

# Technology, Place, and the Nonmodern Thesis

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**Proposals for regionalist architecture have appeared regularly in architectural discourse since the seventeenth century. Central to this discourse are shifting attitudes toward the core concepts of technology and place. Moderns, it seems, tend to value technology and devalue place. Postmoderns do the opposite—they value place and devalue technology. The doctrines of critical regionalism defy categorization because they value both technology and place positively. However, by deriving its program equally from the modern assumptions of Jurgen Habermas and from the postmodern assumption of Martin Heidegger, critical regionalism presents a philosophical antinomy, or unresolvable conflict. It is this conflict that suggests a nonmodern thesis for architecture.**

## Introduction

In the 1980s and early 1990s the topic of regionalism enjoyed considerable visibility within architectural discourse. The prospect of a progressive regionalism, 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 that conversation, 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 have been reframed by other discourses.

This state of affairs is, in my view, a rather natural if not entirely satisfying development. In the maturation of any conversation, some possibilities are suppressed just as others are amplified by the exigencies of the situation. The purpose of this article, then, is to reconstruct those suppressed possibilities contained within the modern conception of regionalism that might yield unsuspected theoretical opportunities rel-

evant to contemporary conditions. In short, I wish to argue that *technology* and *place* should be understood as the suppressed core concepts that are contained within regionalist architectural production.

This is not to say that regions are constituted only of places and technologies, but that these concepts are central to our understanding of what a “region” might be. The interrogation of these core concepts, then, is an opportunity to reconsider the history of regionalism as a concept.

Before I argue that the concept of regionalism should be renovated in one direction or another, I have a responsibility to review how the core concepts of place and technology have been used in the past. In what follows I’ll first define the concept of place by reconstructing the rationale behind its devaluation as a concept relevant to modern conditions. Because the contemporary recuperation of place is often a conservative reaction against modernist ideology it will be helpful to put this discussion in a historical context before looking further.

In their most recent essay on critical regionalism, Alexander Tzonis and Liane Lefaivre documented five historical stages in the evolution of the concept of regionalism in Western culture: the picturesque, the romantic, the Nazi *Heimat*, the commercial, and finally, the stage of critical regionalism.<sup>1</sup> I find their analysis to be helpful and will review their genealogy for the benefit of the nonmodern thesis to follow. Having defined the concept of place through the disciplines of geography and history, I’ll then consider how we might understand the modern construction of technology. Kenneth Frampton has, of course, deeply mined the philosopher Martin Heidegger’s critique of modern technology as a way of informing his critical regionalism hypothesis. Rather than revisit that discourse, however, I will borrow from the contemporary literature of

science and technology studies to provide a sociological view of how technological systems are developed.

My own position is very supportive of the critical regionalism hypothesis originally constructed by Tzonis and Lefaivre and fully developed by Frampton. There are, however, hanging threads in that conversation which tug at a contemporary understanding of the topic. In my view it is necessary to resolve the internal tensions implicit in Frampton’s hypothesis that (too freely) mix the underlying modernist assumptions of critical theory, particularly those of Jurgen Habermas, with the underlying postmodern assumptions of Martin Heidegger. I will attempt to resolve this opposition by constructing a *nonmodern* position that avoids the conflicted attitude toward the concepts technology and place that is implicit in both modernist and postmodernist thought.<sup>2</sup> Before I can map a nonmodern position from which Frampton’s critical regionalism hypothesis might be renovated, however, it is necessary to better define my terms.

## Defining Place

The geographer John Agnew has argued that, in modernist thought, the traditional concept of place is devalued, and this for two reasons: First, modern social science has confused, or conflated, the distinction between place and community. Community in the modern view, argues Agnew, is assumed to define both “a physical setting for social relations” and “a morally valued way of life.”<sup>3</sup> In the conflation, place has been erroneously equated with local concepts of traditional morality. Modernist thought, in Agnew’s analysis, fails to understand society as a dynamic process that transforms, but does not abolish or invalidate, the concept

of region. As a result, moderns tends to reify moral concepts as places. In other words, our characterization of big cities as dens of iniquity and small towns as the vessels of morality is ideological, not empirical.<sup>4</sup>

Second, beginning in the nineteenth century—a period that witnessed the dramatic evaporation of traditional communities—social scientists attempted to project the trajectory of history. Common to all of these a priori projections was the polarity of community and society. Writers as dissimilar as Herbert Spencer and Karl Marx saw community as being coercive, limiting, or idiotic, whereas national societies were characterized as liberative. 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*.<sup>5</sup>

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.”<sup>6</sup> Agnew argues, in concert with the postmodern geographer Edward Soja, that the devaluation of place was most vigorously promoted by Marxist ideology.<sup>7</sup> For traditional Marxists to consider social behavior as in any way determined by the conditions of place would have been to subvert the dialectic order of causality. Marxist logic has tradi-

tionally 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.<sup>8</sup>

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.<sup>9</sup> We will return to this logic shortly.

