

The Battle for Ordinary Human Existence in Our Time

Upon the completion of his four-volume work, The Nature of Order, Christopher Alexander talks with Traditional Building about his vision for our future architecture.

Christopher Alexander interviewed by Kim A. O'Connell

In the 1970s, architect Christopher Alexander, along with his colleagues at the Center for Environmental Structure in Berkeley, California, published a trilogy of books—*The Timeless Way of Building*, *A Pattern Language*, and *The Oregon Experiment*—centered on the theory that people can and should take back the design and construction of their towns and cities. By distilling natural patterns into an understandable grammar for the built environment, Alexander advanced the belief that, in building something, one could “also repair the world around it, and within it, so that the larger world at that one place becomes more coherent, and more whole.”

Three decades later, Alexander has expanded on the concept of wholeness in *The Nature of Order*, a four-volume opus in which he presents an organic approach to architectural theory and practice. Instead of subscribing to the artificially rigid constraints of current construction—a typically linear progression from architect to builder to subcontractor, with often banal or outlandish results—Alexander proposes a humanistic, scientific, and artistic methodology, in which buildings and towns are created through a natural, unfolding, living process. His work celebrates traditional buildings, not out of superficial nostalgia for historic styles or details, but because they are often the best examples we have of such holistic process at work, and are therefore highly instructive for a future-oriented profession that has, in Alexander's view, largely lost its way.

From his home in West Sussex, England, Alexander recently spoke to *Traditional Building* about his feelings on completing *The Nature of Order*, his critique of the “supermarket approach” to sustainability, and his charge that New Urbanism, while well-intentioned, is not deeply different from other forms of technocratic Modernism. Although he recognizes that *The Nature of Order* demands a monumental shift in thinking – one that could take decades to be fully accepted, Alexander's message is ultimately one of hope and faith. It is the nature of living beings, after all, to support those systems that sustain life, and this includes built communities that are vital, logical and beautiful.

Traditional Building: *The Nature of Order* is the culmination of many years of work and thought. What are your hopes for the books? What effect would you like to see them have?

Christopher Alexander: My intention with these books is to modify the way architecture is thought about, altogether. The reason for the ugliness and rigidity and pretentiousness we've encountered in the last few decades is that the general understanding of architecture is so far off the rails that it's virtually impossible to build an adequate architecture for our time. My main goal in *The Nature of Order* is to do all I can to explain the vision of architecture that is in these four books so that it can be carried into everyday practice by all people and communities concerned with building. It is a very large task. But if we are to have life on earth, it is a necessary one.

To get there at all, the first thing is for people to grasp what the main problem is. The creation of a world that is beautiful and in harmony, adequate for the people who live in it, supporting both the personal and the community, urban life, plant life, animals and rivers and all the world we treasure, can only happen if what takes place in the formation of buildings and towns is a continuous unfolding of the whole. That is the way that nature works, and of course necessarily so. For thousands of years all traditional architecture also went forward like that. Briefly it may be called "adaptive morphogenesis." It's an adaptive process which allows the whole to guide the formation of the parts created within in it, so it all fits together comfortably. It allows minute adaptations at many points going forward.

The system of planning, regulation, design, and production that we have inherited from the relatively early part of the 20th century makes all of that impossible. CNU is a strongly motivated and in part highly sensible way of addressing this problem. It has arisen from highly sensible people, architects, who are now in a panic because they see the problem, want to do something about it, don't really know what to do about it, and so they try to hark back to history and historical forms. Their motive is completely understandable, but their means cannot succeed, because they hope to do this within the same technical means of production that are producing the most far-out and absurd postmodern concoctions. Harmonious order cannot be produced by copying the shapes of the past, although I suppose it might be mildly better than indulging in the very horrific architectural fantasies that are deliberately intended to shock. But at root it is the system of production and the processes of production which are at fault. Until these are changed, architecture cannot get better.

This is a very large undertaking. My main reason for having faith that this insight will gradually become a common insight, and be carried forward in the next few decades, is that both complex systems theory and biology already understand these things in their own ways. But oddly enough, the very large community of architects, planners, and ecologists committed to sustainable architecture, building, and planning have not yet really understood the concept of wholeness. It's the crux of the well-being of the Earth and also the crux of the well-being of human cultures: and it has always been so. Whether people understand it or not, or are willing to believe it or not, that does explain why I have spent the last 27 years writing these four books. It has taken every ounce of energy I have to put it together in an intellectually comprehensible fashion.

TB: In Book One of *The Nature of Order*, you detail 15 properties of wholeness, including levels of scale, strong centers, boundaries, and simplicity, among others. Do you view them as a hierarchy? Are there properties that have primacy over others?

