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Behaviour, Preferences and Cities: Urban Theory and Urban Resurgence

Michael Storper and Michael Manville

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Summary. The resurgence of big, old cities and their regions is real, but it is merely a part of a broader pattern of urban change in the developed countries, whose broadest tendency is urban emergence, including suburbanisation, and movements of population to certain ‘Sunbelt’ regions. The problem is that it is difficult to accommodate explanation of both resurgence and emergence using the main explanations in the field today. These include: theories of the knowledge or creative economy, urban amenities, diversity and tolerance, and urban beauty. In most of their common specifications, they do well for either resurgent or emergent cities, but not for both at the same time. This suggests that these ideas, interesting as they are, require much greater specification and, in some cases, overhaul, in order to offer satisfactory responses to the diversity of patterns of urban growth. By examining some of these deficiencies, we conclude that urban theory needs a better understanding of urban choice behaviours and especially the effects of bundling, the limits to preference substitutions and the relationship between past and present preferences, in order to become fully effective in explaining urban resurgence and urban emergence. When these aspects of choice and preference are better integrated into urban theory, then the ‘exogenous’ causes of urbanisation can be made more endogenous and, in addition, they can be applied better to both emergence and resurgence. Urban research can, by so doing, also potentially become more policy-relevant.

1. The Recent Past: ‘Resurgence’ from What?

In the final chapter of his history of American urban revitalisation, John Teaford (1990) notes that, in 1955, *Time* magazine devoted a cover story to ‘The rebirth of the city’. In 1962, it devoted a similar story to urban rebirth, titled, simply, ‘Renaissance’. In 1981, the magazine gave a cover to developer James Rouse, king of the festival marketplace, and titled it ‘Cities are fun!’ Six years after that, in 1987, the cover went to ‘Bringing

the city back to life’. The urban comeback has been coming for some time now.

And yet so has the urban crisis. Six decades of boosterism for the city have been matched by decades of despondency as well. ‘The city is doomed’, Henry Ford declared in the 1920s. ‘Is the Inner City Doomed?’, the *Public Interest* asked in a 1971 symposium. The answer was yes, at least according to the symposium’s contributors: America’s cities were now ‘sandboxes’ (Sternlieb, 1971) or ‘reservations’ (Long, 1971)—museums of themselves, to be photographed

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by tourists, or containers for a permanent underclass. In 1987, just as *Time* was bringing the city back to life, Pascal, with his 'vanishing city' thesis, was laying it to rest (Pascal, 1987). New Economy capitalists in the 1990s declared urbanity obsolete (Garreau, 1991). The cities were the jetsam of another age, vertical settlements in a horizontal world, artefacts of a time before distance died. They were not where people wanted to live and were no longer where they had to work.

The old, cold, dense city-region of the Western world has become, in the eyes of observers, something like a frail and ageing relative. There is constant fretting over its condition and, while all acknowledge the withering effects of age, the mood is occasionally interrupted by fits of optimism, or by the warm glow of sentiment and nostalgia—the patient seems to be recovering, he exudes all the energy of his adolescence. Just as often, an icy pessimism takes over: the end, it is said, is truly near. And of course there are the wonder drugs, loft living, convention centres, creative professionals, the glass and steel of the post-industrial CBD. For all the bedside clucking, however, and all the catchy names—the urban crisis, the comeback city, the renaissance, the collapse, the rebirth—how much change has really taken place?

The question is worth asking, because it now seems that a multifaceted process of urban resurgence unfolded in the 1990s. A number of big dense metropolitan areas in colder climates, the very symbols of urban decline, once again started to add jobs, enjoyed high levels of per capita income growth, attracted significant new investment in both central cities and suburbs, and saw steep increases in population and/or housing prices. The revival of American urban areas like Boston, New York and Chicago, and European centres like Paris and London, belied the idea that old cold places could live only in the basement of the new economy.¹ Increases in the population of a handful of central cities similarly contradicted long-held beliefs about their inevitable decline.

The presence of these resurgent cities does not, however, reverse the overwhelming growth of less dense urban areas in warmer climates, nor suggest that people have suddenly abandoned the suburbs for a renewed love affair with downtown life. In the aggregate, American centre cities lost population in every year between 1985 and 2000, while American suburbs grew in all of those years and American rural areas grew in all but one (US Census Bureau, 2004). Centre cities that were distressed in 1980 remained, on the whole, distressed 20 years later (Furdell *et al.*, 2005). The South and the West grew more than the Midwest and Northeast. So much for urban resurgence. But things are not really so simple. In 1985, historian Eric Monkonen surveyed the evidence of the 1960s and 1970s and calmly called the urban crisis 'an imaginary event'. Cities, he said, were by historical standards healthier than ever. So much for urban collapse. In Europe and Japan, of course, the decline of older cities was never as big a process as in America; yet the continued vitality of central cities there, accompanied by on-going suburbanisation and metropolitan fringe growth, is their version of the renewed vitality of old centres in America and Britain. Nowhere, even in America, did dense urban life come to an end; distance never died and the world never became a flat suburbanised plane.

Confusion arises in the debate over resurgence because it would seem to concentrate on old, cold central cities, while the bulk of population growth has been going to suburbs, warm regions or newer metropolitan areas—with the mix of these phenomena varying from one country to another. But as we imply above, there is no contradiction between these phenomena: both overall tendencies exist and they are no longer mutually exclusive as they seemed to be, especially in the US in the 1950s and 1960s. Thus, it behoves us to consider resurgence and, ultimately, whether it has common cause with the other broad trends in urbanisation—suburbanisation and interregional population movements—or whether what is going on in old and/or cold places is driven by distinctive

forces. Put more bluntly, can the factors attributed to explain urban emergence also explain resurgence? We propose that they cannot, as currently formulated, but that they can be modified to do so.

For our purposes, then, resurgence refers to two separate but related processes, on two distinct but related geographical scales. The first, which this article deals with in more depth, is at the regional level: the revival of entire metropolitan areas that had previously lost population and investment. The second is the jurisdictional level: the revival of central cities themselves. The former phenomenon has been more extensive than the latter, although the latter seems to command more attention in the popular press. Both levels are intertwined, however. The resurgence of a metropolitan region is due in part to an external shift in the nation's economic geography, but also in part to shifts within its internal space that make it more appealing. For the rebirth of a central city, the growth of its surrounding region is also necessary (we do not see thriving cities and stagnant suburbs) but not sufficient (for we do see stagnant cities and thriving suburbs). The revitalised central city needs not just a growing region, but also some shift within that region that moves people towards city life.

2. Preferences for the Old and Cold

We now examine the major explanations that have been put forward for urban resurgence, including agglomeration economies, new tastes for amenities, diversity and tolerance, and aesthetic beauty. We focus primarily on resurgent urban areas, but in our discussion of beauty take up the subject of resurgent centre cities as well. We show how emergence and resurgence taken together pose problems for these explanations and demand that they be respecified, placed in a context of complex feedbacks and seen as less 'exogenous' than they are in most existing explanations. In section 3, we then build on this latter point to argue that this makes phenomena such as resurgence difficult to anticipate in centre cities, limiting the usefulness of

urban research to informing policy. But there may be ways to improve on this situation.

2.1 *The Preferences of Firms? Agglomeration Economies and Urban Growth*

Regions grow where firms congregate and no theory of urban resurgence can afford to ignore agglomeration economies. We remain unsure, however, of what generates agglomeration and, conversely, of what weakens it. Much of the early research on agglomeration focused on manufacturing, and in this regard history may have played a trick on us, for we poured our efforts into understanding manufacturing as the basis of urban economies just as manufacturing was ceasing to be the basis of urban economies.² The decentralisation of traditional goods manufacturing, however, has essentially ended cities' role as centres of much such traditional goods production.

This was indirectly recognised in the 1980s, when economic geographers noticed strong agglomeration tendencies in certain industries, in the midst of a general tendency towards decentralisation and interregional dispersion of manufacturing, and began to see them as possible sources of 'new industrial spaces'—but it took them longer to apply this thinking to older cities, which they did by the early 1990s in likening the growth of Wall Street or Hollywood to the growth of Silicon Valley (Storper and Scott, 1995). Still others saw the decline of mass manufacturing not as the deathstroke of urbanism but rather as a painful yet necessary correction in cities' economies. Manufacturing's location in central cities, these scholars claimed, had been an aberration, one that provided a temporary surge of growth at the cost of misallocating valuable land. Historically, cities had been centres for the exchange of ideas and, with manufacturing's exit, they could be expected to reassume this powerful and more durable role (Cheshire and Sheppard, 1995; Drennan *et al.*, 1996; Frey, 1993). The end of concentrated manufacturing did not mean the end of concentration.

Yet even some narratives that took this view did so morosely. Perhaps the

best-known account of growth in old cold places is Sassen's (1991) theory of 'global cities'. Sassen described resurgent cities, but her picture was a baleful one. She argued that the growth in London, New York and Tokyo was limited to financial and producer services, and that the wealth it created was offset by an equally efficient creation of poverty and marginalisation, making it ultimately unsustainable. This claim—that the expansion of these sectors only masked a continuing turmoil in other areas of urban life and that it left people behind rather than picked them up—turns out to be generally untrue. The 'global cities' have done much better at generating income growth than manufacturing cities, emergent or older (Drennan *et al.*, 1996; Drennan, 2002), and their increased inequality comes almost entirely from disproportionate increases in incomes at the top of the income distribution, not decreases at the bottom.