In a friendly renovation of this Marxist viewpoint, Agnew argues that places cannot be understood within the limited dimensions of architecture or physical geography.<sup>10</sup> 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*.<sup>11</sup>

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 Community (EC), 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 that manage the oil fields of the North Sea, manage those of Texas. It is these structural conditions of political economy at the macroscale 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 intersubjective 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, Texas, reserve for a swim in Barton Springs and the stylish ambition of street life that New Yorkers enjoy 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 intersubjective 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 scale 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. I want to claim that by considering the concept of place, or region, from this mesoscale, we avoid two problems. First, we can appreciate the insights of Marxists but avoid the overdetermination that derives from their preoccupation with the seemingly objective conditions of political economy. Second, we can appreciate the insights of constructivists and phenomenologists but avoid the underdetermination that derives from their preoccupation with the subjective conditions of atomized reality.<sup>12</sup> It is the “elastic” scale of all three dimensions, viewed from the mesoscale of the city-state, which 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 understand the concept as a set of objective structures and those who understand it as a set of romantic myths tied to subjective experience.

## Regionalism as a Historic Strategy

Agnew's analysis of the devaluation and reconstruction of place is helpful, but doesn't tell us much about how place, or the concept of regionalism, has been employed in architecture. The essays of Alexander Tzonis and Liane Lefaivre are more helpful. These authors distinguish *regionalist* architecture from *regional* architecture as a matter of political content. Where a regional architecture is constituted by an isolated craft tradition that adapts to local ecological conditions, regionalist architecture implicitly "criticizes an architectural order that claims universal application."<sup>13</sup> The regionalist position, then, is both reactive and liberative. It reacts against imposed a priori standards and seeks liberation from a power that is considered foreign and illegitimate.

Tzonis and Lefaivre's first regionalist category, eighteenth-century English picturesque architecture, is a good example. It is no accident that Anthony, Earl of Shaftsbury (1621–1683), was a member of the Whig Party, a promoter of a parliamentary form of governance, an antimonarchist, a nationalist, and an advocate of constructing a picturesque landscape. The cultivation of a landscape that intensified the natural topography and flora of place was, for Shaftsbury, an aesthetic tactic that would foreground the rigid imposition of classical order upon local order. Rather than tolerate the classically ordered formal gardens adopted by the monarchy, which were associated with the claims of absolute rule, the Whigs cultivated a landscape of particularity in the hope that it would nurture the liberative politics inscribed in the genius loci.

Tzonis and Lefaivre's second category, romantic regionalism, continues the project of political liberation from central authority that was initially found in the English picturesque, but it employs new tac-

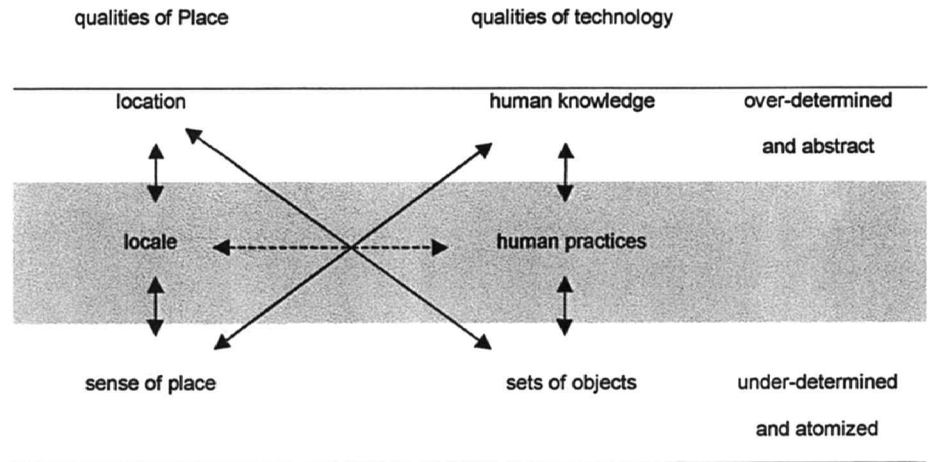
tics. Where the picturesque was a spatial strategy, romantic regionalism also employs temporal strategies. In the projects of Johann Wolfgang Goethe and John Ruskin, for example, architecture is constructed as a "memory machine"—a setting that evokes one's sense of belonging to a familiar history. The romantic, however, should not be confused with the merely eclectic. Where the eclectic chooses what appears to be best from diverse sources, the romantic recuperates a seemingly authentic ethnic history for the purpose of reconstructing lost authority. In this sense, romantic regionalism employs the previously introduced doctrines of environmental determinism, which have roots in architectural theory going back to Vitruvius. In his *Ten Books*, Vitruvius argued that Africans to the south were dim-witted because their climate was too hot. Using similar logic, Vitruvius argued the Germans to the north were no less dim-witted because their climate was too cold. In this logic it follows that Roman genius emerged from the "just right" environmental conditions of the sacred region of Romulus and Remus. Like Vitruvius, the romantics of the nineteenth century credited nature, or those who presumed to speak for her, with cultural constructions.

