Nature and the New Rural Landscape

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We enjoy the fruits of the plains and of the mountains, the rivers and the lakes are ours, we sow corn, we plant trees, we fertilize the soil by irrigation, we confine rivers and straighten or divert their courses. In fine, by means of our hands we essay to create as it were a second world within the order of nature.

— Cicero, De natura decorum (1st century BC)

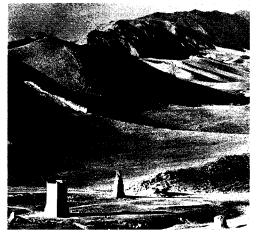


Fig. 1 Harmony in Nature

THE NEW RURAL LANDSCAPE

In "Thoughts on the New Rural Landscape" Robert B. Riley writes that the rural landscape in the U.S. has been a story of rapid change. This change is inevitable since it marks the progress of a nation from underdevelopment of its natural resources to full utilization. The gradual transformation of the landscape from wild nature to agrarian countryside was, for the most part, progressive and incremental. These changes brought a sense of order and hierarchy that could be understood in traditional terms:

"The old rural landscape was not just a physical, social, and economic phenomenon. It was a conceptual image, an unexamined, shared vision of the countryside. It was economically, socially, and visually organized around people living on the land and earning their living from the land, particularly through agriculture and some extractive land uses....It had a basic conceptual and hierarchical organization - city, town, village, hamlet, freestanding farmstead, and, finally, wild land. Economically, it was organized hierarchically and centrally as well, with functions and markets linked to settlements."2

The factors that have transformed the old rural landscape have been driven, for the most part, by rapid and systemic changes in technology and traditional agricultural and land use economies. The railroad and new patterns of settlement made possible during the nineteenth century transformed rural places from remote outposts into villages and towns. Trains significantly reduced travel time between far-flung towns and settlements. Goods and materials, previously unavailable in many locales and regions, could now be transported efficiently and cost-effectively to the countryside from distant manufacturers and suppliers. New highways and infrastructure systems, developed in the twentieth century, spurred peripheral growth and development away from the central city making rural places accessible to a new middle-class populace of suburbanites. Recent advances in communications technologies are just beginning to transform the old economic underpinnings of the traditional rural landscape in new and unprecedented ways. As a result, the traditional roles of agriculture and extractive economies in rural places are rapidly shifting to tourism, recreation, and leisure activities.

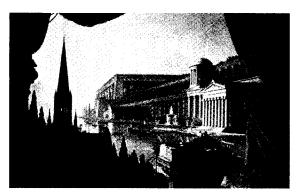


Fig. 2 The Ideal City

Pierce Lewis describes the Galactic City as a new urban form of city that can't understood at all in terms of the old city, but only in terms of itself, and noted its expansion into the countryside. 3 The old rural landscape was a place where people worked on the land, earned their living from the land, and lived on the land. The new rural landscape is a residence and occasional workplace for people whose livelihood depends not at all on the land per se. People to whom the rural landscape is nothing more or nothing less than an alternative residential location are shaping the new rural landscape.

According to Riley, traditional concepts of city, town, village, hamlet, farmstead, and wild have little relevance to this new landscape and this new way of life. As Lewis observed, our habit of constantly trying to interpret the new landscape in terms of the old city is not only futile, but actively hinders understanding. The new landscape is one in which traditional concepts of central place and hierarchical organization are meaningless. It is a landscape, as in Richard Louv's phrase, of "buckshot organization." ⁴

PERIMETER CENTERS AND NERDS

The new networks of high-speed rail, motorways, and telecommunications are profoundly effecting the way in which everyone lives their lives. Future developments in the communications industry will further change our perception of the relationship between living and working. The periphery will offer the territorial solutions and typological programs that could never have been imagined or supported within the traditional city model. ⁵

Riley suggests that the new and old landscapes are two inherently different networks that have to somehow coexist or find resolution on the same land. ⁶ He postulates that we need to understand this new composite landscape on its own terms. First, we need a new vocabulary since the old categories such as town, village, hamlet, and farmstead, are no longer relevant. The second need is to analyze in quantifiable terms what is going on. Finally, we need to understand what people seek in the new rural landscape.

