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COMMUNITY AND REGIONAL PLANNING
THE UNIVERSITY OF TEXAS AT AUSTIN

P L A N N I N G
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It is the mission of *Planning Forum* to serve as a medium for the multi-disciplinary exchange of ideas related to the study of human communities and the interplay of social, political, and economic policy and action with built and natural environments. This nontraditional cross-disciplinary forum seeks participation and representation from students, faculty members, and field practitioners.

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LETTER FROM THE EDITORS

We were especially pleased with the articles submitted for this, the eighth, issue of Planning Forum. Written by planning students, faculty, and practitioners, the articles that follow reflect the full range of the planning continuum. Through lively prose and thought-provoking images, these pieces collectively examine the continuing influence of the urban past, assess the current state of cities and communities, and imagine various scenarios for our future world.

Carlos Romo treats us to a rich historical analysis of gentrification in Montevideo, Uruguay. The neighborhoods featured in his study, unique Afro-Uruguayan communities, have undergone both architectural *and* cultural change as a result of various policies by 20th century dictators and the current government. Romo argues that his case study illustrates the need for municipal governments to consider the role of economic development policy in accelerating or enabling gentrification. Lydia Heard similarly identifies a strong connection between urban form and social cohesion. Using historical examples of urban villages in both England and the United States, she probes the relationship between spatial and social distance, raising a number of points for policymakers to consider with respect to urban planning.

From these historically focused pieces, we move ahead to two pieces that address planners' current struggle to measure and evaluate urban health and trends. Zhou Yu analyzes U.S. census data from the last two decades for evidence of a link between immigration and urban sprawl in U.S. cities. Demonstrating that many factors influence the movement of people out of central cities and into suburban areas, he concludes that anti-sprawl forces have unfairly and unhelpfully targeted immigration, arguing that their opposition could be more usefully focused on specific development behaviors. The piece that follows by Lisa Weston explores several methods for evaluating whether existing urban and suburban areas reflect the New Urbanist principles often advocated to guide development of new suburbs. Using seven existing neighborhoods in Austin, Texas as test cases, she presents a series of measures that could help planners evaluate and then retrofit existing communities in accordance with New Urbanist principles.

In the last article, Bruce Tonn presents several potential scenarios for the future that planners will find rather interesting. Looking beyond the typical ten to twenty year timeline, Tonn turns his gaze fifty years into the future. Interweaving and extrapolating social, economic, political, technological, and environmental trends, he presents four very different possibilities for urban form and social interaction in the future.

Our regular Point/Counterpoint feature also looks at the relationship of past, present, and future in the field of planning, illuminating some of the issues infrastructure planners face during periods of prosperity. We asked six experts from the public and private sectors, as well as academia, how the ups and downs of the economy influence planning in urban areas.

We think you will find these articles to be informative and stimulating, and we look forward to hearing comments from our readers. Special thanks to all of you who completed our survey last year. You will notice that we have incorporated many of your comments in this issue as part of our multi-year effort to bring you a publication that meets your needs. At any time, please feel free to contact us with your input at forum@vitruvius.ar.utexas.edu.

Sincerely,

K. Maria D. Lane and Lisa M. Weston
forum@vitruvius.ar.utexas.edu

INFORMATION FOR CONTRIBUTORS

Planning Forum serves as a medium for the multi-disciplinary exchange of ideas related to the study of human communities and to the interaction of social, political, built and natural environments. The journal welcomes submissions of original research papers, timely book reviews, and discussions of current debates, literature, and theory. The journal's intended audience is primarily academic – graduate students and faculty members in worldwide planning-related disciplines – but also includes practitioners who work in fields directly related to journal content.

Submission Guidelines: Suggested length is 5,000-10,000 words, including notes and references. Please indicate the number of words on the cover sheet. Authors should follow the style and spelling requirements of the Chicago Manual of Style, 14th Edition. Authors may use either the parenthetical author-date or end-note style of references, but should include only those works actually cited in the text. Planning Forum cannot accept papers that include footnotes. Papers are reviewed anonymously, authors should therefore refer to themselves in the third person in text and notes. Each illustration, chart, table, or graph to be included in the text should be submitted on a separate sheet, with desired text locations clearly indicated. If the manuscript is accepted, the author will receive detailed instructions regarding the proper format of non-text elements. Submission of black and white photographs to accompany the article is encouraged, but publication of these will be at the editor's discretion.

Number of Copies: Authors should submit five (5) copies of each manuscript, which will not be returned, and an electronic copy on diskette or as an email attachment to the address below. Please include a cover sheet listing the article title, author's name, author's address, phone number, and email address.

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Deadlines: Planning Forum, Volume 9, will be published in late spring 2003. Abstracts (250 words max) may be submitted via email until September 15, 2002, indicating that the author intends to submit a full manuscript. Full manuscripts prepared according to the guidelines above are due no later than October 15, 2002. Note: Papers must be received by this deadline, *no exceptions*.

Correspondence should be addressed to:

Editor, Planning Forum

forum@vitruvius.ar.utexas.edu

<http://mather.ar.utexas.edu/planning/forum>

University of Texas at Austin School of Architecture

3.108 Goldsmith Hall, Austin, Texas 78712

Tel (512) 471-1922 – Fax (512) 471-0716



Gentrification of a Cultural Space

Revitalization Policies and their Impact on Afro-Uruguayan Neighborhoods in Montevideo

CARLOS ROMO

This essay examines the neighborhoods of Palermo and Barrio Sur in Montevideo, Uruguay as case studies in the role city revitalization policies play in the gentrification of cultural spaces. The project is based on a preliminary investigation of a housing rehabilitation program in Montevideo aimed at urban renewal. This paper shows that the Programa de Reciclaje has lost its focus as a targeted rehabilitation policy and instead subsidizes the gentrification of two stable, traditionally Afro-Uruguayan neighborhoods. The implication for city revitalization is that public policies that take into account and seek to protect residents and their valuable cultural contributions to city spaces are as important to the preservation of historic communities as the “recycling” of buildings.

To Marta who recently passed away – sin usted el barrio no será igual.

Afro-Uruguayan culture still resonates in inner city Montevideo. Comprising only 6 percent of the national population, the Afro-Uruguayan community has a disproportionate impact on Uruguayan popular culture. The Afro-Uruguayan musical tradition *Candombe* is currently seeing unprecedented popularity among all Uruguayans and Montevideo's internationally renowned *Carnaval* celebrations include traditions practiced by Afro-Uruguayans for over two centuries. This community's cultural impact is in part due to its historically strong urban presence in Montevideo: for over two hundred years, the inner city neighborhoods of Barrio Sur and Palermo served as critical social and symbolic spaces for the development and preservation of Afro-Uruguayan cultural traditions.

Even as the Afro-Uruguayan community gains growing notoriety, the cultural spaces that incubated its historical legacy are increasingly threatened. Urban renewal strategies since 1975 have focused on economic revitalization at the expense of the cultural contributions of the community's residents. Displaced first by a repressive dictatorship aimed at cleaning up "ghettos" through demolition and eviction, and later dispersed by a state subsidized historic preservation program "recycling" the neighborhood's middle-class roots, the remaining Afro-Uruguayan community in these historic enclaves is on the verge of disappearance.

The urban renewal policies of a dictatorship and the more recent democratic city government are more ideologically linked than one would imagine. Both governments argue that by restoring deteriorating urban centers, the vitality of the city as a place for social and commercial exchange will return. Each renewal policy is linked by the inherent logic of revitalization: certain historic (often more economically beneficial) places must be preserved over others. The dictatorship favored the explicit destruction of cultural spaces to make room for more economically beneficial residences and businesses. The post-dictatorship government developed a housing rehabilitation policy that used a more tacit approach with a similar result. The cumulative impact of Montevideo's urban renewal policies over the last twenty-five years has been the displacement and gentrification of a uniquely Uruguayan community.

Paradoxically, in a moment when movements like New Urbanism, Smart Growth, and Neo-Traditionalism are encouraging a new wave of revitalization in cities worldwide, the study of gentrification has become passé. Urban theorists either believe it is inevitable or have few new policy responses to address it. One area of increasing examination is the role public policy plays in contributing to gentrification. Housing policy in particular has become a focus of researchers exploring the links between public reinvestment in central cities and the increasing waves of young urban pioneers pricing out minority communities in the inner city (Wyly and Hammell 1999).

The goal of this essay is to examine the neighborhoods of Palermo and Barrio Sur in Montevideo as case studies in the role city revitalization policies play in the gentrification of cultural spaces. The project is based on a preliminary investigation of a housing rehabilitation program in Montevideo aimed at urban renewal. The conclusions of this study suggest that revitalization policies that concentrate on the built environment may be misguided for communities with strong cultural traditions. The implication for city revitalization is that public policies that take into account and seek to protect residents and their valuable cultural contributions to city spaces are as important to the preservation of historic communities as the "recycling" of buildings.

The first part of this essay explores the roots of Palermo and Barrio Sur as Afro-Uruguayan enclaves. Several Afro-Uruguayan traditions that have been incorporated as unique parts of Uruguayan culture began in these neighborhoods along the southern coast of Montevideo. A brief history of these areas is necessary to understand the role the city government has played over the last twenty-five years in the reinvasion of Montevideo's traditionally Afro-Uruguayan neighborhoods by middle- and upper-income residents.

After examining the physical and symbolic ties that the Afro-Uruguayan community has to the two neighborhoods of Sur and Palermo, the second part of the essay will investigate the origins of the current rehabilitation program known as the Programa de Reciclaje (Recycling Program). Ironically, the most recent displacement of Afro-Uruguayans in Montevideo was determined in large part by a historic preservation policy aimed at rehabilitating the "historic memory" of its oldest neighborhoods. This paper argues that the housing rehabilitation program known as the Programa de Reciclaje was one incarnation of a general trend of nostalgia in the post-dictatorship period. As a result, it was never adequately evaluated as an urban revitalization strategy. The current rehabilitation policy in these traditionally Afro-Uruguayan neighborhoods is contributing to the rapid gentrification and displacement of the cultural traditions that originated there.

It will become clear that the City of Montevideo has relied on a model of redevelopment formulated for one *architecturally* historic neighborhood that is suspect for the redevelopment of Montevideo's *culturally* historic communities which are still strong neighborhoods despite pockets of blight. This paper shows that the Programa de Reciclaje has lost its focus as a targeted rehabilitation policy and instead subsidizes the economic and social gentrification of two stable, traditionally Afro-Uruguayan neighborhoods. As a final point, the paper questions the appropriateness of Montevideo's historic preservation program as a *public* policy and offers several policy responses as a means to renew the debate of what role Montevideo's city government should play in the revitalization of its urban cultural spaces. The analysis concludes that policy change is necessary to help mitigate the damage to the remaining Afro-Uruguayan community in these neighborhoods.¹

Origins of Two Afro-Uruguayan Cultural Places in Montevideo

Montevideo was built as a city open to the ocean. With a naturally deeper port than the Puerto Madero in Buenos Aires, the Puerto de Montevideo played a very important role in Uruguay's economic and social development² (see figure 1). Montevideo grew into a regional center for imports and exports, and by the early 19th century it had become a regional hub for the exchange of slaves. By 1812, Afro-Uruguayan slaves made up as many as one-third of Montevideo's total population (Rama 1967).

According to Uruguayan historians, many Afro-Uruguayan traditions began when slaves from West Africa gathered together in settlement camps in Montevideo called *caserios* (villages). In these areas outside of the city walls, slaves were raised and "fattened up" temporarily before auction. Many accounts suggest that slaves have historically occupied the southern edges of the city along the coast since the early 1800s and one of the colonial *caserios* may have been located along the southern coast where the two traditionally Afro-Uruguayan neighborhoods, Palermo and Barrio Sur, are today (Ferreira 1997).

The earliest descriptions of these communities focus on a nascent Afro-Uruguayan musical tradition called *Candombe*. Drawing upon the dances and spiritual celebrations of the descendants of Bantu tribes from West Africa, *Candombe* was practiced throughout Montevideo and in particular is associated with the neighborhoods Sur and Palermo. *Las llamas* were weekly public exhibitions of *Candombe* where a mix of tribes and nations



Figure 1. General Map of Montevideo

from Africa came together to play *tambores* (drums) and dance. The term *las llamadas* (the calls) refers to a distinct cadence of the drums that served as a means of calling the slaves from their owner's residences. *Las llamadas* were temporarily sanctioned celebrations in the time of slavery, traditionally practiced on Sundays around dusk when the playing of the *tambores* called together the slaves around Montevideo to come out of the homes of their masters and join the group to dance and socialize. *Candombe* was made up of *cumparsas*, or groups of Afro-Uruguayans who would play the *tambores* and dress up in colorful costumes mimicking their colonial masters.³

The first official mention of *Candombe* was from public documents describing the tradition's integration into the Uruguayan *Carnaval*, the cathartic celebration before Lent that is especially significant in Montevideo (Ferreira 1997). The following is a reprint of the description of *las llamadas* celebrated around the 1830s:

From dusk they began to fill the plaza of the *caserio* of *los negros* ... Old black women with their colorful suits, reds, blues, yellows ... after an hour, a growing noise wants to break the eardrum of the city... You have never seen as many blacks in the Montevidean neighborhoods ... *los bangelas, luandas, nolembos*, [Bantu tribes] representing all the sects ... the best and nothing malevolent ... all the curious start circling around...they come from all parts attracted by the deafening thunder of *los tambores* ... the servants flee from their giant houses, tripping over each other, leaving the kitchens to respond to the noise ... a corner of Africa vibrates in the middle of the city! ... the noise grows deafening, amplified, nearing a magnificent crescendo ... pieces of a mad orchestra ... the breasts of the *mulatas* move in a dislocated rhythm. The young males carry the elders on their backs. The matron ladies pass by upright and satisfied ... Everyone

jumbles into a collective madness ... It is *Candombe*! The Negro has lost control of himself and submitted himself to the devil's frenetic movement ... he has been called from the jungle ... his African ancestry emerges from the subconscious. (Pareda Valdes 1954, 209)⁴

Beyond the racist associations of this passage, one can see the role that *Candombe* played for a repressed Afro-Uruguayan slave community. By 1839, the fleeting fascination with *Candombe* by the Colonial patriarchs had passed and *las llamadas* were banned by a police decree prohibiting the dance (Ferreira 1997).

