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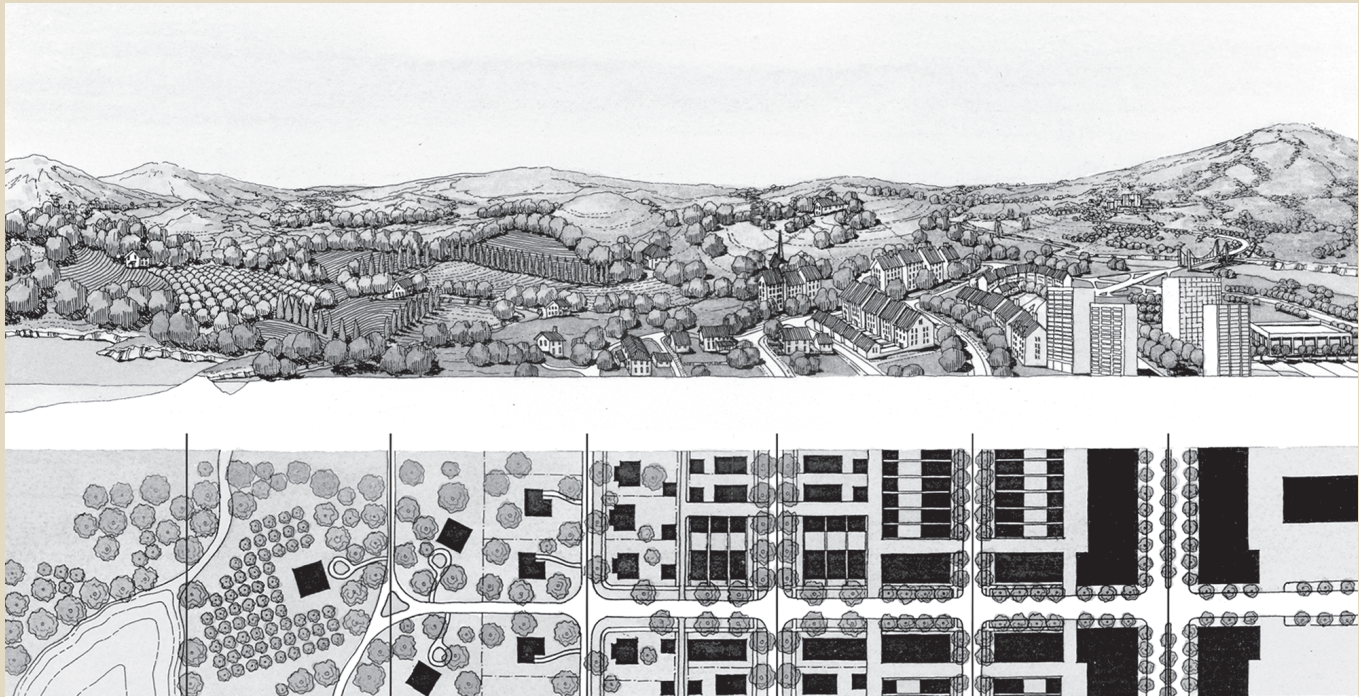
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New Urbanism's Smart Code

David Moffat



As a movement, the New Urbanism has long been concerned about the connection between theory and practice. To its founders, the campaign to recover older, lasting principles of city form has always needed to go beyond windy critiques of sprawl development, to provide real tools for change.