"Perimeter Centers," according to Kieran and Timberlake, are pockets of commercial development along the interstate highways. These new development typologies cannot be understood in terms of conventional building-to-building or building-to-road relationships, but as "abstract circuitries of roadway, each isolated from the next by an insulating 'green veil' connecting unseen structures in gardens of commerce and living." These satellite commercial developments often comprise similar elements (motels, gas stations, fast food franchises) and cater primarily to the needs of transient motorists. In many instances, perimeter centers eventually evolve to include other functions, such as office buildings, shopping, and recreation. Invariably, residential development follows. This phenomenon is now well established and predictable. The impact of this type of development has transformed the countryside in significant ways often pitting agricultural and sustainable uses of the land against commercial and residential development.

The land bay is the basic unit of the perimeter center codifying the separation of building from building and building from roadway. § It is a ready-for-development parcel, complete with looping access road, utility infrastructure, and planning permits. It may vary in size, from a circumference of more than 1 mile to less than 500 feet, and it usually houses a single use with attendant parking. Perimeter centers can be interpreted as deliberate collections of individual land bays docked against one another. They are developed as privatized gardens in which one works, markets, and resides, and that define a collective realm of sorts, interconnected by a network of green-veiled highways.

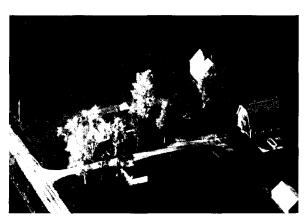


Fig. 3 NERD I

Riley identifies three conceptual models that he classifies as the New Edenic Residential Development, or NERD. NERD I is based on the quintessential farmstead model where the house sits on the existing or rural framework without really affecting it. An isolated house, he asserts, makes little visual impact on the existing landscape. At the other extreme, NERD III, the new residential development exists at a scale and with a pattern sufficient to create an environment, distinct from the old, which can be experienced totally in itself. In the Illinois flatlands, for instance, these developments, the amenity subdivisions that cluster along stream corridors, are very different from the surrounding landscape. They are treed and curvilinear, versus the open and rectilinear character of the existing landscape.



Fig. 4 NERD III

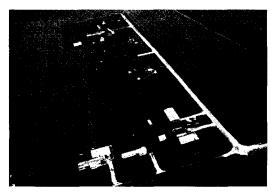


Fig. 5 NERD II

As Riley phrases it, NERD II "combines the worst of town and country living without the advantages of either." It commonly results when a farmer sells road-fronting land along one side of a farm. Of the three types, he finds this development to be the most deplorable since "it affects, and to some extent vitiates, the landscape experience of the existing or traditional land pattern without being strong enough or extensive enough to substitute a pattern or environment of its own."

Kieran and Timberlake contend that Perimeter Centers and their emerging building typologies have been unfairly criticized for deficiencies in comparison to traditional urban forms. They represent a morphological change as different from the Strip as the Strip is from Main Street and the conventional urban grid. In 1968, Robert Venturi, Denise Scott-Brown, and Steven Izenour analyzed the Las Vegas Strip as the dematerialization of Main Street's slow moving spatial enclosure into a mid-speed array of information. The Strip, in turn, has been further dematerialized by the interstate highway network into an aspatial, but ordered, contemporary City in the Garden.

"It is the interstate highways that have provided the mechanism on a regional basis for the reclamation of paradise in the extended garden of America." ¹⁰ This high-speed system and accompanying development, they argue, cannot be comprehended through traditional types of urban analysis. "Like a broken kaleidoscope in which the elements fail to coalesce into recognizable patterns, buildings and asphalt appear like isolated, internalized fragments. Neither figure nor ground." 11

The only self-contained spaces in the new perimeter center are internalized and privatized automobile and building interiors; everything beyond these realms is just simply asphalt circuitry overlaying a garden. Kieran and Timberlake believe that this circuitry, and the garden it occupies, can sustain analysis as a purposeful—even desirable—vernacular form in which architecture is rendered nearly meaningless in this new tapis vert. ¹²

THE ORDER OF NATURE

Donlyn Lyndon observes that the transformations through which our world is passing have been especially vivid in the last several years. ¹³ The tensions between global change and local identity are a persistent theme in current affairs. On the one hand are the ostensibly inexorable forces of economic development, compounded by the increasingly rapid diffusion of ideas, technology, and culture. On the other hand is the wish to hold steady to the traces of a known and familiar order, the persona of a given place and culture.