Although public displays of *Candombe* continued despite the police ban, by the middle of the 19th century *Candombe* had made a significant move from its street origins to private spaces in proliferating social clubs sponsored by Afro-Uruguayan societies called *naciones* (nations). *Naciones* were groups of Afro-Uruguayans that were arranged by tribal allegiances or neighborhood. Each *nación* organized gatherings held in private *salas* (clubs)—often the living rooms of the *rey* (king) of the *nación*—to practice *Candombe* and other traditional dances (Ferreira 1997). Over a period of almost two hundred years, *Candombe* became a means for both the literal and symbolical cohesion of the Afro-Uruguayan community. The community's practice of its own Afro-Uruguayan cultural traditions served a socialization and historical function similar to that of the oral tradition of slaves in the United States. Different roles in theatrical displays were passed on from one generation to another and traditional costumes based on colonial dress are still worn today.

Over time, different *cumparsas* began distinguishing themselves based on neighborhood allegiance. The neighborhood-based *salas* were the precursors to the informal community spaces formed in large communal houses known as *conventillos*.⁵ In the cases of Barrio Sur and Palermo, *cumparsas* took on the identity of their respective *conventillos*, Medio Mundo and Ansina. Less than ten city blocks apart, the two *conventillos* often held spontaneous marches of *tambores* amassing residents along the famous street Isla de Flores that connected the two neighborhoods. Reenacting the *llamadas* of colonial time, these impromptu celebrations wound around the two Afro-Uruguayan neighborhoods following the same route of Carnival. Friendly competition between these fraternally connected communities still exists today and neighbors often make distinctions between the generally identical neighborhoods by alluding to the unique rhythms associated with their respective

conventillos—Medio Mundo in Sur and Ansina (Barrio Reus al Sur) in Palermo.

The Afro-Uruguayan cultural foundations that developed during colonial times became fundamentally connected to the unique spaces inside the famous *conventillos* in these neighborhoods. By grouping



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Figure 2. The traditional parade of *las llamadas* during Carnival brings together groups of *cumparsas* in the neighborhoods of Sur and Palermo.



© Carlos Romo

Figure 3. Typical *conventillo* (Source: IMM in Figueredo 1999).

several small rooms around shared cooking and bathroom areas, *conventillos* provided an inexpensive housing alternative for the newest working class residents of the city (primarily immigrants and descendants of slaves). The model of *conventillos* came from the anarcho-syndicalists in Europe that had used them to collectively house unionized workers. According to the Uruguayan census of 1908, there were 357 *conventillos* in four neighborhoods in the center of Montevideo with 6,853 rooms and 17,727 inhabitants. In all the rest of Montevideo, another 773 *conventillos* existed with another 17,100 persons living there. In total, 10 percent of Montevideans during this time lived in *conventillos*. The *conventillos* closer to the city served as hostels for the workers that needed to be close to informal jobs and domestic service jobs in the center of Montevideo (Figueredo 1999). Afro-Uruguayan women filled a large number of these domestic service positions.

Conventillos in Montevideo were significant for the cultural traditions that were nurtured and preserved within them rather than for their representation as a unique Uruguayan housing type. *Conventillos* existed throughout Latin America and in great numbers in Buenos Aires; they were also close relatives of the tenements of New York City, though until recently appeared to have positive connotations. The communal spaces and patios in the *conventillos* were central to the development and preservation of Afro-Uruguayan culture and in particular the musical tradition of *Candombe*. The importance of these spaces for Afro-Uruguayans is intimately connected to the *salas* of colonial times. The *conventillos* and their patios were the post-colonial *naciones* of Afro-Uruguayan socialization. Similar to the *salas*, private patios in the large communal dwellings developed into spaces for Afro-Uruguayan interaction and exchange. In the case of *Candombe*, these spaces were intrinsically tied to the preservation of the tradition:

The members of the *cumparsas* came from the *conventillos* of Barrio Sur and utilized the patios for their practices for *Carnaval* and for informal celebrations during the year. Both types of celebrations attracted Afro-Uruguayan residents and others. Spectators and musicians participated in festive processions that were part spontaneous theater and another part organized ritual. (Benton 1986)

The typical inhabitant and the cultural traditions that existed in these spaces would suggest that the *conventillos* might have had some worthy characteristics for historic preservation. These ideas are supported by the fact that the two most famous *conventillos*, Medio Mundo and Ansina, were given Historic Monument status in the early 1970s, only to have the status revoked later by the dictatorship.

Although the *conventillo* and its patio areas were significant for the development of Afro-Uruguayan community traditions, these spaces should not be overly romanticized. By their nature, conditions were dismal in *conventillos*. Built as quick-fix housing arrangements for the deluge of immigrants at the turn of the century, *conventillos* would remain the only affordable housing in the inner city for almost a century. The School of Architecture in Montevideo made some fieldwork observations in 1957 regarding the conditions of the *conventillo* Medio Mundo and found it to have fifty-six families “stacked into ‘apartments’ 12ft by 15ft, plaster falling down from the wall, and water from rain dripping from the ceilings...hundreds of inhabitants with only three bathrooms” (Kroch 1987).

Most observers would objectively agree that the buildings were overcrowded and unsanitary. Still, keeping in mind the cultural enclaves that existed there, in a series of interviews conducted for this study, conceptions of *conventillos* often hinged on the ethnicity, age, and social class of the interviewee.⁶ Younger respondents identified *conventillos* first with *Candombe* and second as a cheap place to live (many students who come to Montevideo to study today live in *conventillo*-like residences called *pensiones*). Perceptions of *conventillos* were still negative among the majority of middle-class Uruguayans outside the neighborhood, however. These groups tended to focus on their “tenement” like characteristics.

Not surprisingly, many Afro-Uruguayans interviewed for this research had a much more positive view of *conventillos* in comparison to those of other origins. Afro-Uruguayans tended to tie the *conventillos* to the experiences of *Candombe* and other cultural activities in the two most famous *conventillos* of Ansina and Medio Mundo. One can get a glimpse of how the *conventillos* and Afro-Uruguayan culture existed thirty years ago by visiting with some of the residents that continue to live in the partially demolished *conventillo* Ansina in the heart of Palermo. In a series of interviews with one Afro-Uruguayan named Juan Carlos, the connections between the buildings and their preservation of Afro-Uruguayan cultural traditions becomes apparent.

Juan Carlos, a late thirty-something Afro-Uruguayan squatter who returned to a partially demolished Ansina after a period in Buenos Aires, is a typical example of how Afro-Uruguayan traditions are nurtured in these neighborhoods. On the walls, he has clippings of *Candombe* groups from the last thirty years. He is often gathering other famous Afro-Uruguayan

Candombe musicians in the “patio” that is really open space created by the partial destruction of a back wall. He recycles old *tambores*, paints them, and sells them to young Uruguayans learning to play. You can find him frequently sitting in his window talking with neighbors that pass by. The window is almost always open and he listens to music while painting the *tambores* and their straps (each *cumparsa* uses colorfully painted straps to distinguish them from other groups). As a veritable historian of *Candombe*, his impact on

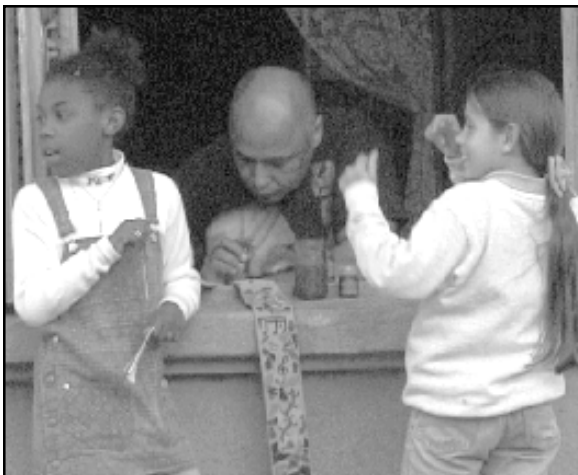
the community extends far beyond the four precarious walls of Ansina.

When a neo-fascist dictatorship took power in Uruguay in 1973, it made it very clear that the conditions in the *conventillos* and the characteristics of those that lived there were paramount considerations in their eventual policy to destroy them. As there were no political barriers to a slash-and-burn policy of eviction and demolition, this method of “modernization” of the inner city faced no opposition and the efforts were conspicuously focused on the Afro-Uruguayan communities of Sur and Palermo. The *conventillos* were selected as starting points for the dictatorship in its attempt to create a climate for reinvestment in the inner city. The dictatorship created housing decrees labeling *conventillos* “slums” and then set upon a policy of demolishing *conventillos* and other “urban blight” from these areas and enacting mass evictions of the Afro-Uruguayan “ghettos.”

American researcher Laura Benton (1986) has completed a partial examination of the dictatorship’s demolition and eviction policy in Montevideo. According to Benton, before 1978, officials had implemented an average of two or three evictions a year. An official decree in 1978 stated that any “unsafe” building “imminent” of collapse should be scheduled for demolition and its residents removed (1986, 28).

In a very short time, many residents of Palermo and Barrio Sur were arbitrarily evicted under different “states of emergency.” An estimated 440 buildings were declared ruined in 1978. In 1979, five hundred properties that had been declared historic monuments, including the *conventillos* Ansina and Medio Mundo, were removed from the list. By 1982, up to fifteen thousand residents had been evicted throughout the city (Benton 1986). The majority of these families were relocated to outer neighborhoods of Montevideo, although housing was generally not provided. When the evictions began on Ansina and Medio Mundo, the residents reacted emotionally: “They are evicting the area because it is so close to the center and the river. They’re not interested in tradition—the tradition of Ansina and [Medio Mundo] ... It’s not the buildings that are important. Without the people, the neighborhood won’t be the same” (neighbor quoted in Benton 1986, 30).

While the two central neighborhoods have obvious economic importance as a part of Montevideo’s center, the demolition of the *conventillos* had undertones of racial and cultural prejudice against Afro-Uruguayans. In the areas of Barrio Sur and Palermo, the focus of the decree, it is likely that many Afro-Uruguayans were targeted. One of the best examples of this potential bias comes from city decrees concerning *Candombe* and the possible impact that the drums would have on the already precarious structures. Benton explains:



© Carlos Romo

Figure 4. Juan Carlos, one of the few remaining residents in the partially destroyed *conventillo* Ansina, still shares his knowledge of *Candombe* with the neighborhood’s younger residents.

In Barrio Sur the demolition of the buildings implicated a deterioration of local tradition. The evictions of residents in the *conventillos* in the barrio coincided with an intent to displace the *Carnaval* celebrations out of the neighborhood. The Municipality argued that the deterioration of the houses was linked to the vibrations from the *tambores* of *Candombe*. (1986, 29)

While the demolition policies of the dictatorship had significant cultural undertones, not everyone is convinced that they were racially motivated. Abril Trigo, who has studied the repression and reemergence of *Candombe* since the dictatorship has stated, "It is pointless, of course, to say that these demolitions were racially motivated; their motive was economic, and included as well a hidden strategy of the dismantling of all strongholds of popular culture: a cultural policy supported by market ideology" (1993, 722). Trigo attempts to separate *Candombe* from Afro-Uruguayans, but the direct link that *Candombe* had to these communities cannot be disconnected. Trigo's dismissal of the potential for a racial motivation behind the demolitions in the 1970s continues a long Uruguayan tradition of underestimating the extent to which racism exists in Uruguay.

Based on many Uruguayans', including sociologists' and historians' of Afro-Uruguayan culture, belief that racism does not exist in Uruguay, it is not surprising to find that there have been no Uruguayan studies of the mass evictions and displacement of Afro-Uruguayans in Palermo and Sur. While there are some fictional plays and some studies on the demolition of Medio Mundo, at the suggestion that the evictions were race related in some form, it was not uncommon for academics to respond with the familiar "*no hay racismo en Uruguay*" (there is no racism in Uruguay).

Despite the widespread belief that all Uruguayans are treated equal, examples abound in academic and day-to-day conversation of racist generalizations about the Afro-Uruguayan community. Often it is in the seminal works by historians and sociologists where one can find the most egregious examples of cultural bias. For example, a book entitled *El Negro en la Sociedad Montevideana (Blacks in Montevidean Society)* from 1982 explains:

A 'black community' does not exist in Montevideo and there is no reason to create one...their meetings do not have a sense of 'community'...rather [blacks] only get together to have fun, where they dance and find similar people...but apart from these accidental reunions, they do not feel the need to unite together as blacks (Merino 1982, 14-16).

The statements of the author above are in the same book that reported a poignant response when a young black man from the community was brought in from the community for a round table discussion on the "black community" in Uruguay. The respondent comments, "There is a sly larval racism [in Uruguay] that is more uncomfortable than the overt racism of other places" (in Merino 1982, 16).⁷

While there is still little concrete evidence of the motivations behind *who* was evicted during this era, it is not difficult to imagine that race may have been a factor in the selection of buildings to demolish. Regardless of the motivating factors behind the demolitions, the limited evidence points to an overwhelming proportion of evictees being of Afro-Uruguayan descent.

While the slash-and-burn urban renewal strategies were increasingly falling out of political favor due to their effects on minority populations in places like London and other American cities, the Uruguayan dictatorship had the comfort of working in an apolitical

environment. There is evidence pointing to a cultural and perhaps racial bias in the dictatorship's focus on these traditionally Afro-Uruguayan neighborhoods. Still, like other forms of repression during the dictatorship, there was little room for opposition to these culturally insensitive policies.

The *Cultura de Reciclaje*

Understanding the effects of the dictatorship's urban renewal strategies puts the current historic preservation policy in context. The apolitical environment in Montevideo during the dictatorship and destructive policy of demolition and eviction led to a post-dictatorship period that looked temporarily to the past for help on how to move forward. After the end of twelve years of dictatorship in 1985 and the return to democracy, the trend in Uruguay was to look back and ask "What went wrong?"⁸

Up until the dictatorship, Uruguay had a self-image as "different" and "better" than other countries in Latin America (Grupo de Viajes 1993). This national identity was in part a result of forward-thinking president Jorge Batlle y Ordoñez who at the turn of the century built the foundation for many of the Uruguayan successes that carried a small country of only three million people to international recognition. Uruguay was one of the first "welfare states" and its distribution of income and its strong middle class democratic traditions created a reputation of Uruguay as the "Switzerland of the Americas." It was one of the first countries in the Americas to grant women's suffrage. For a short time in the 1920s, it had the tallest building in the hemisphere. Even its soccer team seemed to play beyond its means, winning the first World Cup in 1930 and again against Brazil in 1950. The common saying about Uruguay in this era was "*como el Uruguay, no hay*" (there's no place like Uruguay).

