

Steven Moore began his career as a practicing architect in Maine in the 1970s and describes his built work of that period as "regionalist." As a means to explore the relationship between critical regionalism and sustainable architecture he completed a PhD in the 1990s at Texas A&M University. In it he studied the demise of the Blueprint Demonstration Farm, a regional-sustainable project developed by the Center for Maximum Potential Building Systems (see Haslam, Chapter 6). This research became the background for his first book, *Technology and Place*.

The article, derived from that book, which appears here, can best be understood as a statement of the theoretical implications that emerged as a result of that empirical study. It is also a critique and extension of Kenneth Frampton's theory of critical regionalism, from which Moore borrows the rhetorical strategy of distilling the conclusion into points. His work points the way toward the much-needed reformulation of sustainability as a practice tied to place—as a kind of regionalism.

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Technology, Place, and Nonmodern Regionalism

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In the 1980s and early 1990s, the topic of regionalism enjoyed considerable attention within architectural discourse. The prospect of a progressive, or *critical* regionalism seemed an antidote to both the regressive fantasies of postmodern historicism and the various proposals for a deconstructivist architecture inspired by European linguistic theory. Since the mid-1990s, however, the regionalist moment has waned. The progenitors of the discourse, Kenneth Frampton, Alexander Tzonis, and Liane Lefaivre, have moved on to other topics, and the projects of those architects who embodied the critical regionalist attitude has been re-framed by other discourses.

This is a natural, if not satisfying, development. In the maturation of any discourse, some possibilities are suppressed just as others are amplified by the exigencies of the situation. The purpose of this article, then, is to reconstruct possibilities that reflect our current situation. To do so I argue that *technology* and *place* should be understood as the suppressed core concepts that are contained within regionalist architectural production. These are central to our understanding of what a "region" might be, and their interrogation is an opportunity to reconsider the history of regionalism as a concept.

Place & Region

The geographer John Agnew has argued that, in modernist thought, the traditional concept of place is devalued for two reasons: first, modern social science has confused, or conflated, the distinction between "place" and "community." "Community" in the modern view, argues Agnew, has been assumed to be both "a physical setting for social relations" and "a morally valued way of life."¹ Because of this modern logic, place has been erroneously equated with the concepts of morality. Modernist logic, in Agnew's analysis, fails to understand society as a dynamic process that transforms places and regions. As a result, moderns have tended to reify moral concepts as places so that their characterization of big cities as dens of iniquity and small towns as the vessels of morality is clearly ideological, not empirical.²

Second, beginning in the nineteenth century—a period that witnessed the dramatic evaporation of traditional communities—social scientists attempted to predict the trajectory of history. Common to all of these a priori predictions was the polarity of “community” and “society.” Writers as dissimilar as Herbert Spencer and Karl Marx saw community as being coercive and intellectually limiting, or even idiotic, whereas national societies were characterized as liberative.³ Conservatives, such as Auguste Comte, saw the loss of traditional village forms as the loss of the ideal social type. In contrast, the politics of nation building and the liberative project of Enlightenment became an ideology of “antitraditionalism.” To free humans from feudal bonds to the land, and the hierarchical relations inscribed there, was understood by moderns to be the grand scheme (or teleology) of history. The German sociologist Max Weber popularized this historical tension as the transformation of *gemeinschaft* into *gesellschaft*.⁴

This logic suggests that the modern reification of moral codes and the teleology of history conspired to devalue place as a concept relevant to the conditions of contemporary life. “‘Becoming modern’ involves casting off ties to place (in work, recreation and sense of identity) and adopting an ‘achievement oriented’ or ‘class conscious’ self that is placeless.”⁵ Agnew argues, in concert with the postmodern geographer Edward Soja, that the devaluation of place was most vigorously promoted by Marxist ideology.⁶ For traditional Marxists to consider social behavior as determined in any way by the conditions of place would have been to subvert the dialectic order of causality. Marxist logic has traditionally held that material order arises from a dialectic relationship with social activity. But if Marxists devalued the concept of place on ideological grounds, there is considerable irony in the recognition that it has been market forces that have most effectively devalued real places.⁷

In the eyes of the Left, the doctrine of environmental determinism (which opposes a dialectic understanding of place by holding that societies owe their unique character to the conditions of their territory) amounts to nothing less than racism and the fetishization of place.⁸ We will return to this logic shortly.