The architecture of German National Socialism, or *Heimatsarchitektur*, the third of Tzonis and Lefaivre's categories, is postromantic in that its goal was one of neotribal regimentation rather than liberation. Although the *volkish* fantasies of Albert Speer clearly emerge from German romanticism, they invent an "authentic" taxonomy of forms that is intended to exclude those others that threaten the spatial purity of the race. Nazi *Heimatsarchitektur*, or literally, "homeland architecture," relies upon the doctrines of environmental determinism, but with a particularly malignant twist of logic. Hitler, Himmler, and their cohorts

argued that just as Germanic genius is derived from the enchantment of the Black Forest, the shiftiness and untrustworthiness of Jews, for example, is derived from a life of wandering in the desert. *Heimatsarchitektur*, as in contemporary Bosnia and Kosovo, leads to a spatial project of ethnic cleansing.

Following World War II, regionalist strategies were appropriated, less by totalitarian regimes than by the market. Tzonis and Lefaivre describe commercial regionalism, their fourth category, as an architecture of tourism. Corporate sponsorship of the local can be understood as one of many tactics discovered by the market to differentiate its products in an endless sea of mediocre suburban choices. This is true particularly in the American West, where the propinquity of the placeform has been sacrificed to standards imported by the universal concern for maintaining resale value. Herein some petrified sense of the local has reached epidemic dimensions. Some critics have argued that the phenomenon of New Urbanism is a potent critique of commercial regionalism while others have maintained the opposite—that New Urbanism is itself a product-differentiation strategy that succeeds in the market only to the degree that it extracts value from so-called authentic places. In this view, a distinction between authentic regionalist houses in places like Austin and what my colleague David Heymann refers to as "yuppie limestone starter-mansions" has become somewhat moot. The cynical marketing of architectural motifs precludes an understanding of place as an environmental reproduction grounded in traditional construction practices.

It is into this historical context that Tzonis and Lefaivre have cast their proposal for a fifth category, that of critical regionalism. These authors argue that architecture can mount an effective resistance to the traditionally restrictive conception of place as



1. The dialogic qualities of place and technology.

well as to the hegemony of the global market through a strategy of “defamiliarization.”<sup>14</sup> They mean by this term that architecture should evoke meaning and thought rather than emotion and excitement—that architecture should evoke critical consideration of the cultural and ecological origins of construction practices rather than feed the folk scenographic fantasies that allow them to withdraw into familiarity. For Frampton, critical regionalism is an attitude rather than a set of motifs—it is a set of ever evolving tectonic practices rather than “a look.” By slowing down cognition, rather than appeasing consumer lust for instant gratification, critical regionalists hope to engage the inhabitants of a region in a thoughtful consideration of what it means to live locally. This is an ontological rather than a representational project. This distinction suggests that the labor and material practices employed to construct a place are more important than visual references made to the traditional canons of architecture or to the artificial icons produced by Madison Avenue. Although we lead lives increasingly dominated by universal forces, the critical regionalists argue that some of those forces might act to stimulate, rather than repress, creative response to the material condition of the places into which we are thrown.

Although Tzonis and Lefaivre’s genealogy of regionalism is extremely helpful, it implies a classically modernist teleology about which I am skeptical. Although their successive historical categories ring true, I doubt that there is any historical necessity, Marxist or otherwise, that will drag our understanding into the critical consciousness they advocate. Rather, I will argue, places spring up in response to those interests that are most effective at gathering resources. The social construction of places is an entirely contingent event, not one determined by the structure of history. It is such nonmodern logic that contributes to the

concluding thesis.