CA: There really isn't very much of a hierarchy in them. What I can say that might help is that all 15 properties, in their different ways and their overlapping ways—for they're not independent—are ways in which a particular part affects the whole and ways in which the whole affects the parts. The fifteen of them are simply the ways in which centers get their life from other centers and give life to other centers. In the type of unfolding that I described to you, the most powerful process which goes on, and which must go on, is that every small step that is taken, whether small or large, should do something that preserves the wholeness that exists—and extends it and enhances it; and it does this by using the fifteen properties in its geometry.

I want to try to illustrate for you what this really means in concrete terms. Suppose you're laying in a building complex of some kind on a piece of land, and there is a natural ridge in the land that strikes one as particularly beautiful or intense. Assume, for a moment, that those feelings will come naturally to the observer. Then, in whatever unfolding is going to follow, somehow the beauty of that feeling that attends the ridge needs to be preserved and extended and enhanced. Say we're considering how to place a building so that it will have that effect. Positive space is one of the 15 properties. When you're dealing with this type of a ridge situation, the temptation, quite typical in contemporary building, is to say "There's a ridge; let's plunk a building on it or put some condos on it." But that would destroy the beauty of the ridge, thus destroying the land, not enhancing it.

When we ask ourselves how to place buildings on that ridge or around it so that the whole morphological feeling and emotion of the ridge is kept, several of the properties will (necessarily) come into play. If you say to yourself that, whatever we do, the beauty of this ridge will be preserved, we'll feel that wind in our hair standing there—those things can be preserved if a positive space is created by the buildings in that they protect and animate what is there instead of making it less than it was before. It will be further helped by levels of scale in the buildings, the void in the space, alternating repetition and deep interlock in the boundary – all maintaining the connection of the ridge top to the surrounding lands. We aim at a situation where building something makes a place better than what it was before even when it was "natural". The Golden Gate was a beautiful place before—the place was named of course before the bridge was built—but the bridge structure that was then built is so very finely articulated, with the two towers and the cables, that the experiences of looking through it from a boat or going over it are writ large, and the land is writ large, enhanced, and made more beautiful by the structure of the bridge.

The properties can help, and usually do help, to enhance land in this fashion, provided that we do it right.

TB: What is the relationship between the “generative processes” you describe and architectural traditions? How does this relate to the apparent divorce between the practice of design and the practice of building?

CA: Process thinking – especially emphasizing the importance of process -- has been around in the sciences for the last 30 years. But talking about process, and understanding the impact of process deeply enough so that you change process rather than just changing design—is very sophisticated. Yet that is what is needed, to understand architecture well. The idea that there is a particular kind of process that allows buildings and public spaces to unfold in the right way I’ve described really makes architecture a completely different activity.

Anyone who knows much about building knows that you really cannot work a whole building out on paper beforehand. Let’s say a building is going to have a slab. You’ve got a foundation and you’re now standing on a flat slab where you’re going to build the building. If you’re honest about it, it’s almost certain that your understanding of the building has already changed from the moment you’re standing on the slab. It’s completely different than when you were standing on the earth. The whole character of the building changes.

With each construction step that happens, you have opportunities to really find out what direction the building is taking. At every moment you see things that influence the process. If you are stuck in what used to be called a blueprint (and is now a CAD drawing), no one is visionary enough and brilliant enough to be able to set it down to the last inch and get it right ahead of time. Yet our whole profession is based on the assumption that this can be done and should be done.

The people who read your magazine are probably more aware of this problem than any other group. So this is not going to fall on deaf ears. But it’s one thing to know it and another to do something about it. If one is building relatively small buildings, there are plenty of accessible ways to gain control over the situation. It needs somewhat different contracts which permit this sort of process to go forward. It’s a question of being able to control and manage the unfolding process so that it does not go beyond the contractual terms.

When it comes to larger buildings, many of the great buildings of the past were built over 50, 100, or 200 years, sometimes even longer, and that of course permitted this very kind of thing to go on. The Cathedral in Florence went up layer by layer over many decades. In that case, what was interesting was that the people of Florence were in constant debate about this as it was going up. The discussions about the Duomo were passionately attended by the people of the cities near Florence. In our time we need different ways of managing contracts, time, the flow of money, and the autonomy of craftspeople, to allow the whole to become a successful work.

TB: In your open letter to the Trad-Arch list-serv, published in Traditional Building, you pointed out that there are many traditions of architecture in many

cultures that evince a living structure and a living building process. What response have you received from traditionalists and Classicists?

CA: Direct response to me was very little. But the interesting thing is that, since it appeared, I've noticed that there is a much more open and benevolent approach and more welcoming approach to all the different traditions on earth. What that article did was play a role in an awakening that was taking place already. It was inevitable. The idea of Georgian buildings in Timbuktu is just too absurd to sustain.