In a renovation of this Marxist position, Agnew argues that places cannot be understood within the limited dimensions of architecture or physical geography.⁹ Rather, Agnew argues that the variables that characterize places are multivalent. He offers three elements, or scales by which we might understand the phenomenon of place: location, sense of place, and locale.¹⁰

By “location,” Agnew intends that a place can be understood as a geographic area encompassed by the objective structures of politics and economy. In this sense, places are linked together, for example, by the interests of the European Union or the Monroe Doctrine. Using the same logic, one might argue that Houston is closer to the cities of Aberdeen, Scotland, and Stravanger, Norway, than to Austin, Texas, because the same corporate structures manage the oil fields of the North Sea and Texas. It is these structural conditions of political economy at the macro-scale that most concern Marxist scholars.

At the other end of the spectrum Agnew argues for the existence of a “sense of place.” By this term he means the local “structure of feeling” that pervades

being in a particular place. This dimension of place includes the inter-subjective realities that give a place what conventional language would describe as “character” or “quality of life.” For example, the reverence that the citizens of Austin reserve for a swim in Barton Springs and New Yorkers reserve for food, fashion, and style are ontological, rather than objective, dimensions of place. It is at this scale that the complex human poetics of place are experienced. It is the inter-subjective construction of conditions experienced as a sense of place that most concern constructivist scholars and phenomenologists.

Between objective location, and the subjective sense of place, Agnew establishes a middle ground, or “locale.” This quality of place is the setting in which social relations are constituted. Locale includes the institutional scale of living to which architecture contributes so much: the city, the public square, the block, and the neighborhood. By considering the concept of place, or region from this meso-scale we avoid two problems. First, we can appreciate the insights of Marxists but avoid the over-determination that results from their preoccupation with the seemingly objective conditions of political economy. Second, we can appreciate the insights of constructivists and phenomenologists but avoid the under-determination that results from their preoccupation with the subjective conditions of atomized reality.¹¹ It is the “elastic” scale of all three dimensions, viewed from the meso-scale of the city-state, that best describes a place. By understanding the concept of place as a dynamic process that links humans and nonhumans in space at a variety of scales, we might get beyond the opposition between those who see it as a set of objective structures and those who see it as a set of romantic myths tied to subjective experience.¹³

Technology and Society

Just as place is typically thought of as primarily physical in quality, technology is commonly understood to be physical hardware—radios, refrigerators, or computers. This materialist definition discounts the social construction of such objects and assumes these “objects” are constructed based solely on technical measures.¹⁴ Similarly, in the positivist tradition, technology is understood as the asocial application of scientific truths. In the philosophical tradition of Heidegger, technology is understood as an ontological practice, meaning that it comes to define who and how we are. In contrast to both of these traditions, the literature of science and technology studies has demonstrated that technology is a social system that is inextricably part of society.¹⁵ Technology, like place, is a field where the struggle between competing interests plays out.

The sociologists Donald MacKenzie and Judith Wajcman have argued that technology, like place, includes three qualities: “human knowledge,” “patterns of human activities,” and “sets of physical objects.”¹⁶ I find it helpful to examine technology as a process of social construction. Knowledge is required not only to build the artifact, but to relate the natural conditions upon which the artifact works and to use it. The second quality, “patterns of human activity,” or human practices, refers to the institutionalization, or routinization, of societal problem solving. In the practices of architecture, carpentry, or masonry are examples of

these “routines.” Lastly, “sets of objects,” takes us back to the things themselves. The point is that computers, hammers, or tractors are useless without the human knowledge and practices that engage them.