### Defining Technology

Just as the definition of place requires a multifaceted strategy, so does the definition of technology. Conventional thought understands place as only physical in quality. Similarly, technology is commonly understood to be physical hardware—radios, refrigerators, or computers. Such a materialist definition tends to consider the social construction of such objects as outside the competing interests of society.<sup>15</sup> 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. In contrast to both of these traditions, the literature of science and technology studies has demonstrated that technology, far from being constructed outside society, and far from being the singular practice of the poet, is a system that is inextricably part of society.<sup>16</sup> Technology, like place, is a field where the struggle between competing interests plays out. The sociologists Donald MacKenzie and Judith Wajcman have argued that the concept technology, like place, includes three qualities. In their construction, technology includes “human knowledge, patterns of human activities, [and] sets of physical objects.”<sup>17</sup> Rather than return to those discourses, like Frampton’s or Heidegger’s, that examine technology, or *techne*, through ontological lenses, I find it

helpful to examine technology as a process of social construction.

In MacKenzie and Wajcman’s definition, knowledge—the first characteristic of technology—is required, not only to build the artifact, but to relate the natural conditions upon which the artifact works and to use the artifact. The second characteristic of technology, patterns of human activity, or what I would prefer to call human practices, refers to the institutionalization, or routinization, of problem solving that inevitably occurs in society. The practices of architecture, carpentry, or farming are examples. The third quality of technology, sets of objects, is, of course, the most obvious—these are the things themselves. The point is, however, 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 are related by a tripartite structure that is not accidental. Figure 1 will help to make this point clear. The limited point of the diagram is threefold: 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 overdetermined (meaning that the outcome of events is strongly tied to structural conditions) while our understanding of objects and our sense of place tend toward the

underdetermined (meaning that the outcome of events is weakly tied to structural conditions). These points serve only to magnify the centrality of locale and practices as the glue that holds the discourse of places and technologies together.

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."<sup>18</sup> By technological network, Latour refers not just to sets of objects, but to the social networks that construct a relation 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 places.<sup>19</sup> For example, architects, clients, contractors, and bankers comprise 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, as we shall see shortly, 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 operate to dominate the places inhabited by humans and nonhumans. It is geography, then, that offers methods more relevant to this inquiry because it is through similar spatial structures that technologies and places are constituted.

Henri Lefebvre has argued two points that reinforce the dynamic relationship between technology and place that is claimed here. First, that social spaces are produced by technology acting upon nature, and second, that each society—or, as Marxists would have it, each mode of production—produces its own peculiar type of space.<sup>20</sup> 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, the practice of carpentry requires not only forests, and citizens to house, but the spatial mechanisms that link them. This is the heart of what I will characterize as the *dialogic* relation of technology and place.

In constructing this dialogic relation between place and technology, I should make clear that I am not building a case for environmental determinism, which would be to say that places *cause* technologies. Given different cultural conditions, the sets of objects that dominate any particular place might be different. Given constant

environmental conditions, the interpretive flexibility of culture is entirely contingent. I want to argue that environments do shape technologies but are in turn shaped by them.<sup>21</sup> As a corollary, I am not building a case for technological determinism, which would be to say that technologies *cause* places. The same logic holds—that technologies do shape places but are also shaped by them.<sup>22</sup> The point here is that the relation of place and technology is both spatial and discursive. It is a dialogue of cause and effect, means and ends. They are inseparable but contingent concepts that lead inhabitants of a place to a dialogic narrowing of cultural horizons.

Following the development of the telephone, for example, business practices were extended by the possibility of synchronous communication across space. As a result, businesspeople spent many unproductive hours playing "telephone tag." Although the physical distance between people could be radically collapsed, their places could be joined only by available technological space. After development of the Internet, however, business practice has become increasingly asynchronous. The places where we work are connected to each other through wider and more porous linkages that are independent of time. The changing technological linkages between places are both reflective of, and determinant of, how we conceive our work, perceive our coworkers, and live our lives.