In any case, as they have been for much of history, cities are now centres for the production of rapidly changing goods and services, not hosts for the production of durable goods (Cheshire and Sheppard, 1995). The medium-sized cities built around manufacturing (Gary, Indiana; Sheffield; Lille) continue to decline and the old cold dense areas that are recovering are not doing so as a result of their first nature or 'hard input' advantages. The new economy's demands for proximity are largely stimulated by the way that knowledge is transmitted, which often requires that people work in close quarters with one another (see Leamer and Storper, 2001; Storper and Venables, 2004; Seabright, 2004).³ The proximity advantage lies not in information's quantity, but in the ability to mediate it. Distinction and differentiation become important once visual and linguistic information become banal and it is in cities that information is not just created but sorted—where the 'important' information moves to the top of the enormous heap of banality and gets diffused. Thus, the mediation of this information, because much of it is new and not standardised, often requires face-to-face interaction, which is crucial for learning,

building trust and reducing risk. Face-to-face contact is a 'soft' exchange: it allows information to be mutually understood, placed in context and verified (Storper and Venables, 2004). Thus, it creates the human relationships necessary for innovation.

But knowledge-based agglomeration economies are qualitatively different and we know least about them (Veltz, 1996; Anas *et al.*, 1998). Traditionally, agglomeration has been viewed as a force that makes industries stay in one place, in the sense that it changes the division of labour and overall set of functions in the industry, and some of these functions grow and require proximity. Agglomeration still has this effect, but knowledge-based agglomeration also has a dynamic aspect that may be more relevant to urban resurgence. First articulated by Jane Jacobs (1969), the idea behind dynamic agglomeration economies is that cities decline not because industries leave but because new industries do not spring up in their place. Agglomerative forces in this interpretation use the transmission of knowledge to replenish the well of entrepreneurship and innovation, not just to lock firms in a single location. At this point, a debate begins: some argue that, unlike hard-input agglomerations, which tend to be found in medium-sized manufacturing cities with specialised economies, soft-input economies are found more in big cities with diverse economies—precisely the sorts of places we see resurging. In such places, it is the diversity of the economy that both sustains and is sustained by the easy movement of knowledge. Information spills from one industry to another, creating agglomerations in new branches of the economy; the talent and knowledge from Hollywood, for example, have flowed out and helped to sustain LA's fashion, design and advertising industries (Molotch, 1996).

Others disagree, or at least point out that a diverse economy cannot mean an economy that fails to specialise. Drennan (2002) has shown that the lack of any specialisation is correlated with decline. Most healthy urban economies specialise in at least one sector and then surround that sector with others

that help it absorb negative shocks. The important question may not be specialisation versus diversity, but whether a city has specialised in the right thing at the right time. Unfortunately, with agglomeration economies becoming detached from obvious ‘pull’ forces like ports and rivers, we have lost some of our ability to explain why specialisations arise in the places they do. We are also without some of the ready answers that explained the post-war rise of the Sunbelt: the accessibility of air conditioning, the appeal of cities built around the automobile and many other factors that help explain the ‘where’ of agglomeration economies in the American Sunbelt or in the edge cities of Europe (including government policy).

Indeed, for resurgent urban areas, we are better at explaining the ‘how’ than the ‘where’. Although we know something about why financial industries or high technology are spatially agglomerated, we do not have good theories for why financial services agglomerations are in resurgent cities such as New York and London, and high technology is in an emergent city such as San Jose. History and path dependency are partial explanations: older industries in older places, newer industries in new ones. But a story like that is riddled with exceptions. Why is high tech in Helsinki or Paris? Why are financial services in San Francisco?

Placing agglomeration economies at the heart of urban resurgence requires that we explain why agglomeration of many key knowledge-economy activities has occurred in cold, dense, once-declining urban areas, if so many of the supposed causes of locational choice have shifted to suburbs or warm and sprawled metropolitan areas. Although the deregulation of brokerages and the end of the Bretton Woods agreement, by spurring massive new amounts of financial activity, helped New York and London, which have long been centres of finance, this cannot become a general explanation of the ‘where’ of contemporary agglomeration economies, because such a resort to ‘history and path dependency’ would in turn obviate the attraction of the newer, sprawled areas.

To get around this impasse, many researchers focus on a possible source of agglomeration economies that cuts across resurgent and emergent cities: the preferences of the high human capital workers who make the information economy run. Implicit in these explanations is the idea that firms follow skilled people and skilled people go to places with amenities that suit them. But additional problems emerge when these explanations are considered in detail.

2.2 The Amenity City: The Preferences of Skilled Workers

Edward Glaeser best summarised the prevailing wisdom about post-war urban growth in the US when he said its recipe was “sun, skills and sprawl” (Shea, 2004). Cities that could offer warmth in January and easy auto access grew rapidly; places that were cold and dense for the most part did not. (‘Density’ for Glaeser (2003a) is synonymous with a built form hostile to cars. “It is possible to drive in Paris”, he observes, “but it is not pleasant”.)⁴ The first and last factors of Glaeser’s formula, sun and sprawl, are for the most part beyond the power of local governments to provide. Sun is clearly an exogenously determined variable; we will return to sprawl shortly, but it is enough for now to say that an entire development pattern cannot be created overnight.

If we accept Glaeser’s prescription and then look at places like London, New York and Paris, which do not have sprawled central cities (although they do have sprawled suburbs), and which assuredly do not have sun, it is tempting to conclude that their resurgence must have a skills-based explanation. And indeed, a number of resurgent areas have higher levels of college-educated residents than the population as a whole (Drennan, 2002). Boston’s economy has collapsed three times in the 20th century and recovered three times as well, and the common thread in its recoveries seems to be its supply of skilled workers (Glaeser, 2003a). What, in turn, could account for the presence of high-skilled people in these

cities? One candidate, as we noted above, is agglomeration economies: high-skilled people follow the firms that will hire them. Another candidate, however, comes from the supply side: the amenity-based explanation. Some places have a cultural, aesthetic or consumerism advantage over others, which helps them to attract individuals with high levels of human capital. Richard Florida (2002) has famously labelled such people the 'creative class' and has argued that particular packages of amenities, including cafes, galleries, music and a generally bohemian, tolerant atmosphere (which he measures via the numbers of gay people), are strongly correlated with the presence of knowledge workers and growth.

But correlation is not causation and, while Florida is doubtless aware of the difference, it seems at least some of the policy-makers who read his book are not. The mayors of a number of declining American cities are building economic development programmes around luring gay 25-year-olds to their cities (Swope, 2003; Shea, 2004). The governor of Michigan, after reading *The Rise of the Creative Class*, urged her state's mayors to form 'Cool cities' advisory boards to help them lose their Dullsville image; Detroit's mayor responded by proclaiming himself 'hip-hop'. In Germany, the mayor of Berlin has touted his city as 'poor but sexy'. Richard Florida alone is not responsible for such strategies—'new Labour' politicians had never heard of him when they rolled out their 'Cool Britannia' initiative years ago—but his book has unquestionably led to a spike in cities marketing themselves for 'coolness' (Shea, 2004; Kotkin, 2005).

This is bandwagon economic development. Now, if one believes that politicians are incurably attracted to bandwagons (and there is certainly evidence to support such a belief), then a strategy promoting tolerance and openness is probably better, all else equal, than a strategy promoting, say, subsidies for professional sports stadia. But both strategies are unproven and there is no guarantee that money poured into either will not be money wasted. The difficulty of making a city 'cool' is

representative of the larger difficulty of developing its 'amenities'. 'Amenity' can mean many things, including good weather, a shoreline, ethnic diversity (or its absence), options for dining and entertainment, cultural offerings and aesthetically beautiful architecture. One person's amenity is often the next person's inconvenience. Some consider the bustle of a downtown to be an external benefit of city living; others find it intolerable and suffocating. From one perspective, shopping should not be considered an amenity, or at least not one that offers any particular place an advantage, because Internet commerce has made it possible for us to buy almost anything from almost anywhere. What can we now get in Manhattan that we cannot have delivered to Boise? From another perspective, however, it is the *act* of shopping, and not necessarily the goods purchased (if any goods are purchased at all), that generates an amenity effect. Sharon Zukin (2004) has suggested that one function of flashy city shopping is the acquisition of 'cultural capital'. Proximity to Niketown and Prada is a way to gain information about how to look and perform in certain social and economic roles. Urban shopping is enjoyable but also instructive, for it is in the city where information about consumption patterns is distilled and distributed, and individuals use it in signalling to other people that they belong to a certain milieu, or possess certain kinds of social attributes, which in turn may have pecuniary or psychological benefits to them (Twitchell, 1999; Frank, 1999).

One reason that consumer-based amenity explanations are appealing is that they require few logical leaps; in essence, they just extrapolate some generally agreed upon microeconomic principles. The benefits of innovation in consumer goods and services accrue most to those individuals who have high elasticities of substitution, low aversions to risk and high levels of disposable income. A high elasticity of substitution, in turn, implies substantial willingness to search, because the discovery of new goods and services is impossible without searching. And a

willingness to search generally requires long time-horizons. The individuals who meet these criteria are young, educated, upwardly mobile and still developing their tastes for a wide variety of goods. They look, in short, a lot like Florida's creative class (Tabarrok and Cowen, 1998).

One disadvantage with such an explanation is that, again, consumer amenities do not vary a lot between metropolitan areas. So, while consumption can explain why the young and college-educated would live in urban areas rather than rural ones, it has a harder time explaining a decision to live in one metropolitan area over another. The Boston, New York and Chicago MSAs all saw a net in-migration of young college-educated people from 1995 to 2000, but not nearly as large as those of Charlotte and Atlanta. And Las Vegas out-paced them all (Franklin, 2003).

A larger problem is weighing the relative importance of consumption goods in location decisions. Even if we grant that the young and well-educated benefit more from consumption goods than do other groups, we still have no reason to think that consumption is the pivotal factor in their decisions about where to live. The chicken and the egg come back to haunt us; high incomes, after all, are not usually exogenously determined, which suggests that the young and well-educated need first to live somewhere where they will be well-paid and only second can pursue their consumer tastes. This notion—that consumer amenities follow incomes rather than cause the location of high-end economic development—is supported by recent econometric findings (Shapiro, 2005).

