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## SPONTANEOUS CITIES

Peter Gordon

*“Their intricate order—a manifestation of the freedom of countless numbers of people to make and carry out countless plans—is in many ways a wonder.”—Jane Jacobs*

The rules and institutions that shape our lives have come about via bottom-up as well as top-down forces.<sup>1</sup> The relative merits of each have been argued and elaborated for a very long time and the discussion continues. This essay will consider both of these phenomena as they shape our cities. Many observers take it for granted that cities are the work of designers and planners via top-down authority. Others see top-down as futile and emphasize the ubiquity and power of bottom-up currents. The latter have been characterized as order from human action rather than from human (intentional) design.<sup>2</sup>

Some of the confusion stems from the simple fact that *planning* is a universal activity. We cannot imagine many human endeavors that move forward without a plan. Economists think of markets as the mechanism that coordinates large numbers of plans and construe the outcome as the result of decentralized bottom-up planning. But to many others “planning” simply denotes top-down central planning. And whereas central planning at the national level is not as fashionable as it was in years between the end of World War II and the fall of the Berlin Wall, this is not so for the planning of cities. Indeed, in several languages a city map is called a “city plan.”<sup>3</sup> In the U.S and elsewhere, city planning is a profession, complete with university

curricula and an associated body of research. Most of the latter presumes that top-down planning is essential. To be sure, many of the world's great cities (especially the capitals) have touches of the Grand Manner<sup>4</sup> planning tradition. But monumental citadels, public halls, public squares and spaces, the occasional City Beautiful monument, and similar elements along parade grounds or ceremonial axes are not where most of the world's city people live and work. In fact, most cities (even the great capitals) are populated by spontaneous fill-in, much of which cannot be easily linked to any grand plan or vision.

In Section 2 of this chapter, some of what we should know about cities for background to this chapter is discussed. Section 3 elaborates some of the relevant ideas associated with planning. Section 4 highlights some of key insights on the causes of economic growth. Section 5 returns to cities and examines the way they contribute to economic growth. Section 6 discusses the division of labor between orders from human design and spontaneous orders: Human design in the service of profit-seeking activities *is* subject to market-based error correction; “mega projects” are defined and seen as the prominent exceptions. There will always be some projects that fall into this category. This means that bottom-up and top-down necessarily co-exist even though we can expect more from the bottom-up efforts. Concluding thoughts are noted in Section 7.

## **CITIES**

“Unplanned city” (and its relation “unchecked growth”) is the way many people describe cities of which they disapprove. They usually mean too little top-down planning, assuming that this is the only planning possible. But Stephen Davies, describing urbanization in England, shows that this was not always so. He notes that,

[t]he years between 1740 and 1850 therefore saw an unprecedented amount of urban growth. Cities and towns of all kinds and sizes grew more rapidly and on a greater scale than ever before in history. The rapidly increasing population was drawn into the towns in ever larger numbers with the rise of industry, creating an enormous demand for housing and the urban fabric in general. This was the kind of situation that, when its like happens today, is regularly described in terms of “crisis” or even “catastrophe.” And yet the challenge was largely met. Housing and other facilities were built and provided. The towns of Britain grew to meet the new demands of a growing population and a transformed economy. There were no great shantytowns around growing cities such as Manchester and Birmingham. Instead a tidal wave of brick and stone swept over fields, turning them into new urban areas. Moreover, the period also saw the creation of great architectural achievements of lasting value in both the great cities and the new towns ... The elegance of Bath and Cheltenham, the West End of London and Bloomsbury, the New Town in Edinburgh, and the centers of Glasgow and Newcastle-upon-Tyne—all were built in this period. As this was the first instance of such wide-spread urbanization our understanding of its nature is crucial for our thinking about the process of urbanization in general, whether historically or today. In particular this instance raises the question of how urbanization can happen in the absence of an apparatus of planning and controls, by voluntary means, and what the results of this may be. (Davies, 2002, p. 19)

But the pendulum has swung. Not only is there now a widespread intellectual presumption that the bottom-up planning that Davies describes should be replaced with top-down approaches, but there is also the fact that when it comes to cities, top-down planning is the international standard. The day-to-day activities of large numbers of professional city planners involve regulation of how private property is to be used.<sup>5</sup> Rules to enforce the “separation of land uses” were typically

justified by concerns over presumed widespread negative externalities—coupled with a general unwillingness to address these via pricing or property rights clarifications. There is also significant government involvement prompted by the desire to promote “affordable” housing projects. The details of both of these activities are beyond the scope of this chapter. But, to get our bearings, it is worth pointing to the dominance of suburban development in major cities of the developed world despite the widespread idea among planners and policy makers that it is their task to contain such “sprawl.” The data in Table 8.1 suggest the international (developed-country) dominance of large-city suburbanization.<sup>6</sup>

*Table 8.1: Spatial organization—population growth in metropolitan areas (population > one million)*

<b>Country or region</b>	<b>Since</b>	<b>Areas</b>	<b>Core</b>	<b>Suburbs</b>
Western Europe	1965	42	-13.0%	+113.0%
Israel	1965	1	-1.6%	+101.6%
Canada	1951	4	+5.3%	+94.7%
Australia and New Zealand	1965	6	+7.2%	+92.8%
Japan	1965	8	+7.6%	+92.4%
United States	1950	52	+8.4%	+91.6%
Hong Kong	1965	1	+55.0%	+45.5%

*Source:* [www.demographia.com/db.highmetro.htm](http://www.demographia.com/db.highmetro.htm)

This is how the middle classes have been able to move into the types of housing that were once thought to be elite. Except for the fact that the trend overrides conventional planning doctrine, which is to promote more intensive development of built-up areas, this outcome should not be surprising. Rybczynski (2010, p. 170, italics added) has noted that “[v]irtually every technological innovation of the last fifty years has *facilitated*, if not actually encouraged urban dispersal.”

Explicit recognition of a top-down mandate to limit the spreading out of cities came with the United Kingdom’s Town and Country Planning Act of 1947 and the various British “Greenbelt” plans that followed. This type of growth management and urban growth boundary approach to city planning has since been mimicked throughout most of the industrialized nations.

Consider this sentiment by Filion and McSpurren (2007, p. 501): “A supportive distribution of residential density is perceived to be an essential component of strategies aimed at increasing the use of public transit. To alter substantially land use-transport dynamics in a fashion that favours public transit patronage, residential density policies must be deployed over long periods and unfold at local and metropolitan levels simultaneously.” Many planners are eager to support “transit villages” as part of “coordinated efforts” to support the use of public transit (Bernick and Cervero, 1997).