Riley and Kieran and Timberlake point out that the old landscape, and the lifestyles that it once sustained, is gone and a new landscape is just around the corner. Just as this is a new landscape being shaped by new forces, institutions developed in the old landscape are inadequate or irrelevant in the new. Riley stresses that understanding this new landscape requires a deep sense of local and regional history and knowledge of the landscape as a "complex, evolving artifact, a particular and peculiar place expression of larger social and cultural trends." 14

According to Norman Crowe, we reveal our presence in the world by creating places – buildings, towns, villages, farms, and cities:

"They are either set directly or indirectly into the world of nature, and they serve us as a kind of artificial nature, or 'second nature,' to use Cicero's term for it, that we are able to control just as the gods of our remote past were seen to control the natural world that lay outside our door. The fundamental sources of all our knowledge, however, still remain rooted in nature." ¹⁵

Our understanding of the relationship of man-made world and the world of nature is based on the fundamental notion that the artifacts we produce comprise our world as something distinct from nature and that our sense of what is natural is therefore exclusive to the province of nature. 16 As concepts they interact in a dialectical fashion to condition the way we approach nature and what we build.

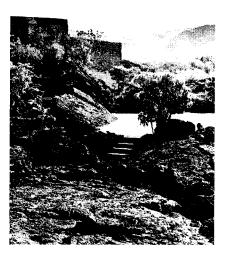


Fig. 6 Architecture Conforms to Nature (El Pedregal, Luis Barragan, Mexico City, 1945-50)

Alexander Purves writes that it is the earth-bound characteristic of architecture that establishes man's place in nature. ¹⁷ Whether one understands a given topography as an active component of a three-dimensional composition or one focuses on a single window and its way of looking at the out-of-doors, one is observing the relationship of the man-made object to its natural context. And that relationship ranges from opposition, where lines are distinctly drawn, to fusion, where the edge between the "natural" and the "man-made" is artfully disguised. But even among buildings that appear to oppose nature, a telling diversity exists when one takes a closer look, and those buildings that retreat into the landscape do so in very different manners.

As Crowe points out, the present is always shaped by the past. ¹⁸ The "environmental crisis" that we find ourselves immersed in today stems from our success in using nature's resources to proliferate our numbers and expand our material wealth. Now that we can see more clearly the results of past and present practices, we have begun to look again for other ways to understand the natural world upon which we ultimately depend. Our sense of what constitutes a balance between our built world and the natural world is always changing, conditioned as much by personal experience and religious and cultural forces as by coolly objective scientific knowledge.

In spite of our prescient knowledge, the periphery continues to extend deep into the natural landscape, blurring the contrasts between urbanization and the distinctive qualities of the natural habitat, whose inability to offer non-industrial and controlled space has provoked a social awareness of environmental crisis. ¹⁹ Now architecture and the city are seen to reside in a theoretical realm outside the bounds of nature. It is as though there are two distinct worlds – nature's and ours – and the feeling of unity between them is conspicuously missing, perhaps even lost for ever. ²⁰

MODELS FOR THE NEW RURAL LANDSCAPE





Fig. 7 The Garden Versus the Garden City

Unlike Kieran and Timberlake who acquiesce to the unorthodox patterns of suburban development, Peter Calthorpe remains staunchly critical of unplanned development and urban sprawl. "Our urban-suburban split, "he writes, "has created on the one side disinvestment and economic hardship, on the other congestion and pollution. The crisis of place in America affects everyone in that it fails to fulfill the needs of so many." Calthorpe contends that nature itself, not interstates, should provide the order and underlying structure of the metropolis. Natural features, such as ridges, bays, rivers, ocean, agriculture, and mountains, form the inherent boundaries of our regions. They set the natural edge and can become the internal connectors, the larger common ground of place. They should provide the identity and character that unifies the multiplicity of neighborhoods, communities, towns, and

cities that now make up our metropolitan regions. As an environmentalist, he views preservation and care for a region's natural ecology as the fundamental prerequisites of a "sustainable and humane urbanism."