Moreover, metropolitan areas *do* vary quite a bit in terms of some other amenities (climate and geography, ethnic diversity and the urban design of central cities), but it is difficult to sort out just which of these amenities would lure high human capital individuals. For instance, Richard Florida includes not just San Francisco and New York, but also Austin and Orlando, in his list of creative cities, because all have a high proportion of 'creative' workers. But aside from the presence of these individuals, the commonality

between such cities is hard to find. The mixing of people in Orlando does not happen in the same manner as it does on the streets of London or New York; Orlando lacks the same tradition of bohemian tolerance (as well as the same pattern of narrow streets and short blocks) that characterise the bigger, older cities. Nor is Orlando known as a place where people move to have café culture and spontaneous interaction, to fix up charming old houses, to have loft parties or to hang around Prada stores. On the other hand, it has a lively arts scene, as do many cities like it (Markusen and King, 2004). Lest this be considered an exclusively American story, there are parallels in Europe, although less stark. One can think of Munich, Lyon or Copenhagen in this vein (with apologies for the comparison with Orlando). Yet it is really stretching the story to hold that these places have anything resembling 'bohemia', close ethnic mixing like one finds in New York or London, or a lot of serendipity in daily trajectories through their urban space. At the very least, something has been underspecified.

One possibility is that the definition of 'creative' (or 'high human capital' or 'skilled') is just too broad. Many sunbelt cities that are sprawling and warm, including Orlando (but not Silicon Valley or Austin), have much lower proportions of patented innovations than older places like New York or Boston. They also, on average, have lower proportions of college graduates than cold and old places, and also lower per capita income growth—although again there are exceptions, among them Austin and Silicon Valley and Orange County and San Diego. So the criteria for defining 'creative' workers probably need to be more finely tuned and restrictive.

Even if the criteria are tightened, however, they will include both cold and old and sunny and sprawled places, not one or the other. The Jane-Jacobs-style cities of serendipity and diversity; the homogeneous, neighbourly, traditional and confidence-based enclaves that look like Robert Putnam's places of 'high social capital'; and the 'leave me alone' of

anonymous suburban living are all associated with growth and high levels of human capital. Notice that we have just lost any theory of urban growth that discriminates between resurgent and emergent places. It is telling that the categories above not only describe both Phoenix and Boston, they also aptly describe Boston by itself, where a dense central city is surrounded by a sprawl that puts Phoenix's suburbs to shame.⁵

Jacobs, Florida and Glaeser are all onto something in claiming that skills and amenities go together, but they may have got their causality reversed: it is the fact that these skilled workers are congregated in certain places that leads to the presence of amenities and, in some cases, makes the places tolerant and bohemian as well. In other words, the locational preferences of these workers do not account for why resurgent and 'high-end' emergent places have grown. This is strongly suggested by the story of Silicon Valley: after all, the Valley possessed no pre-existing workforce in high-tech. In the years before its explosive growth, there were not even departments of computer engineering at Berkeley and Stanford—the subject did not even exist as a formal domain of research. The workforce was an endogenous product of the agglomeration of high-tech in Silicon Valley in the 1970s (Scott and Storper, 1987), as was the financial-sector workforce in London and New York at the time those industries arose in those places, as was the skilled labour of the motion picture industry, which developed *in situ* with the growth of Hollywood in the 1910s and 1920s. Any other explanation simply puts the cart before the horse. People generally locate where they can maximise their access to jobs. Research on 'power couples'—couples where both individuals hold highly skilled jobs in the 'new economy'—shows that many choose to live in large metropolitan areas because doing so maximises their joint access to jobs and allows them to adjust, at relatively low cost and risk, to changes in or losses of employment (Costa and Kahn, 2000). Power couples derive tremendous benefits from the

consumption amenities of large metro areas, but their amenity preferences are not the prime determinants of their locational choice.

The notion that skills have driven growth, and that skilled workers locate according to some set of exogenously determined preferences and therefore determine the growth's geography, is less convincing than a theory that the preferences of firms—i.e. agglomeration economies—give rise to growth. As cities decline as centres of durable goods production, the most promising approach to analysing them is not as centres of consumption (although they are) but as, in Veltz's (2004) phrase, 'Schumpeterian hubs': giant matrices for recombining resources in order to generate innovations. The advantage of refocusing the 'skilled city' explanation away from preferences of the skilled and back towards the demand for labour is that it encompasses both the resurgent old, cold and dense cities and, in a discriminant way, some of the new, warm and sprawled cities. Power couples can certainly do just as well in places like Silicon Valley, Orange County and Los Angeles, with their sprawled residential patterns and automobile-dominated transport system as they can in London or New York.

The disadvantage of emphasising agglomeration economies is the great weakness we discussed before: the inability to explain the *where* question, and therefore the inability to draw policy-relevant conclusions. The firms may attract (or create) the labour and a virtuous circle may begin from there, but why do the firms end up where they do? It is possible that certain types of institutional environment facilitate the entrepreneurship that in turn leads to agglomeration of firms in activities that require highly skilled labour and, in turn, this attracts and retains that labour and creates virtuous circles of interaction among these people that generate more innovations, more activity and more labour demand.

2.3 Preferences for the Way Amenities Are Accessed: Sprawl versus Density

The discussion above is not meant to imply that amenities fail to influence a region's

fortunes, only to highlight the difficulty of drawing distinctions between regions based on the amenities they offer. Aside from the 'skyline versus sunshine' split—old urban form and cold weather versus new urban design and warmer climes—there seems little in the way of amenity packages that separates the resurgent cities from newer growth centres. A more promising approach might be to focus less on the amenities themselves and more on how they are obtained. What does differ across metropolitan areas (and to some extent within them, between cities and suburbs) is the manner in which amenities are spatially packaged and the modes of transport used to access them.⁶ Consider Orlando and Manhattan. Manhattan's density might be exciting in and of itself—i.e. for some people the density may *be* an amenity—but it also provides *access* to a large number of amenities in a small geographical area. Orlando is not dense, but its absence of density facilitates a very similar access to amenities (so long as one owns a car), because the ease of automobile travel allows individuals to cover a much larger amount of ground in the same amount of time. A half-hour walk or subway ride in New York might take you only from Lower Manhattan to midtown; a half-hour of driving from downtown Orlando could bring you to its urban periphery. And the quantity of amenities available from each trip is roughly comparable, even if the composition may be different. A more powerful comparison is between New York, London or Paris on the one hand and Los Angeles on the other: a half-hour trip in the centre of the first three, on foot or by public transport, will give you access to the same amenity package (movies, museums, galleries, concert halls, architecture) as a half-hour car trip in a comparable area of Los Angeles.

Comparing places by access is more promising than a 'skyline versus sunshine' story and it might get us closer to a micro-level explanation of urban resurgence. Individual preferences will always vary and rising incomes, falling prices and technological advances might accelerate the rate at which

our preferences change. Increased exposure to foreign cultures—via trade, travel and immigration—can alter our conceptions of beauty, change our aesthetic preferences and broaden the array of goods and services we want at hand (Postrel, 2003). Resurgence, then, may not solely be due to the presence of any particular bundle of amenities (cafés, sunshine, old buildings, new architecture), which in any event will be unstable, and may be as much to do with the ability of certain places to provide access to whatever preferences we may have in an age when preferences are rapidly changing. If we prefer to gain access through density, or if we consider density an amenity in itself, then places like New York are desirable. If instead we consider a smooth-flowing road system an amenity, we might like Orlando; or if we prefer to access amenities by car, then we might like Los Angeles (or New York's suburbs). In any case, since amenities come in many different mixes and many different packages, they are a necessary but far from sufficient explanation of urban resurgence. We cannot say whether highly skilled workers cause resurgence or whether agglomeration causes the concentration of highly skilled workers; and, likewise, we are uncertain about whether amenities are growth's symptom or its source. Paris and London may have a wealth of amenities because of the way they have resurged, rather than the other way around.

2.4 Is a Growing Preference for Diversity Responsible for Resurgence?

One of the more remarked upon aspects of Richard Florida's creative cities thesis is its emphasis on diversity and tolerance (some of its notoriety, as we mentioned above, is a result of star-crossed policies to attract gay people to declining centres). Leaving aside for a moment the difference between the two terms, Florida suggests that tolerance is a sign of openness, which in turn signals an environment conducive to entrepreneurship and new ideas. History suggests that open societies prosper more than closed ones; the

classic defence of the cosmopolitan life rests on the value of integration. But for cities, the role that tolerance and diversity play (as well as their relationship to one another) is more difficult to determine. There can be little doubt that increases in immigration (which is usually diversity's source) have contributed to urban resurgence. If nothing else, immigration increases the supply of capable people and can tighten a slack housing market.⁷ Indeed, were it not for foreign immigration, some of the net gains in central cities would have been losses.

We can speculate as to why a diverse urban area might fare well in the information economy. Ottaviano and Peri (2005) contend that ethnic diversity can increase the human capital of the native-born, as a result of mutual learning. Glaeser *et al.* (2001) point out that one of the values of diversity is its ability to increase the array of available consumer goods—certainly the Mexican markets, Korean restaurants and Chinese-language newspapers of Los Angeles lend the city some attributes that other places lack. A corollary to the ethnic diversity/consumption hypothesis is the relationship between 'lifestyle diversity' (i.e. the presence of gays) and urban consumerism. Because gays are generally childless, they have a lower demand for housing, more disposable income to spend on consumer goods and are unburdened by concerns about the quality of poor urban schools, meaning that they could have an increased willingness to live in central cities (Molotch, 2002; Black *et al.*, 2002).