Much of this is inspired by concerns over the air quality consequences of widespread auto use. But pollution pricing is avoided while re-shaping cities is embraced. The Smart Growth movement seeks a stronger role for top-down urban and regional planners.<sup>7</sup> Environmental and “sustainability” concerns (and environmental impact hurdles) have been added to the mix, usually involving even more fear or skepticism over market outcomes. At the same time, public sector “redevelopment” activities have been growing in importance and recently given wide sanction via the United States Supreme Court’s expansion of the eminent domain power of governments.<sup>8</sup> Nevertheless, it appears that significant policy efforts and contrasts around the world make little difference. There are big plans, to be sure, but they do not seem to matter. Market forces trump apparent policy differences—to the deep consternation of many observers, most of whom conclude that existing top-down plans have to be toughened.<sup>9</sup>

## **PLANNING**

In most societies top-down planning and bottom-up planning co-exist. Even the formerly “East-bloc” regimes that had outlawed private property and formally assigned all planning to central authorities had unwittingly spawned numerous black markets.<sup>10</sup> It is quite plausible that the failed centrally planned economies persisted as long as they did because of black market activity.

And while many observers grossly over-simplify by referring to the United States as a “laissez-faire” or “free market economy,” it is much more likely to be an amalgam of top-down and bottom-up. It is hard to imagine anything else because it is the nature of politicians and bureaucrats to want to increase their influence and power, but it is the nature of almost everyone else to look for ways to avoid their power and influence.

The Socialist Calculation Debates of the early-to-mid twentieth century challenged the neoclassical “nirvana economics” (Demsetz, 1969) approach as well as the aspirations of Marxist economic planners. It is now recognized that the final intellectual blow was struck by Friedrich Hayek when he emphasized the wide dispersion of critical knowledge, much of it tacit, and the impossibility that central planners could grasp or gather enough of it.<sup>11</sup> It is left to individuals to respond to market price signals. Most of the centrally planned economies did collapse, as expected, just over a half-century after Hayek delivered his decisive blow. Nevertheless, neoclassical economic analysis or faith in central planning persists in many quarters. It is not at all strange that the former is often used to support the latter. By positing a grossly unrealistic economic universe and finding that reality falls short, neoclassical economists have incited a large literature on “market failure.”<sup>12</sup> The latter has been absorbed and even celebrated by statisticians and central planners. Austrian school economists, in contrast, reject the simplifications of the neoclassical model and avoid its central planning implications. This is summed up in Hayek’s (1988, p. 76) famous observation that the “curious task of economics is to demonstrate to men how little they really know about what they imagine they can design.”

The second challenge to top-down planning comes from the Public Choice school of economics, which acknowledges the self-serving motivations of political actors (including politically sanctioned “experts”) and consequent wasteful rent-seeking (Krueger, 1974)—and even “rent extraction” (McChesney, 1997)—about which neoclassical economics is mostly silent. Most “capitalist” economies foster widespread “crony capitalism,” whereby the essential

profit-loss dynamic is lost. Even when and where markets “fail,” there is little reason to expect that the simple public sector remedies prescribed by neoclassical economists will come about.<sup>13</sup>

The conceptual problems of modern city planners were addressed by Britton Harris in a series of articles that explored the analogy between city planning and mathematical programming. Harris (1971) argues that advances in mathematical programming reveals problem-solving challenges and opportunities that could help us better understand the work of city planners. But these thoughts were not a return to the calculation debates—they did not claim that planners could replace markets for the allocation of goods and they did not allude to planners computing prices—but they did reflect the technocratic optimism of the mid-twentieth century. Harris can be seen as devoting considerable energy to refining and updating Progressive Era impulses.

## **GROWTH, DEVELOPMENT, AND COMPLEXITY**

It is almost a cliché of modern growth economics that “institutions matter.” Growth is not simply about applying more labor and capital. Deron Acemoglu presents a schematic summary (Figure 8.1) which shows institutions (he defines them, as does Douglass North, as rules of the game that are humanly devised and that shape human activities) as the “ultimate cause”; his simple graphic sums up much of what we know about economic growth.<sup>14</sup> People respond to incentives, but the incentives are clearest when the institutions are favorable. There are inevitably various definitions of “institutions,” but the most robust empirical results are those that define institutions via “economic freedom” indices.<sup>15</sup> Recent work by the World Bank (2006) attempts to value “good” institutions, calling them “intangible wealth.” It turns out that most of the world’s wealth is intangible wealth, with substantially more of it in the developed countries. Responding to incentives, people combine human and physical capital in auspicious ways—but

only *after good ideas are formed*. Good ideas are promising *new combinations of old ideas*. And “[e]conomic growth occurs whenever people take resources and rearrange them in ways that are more valuable” (Romer, 2007). It is always about the *discovery of better combinations*. One could add that the number of possible combinations grows over time as there is ever more to choose from.

The graphic also shows the role of organizations. Coase (1937) famously shows that organizations emerge to reduce transactions costs. It is then that we get better technologies. Economists suggest that “organizational capital” is an important contributor to productivity. It involves a firm’s capacity to discover economies in production and distribution. But this is linked to our interest in spatial order, because organization involves many shells, including the ones that describe *spatial* organization. And just as with Elinor Ostrom’s (2010) emphasis of local institutions, local spatial arrangements emerge that respond to local conditions.

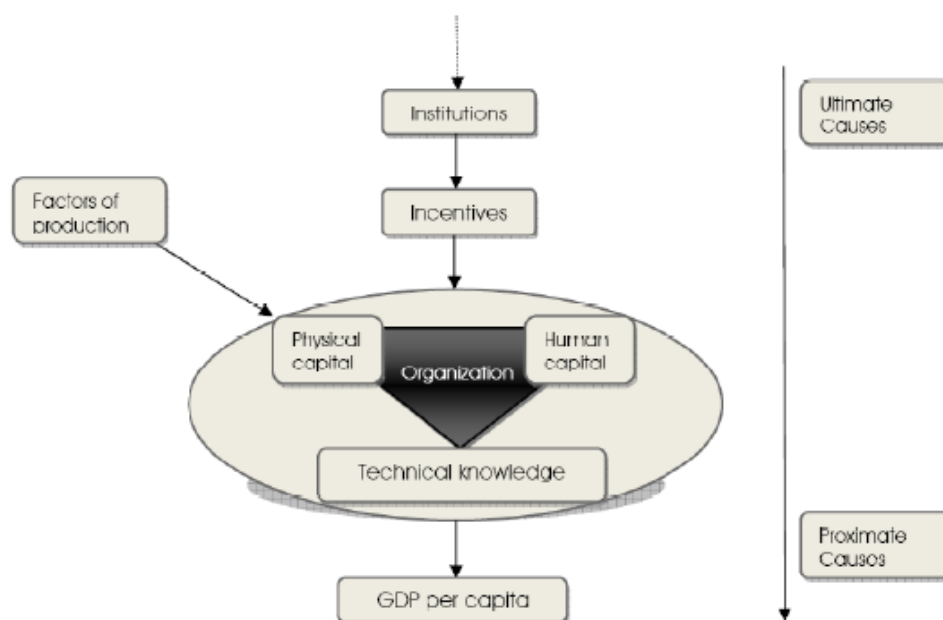


Figure 8.1: Economic growth (adapted from Acemoglu, 2009)



The big picture story is how we might obtain the favorable circumstances. Some analysts (see Bhalla, 1994) have even suggested a positive feedback, from growth to the demand for improved institutions. But only when the institutions are favorable can we expect the benefits of Smithian comparative advantage, Schumpeterian discovery as well as the formation of complex Hayekian supply chains prompted by prices and more discovery—supply chains that often span the globe.<sup>16</sup> All three of these phenomena describe highly complex processes that rely on market signals and decentralized decision-making.

