

In Pursuit of a Living Architecture

Continuing Christopher Alexander's Quest for a
Humane and Sustainable Building Culture

Edited by

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CHAPTER 7

The Culture of Green Neighborhoods

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Contemporary discourses on sustainable neighborhoods have considered the form and the technology of cities, metrics of evaluation and the process by which ecologically complex and beautiful environments emerge over time. But sustainability is not by itself a technology, morphology, a process, a policy, or a thing. Sustainability is a relationship that people have with natural resources. Sustainability is a practice. The challenge of green neighborhoods regards how emergent sustainable practices are coupled with the forms, technologies, and processes of 21st century sustainable cities. This is not cultural change made necessary by the threat of apocalypse. It is, rather, a creative opportunity.



Figure 1: Community Garden, Tempelhofer Park, Berlin.

Source: Tavel 2013.

SUSTAINABILITY AS A PRACTICE

When we think of a sustainable urban neighborhood - a green neighborhood - we might conjure up bike paths, community gardens, and walkable routes to school. We might see apartment buildings and corner stores, solar panels and energy efficient buildings, trains and buses, people of different shapes sizes and colors, or deep front porches that peer over tree-lined sidewalks.

We might focus on the *forms* of buildings, blocks, streets, and tree canopies. Forms and shapes are profound, and in myriad ways they can reduce the demand for resources. The forms might relate to climate – making a specific region habitable and comfortable year round as with the breeze-filled verandas of a southern plantation house, or the sun-filled south-facing terraces of an adobe pueblo. Or they might relate to the shape and character of urban density, bringing people within walking distance of services, public transit, jobs, and schools.

We could consider the *materials* and *technology* of green neighborhoods, in the buildings, the landscapes, transport modes, green and grey infrastructure. Sometimes in our era the term sustainability is identified with “green tech” alone. Then there are *policies* of green neighborhoods, from zoning and transportation to affordable housing and the gas tax. And there are *metrics* of green neighborhoods, such as LEED for Neighborhood Development (USGBC 2009). Metrics and indicators help to move an industry forward and provide data to support better policies. But indicators are finite, in the same way that checking one’s blood pressure is finite. The web of relationships of a healthy person or a sustainable city is mysterious and complex, and it all changes over time.

The city and its neighborhoods are a *process*. Like an ecosystem, cities are emergent (Corner 2006; Alexander 1987, Alexander 2002). Alive, ever-changing, shifting and being reborn bit by bit -- cities *are* ecosystems. Healthy or not, they are where nature and culture are forever embedded in one another in a process of change.

Sustainability; however, is not by itself a form, a technology, a policy, a metric, or a process. It is not something you buy. I would argue that sustainability and a green neighborhood, are not nouns. They are best appreciated as verbs. They are something you *do*. Sustainability is an act. It’s a *practice* that considers one’s relationship with natural resources, and natural processes. This relationship is personal and cultural. It is how people live in this relationship that is green, or not.

The culture of green neighborhoods is found in the everyday choices of people trying to live their lives. To solve environmental problems, the most important innovations ahead of us are cultural: the culture of stewardship and the

creative culture of making a sustainable relationship with resources *desirable*. People don't practice sustainability because a metric or a policy tells them to. People do it because they want to.

Over the past 20 years in my neighborhood near downtown Denver, Colorado, I have seen sustained public investment in public transit and in pedestrian infrastructure. I've seen an increase in walking and biking, in raising vegetables and in composting. I've seen an increase in people and an increase in density. I've also seen private investment in creating interesting places in local markets and restaurants selling in-season local foods, and in bike and car share programs. Car usage is down, and chicken coops are "in." Living in the city center and partaking in a more sustainable lifestyle has become cool.

What is it that drives the evolution of culture so our relationship with natural processes is improved? There is no one concept or paradigm that will save society from environmental disaster. What I hope will save society is how everyday grassroots culture evolves within a democracy and how that evolution makes it increasingly desirable for people to choose to engage in sustainable urban practices as a *lifestyle*. This cultural progress is something that designers, developers, citizens can endeavor to cultivate. This essay, to a North American audience, might be seen as a small companion narrative, or counter narrative, to LEED for Neighborhood Development or Smart Growth with a focus on the forms and metrics of urban neighborhoods, or to landscape urbanism and its emphasis of process. To an international audience, however, these words might ring true to people's common sense about living in cities. It is that common sense, based on experience, which forms the culture of green neighborhoods. In designing and producing sustainable urban environments, our aim should include the conscious effort to help cultivate cultures of urban sustainability.