What I want to argue here is that the definition of place offered by Agnew, and the definition of technology offered by MacKenzie and Wajcman, is similar to that shown in Figure 1. From it I propose three related ideas: first, that places and technologies are both spatial concepts with related structures; second, that these qualities are dialogically related; and third, that modern forms of knowledge, like the economics of location, tend toward the abstract and over-determined (meaning that the outcome of events is strongly tied to structural conditions) while our understanding of objects and sense of place tends toward the under-determined (meaning that the outcome of events is weakly tied to structural conditions). These points serve only to magnify the centrality of locale and acts as the glue that holds the discourse of places and technologies together.

	Place	Technology
Modernism	(-)	(+)
Postmodernism	(+)	(-)

FIG. 1

To argue that place is a spatial concept is a tautology and requires no further backing. However, to argue that technology is a spatial concept requires some explanation. Bruno Latour’s term *technological network* is helpful in this regard. Latour has argued that, “Technological networks, as the name indicates, are nets thrown over spaces.”¹⁷ By “technological network,” Latour refers not just to “sets of objects,” but to the social networks that construct relationships between human knowledge, human practices, and nonhuman resources—the latter being the stuff—steel, wood, water, etc—from which the objects themselves are made. His point is that technology is essentially a spatial concept because its operation depends upon the mobilization of human and nonhuman resources that exist in different places¹⁸. For example; architects, clients, contractors, and bankers make up a social network of building producers. Their relationship has a social and spatial quality to it. Advances in communications technology, many now argue, have radically collapsed the spatial reality of these social relations. When one recognizes, however, that lumber from Oregon, windows from Pittsburgh, carpet from Mobile, and compressors from Taiwan are required to realize the material intentions of the producers, the concrete qualities of their purely social network are materialized as a global technological network. A technological network produces spatial links that tie the social network of producers to those nonhuman resources required for construction. This is a central argument of this

study that has important implications for how we understand an architecture of place in a contemporary context.

My argument is that technology is best understood not through history, but through geography. History interprets reality as human events in time. Through temporal interpretation we might better understand the causal sequence in which humans construct artifacts. In contrast, geography interprets reality as human events in space. Through spatial interpretation we are more likely to understand how technological networks dominate the places inhabited by humans and nonhumans.

Henri Lefebvre has argued two points that reinforce this dynamic relationship between technology and place. First, that social spaces are produced by technology acting upon nature.¹⁹ Lefebvre’s second point is that each society—or each mode of production—makes its own peculiar type of space.²⁰ What architects might extract from Lefebvre’s logic is that the differing qualities of places are more a matter of technological practices than aesthetic choices because such practices are always already spatial. For example, carpentry requires not only forests and citizens in need of housing, but also the spatial mechanisms that link them. This is the heart of what I will characterize as the dialogic relation of technology and place.²¹

The Nonmodern Thesis

In reconsidering Frampton’s critical regionalism hypothesis, it is necessary to examine the unresolvable conflict between his mix of modernism, as it is embodied in the doctrines of critical theory, and postmodernism, as it is embodied in the place-bound doctrines of Martin Heidegger. The simplest way to illustrate this conflict is demonstrated in Figure 2. Here I have plotted the way that modernism and postmodernism value the concepts of place and technology.²²

The point of the diagram is to argue, as did Agnew, that moderns have generally held a negative attitude toward place because the social hierarchies inscribed there restrict human liberty. Conversely, moderns have held a positive attitude toward technology because machines, science claims, will free us from the drudgery of place-bound tyrannies.