Jane Jacobs (1961) famously called attention to the nature and the extent of the complexity of spatial organization, cities, and successful neighborhoods. She argued for diversity of land uses and explained her fears that city planners of her day, who had taken on the task of large-scale city redevelopment projects, could not cope with all of the intricacies involved.<sup>17</sup> But whether it is Leonard Read explaining the complexity of constructing a simple pencil<sup>18</sup> or Jacobs trying to explain urban neighborhoods, each one addresses the wide gap between popular understandings and the extent of the underlying complexities. Emphasizing how complicated things really are underscores Hayek's skepticism of grand designs. Paul Romer illustrates complexity in this way:

There have been  $10^{18}$  seconds since the Big Bang, and there are  $10^{88}$  particles in the known universe. Those are very large numbers ... but they are dwarfed by the number of ways that things or ideas can be combined. Even something as simple as a deck of cards can be arranged in unimaginably numerous ways. There are  $10^{68}$  possible card decks, which means that any order you happen to shuffle has probably never appeared before. (Romer, 1994, cited in Postrel, 1998)

And “[t]he naïve intuition that people have about limits to growth is profoundly wrong ... There is a scarcity of physical objects but that’s not the constraint on what we can do” (ibid.). This suggests that the “real constraint is not the number of objects, but the ways of combining objects or ideas—a number of possibilities that makes the number of atoms in the universe look close to zero in comparison. We are limited in a very real sense, only by our imagination and the time in which we have to exercise it” (Postrel, 1998, p. 64).

All these thoughts are relevant to the economic growth discussion. The biggest question in economics is still the one that asks why some people and places are rich and some poor. Going back to at least Adam Smith, the discussion continues to the present and looks at how so many (notably in the West) became so rich so quickly over the last 200 to 300 years. Steven Landsburg notes:

Modern humans first emerged about 100,000 years ago. For the next 99,800 years or so, nothing happened. Well, not quite nothing. There were wars, political intrigue, the invention of agriculture—but none of that stuff had much effect on the quality of people’s lives. Almost everyone lived on the modern equivalent of \$400 to \$600 a year, just above the subsistence level. True there were always aristocracies who lived far better, but numerically, they were quite insignificant. (Landsburg, 2007)

Landsburg could have added the important fact that population growth was accompanied by *increasing* resource supplies. Bjørn Lomborg illustrates it this way:

It is remarkable that the fall in the proportion of people starving in the world should have come at the same time as the population of developing countries doubled. What is more astounding is that the actual number of people starving in the Third World has fallen.

While in 1971 almost 920 million people were starving, the total fell below 792 million in 1997 ... In 2010 it is expected to fall to 680 million. (Lomborg, 2001, p. 61)

Events have undermined countless “doomsday” forecasts. Yet, they remain in vogue; “[t]he most astonishing thing about the extraordinary growth and innovation that the U.S. and other economies have achieved over the past two centuries is that it does not astonish us” (Baumol et al., 2007, p. 1). Scarcity is a fundamental fact of life, but we see receding (never disappearing) scarcity. Julian Simon has famously ascribed this to the power of the only *infinite* resource—human ingenuity. When allowed to flower in a context of economic freedom (that is, protection of property and credible contract enforcement), the application of human ingenuity explains what would otherwise be a paradox: ever more consumers, but ever greater availabilities.

Anticipating Simon, Joseph Schumpeter famously assigned the key *discovery* activity to entrepreneurs. In a world of considerable uncertainty, those with a comparative advantage in pursuing it and also accepting its risks are indispensable. All of this is consistent with Romer’s (2007, p. 128) point that “[e]conomic growth occurs whenever people take resources and rearrange them in ways that are more valuable.”<sup>19</sup> It is about new combinations and about rearranging previously unrelated items. But this is again a problem of choosing from a near infinite number of combinations. We somehow get people to *rearrange ideas* from a near infinite set so that they can facilitate the beneficial *rearrangement of resources* from a very large set. Entrepreneurs are the ones who typically take the lead and show the way. They develop insights and take action. Whereas developing economies can execute high-growth catch-up strategies (the recent example of China) by implementing existing technologies “off the shelf,” economies already on the frontiers grow via new ideas and new methods that are implemented by entrepreneurs.

Flashes of insight are actually a novel assembly of ideas which takes place within *and also among* inspired brains. Consider Duggan's description of creativity:

Clausewitz gives us four steps for how strategic intuition works. First, you take in 'examples from history' throughout your life and put them on the shelves of your brain. Study can help, by putting more there. Second comes 'presence of mind' where you free your brain of all preconceptions about what problem you're solving and what solution might work. Third comes the flash of insight itself. Clausewitz called it *coup d'oeil*, which is French for 'glance'. In a flash, a new combination of examples from history fly off the shelves of your brain and combine. Fourth comes 'resolution', or determination, where you not only say to yourself, 'I see', but also, 'I'll do it'! (Duggan, 2010, p. 10)

But we do even better if we are able to select (mix and match) ideas, even the seemingly disparate ones, from the "shelves" of many brains. We do that best once we have created modes and networks by which we interact—or as in Matt Ridley's (2010, p. 6) colorful expression: "I believe that at some point in human history, ideas began to meet and mate, to have sex with each other."

Duggan and Ridley seemingly anticipate Johnson's discussion of the "adjacent possible." Here is his summary:

The adjacent possible is as much about limits as it is about openings. At every moment in the timeline of an expanding biosphere, there are doors that cannot be unlocked yet. In human culture, we like to think of breakthrough ideas as sudden accelerations on the timeline, where a genius jumps ahead fifty years and invents something that normal minds, trapped in the present moment, couldn't possibly have come up with. But the truth

is that technological (and scientific) advances rarely break out of the adjacent possible; the history of cultural progress is, almost without exception, a story of one door leading to another door, exploring the palace one room at a time. But of course, human minds are not bound by the finite laws of molecule formation, and so every now and then an idea does occur to someone that teleports us forward a few rooms, skipping some exploratory steps in the adjacent possible. But those ideas almost always end up being short-term failures, precisely because they have skipped ahead. We have a phrase for those ideas: we call them ‘ahead of their time.’ (Johnson, 2010, p. 16)

## **CITIES AND THE “ADJACENT POSSIBLE”**

The ideas of the thinkers cited in the previous section help us to appreciate the insight of Jacobs quoted at the beginning of this chapter. Cities exist because most of us are more productive when clustered. But simple clustering is inadequate. People must be able to develop contacts and networks that work for them. This can involve private or public spaces. Peculiar spatial arrangements that facilitate all this must be possible. When this occurs, cities can be the engines of growth and innovation: “Cities enable the collaboration that makes humanity shine most brightly. Because humans learn so much from other humans, we learn more when there are more people around us” (Glaeser, 2011, p. 247; see also Storper and Venables, 2004). The great port cities have always had an additional advantage, being able to draw on even more ideas from abroad and adding them to the interaction that naturally happens in cities. Economists have been accused of neglecting how innovation happens. Looking at cities would be a good way to proceed.