Still, nostalgia for the past could not hide the fact that Montevideo's urban areas, especially the Ciudad Vieja (Old City), were facing drastic decreases in population and density (see figure CV to see the acute depopulation that the Ciudad Vieja still faces.) These trends had been occurring for over fifty years. Montevideo's city government has been concerned about depopulation of the city center since the late 1940s. In 1946 the City of Montevideo tried to contain sprawl by imposing a growth boundary and promoting denser development with new laws stimulating home ownership in central areas. For example, *La Ley de Propiedad Horizontal* (The Horizontal Property Law), also in 1946, allowed for co-op and condominium arrangements to help the large inner-city renter population move towards home ownership of apartments. One of this law's first articles established that various floors of a building and independent apartments—both for apartment buildings and for houses with only one floor—could be divided and independently owned. Although the intention was to turn current renters into owners, an unintended consequence was a boom in the construction of new high-rise apartment buildings between 1946 and 1958 in the more ecologically attractive coastal areas like Pocitos and Punta Carretas (Figueredo 1999).

Increasingly, families were moving into the inner-suburb areas—like Pocitos and Malvin—and then into nearby peripheral areas east and northwest. These movements out of the inner city in the 1960s could primarily be explained by the prosperous economic period during this time in Uruguay. Land was relatively cheap, and improved transportation, new jobs, and the ecological benefits of clean beaches and air were significant factors for out-migration and growth in the suburban Costa del Oro (Golden Coast) and surrounding metropolitan areas (San Jose and Piedras to the northwest, and Canelones to the east). These shifts outward have continued into the 1990s.⁸

Both the dictatorship and more recent governments took into account these trends in depopulation, dilapidation, and trends in the service economy, and argued that the continued

deterioration of the historic core of Montevideo could be prevented. Attempting to shift the focus away from the urban renewal policies of the dictatorship, the Programa de Reciclaje (Recycling Program) promoted the prospects for historic preservation of the Ciudad Vieja. The return to democracy and the search for a new “national identity” in Uruguay created a socio-cultural window for a neo-traditional urban revitalization policy. A policy focusing on historic preservation was the polar opposite of the dictatorship’s policies of cultural repression; nostalgia was particularly welcome for the precarious rebuilding of Montevideo’s collective memory.

One of the first proponents of greater public involvement in historic preservation was the *Grupo de Estudios Urbanos* (Urban Studies Group, or GEU). The GEU published a study in 1983 during the final years of the dictatorship that recommended the city, “reaffirm its role as a protagonist [in the rehabilitation of the Ciudad Vieja], ... ratify the policies on historic and cultural preservation, [and] promote and extend a new line of private and public credits for the financing of rehabilitation projects” (Arana 1983). This study in particular has guided Montevidean urban redevelopment for almost twenty years since it was first published, partly because the study’s coordinator Mariano Arana, an architect, became mayor of Montevideo in 1990.

Following the worldwide trends of historic preservation in architecture and urban planning, the GEU promoted a pilot project in the Ciudad Vieja that would focus on “the maintenance, recuperation and revitalization of the buildings in the area of the Ciudad Vieja with an outlook towards the preservation of relevant historic, cultural, and environmental values” (Arana 1983, 3-4). The Ciudad Vieja project would use a public line of loans to rehabilitate buildings around the financial center. The Banco Hipotecario de Uruguay (the national mortgage bank, or BHU) would give special low interest loans to individuals living or working in the Ciudad Vieja to rehabilitate their homes. In 1987, the Ciudad Vieja had been established as a “Priority Zone of Urban Action” by the BHU and the Municipality of Montevideo (IMM).

Not surprisingly, the pilot project was unsuccessful in its first years. While the policy was designed for residential rehabilitation, most of the residences in the Ciudad Vieja were multi-family or rental properties similar to the *conventillos* in other areas of Montevideo. Costs would have been too high for a private entity to rehabilitate a major structure like a *conventillo* and these properties were often divided up and owned separately. Also, the BHU likely did not include many of the lower income residents of the Ciudad Vieja among its debtors and probably made few new efforts to extend the program to these lower income populations. During the initial years from 1987 to 1990, only thirty projects with fifty-three habitations were approved. As a result of this slow start, the IMM made a critical decision to expand the initial priority areas to include an entire urban area surrounding the center. The new Programa de Reciclaje would be set up to achieve the following goals:

- To preserve the *valores testimoniales* (historic memory) [of the city]⁹
- To rehabilitate so that the people that live in the neighborhoods attain [the benefits] of its revitalization
- To deter the abandonment of the central areas
- To achieve a contagion effect (BHU 1993)

A careful reexamination of the aims of the project demonstrates that while it was originally a well intentioned project oriented at renovating the architecturally unique Ciudad Vieja, it was not necessarily appropriate for other parts of Montevideo.

From an urban revitalization perspective, there are significant differences between Ciudad Vieja and areas like Palermo and Sur. In terms of depopulation, the Ciudad Vieja had suffered particularly sharp declines in comparison to other inner city areas of Montevideo, losing 20 percent of its population from 1976-1986 compared to less than 10 percent decline in less distressed areas like Palermo and Sur (INE 1976-2000). While the historic significance of the Ciudad Vieja is still obvious around the main Plaza Matriz and the original *cabildo* (governor's house), as you move around its carefully planned streets, one can visually see the rampant abandonment and dilapidation that many of the older buildings have suffered in the last few decades. Crime is high in the Ciudad Vieja and its large old buildings have been converted into new types of "slums" called *pensiones* (cheap motels). Although it has become less attractive from a residential standpoint, the Ciudad Vieja is growing in importance from a commercial services perspective. Transitioning from its role as the former center of Montevideo to an increasingly specialized role as the financial center of Montevideo, many of the city's banks and other international service companies working for the Puerto are located here. When these institutions are closed in the evening, the Ciudad Vieja looks like any other financial center in a major city, deserted and unsafe.

The expansion of the Programa de Reciclaje's Priority Zone to include other central city areas outside the Ciudad Vieja signified three prominent changes in the purpose of the project. First, it compromised the original focus of the project to rehabilitate Montevideo's most distressed areas. Second, it widened the pool of eligible debtors that could apply for the subsidized loans, which resulted in higher income classes being publicly subsidized to locate in areas that were not in need of incentives. And third, it took a policy that was designed for architectural preservation of historic buildings and attempted to apply similar criteria to less architecturally significant but culturally important urban areas. Although it is not difficult to see why the city extended the program outwards from an economic standpoint, the collective impact of the decision ultimately transformed a well-intentioned public reinvestment program focused on a truly distressed area into a state sponsored gentrification plan that used historic preservation to subsidize the redevelopment of inner-city neighborhoods already struggling from middle-class invasion.

In purely economic terms the Programa de Reciclaje could be considered a success. The demand for permits for *reciclajes* in the program's first five years went from three in all of 1986/1987 to 253 for 1990/1991. This increase was due in large part to the extension of the program outside the original zone of the Ciudad Vieja. By 1990, the new priority zone had included many of the surrounding neighborhoods of the Ciudad Vieja, including Barrio Sur and Palermo. Real estate prices in terms of average price per square meter and gross dollars in the selling and buying of property now place Palermo into one of the seven top neighborhoods in economical value in Montevideo (INE 1976-2000). Barrio Sur is close behind with the 13th highest valuation per square meter in the city.

While there is no similar pre-1999 data to show how much property values have changed in the last fifteen years, rates of construction give us a glimpse into the new importance of these neighborhoods from a real estate perspective. Looking at construction permits requested by neighborhood in Montevideo, the number of permits for construction requested per year for Palermo has increased by over 100 percent from 1991 to 1996 (INE 1976-2000). Statistically Palermo and Sur are now closer than ever to historically wealthier areas of Pocitos and Punta Carretas. Despite obvious signs of increasing wealth in these neighborhoods—for example, new high-rise buildings, renovated homes, and new computer businesses and stylish restaurants—the program's intentions were more than just economic revitalization.

The extension of the Priority Zone to include more stable neighborhoods meant the program no longer could be concentrated on this area most in need of public investment. Originally, the pilot Recycling Program was designed to help the severely distressed area of the Ciudad Vieja and its inhabitants. Those who lived in the Ciudad Vieja lost out by the new zoning, because wealthier residents of other neighborhoods were now included. Essentially, the pool of eligible homes and residents was extended and as a result, the bank could use a screening process in their investment decisions. This hurt the Ciudad Vieja in particular because residents outside the Ciudad Vieja were increasingly applying for loans. Likewise, residents moving in from outer suburbs were no longer lured back to a severely distressed area but instead were able to choose nicer areas in the new historic Priority Zone to get a better bang for their subsidized buck. As a result, areas like Palermo, which have intrinsic value as residential areas and are still strong communities with only spots of blight have become magnets for subsidized redevelopment and *reciclajes*.

For a private investor, the extension of the credit to other more developed areas around the center also meant a reduced risk for investment. Although it is traditionally difficult to determine what impact public housing policy has on market trends, in the case of the Programa de Reciclaje, the BHU line of credits has had obvious success in the extent it has lubricated the growing trend of rehabilitating houses. The BHU has made clear that after the initial first stages of the program, *reciclajes* were increasingly being built to sell and rent and not to rehabilitate existing owner occupied homes (BHU 2000). Although a larger and larger share of *reciclajes* were being developed on the private market with young architects specializing in redesigning typical houses into colorful living spaces, the city government failed to recognize these investment trends and paradoxically the public's share of investment skyrocketed. In the first four years of the program (1986-1989) the share of investment by the BHU—the public equity that was included in a loan package—increased dramatically from only a 2 percent share in (1986-1987) to 12 percent in 1989. In 1990 and 1991, the public share of the investment jumped significantly to rates of 29 percent and 32 percent, respectively, as the recycling program became a new focus in the city's overall redevelopment plan (BHU 1993).

The criteria used by the BHU to determine who qualified for loans also tended to exclude potential lower income residents because of the changing character of the bank itself. To qualify for a loan for *reciclaje*, one had to have an account with the BHU for at least two years and a good credit rating (Crespi 1989). While the BHU was originally designed to help lower income groups have access to a bank, and in particular housing, after the dictatorship it increasingly operated more like a private bank, losing some of its original social function: "the BHU has not completed its constitutional duty to help the lower income groups... with the violent rate hikes, and the high mortgages that the bank demands, the sector of society that can access a loan is more and more restricted and of middle and higher incomes" (Barriero 1991, 20). Although the financially strapped bank cannot be blamed for shifting to relatively higher income debtors, these higher income groups were taking advantage of the especially low interest rate loans of the Programa de Reciclaje to move to and renovate homes in areas like Palermo and Sur. In reality, many of the debtors taking advantage of low interest loans and public equity could have moved to these areas without these incentives, and would have moved in due time considering the relative stabilization of the area and the overall trend of moving back into the city.

As a result of the characteristics of its debtors, the Programa de Reciclaje is progressively redeveloping and recycling houses that are not for lower income residents, the BHU's constitutionally mandated purpose (Barriero 1991). At first, the establishment of a public line



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Figure 5. The old and the new.

of loans from BHU was needed to assume part of the risk of this innovative program. Public intervention was especially necessary in its original area of focus, the Ciudad Vieja. However, once the project extended outwards to areas like Palermo and Parque Rodo (a neighboring area of Palermo close to the large city park by the same name), the Programa de Reciclaje's supposed focus on low income housing units could never take root and the program was increasingly focused on middle income residents. The recycled houses were almost always labeled *mediana* (middle) in official data sources and the popularity of *reciclajes* among young trendy architects suggests that very few *reciclajes* are intended for lower income groups. Especially in the last few years, more than 90 percent of the *reciclajes* have been categorized as middle income by the Census (INE 1976-2000). As more economically mixed neighborhoods receive more projects for *reciclaje*, the consequence is both a symbolic and real displacement. Not only are the intended beneficiaries of the loans not getting them, but they are also being forced out of their traditional neighborhoods by the increasingly higher income and subsidized trendsetters. After seeing some of the more stylish *reciclajes* in Montevideo, one must be reminded that this is a publicly funded program supposedly concentrating on helping the lower income residents in these areas renovate their own homes.

The financial defects of the program are compounded by the application of the historical preservation criteria of the recycling credits to less and less architecturally significant housing outside of the Ciudad Vieja. Most of the houses that qualify for historic preservation ("older than fifty years and some historic value" (BHU 1993, 1), according to the Programa de Reciclaje) fall into the category known in Uruguay as the *casa estandard* (standard house).

Looking at the typical *casa estandard*, one can understand why it would be a popular choice for renovation among today's Montevidean middle class. As *conventillos* were being

built for the steady flow of new working class immigrants at the turn of the century, a growing middle class population was also demanding new housing in the central areas. As a result, the *casa estandard* evolved into a very common housing type in the central city areas of Sur and Palermo. *Casa estandardes* were relatively large single-family residences located on the edges of the Ciudad Vieja, the result of the first expansion outside of the colonial walls. The parts of Cordon, Sur, and Palermo near the main boulevard of 18 de Julio and Parque Rodo increasingly were developed with *casa estandardes*.

The basic model of these residences did not change, leading one journalist to satirize that “thieves did not have to familiarize themselves with the layout of the rooms because it was already known...architects do not have to exhaust their brains thinking of plans, and we all know what the neighbors houses look like on the inside” (a journalist in Figueredo 1997, 70). As a result of the layouts being very similar, the facade took on special significance in differentiating one *casa estandard* from the other. Often residents would save the construction of the facade for last, bringing in “surface specialists” to decorate the front. As a result *casa estandardes* are highly decorative: “windows are tall and arched...[and the] facades are decorated with Corinthian columns, dados, cornices, and friezes. Entry halls and patios are trimmed with stucco and fountains” (Zum Felde 1919, 256).

Although highly decorative, according to one prominent architect in Montevideo, *casa estandardes* are still inherently without much value (Louceau 2000). Similar to *conventillos*, they were built quickly to fill the consumption patterns of a growing middle class. By their nature, they were copies. The neo-colonial cornices and window balconies were designed using stucco and cement instead of the more costly wrought iron found in Montevideo’s wealthier older neighborhoods.

Many of the *casa estandardes* were abandoned and neglected in the 20th century as middle class residents moved out of the inner city. Interestingly, as Afro-Uruguayans were displaced from *conventillos*, they began to appropriate these properties and divide the homes into *piezas* (rooms) for rent. As property laws changed in the 1950s, many of these smaller rooms within properties became eligible for home ownership. The new law allowed working class families and Afro-Uruguayans to purchase a room or *pieza* that was linked together with three or four other rooms by a common throughway leading to the street and common areas used for cooking and washing. Often the passageways linking the rooms opened on both ends of the block, creating passageways for pedestrians in the community.