SCARCITY AND DESIRE

Historically, one of the things that led societies to modify their relationship with natural resources was the emerging scarcity of a resource and the experience of hardship. Societies have a built-in conservatism that is based on past experience. One could argue that peoples' attitudes and values are a reflection of their past experience and behaviors (Bem, 1972). They change their ways based on changes to their experience. A society may not "change its ways" until its members find that their current practices are not working well enough and experience a different way of doing things. Human history could even be spun in terms of the history of the trial and error of subsistence systems and how material cultures have been coupled in a reciprocal relationship with natural resources. One example is the

invention of agriculture. It has been argued that agriculture was originally invented in the context of scarcity and hardship. It began not in the most fertile places, but on the fringes of those fertile areas. In ancient Mesopotamia, agriculture first emerged on the fringe, where harvesting edible plants that grew naturally was most difficult. It needed our help (Flannery, 1965).

A resilient society, through its cultural practices, evolves out of necessity but is not forever stable. At best, it has mini-failures so it can save itself. Some call this “safe-fail” as opposed to “fail-safe” (Holling, 1976). It is in conditions of scarcity and hardship that much cultural progress is born.

In conditions of hardship, people do not invent or adopt new cultural practices as an idle hobby. They do so out of the effort to succeed in survival. This dynamic is not only seen in the grassroots culture of the pre-industrial village, but also in the grassroots culture of the contemporary metropolis. Throughout history, parallel to and under the radar of “economic” civilization, are the grassroots of material civilization, of folk culture, and people’s personal choices, personal practices, and personal relationships with resources (Braudel, 1981).

People everywhere want to have a good life. Material culture, including art, food, clothing, architecture and all things deemed beautiful or dignified are part of a good life. Culture is a way of making a particular relationship with natural resources, a particular set of practices, *desirable*. Culture and beauty help us pull at our own heart strings. Looking back across all of history, I would argue that cultures of beauty have always been coupled with the cultures of subsistence. And these cultures emerged in a relationship with limited natural resources. Think of the traditional cuisines that we enjoy: South Indian, Ethiopian, Moroccan, New Mexican. They take the healthy native foods which are available and sustainable in a particular region and make those foods desirable as a cuisine (McQuaid, 2015). And the production of a particular regional cuisine is an ongoing and evolving cultural practice. The built environment is no different. A sustainable relationship with climate, energy, water, materials, or food, involves sustainable practices. Think of the urban culture of a northern European city, their culture of cycling, or their culture of density. It is dignified and desirable to bike to work in Berlin and to live in a six story building. The problem of a sustainable relationship with resources, the problem of subsistence is historically coupled with beauty, desire and the creative work of culture.



Figure 2: Fence, Cobble Hill, Brooklyn, New York.

Source: Tavel 2013

Part of the job in producing and maintaining a more sustainable built environment is to support people in their own sustainable practices. We should endeavor to not only make places desirable or consumable (as in selling a house), but more so to make a sustainable lifestyle, its cultural practices, desirable – desirable to a changing society. Making a sustainable city or a green neighborhood desirable is not an act of policy. It is a creative act of passion. Subjectivity and beauty and interest are part of the solution to the sustainable city, part of the admixture.

CRAFT AND COMMON SENSE

My son, when he was nine, asked me, “Daddy, what makes the wind go?” I realized in that moment how we lack the everyday useful vocabulary and metaphors for explaining many complex webs of relationships – like the weather. An Eskimo can probably answer my son’s question, but I could not. In traditional societies, people comprehended and worked within a world of complex interrelationships via the craft of trial and error, the craft that comes with experience, the craft that is understood as common sense and is described with a vocabulary, whether myth or metaphor. That vocabulary and its rules of thumb were nothing without the experience behind them (Ingold, 2000).