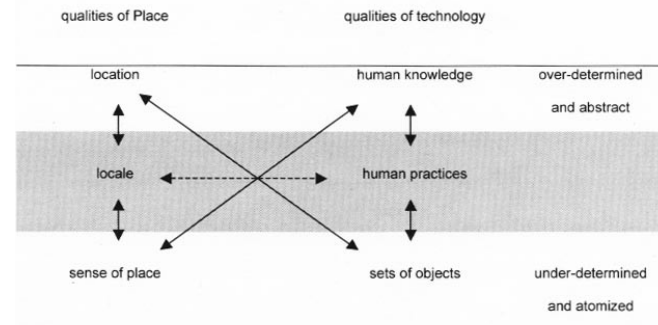


FIG. 2

The flip side of the diagram in Figure 2 is to recognize that postmoderns, far from constructing a new worldview, have merely inverted the relationships constructed by modern thought. Where postmoderns desire to recuperate the propinquity of place and value it positively, they have become evermore skeptical of modern technologies and the unintended consequences that have followed in their wake. The malignant promises of atomic power and industrial agriculture are salient examples of the fears nurtured by postmoderns like Heidegger or the American poet-farmer Wendell Berry. Another way to argue this point is to claim that conservative postmoderns, at least in their attitude toward place and technology, are only *anti*-moderns. In the world of architecture, a figure like Leon Krier exemplifies this position—his drawings value the premodern city as the place that embodies ideal civic relations, but he employs technology only as a scenographic, or instrumental, tool to realize those social relations.

The problem, or the opportunity, found in Frampton’s critical regionalism hypothesis, then, is that it relies upon assumptions drawn from opposing philosophical traditions. Critical regionalism proposes to value both technological means and the propinquity of place as positive forces in history, an admirable goal. By relying alternately upon the opposing assumptions of critical theory, which are modern, and those of Martin Heidegger, which are postmodern, critical regionalism leads to philosophical confusion.²³

I argue that the doctrines of critical regionalism are better served by nonmodern assumptions, as Figure 3 demonstrates. Bruno Latour has used the term “nonmodern” to argue that we have, in practice, never been modern at all.²⁴ If being modern means the isolation of subjects from objects, and the isolation of humans from nonhumans, then I agree with Latour that we have been modern in theory, but never in practice. It is a condition like pregnancy—one is never “sort of” modern. In this sense, modernity has been a convenient license to plunder nature, not an anthropological fact.

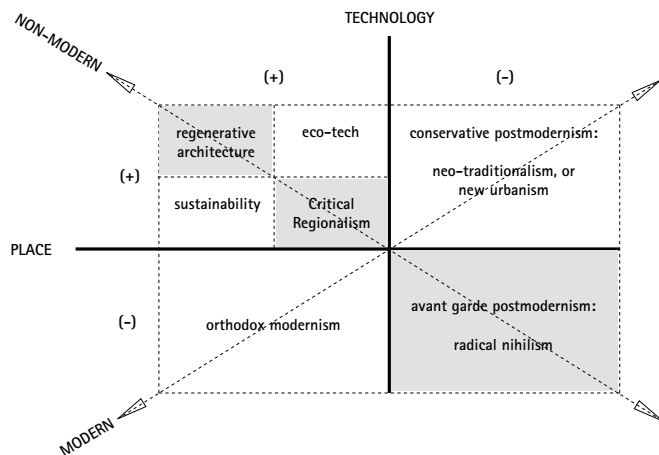


FIG. 3

The nonmodern thesis proposes to erode the Cartesian distinctions between humans and nonhumans. In the nonmodern view, we are no longer subjects empowered to contemplate and order-up resources from afar. When we examine how the world really works we are compelled to recognize that we—riders and horses, politicians and voters, bricklayers and bricks—are “quasi-subjects” and “quasi-objects.”²⁵ These terms suggest that what distinguishes a subject from an object at any given moment in time is only a temporary advantage in power relations. At one moment we are in control, and at the next moment we find ourselves being ordered about by the digital logic of machines that determine our health-care benefits or which telephone company will bill us each month. My point here is that in a nonmodern world, humans and nonhumans have more in common than they don’t. In such a world, places show up as place-making is practiced. In other words, it is hard to distinguish between the qualities of a place and the technologies employed to make them.

This nonmodern logic further suggests that there is no effective distance between culture and nature. If there ever was such a thing as primeval nature—nature untouched by human invention—it has long ago disappeared. Far from lamenting the lost garden of human origins, nonmoderns see not ruination, but increasing opportunities in which human institutions can creatively participate in the cycles of natural systems. Participation in nature just might produce life-enhancing conditions that will benefit all us quasi-objects.

