Commentary on Mexicali

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ADVENTURE CITIES

Each time I read Christopher Alexander's story about his Mexicali Project, I'm filled with a sense of both joy and concern. Alexander describes compassionately the engagement of five families in the building of their own dwellings clustered around a common area. I empathize and rejoice with Alexander as he was deeply moved when one participant told him:

... in words of almost inexplicable warmth and fervor that this was the most wonderful process he had ever experienced, that he had always a desire to work more, that he wanted to help the other families complete their houses

Whenever I hear of people's meaningful involvement in building their own habitat and the resulting sense of accomplishment, mastery, and dignity they experience, my sense of faith in the potential of such processes is renewed. Often enough in my own work over the last 20 years, I've witnessed a sense of community develop when people join forces to build a common environment. The potential that participatory building processes have to generate human strength and community has haunted and inspired me all these years.

The building process that Alexander initiated must have been extraordinarily successful, touching all involved, including Alexander, the catalyst, at the very core of their beings. Alexander exclaims:

... when I look at these five houses and the cluster I am filled with something which is as close to religious feeling as any social act in society today can bring me to . . . [The families] have become powerful, and are powerful, in a way which almost takes the breath away.

Having let myself feel, through Alexander's words, the exuberance that the Mexican families actually experienced, I'm also left with a sense of anxiety about the fate of the families. What will happen to them if officialdom reacts, provoked by the 'rambling appearance' of the houses and by the growing sense of liberty that the families express? What will happen to the families' sense of powerfulness? What will Alexander's new friends do if political and economic pressures mount against them? Have they been able to inform themselves as to the uniqueness of their position in the midst of violent political and economic forces organized to keep poor people in their places? How long can such a system tolerate this life-affirming nucleus?

I have worked with grassroots communities in the United States and have witnessed people-removal through slum clearance, planned shrinkage, and gentrification (a process often triggered by the success of self-help rehabilitation efforts). I'm convinced that today, as the polarization of poor and rich and

of underdeveloped and developing countries intensifies, any engagement of people in the development of their habitat has to be accompanied by political consciousness-raising, so that the consequence of property development and the dialectic of property improvement (as illustrated by the gentrification process) are made clear. Having registered these reservations, I would like to focus on the fundamental programmatic contributions Christopher Alexander has made in his Mexicali experiment.

THE SYSTEM OF STEP-BY-STEP OPERATIONS

Alexander has succeeded in developing a self-help housing production system that "respects human feeling and human dignity first." The buildings are also cheaper than most, more in reach of the masses, costing only about \$3000 each. And the system is capable of mass production, drawing optimally on local resources as it did.

Architects' only actual physical contact with their work is the sharp point of a pencil. In grassroots work, people become much more intimately involved with building materials and building processes; a building system that encourages sensuous hands-on contact with materials fosters greater creativity. An architect-builder-a person sensitive to the organization of space as well as one intimately connected with materials—can nurture such a process. Christopher Alexander has carried this people technology a step further with his development of "stepby-step operations," a process with which I am eager to experiment in my own work. By organizing not the components but the operations-bricklaying, plastering, painting, etc.-into a functional system, he shows the way to tap community creativity fully: "If we cannot make adequate houses of identical components, then what we mean by the same way must somehow be deeper, more basic, and capable of more fluidity. . . . "

Through his use of the concept of step-by-step operations, Alexander was able to engage people who had never built before, unleash latent capabilities, and teach new ones, thus transforming building into an ongoing celebration of the builders' full humanness.

THE BUILDER'S YARD

Contrary to the static relationship between passive consumers and the preconceived housing products generated for them by architects designing for defense, prestige, profit, and regimentation, the Mexicali project aspires to reestablish the functional relationship between dwellers and their habitats common in indigenous architecture. Alexander has written:

The process not only builds the houses, but repairs them. . . . The houses are never finished; they exist, in an imperfect state, constantly changing and improving, just as we our-

selves also exist in an imperfect state, constantly struggling to improve ourselves.