When I think of the craft of making green neighborhoods, and look at peoples’ practices, I think of how people in different cultures move across their own city, how they negotiate and share space in the right of way with bikers and walkers and trams, or even with trucks, auto rickshaws, or goats. I think about

how they dress for the weather or for the occasion, where they get their food, or where they park their car, if they have one. I think about how they maintain the soil in their garden or the appearance of their front stoop.

When I think of the design and planning professions, I think of the craft of designing sustainable neighborhoods to work and be desirable in many ways, such as when to propose a beer garden in a public park; how to make a sidewalk beautiful; how to mingle different speeds of pedestrians and bikes and cars or weave the networks of children with the networks of adults; how to balance passive cooling and heating of a building with the passive cooling and heating of the public realm outside. Craft is an ability that comes from repeat experience to make beautiful and functional things. Craft helps us to optimize different relationships and produce a material culture and built environment that works for us, is convenient, and desirable. Our ability to craft a green neighborhood improves with experience (Dewey, 1963).

Solving the problem of a denser and more sustainable city requires optimizing interrelationships and tradeoffs and such work requires craft-like thinking as much as scientific thinking. It requires sensibility and common sense. It also requires *political* common sense. It is not a battle of one methodology (feeling and beauty) against another (reason and metrics). It is a matter of crafting and finessing an environment that is based on an appreciation of both.

Many people in modern civilization are afraid of common sense. Common sense is similar to a gross generalization, and a gross generalization can be the basis for grave injustice. The common sense, grassroots behaviors of ordinary citizens making daily choices; however, *is* at the center of the solution to what is a green neighborhood. It is the flip side of a sustainability metric, but the two go together. The policies of a green neighborhood or sustainable city might be based on metrics and research, but craft and common sense are usually based on experience, on trial and error. Craft and common sense based on experience is the number one way we know how to do anything, like ride a bike. For a society to adopt new cultural practices that are coupled with sustainable forms of cities (think of composting; raising a family in a small urban apartment; closing exterior shutters to block the summer sun; walking a lot and as a result wearing clothes appropriate for the seasons), its citizens first need to have the opportunity to experience sustainable forms of cities, sustainable practices, and to find them convenient and desirable and dignified. Only this experience, as a past experience, can lead to a new common sense.

I propose that culture changes in the face of the experience of hardship and scarcity. It also changes, however, in the face of abundance and surplus. In the era

of industrialization and cheap fossil fuels, civilization has completely transformed. World population has grown from one billion people in 1800 to seven billion in 2015. During this time we in the West have become increasingly illiterate about our relationship with resources. The cheap cost of resources is institutionalized across Western material civilization, from food production to land use and transportation, global trade, on-line shopping, disposable packaging, and the energy performance of buildings. We have become increasingly illiterate in the free things that our ancestors did, in urban environments, to reduce the demand for resources.

These things included the form and technology of cities, and the flow of goods and cultural practices. Every corner of contemporary North American material culture provides examples of this new illiteracy. In 1950, in a hot humid climate, somebody might have dressed appropriately for the weather while sitting out on a porch or veranda in the middle of the day to cool off in the breeze. Today, in the same climate, someone is likely to dress for air conditioning and move from one mechanically cooled space to another as they drive through the city in an air-conditioned car. Writing as an American, I know my culture is known to “oversize” everything, segregate everything, consume too much of everything and be quick to throw it away. A more sustainable approach would involve conserving, compacting, integrating, re-localizing, recycling, and maintaining what one has, and as one does this ... making those choices wonderful and interesting.

By looking abroad, at cities that evolved with less surplus, including contemporary, historic, even prehistoric cities, we can consider the rules of thumb, the beautifully crafted examples, and the cultural practices tied to an urbanism that was not dependent on cheap fossil fuels. The late Seattle architect Robert Hull, once spoke to me about his personal experience in the Peace Corps in Afghanistan. He noticed that villagers would head outdoors in the winter to the south-facing sides of buildings to do their work in the winter sun. This practice is identical to how inhabitants of an adobe pueblo would interact with their climate (Tavel, 2012). The creative work for designers of green neighborhoods today is in how to translate this type of environmental literacy into the urban practices of today’s cities.



Figure 3: Solar Village, Longmont, Colorado, by Michael Tavel Architects.

Source: Tavel 2009.

