

# Seventy-five Percent

The Next Big Architectural Project, by **Ellen Dunham-Jones**

IT IS A WELL-RECOGNIZED if unwelcome fact of architectural life: Architects design only a small percentage of what gets built in the United States. Still, it is astonishing that in the past quarter-century a vast landscape has been produced without the kind of buildings that architects consider “architecture,” a landscape almost entirely uninformed by the critical agendas or ideas of the discipline. This landscape is the suburban fringe, the outer suburbs and exurbs—the landscape often called “urban sprawl.” The favored venue for development associated with the post-industrial economy, this landscape accounts for approximately 75% of all new construction in recent decades—yet it is shunned by most architectural designers.<sup>1</sup> Not only does this extraordinary phenomenon represent an immense lost opportunity for the design-bereft landscape and for architects, it also reveals the ineffectiveness of architectural discourse and theory to influence either the design of the built environment or attitudes toward societal change. However, new policies intended to ameliorate the growing pains associated with ongoing

suburban development are opening up new opportunities for architects to grapple with the dilemmas posed by this landscape and to produce innovative, hybrid, and potentially critical architecture.

While it should be cause for reflection, the 75% figure should not come as a surprise. A traveler driving to any American city will inevitably pass through a ring of recent construction. However, because so much of this new building is generic in design, if not downright ugly, and because it is spread out at low densities or hidden from view in cul-de-sacs, this vast body of work rarely figures in discussions of contemporary architecture. The prevalent attitude in architectural discourse—and not without reason—is that malls, office park buildings, apartment complexes, and suburban houses are overwhelmingly formulaic, market-driven, unimaginative designs unworthy of the designation “architecture.” Despite the current fascination with fifties styling and the rediscovery of the California Case Study houses, the suburbs do not represent “modern living” to the generation of designers

actually raised in them. Beyond the revived chic of butterfly roofs, boomerang curves, and texture and pattern in cladding, much recent architecture resembles midcentury work in its rejection of place-based forms in favor of more modernist expressions of an international or global style.<sup>2</sup> But architects tend to dismiss the suburbs as culturally vapid, still bound by the stubbornly patriarchal conventions of Ozzie and Harriet.<sup>3</sup> Those who value the potential of architecture to challenge the status quo feel particularly alienated by suburbia's apparent complacency, especially its '50s-cum-'90s belief in the American way, its abundant consumption, trust in authority, and the communal conformity that often masks the inequities of a system that literally zones out difference.

A few of us teaching design have enjoyed exploring this *terrain vague* in studios in which the banality of the 'burbs takes on a kind of B-movie hipness. A class trip to Wal-Mart or Home Depot is a walk on the wild side for the intrepid men and women dressed in black. But by and large, our discipline has ignored the entire landscape that contains the bulk of new building.<sup>4</sup> The schools teach ways to think about cities and the natural landscape, but present few paradigms for working with the murky conditions in between. The architectural profession, with a few notable exceptions, remains focused on the design of single buildings with little concern about where they're located.<sup>5</sup> Many design journals have reported on New Urbanism with varying degrees of skepticism, but they have generally shown little interest in the suburbs or suburban building types. With blithe inconsistency, architects and architectural scholars point to the seemingly undesigned sprawl of suburbia and say, "Don't blame us, we had nothing to do with it." This avoidance is precisely the problem.

It's no small matter for architects to write off suburban and exurban buildings as "not our concern." In fact, their contribution to this landscape is

more significant than is generally acknowledged. Certainly, many suburban building types rely heavily on cookie-cutter reproduction with little input from architects; this is especially true in the case of single-family houses. Whether built by large production homebuilders or small contractors, suburban house designs are more and more alike, as increasingly well-distributed and sophisticated marketing information steers builders toward variations on the same few plans.<sup>6</sup> Stand-alone retail franchises, hotels, and storage facilities similarly rely on standardized templates, especially if they belong to one of the ever-expanding national chains.<sup>7</sup> However, architects are very much involved in designing the building types that are allowing the continued expansion of peripheral development and dramatically changing the contemporary suburbs: office and commercial space, shopping areas, suburban multi-family housing, and schools and other public or institutional buildings.<sup>8</sup> And yet architects' work on these projects is rarely acknowledged—either for its intelligence or lack thereof. While sylvan corporate campuses, aggressive attention-seeking retail, and high-end institutional projects get published with some frequency, they are almost never described as "suburban," whereas the "urbanity" of city buildings is often celebrated. To most architects today, "urban" implies a degree of vitality and innovation not associated with the assumed conventionality and middlebrow tastes of the suburbs. This blinkered view is relatively new. In the first half of the 20th century, architects and critics from Frank Lloyd Wright to the founders of CIAM to Lewis Mumford recognized the value of considering architecture in relation to the full range of contexts that connect the city and its suburbs to the larger region.<sup>9</sup> Contemporary discussions of buildings more often present them in terms of professional or theoretical discourse rather than in terms of their participation in a specific urban or regional context.<sup>10</sup> As a consequence,

the profession has more or less abdicated responsibility for its role in designing contemporary suburbia.

