Everything is Somewhere

By Angus W. Stocking, LS

After a 17-year surveying career in several states, Angus Stocking now lives in Paonia, Colorado where he is establishing an organic farm and a freelance writing career. He remains actively involved in surveying.

Christopher Alexander, Genius of Space

Surveyors shape the world. The decisions we make in an afternoon will resonate for generations. The boundaries we propose on paper will be written on the land with wire and stone, will be enforced by law, will govern patterns of use that might persist for centuries. And yet we make these decisions rather casually, often by the seat of our pants. In my practice, I am often concerned with just a few factors–lot yield, road frontage, minimum area, depth-to-width ratio, and sometimes existing features that can be used as buffers. My twin masters, time and money, along with zoning laws, usually prevent deeper thinking. Still, it has often seemed to me that opportunities to do good are constantly missed, or not even recognized. I guess what I often feel is a frustration that there isn't better theoretical and practical support for *deep* questions about land division. That is, I think it would be *great* if I had the leisure and responsibility to consider the future life, health, and beauty of the land I am about to divide, and some methodology for doing so that was more sophisticated than simply resolving frontage and depth-to-width ratios. If surveyors had the theoretical support, we might more often notice and take advantage of our opportunities to improve the world we are making. What is needed is a genius of space.

All my life I have worshiped genius. I have sought it out even when it is a little repugnant. The comics of Robert Crumb, for example, often make my skin crawl but are so clearly the product of a certain mad brilliance that I read them anyway. Likewise, I don't care if the genius is *useful*; I will probably never be called on to defend a Japanese village from bandits, but I have seen Akira Kurosawa's masterpiece *Seven Samurai* no less than six times and intend to see it several more times before I die.

Happily, genius is, often enough, appealing *and* useful; the best example I know of is the iconoclastic architect Christopher Alexander. He is a genius of space, best known (at least until recently) as the principal author of *A Pattern Language*, a book of architectural theory that vigorously insists that architecture–the built world–must serve humans, must strengthen and enrich the 'life' of a place. In 1977, when *APL* was published, this was, astonishingly, a highly controversial view. Alexander, in fact, became involved in a seven-year first amendment case with the University of California, which tried to prevent him teaching the material. Students who took his work seriously were often penalized by other teachers. Alexander and his supporters were heretics in the dysfunctional church of architecture. Alexander himself was not just a 'bad boy' of architecture; in many circles he was a pariah . . . and, in some circles, a pariah he remains.

In retrospect, it's easy enough to see why. Alexander was the little boy pointing out the non-existence of the Emperor's clothes, except in this case he was pointing out that most of the big new buildings being hailed as masterpieces really sucked for the people that had to live and work in them and that, more often than not, new buildings were destroying beautiful old cities and neighborhoods. His observations were as irritating as they were undeniable, and those who promoted, designed and built the monsters reacted vituperatively.

But Alexander wasn't out to reform architecture–that was just a side effect. He was really attempting to deal with an obvious and frustrating problem–it is really, *really* hard to build something wonderful, something with life. Houses, for example, should be a solved problem by now. For centuries, or for millennia,

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actually, humans have been not only making houses but thinking about them, codifying their modes (and modifying their codes) of construction, publishing plans, assembling not just houses but knowledge *about* houses. And yet still, after all this effort, new houses, *more often than not*, are kind of lousy. One exists in them, is sheltered, but one does not actually *live well*. We've all been in houses with no comfortable corner in which to read a book, no gathering places for friends to casually chat, no incentive, really, to *be* in the house. The house functions as a place to sleep, bathe, and refuel, but has no structural support for anything more intensely human. In subtle ways it fails, and will never be a home, merely a padded box with plumbing.

But when a house works, it's glorious. One walks in and instantly feels 'at home', more oneself, more *alive*. And the reasons for this success are not obvious. It is not related directly to expense–small huts occasionally have more life than the mansionettes so often built today. Nor is it a matter solely of location–many beautiful sites are nearly ruined by the wrong houses being built on them. And I believe it can be definitely said by now that it is not a matter of having the right plan–the overabundance of housing plans has not noticeably increased the world's quantity of excellent houses. So what does make a building come alive?

Alexander first publicly explored these important questions in two books which have fascinated and infuriated architects and urban planners (among others) ever since. The first was *The Timeless Way of Building* and the second was the aforementioned *A Pattern Language*. *Timeless Way* is more a book of philosophy or even mysticism than a book of architectural theory–in my view it can be considered a worthy descendent of the *Tao te Ching*. *APL*, by contrast, is nuts-and-bolts practical; it balances *Timeless Way's* apparently subjective philosophy with a sort of DIY empiricism that begins by describing the proper form of world government and ends with the admonition to decorate with "things from your life." Along the way instructions are provided for, among other things, making and firing paving stones, positioning window seats, and constructing concrete arches.

It's organized eccentrically, with each 'pattern' linked to others; the kind of book to which one happily loses hours. I sometimes thought of it as the world's most important book. Why?