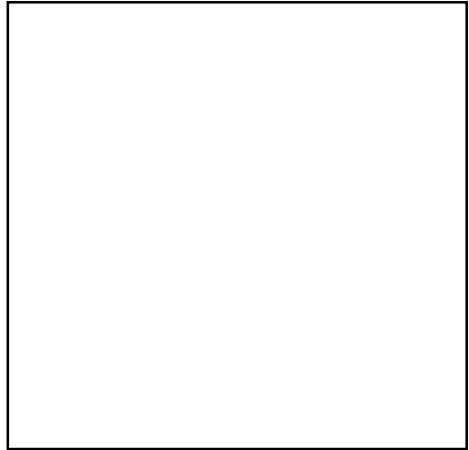
As more Afro-Uruguayans clung to these houses in Palermo and Sur, these converted houses became *conventillo*-like in their use of patios as social spaces. While very few *conventillos* exist anymore in Palermo and Sur, the *casa estandardes* in these areas have increasingly played a similar role in the preservation of Afro-Uruguayan traditions.

Similar to the *conventillos*, by the late 1980s *casa estandardes* were beginning



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Figure 6. Example of a decorative window balcony of a *casa estandard*.



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Figure 7. Two typical *reciclajes*. Middle to upper income with garage and colorful stylings.

to be seen as overcrowded and dilapidated. However, unlike the *conventillos*, their lower income residents owned many of the properties within the homes. It was thus difficult for any government, let alone the post-dictatorship democratic government, to simply evict residents from their own homes. As a result, the city began to use the powerful market incentives of the Programa de Reciclaje to promote the revitalization of these neighborhoods through the rehabilitation of its buildings. The typical *reciclaje* involves a *casa estandard* and many of the rehabilitations have priced out lower income residents as profit seekers turn the otherwise indistinguishable urban homes into hip apartments for younger artists, academics, and professionals—the traditional urban pioneers.



It has revitalized these areas in many ways, one of the primary *reciclaje* was to rehabilitate the “historic memory” of an area “so that the neighborhoods that are rehabilitated attain the benefits of (1993, 1). In Palermo, the reconstruction of historic values increasingly appeals to a peripatetic middle class. The renovations of *casa estandardes* are aesthetically pleasing, should not be subsidized if the City is genuinely interested in other diverse historic values of the neighborhood other than its

reproductions is part of a more general cultural trend in Uruguay. Hugo Achugar, a cultural critic in Montevideo labeled this period

“... recycling has started, as much by the garbage scavenger as by the [historic] patrimony that recycles houses and hovels. It is the culture of poverty and the culture of a recuperation of memory. . . . [we] recycle textbooks from the end of the 1960s as if knowledge about many themes has not grown or improved. One recycles because we do not have the means to construct and create new things. It is ok that it is like this, but you cannot help but observe that it supposes a postponement of the future and a return to the past. (Achugar 1990)

The Programa de Reciclaje’s extension to less significant architectural projects has resulted in a new distinctive aesthetic; the renovation of the already inherently recycled results in a very distinct, ultimately kitsch structural environment where imitation takes place over authenticity.

The rehabilitation program has meant that current fetishes are distorting even the simplest characteristics that have historically made these neighborhoods unique. For example, the *casa estandard* is by its nature an introverted and closed living space. While the appropriation of these spaces by Afro-Uruguayans in recent years has transformed *casa estandardes* into more vibrant social spaces, as the neo-colonial characteristics are teased out in the renovations of the *reciclajes*, features that allowed these houses to become integrated into the community are increasingly forgotten: windows that had become open for community space are now literally being “barred” for protection *from the* community; patios that were appropriated by Afro-Uruguayan families and used to carry on the traditions that once took place in *conventillos* are being transformed into garages for wealthier families with the desire for more modern amenities. As much as a policy focused on demolition, these policies lead to a trivialization of spaces as the market takes control over what is considered worthy of preservation. This process mirrors similar trends in historic preservation that occurred in New York City:

The diffusion of a preservation ethos offered legitimacy to the shifts of middle class residents from one neighborhood to another ... homeowners pursue a landmark designation that privileges the look of a space over such other sources of community identity as social class, ethnicity, and residential stability (Zukin 1995, 124).

Through its emphasis on the facade, the city has attempted to preserve the character of an area through its focus on the built environment in these neighborhoods. As a consequence, the Programa de Reciclaje gave credence to a belief that the old buildings themselves represented the culture of the cities. With significant economic success, it is touting the preservation of “historic memories” while literally and symbolically gutting the social fabric of the neighborhood. As consumption patterns take over, its policy increasingly preserves and “recycles” a history that comes at the expense of one of its most “historically valuable” communities.

By ignoring the history of the evictions of Afro-Uruguayans and implementing a new program preserving an inherently inferior neo-colonial architecture, the Programa de Reciclaje legitimized the historic place of blacks as non-members in the urban renewal process and held on to certain elements of a hegemonic vision of what Montevideo should look like. The consecutive choices to restore the neo-colonial (white) *casa estandardes* after demolishing the neo-colonial (black) *conventillos*, symbolizes in terms of *sight* and *site* what spaces the city thinks are more important.

If Montevideo’s rehabilitation program had made an authentic attempt at recognizing the historic memory of Palermo and Sur, it would have had to recognize that, first and foremost, the neighborhoods’ history as Afro-Uruguayan enclaves had been severely jeopardized by the demolitions and displacement processes of the dictatorship. Any attempt to



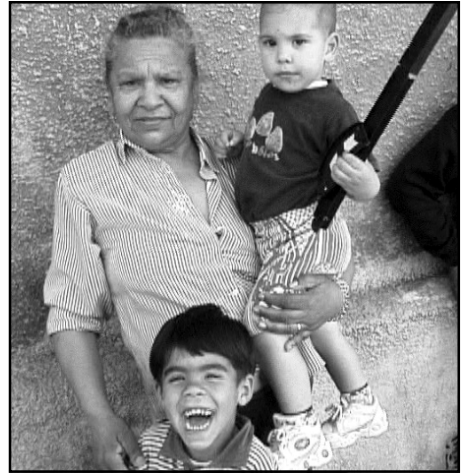
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Figure 8. *Reciclajes* commonly have windows that are closed to the community.

rebuild the “collective history” of this area would have had to start with the acknowledgement of those still fresh memories. The Programa de Reciclaje, while well intentioned as a historic preservation policy for a more architecturally significant area like the Ciudad Vieja, ultimately failed to protect the culturally diverse areas of Sur and Palermo.

Possible Policy Responses

Some may discount the gentrification of two relatively small areas of Montevideo on grounds of magnitude. While the reinvasion of inner cities has apparently come to be seen as unavoidable, or even desired, from a market standpoint, the question remains as to what role publicly subsidized programs should play in encouraging the economic and cultural



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Figure 9. Residents of Palermo often meet in the street. Newer residents are “more reclusive,” according to one longtime resident.

gentrification process. Thus, the point of this paper is to remind policymakers to consider the influences of cultural factors other than the built environment on communities and to begin thinking creatively of how to better integrate residents into revitalization policies. The case studies of Palermo and Sur are two powerful examples of how recent policies that focus on built environments may be at odds with the equitable development of urban spaces. While the social fabric of inner city areas like Palermo and Sur is impossible to convey by acceptable social science standards, urban policymakers must re-examine the role their policies play in lubricating a gentrification process that displaces cultural diversity at the expense of economic revitalization.

To stop the current gentrification of Palermo and Sur, the City of Montevideo should carefully evaluate its Programa de Reciclaje to determine if more displacement can be avoided. This paper concludes that the program should be frozen, particularly for the two neighborhoods of Sur and Palermo. If the program is not stopped, the following critical adjustments should be made to help mitigate the displacement that threatens the remaining Afro-Uruguayan community:

- Rehabilitation loans must be refocused on the Ciudad Vieja—with greater incentives than were originally offered to lure investment back into this truly distressed area;
- The Commission on Historic Patrimony should include “diversity” as a standard for evaluating projects both architecturally and culturally;
- Standards for what constitutes “historic value” should be re-examined; for *reciclajes* new conditions that include diversity of residents should be included;
- Building Freeze: new developers must meet with City officials to resolve displacement and affordability issues before construction;
- Rent restrictions: any *reciclaje* that receives public subsidies must include lower income units aimed at current residents, preferably on a one-to-one replacement basis;
- Relocation Plan: any private or publicly subsidized renovation must include a plan for relocation of displaced residents; and
- More outreach to current residents must be included in the planning process for these neighborhoods, including active engagement and participation on the designated commissions responsible for developing particular areas of Sur and Palermo.

Even with these changes, a historic preservation program designed for an architecturally significant environment may be difficult to adapt to preserve certain cultural and historic traditions in neighborhoods like Palermo and Sur. Thus, a comprehensive revitalization strategy would have to refocus from an ethos of the preservation of the built environment to a focus on the preservation of the diversity of the areas' residents, both socio-economically and ethnically. Several resident-based revitalization policies might include:

- Reinvention of original Programa de Reciclaje rules prioritizing existing residents of neighborhoods for *reciclaje* projects;
- Creation of new home equity loans limited to existing residents (this is currently being tried on a small scale basis in Barrio Sur);
- Reassessment of BHU lending guidelines and equity shares;
- Extension of home ownership programs to lower income residents;
- Adjustment of housing cooperative rules to include small scale cooperatives;
- Increase in the density rules for *reciclajes* (currently a *reciclaje* must include at least two residences; the typical *casa estandard* pre-rehabilitation could be developed into 3-4 units);
- Development of publicly funded affordable housing with limitations to existing residents (a large publicly funded high-rise building was built in the Palermo area, but included many residents from outside the neighborhood based on BHU credit histories);
- Increase outreach efforts and technical assistance to extend BHU credit programs to lower income and non-traditional populations;
- Increase data gathering of statistics related to race and ethnicity among loan applications to help determine possible redlining; and
- Inclusion of publicly funded tenant-based vouchers for displaced residents.

Conclusion: *Que ves? Que ves cuando me ves?*

“What do you see? What do you see when you see me?” The lyrics of the popular Argentinean 1980s rock song are appropriately scribbled on the wall of Ansina in the heart of the Palermo neighborhood in Montevideo. In an active twenty-five years, two governments have used revitalization policies to reconstruct how these historic Afro-Uruguayan neighborhoods will be seen for years to come.

The Programa de Reciclaje's focus on historic preservation and rehabilitation is clearly different from the dictatorship's policy of demolition. Rather than displacement, it attempted a policy for the “betterment of the existing population.” Eschewing the new and the modern, it looked to the past to reconstruct lost ideals. Focused on “historic memory,” the Programa de Reciclaje reasserted the importance of cultural experiences in the redevelopment of public and private space in Montevideo—*reciclajes* were intended to rehabilitate a collective memory damaged by the slashing and burning of an urban community by a dictatorship. In this light, the Programa de Reciclaje was a major step in the “reterritorialization of the popular” over authoritarian control in Montevideo (Trigo 1993).

The Programa de Reciclaje was one manifestation of the national trend in the period during the post-dictatorship to find common ground in the redevelopment of a collective memory. In the period of the post dictatorship, the rebuilding of a democracy asked that local communities, physical and symbolic, come together to forge a new Uruguayan identity. However, just as a national identity attempts to mask geographical and ethnic differences, the urban revitalization program designed for the Ciudad Vieja suppressed the redevelopment of the Afro-Uruguayan communities of Palermo and Barrio Sur.

The rehabilitation program appears to distance itself from the urban renewal policies of the dictatorship but nonetheless maintains an implicit form of cultural bias. Its limited focus on the built environment and its broad application in Montevideo precluded it from actually preserving the diverse histories of Montevideo's communities. Historic preservation works in similar fashions to slash and burn policies by privileging certain histories over others. While preservationists complained of the loss of cultural heritage from policies like those seen under Uruguay's dictatorship, the current question is which cultural heritage will be preserved, and whose culture will control the designation?

As the post-dictatorship period is now analyzed, a closer look at Montevideo's Programa de Reciclaje reveals that its focus has been lost and its current subsidization of gentrification in Palermo and Sur has resulted in the demise of culturally significant communities. While the displacement of Afro-Uruguayans can partly be blamed on the authoritarian urban renewal policies of an apolitical dictatorship, the reconstructing of these historical Afro-Uruguayan places into "new" urban forms marketed for urban pioneers and trendsetters suggests that historic preservation is contributing to the gentrification patterns that physically and symbolically continue to displace Afro-Uruguayans from their communities.

Although Afro-Uruguayans continue to live in these neighborhoods, their informal community spaces in the *conventillos* and other historically significant spaces in their community have been destroyed. *Tambores* still resonate in these areas but the Afro-Uruguayan communities that incubated these cultural traditions are increasingly more subdued.

About the Author



Carlos Romo spent ten months in 2000-2001 in Montevideo studying local development on a Fulbright Fellowship. Before Uruguay, he worked as a John Gardner Public Service Fellow in New York City with The Enterprise Foundation. Currently, he works in Austin, Texas at the Center for Public Policy Priorities. He is a graduate of Stanford University with a degree in Public Policy. When he's not working on local development, he likes to travel and play the acoustic air bass.

Notes

- ¹ This project stems from archival research and interviews with local residents, city officials, and academics over a period of ten months as part of a Fulbright Fellowship.
- ² Montevideo's Ciudad Vieja was built at the tip of a peninsula that juts east to west into the mouth of the Rio de la Plata. This peninsula naturally protects the bay/port that is at the northwest corner of the peninsula. Palermo and Sur are along the southern coast of the peninsula that makes up the inner city of Montevideo. As Montevideo expanded, it grew radially eastwards towards the base of the peninsula. An important ecological note in the expansion of Montevideo: while many Montevideo neighborhoods are located along the beach on the southern edges of the coast, as you move eastwards along the coast of the river, you reach more pristine waters of the Atlantic Ocean.
- ³ *Candombe* should not be confused with *Candomblé*, the Afro-Brazilian religion.
- ⁴ All translations are mine unless otherwise noted.
- ⁵ *Conventillo* can be translated as "tenement" but it has different connotations to different people. Those different conceptions will be explored below.
- ⁶ These interviews were part of a series of short videotaped street surveys conducted by the author over a period of ten months in Montevideo. The surveys were very informal

and inconsistent. Questions were asked about neighborhood identity, the differences between Palermo and Barrio Sur, and what respondents thought of when they heard the word *conventillo*.