This bias against suburbia disengages architects from the environment in which half of Americans now live and work.<sup>11</sup> Not only does this disengagement reinforce the common perception of architects as elitist, it also guarantees the marginalization of the profession. Is it a coincidence that while the suburbs have been experiencing tremendous expansion, architectural discourse shifted from the 1950s and '60s focus on practice to the 1970s and '80s focus on theory? Perhaps this can be explained by the degree to which suburban developers have valued the predictable market performance of conventional designs more than architectural innovation. The limitations of working for developers and their largely conservative middle-class clients enhanced the appeal of operating in more hypothetical and intellectual realms. Theory-oriented designers claimed the high road as they declared their autonomy from context and commerce, staking positions from which to critique the wider culture. Architectural theorists, in particular, have become increasingly isolated from both practice and the dominant landscape of everyday life.

Meanwhile the high road has failed to provide the professional autonomy it seemed to promise: Elite clients interested in distinguishing themselves from middle-class conventions soon discovered that the unconventional projects of the neo-avant-garde suited them much like designer-label fashion. Today, despite growing attention to new technologies, urban design, and environmental and energy agendas, it isn't theory or critique that dominates architectural discourse so much as agenda-less celebrity. The signature styles of star designers are sought on increasingly predictable and limited short lists for major cultural institutions worldwide. Such recognition of the value of distinctive design deserves to be celebrated. Sadly, however, it also perpetuates the sense that archi-

texture is a clubby profession principally concerned with serving the wealthy, a profession cut off from everyday life and indifferent to the larger influence it might enjoy.

The same critique has also often been applied to Washington (“Beltway”) politicians; but they have been quicker to recognize how power and population have shifted toward the suburbs.<sup>12</sup> The fact is that suburbia no longer conforms to the now-outdated postwar stereotypes that earned it the disdain of so many architects.<sup>13</sup> Suburbs today incorporate conditions as varied as the glittering office buildings of edge cities and the multi-ethnic mini-malls of older first-ring suburbs. While many suburbs are struggling with out-of-control growth, others are struggling with disinvestment. While some are still bedroom communities, many have become the engines of the New Economy, more connected to

25% of households are people living alone.<sup>18</sup> All of which suggests that the suburbs are not as “suburban” as they used to be.

In fact, the suburbs have become the centers of innovation, the fuel cells of the New Economy. Silicon Valley is the preeminent example of a high-tech suburban landscape producing leading-edge products for a global marketplace. Simultaneously an instance of decentralization and low-density agglomeration, its example has been imitated throughout the U.S. by start-up businesses in search of cheap space, shared supply routes, and a highly educated workforce.<sup>19</sup> While much of the office stock in the suburbs continues to be filled with the back offices of the service economy and thus remains technologically tethered to central cities, the majority of businesses in recent suburban developments—from hardware and software developers to

road rage, rising taxes, municipal debt, crime, pollution, loss of open space, lack of affordable housing, and out-of-control development.<sup>20</sup> As the suburbs and urban fringe have absorbed the spaces of the New Economy, the same development standards that once promised a retreat from the city—densities below three to four dwelling units per acre; auto dependency; a road system designed to minimize traffic in residential areas; single-use zoning; discontinuous developments and stand-alone buildings—now trigger sprawl.

The tipping point between a healthy poly-nucleated region and sprawling leap-frog development is not always clear and is, in fact, the subject of much academic debate.<sup>21</sup> Arguments in defense of decentralized development patterns tend to view them as the efficient workings of the free market, which provide an ever higher standard of living to more and more Americans.<sup>22</sup> Critics, prone to invoking the pejorative “sprawl,” are more likely to point to the spatial segregation of rich and poor, continued racial segregation, imbalances between jobs and housing, public services inequities, decay and disinvestment in first-ring and older suburbs, self-defeating tax incentives spurred by competing municipalities, increased land consumption per capita, increased vehicle miles traveled per capita, more impermeable surfaces, declining air and water quality, increased flooding, loss of animal habitat, and a general loss of civic engagement and social capital.<sup>23</sup>

Precisely because of the depth and interconnectedness of these problems, the suburbs have increasingly become centers of innovative policies and proposed solutions. Many of these are grouped together under the still nebulously defined term, “Smart Growth,” coined by the Environmental Protection Agency to designate policies that help cities conform to the environmental standards of the Clean Air and Clean Water Acts. While the EPA targeted smokestack and sewage pipe

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global business ventures than to local development.<sup>14</sup> Henry L. Diamond and Patrick F. Noonan, authors of *Land Use in America*, report that approximately 95% of the 15 million new office jobs created in the 1980s were in low-density suburbs.<sup>15</sup> Various studies in the mid-1990s of the fastest-growing businesses and areas of job growth also show them all in the suburbs.<sup>16</sup> And while one can still find neighborhoods populated by traditional families, in 1999 only 7% of U.S. households had a working dad, a stay-at-home mom, and children under 18.<sup>17</sup> Suburban households increasingly reflect the changing demographics of the country—65% of households do not have children, and

new media and biotech companies—is oriented to global rather than local markets.