Just as critical regionalism constructs a positive nonmodern synthesis, a negative nonmodern synthesis resolves the modern dilemma equally well—at least from a purely rhetorical point of view. The position that I label as “radical nihilism” in Figure 3 is, I think, best exemplified by the projects of Rem Koolhaas and the Office for Metropolitan Architecture. Koolhaas and those who see the world through similar lenses are simply disinterested in the project of regionalism. Koolhaas’s projects and those related to “sustainability” and “eco-tech” are well documented elsewhere so I won’t dwell on them here.²⁶

“Regenerative architecture,” however, describes the heart of the nonmodern thesis. This term is borrowed from the landscape architect John Tillman Lyle. I propose substituting it for Frampton’s “critical” because “critical” must always refer back to the modern dialectic assumptions embraced by “critical theory.” Just as Jameson would renovate critical regionalism as a postmodern doctrine, I propose renovating it as a nonmodern doctrine.²⁷ The philosophical trajectory of critical regionalism is best understood not in its modernist origins, nor in postmodern Marxism, but within a nonmodern, dialogic future.

Lyle defines a “regenerative system” as one that “provides for the continuous replacement, through its own functional processes, of the energy and materials used in its operation.”²⁸ In this definition, the notion that technology might provide such continuous replacement does not mean that architecture might overcome the second law of thermodynamics, and thus escape the concept of entropy. While it is not possible for any technological system to reconstitute all of the energy consumed in its own creation, architecture—or, “place-forms” as Frampton would have it—can certainly participate far more effectively in

the natural energy flows of a place than current technological practices do. It is through such participation that entropy might be radically reduced.

Lyle offers the concept of “regeneration” as an alternative to the now-common term “sustainable” because, in his view, to simply sustain current entropic conditions is inadequate. I agree; to merely maintain the status quo of material systems is a necessary, but insufficient, strategy to achieve life-enhancing conditions. It is equally necessary to recognize, as does Latour, that all material systems are technological networks in the sense previously defined. In other words, they are politically constituted. This political recognition requires that we reject the status quo of social systems as equally entropic. It is simply a passive form of positivism (traditional science by another name) to imagine that ecologists can repair the ecosystem in isolation from political processes. Lyle’s definition of a regenerative system, then, is flawed because it ignores the social and political constitution of an ecosystem.

Rather than attempt a comprehensive redefinition of what a regenerative architecture might be in this short essay, I’ll simply add the following to Lyle’s definition: A regenerative architecture will seek to engage human institutions in the democratic reproduction of life enhancing places. While not yet adequate it does point toward a cultural horizon where the dialogic relationship between technologies and places can be better understood.²⁹

Having defined place and technology as the core concepts upon which regionalist architecture depends, I conclude by summarizing this discussion in three propositions followed by eight summary points that are meant to serve as a renovation of Frampton’s critical regionalism hypothesis:

First, it is politically desirable and ecologically prudent to reproduce regionalism as a practice relevant to contemporary conditions. Regenerative or sustainable architecture provides a framework through which we might reconstruct and extend that discourse.

Second, to do so we must understand the historic uses and abuses of regionalism, with particular attention paid to the geography of power relations. It is both possible and desirable to make places that relate human institutions to the natural cycles of a region without resorting to appeals that authenticate, and thus legitimize, the authority of entrenched social networks. Rather, a regenerative regional architecture might consciously, and democratically, construct places that relate humans and nonhumans in life-enhancing and ever-changing practices.

Third, although critical regionalism offers a positive direction for architectural practice, its own assumptions are philosophically conflicted and require renovation as a nonmodern polemic for architectural production. The articulation of regenerative regional architecture is a first attempt to meet this challenge.

Toward that end, I must agree with Fredric Jameson that Frampton’s discussion of projects by Mario Botta, Jorn Utzon, Alvaro Siza Viera, or Glenn Murcutt is largely aesthetic in character. To expand this too-narrow interpretation I have engaged two additional issues—the political and the ecological—that are, I believe, essential characteristics of any architecture that aspires to be regenerative. The demand for an overtly political program

comes not only from Jameson, but also from the advocates of social ecology. These observers require that architecture be understood not in the aesthetic terms of high culture, but in the social and material context of everyday life. The demand that regenerative architecture engage the ecology of places comes from the ecologists. These observers require that architecture be understood as the transformation of nature. The limits of a purely aesthetic discourse, critical though it may be, are that it remains outside the social and biological conditions that describe normative practices.