- 7 The non-governmental organization Mundo Afro was established in 1986 to address these pressing racial issues in Uruguayan society. Part community center and research institute, it is forging a new model of race relations in Uruguay. For example, a national survey was formed to find out how many Afro-Uruguayans were in Uruguay; accurate numbers had not existed since colonial times. The most recent survey in 2000 found that 6 percent of the population in Montevideo (or about ninety thousand) and 6 percent in the Interior of Uruguay identified themselves as Afro-Uruguayan.
- 8 Another possible factor in the decline of Montevideo's population could be the emigration of exiles during the dictatorship and the continuing out migration of young people as a result of a stagnant economy. As many as two million Uruguayans may currently live abroad. Enough to have a collective nickname: *los que se van* (those that are going).
- 9 "Testimonial values" does not mean much in English, but anyone familiar with a Latin American country that experienced a dictatorship will recognize the allusions to the genre of *Testimonios*. This genre focused on memory and the dictatorship, and was often written by "witnesses" who were politically imprisoned, interrogated, or tortured. While "historic memory" does not capture these connotations, it is important to recognize that as an explicit goal of Montevideo's rehabilitation program, it alludes to a process of recuperation of that which was lost during the dictatorship.

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The Space Between

Spatial and Social Distance in the Urban Village

LYDIA HEARD

Analysis of the spatial form of settlement patterns suggests a relationship to social behaviors which impact the formation or inhibition of associations within a community. The combination of increased spatial and social distance results in a wide range of negative social consequences. This paper explores the possibility of a relationship between spatial form and social behavior and what this might mean to the planning or urban design practitioner. Observations from an ongoing personal inquiry examine the evidence presented through examples of historic urban community forms. Conclusions point to guidelines and practices which planners and designers might use to decrease spatial distances and encourage the social interactions which form the basis of community.

Settlement patterns of decreasing density have increased spatial distances between people within communities and between residence, work, service, and recreation locations. Increased distance leads to social consequences of traffic congestion, loss of undeveloped agricultural and wilderness lands, inefficient and inequitable use of resources, and the breakdown of social interactions that form community identity. In the attempt to counteract this trend, urban designers and planners may begin by critically appraising the relationship between spatial form and social consequence.

This paper results from just such a critical inquiry and attempts to address the following questions: Is there a demonstrable relationship between social and spatial distance? Can a physical sense of space generate community? (We shape our buildings; do our buildings shape us?) To what degree can principles of physical design and planning facilitate the social structures of community, if those structures are not already present? In essence, is it possible to design for community, and what does that mean?

Relationship between social and spatial distance

The first stage of inquiry involves establishing a relationship between social structures and spatial form. Urban geographers have for several decades documented that the physical structure of human communities has a strong influence on social behavior (Jackle, Brunn and Roseman 1976). Conversely, in attempting to establish a relationship between social behavior and spatial arrangement, Bill Hillier and Julienne Hanson (1984) conducted intensive mapping and mathematical modeling of settlement patterns and found that underlying social behaviors act as generators of form. While stating that the environmental determinism behind social engineering has largely been refuted, Bill Hillier in *Space is the Machine* also posits that “the relation between form and function at all levels of the built environment, from the dwelling to the city, passes through the variable of spatial configurations. The effects of spatial configuration are not on individuals, but on collections of individuals and how they interrelate through space...a pattern of space in a complex can affect the pattern of co-presence and co-awareness of collections of people who inhabit and visit that complex” (1996, 378-379). Through study of spatial and social relationships, society can itself be viewed as a spatial system.

Henri Lefebvre has described spatial form as a historical, social development, and goes further to say that “the form of social space is encounter, assembly, simultaneity” (1991, 101). One of the primary spatial characteristics of society is the physical encounters and interactions of people, and these interactions exist in some sort of relation to physically ordered space.

Practitioners and theories

“Practice is a set of relays from one theoretical point to another and theory is a relay from one practice to another” (Foucault and Deleuze, in Liggett and Perry 1995, 2).

Helen Liggett and David Perry cite this quotation in the introduction to *Spatial Practices: Critical Explorations in Social/Spatial Theory* to make the point that “...it is not useful to assume that the time and space of analyses exist as separate modes of operation or to treat them as distinct realms apart from every day practices...theory and practice are relational, depending for their continued viability on mutual referral” (1995, 2).

If the relationship between social and spatial form can be safely assumed, then the next stage of inquiry is applying that relationship to theories of practice. Some examples of social/spatial practitioners and theorists are offered in this section.

The life of a community is dependent upon the actual, physical presence of people going about the business of life. Jan Gehl (1996) asserts that outdoor activities in the public space between buildings, particularly streets, are crucial to social formation; conditions that increase and enhance these activities can be produced by carefully considered planning and design principles. In theory, the success of community formation involves varying degrees of social relationship, which can be as passive as simply observing other people. Such relationships are created and enhanced by frequent, informal chance encounters. The goal of the planner or designer of urban spaces therefore is to increase the possibilities for meeting, seeing, and hearing other people.

Just as latent demand leads to an increase in traffic coinciding with improvements in road infrastructure, improving the physical and spatial infrastructure of public spaces increases their use. When late-modern functionalists spread dwellings out for increased light and ventilation, and separated uses, they also thinned out people and events. Observations of social behavior in space, such as those conducted by Gehl, indicate that increased spatial distance increases social distance. While social interaction cannot be enforced by physical design, it can be encouraged (or discouraged) by it (Gehl 1996).

William Whyte (1980) also focused on the public space between buildings and its importance to the formation of social relationship. As an urban anthropologist, he used the basic methodology of observing the behavior of people using urban public spaces. In his research of these spaces, he used quantitative time-motion studies to gather data which contributed to new zoning codes for public plazas in the city of New York.

Suzanne Sutro (1990) documents a methodology used to create village development codes along the eastern seaboard, where the traditional New England settlement pattern evolved. A study of the original, still successful villages noted a spatial arrangement that has significant social and cultural ramifications. For example, as also noted by Gehl (1996) and Whyte (1980), pedestrian-oriented and small-scaled spaces encourage the frequent, casual, social interactions that form the basis of village life. In the same vein, Andres Duany and Elizabeth Plater-Zyberk used traditional urban forms to formulate an entire code of town-planning, along with the principles of the New Urbanist movement (Lennertz 1992).

Peter Calthorpe and William Fulton (2001) also depict neighborhood as a “community of place” fostered by everyday, casual meetings. Borrowing the term “social capital” as attributed to Jane Jacobs (1961) and sociologist Robert Putnam (2000), they describe successful communities in which “community gathering places...provide people with a backdrop for engaging in the informal community life required to build social capital... By providing a neighborhood environment that both supports and affords respite from home and work, the gathering places nurture the networks of human interaction required for a well-rounded social structure to emerge” (Calthorpe and Fulton 2001, 37). In particular, walkable streets are emphasized as the physical basis of community. A street is a neighborhood, an urban living space, and a public room.

Allan Jacobs (1993) gives even greater importance to streets as the essence of the public realm, essential to making community. He believes that streets are settings for activities that bring people together, and design considerations of streets are crucial to facilitating social interaction.

In mapping traditional village settlements, including the urban villages of London, Hillier and Hanson (1984) describe societies as “encounter probabilities” and further that “high frequency and density of encounters...could only follow from spatial compression...likewise the relative infrequency and sparseness of encounters...could follow from spatial distance” (235-236). Their analyses depict urban villages as an arrangement of

convex and axial spaces (also known as public spaces and streets) which are geared towards accessing and controlling people from outside the village. Spatial arrangements move and then integrate people. Random encounters and awareness of others is a vital motor of social systems, and awareness of others is powerfully influenced by spatial form.

In contrast, suburbia is about controlled interiors, segregation, and a disregard for external spatial relations. There are cultural differences that create different spatial arrangements: urban, suburban, village. Spatial arrangements follow social changes but the reverse is also true: social change can be influenced by spatial arrangements.

This concept of axial extension and access that Hillier and Hanson describe supports the idea presented by Calthorpe and Fulton (2001) that a settled geographical region is also a social region, a series of interconnected places relying on easy access through modes of regional transit. Economic, social, and cultural assets required for a vibrant sense of place are assembled at the regional level and require easy access for integration throughout the region. Lefebvre also states that “social space contains a great diversity of objects, both natural and social, including the networks and pathways which facilitate the exchange of material things and information. Such ‘objects’ are thus not only things but also relationships” (1991, 77). Like their historical antecedents, successful communities must be based on both diversity and commonality.

The above mentioned practitioners and theorists have proposed many common principles to increase social interaction. Human scale, densities, pedestrian orientation, one-quarter to one-half mile walking radius, gathering places, center and edge conditions, codes for spatial arrangements such as setbacks, lot sizes, buildings heights, height-to-width ratios, street widths and parking, sidewalk widths and distances, hierarchies of streets, and so forth have been described by all of these authors to varying degree, from generic principles to highly detailed and specific codes of design for an entire lexicon of public spaces. The specific details of those spatial principles will not be discussed here; but the important thing to note is that a wide variety of practitioners have reached remarkably similar conclusions on basic principles of spatial design.

Historical models and change over time

“There is a special kind of wisdom in our cities born of time and its shifting forces” (Van der Ryn and Calthorpe 1991, 1).

The question still remains as to whether use of these spatial patterns in contemporary practice will influence the formation of social patterns. This question cannot be fully answered, as it involves the unknowable future. Though we may not be able to predict how contemporary or future spatial patterns will influence social patterns, it should be possible to look at the past as part of the process of the present: informing practice in the present and creating the opening of possibilities for the future. Many practitioners and theorists have looked to historical precedents as models for design. The key to these models is not only that they were successful in the past, but that they have remained successful in spite of the historical, social, political, and economic changes which occur over time. Space is not fixed in time, but is the result of a process over time, produced in inseparable but shifting physical and social contexts (Lefebvre 1991).

According to Lefebvre, the reproduction of social relationships in spatial arrangements calls for “an approach which would analyze not things in space but space itself, with a view to uncovering the social relationships embedded in it” (1991, 89) and by so doing, to rediscover the relationship of time. The next stage of inquiry is then to develop a methodology for

looking at historical precedent in the context of change over time. Identifying historical settlement patterns that have proven successful over time requires the use of some sort of indicator as a measure of success. The previously cited practitioners have typically, and logically, used numbers of people present and engaged in outdoor activities in public spaces as a measure of the success of such spaces. Those using the space should be made up of diverse and active strangers as well as actively engaged inhabitants. On the scale of a settlement such as a village or a town, a continuous population of transient visitors who actively engage and integrate among an equally engaged resident population would indicate success. Any number of popular tourist destinations meet this criteria, as do places which serve as market centers. In that, successful public places facilitate outdoor activity and social interaction.

Communities change over time. What spatial principles cause one community to survive social change and upheaval, where another does not? Did the existence of a strong sense of community generate spatial forms that maintained that community through periods of duress? Did physical design assist in forming social structures that grew stronger over time? Did certain physical structures lead to a social breakdown? Or was physical space irrelevant to their success or failure?

To address these questions, one might look at a typology of settlements according to origination, spatial formation, changes over time, and present status. Origination can be social, meaning that people in a pre-existing social relationship formed settlements to serve that relationship, economic or political. Using this typology, the author attempts to pursue the inquiry, and to thereby inform her own theory of potential practice, through observations of historical examples. The historical overview presented here as a part of that process begins with British/English historical precedents, moves to New England village settlements and the American Main Street town, then progresses through urban and contemporary settlements which have experienced sufficient changes over time to provide indicators of present and future success. Examples from Britain result from personal notes and observations made during a program of study abroad in 1999. The example of Seaside, Florida, results from personal observations made during a visit in 2000. Other references are as cited.

Historical examples

Robin Hood's Bay, England

Origination: Social

Spatial formation: Social/topographical—The social structure of this village was based on close-knit, clannish relationships with strong family bonds. Fishing provided the basis of economic support. The social structure combined with its physical location on the steep sides of an enclosed bay created a system of steep, narrow, winding pedestrian streets or “yards” which were named after the original occupying families. Close relationships between inhabitants and little concern with privacy led to very intimately scaled internal public spaces. External access was provided by a single vehicular street which ran through center of the town to the harbor, forming a commercial service spine.

Changes over time: Historically, the community was geographically and socially isolated, with a reputation for illegal smuggling activities. The relatively closed, strongly knit community was self-maintaining. When a rail line was extended from London in the late 19th century, opening external access, the community experienced a brief burst of prosperity and growth. A new resort community developed on the top of the cliffs, and quick access to the London market was enormously beneficial to the local fishing industry. The increased external access changed the old social structure of blood relationship, as new generations followed the lure



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Figure 1. Houses overlooking the seawall – Robin Hood’s Bay, England

of the outside world and new residents made their way in. Consequently, loss of the rail line in the twentieth century led to rapid decline of the community.

Present status: Currently, the historic community structure survives to some degree, through a strong shared sense of place and history. New residents help maintain the community in the old pattern, through a self-maintaining mode of people who are able to work where they live, or who are retired from work. As private auto usage has increased in Britain, an influx of visitors has brought additional vitality to the community. Yet, part of the appeal of Robin Hood’s Bay is a sense of isolation within a dramatic landscape, combined with the amenities of a quaint, picturesque, small-scale community. This model is more about agrarian segregation than urban integration, but the changes that occur with provision and then removal of regional access provide insights for contemporary models of regional settlement, and possibilities for evolution of suburban form.

York, England

Origination: Political

Spatial formation: Organic/functional—York is a walled city, a response to threats of invasion, and as such is a political construct. The spatial formation of York, particularly the

popular Shambles area, is an organic medieval creation of economic (market) function. External access was controlled through four main gates as well as fortified points on the two rivers that ran through the city, the Foss and the Ouse. Access was balanced between political concerns of defense against intruders and the need for external sources of income and goods.

Changes over time: Areas within the city developed to serve multiple-use functions of residence, industry, and commerce and performed those functions so well that they survive and function in a similar pattern of mixed-use to the present day. The spatial patterns that bolstered economic activity also fostered social activity. Recognition of the success of existing patterns led succeeding generations to follow similar patterns in the continued development of the city, while also responding to the contemporary requirements of their time.

Present status: Economic activity was dependent upon providing market access to the world beyond the city walls, and such access remains important to the city as a destination for tourism. The city is also a thriving community in its own right, but that success is inseparable from the influx and integration of visitors. In apparent contradiction, a walled city with a highly defined spatial edge thrives on external access and a preference for generation of events over control. There is little regulation in evidence on the streets of the Shambles. Could an American predilection for gated, segregated communities evolve over time into this sort of defined but accessible spatial form?