And with growth have come growing pains. The suburbs have become centers of emerging social, economic, and environmental problems. Architects interested in confronting issues of mobile capital, social fragmentation, complexity, environmental justice, or sustainability will find rich grist for their mills in the suburbs. Commonly lumped together under the term “sprawl,” these dilemmas reflect the encroachment of problems once considered “urban” into the landscape of the American Dream. Suburbanites increasingly complain—with reason—about traffic congestion,

emissions throughout the 1970s and '80s, 1990s-style Smart Growth combats automobile emissions and polluting runoffs produced by sprawl development patterns and land-use regulations.<sup>24</sup> Instead of the no-growth policies favored by many environmentalists but resisted by affordable housing advocates and free marketeers, Smart Growth encourages regional-scale planning that identifies both natural areas to be preserved and growth areas targeted for higher-density, transit-oriented development. By coordinating federal, state, and local investments in infrastructure, transit routes, and job centers, Smart Growth links economic development, land-use planning, and environmental protection.<sup>25</sup>

Part of the strategy of Smart Growth is to focus responsibility for the maintenance of environmental quality less on government regulations and big business practices, and more on local growth patterns and individual lifestyle choices. Municipalities are encouraged to engage in Smart Growth planning with federal funds made available through the Clinton-Gore administration's Livable Communities Initiative. A thirty-point plan, the initiative includes proposals for \$10.75 billion worth of "Better America Bonds" to support local efforts to preserve open space and protect water; for \$9.1 billion to promote transportation alternatives and brown-field mitigation; and for \$35 million to fund local computer mapping to aid regional planning.<sup>26</sup> Smart Growth policymakers complement these incentives with an increasing emphasis on quality-of-life arguments that echo suburbanites' frustrations and promote the benefits of living in towns and urban neighborhoods instead of subdivisions. Harriet Tregoning, director of the Urban and Economic Development Division of the EPA and coordinator of the Smart Growth Network, points out that although 80% of Americans call themselves "environmentalists," few of them display this leaning in their life circumstances—

beyond engaging in curbside recycling and perhaps buying the Eddie Bauer model of the SUV.<sup>27</sup> Smart Growth policies are intended to spur development patterns that allow citizens to make more environmentally, socially, and economically sustainable lifestyle decisions.

While Smart Growth and Livable Communities are concerned more with regional than with architectural design, they are nonetheless enabling architects to participate more effectively in the development of the neglected 75%. Two professional programs, the AIA's Center for Livable Communities and the Congress for the New Urbanism, have engaged in shaping public policies through bringing together architects, planners, and high-ranking policy officials. More than fifty sessions at the 2000 AIA convention were related to Livable Communities; more are planned for coming years. New Urbanism is similarly growing. In the eight years since its founding, the Congress for the New Urbanism has grown to 2,100 members and has formed alliances with the U.S. Department of Housing and Urban Development, the EPA, Fannie Mae, the Urban Land Institute, the MacArthur Foundation, and the Energy Foundation. Because much of its development has been located in greenfield sites and has employed neo-traditional styling, New Urbanism is often dismissed as New Suburbanism. What such criticism fails to recognize is how such styling helps sell the far more radical—and urban—aspects of New Urbanist proposals, including mixed uses, mixed incomes, mixed building types, higher densities, and better public transit.<sup>28</sup> While few New Urbanist developments have been adequately linked to larger regional growth plans, in urban, suburban, and exurban sites they have offered residents alternatives to conventional sprawl.

While many architects continue to view New Urbanists with suspicion, the movers and shakers of the New Economy are increasingly recognizing

the benefits of its principles. In what might be a telling irony, Silicon Valley has decided that rather than relying on telecommuting and e-commerce to relieve its congested roads and long commutes, it should invest in public transit and affordable housing. The Silicon Valley Manufacturing Group—representing all the major Silicon Valley employers in coalition with the twenty-one municipalities in Santa Clara County—pushed for and won a 1/2¢ sales tax to fund \$2.5 billion in roads and rail and to build 24,000 affordable houses.<sup>29</sup> In Portland, Oregon, all Intel workplaces are now within ten minutes of a light-rail station or bus stop, and the company provides all 11,000 employees with a transit pass. In Atlanta, BellSouth is consolidating its 13,000 employees, now located in seventy-five suburban locations, into three new locations close to transit stations in the center of the city. In addition, BellSouth is constructing additional parking decks with small business centers at four suburban transit stops so that employees can either begin, conclude, or even conduct their work days there, thus offering them the chance to avoid rush-hour commutes.