Diversity can also be approached in the same manner as density: by viewing it as both an amenity in itself and a vehicle for accessing other amenities. It may be that people welcome (or tolerate) ethnic fragmentation because of the consumer benefits it offers, or it may also be that diversity, in the form of immigration, provides cheap labour, which effectively increases the spending power of affluent residents. Those with high incomes and high values of time can use a low-wage service class to emancipate themselves from tasks they would rather not do

and, instead, devote time and money to activities they enjoy. Diversity therefore may increase the productivity of high-human capital people by letting them outsource the mundane aspects of everyday life. So-called 'world cities', which are centres of immigration, are better positioned to offer this advantage than are suburbs or smaller metropolises. Some empirical research is consistent with this view: Alesina *et al.* (1999) show that in the US the level of ethnic fragmentation in a city varies inversely with its spending on public goods, suggesting that White majorities might like the returns they gain from diverse populations (an increased array of private goods), but do not want their tax dollars spent on amenities for people different from themselves.

Evidence of this sort suggests that tolerance, which is the extent to which different groups embrace diversity, will be dependent on each group's ability to manage diversity's benefits and costs. A further implication is that tolerance can be a function of segregation.⁸ Regions or cities that are statistically diverse are often quite segregated at local scales, be it the neighbourhood or even the block level. Affluent residents of Los Angeles are able to isolate themselves from people of other cultures via the buildings they live in, the schools to which they send their children and their use of private automobiles rather than public transport. Indeed, the level of immigrant segregation in American cities correlates highly with the availability of public transport, since immigrants often organise their lives around public transport while native-born residents organise theirs around the car (Cutler *et al.*, 2005). For these élites, the costs of diversity are low and the benefits high, which could explain why tolerance is a value often associated with people of high human (and financial) capital. For less wealthy members of the majority, the opposite is the case; they can afford fewer of the goods and services made available by diversity and have a higher risk that mixed residence means problems, at home, at school and in leisure. So they may choose to segregate themselves via

suburbia because it helps them to manage the potential costs of diversity by increasing the spatial distances of interaction. All of this may have little to do with the overall level of diversity desired by each group.

Tolerance and diversity probably perpetuate existing growth more than they start it. That is, tolerance and diversity can probably feed a virtuous circle once it begins, but are outgrowths of economic development rather than its initiating causes. In the case of diversity, some evidence indicates that immigration is correlated with growth, because immigrants move to places with strong economies (Singer, 2004). On the other hand, urban decline can attract people of low human capital, including immigrants, because declining areas provide low-cost housing (Glaeser and Gyourkos, 2005). In the former instance, diversity would feed existing processes of growth or resurgence; in the latter, it is unlikely to reverse decline, absent the presence of high human capital people.

Tolerance, too, is more likely to grow out of economic development than it is to ignite it. This is true at both the institutional and individual levels. At the institutional level, a certain level of economic integration is often a necessary pre-condition for the passage of laws designed to protect minorities. As regional economies become less self-sufficient, business and government leaders become increasingly unable to ignore the opprobrium of other regions. Lynchings in the South declined rapidly when the Southern economy became more dependent on investment from other places and thus more sensitive to the 'frown of the world' (Fischel, 2001). Similarly, corporations in Cincinnati have crusaded to overturn the city's ordinance barring equal protection for gays and lesbians, on the grounds that such laws inhibit the recruiting of top-flight personnel (Swope, 2003).

On an individual level, psychologists and behavioural economists view tolerance as a benign reaction to human cognitive limitations. Human beings have an inherent desire to influence those behaviours of other people that impact their own happiness. As a

population becomes larger and more diverse, however, the sheer number of these behaviours outstrips the capacity of the human mind to monitor and interfere in them. Tolerance is a value that develops to suppress the unattainable desire to meddle (Kuran, 1997).

This would explain why cities are more tolerant than small towns. It also explains why tolerance, while often valued in the abstract, often breaks down in the case of an individual's most deeply held convictions. With these convictions, the desire to interfere is least easy to suppress. The man who values tolerance but is also fiercely patriotic will support free speech but condemn the activist who burns a flag.

Where does this leave us? Tolerance, like diversity, is a necessary but not sufficient condition for urban growth. It is unlikely to generate resurgence, although its absence—by dissuading people of high human capital—may well prevent it. And tolerance can, like consumption amenities, certainly explain the desire of high human capital people to live in large urban areas rather than small or rural ones. It cannot explain why growth begins, but its absence could explain why it stops. A growing urban area is likely to become more diverse and, to continue growing, it will need to become more tolerant. But, as explanations for resurgence, diversity and tolerance are partial at best.

2.5 Household Preferences for Residential Amenities: Beautiful Cities, Sprawling Cities

A final major explanation put forth for urban resurgence is that the unique amenities of old, cold and dense cities are increasingly favoured by households and individuals because they are beautiful. This theory applies more to centre cities (and their first-ring suburbs) than to entire regions, largely because beauty is more a residential than a business amenity. Firms are unlikely to choose an urban area based on its aesthetic qualities. Silicon Valley overflows with business but is no one's idea of an architectural treasure; Savannah, Georgia, or Venice are a preservationist's dream, but their

economies leave much to be desired. Individuals who locate in an urban area for other reasons, however—such as access to jobs—can choose from a number of jurisdictions within that area to live and the aesthetic appeal of the centre city, combined with a desire to walk or use public transport, may be a powerful intraregional locational determinant. A common theme in the narrative of urban resurgence involves middle- and upper-middle class individuals who have been seduced anew by the beauty and urbanity of the centre city and who are fuelling the revitalisation of once-moribund downtowns.

The centre-city renaissance story comes laden with an important *caveat*. Most quantitative examinations of urban–suburban migration patterns show that city living is not really back, or at least not nearly to the extent that some popular accounts might have it (Kasarda *et al.*, 1997; Downs, 1997; Glaeser and Shapiro, 2003). Although some old cold central cities gained population in the 1990s, the dominant trend of residential movement remains towards the suburbs, even among sub-groups such as immigrants who have traditionally located in centre cities. Overall, many more people leave centre cities than enter them. Media accounts of urban revitalisation may be stimulated in part because affluent in-migrants tend to be more visible than out-migrants. The in-migrants tend to concentrate in a few neighbourhoods, such as loft districts, near well-publicised redevelopment projects. Out-migrants, by contrast, tend to depart from neighbourhoods throughout the city and to arrive at equally scattered destinations throughout the region (Kasarda *et al.*, 1997). Just as the graphic images of closed factories may have made decline seem more far-reaching than it was, so too can the photogenic nature of new loft districts make the renaissance seem grander than it actually is.

Nevertheless, while it is important not to overstate the rebirth of centre cities, it is equally important not to trivialise it. Some old cold cities have, in the past 20 years, got an undeniable demographic boost. Almost two-thirds of the households moving to

centre-city San Francisco between 1985 and 1990 were in the top two income quintiles, as were over 40 per cent of Boston's in-migrating households and one-third of Chicago's in the same period. In the US, only some Rust Belt cities, like Cleveland and Detroit, failed to attract significant numbers of high-income in-migrants in the 1980s (Kasarda *et al.*, 1997). In the 1990s, a decades-long trend reversed when a majority of Northeastern and Midwestern cities of over 500 000—among them New York, Chicago and Boston—grew (Glaeser and Shapiro, 2003).

One suspects that some part of the *cachet* of these resurgent cities lies in their beauty; the urbane lifestyle is built in no small part around the architecture and urban design of the central city and the beauty of dense cities can offset the numerous difficulties of living in them. But the concept of beauty is elusive and subjective. In practice, 'beauty' often seems to mean 'oldness'.

It is a common lament that urban architecture and urban form have declined in quality in the past 50 years and that old design is more pleasing to the eye than new (Benedikt, 1999). Accepting the qualifier that beauty is a subjective notion, the aesthetic advantage of old areas probably has multiple explanations. The first is simply selection bias: in general, the worst of the past gets destroyed and the best preserved. There was no shortage of playwrights in Shakespeare's day, but his work alone persists. The same mechanism is at work with buildings. Some wonderful old buildings get demolished, but few ugly old buildings get saved. At any given moment, a city will be comprised of old buildings that have withstood the selectivity of the wrecking ball, new buildings that are charming but which have yet to face time's judgement and new buildings devoid of charm that are equally untested. The old will thus look good relative to the new and, the bigger the proportion of old buildings, the more aesthetically pleasing an area is likely to be. Other explanations for the comparative charm of older structures include the rise of property taxes—which create incentives to improve the interior, rather than the exterior, of

buildings—and advances in construction technology. New technology enables some stunning architecture (the graceful, computer-designed curves of LA's Disney Hall, for instance) but it also enables function without form. There was a time when a wall, in order to be sturdy, needed to be made of brick; its arresting appearance was part of its utility. This is no longer the case, as long rows of durable but unsightly tract homes can attest. A final factor in the decline of urban architecture may be the rise of business regulation. In the days before insurance and sophisticated contract law, the aesthetic grandeur of a building was often used as a signal of trustworthiness and stability—particularly for banks, which had to convince citizens to deposit their money. With the advent of federal deposit insurance (and other laws protecting customers), however, stability became more of a given and aesthetic signals became less important. Certainly, American bank design has plummeted in quality since the FDIC has established; it is not hard to spot a handsome old bank building, but contemporary banks are nondescript boxes.⁹

All of this begs a further question, though: if beauty is oldness, why has oldness only recently become so valuable? The most immediate answer is that oldness is scarce. Good oldness cannot be imitated (even by Las Vegas), so it is supply-inelastic and hence earns rents. But scarcity alone cannot account for people's increased willingness to live in, and pay for, old environments. Oldness has not always earned rents, after all—for a long time, the old neighbourhoods of many cities languished unwanted and, in many cities, they continue to do so. Frieden and Sagalyn (1989) in their study of downtown redevelopment, point out that the 1976 American bicentennial, and the resulting attention it gave to history, boosted interest in preservation and old buildings and ultimately laid the groundwork for a surge in public/private central-city revitalisation. Doubtless there is some truth to this argument. But it may be more important that the bicentennial also coincided with a particularly acute wave of deindustrialisation and the

final gasps of heavy manufacturing in central cities. The disappearance of manufacturing untethered oldness from one of its great costs—dirt and pollution. The effect of unbundling old neighbourhoods from dirt is nowhere more evident than in the redevelopment of urban waterways. For much of the 20th century, urban architecture in dense cities turned its back to rivers and lakes, because the waterways were unsightly industrial landscapes. Cleveland's Cuyahoga River, once so polluted that it caught fire, is only the most infamous example. The Cuyahoga today is much cleaner and residential properties now line its banks. The departure of heavy industry allowed waterways to become an aesthetic amenity rather than an aesthetic liability.