New England Villages

Origination: Social

Spatial formation: Planned—The Puritan village, organized around a central green or commons with a meeting house, was one of the early American settlement patterns of the eastern seaboard. These were often planned communities, giving spatial form to a social structure of ideology. The form was based on the immediate historical precedent of English nucleated villages, with inhabitants residing in the town center and working the surrounding fields. Optimum size was limited by consensus and growth was directed or “hived off” to new settlements. The goal was self-sufficiency; there was little economic trade or travel between towns (Kunstler 1993).

Changes over time: The 18th century brought an influx of immigration. Increases in population led to increased migration to new settlements; the migrants tended to preserve established networks of family and friends. Some towns chose to allow population growth, and as they grew, divided into neighborhoods with separate identities, yet maintained a sense of social unity throughout the town. Communities maintained ties of family and friendship well into the nineteenth century. (Bender 1978).

Present status: Even without the close-knit social ties which created them, the most successful of the New England villages have retained the spatial characteristics of their social beginnings. They are widely popular, drawing an influx of visitors, yet maintain a local sense of community. Communal public space, pedestrian orientation, and human scale still enhance the social qualities of these communities, which are studied as models for contemporary New England town planning codes (Sutro 1990).

American Main Street towns

Origination: Economic

Spatial formation: Functional—After the Puritans, William Penn had also hoped to establish a pattern of nucleated village settlements in Pennsylvania, but the predominant

American pattern of individual settlement had soon taken hold across the countryside. Market towns arose as economic service centers for these scattered settlers, and served important social needs as well. These economic centers took the form of the classic Main Street village, with a quarter-mile pedestrian core and a surrounding half-mile radius. An important feature is location on a crossroad or other transportation juncture, with access to other settlements and economic centers (Kunstler 1993; Sutro 1990).

Changes over time: As America changed from an agrarian to an industrial nation, the social nature of economic activity within the community also changed. The change to a market economy in the late nineteenth century took economic activities out of the social context (Bender 1978). Residents of small towns increasingly left in search of economic opportunities elsewhere. When the economic base of a town disappeared, so did the town in most cases.



Figure 2. Main Street – Bastrop, Texas

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Present status: The American landscape is littered with the remnants of towns that did not survive. Yet the American imagination maintains an image of a small town utopia, a place that provides a sense of community and a quality of life not found in the suburbs or degraded cities. Many small towns retain a sense of vitality, although Main Street must now compete with Wal-Mart. The mixed-use, small-scale, pedestrian orientation of a classic Main Street town provides the model for both Disneyland and some New Urbanist developments.

Bath, England

Origination: Economic

Spatial formation: Planned—The city of Bath was almost entirely the result of speculative and carefully considered development and planning. Planners created defining and memorable street edges, spatial edges, and public spaces which helped to generate a strong sense of place. Building frontages share common unified facades, adding to a sense of recognizable shared community space (even though the space behind is privately subdivided). The defined spaces of the Circus and the Crescent are recognized around the world by persons who have never been to Bath.

Changes over time: Bath began as a popular resort community where the wealthy came to experience the benefits of the local waters. Gradually Bath became less important as a resort for wealthy visitors, and a strong community of permanent residents with a local economic structure developed. Bath is an example of a town that managed to evolve from a destination resort into a grounded, permanent and vital community of place.

Present status: Bath continues to thrive today as both a tourist destination and as a fully functioning community of permanent residents, and has all the accompanying services and amenities associated with urban life. At the end of the exclusive housing row of the Crescent lies a great block of community allotment gardens, and schoolchildren play soccer next to blocks of tourist hotels. The evolution of an exclusive speculative resort development into a vital community provides a very promising model for contemporary planned residential developments. Could the carefully planned but exclusive resort development of Seaside, Florida evolve over time into a truly integrated community?

Byker, Newcastle, England

Origination: Social/political

Spatial Formation: Social/planned—Byker is a large housing estate built in the 1970s. During the postwar period when urban renewal and slum clearance were in vogue, it was decided to replace all the housing in the Byker area with modern housing. Because the area had defined neighborhoods and a strong sense of community there was a desire to maintain that structure during the process of clearance and renewal. This presented a problem, since urban renewal as practiced at the time involved massive clearance and displacement while the new housing was being constructed. The architect, Ralph Erskine, who was asked to develop an overall plan, proposed a solution of replacing the housing piecemeal to minimize social disruption, involving community input and creating a new physical plan that would preserve the existing social fabric of the community.

Changes over time: Initially the new Byker plan was held up as a model of urban renewal. From the beginning, however, the redevelopment did not go as planned. The



Figure 3. The Crescent – Bath, England

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destructive process of renewal, even enacted in piecemeal, still resulted in the permanent displacement of 40 percent of the residents. This loss of population disorganized the original plan of dense housing defining the edges of highly organized street spaces, leaving a loose and ill-defined spatial pattern. Densities were too low to support commercial activities as intended, requiring residents to walk long distances to access basic commercial services. Further segregation occurred with the separation of older residents into special housing, rather than integrating them into the community and providing a sense of generational continuity.

Even so, Byker was an initial success because the spatial structure respected the original community structure and allowed the pre-existing social structures and community identities to continue. Trouble occurred when social and economic changes were introduced into this structure. Relocation of residents from other housing estates, followed by the privatization of housing, introduced new social elements, often in the form of troubled individuals with a history of anti-social behavior and with no links or relationships to the community. Any self-policing effect of inhabitants and strangers could not operate effectively in the poorly defined spaces of the low-density plan, and the social structure of the community was severely impaired. Residents who could do so moved out, leaving vacant, boarded housing and even more dangerous abandoned spaces.

Present status: Although by the late 1990s the social structure of the community seemed doomed and the local government had considered demolishing the vacant sections of Byker, remaining residents of the community rallied and succeeded in preventing the destruction. The residents of the Byker Wall (a multi-family high-rise) have, in particular, developed a strong sense of place and cultural identity around living in the Wall. They argued that Byker has already been demolished once; why destroy it again without a clear idea of what will take its place (Rogers and Power 2000)? Their position is that what exists still has merit and deserves protection; preservation is preferable to destruction. Byker is a prime example of the correlation between spatial and social relationship; minor changes of either would have, and perhaps still could, make Byker a true model of urban redevelopment.

Seaside, Florida

Origination: Economic/social theory

Spatial Formation: Planned—In the 1980s developer Robert Davis enlisted the town-planning firm of Andres Duany and Elizabeth Plater-Zyberk to create a plan for a seaside resort development that would foster a true sense of community through physical spatial design. By studying historical examples of regional resort communities of the 1930s and 1940s, the planners developed an entire set of design guidelines for a neotraditional community. They developed and built the community of Seaside according to the guidelines, which led to the establishment of the New Urbanist movement.

Changes over time: The traditional community concept proved enormously successful, capturing the attention of developers, designers and planners everywhere. Extreme success and popularity of Seaside led to early changes in the development that did not coincide with the original community vision. While originally envisioned as a modest resort community of simple houses in a regional vernacular, with some lower cost rental units on individual properties, popularity and demand drove prices upward dramatically. Housing became more expensive and grand (although still meeting design guidelines), and even small rental units commanded high prices. As a result, people who work in the development cannot afford to live there and must commute long distances in a severe infraction of New Urbanist principles.

Smaller spatial distances between porches and sidewalks were intended to increase social interactions between residents and passersby, but were short-circuited by property owners who let vegetation grow and obscure the ground floor, favoring privacy over interaction. As a result, any semi-public household activity tends to take place in the open but relatively secluded upper-story belvederes, terraces, and cupolas incorporated into the majority of house designs.

Present status: After twenty years, Seaside provides an excellent opportunity to observe the relationship between spatial practice and social form. In many ways the space performs its intended functions admirably, with ample evidence of people walking or pedaling along human-scaled streets to easily accessed social and commercial centers. While residency is exclusive, the community is highly accessible to transient visitors and even allows open access to the privately owned beachfront. Commercial enterprises and planned social events draw large numbers of people from surrounding communities and beyond. Enough people have chosen the community as a primary, rather than a vacation residence, that it now supports a school and a church. The emphasis on historical vernacular can give the impression that the community is a nostalgic attempt to recreate an imagined past, resulting in a sense of unreality. This sense was reinforced by using the town to depict a huge film set in the movie *The Truman Show*. While developers would love to copy the success of Seaside, not all are copying the principles behind it. The town's success has led to increased development in



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Figure 4. Market on Town Square – Seaside, Florida

the surrounding areas, but this new development follows more typical models of sprawl. Seaside is still a design based on the agrarian village model, an object floating in the landscape. A more urban model would take into consideration connections to regional amenities and diversities of economy and habitation. But, given the historical precedent of Bath, it is not unreasonable to hope that Seaside will evolve into a more “real” community of permanent residents with greater diversity.

Conclusion

Assuming the relationship between spatial form and social behavior provides a foundation for design and planning practice. Observations of current practice and historical precedent, as well as quantifiable methods of inquiry can help current practitioners to “design for community” based on soundly established principles. The best principle of spatial practice, however, is that the practitioner, informed by past and current models and practices, engages in direct observation of and participation in the social behaviors of people and their environment, because behind all the data and the success of any given place, lies the perception, behavior, and feeling of a human being.

About the Author



Lydia Heard is a student in the Master of Architecture program at the University of Texas at Austin with a focus in Urban Design, and intends to undertake a dual degree in Community and Regional Planning beginning in Fall 2002. She worked in the public sector for ten years on issues of accessibility and civil rights. Most recently she has worked on transportation research projects involving sidewalk accessibility for individuals with disabilities and has an ongoing interest in all aspects of urban form.

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Does Immigration Induce Urban Sprawl?

A Dynamic Demographic Analysis for the U.S.

ZHOU YU

This article, utilizing U.S. Census data from 1980 and 1990, probes the relationship between immigration and urban sprawl. The preliminary findings reveal that native-born and foreign-born populations are very different regarding their household behaviors. Population growth caused by immigration is not likely the major causal factor to urban sprawl. The residential pattern of native-borns is more prone to inducing urban sprawl, since native-borns have a much higher growth rate in the number of households, owner-occupied housing, suburban residency, and demand for new housing. The article also shows that household behavior is a critical factor in causing urban sprawl. Household growth rather than population growth has a stronger causal linkage with urban sprawl. Future research on implementing microdata is necessary to better untangle the complex relationship.

“Nobody denies that there is a relationship between population growth and urban sprawl. Furthermore, nobody disputes that immigration is the single largest factor in U.S. population growth. Therefore, it is essential that immigration policies be evaluated when we try to deal with urban sprawl.”

– Dan Stein, Executive Director of the Federation for American Immigration Reform (F.A.I.R. 2000).

Immigration and urban sprawl have typically been pursued as two fairly distinct research and policy endeavors. Their relationship had rarely been discussed until recently, when controversial advertisements claimed that immigration directly contributed to urban sprawl (*USA Today* 2000a). Recent debates in the *New York Times* indicate that the relationship between immigration and urban sprawl has become a centerpiece of public discussion (Krugman 2001; Stein 2001). These discussions become increasingly relevant given that foreign-born population has reached its largest share over the past several decades. The first objective of this study is to explore what we know so far about the relationship between immigration and urban sprawl through a brief review of the literature.

The general perception is that immigration causes population growth, and therefore, urban sprawl.¹ Debate over this supposed link is typically grounded on the assumption that native-borns and foreign-borns have similar household behaviors, such as household formations, tenure choices, and preferences of residential location. Therefore, the second objective is to test this underlying assumption through a demographic analysis. The third objective is to specifically investigate whether there is any causal linkage between immigration-generated population growth and urban sprawl. In lieu of the forthcoming Census 2000 microdata,² it also presents a framework of implementing dynamic demographic analysis in the study of urban form.

The preliminary findings do not substantiate the perceived relationship between immigration-generated population growth and urban sprawl. Native-born and foreign-born populations have very different residential patterns. Consequently, growth of foreign-born population does not necessarily cause urban sprawl. Household growth rather than population growth has a much stronger causal linkage with urban sprawl. Accumulating evidence suggests that the household behavior of native-born population is more prone to inducing urban sprawl.

Public Discussions

The relationship between immigration and urban sprawl has captured increasing public attention because of the rapidly growing foreign-born population. According to the Census 2000 Supplementary Survey, about 44 percent of the nation’s 30.5 million foreign-born residents – 13.3 million people – arrived here in the 1990s (U.S. Bureau of Census 2001). Immigrants make up 11 percent of the country’s population, the largest share since the 1930s (Fields 2001).

Because of such dynamic population changes in recent decades, people start to ponder the impact of immigration on American society in general, and urban development in particular (*USA Today* 2000b; Glasser 2001). Some people argue for stricter immigration regulations, insisting current immigration policies have introduced too many new immigrants in a short time. Recently those people have begun to contend that immigrants have generated unchecked population growth, and therefore, induced urban sprawl and dragged down the quality of life of all American people. They suggest that fewer immigrants would help curtail population growth to ameliorate sprawl (*USA Today* 2000b; Fields 2001; F.A.I.R. 2001). Their logic

follows conventional wisdom, which holds that everything else constant, a growing population induces more houses, more cars, and increased demand for land. Therefore, there has to be suburban expansion or urban sprawl to accommodate these new demands. Without rigorous examination, this perception is widely accepted among immigration restrictionists and growth-control advocates (F.A.I.R. 2001; Sierra Club 2001).

Contesting this notion, Paul Krugman, in a recent *New York Times* column, argues that population growth is the secondary contributor to current dispersed land-use patterns. Mismanagement, rather than population growth, he said, is more likely responsible for the sprawl problems, such as those in Atlanta and Houston (Krugman 2001). Gordon and Richardson (2000) suggest that the linkage between immigration and urban sprawl cannot withstand serious scrutiny. They claim that, instead of population growth, increased development is the primary cause of sprawl. Demand for new development is a reflection of consumer preference and more accessible residential mortgages. In addition, recent surveys show that Americans are less concerned about population growth than they were twenty-five years ago. The general public does not connect environmental problems to population growth (Maher 1997). Despite such intense public debates, there is scant research that substantiates either side of the argument.

Policy Implications and Definitions of Urban Sprawl

Is the connection between immigration and urban sprawl justifiable? If so, remedies may be necessary to uphold the quality of life of the general public. If the allegations were misguided, public policy aimed at curbing immigration would not curtail urban sprawl or ameliorate urban decay. The social ills that immigration restrictionists and growth-control advocates fought against would still be prevalent and the American labor force would lose a key dynamic component – new immigrants. Therefore, this issue is important to urban planners and policy makers because of the significant implications for the nation's immigration policy, urban landscape, and economic activity.