Similarly, many designers of digital networks are beginning to recognize the value to their employees of face-to-face interactions and of ecologically sound and socially diverse environments. Microsoft has hired Peter Calthorpe to relocate its corporate campus and integrate it into an urban neighborhood. The plan calls for office buildings to line streets adjacent to the walkable, transit-served, mixed-use town center of Issaquah Highlands; restaurants and a health club that once would have been internally situated will instead be placed in the town center, near shops and residences. Employers in many businesses, but especially those in high-tech, are finding that in a highly competitive labor market they need to offer more amenities to attract and retain employees. This is not simply a matter of fancy gyms and cafeterias. Especially

when job tenures are short and industries are competitive, prospective employees evaluate the overall quality of life in a region. Instead of a boxy building in the middle of a large lot in the middle of endless sprawl, employees who can afford to be selective are looking for access to sociable, walkable, mixed-use neighborhoods, and to hiking trails, beaches, and parks. A recent study showed that high-tech firms ranked overall environmental quality as a top factor in location decisions, one that helps them attract talented employees.<sup>30</sup> A similar study also noted the preference among the rising generation for culturally and demographically diverse populations.<sup>31</sup>

These findings support the dissatisfaction of New Economy leaders with the kind of sterile suburban environments in which so many of them have been working. The new dot.coms are discovering that Silicon Valley is a terribly inefficient place. With venture capital easier to obtain, emerging digital ventures are more willing to pay the higher rents of Silicon Alley in New York or Media Gulch in San

aggressive newness of the dot.coms. Precisely because telecommunications increasingly allow businesses to locate anywhere, this kind of recentralization is occurring more and more. In both cases, New Economy businesses are selecting certain locations less because they reduce costs than because they appear to offer a better quality of life. Thus even in suburban settings, the New Economy is promoting better design, community, and environmental standards.

What remains is for architects to seize these opportunities. Given Smart Growth's mandates for higher densities and innovative mixed-use environments and the New Economy's market pressures for healthy, lively, 24-7 environments, there is a growing need for architects to take the skills they have honed on urban projects—the creative integration of mixed uses and complex site requirements—out to the suburbs. But they should first leave behind their prejudices about suburban life and learn to recognize the dynamics of transformation already in place. Many of the older suburbs of Los Angeles,

barries, post offices, shops, recreation, restaurants, and even residences, these centers are generally more innovative in their mix of programs than in their design expression or commitment to civic purposes, but they do reflect an interest in urbanizing suburbia. In such contexts, architects have extraordinary opportunities and abilities to show how innovative design can help the suburbs define their identities, generate community pride, and compete in the New Economy.

The suburban problem is not just an urban design problem—it is also an architectural problem. That suburbs can be improved through new architectural ideas is brilliantly exemplified by the work of Gary Reddick and his firm, Sienna Architecture Company of Portland, Oregon. Sienna has been exploring innovative ways of melding different suburban building types to form hybrid, urban buildings that nonetheless retain a suburban level of service, convenience, and name-brand recognition. By stacking housing above parking lots and retail chain stores, Sienna is providing the mixed uses and higher densities advocated by Smart Growth.<sup>35</sup> In Seattle and Portland, where there are very good markets for residential development, Sienna convinced a variety of non-residential building owners to sell the air rights over their parking lots or roofs for housing. In Portland's desirable and compact Northwest neighborhood, Sienna saw the parking lot of a specialized medical center as a potential housing site. After producing a pro forma, the firm approached the owners and showed that it could provide them with a covered, forty-three-space parking lot (with only three fewer spaces than before) and a million-dollar profit in exchange for stacking an additional layer of parking (with a separate entry) and two stories of condominiums. The built project, Northrup Commons, screens the parking with duplexes entered from the streets and adds two floors of apartments. The resulting section weaves conventional flats, duplexes, and parking infrastruc-

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Francisco, places more attractive to their employees. Such places offer lively, compact, twenty-four-hour, mixed-use environments and facilitate the networking and access to amenities that time-pressured workers prefer (they also reduce the distance-sensitive costs of providing high bandwidth computer links). The atmosphere of these urban places is much less corporate and far more funky than that of a suburban office park. Similarly, renovated warehouses, often in gentrifying neighborhoods like San Francisco's Mission Hill or Atlanta between Auburn Avenue and the old Fourth Ward, provide spacious, informal, and weathered settings that highlight the

for instance, are being adapted to new ways of life—entrepreneurial, often immigrant homeowners use their front yards as retail spaces and their carports as commercial spaces.<sup>32</sup> These ad hoc live-work arrangements suggest the need for greater attention to be paid to the complexities of running businesses from the home and of accommodating telecommuting.<sup>33</sup> Malls and retail environments are similarly looking for new formats to distinguish themselves from competitors and to meet the challenge of Internet retailing. Some suburbs are renovating older malls or building new ones to create town centers and main streets where none existed.<sup>34</sup> Hybrids combining li-

ture into a unique mix whose massing, scale, and materials fit remarkably well into its traditional context.