Urban economists label all of the benefits of nearness “agglomeration economies”.<sup>20</sup> Just as there may be scale economies within firms, there may also be scale economies among firms,

in both similar and different industries. The comparative benefits of clusters of similar versus dissimilar firms in terms of which is best for the incubation of new ideas have fed a minor controversy among urban economists.<sup>21</sup> But nearness between *any* two parties reduces their transaction costs, and there are also gains when both are near valued third parties. This includes proximity to common vendors, customers or labor pools. Everyone involved also benefits from lower search costs.

Lee (2006) found that the longest average commutes in the United States (in minutes) are those experienced by residents of the New York metropolitan area, particularly those who commute to its downtowns. But why do these people put up with long commutes and high prices? Partly because they are rewarded with high wages. But why are high wages available? Because these workers are productive. And they are extraordinarily productive because they work in areas of New York where agglomeration opportunities abound.

New ideas spawn new businesses, new processes, new products, and new wealth. The ever-increasing value of information explains the fact that ever more agglomeration economies spring from information exchange. Note that while the first two types of agglomeration economies involve transactions, the third is more complex. Edwin Mills has remarked that electronic information exchange is good for transmitting unambiguous information (data is an example), but face-to-face interaction is still necessary for the transmission of ambiguous information. He cites seminars as an example. The feedback is quick and ongoing and complex, including the tone, facial expressions, and body language. Could all of these ever take place electronically? Can relationships be formed via teleconferencing? What would be the “new normal?” No one really knows. But the discussion evokes Johnson’s “adjacent possible” and its importance to the spread and sharing of ideas. For any setting, *the adjacent possible that works best* involves complexities that are beyond the capabilities of top-down planners.

It is not simply clustering, but propitious clustering that matters. Many analysts worry about what the “best” clusters might be. But the content and the arrangement of clusters are very complex, and the best ones for each setting are most likely to emerge spontaneously. The shortcoming of much existing research on cities is that—instead of examining cities and what it is about their *emergent spatial juxtapositions* that facilitates the development of new technical knowledge—most analysts have settled on an oversimplified and extreme shortcut: the idea of city (or metro area) size or simply overall “density” to explain success. Higher (usually population) densities presumably facilitate interactions—so let’s have higher densities. Urban economists have noted “human capital externalities” (Rauch, 1993) and have done considerable work to test the links between metropolitan area education levels and productivity or growth (Gordon and Richardson, forthcoming, survey some of this literature).

But this is much too simple. Overall density variations within any city or metropolitan area are huge; simply relying on the means and ignoring large variances oversimplifies and ignores essential information. For the United States, the Los Angeles urbanized area has been more densely populated than the New York urbanized area since at least 1980.<sup>22</sup>

Density has been taken up by Smart Growth planners who routinely prescribe “compact development” and higher densities than the market demands. The latter is often dismissed as “urban sprawl.” But this approach involves various misunderstandings. Bruegmann reminds us that “sprawl” is not new:

Most American anti-sprawl reformers today believe that sprawl is a recent and peculiarly American phenomenon caused by specific technological innovations like the automobile and by government policies like single-use zoning or the mortgage interest deduction on the federal income tax. It is important for them to believe this because if sprawl turned out to be a long-standing feature of urban development worldwide, it would suggest that

stopping it involves something much more fundamental than correcting some poor American land-use policies. ... I will argue that the characteristics we associate today with sprawl have actually been visible in most prosperous cities throughout history. Sprawl has been as evident in Europe as in America and can now be said to be the preferred settlement pattern everywhere in the world where there is a certain measure of affluence and where citizens have some choice in how they live. (Bruegmann, 2005, p. 17)

Growth means outward expansion. But the word “sprawl” is problematic because it is vague and pejorative. We are in the automobile age. Around the world, as people reach middle-class status, they want private mobility (Dargay et al., 2007). As more people acquire the range and mobility afforded by cars, origins and destinations disperse. And as origins and destinations disperse, the demand for private autos increases, and so forth. The objection to “sprawl” is really an objection to auto-oriented development as well as to autos. Along these lines, it is usually presumed that developing more compact forms (such as “transit villages” or “transit-oriented development”) will cause auto use to decline, to be replaced by transit use, walking, bicycling, and so on. “Coordinated” development of public transit and transit stations is now a favorite theme.

But there are problems with this view. First, causation may run the other way; historically dense areas may have lower auto use, but making developed areas denser is not likely to reduce auto use. Second, high-density development accounts for greater street congestion and slower, less efficient, auto use. Third, even if higher densities make distances shorter, this could increase the quantity of travel demanded, including auto travel. In the United States, Manhattan is by far the densest urban place. It is also by far the nation’s largest transit market and also has the slowest auto traffic. As mentioned, Lee (2006) shows that the longest auto commutes in America are among those of the New York commuters who *drive* to work into Manhattan’s downtowns.



The limited ability of planners and policymakers to impact these phenomena is fairly clear in Table 8.1. As 2010 census data become available, it appears that suburbanization continues in spite of significant efforts by planners to stop it. Most of them conclude that they have just not been able to try hard enough. The popular antidote to the spread of cities is “smart growth” or “new urbanism,” each of which prescribes more compact urban forms. All of this is presented as in the interests of “sustainable development” and “livable communities.” Advocates are not reluctant to suggest “regional urban design” (see, for example, Porter, 2008).

This goes with the belief that top-down planners can arrange “jobs” and “housing” to be “balanced,” that is, in closer proximity so that commuting distances can be reduced (Cervero, 1996). This view assumes that planners can do the matching and that they can do so in light of all of the trade-offs that would be involved. But individuals’ choices of job and home location are much too complex for any of this to be achieved top-down. The same goes for employers’ location choices. But the bigger problem is that these discussions leave little room for the “serendipitous connections” that foster so many of the agglomeration economies (McArdle, 2010).