In the US, oldness was unbundled from a further disadvantage in the early 1990s, when urban crime rates fell dramatically (Glaeser, 1998; Levitt, 2004). Cities will always provide more opportunities for criminals than will suburbs—crime also benefits from increasing returns to scale—but the sharp downturn in crime weakened the association between city life and criminality. The decline arrived with little warning and came amidst predictions that things would get worse before they got better. It also had the biggest impact in the Northeast and in cities of over 250 000 people.¹⁰ The falling crime rates were accompanied (although it seems not caused) by the rise of 'incivility' laws, whose purpose was to remove or suppress many of the aspects of urban life—such as homelessness, vagrancy and begging—that affluent residents find fearful or repellent.¹¹ Once old architecture and urban design were no longer viewed as a container for criminality, their appeal and value increased. And the increase took place in time for the arrival of the 'new economy', meaning it provided not just opportunities for a new round of urban living, but also a built environment suited to a surge of entrepreneurship. It was at the apogee of American urban decline when Jane Jacobs (1961) argued that cities required new ideas and that new ideas required old buildings—that entrepreneurs

could not afford the high rents of new construction, but that successful entrepreneurship could restore high rents to old structures. The 1990s saw her argument at least partially validated.

Lastly, in the 1980s and 1990s, old central cities began to overcome some of their technical obsolescence. The great aesthetic appeal of dense city neighbourhoods had also been their great functional weakness: designed in pedestrian eras, they were deeply unpleasant places to drive and utterly horrible places to park. City living was thus bundled together with car-free life; and car-free life was something that few people wanted and fewer still could afford. Eventually, old cities took steps, some desirable and some less so, to remedy this functional obsolescence of their designs and make a car/urbanity bundle possible (see Downs, 1997, for a discussion of technical obsolescence). Neighbourhoods like Boston's Beacon Hill sold curb parking spaces at market rates. Paris built massive underground parking in every neighbourhood. More commonly—and more regrettably—cities invested in, or required developers to provide, off-street parking spaces. Off-street parking surmounts the technical obsolescence of the urban core, but it also provides incentives to drive, undermines density and debases the city's aesthetically advantageous urban form (Shoup, 2005). Most recently, and to the delight of transport economists worldwide, London introduced cordon tolls for vehicles entering its central business district. The pricing of roads is often applauded on efficiency grounds, but in dense cities it has aesthetic benefits too. Congestion is often a product of density and the use of market-clearing prices on the roads makes old areas more amenable to driving while preserving their pedestrian-orientation and the visual appeal of their built environments. Just as the new functional obsolescence of urban waterways and manufacturing districts has allowed them to become beautiful, the proper pricing of beautiful urban streets has once again allowed them to become functional.

The steps taken by central cities to become more car-friendly, combined with well-

publicised redevelopment and crime-fighting efforts, highlight a larger point about both central-city rebirth and regional-level urban resurgence: resurgence is, in many ways, convergence. Central cities are becoming more like their suburbs (and vice-versa) and old cold resurgent urban areas now look more like the emergent warm growth centres to which they originally lost population. There can be little question that urban life has now adopted some of suburbia's trappings and that suburban life has become more urbane. Suburban-style malls and supermarkets now proliferate in central cities. Target and Wal-Mart have begun building multistorey urban discount centres; Wal-Mart wants to open a store in Manhattan. Many inner-city redevelopment projects, despite assertions to the contrary, are designed to imitate the experience of suburban malls. Walking around Times Square in New York today, one cannot help but think that it has been provincialised, all snobbery aside. Cleaned up and returned to corporate America, it looks like a denser version of the culture one can find in any suburban mall, while New York's Upper West Side has basically the same stores as the 'bobo' suburbs everywhere. And at the same time, mega-malls like South Coast Plaza in Orange County, or even Noisy-le-Grand in suburban Paris, offer a lot of what you can find in centre-city neighbourhoods, albeit in a less historically distinctive container.

The convergence is also reflected in immigration. Although some urban areas still receive many more immigrants than others, the distribution of immigrants within those areas is not nearly as stark as it once was. No longer are immigrants automatically bound for the central city. By 2000, slightly over half of the immigrants in US metro areas lived in suburbs and their growth rates in suburbs exceed those in the central cities (Singer, 2004).

The blurring of city and suburban life casts the utility of old labels into doubt. Even the idea of a resurgent city is open to question—can we call a city 'resurgent' if it is essentially remaking itself in the image of its suburbs?

The same question can be posed at an interregional level. 'Sprawl' may be a key ingredient for regional growth, but it is also a term whose meaning is fast disappearing. Traditionally, urbanists have held up the Southwest of the US as an archetype of sprawl and have pointed to the old cold Northeast as a model of dense living. By 2000, however, something closer to the opposite was true. The Northeastern cities have compensated for their high-density centres by developing some of the most sprawling suburbs in the US, while the Southwest's lack of strong urban cores is now counterbalanced by its extremely dense suburbs. The monotonous density of the Los Angeles urbanised area (the densest in the US), which gives the lie to most efforts to call it sprawl, is caused largely by its suburbs which, at 6431 persons per square mile, have fully 74 per cent of the density of their central city. The suburbs of New York, by contrast—at 3211 persons per square mile—are only 12 per cent that of their central city. New York's suburbanites occupy, on average, 155 per cent more land than LA's (Manville and Shoup, 2005). The old Northeast is now more diverse internally, but its evolution has diminished the diversity between it and other regions. The New York, Chicago and Boston regions will never outdo the Southwest in the sun department, but they are now competitors when it comes to sprawl.

3. Satisfying Preferences: Choice Behaviours and Urban Transformations

We have now seen that urban research has made great strides in showing why suburbanisation and, in the US, new metro regions in warmer areas, have dominated urbanisation for some time now. But it has done less well in incorporating in a general theory the forces that could account for these trends in centre cities or in old, cold metro areas generally. We shall argue that this is because urban research has failed to understand adequately the choices of firms and households and individuals who are causing urban resurgence, because it is overwhelmingly centred on the

choices of individuals going to suburbs or new metropolitan areas. And some of these behaviours have their genesis in forces that are not adequately considered by urban theory, some of them exogenous in origin, but many of them stemming from the very complexity of the urban built environment itself.

Predicting human behaviour is a tall order and there are good arguments that even moderate-sized social changes will always be unanticipated (see Kuran, 1997). A longstanding dilemma of the social sciences has been the difficulty of tracking individual decisions into larger outcomes (see Schelling, 1978). The reasons for the difficulty are not hard to discern: even if we all agree that small changes can lead to big transformations, there are many more small changes than big ones, which makes it difficult to know which small changes are worth studying. In the specific case of resurgence, it is exceedingly hard to pick out which small change will precipitate the turnaround from decline to growth. Growth, as Edward Glaeser and Joseph Gyourkos (2005) tell us, is not decline's mirror. Decline happens in slow painful increments, growth in spurts and explosions. Las Vegas has been growing rapidly for the past 15 years; Buffalo, Detroit, Valenciennes and Liverpool have been declining slowly for the past 50. Decline is easy to see and anticipate and, because it is so slow, current decline is, in most instances, a good predictor of future decline. Growth also tends to predict itself. Hiccups and changes in longer patterns of growth and decline, however, are not easy to predict at all.

Two major obstacles stand between us and a more satisfactory explanation of both resurgence and emergence. First, as noted, we lack convincing explanations for why growth *starts*. Urban studies has done rather well in examining the motors of growth; once the process begins, we have reasonable explanations as to why it continues. But we have done less well in explaining growth's ignition. One difficulty is that one of the most interesting generators of change—preference

formation—is left outside the scope of urban analysis, making it backward-looking and accounting-oriented rather than forward-looking in a way that would make it useful to urban policy.¹² To some extent, this is to be expected; cities are primarily economic entities and urban economics rightly occupies an influential position in urban theory. But economics, as Lionel Robbins once pointed out, is concerned primarily with efficiency based on a set of *given* ends. Traditionally, it has had little interest in how preferences *form* (George, 2001).¹³ And therein lies the problem, for it is the formation and alteration of preferences that drive the transformations we call resurgence.

A second major obstacle is the physical form of the city itself, which often confounds standard economic analysis. The bumps in larger trends might be easier to foresee if the durability of the built environment did not obscure them. Choices for land and location are not autonomous in the way that choices for many private goods are. Land preferences suffer from imperfect sovereignty for the deceptively simple reason that the preferences often outlast the people who hold them. Growing cities physically expand, but declining cities do not physically contract, or at least not at the same rate that growing cities get bigger. Houses and highways are durable; the economy is more fluid than the built environment. Cities are accumulations of past preferences and our choices for housing and density are frequently predicated on the choices made by those before us. Spatial structure is not reinvented to meet every adjustment in the market, but is instead an aggregation of historical patterns of development, which can be changed only marginally—via demolition or new construction—as preferences evolve (Harrison and Kain, 1974).