Sienna has also pioneered the building of apartments and condominiums on top of grocery stores. Its design for Macadam Village, three miles from downtown Portland, places apartments on the roof of an upscale grocery store and retail strip. The apartments face several Sienna-designed multi-family villas built into the side of a hill. The level of the retail strip and the level of the housing are

the range of home prices and presumably in the income levels of the residents is underscored by how the design combines its various elements: the new, chic penthouse hat, an old painted billboard that has been left on one elevation, and a proposed restaurant at street level looking out at the park. The result is a strikingly urban juxtaposition of old and new, rich and middle-income, residential and commercial—all with internal and invisible parking.

In Seattle, Reddick and his firm

suburbs and engage themselves in the process of development have a tremendous opportunity to challenge the status quo and radically re-imagine the suburban landscape. Mayors, governors, developers, and suburbanites desperately need alternatives to sprawl, and architects need to be re-engaged practically—and theoretically—with the unavoidable issues of ecological sustainability, social justice, mobile capital, consumer culture, ethnic and cultural identities, and politics. The new models, new policies, and new demographics I have been discussing should empower architects to move beyond merely representing or critiquing these problems. This is not a call for producing new templates, replacing one suburban formula with another. Nor is it intended to detract from cities. Rather I am arguing that architects should bring their urban sensibilities to bear on the 75% of development that they've usually been ignoring. It is because I am an urbanist that I am arguing that greater attention be paid to the suburbs.

There are many reasons for architects to get involved with the design of suburbia. Like the New Urbanists, they might be motivated by a reformist desire to redirect and reconfigure suburban development to advance social and environmental goals. Or they might be attracted by the business opportunities offered by the New Economy. Or by the opportunity to critically engage the rapidly transforming suburban culture. There are many questions that critics, theorists, and designers might ask about this transformation. How can architecture contribute to the leading of an admirable contemporary life in suburbia? How can architecture better deal with middle-class identities and tastes? How might the increasing mass customization of products (from Levis to kitchen cabinets to entire construction systems) help decrease suburban homogeneity and spur consumer demand for better architecture and design? How might suburbia be retrofitted without replicating the dilemmas of

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distinct, each level more or less conforming to typological expectations (including a surface parking lot in front of the retail). But these two uses are resolved into an unusually tight urbanistic whole. Back-of-house deliveries and garbage storage are tucked under the access road to the housing and present no disincentive for nearby residential development. This level of care drives up costs, as do the HVAC and roof structure—but such costs are paid for by the sale of the roof's air rights.

In downtown Portland, Sienna initiated a wave of redevelopment around the North Park Blocks by fitting residential units and structured parking neatly into a ninety-two-year-old automotive warehouse. The designers oriented the condominiums toward the park and reused the car ramps to provide three levels of parking near the interior of the block. Residents on the lower levels of the now ten-story building can park more or less in front of their units. Four new floors were added above the condominiums. Prices for the units range from \$113,000 to \$573,000. The diversity in

have convinced Safeway to allow construction of 100 units of housing above a 65,000-square-foot store fit tightly onto its site. The sale of the roof rights will not only pay for the project's two levels of internal parking (including a full-service truck dock) but will also provide the grocery store with an in-house clientele. Using similar arguments, Sienna hopes to convince a national drugstore chain to allow construction of an assisted living complex above its roof.<sup>36</sup>

The landscape of America is covered by—littered with—stand-alone chain stores selling everything from groceries to medicines to books. The national chains in particular have resisted adapting their design templates to connect and coordinate with other uses and to contribute to more compact urban places. In this context, Sienna's piggybacking strategies are downright revolutionary, and bode especially well for retrofitting existing suburban retail strips targeted for Smart Growth.

Big problems provide big opportunities for creative and resourceful people. Architects who look to the

gentrification? Seventy-five percent of the landscape and 50% of the population await our answers.