As I have implied throughout this essay, the nonmodern dialogic requires that the discipline of architecture be reconstituted as a political, rather than an aesthetic, practice. Through this reconstitution the canon of architecture would be re-conceived as not a set of heroic objects, but as the material narrative. This proposal suggests that architects would no longer design “things” per se. Rather, we would design the political processes embodied in technological and topological choices.

The points that follow are generalizations stated as practice-based *attitudes*, not as deductive propositions.

Eight Points for Regenerative Regionalism: A Nonmodern Manifesto

1) *A regenerative architecture will construct social settings that can be lived differently.* This point rejects the notion that technology in itself might be an autonomous agent capable of liberating humans from the oppressive natural and/or social conditions of place. Rather, it suggests that human institutions are both affected by and, in turn, affect the social construction of technological networks. Humans might, then, rationally and democratically construct regenerative technologies as the engaged agents of the humans and nonhumans that collectively inhabit a place.

2) *So as to participate in local constellations of ideas, a regenerative architecture will participate in the tectonic history of a place.* Participation in the tectonic history of a place requires that the interventions of architects be, first, intelligible to local citizens and, second, be perceived as relevant to the material conditions of everyday life.

3) *Rather than construct objects, the producers of regenerative architecture will participate in the construction of integrated cultural and ecological processes.* Historically, architects have tended to claim sole authorship for places and thus obscure the complex social and ecological processes in which buildings participate. A regenerative architecture will de-emphasize the significance of objects and emphasize the construction of processes that relate social activity to ecological conditions.

4) *A regenerative architecture will resist the centers of calculation by magnifying local labor and ecological variables.* The overt political program of regenerative architecture will include two principal strategies: First, the producers of regenerative architecture will consciously subvert the universalizing and optimizing measures of objective building performance. These

are typically promoted by such technological networks as the air-conditioning industry and measured in BTUs, calories, and watts. This strategy should not be construed to mean that human comfort is to be devalued or energy squandered. Second, regenerative architecture will rely upon technologies that reveal the manner of their making to magnify local labor knowledge and local ecological conditions.

5) *Rather than participate in the aestheticized politics implicit in technological displays, regenerative architecture will construct the technologies of everyday life through democratic means.* The market has increasingly manipulated architectural technology in order to stimulate those consumers whose appetites have become dulled by the ever-increasing rates of production and consumption. A regenerative architecture will subvert the power of market-driven technologies by engaging citizens in decision making about the technologies that enable everyday life.

6) *The technological interventions of regenerative architecture will contribute to the normalization of critical practices.* Rather than construct critical objects that inform viewers of how history might have been different, regenerative architecture will strive to influence normative construction practices. This proposition recognizes that the ontological dimension of building takes precedence over the representational—that the repetitive material practices of construction do more to influence the operation of society than do singular aesthetic critiques. In this sense, the reproduction of life-enhancing practices is preferred over aesthetic commentary.

7) *The practice of regenerative architecture will enable places by fostering convergent human agreements.* A durable architecture need only delay the inevitability of decay. A sustainable architecture need only maintain the status quo of natural carrying capacity. A regenerative architecture, however, must concern itself with the reproduction of the institutional agreements that tie humans to the ecological conditions of a place. This suggests that architecture itself must facilitate democratic consideration of the tidal cycle, of prevailing breezes, or of the coolth of the earth itself. This is a matter of democracy and technological development.

8) *A regenerative architecture will prefer the development of life-enhancing practices to the creation of critical and historically instructive places.* The critical place helps society to understand that the social construction of places and technologies might have been different. Such a place is a memorial to the forgotten or as yet untried modes of non-capitalist production that would transform nature in some other way. My final point is that critical places are not in themselves productive. Better yet, a critical place can become regenerative only through the production and reproduction of democratic, life-enhancing practices.