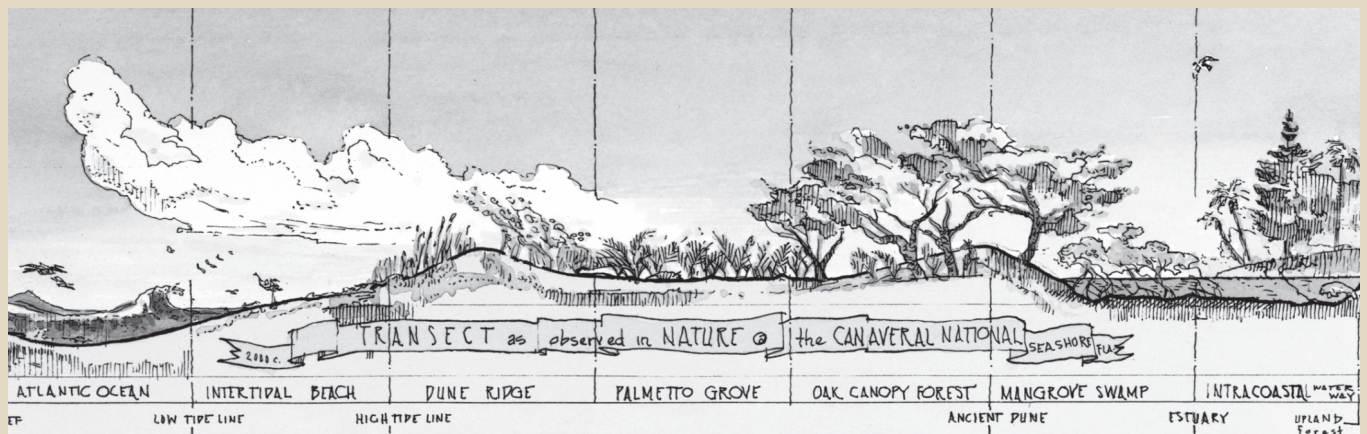
One of the best-developed of these is the Smart Code, a comprehensive municipal development ordinance written by Andrés Duany, Elizabeth Plater-Zyberk, and their Florida architecture and planning firm DPZ. As one of the founders of the Congress for the New Urbanism, Duany maintains most people don't want "dendritic" landscapes of cul-de-sacs, parking lots, freeways, and office parks. Nevertheless, current zoning laws almost guarantee this type of environment, because their driving concerns include almost everything other than form. The Smart Code, by contrast, begins with what people want their communities to be like, and works backward to create the legal framework to allow it to happen.

In technical terms, such a strategy has recently been referred to as form-based planning. In place of the separation and regulation of uses (at the heart of most modern municipal codes), it proposes the regulation of physical relationships and densities. And behind the Smart Code's particular approach is the idea of a transect: a progression of forms from rural to urban that its advocates claim most people "naturally" prefer.

When it first appeared in the early 1990s, the Smart Code was a free, one-page document whose intent to replace all a town's existing development ordinances was largely polemical. But in subsequent revisions, numbered like the releases of a computer program, it has been refined and expanded. It now includes seven articles that address everything from regional environmental analysis to the details of local sign ordinances. It is also now available for a license fee from Municipal Code Corporation, the same Florida publishing house that distributes 2,600 other model municipal codes.

Today, Smart Code advocates claim their all-in-one approach to development planning is not only a viable and "grown-up" alternative to standard forms of municipal regulation, but it is simpler and more transparent to administer. At its heart, it does away with the proliferation of use-based zones and special overlay districts (R-1, R-2, C-1, etc.) that dominate a typical zoning ordinance. And in their place it substitutes six transect zones — T-1 to T-6 — and "special district." These are tied to a specific gradient of development types, from the protected landscape to the dense urban core, that clearly describe, map and diagram what developers are allowed to build "by right."

Above: The development transect from the SmartCode. The vertical dividing lines in the lower drawing indicate the transect zones from T-1 at left to special district at right. **Facing page:** A natural transect. Drawing by James Wassell.



A Matter of Natural Law

To make sense of all this, and promote the Smart Code to city officials and planning practitioners, for the last several years the code been the subject of series of seminars organized by the planning firm Placemakers. A feature of all these events is an inspirational talk by Duany. However, at the seminar Feb. 19-20 in San Diego, the code's principal author also used much of his time at the podium to argue that advocates of a denser, mixed-use lifestyle need to recruit environmentalists to their cause.

According to Duany, the art of town planning was largely swept aside after World War II by the advent of technological modernism. By contrast, starting in the early 1960s, environmentalists were far more successful at establishing a countervailing moral position. But environmental arguments for the priority of natural systems have generally been based on notions of wilderness (in moral terms, Eden before the fall). And today, if New Urbanists want to make common cause with them, they will have to put people back in the picture.

This pairing of urban development and environmentalism is not as odd as it might at first seem. The language of New Urbanism is filled with biological analogies. Thus, sprawl development is a "monoculture" that cannot "evolve" according to a process of "succession." But Duany also pointed out that the idea of a development transect underlying the Smart Code is taken from topological stud-

ies of plant and animal communities. To reconcile an environmental transect with the New Urbanism, you only need to extend it into areas of human settlement.

The trouble here is that key writings, including Ian McHarg's *Design with Nature* (1967) and Ann Spirn's more recent *The Granite Garden*, have set the environmental movement on a collision course with those who believe the city to be one of the greatest "natural" human environments. Followed literally, McHarg's ideas have been shown to lead only to beautifully landscaped sprawl, Duany said; and Spirn's would have made the building of those rich urban environments we know and love virtually impossible.