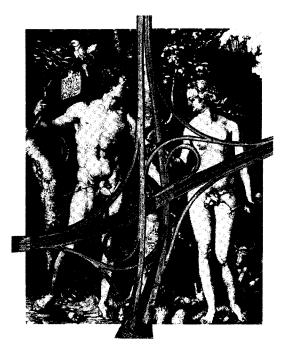


Fig. 8 Eden Made Accessible

Like many architects and planners, Woodroofe, Papa, and MacBurnie recognize that the process of change is inevitable. They believe that potential opportunities will arise from new ways of reading these changes, and responding positively to these changes. "The city of tomorrow, like the city of today," they write, "could be a veiled, subtly complex, contradictory, and ultimately transparent environment with its own precise and delicate order." ²²

Riley concedes that traditional landscape, much of it framed in the Jeffersonian grid, could be understood in terms of sophisticated regional science or central place theory, theories of agricultural land use and rent, and so forth. The new landscape, by contrast, may be thought of as a network based on entirely different motivations, economics, and sociology. It is a network with many fewer spatial and distance restrictions than the old network and, in fact, with electronic communications, about as aspatial as any spatial network could be:

"We have not developed any theoretical models for this network yet, as we developed theoretical, if not always very useful, models for the old. Such models will probably be different, more complex, and less spatial than those for the old network." ²³

One of the differences between the networks is that of order. Agricultural landscapes inevitably have a clear visual order, built from visual patterns, building materials of local origin, a settlement system of residences, service, and market towns, and transport routes.

Riley, however, is not convinced that the new rural landscape should partake of any older rural order. First, we do not yet know and cannot envision what this new landscape's order might be. And, second, since this new landscape is far less deterministic than an agricultural landscape, it is likely to have an apparent or conventionally recognizable order only by design, whether or not that order comes from designers.

The new and old landscapes are two inherently different networks that have to somehow coexist or find resolution on the same land. At the regional scale, for example, Calthorpe believes that the man-made

environment should fit into and along larger natural systems. ²⁴ He proposes that urban limit lines or growth boundaries should be set to preserve major natural resources at the edge of the metropolis. This line should be large enough to accommodate growth for the next generation but small enough to encourage infill, redevelopment, and density at the core.

Kieran and Timberlake's view of a new rural order of perimeter centers is somewhat analogous to Lewis' old city and new city. The galactic metropolis that Lewis sees, however, surrounds, engulfs, and eventually transforms the old city. In contrast, Kieran and Timberlake contend that the 21st-Century American metropolitan region should be based upon symbiotic rather than mutually consumptive relationships between the central city and its perimeter centers. The central city needs perimeter cities, they stress, and conversely, perimeter centers need the central city. Each cannot define itself without the other.

"The perimeter offers substantial lessons for the central city," they write. "We are asking that we allow the central city to live by natural selection, rather than suffer death by history." ²⁵ They believe the central city can correct itself, respond to the perimeter, and in turn by inclusion of certain aspects of the social and economic agendas of the central city, the perimeter can accommodate the central city without political, economic, or social hegemony. However, they do not specify just how this corrective accommodation might actually be achieved.

Lyndon addresses adaptation of existing cultural and historical patterns in another way. For decades we have been told that we must come to grips with the changes in our culture brought about by evolving technology. These changes (automobiles, jet travel, domestic appliances, communications technologies) have all left their traces in our lifestyles, thought patterns and values, as well as in the concentrations of power that determine how we express our place in the world. "The protean, creative side of these diversities," he writes, "expresses itself in the glimmering vitality of many changing neighborhoods, the intricate resourcefulness of people with minimal means and expansive spirits, the energizing fusion of memories and wishes that can give new form to a community." ²⁶

From a sustainable point of view, Calthorpe's vision of adapting architecture to the landscape as a palliative to uncontrolled urban sprawl has merit. But we are also reminded that regional and local history is out of fashion. ²⁷ It conjures up images of cardigan-clad antiquarians, or naïve New Deal populism. Intelligent planning, however, requires history. Designing places that can effectively accommodate demographic and cultural change calls for a new kind of listening and observing, a wider range of knowledge about formal precedents, their potential to inform new work, and an ability to anticipate forms that have both resilience and flexibility, allowing the continuing investment of imagination and invention by their users. ²⁸

The real test of our abilities to care for places, according to Lyndon, will be our ability to extract creative and productive energies from these necessary disparities of background and expectation, to forge a positive future through spirited appropriation of the many pasts in our present.

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