### Notes

1. Seventy-five percent is a conservative estimate based on various indices (and their less-than-consistent terms of measurement). It refers strictly to the United States. Development patterns in other nations, including Brazil, India, and Indonesia, are producing megacities whose populations dwarf those of U.S. metropolises. In the U.S., however, population growth is concentrated in the suburban peripheries. Growth rates have varied across the country. Cushman & Wakefield, the real estate firm, reports that in 1999, 5.5 million square feet of new office space was added to American cities, while 69 million square feet, or 92.6% of the total, was added to suburban markets; see Peter Grant, "Commercial Real-Estate Boom Cools," *Wall Street Journal*, June 22, 2000. That is a significant increase from the 1980s, when cities with prosperous downtowns retained 40% of new office space, losing only 60% of this market to suburbia, with weaker cities losing 80 to 85% of their market to their suburbs; see William C. Wheaton, "Downtowns versus Edge Cities: Spatial Competition for Jobs in the 1990s," WP45, MIT Center for Real Estate, 1993. In contrast to commercial space, housing has been more stable. Of the Census Bureau's three categories—Central Cities, Suburbs (which with Cities constitute a Metropolitan Statistical Area, or MSA), and Outside MSAs—suburbs contain the significant majority of households. In 1995, there were 97,693,000 households in the U.S.; 30,243,000 in cities, 45,864,000 (47%) in suburbs, and 21,586,000 outside metropolitan areas. Between 1993 and 1995, 82% of new metropolitan households and 61% of new households overall were in suburbia; this data comes from the 1993 and 1995 Census American Housing Surveys. Similarly, in 1986, 1991, and 1998, more than 80% of new housing construction was in the suburbs; see Alexander von Hoffman, "Housing Heats Up: Home Building Patterns in Metropolitan Areas" (Center on Urban and Metropolitan Policy, in collaboration with the Joint Center for Housing Studies at Harvard University and the Brookings Institute, Survey Series: December 1999), 1. From 1990 to 1998, 76.2% of the population growth in metropolitan regions was outside the central cities; this data was obtained

from the Population Estimates Program of the U.S. Census Bureau.

2. Nonetheless, there are similarities in how some current work and work from the '50s expressed their contemporaneity. See Hans Ibelings, *Supermodernism: Architecture in the Age of Globalization* (Rotterdam: Netherlands Architecture Institute, 1998).

3. While there are many examples, Neil Smith's recent reading of Seaside exemplifies the tendency for architecture critics to assume that neo-traditional architectural styles appeal to and foster neo-traditional lifestyles, such as apron-clad women in kitchens; see "Which New Urbanism? The Revanchist 90s," *Perspecta* 30 (Cambridge: MIT Press, 1999).

4. Notable exceptions include Peter G. Rowe's study of suburban building types and development in *Making a Middle Landscape* (Cambridge: MIT Press, 1991); Rem Koolhaas's writings on Atlanta, Generic Cities, Lite Urbanism, and Bigness, in *O.M.A., Rem Koolhaas, and Bruce Mau, S,M,L,XL* (New York: Monacelli Press, 1995); and the efforts of the New Urbanists—see Michael Leccese and Kathleen McCormick, eds., *Charter of the New Urbanism* (New York: McGraw-Hill, 2000).

5. The AIA's Center for Livable Communities and the interest of many AIA chapters in local urban design issues are welcome exceptions to the AIA's dominant interests.

6. Profit margins are so slim and competition for market share so severe in the new housing market that a single popular house design can dominate production. Marketing analyst Laurie Volk of Zimmerman/Volk Associates estimates that in 1999, one particular design accounted for as much as 30% of all new single-family detached housing throughout the country.

7. Aided by digital coordination of inventory and distribution, corporate chains are increasing their share of their respective markets. Wal-Mart now accounts for more than 5% of all retail spending in the U.S. Independent booksellers claimed 58% of book sales in 1972, just 17% in 1997. By 1998 Home Depot and Lowe's accounted for almost 25% of all hardware and building supply sales. Since 1986, the growth of Office Max, Office Depot, and Staples has caused small and medium-sized office products stores to lose ground: their share of this market declined from 20% to 4%. See Stacy Mitchell, *The Home Town Advantage: How to Defend Your Main Street against Chain Stores . . . And Why It Matters* (Minneapolis: Institute for Local Self-

Reliance, 2000).

8. A 1985 survey of developers of multifamily housing found that half of them used in-house designers. The other building types listed are far more likely to hire outside design services. See Robert Gutman, *Architectural Practice: A Critical View* (New York: Princeton Architectural Press, 1988). Growth in these building types is reflected in the following statistics: Between 1960 and 1980, the stock of apartments in complexes with more than ten dwellings increased threefold in the San Diego SMSA, almost sevenfold in the Houston SMSA, and eightfold in the Phoenix SMSA. In the Puget Sound area they house almost 20% of the suburban population, more than half of the city of Seattle. See Anne Vernez Moudon and Paul Mitchell Hess, "Suburban Clusters," *Wharton Real Estate Review* 1, (spring 1999). While central cities housed approximately 42% of corporate headquarters in 1984, by the early 1990s this number was down to 29%, due to relocations to the suburbs. See U.S. Congress, Office of Technology Assessment, *The Technological Reshaping of Metropolitan America*, OTA-ETI-643 (Washington: U.S. Government Printing Office, September 1995), 48. While population grew 10% in the '80s, retail floor space grew 80%, most of it in malls or discount stores in the suburbs. See Ian F. Thomas, "Reinventing the Regional Mall," *Urban Land* (February 1994) 25.