This gap between analyses of the city in its material form and those of the city as economy and society is a much remarked upon phenomenon. Beauregard and Haila (1997) have referred to it as the city's 'unavoidable incompleteness'. Economists simply call it 'durable housing'. Whatever

the name, the persistence of the built environment matters because it creates bundles of goods and amenities—the single-family house that requires a car, the Manhattan apartment that precludes one—and these bundles obscure the way people rank their desires. Survey evidence suggests that many people in large-lot suburban developments would like to drive less, but their driving lifestyle is bound up in their preference for more space (Myers and Gearin, 2001). This is not terribly surprising, but it suggests that when exogenous shocks (deindustrialisation, rising incomes, new technology) cause some preferences to be unbundled—as suburbia becomes more urbane, or cities more suburban—we are likely to see unanticipated changes in behaviour. In the absence of such shocks, however, these underlying preferences are latent rather than manifest and remain hidden from analysis because they are small and seem insignificant. To be sure, there are some aspects of the city not prone to such a vexing dilemma. Many facets of urban life could be correctly priced but are not (such as driving), and the failure to price them needlessly deprives us of a better picture of people's preferences.¹⁴ But some types of amenities resist being priced at all, at least *ex ante*.

Bundling is not unique to land or cities, and common examples of it can be found in many other areas of the economy. Many people who like to watch sports on television buy cable TV packages that have hundreds of channels they do not want, in order to get the one or two sports channels they do want. Likewise, most people who use Microsoft's Windows operating system end up with Internet Explorer, its Internet browser, as well. Largely because Explorer is tied directly into Windows, it controls over 90 per cent of the market for Internet Browsers. Taking it at face value, this statistic suggests that an overwhelming majority of people prefer Internet Explorer to all other options. However, Internet Explorer has well-documented problems and vulnerabilities, and we would get an accurate idea of people's browser preferences only if Explorer was not integrated into the

operating system of so many PCs (a natural experiment pursued with limited success by the US Department of Justice).

Bundling, then, is often a product of monopolistic or quasi-monopolistic conditions. Most cable companies have monopoly control over their service areas and it is Microsoft's dominance of the market for computer operating systems that lets it disseminate Internet Explorer. Urban economics has long recognised that land has features that make markets in it different from standard markets; one of these is that land has some inherently monopolistic attributes. Land exists in a more or less fixed supply. For the most part, it can be neither created nor moved. It is the only major asset most people have and it is largely indivisible. The standard approach to dealing with bundled goods, which has much to commend it, is to argue that preferences for them, like those for many private goods, are 'revealed'—that in the end we know what people want by observing what they have done. If a majority of people buy single-family homes on large plots and drive a lot as a result, then we can conclude that large-plot, auto-dependent life represents the majority preference for transport and land use. Approaches of this sort are outcome-based, analysing results of *ex post* adjustments.

But these results, although important, are not likely to be complete indicators of what happens in the future, because revelation depends on the array of choices available at the time. The person in the large suburban house may like the space she has, but dislike the amount of driving she has to do because of it. If she likes the space more than she dislikes the driving, she will choose to live in the house: for her, the package of amenities—even with its drawbacks—is better than the available alternatives. However, if some external shock alters the available alternatives (if the amenities become unbundled from each other and it becomes possible to have lots of space without driving), her *revealed* preferences could change, even if her latent preferences do not. On the other hand, it might take some time for the revelation to occur. If

the external shock impacts her house specifically (if a commuter rail line opens nearby that can take her to work and leisure), her behaviour might change right away. If, however, the market just creates more spacious central-city apartments, the process of change will be much slower. She has already purchased her house and people do not upgrade homes the way they do cars or notebook computers. So she stays put longer than she might prefer, because she has sunk costs in her property. And when she does move out, her house does not disappear; it remains, for the next occupant, a house with a lot of space and a lot of driving, regardless of the tastes of that occupant. Lastly, our suburbanite may not move at all, but someone else, in the future, who has similar preferences may move to the spacious apartments in the centre city. All of this adds up to a subtle and slow-moving process of change. Policies that have mild but widespread individual effects, as many urban policies do, do not just alter the future of the present population. They also *create* new future populations.¹⁵ The time-lag between the policy and the new population, and the built environment's adjustment to both, makes change hard to foresee.

3.1 What Do People Want: Are Urban Preferences Substitutable and Can We Fully Rank Them?

There are, of course, a number of hypotheticals in the example we give above, although the basic tension—between the desire for space and the desire to drive less—has been reported in more than one survey of American home-owners. The standard view of preferences is that they are fully substitutable and there are elasticities between them. The substitutability of preferences should enable each of us to rank them and enable the market to sort out the real, effective demand for urban space and infrastructure, so that one-best pareto-rankable solutions will emerge. In the short run, this may indeed be what people do, choosing a flat in Covent Garden rather than a small house in Islington

or a larger house in Crouch End or a detached house in Suffolk.¹⁶

Economic theory generally has little patience for the idea that people's internal preferences might conflict, or that preferences cannot be perfectly ranked.¹⁷ Recent work in behavioural economics, however, has begun to lend such ideas more credence. David George (2001) complicates the revelation picture by introducing the idea of 'second-order preferences' which he defines as those things we would 'prefer to prefer'. Our second-order preferences can differ from our revealed preferences both because the second-order preference is subordinate to a conflicting preference for another good (as often happens with bundling) or because other external incentives are aligned against it. Humans sometimes have difficulty in forming rational anticipations and if a second-order preference has distant benefits and immediate costs, while a competing option has immediate benefits and distant costs, then the competing option is likely to prevail. George's example is his tendency to eat fast food when he is hungry—he would prefer that he did not, but the extra increment of immediate satisfaction he gets from McDonalds shifts the balance in favour of it. His revealed preference may not be stable, however, because it is accompanied by dissatisfaction. Or, to be more precise, the satisfaction he gets, although immediate, also decays faster, while the foregone option—eating healthier—involves delayed but longer-lasting gratification (Frank, 1999).¹⁸

Latent dissatisfaction makes an unpreferred preference prone to change, even in spite of an outward appearance of firmness. If the external incentives shift, what seemed like a stable equilibrium can quickly unravel. In a standard goods market, when this happens, output can adjust relatively quickly and within a short time the market is stable again. But this does not happen in the built environment because, again, the adjustments are slow.

How do these changes manifest themselves? In the narrowest sense, people living within fixed budgets who demand both space

and access have to cut back on other items of consumption: they make a lifestyle shift. Or, the increased demand for space and access could encourage innovation in how they are supplied, breaking down and transforming the old links with density and accessibility as traditionally defined, in the process possibly giving rise to some new negative or positive externalities.¹⁹ The upending of traditional trade-offs between space and access could come in the form of government intervention: the zoning laws that require off-street parking spaces for every new development. Preferences emerge against a dynamic backdrop not just of what has historically been supplied, but in light of emerging new lifestyles, expectations, income levels and technologies. They emerge institutionally from 'outside' the urban environment as much as from within it, but they have to find a concrete material expression within it. A change in external conditions can make an unpreferred preference less tempting, or less likely. The sudden absence of all fast food (unlikely) might make George less likely to surrender to his cravings; the new presence of off-street parking in a CBD (quite likely) might allow a person with a low demand for space to satisfy his high demand to drive. So the demands from imperfect substitutability create situations that are contradictory, in that they can have long-term price and quantity effects that are far from what standard theory tries to understand. Thus, housing and transport choices can be motivated by relaxed income constraints or new income trade-offs outside the housing/transport budget, but the consequent effects on transport use and pricing, or on house prices, can be enormous and unanticipated. These effects can lead to externalities and the externalities can in turn provoke further unanticipated reactions.

3.2 Are Supplies of Urban-ness Convex?

Let us complicate our example of the suburban woman trading space for more driving. If this woman lives in the US, it is entirely

possible that she would like neither as much space nor as much transport as she has. She would prefer instead a good public education for her children. If the local schools are funded by the property tax, then exclusive communities are likely to have better schools. Exclusive communities are generally exclusive because they practice fiscal zoning, usually in the form of large minimum lot sizes. One 'buys' one's way into the community by being able to afford a large house, which is made valuable not just by its size but by the fact that the quality of local schools gets capitalised into the home value. In essence, then, our hypothetical resident buys more house *and* more transport than she wants, in order to get the schooling she covets (Fischel, 2001).

Land, complicated as it is, is not the sum-total of the supply side in cities. The supply side also involves public goods, like education, and the public goods are often bound up in what *occupies* the land (sometimes referred to as 'place'). Almost no-one can create land, but the making of places is a joint project of architects, developers, engineers, regulators and others. Although prices probably do a better job of co-ordinating these disparate sectors than any other system would, the co-ordination is highly imperfect and a tremendous amount of information is still lost.

In addition, the fragmentation before the fact then suffers from interdependence after it. All of the creations of these separate communities (labour, housing and transport and government) come together and rub up against each other. Because the *ex ante* information on the qualitative and price effects of one another's actions is incomplete, the price mechanism works better 'after the fact' and gives rise to more unintended consequences. In other words, the urban services and structure that are actually supplied can be very difficult to understand up front, when the choices are made, and they are—for the same reasons—inherently and probably unavoidably subject to all sorts of surprises. For example, our suburban woman might be enticed to move not by spacious

city apartments (built with required parking) but by an increased number of urban private and parochial city schools, which allow city living but suburban quality education. Or her preferences for city living could be revealed by her support of school vouchers, which detach school quality from residential location, but also sever its connection to property values. Here, we have unintended consequences. Vouchers, intended to increase educational quality, could actually diminish it, if they remove the incentive for childless home-owners to fund schools (Fischel, 2001). Equally, they could reduce incentives for parents to support good local schools.

