page 46 you talk about the idea that language might be a way to this "egolessness": "In this sense, the language is the instrument which brings about the state of mind which brings around the egoless." Why is egolessness necessary for timelessness? I think it's interesting in the current moment of the architecture world because Modern art and architecture right now are ego-driven.

CA: Well, I used to teach painting as well as architecture, at Berkley. So, I remember I got a bit fed up with the students on one occasion, as I thought they were trying too hard and what they produced was too ego-bound. I had asked them to draw a certain kind of thing, and they had done it and I wasn't pleased with it. So I said "OK, I tell you what – I want you to get a very long roll of butcher's paper, I want you to make this drawing 150 times as you work your way along the paper, and then we'll talk. But just go as fast as possible. And you're going to get bored, so at that point just speed it up." And by the time they got even half way there, what they were doing had a different level of fluidity altogether. Because they stopped thinking about it, they stopped worrying about themselves, and they were obsessed with just getting it done. It's a very simple example of this kind of thing. Your body is acting, your mind is acting only in a certain way -- but not in a way of controlling things. The pattern language has an ability to do something like that, because it provides you with things which are actually coming from your own person, because most of those things are like that in their nature.

RK: I wanted to add another question about language – when did the similarity of your operation with language become important to you? At some point there is some explicit correlation with what you do and your language. Was the thinking of Chomsky important for you at that point? About deep structure ...

CA: Chomsky's work was a revelation to me. I was at Cambridge at the same time as he was. Although I don't think he was penetrating the deepest issues of language, only a small part of the issues, which had to do with grammar, and that was fine. His ability to bring that out was colossal, incredibly fascinating. That was my home turf.

RK: I would like to finish with something different. It's a series of interrelated issues. When I look at your work and try to reconstruct or construct your relationship with the modern, I think that what fundamentally horrifies you is how everything that is modern is fundamentally stripped of all the familiar touch, familiar tactile and emotional paraphernalia that were there. If I look at your work, I think that what you're trying to do is to include the patina in newly constructed things. CA: That's true. But only partly true. It is a deeper issue which we can, perhaps, take up in part two of our discussion.

RK: So I think that first of all there is a question: Can you actually include your own patina, or is patina something that accrues over time. The second question is, I want to suggest that there are two analogous efforts in history to what you have been doing. I've been trying to do a book about the Romans; the systematic nature of the Romans and the "pattern language" of the Romans, because it's very clear also a pattern language. Contrary to you, I'm not saying it's only you that shrinks away from doing a village, they didn't shrink away from doing anything ...

### [Laughter]

... and were happy to impose the same pattern language anywhere on the globe with remarkable success. I was just in Amman, and the most beautiful features of Amman are a temple on a hilltop and an amphitheatre for 6,000 people. Not only it is a very abstract and synthetic language without a lot of patina, but even in its smallest articulation it can be repeated and unindividual in a certain way, and still be successful.

The second analogy is more controversial, but if you look at modern architecture at its most idealistic and aesthetic success, we take Mies as an example, we see the same ability to create almost a universal language, to be also very sensitive within that language, to create objects of beauty etc. etc. And so, you could say that what the Romans did is similar to what you've been trying to do and what Mies has tried to do. If you then look at the differences, the only one is between the organic and the synthetic, with you ultimately finding the synthetic sterile or fundamentally lacking in something, and only the organic being able to provide that something. Would that be a fair ...?

CA: I don't usually use the word organic in relation to architecture. My most successful buildings are not organic in the sense of these kinds of shapes. [gestures flowing forms] I don't use those shapes.

RK: Maybe there's a better word for the opposition of synthetic ...

Anyway, what would your response be in terms of the Romans. What I'm particularly interested in is also the issue of slowness and the current speed and your attempt, or your vision to make the world beautiful again. I can see that if at all, you can make the world beautiful again by becoming a Roman. But I don't think you can make the world beautiful again through the natural or the morphogenetic, in terms of the quantities that has to be done. Theoretically I can see it, but not in practice. Theoretically it's a fantastic idea, but the very brutality of the Romans and the limitations and the lack of fluidity of the Romans is perhaps what could still do it. Do you also see that the Romans created a form of beauty in terms of planning?

CA: Quite remarkable I think in terms of planning, streets, houses, axis, aqueducts ...

HUO: Rem mentioned the Roman model. You mentioned in your book "A Foreshadowing of 21st Century Art: The Colour and Geometry of Very Early Turkish Carpets" another model from the past as a tool for the 21<sup>st</sup> century, not Roman but Turkish art, early Turkish carpets. I was wondering if you could tell us a little bit about these Turkish carpets, and why they are a model for the 21<sup>st</sup> century.

CA: Well, they were masters of color, they knew how to do things with color. The old Turkish carpets came from the Sufic tradition. They came from the real origin of the Islamic mosques. Essentially in Islam you're not allowed to represent God as in Christianity. You can't have a picture of God. But the carpet is something like the picture of the soul. And they put into it all of the severity and the detail and the unfolding of particular parts and almost endless variation, and the most beautiful color transitions. All of these things are just there in the carpet. These carpets were made to sit on and help you see God, yourself. So I have always been fascinated by the most beautiful ones; I collected these carpets for years and years.

HUO: I thought it ties in beautifully with Rem's Rome question. For Rem, Rome is a model for the 21<sup>st</sup> century and for you it's this early Turkish art.

CA: I have an instinct that something like what you call the Roman way is actually what's needed. I agree with you about that. I'm very conscious of the fact that my attempt to create the sort of full-blown version of the morphogenetic processes that I've been speaking about, are flawed because I have not succeeded in giving them the thrust that is exactly the character of the Romans.

HUO: The thrust?

CA: The power and ability to get vast things done. I was hoping that I might first of all learn things from you about that, and that perhaps together we could find out how to do this.

RK: That would be exciting.

HUO: I have a last question: Rainer Maria Rilke's "Letters to a Young Poet" contains some of the most beautiful advices to a young colleague. What would be your advice in 2007 to a young architect?

[Laughter]

CA: Oh my. Well, it might sounds a little bit simple, but I would say it's this: learn how to make the very small with your own hands, and learn how to make the very large with your mind. And above all recognize the creative nature of new kinds of construction contracts that I have made, and that you may make to help the architecture of the future.

RK: And take your time.

[Laughter]

CA: Yes. And take your time.

To be continued . . .