Theoretical discussions of cities are still hobbled by the convenient and dated assumption of monocentric cities, in which all households send a worker to a job in the downtown. This tradition still prompts analysts to look for central city versus suburb distinctions. But these gross divisions bear very little resemblance to actual modern cities. For the United States since 1980, most commuting has been suburb-to-suburb. But when we examine the personal travel data, no matter how it is reported, we find some remarkable results. First, overall commuting times have been remarkably stable; 25.1 minutes in 2000 and 25.3 minutes in 2007 (Pisarski, 2006). Second, differences between central city versus suburban average work-trip durations are moderate. The 2001 and 2009 National Household Travel Surveys defined *four* classes of metropolitan location: “urban,” “suburban,” “second city,” and “town and country” along an “urban continuum”—

“town and country” being exurban-rural. Reported average travel (one-way, all modes) times for commuters living in these places were 28, 24, 21, and 24 respectively in 2001; the corresponding numbers from the next time the survey was taken in 2009 were 28, 24, 23 and 25 (Table 8.2). The “urban” and “suburban” travel times did not deteriorate in spite of more people and more drivers, and “suburban” commutes were of shorter duration than “urban” in both years. There is no sign of “traffic doomsday” and there is no sign that “suburban sprawl” prompts more time consuming work trips. Both results can be explained by the co-location of employers and employees in ways that prevent overly costly travel. In a world where policy makers avoid pricing the roads, these benign results can be seen as markets coming to the rescue of policy failures.

*Table 8.2: Mean commute times (minutes, one-way, all modes), 2001 and 2009*

	Urban	Suburban	Second city	Town and country	All metro	USA
<b>2001</b>						
Commute time	28	24	21	24	24	
Population*	39,757,000	61,105,000	43,140,000	60,757,000	204,050,000	253,131,000
Population share	15.7%	24.1%	17.0%	24.0%	80.6%	100.0%
<b>2009</b>						
Commute time	28	24	22	25	25	
Population*	49,563,000	69,223,000	45,322,000	65,532,000	229,639,000	283,017,000
Population share	17.5%	24.5%	16.0%	23.2%	81.1%	100.0%

*Source:* Author calculations from 2001 and 2009 NHTS; *Note:* NPTS defines an “urban continuum” from “urban” to “suburban” to “second city” to “town and country;” \*Excludes ages 0-4.

Lee (2006) provides a more complex analysis, first identifying places of work in greater detail and then noting the commuting time differences. For the fourteen largest (three million and more in 2000) American metropolitan areas, 18 percent of workers were employed in the main center, 15 percent were employed in various sub-centers and 68 percent were “dispersed,” that is, not working in a major center.<sup>23</sup> The “dispersed city” is a much more widespread phenomenon than many suppose. The respective average commuting times for the three groups were 35 minutes, 30 minutes, and 26 minutes (also one-way and drive-alone only). Again, the variations are not

great; many in the first group were commuters to Manhattan's two centers, where many use public transit and still experience a more time-consuming trip. But how is it that on average the dispersed workers had the shortest commute? Contrary to the fear that "sprawl" causes long commutes, many employers apparently found it to their advantage to locate in places that were convenient to large numbers of workers. Lee found similar patterns for all of the 79 metropolitan areas that he studied. It is doubtful that top-down land use planning could have achieved this benign result.

A similar market process apparently applies to the location of shopping opportunities. Consider that the idea that centers and sub-centers have evolved. Rybczynski writes:

To understand the implications of an urbanism based on popular demand, it helps to look at an environment where the consumer is paramount: the places we shop. Shopping habits have changed radically over time. A century ago, shoppers dressed up and took a streetcar to a downtown department store; fifty years ago they drove the station wagon to a suburban shopping center; twenty-five years ago they might have spent the afternoon at the mall. Today, many young people have never seen a true department store ... and I suspect in another twenty-five years many shopper will never have set foot in a mall. (Rybczynski, 2010, p. 93)

But he also reports that "even as dispersal appears to be the order of the day, concentration is making a comeback. Sometimes concentration takes new forms: power centers, office parks, theme parks, and villagelike planned communities in the middle of nowhere" (ibid., p. 171). These are multi-purpose places. Shopping and entertainment are hard to separate. So even if people do not rely on a traditional downtown, they still enjoy being among others and can do so

in a variety of suburban places. The critics have not noticed that people seek and find “community” in all sorts of places.

The International Council of Shopping Centers reports that there are about 100,000 “shopping centers” (including many “Lifestyle Centers”), which account for about 50 percent of America’s retail gross leasable area. Whereas some of the centers are Edge Cities that include many of the functions once associated with downtowns, many others are developed at low densities that are seemingly under the radar (as in *Edgeless Cities*; see Lang, 2003). So, rather than downtown and the ‘burbs, it is an extremely complex arrangement. The many small “centers” are spatially distributed so that the average shopping trip by central city versus suburban residents in the United States were of similar duration, 14 minutes for central city residents and 16 minutes for residents of suburbs (2009 NHTS data; see Zhu, 2011). In fact, the 2001 and 2009 travel surveys by the U.S. Department of Transportation show that the average shopping trip distance in 2001 and 2009 was the same, at 6.7 miles each way. In the intervening years, the American population had grown by 7.8 percent but shopping access had not gotten out of reach in spite of significant growth and development.

It should not be surprising that emergent orders have an important spatial dimension. Emergent “spatial orders” have been described by Chris Webster and Lawrence Wai-chung Lai:

The creative order that emerges as individuals interact to discover, test and exchange new knowledge has been termed *catallaxis* and involves innovation. It happens when resource owners, however meager their assets, find others who want something that they possess and discover how to process their assets to supply that need in return for remuneration. *Catallaxis* as an economic model contrasts to the traditional neoclassical maximization model by being open ended and relatively unconstrained. In the comparative static neoclassical world, profit and utility maximization is limited by endowment constraints

including production technology. In the catallactic world, knowledge evolution, innovation and adaptation guarantees a constant supply of new wealth-enhancing opportunities for those willing and able to use their resources productively in exchange or in combination. (Webster and Lai, 2003, p. 35)

This spatial order allows for the internalization of many positive externalities and the avoidance of many negative externalities. In fact, land markets are the only mechanism that we have for pricing these (see Pennington, 2002). As we will see in the discussion of private land use planning (below), the spatial order also involves the supply of many “public” goods and spaces.

Urban economics began with *equilibrium* models that describe economizing behavior with respect to job access. There are several problems with this approach. First, it skirts the important question of how cities change to facilitate growth and development; the topic that is taken up in the previous pages. But the simple model is incomplete on its own terms. Economizing behavior in space involves access to all sorts of places and activities. Bids for space at any location are formed as the bidders evaluate various sites for their interaction potential with large numbers of other locators. These interactions *may or may not* involve explicit transactions. *Potential* externalities are carefully considered. The emergent spatial arrangements determine which of the potential externalities become *realized* externalities. All of this requires open-endedness, which is what it takes for better arrangements to emerge as the world changes. So it is not simply clustering or size or density; what matters is the specific nature of each cluster. Is it a place that is congenial to inventiveness and productivity?