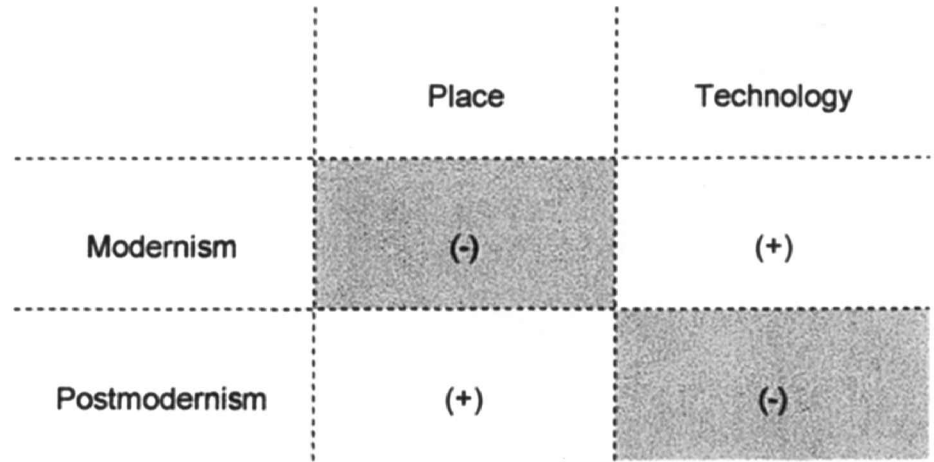
This rather lengthy definition of technology in relation to place can now be related back to the topic of regionalism. The dialogic structure that I propose to exist between technology and place is only in part consistent with the modernist assumptions that lie behind Frampton's critical regionalism hypothesis. Extension of Frampton's hypothesis, then, requires different (nonmodern) assumptions.

## The Nonmodern Thesis

In this short essay I will not try to fully explicate the critical regionalism hypothesis. Between 1983 and 1990, Frampton produced no less than six separate essays that fully accomplished that goal. In my view, what might be more helpful in the current discussion will be to examine what I'll refer to as Frampton's *antinomy*, or the unresolvable conflict between Frampton's 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 place and technology.<sup>23</sup>

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 it is the machines invented by us that, science claims, will free us from the drudgery of place-bound tyrannies.

The flip side of this diagram 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 ever more skeptical of modern technology and the unintended consequences that have followed in its 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 atti-



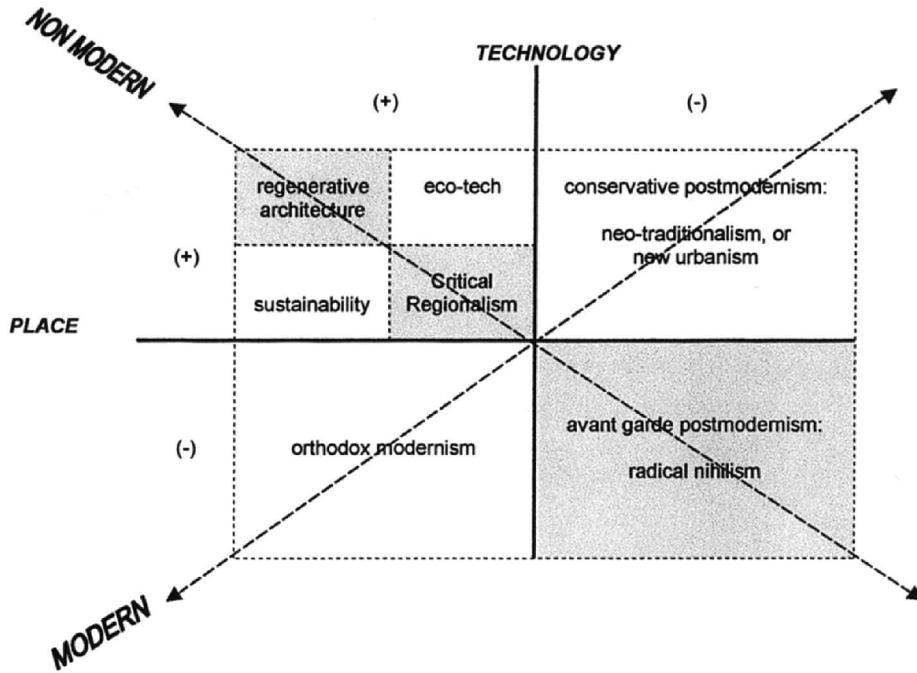
2. The value opposition of place and technology in modern thought.

tude toward place and technology, are only *antimoderns*. 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 required 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. I want to stress that the problem I see here lies not in the expressed goal, which is admirable, but in the incompatibility of the assumptions upon which the hypothesis relies. By relying alternately upon the opposing assumptions of critical theory, which are modern, and those of Martin Heidegger, which are postmodern, critical regionalism is led to philosophical confusion.<sup>24</sup> What is needed, in my view, is not more hybridizing of disparate sources, but a single set of philosophical assumptions that will lead to a coherent position. Fredrik Jameson has hinted at such a direction. Jameson has argued that the philosophical assumptions of critical regionalism are neither modern nor postmodern.<sup>25</sup> I agree. The question is, then, what are they?