Patterns provide the means by which something as large and amorphous as 'space' can be usefully employed. Alexander and his coauthors made a serious attempt to identify space that worked, that had 'life', and then to identify the underlying factors that worked for and against that space. The resulting patterns present a sort of algorithm for successfully creating similar spaces, spaces that live, and the 253 patterns are meant to be combined in ways that create rich symphonies of structure.

This sounds hopelessly dry and academic, but in fact the patterns, and the underlying concept of a language of such patterns, are so immediately apprehensible that they bypassed architects almost entirely and began to be used by laypeople and contractors and that segment of

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the counterculture represented by *Mother Earth News* and *The Whole Earth Catalog*. Consider, for example, this statement:

"When they have a choice, people will always gravitate to those rooms which have light on two sides, and leave the rooms which are lit only from one side unused and empty."

APL is chock-full of similarly useful verities. To many readers, *APL* was a revelation, an apparent way out of the madness that much of the built world seems to have become.

But . . . that was then, and this is now.

Christopher Alexander is both a prominent architect and a practicing general contractor. His book *The Production of Houses*, moves easily from the topic of large-scale house production to the way plastered walls are prepared for painting.

Naturally then, all his ideas are regularly field tested and he has completed about 200 projects on four continents, ranging from third world housing projects to major universities. And what he's learned in the nearly three decades since *Timeless Way* and *APL* isn't totally comforting. Though the books are valid, something was missing; it was discouragingly rare for the principles to be applied by *others* in ways that created the sort of living space that Alexander envisioned . . . and without that, there was nothing.

His response was to look deeper into the nature of order itself, to try and divine the deepest possible principles underlying the kinds of space that he feels have 'life' (a word with precise and special meaning for him). Ultimately he wrote a four-volume magnum opus, now being released, grandly titled *The Nature of Order*. Like Stephen Wolfram's recently released *A New Kind of Science*, it attempts nothing less than a fundamental reordering of humanity's worldview and, also like *A New Kind of Science*, it is reaping more than its share of both scorn and reverence. I have read Volumes 1 and 2, and for now, suffice it to say that I lean toward the reverent camp.

I recently arranged a phone interview with Mr. Alexander–such is the clout of *The American Surveyor*–and talked with him about the above issues and also about matters relating specifically to surveying and land division. He was in England at the time, frantically editing galleys for Volume 3 of *The Nature of Order*, but graciously made time for my questions. The interview is excerpted below.

AS: Ideally, how would you like to work with land surveyors?

CA: Let me just describe two different stages of a typical layout procedure. We would normally place rough stakes, sometimes even rougher markers than stakes, at a very early stage to get the broad configuration. Then at a later point we find ourselves either placing or adjusting buildings and lot lines and so forth. So there may be one or two stages of preliminary work where we need to have these rough plots, and then finally, of course, they have to go to a level that can be accepted by the county recorder, which would have to go through an office such as yours. . . . In these development situations, where you've got, let's say perhaps a campus with hundreds of points or it could be a community of several hundred houses. But even the definition of lots and public

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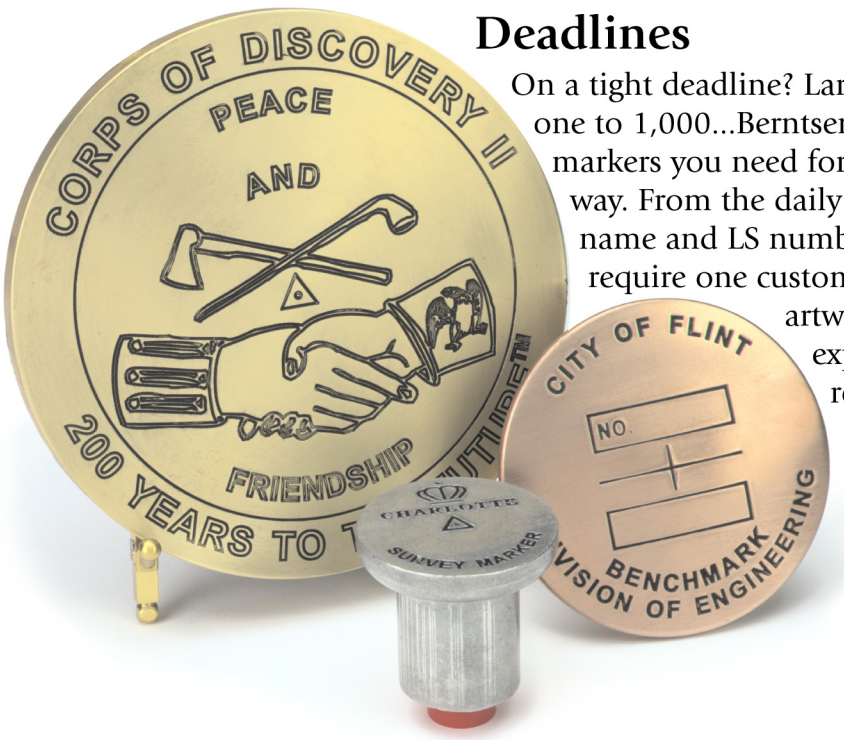

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rights-of-way and so forth, it's all being done gradually. In other words, if there isn't a big operation where you lay the whole thing out, what happens is you gradually build up this picture, and then you start building it; you're always adding to it and continuing the same process to do further bits of right-of-way or further buildings or further lots and so on. To get surveyors up there you know, time after time after time, becomes prohibitive. That's why it is a real problem for us. So, if there is away of operating the kind of thing that you have just described to me [note: we had been discussing the current capabilities and costs of surveying equipment] so that intelligent clients or managers within a client's situation can do a good deal of the ground work and then only in the final phases when it gets near to being where it has to be recorded, then we call the surveyors in because of the professional requirement that they be there. . . .