TB: Architecture is considered both a reflection of culture as well as an embodiment and, in some sense, a creator of culture. You've stated that the great traditional buildings of the past have always been made by people who were very close to the center of a timeless way of building. In our increasingly inorganic and fragmented culture, does such a center exist? Who is at this center?

CA: It has to be interpreted very carefully. I've never been interested at all in copying traditional forms of building. The effort to do that could be quite silly and almost embarrassing. The thing that is timeless and unchanging is the understanding we discussed at the outset of our interview, the necessity for a particular kind of unfolding to bring buildings into being into a particular context, geographically, so as to enhance the whole.

The issue is a state of mind and a control over process and adaptation which allows things to be made so they genuinely support you, me, the cat next door, the birds in the garden. It has nothing to do with putting thatch on the roof or using ancient forms of stonework. Of course, some of these old methods are perfectly appropriate and genuinely sustainable. One always has to keep one's eye on the ball of what's actually going on in the particular process. Does the process itself—of doing it, laying it out, and building it—permit it to become whole? Are you able to gather together the strands of the community for whom it's being built? Traditional buildings were almost all very helpful and forgiving to that process, and that's what makes the outcome of those processes so enduring.

Modern methods of construction can, equally, be made to support gradual adaptation. It only requires a (big) shift in the way of thinking and managing materials and construction methods.

TB: What is your view of the historic preservation movement? What is your opinion on the recent focus on preserving Modernist icons, which are now past the 50-year mark?

CA: I am completely in favor of historic preservation. I think it's a very, very helpful movement. And I have no negative feelings, either, toward the people who are historically minded and wish to preserve what they perceive as the icons of 20th-century architecture. It brings a slight smile to my lips, but at the same time I think that they are serious people. No one can claim to know everything. If some of those things are still

visible in the future there may be a good reason for it. But if the awakening of a new architecture that I am talking about succeeds, it won't then ultimately be SO necessary to do historic preservation any more. It won't be so desperately urgent to hold on to the vanishing catalogue of things we no longer know how to do, because we shall then be able, once again, to make the world whole, and we will then be able to look forward to the creation of life, not only backward. But I'm very grateful that people are doing historic preservation, and I think there is a real danger that incredibly beautiful and important things could easily get swallowed up in the flood.

TB: How do you feel about New Urbanism, both the iconic early developments and the scores of recent copycats? New Urbanism, as it is often practiced, does not seem to always embody the generative processes that you are talking about.

CA: The way you summarized it is fairly accurate. I should stress that Andrés Duany [cofounder of the Congress for the New Urbanism] is a very good friend of mine. We disagree in a most friendly way, but I do feel that the path that the CNU people have taken has been very successful—in other words, they've managed to spread this movement to a very large number of people. So their success in terms of making something change has to be measured positively. But what many of them don't yet see is that so far what they've reached and defined as their model is simply another version of the kind of Modernism that they themselves hate, except that it's just got different shapes. It isn't living tissue yet. The real issue is, are there processes in place that create a living community and a living environment, and building forms and completed buildings and details, which are all so finely adapted that the thing comes to life and works as an artistic whole and a biological whole? At the moment, the New Urbanists, I would say almost without exception, seem to be quite comfortable with the mechanical development process as we've known it in the United States in the last 25, 30 years. They take it as their baseline that whatever is done must be done in this development mold.

Instead of thinking about what I would consider the deeper issues, they take the issues that they believe in and define them and formulate them in terms which can fit into the activities of a typical and reasonable developer (reasonable in their terms). They've constructed a set of tools and ideology and formulation of process which permit that kind of world to be built. But it is in very large degree based on shape. If there's an echo, shall we say, of past arrangements, it's still going to be built from massive development and construction drawings. It still has no real connection with the people in the communities and shops and houses that they build for. It's still essentially a commercial product with a slightly different physical flavor. They do make efforts to deal with certain issues, such as they have attempted to redefine the relationship between the car and the pedestrian, but I find that the mechanics of what they do, and how they've worked out how to do it, are very dangerous in the sense that it does make it very, very difficult to do the kind of thing that I'm talking about.

This is actually a source of some sadness to me because Andrés has said again and again (publicly) that the whole birth of CNU came about because of his wish to emulate the content of *A Pattern Language* and plug it into the existing production system. Of course

I've wanted to try and join forces with them, because there's no question that, on a practical level of effectiveness, they've done extraordinarily well. But I find that even the language they speak is, for the time being, inherently mechanical and makes it very difficult to approach the real core of the issue.