I argue that the doctrines of critical regionalism are better served by nonmodern assumptions. Figure 3 demonstrates this

conceptual possibility. Bruno Latour has used the term nonmodern to argue that we have, in practice, never been modern at all, by which he means that modernity has been so powerful, and sometimes environmentally destructive, precisely because it has concealed our existence within nature.<sup>26</sup> By embracing the Cartesian assumptions that position us outside nature, we have made those nonhuman "Others" with whom we share the planet available for domination and exploitation. 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. 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."<sup>27</sup> 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 empowered to control conditions, and at the next moment we find ourselves being ordered about



3. Alternative theoretical positions with regard to the concepts place and technology.

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.

I recognize that the nonmodern thesis that I am proposing, and Figure 3 in particular, leaves many questions unanswered. I should dwell on this diagram long enough, however, to point out that 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 the diagram is, I think, best exemplified by the projects of Rem Koolhaas and the Office for Metropolitan Architecture. The negative nonmodern position is, of course, disinterested in the topic of regionalism so that discussion can be left for another day. When taken up, however, the first question to be asked must be “Can a double-negative constitute a life-enhancing course of action?” As metaphor, this strategy surely has merit. As a material practice, however, I am skeptical.

For the sake of brevity, I will also leave other terms that appear in Figure 3 undefined. *Sustainability* and *eco-tech* are concepts related to regionalism and the current discussion, but are well documented elsewhere.<sup>28</sup>

The term that appears in the upper left-hand corner of Figure 3, *regenerative architecture*, does, however, demand more discussion because it describes the heart of the nonmodern thesis. This term is borrowed from the landscape architect, John Tillman Lyle. By placing this term in this position in the diagram, I am proposing to substitute the word *regenerative* for Frampton's word

*critical*. This language is proposed 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 would renovate it as a nonmodern doctrine.<sup>29</sup> I am arguing that the philosophical trajectory of critical regionalism is most comfortable not in its modernist origins, nor in postmodern Marxism, but in 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.”<sup>30</sup> In this definition, the notion that technology might “provide for the continuous replacement . . . of energy and materials used in its operation” 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, placeforms as Frampton would have it—can certainly participate far more effectively in the natural energy flows of a place than is the current technological practice. 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, but for different reasons. In my view, 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 suggest a single political characteristic that we might add to Lyle's scientific definition: A regenerative architecture will seek to engage human institutions in the democratic reproduction of life-enhancing places. This is not yet an adequate definition of the possibilities foreseen in this essay, but it does point toward a cultural horizon where the dialogic relationship between technologies and places can be better understood.<sup>31</sup>

Having now defined place and technology as the core concepts upon which regionalist architecture depends, I can conclude by summarizing this discussion in three short propositions:

First, it is politically desirable and ecologically prudent to reproduce regionalism as a practice relevant to contemporary conditions. Regenerative 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 as a concept, with particular regard for 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 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 and life-enhancing direction for architectural practice, its own assumptions are conflicted and require renovation as a nonmodern polemic for architectural production. The articulation of regenerative architecture is a first attempt to meet this challenge.

In sum, these propositions are an attempt to reconstruct the suppressed possibilities of an ongoing discourse. By examining the core concepts of regionalism, we find a vocabulary through which we might interpret the contemporary projects of such architects as Webler + Geissler Architekten, Stuttgart; Herzog + Partner, Architekten, Munich; Renzo Piano Building Workshop, Paris; and Neutelings Riedijk Architekten, Rotterdam. The projects of these firms, and those of six others, have been collectively documented in the exhibition, *Ten Shades of Green*, organized by the Architectural League of New York and guest curated by Peter Buchanan.<sup>32</sup>

What these projects share is a dialogic attitude toward the variables of technology and place. In each case documented, these architects have found unexpected technological opportunities through rigorous investigation of ecology and physics, local building practices, the objects themselves, or a combination of these. Similarly, they have found

unexpected topological opportunities through rigorous investigation of global economic structures, local sense of place, or the unique ordering systems of the cities and neighborhoods in which they have built. Most important, however, is that these architects investigate the qualities of place through the qualities of technology, and visa versa.