How do we get such places? There is no choice. The fortunes of cities rise or fall, depending on how well they provide opportunities for greater productivity. The productivity of most enterprises is often linked to location with respect to suppliers, workers, customers, and

information opportunities. This involves complex trade-offs that each locator has to evaluate. But spatial organization is the key ingredient missing from most discussions of the sources of economic growth (Figure 8.1). “Bad” institutions have been cited as retarding growth while flexibility has been cited as essential (Acemoglu’s argument); the same applies to the malleability of location patterns. This brings us back to the importance of trial-and-error experimentation, feedback, and discovery opportunities—and the fact that market participants are most sensitive to feedback. These do the important work in a profit-loss system. To be sure, Jacobs (cited in Rybczynski, 2010, p. 60) wrote that “[c]ities are an immense laboratory for trial and error, failure and success, in city building and city design.”

As already noted, events in the United States and elsewhere (as Figure 8.1 shows) have overwhelmed the ideas as well as the efforts of top-down planners. Rybczynski writes:

[Herbert] Gans, who had taught in a city-planning department, took issue with Jacob’s critique of city planning. Not because he was particularly sympathetic to planners—although he pointed out that most city planners probably agreed with her proposals—but because he felt that she exaggerated the power of planning in American society. “The truth is that the new forms of residential building—in suburb as well as city—are not products of orthodox planning theory,” he wrote, “but expressions of middle-class culture which guides the housing market, and which planners also serve.” In an entrepreneurial society where people are free to choose how, and where, to live, they will ultimately get what they want, not what planners think they need. (Rybczynski, 2010, p. 91)

Gordon and Ikeda (2011) challenged analysts’ focus on whole cities or metropolitan areas and the various studies that linked city-wide or metropolitan-area-wide descriptors, especially population densities and the skill set of resident workers, with metropolitan success (examples of

metropolitan-wide analyses include Dalton and Zabel, 2009; Glaeser and Ressenner, 2010; Ihlanfeldt, 2007; Kok et al., 2010; Malpezzi et al., 1998; and Schuetz, 2009). Unlike these analysts, Gordon and Ikeda studied the top *sub-metropolitan* destinations of United States migrants with advanced academic training (those with Masters degrees and higher) by considering arrivals at the over 2000 Public Use Microsample Areas (PUMAs) that are classified as “metropolitan” by the U.S. Census Bureau. These areas are useful because they are much smaller than most cities; density variations are significant enough to undermine the usefulness of large-area averages. The authors found that

[s]ubstantial human capital (as measured by people with advanced degrees) can be seen to migrate to parts of Manhattan as well as to areas such as Silicon Valley. These people are seemingly attracted to opportunities found in ‘low density’ as well as in ‘high density’ places. Four of the top 25 (out of 2069 areas included after discarding ones with only partial data) were in Manhattan and four of the top 25 were in Silicon Valley; other top-25 destinations included West Los Angeles or suburban Washington DC, suburban Seattle, Boston, suburban Chicago, Austin or San Diego. The densest receiving area (in Manhattan) was thirty-eight times as dense as the most spread out (in Silicon Valley, California), yet each one succeeded in attracting highly educated, (and presumably creative) people ... the sizes of areas ... vary from below ten square kilometres (in Manhattan) to one just over 300 square kilometres (in the Washington DC suburbs) and one just over 250 square kilometres (in Silicon Valley). (Gordon and Ikeda, 2011)

Clearly, the simple idea of “density” is not adequate. And favorable spatial arrangements can occur in a wide variety of settings. Silicon Valley is still an agglomeration, albeit one that spans San Francisco Bay.

There are many kinds of proximity. Easy auto access rather than pedestrian access may be sufficient and is widely available in many areas. Electronic networking is clearly a plus; it is a complement and not a substitute for conventional networking. Gordon and Ikeda (ibid.) introduced the idea of

‘Jacobs density’ ... The drawback to this measure is that data on Jacobs density may be hard to get, because it would have to combine measures of distance travelled per hour (say) of the average user of public space and the average number of public stopping points in which informal contacts could take place. ... However, we can say that the informal contacts that form social networks valuable for entrepreneurial discovery would be hard to imagine taking place absent an environment of economic freedom ...”<sup>24</sup>  
(Gordon and Ikeda, 2011)

## **DIVISION OF LABOR**

The variety as well as the ubiquity of emergent orders is clear. But it is also true that almost everything within reach of our senses is designed by humans. How much of the order in our lives is from human action and how much is from human design? What should be the proper division of labor? Holcombe has taken a stab at providing an answer for the American context. He writes:

A strong argument can be made for leaving the government out of the land use planning process altogether, and allowing private landowners complete freedom to use their land as they want, so long as their land use does not create a nuisance for others. ... the law of nuisance is superior to zoning for preventing conflicting uses of land. Still, under current



institutions, the government must play a crucial role in land use planning, because it owns nearly all the roads. But for optimal land use policy, the government must play a role considerably different from the role recommended by the New Urbanists. It should plan more for its own infrastructure development—especially roads—and do less planning about how private landowners can use their land. If government does a good job planning for the location of transportation corridors, private landowners will be led by market forces to make efficient land use choices. (Holcombe, 2004, p. 295)

In this view, top-down planners set the “rules of the game” via published infrastructure plans. Private land owners are then free to plan and develop land uses subject to these specifications. To be sure, the New Urbanists often insist that they are critics of poorly conceived top-down planning. But they part company with Holcombe’s approach because they are optimistic that it is possible to replace “bad” top-down planning with “good” top-down planning.

That aside, there are two ways to parse Holcombe’s argument. First, consider his mention of “government.” In a world of increasingly dispersed knowledge involving people with strong demands for property rights, we should expect that at least some authority is also decentralizing. While the demand for property rights has been used to explain the early twentieth-century adoption of zoning codes in the United States, their recent privatization in many places fits the view that many large-city governments have lost credibility and trust in this area. Discussions of modern American cities must acknowledge the phenomenal growth of private communities (revealingly labeled “master-planned”) as well as privately organized business improvement districts.<sup>25</sup> There are presumably now 900 of the latter in the United States.<sup>26</sup> In addition, almost 20 percent of the American population reside in privately governed communities (most of them *not* “gated”); between 1980 and 2000 one-half of new housing was placed in such communities (Nelson, 2005; Pennington, 2002; Briffault, 1999). People do vote with their feet. Both of the

cited privatization phenomena are essentially spontaneous orders. When relatively small units can be formed, novel institutional arrangements can emerge spontaneously to create property rights, as Elinor Ostrom has found on more than one occasion.

Most private business or residential communities include all manner of “public” spaces, “public” facilities and “public” services that are supplied in response to market signals. Foldvary (1994) points to the fact that local public goods have benefits that are available over a limited space. He calls them “territorial goods.” In that case, the benefits are capitalized in land values and provide market signals to guide developers. Once again, events have overtaken academic discussions of the public versus private divide, as well as standard definitions of “market failure.”