Andrés is without a doubt one of the most open-minded of the CNU group, but I think there are probably others in the group who are scared witless by what I do. Because they somehow realize that if they were to go where I have gone, the whole cozy relationship with business, money, and development would be very seriously affected. I think many of the CNU are not yet ready to take it on. One time I had this funny conversation with Andrés and he said, "Chris, you're not building enough, and don't you think that it's important that you should have a bigger effect?" (Actually, I am building a lot, but that is how he chose to express it). I said "Of course I wish I could build more. But it's a very touchy thing. I could say to you that you're being tremendously effective, but at a very great sacrifice of human content, and of spirit, even of beauty. Do you want to be the McDonald's hamburger of architecture?" I sacrifice volume, because I want what I do to be true, in the hope that when people understand it, the truth will then prevail.

This debate I am having with Andrés is a very gentlemanly and serious debate, and I wish it were taking place in a more public arena. For instance urban coding is an area we could be exploring together, since I am now writing new kinds of code which may be thought of as generative codes, that quite sharply differ from the CNU-approach codes. One of these new generative codes is the backbone of the master plan for a new town near Brookings, Oregon. Others we are working on deal with housing in the north of England, and in areas around London. The difference between these second-generation "generative" urban codes and the codes currently being used by CNU, is very great. Constructive and public study of the differences would help us all in our way forward.

TB: Do you believe that sustainability is a question of design or a question of technology? The LEED system—which turns sustainable design into a checklist—does not seem to embody the sense of wholeness and living processes that you discuss.

CA: The green building index is another very mechanistic thing, and has little to do with true sustainability. A few months ago, I was greatly honored by being asked to give the annual Schumacher lecture in Bristol to several hundred professionals and active citizens in the sustainability field.

This is one of the most serious audiences in this field, and the lecture I gave was very highly controversial and (I believe) very highly welcome to that audience, exactly because they have come to see that the sort of mechanical handling of alternative energy—or these housing schemes that embody various bits of this and bits of that—although they are nominally contributing to the sustainable effort, actually do very little to regenerate the earth or our communities. I described, in some detail, the kind of morphogenetic process which can create living communities (public space and buildings) and which will simultaneously make them truly sustainable. Whether there will, as a

result, be a large shift happening in the sustainable community, I can't predict. But the speech made a fairly strong impression on the people who heard it.

[Alexander's lecture, titled "Sustainability and Morphogenesis," is available for purchase on CD and DVD from the Schumacher Society web site, www.schumacher.org.uk. It will shortly be published in written form by the journal *Resurgence*]

TB: The fact that the lecture took place in England may be reflective of the generally more progressive view in Europe toward ecology, at least when compared to the United States. Is the green-building index indicative in particular of the American culture, which likes to break things down?

CA: The green building index is a sort of a mechanical toy which not coincidentally fits oh-so-neatly into the marketplace, and of course we should genuflect when we say that word. But I don't really agree with your mildly negative assessment of American culture in regards to ecology. If you think of Aldo Leopold and Rachel Carson and Eugene Odum, they took the first really serious whacks at our industrial civilization, and they all came from the U.S. of A. Yet I do confess to a worry along the lines of what you said. Since Leopold and Carson lived and wrote, everything has become more mechanized and more dominated by banks and regulations. Maybe Americans should stand up and say, "Let's take back the field of ecology as it really is and not hand it over to the green-building index and the supermarket approach to sustainability."

TB: What can be done about the architectural education? Do you see any shift away from the general approach that prevails in the academy? How can the disjunction between design and construction be reconciled in architectural schools?

CA: After working theoretically in very enlightened universities for many decades, and seeing how difficult it is for academics and professors of architecture to grapple with these things truthfully, I believe it's a colossal problem. I believe the profession has been hijacked by the teaching of architecture—although you could argue, I suppose, about which has hijacked which. If we were to talk about this seriously, we would need a lot more time than I can take right now. I'm more than worried about it. It's not small changes that must be made. There is a colossal inertia and a kind of unintentional conspiracy among professional academicians to make these things difficult to teach to students.

TB: In his *Traditional Building* review of Book One of *The Nature of Order*, David Seamon wrote that your work paves the way for a world that is more robust, beautiful, and kind—something Seamon calls utopian and never actually gained in real life. Do you agree with that? And has the world, in your view, ever achieved this at any time?

CA: My work is more about changing our worldview as the necessary underpinning of a new architecture and a new society, and not only about ways of making immediate changes in our professions. It is a huge topic. Think about George Orwell, H.G. Wells,

Aldous Huxley, Bertholt Brecht. The anti-utopian future that these writers foresaw has actually come true. They foresaw the future world as market-dominated and corporation-dominated in a very damaging fashion, and described the immense struggle that would be needed to regain the Earth. This is not a new topic. Architecture is just one arena of expression where this struggle goes on. We all have to grapple with it somehow. This is a slow process, but it is, in a sense, the only great struggle there is. It is the one we must pursue.