The mind-set is the second issue. Subdivision maps are a torment to the land, as you probably know. I mean, in other words, the kind of subdivision that would typically be laid out for a tract in the old days, and I am including right up until today, you know have very, very rudimentary layout of roads, sewers, parcels and so forth . . . much of it done on drawings by the developer, who doesn't want to spend a penny more than he has to. When I say they are a torment to the land, it's because most of it is conceived barely in relationship to the character of land. I mean it is really like an overlay. As you know there is a lot of bulldozing that goes on because people don't want to screw around with the complexities of actual land, adapting lots and buildings and boundaries and outbuildings and so forth to land in an organic and comfortable fashion. To adapt like this is a mind-set that virtually does not exist now, and yet it was completely commonplace everywhere in the world up until about a hundred years ago.

AS: You've hit on a major theme of my developing article–that often when we sit down and do a subdivision map we are doing conceptual layout over a day or two and the decisions we make are going to resonate for generations.

CA: Right. Well I am just now in the process of working on a plan for a new community called Harbor Peak, in Brookings, Oregon, near the California border. This place is in the hills just above Brookings so it looks out over the ocean but it's inland about a mile. We're doing a completely new kind of master plan for this community, where the whole subdivision process is governed by the kind of thinking that we're talking about here. It's the first time that I've ever attempted to write a full legal description of what it takes to do things in this way although I have been doing it in practice in many projects for years. But it is quite fascinating. . . . The trouble is that we're right in the nitty gritty of fooling around with the language. But I feel enormously encouraged, in fact very, very excited by the fact that you immediately pinpointed the mind-set as being the critical issue. Of course these things are not technical wonders–I mean it is primarily a question of whether the developer or the township or the planning officials, architects, contractors are interested in being in that kind of relationship to a piece of land so that the result is in harmony with the land, it protects the land, it preserves the structure of the land and makes something beautiful out of it. One of the reasons why I have been so concerned with this surveying problem is that I think that it's a major key to helping people to think in this way. Even when they think that it is not possible.

AS: That's another question–it's almost as if there is a gap in *A Pattern Language*. There is quite a bit of discussion about matters larger than lot layout and discussion of matters within a lot, but not too many patterns that would really guide a surveyor who is sitting down to do the conceptual layout for a subdivision.

CA: Right, well I think, I mean you're very kind to be thinking about *A Pattern Language*. My own thinking has moved very, very far beyond that.

AS: And I should say I have also read the first volume of Nature of Order and I'm trying to work with what I know, and trying to apply it to the larger pattern of where you are now.

CA: Right . . . it would be possible maybe to capture some of what we are talking about in the form of patterns.

AS: Well, I guess one reason I keep returning to it is I think it's possible that a surveyor might work with a set of patterns that apply, but I think it might be asking a bit much to get someone to read *Nature of Order*.

CA: Well, the point is that the type of plan that I was just speaking about, for instance the Brookings plan . . . it's governed by process rather than by configurations. [Note: this is probably the most important point from the interview.] You may have seen Volume 2 of *Nature of Order*, which is entirely about the idea that organic form is controlled by processes which work in a certain way. And if you follow these processes than you can create organic and harmonious things, but if you don't do things in the right order you cannot. And I would guess just from what we're talking about that it would be a process of that sort that would most helpfully interact with the activities of the surveyor who's in the position that you have just described, of trying to lay out a subdivision for someone–but with a better set of tools as to what it would take to make the subdivision good.

I don't argue here that Christopher Alexander's beliefs should be adopted wholesale by the surveying community. But I do find it astonishing that they are not more widely known and discussed among surveyors. His books have had enormous influence in recent years in fields as diverse as computer programming, business organization, urban planning, and oriental carpet studies. New Urbanism borrows from Alexander. But of all professions, save possibly architecture, surveying is the most natural and important for *actual implementation* of his program for creating a more whole and living man-made world. I, for one, would like to see it happen.

I'll be returning to Alexandrian topics in future columns; a review of *Nature of Order* is in the works, as is a detailed look at the construction and approval process for the Harbor Peak development–no preliminary plat! But curious readers can immediately learn more by going to www.patternlanguage.com or www.natureoforder.com, or–even better in my view–reading *Timeless Way* or *A Pattern Language*. Even though Alexander has moved beyond these works now, I still believe them to be the best introduction to his thought. And then, by all means, tackle *Nature of Order*. They are difficult, mind-expanding (and expensive) books, and even the most skeptical reader will find much food for thought. AS