Private communities involve governance that generates and makes available rights versus protections trade-offs. Members are keen to protect the value of their homes and rightly see neighborhood change and neighborhood quality as a commons. This explains homeowners’ natural demand for rules of property. The various “Not in My Backyard” (NIMBY) battles reported in the popular press are simply disagreements over neighborhood property rights when the rights are not adequately clear. While elaborate community-level rules have been criticized by many as intrusive, they represent the emergent trade-offs vetted by markets. Private zoning can internalize externalities in the same way that a private shopping center operator tries to match stores with locations so as to maximize overall profitability. NIMBY conflicts are less likely to occur in this situation. Homeowners will have sorted for broadly similar development tastes.

So whereas private planning diminishes a serious problem, conventional “public” zoning and related regulations have added to the problem of development limits that have contributed to the housing affordability difficulties of recent years (Glaeser and Gyourko, 2003; see also Gruen, 2010, for a summary of recent research). This may seem ironic because one of the popular

rationales for interventions in land markets is that markets supposedly fail to adequately meet what are usually referred to as “broader social goals.”

But the main point is that in light of the growing popularity of private districts and communities, we can modify Holcombe’s approach: not all roads are government-owned; considerable land use and infrastructure planning are jointly executed and private. Private developers are motivated to internalize various externalities and determine economic scales of infrastructures and other features.<sup>27</sup>

Nevertheless, at some point elements of private infrastructure link up with their public counterparts. At some point there will be conventional governmental units that supply the remaining public goods. But the further up the supply chain this occurs, the better. Non-private actors, as already suggested, face an information deficit as well as politicization problems.

The second reaction to Holcombe’s proposal is more general. Most of the artifacts that we are in touch with involve *human design subject to market forces*, benefiting from price signals. Most human designers, therefore, interact with market forces via trial-and-error feedback and learning. The visions of entrepreneurs and the designers in their employ benefit from continuous feedback and error-correction opportunities. People will make mistakes and thus error-correction opportunities must be available. This is why emphasizing discovery and having discovery opportunities are so important. This view of design greatly expands the domain of emergent orders. All of the elements that make up private communities have designers and they are all subject to market forces.

Rapid change in consumer electronics provides a useful and obvious example of market dynamism. Profit-seeking, competition, and market feedback account for amazing product improvements, for example continuously superior designs. These are very basic concepts—even though some writers have noted that trial-and-error learning is not the focus of neoclassical economics—and essential elements of the market economy.<sup>28</sup>

But how scalable is this model of human design subject to market forces? Which are the cases or situations where the error-correction process is *not* to be counted on? Such cases have two attributes. First, market demand is harder to identify when it comes to large and unique projects. Second, project scale or uncertainty can limit the possibility of attracting enough private capital. These two attributes define the urban “mega-projects” which are removed from trial-and-error as well as market discipline by their very nature. They are not amenable to small steps or easy reversibility. That’s the trouble with grandiosity.<sup>29</sup> Not surprisingly, the urban mega-projects have a mixed record of success. Americans rightly celebrate the Erie Canal, New York’s Central Park, the Interstate Highway System and a few others. But we also know about all of the ill-fated “public-private” projects whereby public moneys (including tax breaks) subsidize private sports arenas, convention halls, or even aquaria (see, for example, Siegfried and Zimbalist, 2000). Peter Hall (1982) even devoted a book to *Great Planning Disasters*<sup>30</sup>, in which he documented various mega-project failures and noted that they were each conceived with the hope that they would alter the shape of their city, but failed to do so. The mega-projects have a notoriously poor record in terms of the gaps between their costs and benefits—and the misallocations of public funds allocated to make up the difference (see, for example, Altshuler, 2003; Flyvbjerg et al., 2002). And as public choice analysis suggests, crony capitalism becomes a concern.

Mega-projects, then, are the only logical exceptions to market-guided human design. To be sure, there was a time in our past when most transportation and infrastructure services were private (Beito, 2002). Even now, a moderate reversion to private ownership is underway, especially in places where public providers are trying to raise revenues by selling facilities. Indeed, Winston (2010) titles the first chapter of his recent book “Back to the Future to Improve U.S. Transportation.”<sup>31</sup> Anything that can be metered can possibly be privatized, so the widespread presumption of public planning and ownership can be reconsidered. There are, of

course, also many non-metered private facilities available to the public, because these are bundled with private facilities. The private shopping center, again, includes many obvious examples. The more privatization, the more innovation and improved productivity will be forthcoming.

This discussion parses Holcombe's proposed division of labor. Top-down planners remain responsible for the urban mega-projects as well as infrastructure requirements beyond private projects, be they residential, commercial or any other. All of the rest is better left to bottom-up planners. This approach is appealing because city forms around the world are fairly durable and much too diverse to be subject to common top-down planning principles.

But the world we live in is not divided between bottom-up and top-down responsibilities in this simple manner, because of ideological attachments. Enduring optimism over the prospects of top-down urban planning reaches back to the Grand Manner idea and is still popular among abstraction-prone High Modernist architects who are ready and eager to design whole cities. Fishman describes the tradition in this way:

[Ebenezer] Howard, [Frank Lloyd] Wright, and Le Corbusier had a different outlook. They were not afraid to ask basic questions about the structure of cities and of societies; or to consider large-scale problems; or to envision and work for the social changes that might be necessary to carry them out. They still believed that human efforts could solve human problems. They had the confidence to think that an advanced industrial society could create an urban environment worthy of its highest values. Inevitably, they were disappointed, but I hope that their ideals are not irrelevant to our present tasks. (Fishman, 1994, p. xii)

In fact, writing about Le Corbusier, Rybczynski notes,

Major American cities such as Los Angeles and New York had adopted zoning legislation before the First World War, but Le Corbusier gave zoning an aesthetic rationale. Henceforth, not only would residential and commercial uses be placed apart, but a variety of other functions would be isolated in self-sufficient ‘centers’—shopping centers, convention centers, cultural centers, government centers, sports centers, and so on. The modern city would no longer be a hodgepodge of activities; it would be ordered, logical, and *planned*. ... The Soviet Union, which had rejected his architecture in the 1920s, adopted his idea of mass-produced housing and high-rise urbanism and exported them to its ally Communist China. In America, the designers of the public housing projects that were built in almost every major city also adopted Le Corbusier’s vision. (Rybczynski, 2010, p. 49)

In many quarters, city planning is *presumed* to be the natural preserve of top-down planning and bottom-up is pre-empted as a matter of policy. The Smart Growth movement builds on this presumption. To be sure, top-down cannot entirely ignore market forces, because capital and labor are mobile, but these forces are slow-moving and often beyond the time-frame of political decision-makers.