My only uncertainty about the projects exhibited in *Ten Shades of Green* is that too little is known about the social and political context of their production. Although curator Peter Buchanan has done an admirable job of interpreting these projects through multiple lenses that examine such avial issues as "embodied energy," "total life cycle costing," and "community and connection," I would like to know more about the technological networks that these projects forge. In the scheme of things, however, these are quibbles. The emergence of these projects, and their positive public reception, is an extremely hopeful event, one that leads the way toward a nonmodern dialogic of technologies and places.

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 reconceived as not a set of heroic objects but the material record of life-enhancing discourses. 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. Indeed, we would no longer distinguish between technologies and places.

## Acknowledgments

Portions of this article are adapted from *Technology and Place: Sustainable Architec-*

ture and the Blueprint Farm (Austin, TX: The University of Texas Press, forthcoming). Portions have also appeared in “Reproducing the Local,” in *Platform* (School of Architecture, The University of Texas at Austin, spring, 1999): 2–3, 8–9. I would like to thank Kenneth Frampton, Barbara Allen, Michael Benedikt, and Vince Canizaro for their help in revising both the text and the thesis proposal.

## Notes

1. Alexander Tzonis and Liane Lefaivre, “Critical Regionalism,” in *Critical Regionalism: The Pomona Meeting Proceedings* (Pomona, CA: The College of Environmental Design, 1991), pp. 3–28.

2. I should make clear at the onset that when using the terms “modern,” “postmodern,” and “nonmodern,” I refer not to architectural styles but to the philosophical assumptions that lead to material choices.

3. John Agnew, *Place and Politics* (Boston: Allen & Unwin, 1987), p. 62. Agnew also discusses the theme of the historic devaluation of place in “Representing Space: Space, Scale and Culture in Social Science,” in James Duncan and David Ley, eds., *Place/Culture/Representation* (New York: Routledge, 1993), pp. 251–271. Although Agnew interrogates the concept of *place*, I use the term *region* interchangeably in this text. *Place* and *region* do not mean the same thing, but for the purpose of this discussion I conflate them.

4. For example, crime statistics reveal that the murder rate in New York City is dramatically less than that of rural Arkansas. See Box Butterfield, “Nation-wide Drop in Murders Is Reaching to Small Towns,” in *New York Times*, May 9, 2000. Available at <http://archives.nytimes.com/archives/>.

5. Although Max Weber is commonly credited with the coinage of these terms, they belong to Ferdinand Tönnies who first used them in 1887. See Ferdinand Tönnies, *Community and Society* (New York: Harper, 1963).

6. Agnew, *Place and Politics*, p. 231.

7. Soja’s position is associated with the tradition of critical theory, however, his intention is revisionist. See Edward Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989), p. 120.

8. I am indebted to my colleague Stephen Ross for this insight.

9. Anna Bramwell, for example, has argued that German anti-Semitism arises from the doctrines of environmental determinism. To generalize that all Germans share a genius that originates in the forest and that wandering Jews share a rootlessness that originates in the desert is a classic example of determinist, reductivist logic. See Anna Bramwell, *Blood and Soil: Richard Walter Darre and Hitler’s Green Party* (Abbotsbrook: Kensal House, 1985). See also Jeffery Herf, *Reactionary Modernism: Technology, Culture and Politics in Weimar and the Third Reich* (Cambridge: Cambridge University Press, 1984).

10. Agnew’s concern is, apparently, that those of us who are most involved with the physical world—architects and physical geographers chief among the suspects—are prone to fall into the trap of environmental determinism.

11. John Agnew, *Place and Politics*, p. 28. The definition of these terms is further amplified in his essay “Representing Space,” p. 253.

12. Thomas Misa, “Retrieving Sociotechnical Change From Technological Determinism,” in Merritt Roe Smith and Leo Marx, eds., *Does Technology Drive History?* (Cambridge, MA: MIT Press, 1995), pp. 115–142.

13. Tzonis and Lefaivre, “Critical Regionalism,” p. 4.

14. *Ibid.*, p. 20. The authors credit the term “defamiliarization” to Victor Schlovsky, a member of the Russian Formalists, who coined the term around the time of the Bolshevik Revolution. See also Victor Schlovsky, “Art as Technique,” in L.T. Lemon and M. Reis, eds., *Russian Formalist Critique* (Lincoln, NB: University of Nebraska Press, 1965).

15. Reductive, materialist definitions of technology tend to be less sophisticated in their understanding of the social construction of artifacts. However, Bruce Bimber’s essay “Three Faces of Technological Determinism,” in L.T. Lemon and M. Reis, eds., *Russian Formalist Critique* (Lincoln, NB: University of Nebraska Press, 1965) develops a very scholarly, yet reductive, definition of technology as limited to apparatus. Bimber’s project, however, leads to other ontological problems beyond the scope of this study.