To check the relationship between immigration and urban sprawl, a clear definition of the issue is essential. One of the greatest challenges in dealing with urban sprawl is that the definition of urban sprawl has been vague. Urban sprawl could have various connotations to different people. Growth-control advocates usually articulate *urban sprawl* pejoratively. For instance, according to the Sierra Club (2001), "suburban sprawl is irresponsible, poorly planned development that destroys green space, increases traffic, crowds schools, and



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drives up taxes.” This normative definition is less constructive in academic research since it leaves less room for further discussion about specific characteristics of urban sprawl. Some other researchers define the term vaguely. Jan Brueckner (2000) identifies urban sprawl as “excessive spatial growth of cities.” However, it is difficult to reach consensus on what constitutes “excessive.” Enrico Marcelli (2001) implies that any suburban growth constitutes urban sprawl. Under this definition, the causes of sprawl become almost irrelevant. This definition is not in accordance with the mainstream sprawl discussion. In current academic research, urban sprawl is broadly referred to as dispersed development occurring on the urban fringe. For instance, Edwin Mills (1999) suggests the proportion of metropolitan residents who live and work outside the central city as a way to measure sprawl. This development is usually characterized as low density (Peiser 1989; Audirac, Shermeyen, and Smith 1990; Ewing 1997). There have been attempts to identify other measurements for urban sprawl (Malpezzi 1999; Torrens and Alberti 2000; Galster et al. 2001). Because these alternative measurements are either involved with judgment or difficult to quantify with available data, density is still widely accepted as the standard to gauge sprawl. However, the meaning of low density and scattered development varies by region. For example, even experts on this topic could not agree on whether or not Los Angeles is an example of sprawl, because of the disagreement on density (Ewing 1997; Gordon and Richardson 1997a, 1997b; Myers and Kitsuse 1999). The disagreement is primarily caused by their different understandings of urban areas. This paper uses the Metropolitan Area, provided by the U.S. Census Bureau, as the geographical boundary of an urban area. The method of defining sprawl refers to land resources consumed to accommodate new urbanization or suburban expansion. As a dynamic process, urban sprawl denotes a faster urban land expansion than respective population growth.³ The process of urban sprawl is characterized as decreasing density in urban areas over a period of time.

Relevant Research

Excessive suburban expansion is evident in many U.S. metropolitan areas. During the last two decades the amount of urbanized built-up land in the United States grew by more than 40 percent, which is 2.5 times faster than the population growth in the same period (Fulton et al. 2001). The rate of suburban expansion is accelerating. More than half of the suburban growth took place between 1992 and 1997. More than one-hundred thousand new homes were built in twenty-one metropolitan areas between 1990 and 1997 (Wasserman 2000). More than 80 percent of new housing construction took place in suburbs (von Hoffman 1999). Some people argue that excessive suburban expansion, often defined as “urban sprawl,” has caused fragmented land development, environmental degradation, social inequity, heavy reliance on the automobile, and economic inefficiency. Unchecked sprawl is both socially and financially burdensome to the society (Freilich and Peshoff 1997; Burchell 1997). Some researchers argue that sprawl is a byproduct of public subsidies and market deficiencies, rather than representing a market equilibrium condition (Ewing 1997). More specifically, the concerns include traffic congestion, encroachment of open space, air pollution, excessive dependence on non-renewable energy, and disproportionate service costs for new suburban development (Downs 1998; Stoel 1999; Ciscel 2001; Sierra Club 2001). Compared with urban sprawl, contained development or managed growth could reduce land consumption and be more cost beneficial to the region in the long run (Burchell 1997). Past research also shows a positive association between managed growth and economic performance (Nelson and David 2000).

Rebutting the previous assessment on urban sprawl, some urban economists argue

that, given the condition of urban land markets, sprawl reflects human needs and an efficient equilibrium condition. They suggest that better pricing policies for public services should be given preference over governmental regulations. In the long run, higher density development will eventually occupy infill land parcels through the operation of market forces. In other words, any interference with the market mechanism would only hinder the efficiency of the economic system (Peiser 1989; Gordon and Richardson 1989; Mills 1999; Gordon and Richardson 2000). Previous research also finds that traffic congestion is more closely associated with economic performance rather than urban form (Cervero 2001). In addition, urban researchers provide ambivalent results over the claim that higher-density urban forms promote social equity and stronger social ties (Burton 2000; Freeman 2001). It is also inconclusive whether urban sprawl, by encroaching on farmland, has an adverse impact on the environment or the economy as a whole (Knaap 2000). Furthermore, Downs suggests that sprawl has little or no impact on urban decline (Downs 1999). Past research also indicates that urban containment policies may have an unintended consequence on housing affordability as cities approach their limits and land prices appreciate faster than they would otherwise (Brueckner 2000; Kahn 2001; Knaap and Hopkins 2001).

Despite such debates on whether urban sprawl is a negative form of urban development, there is seldom disagreement on the notion that population growth is the major contributor to urban sprawl (Mieszkowski and Mills 1993; Ewing 1997; Levine 1997; Downs 1998). Anthony Downs (1997) describes that population growth caused U.S. metropolitan areas to grow rapidly after 1940, while many large older cities also experienced a decline in population. Thurston and Yezer find that suburbanization of the residential population is enhanced by rising income and suburbanization of employment. Suburbanization of the population promotes decentralization of the service and retail sectors (Thurston and Yezer 1994). Furthermore, Jan Brueckner (2000) considers population growth one of the three fundamental forces of urban sprawl, in addition to the rise in household incomes and the decline in the cost of commuting. Through an economic analysis, Brueckner (2001) reaffirms his argument



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that population growth is responsible for excessive urban expansion. Since immigration has been the main source of recent population growth, it is consequential to establish a causal relation between immigration and urban sprawl. Furthermore, a recent Bank of America report identifies that population growth in California has fueled the traditional suburban development patterns, namely urban sprawl. The report implies that, as a main source of population growth, immigration should be blamed as one contributor of such unchecked development (Bank of America 1995). It is residential development characterized as lowered density on the urban fringe that causes urban sprawl. Therefore, these arguments are based on the assumption that population growth was a direct contributor to the household growth on the urban fringe. One unique study suggests that the relation is rather complex between population growth and changes in density (Fonseca and Wong 2000). Their study finds that the most densely populated states and places have become even more densely populated. Population growth has caused densification in very few highly populated areas.

Most of the research connecting population growth with urban sprawl is also based on the assumption that the population is similar in its residential patterns. The following demographic analysis strives to check whether such similarities exist among different groups of people. The research hypothesis is that there is a significant heterogeneity between native-born and foreign-born populations in terms of their household behaviors. Therefore, immigrants who have been the major contributor to population growth may not have induced urban sprawl. Without carefully analyzing the demographic components of population growth, it is risky to draw any causal connection between immigration and urban sprawl.

Our knowledge of the determinants of urban sprawl is rather limited. Most studies on urban sprawl have viewed this phenomenon as a consequence of industrial restructuring, rising household income, and advancement of transportation technology. Very few researchers have implemented demographic analysis in the study of urban form. Instead of implementing direct measurement of the physical urban forms, demographic analysis focuses on the people and their changes in urban development. Dowell Myers (1999) suggests that demographic changes have not been properly recognized in urban theory and policy. Contrasting with previous studies treating sprawl as a snapshot of time, this analysis considers it as a dynamic process. The dynamic demographic analysis concerning a changing population is particularly relevant to the study of urban sprawl, a process-oriented phenomenon.

Presented in the following section, this study incorporates a dynamic demographic analysis, probing the general relation between immigration and urban sprawl through a macro level study of the United States.

Data Sources, Definitions, and Geography

Primarily based on the Census PUMS (Public Use Micro Sample)⁴ data from 1980 and 1990, this demographic analysis intends to reveal the changes between 1980 and 1990 and to check the underlying assumption of similar household behaviors between native-born and foreign-born populations. This analysis also examines whether immigration-generated population growth is connected with urban sprawl. Specifically, this paper looks at population and household growth, household formation, tenure choice, occupancy of new residential development, and choices of residential location.

This analysis breaks down the primary residential location into three major groups: those who reside (a) inside the central city, (b) outside the central city but inside the metropolitan area, and (c) outside the metropolitan area. This analysis focuses on the nation as a whole and uses the Metropolitan Area (MA)⁵ geographic construct instead of the

Urbanized Area (UA)⁶ construct to define the metropolitan boundary. This is because the metropolitan area boundaries are much more consistent between 1980 and 1990 and provide a much better comparability of areas over time than the urban area boundaries (Myers 1992; Kasarda et al. 1997). Rural area is referred to as the region outside the metropolitan area boundary. One part in the following section analysis also utilizes the central city construct.⁷

The subsequent analysis employs two methods to analyze the changes between 1980 and 1990. The first follows a “cohort approach” to compare settled immigrants in 1990 with all (settled plus recent) immigrants in 1980. Immigrant cohorts are fixed in membership, defined by the members’ immigration status or recency of arrival, such as arrived in the United States before 1980 or after 1980. This is to discover the longitudinal progress of the immigrant cohort that arrived in the United States before 1980 in the 10-year period between 1980 and 1990, as well as to examine how the newly arrived immigrant cohort behaved in 1990.⁸ The second approach is called “immigrant group approach,” which compares the settled immigrants in 1980 with the settled immigrants in 1990. This approach also compares new immigrants from 1980 and new immigrants from 1990. This comparison shows the compositional changes of immigrants between 1980 and 1990. The two approaches will also capture the changes of U.S.-borns in the 10-year period between 1980 and 1990. The two methods treat U.S.-borns in the same way, since the membership and immigration status of U.S.-borns remained the same between 1980 and 1990 except for aging. The two approaches look at different perspectives of the changes and form various contrasts.⁹ To be consistent with previous research, the household status in this analysis is dependent on the immigration status of the householder.¹⁰

Demographic Analysis

Population and Number of Households

Population growth and housing development, two primary factors driving urban growth, are mutually supported. Myers suggests that, at the national or regional level, population growth precedes housing development. And the population growth is encouraged by regional employment growth (Myers 1992). However, it is unclear whether household growth was proportional to population growth between 1980 and 1990.

The population growth rate of U.S.-borns was lower than that of immigrants. Because of their large base number, U.S.-borns generated about three-fifths of the total population growth. (See table 1.) The total population in the U.S. increased from 227 million in 1980 to 248 million in 1990, or by 10 percent.

Table 1. Population by Immigration Status in 1980 and 1990

Group	Population		Change 1980-90	% Distribution of the Change 1980-90
	1980	1990		
Total	226,662,400	248,107,628	21,245,229	100.0
Born in the U.S.	212,782,940	225,200,798	12,417,858	58.5
Settled Immigrants	8,499,580	13,168,217	4,668,637	22.0
Immigrants Arrived Last Ten Years	5,579,880	9,738,613	4,148,733	19.6

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 1% data).

Household growth outpaced population growth. U.S.-borns contributed about three-fourths of the total household growth, outgrowing immigrants. The total number of households increased from 80.5 million in 1980 to 91.8 million in 1990 by a total of 11.3 million, or by 14 percent. (See table 2.) For the same period, the rate of household growth was four percentage points higher than the rate of population growth. Therefore, household size on average became smaller in the 1980s. With increasing population and decreasing average household size, there has to be more new housing to accommodate the expanding housing demand.

Compared with population growth, household growth has a much stronger relationship with urban sprawl. This is because household growth is directly linked to new housing development. New housing is usually characterized as bigger lot size and lower density than old housing (Clark and Dieleman 1996), which has a strong implication in urban sprawl.

Population and household growth indicates distinctive pattern between native-borns and foreign-borns. Compared with foreign-borns, native-borns had a much higher growth rate in the number of households relative to population growth. (See table 3 and figure 1.) Disregarding factors such as income and age profile, had native-borns behaved like foreign-borns in household formation, native-borns would have added only 4.0 million instead of 8.5 million households, or less than half of the actual household growth.¹¹ Native-borns had a stronger influence on urban form than foreign-borns given the fact that, with the same rate of population growth, the household growth rate among native-borns was much higher than that of their immigrant counterparts. Because of the differences between native-borns and

Table 2. Number of Households by Immigration Status in 1980 and 1990

Group	Population		Change 1980-90	% Distribution of the Change 1980-90
	1980	1990		
Total	90,467,000	91,770,958	11,303,958	100.0
Born in the U.S.	74,529,140	83,014,908	8,485,768	75.1
Settled Immigrants	4,347,120	6,296,296	1,949,176	17.2
Immigrants Arrived Last Ten Years	1,590,740	2,459,754	869,014	7.7

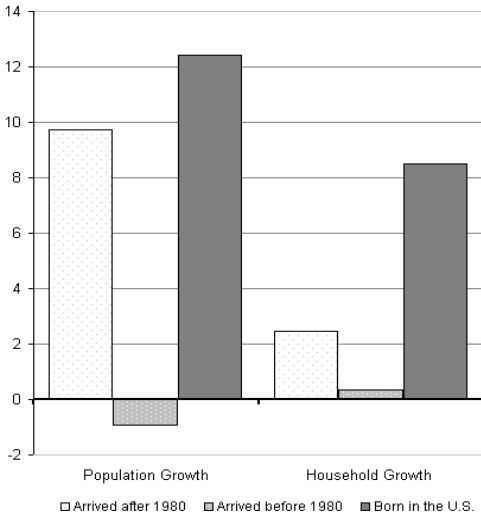
Source: U.S. Bureau of the Census (1980 and 1990 PUMS 5% data).

Table 3. Population and Household Growth by Immigration Status between 1980 and 1990

Group	Population Growth		Household Growth	
	Number	% of Total	Number	% of Total
Total	21,245,228	100.0	11,303,958	100.0
Born in the U.S.	12,417,858	58.5	8,485,768	75.1
Immigrants arrived before 1980	-911,243	-4.3	358,436	3.2
Immigrants Arrived Last Ten Years	9,738,613	45.8	2,459,754	21.8

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 5% data).

Figure 1. Absolute Growth In Population and Households Among the Three Groups from 1980 to 1990.*



* Cohort approach - fixed in membership. Growth in population and households contributed by immigrants arrived in last ten years are counted directly as growth.

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 5% data).

Figure 2. Headship Rates** Among the Three Groups in 1980 and 1990.

*

**Headship Rate denotes % of total population in a group of people who are householders (owners plus renters).

foreign-borns in generating household growth, the connection between population and nsistent.

ection demonstrates that population growth and household veen native-borns and foreign-borns. With the same population create a higher rate of household growth than foreign-borns mplications for urban form.¹²

pattern between native-borns and foreign-borns in household ormed new households at a faster pace than their population mg immigrants decreased in the 1980s,¹⁴ which clearly indicates nmigrants both new and settled increased during that period of er words, household growth rate was smaller than population orns. On the other hand, the headship rate among native-borns h shows that the household size among native-borns shrank.

e

The changes in homeownership rates were also different among native-born population, settled immigrants, and recent arrivals. Native-born population created a higher proportional demand for owner-occupied housing. Both settled immigrants and recent arrivals had experienced a downturn in homeownership attainment between 1980 and 1990, even as native-borns still enjoyed rising homeownership rates. (See figure 3.)