Public goods suffer from their own revelation problem, in that people's taxes depend on their demand for public goods, which creates an incentive for people to falsify their preferences and free ride. If a majority of people free ride, of course, the public goods will be underprovided and revelation will provide an imperfect reflection of the public goods package that is actually desired (Stiglitz, 1983).

The classic solution to the revelation problem for public goods was offered by Charles Tiebout (1957). The Tiebout hypothesis argues that competition between local governments will create a market in public goods and let people reveal their preferences for public goods by moving to those communities that offer the package they like. Politicians, like the producers of private goods, will have an incentive to provide the goods demanded because the value of public investments gets capitalised into residents' homes. For most home-owners, the house is their single and indivisible asset, so residents have an incentive closely to monitor city hall and turn out those politicians who fail to deliver the proper package of public goods.

The Tiebout hypothesis has never lacked for criticism (Stiglitz, 1983; Rose-Ackerman, 1983; Donahue, 1997); some of this criticism is valid and much of it spurious.²⁰ For our purposes, a valid criticism of the Tiebout model is that it responds only somewhat effectively to the inertia of the built environment. People make their choices, but they are still choosing

from a limited number of bundles and the bundled choice sets are typically of very limited convexity. People cannot in general consume half a house in central London and then another half out in the suburbs.²¹ Yes, a few wealthy childless people—the *piéd-à-terre* brigade—might buy a flat in the Barbican and a substantial house in Gloucestershire or Somerset and a few very wealthy might buy a substantial apartment in the 7th *arrondissement* of Paris and a country house in Normandy or the Lubéron; but these are not typical behaviours. And, as always, the hobgoblin of distorted prices rears its head. When the costs of one sector are externalised onto another one—if by choosing, say, a house with a lot of transport, some of the housing costs end up being dumped onto the transport system and some of the price of a home is reflected not in its mortgage but in the congestion at the end of the street—our understanding of preferences gets distorted.

Even with Tiebout, the aggregation of individual choices about land and public goods does not necessarily give us a city full of what we would ‘prefer to prefer’. People often do not recognise that they have conflicting preferences and often do not link their individual preferences, first- or second-order, to the social outcomes that result (if they do make this link, they generally try to reconcile the conflict). Although the options are generated through decisions made in separate institutional spheres (housing, transport, work, firm location), they come together in bundles. The tourists who are dragging their children around beautiful historical neighbourhoods in European cities often cannot help but yield to the temptation to feed them at McDonalds—and the property market obliges. It is not clear that this outcome—the Piazza Navona decorated with the Golden Arches—is desired, either by the tourists, the residents, or perhaps even by the landlords. Once interdependency, context and non-convexity are taken into account, then it becomes clear that the revealed demands for urban-ness are likely to hide within them strong intransitivities with respect to individual elements of the bundles. In larger cities,

where there are more institutions and communities of practice mixing together, the problem is likely to be more acute. Only if we simplify by extracting individual options from their contexts (built environment, long latency periods, locations fixed in the medium run) can we find that an individual fully ‘prefers A to B and B to C, and hence A to C’.

Where there are intransitivities, there can be unresolved tensions—points of less-than-full satisfaction. These can express themselves as ‘untapped markets’ and lead to innovations in architecture, in transport, in location, in lifestyles. These innovations can have strong effects on the urban environment. Where such types of individual ‘voice’ are not possible, however, they may lead to exit, searching for better ways to live; or where neither is possible, they may lead to collective voice—i.e. politics to influence the environment.

3.3 *A Few More Thoughts on Instability and Revelation*

A longstanding tent of political science, going as far back as the 18th-century research of the Marquis de Condorcet, is that in instances of cyclical preferences (that is, where A is preferred to B, and B to C, but C to A) it is impossible to generate a single ‘winning’ option; rather, there will be conflicting majorities and the electoral winner will be determined by who sets the agenda (because the difference would lie in which options were voted on first). But the winning option may not endure, because there will always be a latent majority capable of overturning the decision.

Unlike the work we discussed above, there is little that is controversial in this scenario, because internal preferences need not be conflicted to generate a misleading outcome. Everyone can, in fact, be quite sure of her preferences and, yet, nevertheless, generate a collective outcome that no one is entirely happy with. This is the problem of social choice and it is at work in cities in (at least) two ways; in both it is complicated by durable housing, which makes the initial

result harder to overturn. The first way, which we have already alluded to, is simply history and the durability of past preferences. Even without considerations of political power, the range of current preferences is limited by past choices. The built environment constructed by one generation remains the built environment for the next. The density of central-city Boston is both its *status quo* and a function of its past; most new construction in the Boston area after World War II has been at a very low density. Individual preferences do aggregate to social outcomes, but those social outcomes in turn constrain future preferences. New preferences can only be revealed on the margins, in the form of new construction, and of course new construction today will further constrain preferences tomorrow. Were cities wiped clean with each new market adjustment, this of course would not be a problem. But one reason urban areas expand outwards rather than upwards, preferences for density aside, is that it is almost always cheaper to build on vacant land than it is to tear down an existing structure and rebuild a taller one (Downs, 1997).

Nor is the built environment just an aggregation of past preferences; an argument can be made that it is an aggregation of past *minority* preferences. The amount of new housing construction in any given year is generally a very small portion of overall housing availability. In California, for example, only 1 per cent of housing is constructed new each year; the 1999 American Housing Survey shows that only 2 per cent of home-owners and less than 1 per cent of renters live in dwellings constructed the year before. If the people who choose new construction have significantly different preferences from those who find housing on the resale market (and there is some evidence that they do), then the development industry will be catering to a minority and this minority will in turn have a disproportionate influence over not just the development industry, but also over the options available for future homebuyers (Myers and Gearin, 2001). The physical results of people's past preferences for

housing last longer than do the people themselves.

Similar dynamics are at work in the political arena. Just as past individual preferences inhibit current and future choices, so too do past government interventions. Most theories of urban politics see the city government as an instrument for manipulating the externalities of growth, seeking to capture elevated land values and repel problems like traffic and homelessness (Peterson, 1981; Swanstrom, 1983; Logan and Molotch, 1987). Tiebout effectively cleans away many of the problems associated with this calculus, but as we mentioned above, the Tiebout mechanism is derailed in the case of large cities. In large cities (over 100 000 or 150 000 people), home-owners have a harder time monitoring city hall and there are fewer home-owners and more renters (who suffer from the 'renter's illusion' that they pay no property taxes). Larger cities also have larger pots of intergovernmental money at stake, increasing the incentive of special interests to meddle in public policy. Tiebout's great insight was that in many instances public goods could be supplied without politics. But in big cities the politics is still likely to emerge.

To the extent that politically supplied public goods are produced in the interests of a powerful minority (i.e. large landowners with a disproportionate influence over city government—especially in big parcel, low home-owner areas—or politicians who see benefits to their reputations from overseeing spectacular building projects or bureaucrats who desire expanded power), the built environment reflects a combination of aggregated individual preferences and the material remainders of a vision imposed by people who were able to control the agenda of city building.

We see this best with the construction of geographically immobile resources, such as infrastructure, which like many public goods are often conceived in a context of misaligned costs and benefits, and hence distorted incentives. Urban highways were oversupplied in the US (and many other countries) in the

post-war period because the cities that built them did not pay for them; the federal taxpayers who did pay for them did so at very small individual burden to themselves and the contractors who built them did so at massive gain. The oversupply of highways contributed to driving, which was itself underpriced, and the highway oversupply soon became a peak period undersupply, as congestion resulted. Congestion, because it disproportionately impacted the city centre, in turn led to the devaluing of downtown real estate and probably also to an excessive dedication of downtown land to auto infrastructure (Anas *et al.*, 1998). Congestion also fuels the migration of people outwards, because dispersal lowers commute times for some. Yet rather than take steps to correct the price mechanism through congestion charges, many cities have turned to rail systems, which are themselves public choice problems (paid for by federal taxpayers and supported by construction unions) and parking requirements, which are *de facto* fees on developers that subsidise automobility (Shoup, 2005). Thus we have urban transport systems with an excess demand on some auto infrastructure (roads and highways), an excess supply of others (parking spaces) and a supply of public transit that wildly outstrips its demand.

The problem of misallocated transport infrastructure most readily evokes images of Los Angeles and other cities like it, but dysfunctional transport is not a dilemma unique to young cities of the Sunbelt. Consider the construction of Interstate 93 in Boston. A federally funded highway, it demolished a neighbourhood and sliced the city apart. It is now being taken down through another federally funded highway project (the Big Dig), which in turn will release huge swathes of land for developers to work on (Altshuler and Luberoff, 2002). Neither the highway nor its demolition has much to do with the standard adjustments in markets, nor with the aggregated preferences of individuals. But they have defined Boston's urban form and the subsequent choices of many individuals who live there, for almost half a century. Examples similar to this one are legion.

In the Paris region, abundant but radial-style public transport so increases the value of the centre city and near-western suburbs that it has historically devalued the rest of the suburbs, because they are relatively poorly served and have levels of amenities so low compared with the privileged areas. This leads both to the extreme peak-time congestion of public transport and roads, and to underinvestment in potentially attractive suburban locations. There is a vicious circle of spatial sorting of élites into the centre, followed by more investment in it (and a better tax-base), more gap with the lesser areas and so on. As a consequence, it has proved almost impossible to break the value of centrality, in practice and in perceptions. Although high housing costs have induced some movement outwards, mostly what has happened is readjustment of budgets on the part of those who want the good central and near-western locations. This is quite different, of course, from what has happened in London, New York or Los Angeles, where the distribution of amenities is more even and land values are much more polycentric.