16. I have discussed the various traditions within science and technology studies elsewhere in greater detail. See Steven A. Moore, “Technology and the politics of sustainability at blueprint demonstration farm,” in *Journal of Architectural Education*, 51/1 (September 1997): pp. 23–25 and *Technology and Place: Sustainable Architecture and the Blueprint Farm* (Austin, TX: University of Texas Press, forthcoming).

17. Donald MacKenzie and Judith Wajcman, “Introductory Essay,” in *The Social Shaping of Technol-*

*ogy* (Philadelphia: Open University Press, 1985), p. 3.

18. Bruno Latour, *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993), p. 117.

19. Bruno Latour, “Visualization and Cognition: Thinking with Eyes and Hands,” in *Knowledge and Society: Studies in the Sociology of Culture Past and Present* (JAI Press, Inc., 1986); pp. 1–40.

20. Implicit in the first point is the claim that original nature, if it ever existed at all, has long ago been incorporated into second nature, which is a work of society. See Henri Lefebvre, *The Production of Space* [1974], Donald Nicholson-Smith, trans. (Cambridge, MA: Blackwell, 1991), p. 190. See *ibid.*, p. 31, for the second point.

21. Anthony Giddens is credited with developing the theory of structuration, which is an attempt to synthesize the seemingly opposed principles of voluntarism and determinism. He argues that humans are free to transform social structures but are also products of those structures. My argument here, regarding the relation of places and technologies, is drawn from the same logic. See also MacKenzie and Wajcman, *The Social Shaping of Technology*, p. 6.

22. Philip Brey has examined how “space-shaping technologies” have disembedded the contemporary phenomenon of place. Where Brey’s study has focused upon the role of “connectivity development” in transforming the experience of place, my own emphasis has been on what Brey terms “local development.” See Philip Brey, “Space-shaping technologies and the disembedding of place,” in *Philosophy and Geography III: Philosophies of Place* (New York: Rowman and Littlefield, 1998), p. 242.

23. I want to stress that I am not making a claim in Figure 2 that modernism or postmodernism can be described entirely within the limits of these two concepts. Rather, I only suggest that these concepts are particularly helpful, as heuristic devices to get at those qualities of our time that are relevant to a discussion concerning regionalism.

24. In philosophical discourse, Herbert Marcuse attempted a similar blending of Heidegger and Marx. In Marcuse’s case, however, the project was further confused by the inclusion of Freud as a third pole. To be clear, I am not suggesting that such hybridized texts are unhelpful, only that their confused assumptions lead to previously unrecognized possibilities.

25. Fredric Jameson, *The Seeds of Time* (New York: Columbia University Press, 1994), pp. 187–203.

26. Latour, *We have Never Been Modern*.

27. *Ibid.*, pp. 51–55.

28. The term sustainability is much used and much contested. For an excellent analysis of the term

see, in this issue of *JAE*, Simon Guy and Graham Farmer, "Reinterpreting Sustainable Technology: The Place of Technology." See also Scott Campbell, "Green Cities, Growing Cities, Just Cities: Urban Planning and the Contradiction of Sustainable Development," in *APA Journal* (Summer 1996): 296–312. The term eco-tech has come into use to describe the environmentally responsible projects of those firms, like Sir Norman Foster & Partners, that were previously described as high-tech practitioners. For example, see Catherine Slessor, *Eco-Tech: Sustainable*

*Architecture and High Technology* (London: Thames and Hudson, 1997), p. 7.

29. Jameson, *Seeds of Time*, p. 194.

30. John Tilman Lyle, *Regenerative Design for Sustainable Development* (New York: Wiley, 1994), p. 10.

31. In my forthcoming book, *Technology and Place: Sustainable Architecture and the Blueprint Farm*, I examine a single case of architectural and agricultural production that provides enough empirical evidence to support an eight-point definition of regenerative architecture.

32. The other firms represented in the exhibition include: Foster and Partners, London; Clare Design, Sydney; Jourda & Perraudin Architectes, Kassel; Andrew Lee for Hackland + Dore Architects Ltd., Edinburgh; Michael Hopkins and Partners, London; Lake/Flato Architects, San Antonio; Rick Joy Architects, Tucson; Fernau & Hartman Architects, Berkeley; and Brian MacKay-Lyons Architecture Urban Design, Halifax. For a review of the exhibition, see Muschamp, "Good Buildings and Good for You," *New York Times*, Apr. 16, 2000: Arts and Leisure, p. 37.

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