PARADIGMS AND SPEECH

During the modern era of surplus and cheap resources, designers have tried to envision and build cities that are healthier, and more sustainable. The industrial revolution in Europe abounded with crowded and inequitable urban environments with bad air and sanitation. The garden city, the German social housing estates, Corbusier's Radiant City, and the high rise satellite cities of post WWII Europe, all sought to provide access to sun and clean air. In North America the slum clearance of urban renewal and the automobile suburb had similar aspirations but led to the economic demise of the walkable urban neighborhoods they left behind. All these efforts at healthier environments were detached from the time-worn traditions of crafting desirable cities. In the United States, the New Urbanism sought to return to the traditions of American urban neighborhoods with their roots in historic development patterns of the East Coast and its climates. Out of New Urbanism came LEED for Neighborhood Development, a metric that is valuable for its influence on American policies, on public housing, and on private development. In critique of the perceived formal biases of New Urbanism, Landscape Urbanism arose in the academy after 2000 to emphasize how cities and their ecosystems are emergent processes rather than idealized forms.

With each new paradigm arises a professional community of speakers and promoters of that paradigm. Each paradigm has a contribution to make. But these

are higher-level ideologies that are not sufficiently contextualized to the lives of people in particular regions and particular climates. Sustainable practices vary by context. What matters is how the design of sustainable urban environments supports the emergence and desirability of sustainable cultural choices, supports the development of that free speech down on the ground rather than up in the academy.

This development happens in small ways when people experience these practices as better. Some of this responsibility falls on developers and designers. Some falls on policymakers, as in what governments choose to regulate, tax, subsidize or invest in. But design that supports sustainable practices and the implementation of sustainable policies must move along together in the context of a democracy. The challenge for designers, developers and policymakers is to make green neighborhoods and an increasingly sustainable relationship with natural processes a great experience – and to build the examples. Through that, one can help to cultivate the growth and popularity of sustainable urban cultures.

In creating green neighborhoods, I would argue that the environmental challenges we face are not an apocalypse. They are not a problem to be solved under duress by technocrats, in top down fashion. The environmental challenges we face are a creative opportunity. They are an opportunity for beauty, comfort, interest, and poetics. They are an opportunity not only for the making of beautiful places, but for the cultivation of a beautiful lifestyle, a beautiful culture. And we should treat it so.

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ABOUT THE AUTHOR

Michael Tavel AIA, of SUN Studio in Denver, specializes in sustainable, climate-responsive, urban mixed-use architecture and town planning. His Geos Net-Zero Energy Neighborhood, designed with David Kahn ASLA, won seven awards including a National Honor Award from the American Society of Landscape Architects. Tavel received his Masters of Architecture at the University of California, Berkeley in 1991, has lectured and taught internationally, and is a Senior Instructor in the Program in Environmental Design at the University of Colorado, Boulder.

Since his very first published work in 1961, Christopher Alexander pursued an architecture of enduring comfort and beauty, inventing the idea of “pattern” and pattern languages, describing order in nature and the built environment, and insisting on the importance of process for the formation of wholeness. In the chapters of this book, former students and collaborators of Alexander continue to explore the central concepts of his approach, connecting them explicitly to the urgent need for a more sustainable energy- and resource-conscious building culture.

The book’s three parts address this challenge at three levels. The first part is devoted to conceptual perspectives, addressing craftsmanship and intelligence in design, placing Alexander’s work in the context of current philosophical thought and examining its potential contribution to the Green Building Movement. The second part addresses the methodological development of the “pattern language” approach over the last twenty years, with particular attention to aspects of sustainability in urban design, building, teaching, and research. The essays in the third part reflect on built projects, ranging from small neighborhoods to buildings and interiors, showing how these illustrate the concepts and themes recurrent throughout the book.

This book represents the greater movement of which it is a part, one dedicated to pursuing a practice of architecture that has at its core a concern for human well-being and the continued care of our shared environment. Through their manifold and diverse contributions, its authors show that a truly sustainable architecture must also be humane, and that a truly humane architecture is fundamentally sustainable.

Kyriakos Pontikis, architect and Professor of Interior Design at California State University, Northridge. His courses and research focused on humane and sustainable design and architecture. He had over twenty years of professional experience in Europe and the US. Professor Pontikis passed away in 2015.

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