Robert Dahl, in his classic study of city governance (1961), noted that an election reveals only the first preference of a majority of voters with regard to those preferences they can choose from. Knowing who won an election is thus quite different from knowing what people want. Candidates are also bundles—assemblages of positions and issues that cannot be disaggregated—and for this reason that many votes are reluctant. It is also for this reason electoral politics are prone to sudden reversals. In much the same way, understanding contemporary urban spatial structure does not necessarily give insight into the preferences of the individuals in the city.

In the city, however, unlike in an election, the reversals are not as smooth. In electoral mathematics, the problem of decisive influences tipping political decisions is offset by the fundamental instability among conflicting majorities: political decisions often 'tip back' to something close to the optimum. The volatility of preferences leads to a volatility in

governing coalitions and prevents any one vision from dominating. It is difficult to see how this works in urban space, however, because the winning decision is often written in asphalt and steel. Support for programmes may ebb and flow, but taking down a highway is not as easy as rolling off a log.

4. Conclusion: Urban Research Can Help to Make Urban Choices More Transparent

Urban studies has always been shot through with a curious mix of pessimism and utopianism. For almost as long as we have had cities, we have predictions of their decline and, for almost as long as we have had talk of decline, we have had prophecies of resurgence. Such proclamations respond to short-term volatility in urban regions, rather than long-run trends. From a broad perspective, cities are not dying, but neither are they 'coming back'—if by coming back we mean returning to the supposedly halcyon days of extreme density and heavy manufacturing. Like most complex systems, cities are evolving, but it is easy to lose the forest for the trees—to see in every downturn a crisis and in every upturn a renaissance.

The growth of a number of old dense large cities in the US and Europe in the 1990s was surprising. In part, it was surprising because these cities were exceptions: most old dense cities and their corresponding metropolitan regions did not grow in North America; and, in Europe, most city centres did not grow, although the surrounding regions of most old and cold centres did. The search for robustness in urban research leads to an emphasis on the general and the relatively long run; however, sometimes this can lead to missing the diversity of what is happening and running after reality so late that we no longer have relevance. Emphasising particularity through description is not a satisfactory solution, for well-recognised reasons such as falsifiability, robustness and generality.

Yet the problem of relevance will not go away. It is an age-old charge that urban economics is too divorced from urban policy. As urban economics becomes increasingly

sophisticated and as cities continue to shop for miracle cures on the policy market, surely urban economics should be able to shed more light on major trends and policy dilemmas in time for it to be relevant. For urban theorists, there are probably two paths to take in light of this potential for the field. The first is to improve our ability to shed light on preferences and choices, and their aggregation. This is not an easy task, since most of the difficulties we described in section 3 are bound up with problems of social choice.

However, the social choice problem is not necessarily insurmountable. Amartya Sen (2002) has shown that it is rational under some circumstances for individual preferences to take into account long-term and broad social distributions of their consequences. In this line of thinking, Sen marches against a long line of theorists (since Robbins, 1938) who have claimed that, even if social choice can be rational, it is impossible in practice, because the information does not exist that would allow the interpersonal comparisons of utilities that are necessary to achieve it. But if social choice in cities is potentially rational, then surely one role of urban social science is to try to develop such information (Roberts, 1980). For the moment, however, explorations towards social choice remain highly abstract and their utility in policy seems small. If urban theory can make progress in thinking about how preferences evolve, how choices interact, how the environment involves problems in revealing and satisfying them due to bundling and different latency periods and so on, then it could potentially furnish better information to the public and policy-makers about what they are potentially choosing—in interaction and over medium-run periods of time—when they make short-term choices. This is an 'aggregation problem' of considerable difficulty, but it may be time to tackle it.

The second option is more mundane but arguably more realistic and it is already being done by much of the best urban research. Theorists should tell policy-makers to eschew the magic bullets (or at least limit

their appetite for them) and instead ‘do the small things well’. The problems we describe in section 3, to the extent that they have a common thread, arise from an absence of transparency in reading the causes, costs and directions of the evolution of urban systems. Driving is not correctly priced. The burdens of infrastructure are dispersed and many of its financial benefits are concentrated. The workings of city government are often opaque. And the solutions that have been rolled out to combat urban problems—festival markets, light rail systems, convention centres and stadia—exacerbate transparency problems more often than they improve them. We would have a better idea of what people ‘want’ in a city if people had a better idea of what various urban amenities really cost.

So long as the city remains, in Thompson’s (1968/1996) phrase, a ‘distorted price system’, our theoretical approach to cities will suffer from a ‘disaggregation’ problem of major proportions. Part of the reason that the city is a complex commodity is precisely that the very nature of preferences, demands and supplies for location and space creates the potential for gaps between individual utility maximisation efforts and wider outcomes. Theory will be better able to inform policy when policy begins the better to inform theory. Unbundling amenities, getting the prices right and injecting transparency into the prices and quantities of city features will let theorists fill in many of the gaps that now pockmark our understanding of urban areas. It could also be used to improve cities themselves, by enabling us to identify points where innovations (new technologies, new types of development) in supplying demands for urban-ness might alter the substitutability of preferences, creating genuinely better choice sets with more overall utility and welfare, and less collateral damage.

Notes

1. However, the powerful support lent to Paris by the French central government always slowed any tendency towards decline in its centre, and hence makes its revival less

radical than that of central cities in the US or Britain.

2. This sort of historical accident in scholarship is not unheard of. The historian John Keegan has argued that the unrealistically weak role ascribed to nation-states by Marxism is a function of the aberrant peace that had settled over Europe during the time Marx was writing *Capital*. The peace, of course, did not last (the continent was plunged into violence not long after the book was published) but it lasted long enough to seem normal for Marx, and the deceptive normalcy led him astray.
3. And yet, as Feldstein (2003) points out, a lot of the productivity growth from information technology came from discount retail, a creature of the suburban ‘old economy’. Advances in telecommunications (Wal-Mart owns its own satellite) and logistics have allowed for just-in-time delivery, better inventory control and inefficiency gains from big box stores. So the ‘new economy’ has both centripetal and centrifugal aspects: it centralises and decentralises.
4. ‘Sprawl’ is a notoriously ambiguous term, so much so that in discussions of land use policy, it is probably no longer of any use. In this paper, we follow Glaeser and generally use sprawl as shorthand for regions without strong central cities and where automobile use is more prevalent than public transport. We do not intend the term pejoratively. For more precise discussions of sprawl, see Fulton *et al.* (2001); Galster *et al.* (2001); and Downs (1999).
5. The density of the urbanised area outside Phoenix’s central city is about 3200 people per square mile. The urbanised area outside Boston’s central city is about 2000 people per square mile.
6. Our concept of access is similar to Glaeser *et al.*’s (2001) idea of ‘speed’. It also draws, to some extent, on the concept of the ‘mode-specific constant’ in transport modelling. The constant assumes that, once income, time value, speed of travel and other variables have been controlled for, differences in mode choice can be explained by the qualitative differences in transport mode. The constant often varies from one geographical area to another.
7. As Richard Easterlin pointed out in *Birth and Fortune* (1980), the generation that came of age during the mid-century urban decline was inordinately small. Decline also coincided with a period of highly restricted immigration. More recent native-born cohorts have been much bigger and

- immigration levels are the highest they have been in decades.
8. In one way, Florida's use of gays as a proxy for tolerance is problematic. Although gays certainly face discrimination, they are much more likely than many other minorities (Latino immigrants, for example) to have a similar appearance and socioeconomic status as the majority. Discrimination against gays can thus be more difficult than against other minorities, because it requires more information.
 9. Many of these observations came from, or were inspired by, an on-line conversation on the decline of urban architecture begun by Tyler Cowen on the Marginal Revolution web log (see http://www.marginalrevolution.com/marginalrevolution/2004/08/has_urban_archi.html).
 10. From 1991 to 2001 homicide rates fell by 50 per cent in the Northeast and by 49 per cent in big cities. In the South, which saw the next-largest drop, homicide rates fell by 45 per cent, and, in cities of 50 000–250 000 people, they fell by 41 per cent. Similar differences exist for declines in violent crime and property crime (see Levitt, 2004).
 11. For an overview of anti-vagrancy and 'broken window' laws, see Mitchell (2001). For a powerful critique of them with regard to homelessness, see Waldron (1991). Harcourt (2001) refutes the idea that anti-vagrancy laws contributed meaningfully to falling crime rates, citing instead increased staffing of police forces and the collapse of the crack cocaine market. Levitt (2004) adds the rise of incarceration rates to the list of causal factors and also includes his controversial work with Donohue (Donohue and Levitt, 2001), which advanced the idea that legalised abortion lowered urban crime.
 12. Thanks to Ian Gordon for this point.
 13. Recent work in behavioural economics, particularly on loss aversion, endowment effects and preference falsification, has focused on how preferences form and change. Little of this work seems to have been imported by urban economics, however. Kuran (1997) and George (2001) offer good discussions of preference formation; Glaeser (2003a) discusses the role that psychology can play in market models.
 14. For a brisk exposition of this argument see Thompson (1968/1996).
 15. For instance, cities that pursued urban renewal programmes often removed those populations who would object to them and created populations who benefited from them. Doubtless this gave renewal a temporary veneer of stability.
 16. We owe this example to Paul Cheshire.
 17. The logic behind this is that a person with conflicting preferences would be irrational and open to having his or her wealth drained through a series of perpetual disadvantageous exchanges.
 18. Thomas Schelling was probably the first economist to explore this subject in depth (see Schelling, 1982).
 19. Thanks to Ian Gordon for clarifying our reasoning on this latter point.
 20. Many of Tiebout's critics respond only to his seminal article, and not to the subsequent improvements to it made by Oates (1969) and Hamilton (1975).
 21. Thanks to Gilles Duranton for pointing this out.

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