9. In a similar manner, Andres Duany has recently developed the concept of the "rural-urban transect." Inspired by how nature distributes species along the continuum from wetlands to uplands to foothills, the transect categorizes types of locations from rural edges to urban cores, using this to relate the design of individual buildings and neighborhoods to larger contexts. See Andres Duany, Elizabeth Plater-Zyberk, and Jeff Speck, *Suburban Nation: The Rise of Sprawl and Decline of the American Dream* (New York: North Point Press, 2000) and Duany, Plater-Zyberk & Co., *The Lexicon of the New Urbanism* (Miami: Duany, Plater-Zyberk & Co., version 2.0, 1999).

10. This is particularly evident in the tendency of journals to discuss buildings in relation to a theme or to compare them to buildings of the same type. Ironically, journals aimed at developers, such as *Urban Land*, are more prone to feature articles on a particular city, although they do so to examine how market forces have affected development.

11. The 1995 Census American Housing Sur-

vey showed that 47% of American households were in suburbs, and that suburbs were growing at a faster rate than either cities or outside MSAs. It is reasonable to expect that the 2000 Census will show that the majority of Americans live in suburbs.

12. According to the Congressional Quarterly Weekly Report of May 1997, suburban congressional districts outnumbered urban districts two to one, rural districts three to one. The significance of this is discussed by G. Scott Thomas, *The United States of Suburbia: How the Suburbs Took Control of America and What They Plan to Do With It* (Amherst, New York: Prometheus Books, 1998).

13. Robert Wilson, editor of *Preservation* magazine, recently made this point in "Enough Snickering: Suburbia Is More Complicated and Varied than We Think," *Architectural Record*, (May 2000).

14. Nicholas Lemann argues this point in his study of Philadelphia's transformation from a banking center to a branch-office city whose business power base has largely shifted to the suburbs, eroding the power of the city's traditional civic elite. "Two of the most prominent and rapidly growing Philadelphia companies, for example, are Vanguard, the mutual-fund empire, and QVC, the home-shopping television network. Both serve national markets from isolated locations in the suburbs." See "Letter from Philadelphia: No Man's Town, The Good Times Are Killing Off America's Local Elites," *The New Yorker*, June 5, 2000.

15. Henry L. Diamond and Patrick F. Noonan, *Land Use in America* (Washington: Lincoln Institute of Land Policy and Island Press, 1996), 94.

16. F. Kaid Benfield, Matthew D. Raimi, Donald D.T. Chen, *Once There Were Greenfields: How Urban Sprawl Is Undermining America's Environment, Economy, and Social Fabric*, Natural Resources Defense Council, Surface Transportation Policy Project (New York: NRDC Publications, 1999), 14.

17. From a presentation by Marcie Pitt-Cat-soupes of the Center for Work and Family at Boston College at a conference called "Is Design a Catalyst for Community?" held in Seaside, Florida, in January 2000.

18. In 1998 the Census Bureau defined 69% of the 102.5 million households as "family households." However, only 49% of those contained children under the age of eighteen. This means that 33.8% of households had children; data

obtained from U.S. Bureau of the Census, Current Population Reports, Series P20-515, *Household and Family Characteristics: March 1998*, Update (Washington: U.S. Government Printing Office, 1998). In 1996, 25% of households were married families with children (the conventional suburban stereotype), the same percentage of households of people living alone. See U.S. Bureau of the Census, Current Population Reports, Series P23-194, *Population Profile of the United States: 1997* (Washington: U.S. Government Printing Office, 1998), 24.

19. Christopher Leinberger has tracked the complex factors driving leap-frog development and new generations of metropolitan cores; see "Metropolitan Development Trends of the Late 1990s: Social and Environmental Implications," in Diamond and Noonan, eds., *Land Use in America*.

20. The swell of suburban discontent can be gauged by the growing willingness of voters to fund anti-sprawl initiatives. In 1998 and 1999, more than 300 ballot measures in more than twenty-five states were approved, authorizing \$9 billion to buy and conserve open space, protect farmland, and clean up brownfields. See "Building Livable Communities, A Report from the Clinton-Gore Administration," revised June 2000. See also Richard Lacayo, "The Brawl over Sprawl," *Time*, March 22, 1999; and "Sprawl: The Revolt in America's Suburbs," *New Democrat*, (March/April 1999).

21. See in particular, "Alternative Views of Sprawl," a pairing of articles by Peter Gordon and Harry W. Richardson, "Are Compact Cities a Desirable Planning Goal?" and Reid Ewing, "Is Los-Angeles-Style Sprawl Desirable?" *Journal of the American Planning Association*, (Winter 1997).

22. The defense-of-sprawl arguments are well summarized by Christopher R. Conte, "The Boys of Sprawl," *Governing*, (May 2000).