To facilitate labor-intensive grassroots construction processes, to encourage intimate contact with construction material and personal contact between the builders themselves, Alexander created a builder's yard. The yard contained building materials and design guides (the pattern language), and also functioned as a gathering place for the education of the larger community.

This is a timely invention, a process-oriented institution evolving out of the contemporary need of people to participate actively in the design, construction, and management of their own habitat. Environmental self-help is an idea being catapulted into prominence in all countries caught up in economic crises, including the United States. The expansion and overcentralization of cities and their top-heavy bureaucratic organizations have begun to generate counterforces that emphasize grassroots citizen participation in the revitalization of neighborhoods. But to conduct broad-based environmental self-help programs effectively, including urban homesteading and open space development, support systems have to be established. Alexander's builder's yard must be considered a central component of such a system.

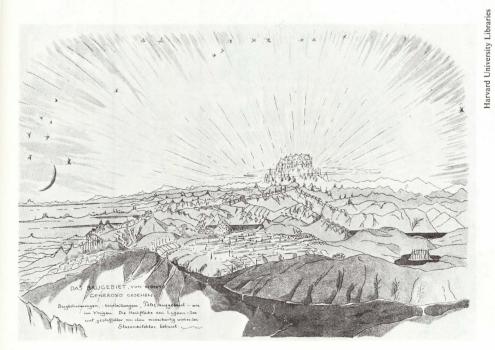
In the United States, another significant sociocultural development is the positive emphasis on cultural pluralism. Now that the deracinating concept of an American melting pot has been outgrown, the consequences for environmental design are staggering. Communities are beginning to differentiate themselves: some Italian neighborhoods now feature urban arbor-vineyards, Hispanic neighborhoods, mosaic plazas. This ethnic renaissance will most dramatically express itself in the homes and streets of residential neighborhoods; again, a neighborhoodbased builder's yard is the essential *catalyst* for the process of individual and collective environmental self-expression.

Some years ago, I visited the new residents of an urban re-

newal section of Washington, D.C. They pooled the tools from their suburban basements in order to equip a most elaborate cooperative workshop, and over the years this workshop has helped them to change completely their new and rather impersonal quarters into intimate, personal habitats. The emphasis on hands-on environmental production systems capable of personalizing human habitats is not limited to residential neighborhoods and is more than a measure for solving the problems of what to do with leisure time created by increasing unemployment—or wealth. The impetus for labor-intensive engagement in production processes is generated by a fundamental spiral development in technologies worldwide. So far, machines that save people from backbreaking work have also caused people's hands to be disengaged from the production process. We need new kinds of machines and processes to spare people backbreaking labor, but reengage human hands and minds.

I can foresee a time when builder's yards—offshoots of the Mexicali project—are integral parts of every neighborhood, contributing to a fundamental transformation that will enable neighborhood residents to control their habitat. In the same way that Adventure Playgrounds—initiated in Scandinavian countries and in England—enable children to discover their creativity in the making of their own environments (thanks to the availability of salvage materials, tools, and compassionate play leaders), architect-builders and builder's yards located on every block might one day transform our desperate urban agglomerations into Adventure Cities.

At the end of the First World War, architect Bruno Taut envisioned the Alps constructively engaging the millions of soldiers who were to be released from military duty. He proposed transforming their aggressive energies into cooperative action in the sculpting of mountains and glaciers. Adventure Cities, through a network of builder's yards, could become a new channel for the energies of millions in the unending process of environmental growth and change.



14. Drawing by Bruno Taut, from Alpine Architektur, Hagen, 1919.

This 'alpine architecture' proposed to use the energies of the demobilized armies of the First World War to transform the entire chain of mountains into crystalline monuments to peace. Universal participation in urban design and rebuilding could equally well transform the social and physical realities of our cities.

The Scope of Social Architecture

Edited by C. Richard Hatch