To actually find a place for people within the higher morality of nature, you must begin a dialogue of forms and locations. And this is precisely what the Smart Code sets out to do. At one end are its T-1 and T-2 zones, designating protected natural areas and the rural environment, respectively. T-3 covers what might be considered the suburban condition — although compressed into densities more typical of the 1920s. T-4 represents the messy area round the core of most American cities, and T-5 represents the more orderly traditional town center. T-6 and "special district" are used to codify big-city places or areas dominated by a single, concentrated activity such as an industrial area.

New Urbanists are normally thought to be arch enemies of suburbia. But the Smart Code does not seek to eliminate

this type of development, Duany said — only raise its performance level, and limit its application to market sectors where it makes most sense. The problem is that today anyone setting out to build a compact, walkable community faces a near-Sisyphean task pushing their plans through the zoning approval process. What the Smart Code sets out to do is restore choice and “level the playing field.”

Despite such an ostensibly free-market orientation, a program of moral judgments clearly also informs the Smart Code. And during his remarks in San Diego, Duany touched on this with reference to a comment by architect Christopher Alexander, whose writings, including *A Pattern Language*, also seek to establish a basis for the ordering of built forms.

Duany said that Alexander once told him that when he entered a building, he asked a simple question: “Does this place raise one’s spirits or lower them?” A similar judgment might be seen as underlying the transect-based Smart Code: what is this form of development, and is this the appropriate T-zone?

Toe to Toe with the Technocrats

Following the presentation by Duany much of the rest of the two-day event was taken up by specialist presentations. Smart Code advocates believe that existing code structures will only be supplanted once they are able to match the authority of experts, issue by issue.

In today’s development climate, the fire chief does not care what the mortgage lender thinks, or the EPA biologist. But they have all devised specialist terminology to codify their concerns. By comparison, the warm and fuzzy of urban design has no “standing.”

“There is no such thing as a void,” Duany said. “Always there is an expert that will fill it.” The trick is to harness the power of code-writing to a general vision. Today, Duany said, those who buy into the Smart Code’s program of change are also buying the expertise of specialists who have embraced the New Urbanist vision, and who have contributed specific language to various sections of it.

Among the specialist presenters in San Diego, the first to the podium were two traffic engineers, Peter Swift and Richard Hall. Swift reported on research by his Colorado firm documenting how wide suburban streets actually increase the number and severity of traffic accidents. A less hierarchical net of narrower streets without cul-de-sacs would be more walkable, encourage drivers to slow down, and always allow fire engines to arrive somewhere from two directions.

Hall, from Florida, then pointed out how forty years of development using a modular “plug-and-play” model

along arterial boulevards has proven little more than a recipe for congestion. By planning patterns of land use first (and in ways that enable a variety of travel modes), you can actually increase “mobility” (the holy grail of transportation planners) by reducing the number of high-volume arterial intersections. But such a strategy involves rediscovering an older typology of walkable thoroughfares, the specifics of which are now part of the Smart Code.

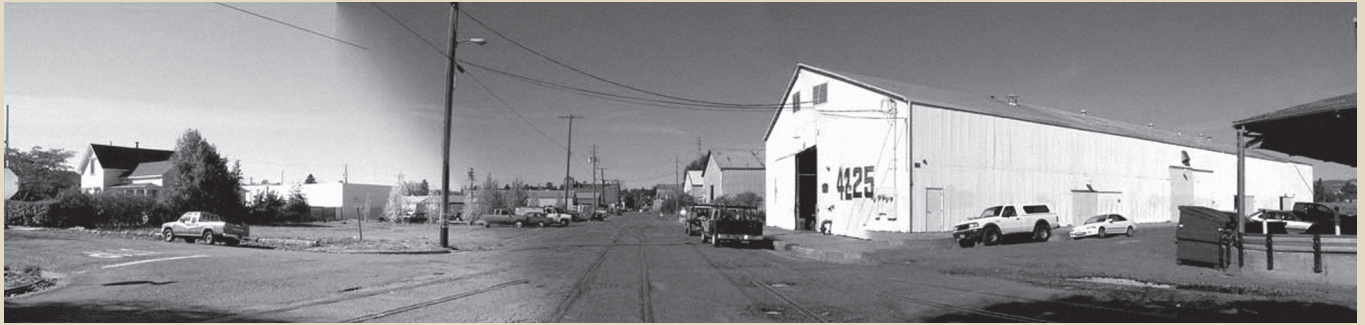
Environmental planner Milt Rhodes next took on the issue of water quality. Environmental science has now established that the amount of land covered by buildings and paving is absolutely related to biotic integrity. In its second article the Smart Code creates a system for prioritizing lands for urbanization and preservation across entire watersheds. It then ties such regional planning to a gradient of provisions by T-zone for such important environmental concerns as stormwater retention and stream channeling and buffering.