23. Among the many critiques of sprawl are *Once There Were Greenfields* and *Suburban Nation*, both cited above. The author has also discussed this topic in "Temporary Contracts: The Economy of the Post-Industrial Landscape," *Harvard Design Magazine* (Fall 1997).

24. The shift in focus is due partly to the EPA's relative success at reducing industrial pollution, and partly to widespread recognition of the exponential damage that could be caused by sprawl were projected population increases to be accommodated by current development patterns. In a January 13, 2000, press release, the

Census Bureau projected that the U.S. population will grow from 273 million to 404 million (a 50% increase) by 2050 and will more than double by 2100.

25. Both Smart Growth and Livable Communities have been criticized as pandering to suburban voters by promising to preserve their current lifestyles, while not allowing others to enjoy these lifestyles. Intended to sponsor both infill into existing communities and more responsible and directed growth, rather than no-growth, both policies are nonetheless subject to abuse in local politics.

26. See "Building Livable Communities," cited above.

27. Tregoning also notes that one of the accomplishments of Smart Growth has been to encourage EPA's core supporters—the committed environmentalists and Sierra Club members, for instance—to shift from resisting growth of any kind toward accepting the social and economic benefits of growth that is strategic and environmentally friendly; from a conference presentation on "Building and Rebuilding Suburban Neighborhoods," December 1999, the Seaside Institute, Seaside, Florida.

28. New Urbanists are still contentious about the subject of style. Marketing aside, some of us feel strongly that traditional styles best connect to the history and climate of places. Others of us are anxious to demonstrate how modern designs can fit into both time and place and feel frustrated that American homebuyers and mortgage lenders remain wary of how anything perceived as "urban" or "modern" will affect property values. I have previously argued that, in fact, by changing the system of production of suburban development, the New Urbanists are more radical than neo-avant-garde architects who change the styling of buildings, but accept the fundamentals of the status quo. See Ellen Dunham-Jones, "Real Radicalism: Duany and Koolhaas," *Harvard Design Magazine* (Winter/Spring 1997), 51.

29. From a presentation by Carl Guardino of the Silicon Valley Manufacturing Group at the Congress for the New Urbanism VII, Milwaukee, June 4, 1999.

30. Paul Gottlieb, "Amenities as an Economic Development Tool: Is There Enough Evidence?" *Economic Development Quarterly*, (August 1994), 276, quoted in Richard Florida, "Competition in the Age of Talent: Environment, Amenities, and the New Economy," report for the R. K. Mellon Foundation, Heinz

Endowments, and Sustainable Pittsburgh (January 2000).

31. Florida, "Competition in the Age of Talent." See also Howard Gleckman, "How High Tech Can Help Save Central Cities," *Businessweek Online*, June 12, 2000, and Rebecca Bryant, "Planning for the New Economy," *Urban Land* (January 2000).

32. See Margaret Crawford, John Kaliski, and John Chase, eds., *Everyday Urbanism* (New York: Monacelli Press, 2000).

33. As reported in the *Wall Street Journal*, March 24, 1998, the International Telecommuting Association estimated there were 11.1 million telecommuters in 1997. The International Telework Association and Council estimates that today 19.6 million Americans telecommute at least one day per week; see the *New York Times*, July 9, 2000, Business Section, 6. Todd A. Canter and Jacques N. Gordon report that, when defined as employees working at home at least three days per week during normal business hours, telecommuting is already used by 32% of companies with more than 1,000 employees. Facility managers expect this number to double in three years. See "Alternative Workplace Strategies," *Wharton Real Estate Review* (Spring 1999), 21.

34. Chattanooga (Tennessee), Pasadena (California), and Kendall (Florida) are examples of cities that are retrofitting older malls to face outward to a main street. Newer "edge cities" such as Tysons Corner (Virginia) and Schaumburg (Illinois), as well as smaller suburban towns like Calabasos (California), Aurora (Colorado), Lenox (Kansas), Deerfield (Illinois), and Hernando Oaks (Florida) are building new town centers from scratch. Trying to encourage the clustering of activities, the New Jersey State Development and Redevelopment Plan provides seed money "for the establishing of a town center within a community that has no such center and no distinct identity at present." See [www.state.nj.us/osp/doc/techfile/tfs3tool.htm](http://www.state.nj.us/osp/doc/techfile/tfs3tool.htm); also Dirk Johnson "Town Sired by Autos Seeks Soul Downtown," *New York Times*, August 7, 1996, A8; Clifford A. Pearson, "Reworking the Mall," *Architectural Record* (March 1993).

35. Lawrence W. Cheek, "Loophole Masters," *Architecture* (June 2000), 68.

36. Based on a conversation with Simon Tomkinson, marketing director at the firm. Sienna's success in these projects stems largely from the trust they have garnered in their fifty

years of designing retail, including big-box stores for Fred Meyer throughout the Northwest. Such work still provides the bulk of their business, but it allows them to be entrepreneurial in their more innovative projects.

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