There are real mega-projects, but there is also the view that eagerly places all sorts of other projects in the same category. This approach discards market-based error correction opportunities. And it invites rent-seeking and politics. This means Bootleggers-and-Baptists phenomena (Yandle, 1983). In that case, we have well-meaning professionals who are simply on the wrong side of the calculation debate allied with those in the private sector who seize on opportunities for self-dealing.<sup>32</sup>

## CONCLUSIONS

Many would like to assume that the socialist calculation debates were won by market economists many years ago. But whereas top-down central planning no longer enjoys the intellectual approval that it once had, the same cannot be said for the top-down planning of cities. Today's city planning literature features considerable concern over "urban sprawl" and presumably associated market failures—including inadequate open space, traffic congestion, air pollution, high cost of services, improperly patterned land uses, and so on. The fact that many of these problems can be mitigated by privatization is seldom acknowledged. And while sprawl remains poorly defined, suburbanization is widespread and notable in the large cities of the developed countries, thereby undermining the presumption that variations in policy approaches make a difference. In fact, to the extent that people's preferences trump international policy differences, it appears that it is the spontaneous orders seen in cities that matter most.

## NOTES

1 "Top-down" vs. "bottom-up" characterizations of institutional change have been adopted by institutional economists (see Easterly, 2008).

2 Horwitz (2001, p. 82) summarizes the Austrian tradition: "the study of human action leads to a focus on three issues: the limits of human reason arising from the inarticulate nature of much human knowledge; the institutional arrangements that evolve to enable humans to make use of dispersed and tacit human knowledge; and the processes that hamper or foster the evaluation of such institutions."

3 The Germans say *Stadtplan*; the French say *Plan de la Ville*. I am told that Koreans also refer to the city map as a plan, whereas Chinese do not.

4 “It thrived because it could stage easily perceived strong urban images that were at once modern and resonant with authority. This is what appealed to the City Beautiful movement of the United States, as Daniel Burnham, Charles Mulford Robinson, Edward Bennett and their associates sought to civilize the anarchic growth of the American city seized by the demon of commercialism and the unabridged tolerance for the *laissez faire*” (Kostof, 1991, p. 218).

5 Rybczynski (2007) is a case study summary of all of the regulatory twists and turns that one modern residential development goes through.

6 As recently as 1995, the *Economist* (pp. 5-6) in its “Survey of Cities” reported; “Clearly there is a difference between the European city with its dense historic heart based on walking and public transport, and America’s unfocused sprawl based on the car. Even so, European cities are subject to the same processes as American ones. They too are generating new suburbs and allowing old areas to decay.”

7 For the United States, Carruthers and Ulfarsson (2008, p. 1797) report: “As of 2005, legislation had been adopted by 20 states and many other initiatives have been implemented independently at the local level.”

8 *Kelo v. City of New London* (see Epstein, 2008).



9 One observer who is not surprised is Rybczynski (2010, p. xiii) who writes that the “urban vitality that she [Jane Jacobs] espoused—and correctly saw as a barometer of healthy city life has found new expressions in planned commercial and residential developments, whose scale rivals that of the urban renewal of which she was so critical. These developments are the work of real estate entrepreneurs, who were absent from the Jacobite city described in *Death and Life*, but loom large today, having long ago replaced planners as our chief urban strategists.” And “[i]f the first half of the twentieth century in American urbanism—the era of the City Beautiful movement, the garden suburbs and urban renewal—can be characterized as the Age of Planning, the period after 1970 was the Age of the Market” (ibid., p. 93).

10 Where there are cracks, there are usually growing vines: “Despite North Korea’s obstinate commitment to central planning, the market is growing like a vine in the cracks of the socialist edifice” (*The Economist*, Jan. 1, 2011, p. 70).

11 Ikeda (2004) argues that various interventions not only ignore local knowledge, but may also distort it.

12 Google Scholar comes up with 82,000 mentions of “market failure” and 24,100 mentions of “government failure.” To be sure, there are probably some references that cite both and not all references accept either as established fact.

13 Not only do socialists reject or ignore these two points, but many of them sincerely believe that socialists and socialism are morally superior.

14 A timely summary of growth economics is in Wight (2011).

15 de Haan and Sturm (2000) note that there is more than one index, but that they yield similar results in tests of the links between greater economic freedom and economic growth.

16 The formation of complex supply chains without price signals cannot be imagined, but it was not until Hayek (1945) forcefully made this point that the basic idea was widely appreciated.

17 Jacobs was particularly concerned with urban redevelopment planning: “What will the projects look like? They will be spacious, park-like and uncrowded. They will feature long green vistas. They will be stable, symmetrical and orderly. They will be clean, impressive and monumental. They will have all the attributes of a well-kept, dignified cemetery” (Jacobs, 1961, cited by Rybczynski, 2010, p. 55).

18 “I, Pencil, simple though I appear to be, merit your wonder and awe, a claim I shall attempt to prove. In fact, if you can understand me ... I have a profound lesson to teach. And I can teach this lesson better than can an automobile or an airplane or a mechanical dishwasher because—well, because I am seemingly so simple. Simple? Yet, *not a single person on the face of this earth knows how to make me*. This sounds fantastic, doesn’t it? Especially when it is realized that there are about one and one-half billion of my kind produced in the U.S.A. each year” (Leonard Read: [http://en.wikipedia.org/wiki/I,\\_Pencil](http://en.wikipedia.org/wiki/I,_Pencil)).

19 Kohn (2004) discusses the limits of neoclassical economics, including its neglect of entrepreneurial activities.

20 Paul Krugman (1991) and others have modeled economies with “agglomeration economies” that only consider pecuniary externalities. These (“new economic geography”) models also omit land markets. The analysis in the rest of this paper does require land markets as well as externalities beyond the pecuniary type.

21 See Desrochers (2001) for a summary of the two sides’ findings.

22 As reported by the U.S. decennial census. The “urbanized areas” do not follow the boundaries of political jurisdictions, as distinct from the bureau’s “metropolitan areas,” which are made up of one or more counties. The urbanized areas are thought to more closely define the areas that are actually settled at densities to merit the label.

23 Lee used two statistical methods to define centers and sub-centers. For the second method, the respective proportions were 7, 15, and 78.

24 More than one study has determined that a doubling of *metropolitan-area* density increases productivity by about 6 percent (see Harris and Ionnadis, 2000; Ciccone and Hall, 1996). A previous literature went so far as to speculate on an optimum urban size.

25 There have also been discussions of how older established neighborhoods, including those in the inner city, could be privatized (see Nelson, 2005)

26 [http://en.wikipedia.org/wiki/Business\\_improvement\\_district](http://en.wikipedia.org/wiki/Business_improvement_district)

27 Many more roads and highways could (some say should) be privatized (see, for example, Winston, 2000).

28 Coyne (2010) elaborates the contrasts between neoclassical and Austrian economics: the former emphasizes allocation while the latter focuses on exchange. Tullock's (1965) analysis of bureaucracies describes the objectives of bureaucrats and demonstrates that bureaucrats' interests are not likely to involve feedback from market tests.

29 Tim Harford's *Adapt* (2011) discusses this general class of problems beyond the urban examples.

30 In response, John Landis has recently written about "Ten Planning Successes" (2011). He includes various new downtown ballparks that he reports attracted ancillary investments.

31 In a previous paper (Winston, 2000), he argued for privatization based on his conclusion that hoping for better public policy or management was futile.

32 Gruen (2010) includes summaries of the state of current land use regulation.

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