Planner Eliot Allen from Portland, Ore., completed the first day of presentations by demonstrating how GIS computer modeling can be effectively used to manage information and implement Smart Code specifics. A precise quantification of benefits may be especially crucial to decision-makers when they receive that politically chilling “call in the middle of the night” challenging their new approach, he said.

The second day’s session began with a presentation on mixed-use real estate economics by former developer, now EPA finance analyst, Lee Sobel. The central point to emerge from his discussion of “lease structures,” “phasing strategies,” and “tipping points” was that retail development is critical to any new urban community, since it creates the sense of place that can serve and attract housing and other uses. However, nearly one third of all retail space in the U.S. is now surplus. Therefore, a shrewd approach is essential, one that stresses cheap, flexible space that can adapt to a variety of tenants.

Duany pointed out that if initial retail development is strategically planned, other aspects of a community can be built out in time on its parking lots. Another key lesson of existing retail development is that there is always a front and a back to any building, even on a traditional Main Street. This means there is no sense spending money on rear facades, he said.

Daniel Sloane, national counsel for the Congress for the New Urbanism, next addressed legal issues surrounding adoption of the Smart Code. As a model ordinance, it needs to be extensively calibrated to local conditions and applicable state laws, he said. Beyond this, the best method to integrate it into a town’s existing development code



Above: Photo collage of existing riverfront street in downtown Petaluma.

Below: Rendering of the same street as it might appear after development according to the SmartCode. In Petaluma, application of the SmartCode made use of California's Specific Plan law to create consensus between developers and environmentalists. Images courtesy of Laura Hall.

may be to adopt it as an overlay, giving developers a choice between parallel approval processes. Once its advantages in terms of speed and ease of use have been proven, the older system can be phased out over time.

The final technical presentation was by Tony Nelessen, whose New Jersey planning practice concentrates on community visioning. A pioneer in visual-preference surveys, he said an "extraordinary misconception" exists about what people want from their built environment. Given the choice, people from Delaware to Florida to Montana consistently prefer images that dovetail with the application of a rural-urban transect. What allows groups he jokingly referred to as CAVE (Citizens Against Virtually Everything) to drive local development politics is a failure by planners to communicate a long-term message of aspiration and empowerment.

A Question of Application

The audience at the San Diego seminar consisted largely of planning officials and technical consultants from such medium-sized western cities as Missoula, Bellingham and Albuquerque. Its authors believe the Smart Code is applicable in such places, both to contain expensive peripheral growth and transform "greyfields" such as dysfunctional older shopping centers into new mixed-use neighborhoods. It may also be applicable in larger cities such as San Diego, which is currently looking at ways to create multiuse district centers in its outlying suburbs.

But away from the official presentations a number of attendees questioned whether any city council would have

the fortitude to go cold turkey and throw out its existing codes to adopt a new system of T zones. Likewise, many were skeptical of creating a parallel system, as Sloane suggested, since this would mean having to administer two regulatory regimes instead of one.

One of the most revealing presentations, therefore, was that of Laura Hall, a private planning consultant from Sonoma County, California. In 2003 her firm managed the process by which a Smart Code was adopted for a 400-acre section of downtown Petaluma, a small city at the northern fringe of the San Francisco Bay Area. What made this application possible, she said, was California's Specific Plan law, which allows a city to craft a highly detailed, site-specific amendment to its local zoning ordinance.

Hall also said the Smart Code was valuable because it gave the community a tool to focus on the real physical attributes of the place it wanted to be. And once people were provided with a comprehensive structure to guide their discussions — one that did not resort to incomprehensible formulas and overly complex and qualified definitions — consensus was remarkably easy to obtain.

In the end, a local newspaper reporter confided he was having difficulty writing the story. Was this a win for the developers, or for the environmentalists? Who could say when the two groups were holding hands and singing "kumbayah."