Household growth among native-borns was primarily among owner households while new immigrant households are mostly renter households. Although the absolute household growth of native-borns was two times faster than that of foreign-borns, the absolute growth of owner households among native-borns was four times faster than that of foreign-borns.

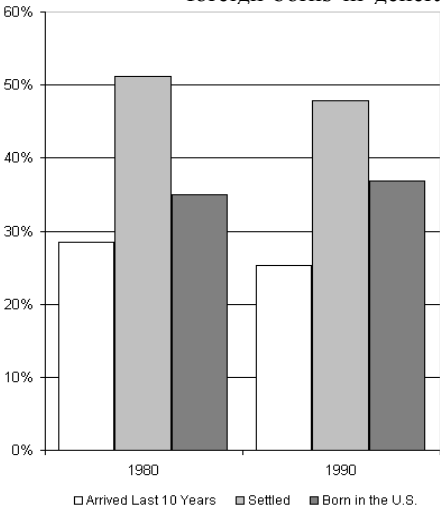


Figure 3. Homeownership Rates* Among the Three Groups in 1980 and 1990**

Figure 4. Absolute Owner and Renter Household Growth Among the Three Groups from 1980 to 1990**

*Homeownership Rate denotes percent of total households in a group who are owner householders in 2000.

**Immigrant Group Approach - fixed in immigration status. Settled immigrants in 1980 is compared with settled immigrants in 1990, same as the new immigrants in 1980 and 1990.

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 5% data).

(See figure 4 and table 4.) At the same time, the absolute renter household growth was almost the same between native-borns and foreign-borns. Compared with native-borns, foreign-born households had a weaker impact on urban sprawl with the same growth of number of households, because foreign-born households were more likely to be renters. Rental units are mostly multifamily housing located in higher density regions.

Residential Location

Native-borns and foreign-borns are different in patterns of population and household growth, household formation, and tenure choices. Their choices of residential locations are also distinctive.

Native-borns were primarily responsible for the substantial growth in the suburbs, because a large number of native-borns moved to the suburbs from the central cities and the rural areas. (See figures 5 and 6.) Residential locations of native-borns changed significantly between 1980 and 1990.

Table 4. Growth in Owner and Renter Households between 1980 and 1990

Group	Increase in Owner Households		Increase in Renter Households	
	Number	% of Total	Number	% of Total
Total	7,578,033	100.0	3,725,925	100.0
Born in the U.S.	6,372,685	84.1	2,113,083	56.7
Settled Immigrants	1,062,908	14.0	886,268	23.8
Immigrants Arrived Last Ten Years	142,440	1.9	726,574	19.5

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 5% data).

The growth patterns between native-borns and foreign-borns were considerably different in the suburbs. The native-born population in the suburbs increased substantially in the 1980s. Although the rate of population growth among native-borns was only 40 percent higher than that of the foreign-born population, native-borns contributed four times more population to the suburbs than that of the immigrants in the 1980s. (See table 5.) In other words, native-borns generated 80 percent of the population growth in the suburbs. Among the three groups of people, only new immigrants added population in the central cities. Almost half of all the absolute population growth among new immigrants took place in the central cities.

Native-born household growth significantly outpaced foreign-born household growth in the suburbs. Native-borns generated 5.7 times more households than foreign-borns in the suburbs. In other words, native-borns contributed to 87 percent of all the absolute growth in the number of households in the suburbs from 1980 to 1990. (See table 6.)

While the native-born population was the main contributor to the suburban residential growth, new immigrants had a disproportionate presence in the central cities. There was a substantial increase in the number of households in the suburbs along with a considerable decrease in the central cities between 1980 and 1990. At the same time, new immigrants filled up the central cities left behind by the native-borns. Therefore, foreign-borns were less likely to induce urban sprawl.

There is a debate whether immigrants have “pushed out” native-borns from the cities to the suburbs or immigrants have taken over the dilapidated cities left behind by native-borns (Frey 1995b; Farley 1996). If it were the first case, immigrants could be partially responsible for the suburban expansion triggered by the out-migration among native-borns. Accumulating evidence, however, suggests that it is immigrants who have taken over the

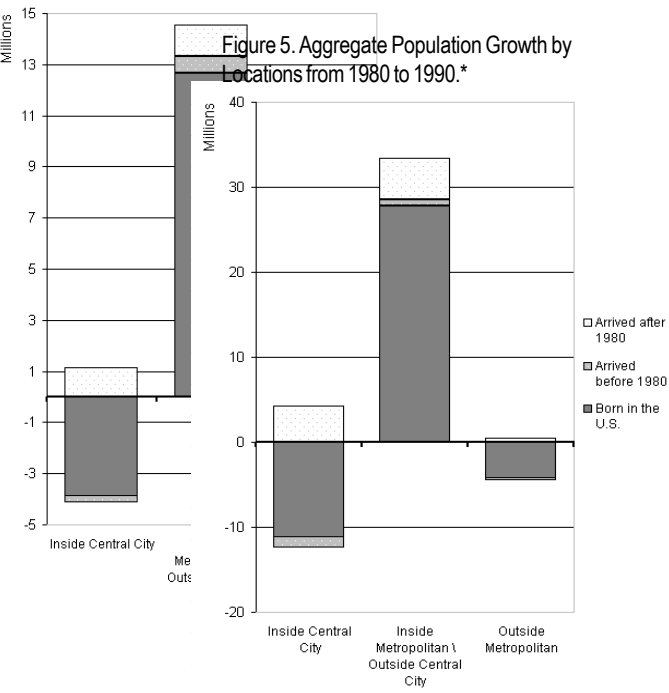


Figure 6. Aggregate Growth in Number of Households by Locations from 1980 to 1990.*

*Cohort Approach fixed in membership.

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 1% metro data).

Table 5. Geographic Distribution of Population by Immigration Status in 1980 and 1990

Group / Location	Population		Change	% Distribution of the Change
	1980	1990	1980-90	1980-90
Total	226,662,400	248,107,628	21,392,018	100.0
Born in the U.S.				
Inside Central City	49,076,400	38,031,449	-11,044,951	-51.6
Inside Metropolitan/ Outside Central City	107,391,300	135,254,454	27,863,154	130.3
Outside Metropolitan	56,053,400	51,882,904	-4,170,496	-19.5
Settled Immigrants				
Inside Central City	3,318,000	4,709,501	1,391,501	6.5
Inside Metropolitan/ Outside Central City	4,422,600	7,579,825	3,157,225	14.8
Outside Metropolitan	790,600	885,650	95,050	0.4
Immigrants Arrived Last Ten Years				
Inside Central City	2,772,500	4,322,671	1,550,171	7.2
Inside Metropolitan/ Outside Central City	2,520,000	4,962,859	2,442,859	11.4
Outside Metropolitan	387,200	494,705	107,505	0.5

Source: U.S. Bureau of the Census (1980 and 1990 PUMS 1% data).

Table 6. Geographic Distribution of Household by Immigration Status in 1980 and 1990

Group / Location	Population		Change	% Distribution of the Change
	1980	1990	1980-90	1980-90
Total	90,461,500	91,822,548	11,361,048	100.0
Born in the U.S.				
Inside Central City	18,250,600	14,398,659	-3,851,941	-39.9
Inside Metropolitan/ Outside Central City	36,788,600	49,452,967	12,664,867	111.5
Outside Metropolitan	19,436,000	19,199,780	19,199,780	-2.1
Settled Immigrants				
Inside Central City	1,781,800	2,352,538	2,352,638	5.0
Inside Metropolitan/ Outside Central City	2,190,700	3,364,544	3,664,544	12.0
Outside Metropolitan	383,000	356,559	355,558	0.1
Immigrants Arrived Last Ten Years				
Inside Central City	847,600	1,148,991	1,148,991	2.7
Inside Metropolitan/ Outside C	693,600	1,214,786	1,214,786	4.6
Outside Metropolitan	90,100	90,100	109,624	0.2

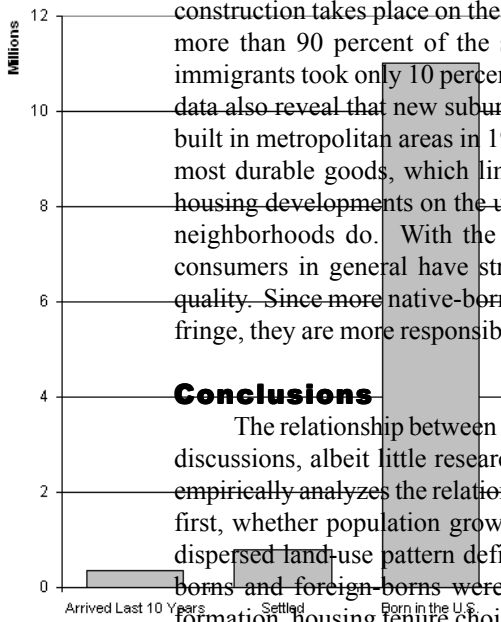
Source: U.S. Bureau of the Census (1980 and 1990 PUMS 1% data).

cities left by the native-born population. Since the early 1900s, people have contended that immigrants have been the demographic fuel sustaining cities (Park et al. 1925; Burgess 1926).¹⁵

Previous research is still inconclusive regarding the claim that recent immigration has caused natives to migrate (Frey 1995; Wright, Ellis, and Reibel 1997; White and Liang 1998; Kritiz and Gurak 2001). At the same time, research shows that households with higher income levels are more likely to move to the suburbs (Thurston and Yezer 1994; Kasarda et al. 1997). Native-borns in general have a higher level of household income and more accumulated

family wealth. Therefore, they have higher residential mobility than their foreign-born counterparts. Concurrently, the foreign-born population is more constrained by their limited access to the capital, transportation, and market at large. They are more likely to be lower bidders in the market and tend to be more price-inelastic in the housing consumption and residential location choices (Hansen, Formby, and Smith 1996; Ihlanfeldt 1981). Therefore, it is more likely the case that immigrants take over the neighborhood left behind by native-borns. Previous studies also show that many more cities would have experienced a decline in population, were there no immigrants to refill the cities (Farley 1996; Myers 1999).

Figure 7. Absolute growth in Number of Households who Live in Newly Built Suburban Housing, 1980 to 1990*



* Immigrant group approach - fixed immigration status
 Source: U.S. Bureau of the Census (1990 PUMS 1% data).

New residential development is the main contributor to urban sprawl, since most of the new housing construction takes place on the urban fringe. The native-born population in 1990 occupied more than 90 percent of the suburban housing constructed in the last ten years while immigrants took only 10 percent of the new housing stock. (See figure 7.) Housing permit data also reveal that new suburban homes made up approximately 82 percent of all homes built in metropolitan areas in 1998 (von Hoffman 1999). In addition, housing is one of the most durable goods, which limits the availability of land in older neighborhoods. New housing developments on the urban fringe do not face the same land constraints that older neighborhoods do. With the steadily rising household income over the past decades, consumers in general have stronger demands for housing with larger space and higher quality. Since more native-borns take over most new residential development on the urban fringe, they are more responsible for urban sprawl.

Conclusions

The relationship between immigration and urban sprawl has drawn considerable policy discussions, albeit little research substantiates either side of the argument. This research empirically analyzes the relationship, addressing two logically connected research concerns: first, whether population growth fueled by immigration was the major contributor to the dispersed land-use pattern defined as urban sprawl in the 1980s; second, whether native-borns and foreign-borns were similar in population and household growth, household formation, housing tenure choice, occupancy of new housing development, and preference of residential locations.

To conclude, the preliminary results of the demographic analysis presented here indicate that there could be a relationship between immigration and urban sprawl in the metropolitan areas where long-term immigrants were experiencing upward mobility triggered by increasing

household income, enlarged family size, and stronger tendency for homeownership. However, immigrants who experienced upward mobility and who relocated to the suburban areas were more likely to take over trickle-down housing instead of new structures on the urban fringe, as shown in figure 7. Immigrants in general are more likely constrained by budget, thus more price-sensitive. Furthermore, native-borns instead of foreign-borns generated most of the growth in the number of households, owner-occupied housing, suburban residency, and new suburban residential development. Therefore, the accumulating evidence appears in favor of Krugman's notion that immigration is not the main contributing factor to current dispersed land-use patterns. This idea is further strengthened by the fact that most metropolitan areas experiencing a faster expanding pace than their population growth are not the high immigrant recipient regions (Wim, Joseph, and Mark 1999; Fulton et al. 2001). In addition, most of the regions with significant sprawl have experienced low population growth (Fonseca and Wong 2000). In other words, population growth by itself is not likely to be a major cause of urban sprawl. No strong evidence supports the perceived causal relationship between immigration and urban sprawl.

The demographic analysis clearly demonstrates that there was a substantial heterogeneity between native-borns and foreign-borns. Almost all the existing evidence suggests that it is not appropriate to assume that native-born and foreign-born populations were similar in their residential patterns. Because of the diverse population growth, the linkage is weakened between population growth and urban sprawl. In addition, it is important to realize that households, not individuals, make residential and locational choices. Therefore, household behavior is a critical factor in causing urban sprawl. Household growth has a much stronger causal relationship with urban sprawl than population growth.

The policy implications of this study are straightforward. Based on this analysis, and the way it defines urban sprawl, limiting immigration is not expected to curtail the current suburban dispersed development pattern. Rather than targeting immigration in general, public policy should focus on the specific characteristics of development that lead to particular negative consequences and determine who bears the costs.

These findings must of course be considered in light of the limited decennial data set used in the analysis. Current research is based on the census data from 1980 and 1990. Research shows that recent immigrants seem more inclined to settle outside the central cities (Alba, Logan, and Stults 2000; Marcelli 2001). New immigrants are more dispersed in terms of their residential locations in the 1990s (Fields 2001). Since urban sprawl is a fluid and dynamic process, the relationship between immigration and urban sprawl could have shifted somewhat between the 1980s and the 1990s. With the incoming 2000 Census data, we can gain more insights by looking at the trend between 1990 and 2000. The research findings satisfy a necessary but not sufficient condition that there is no direct linkage between immigration and urban sprawl. In addition, an aggregate approach such as a national level demographic analysis could conceal important details on heterogeneity across regions and different immigrant groups. It is necessary to explore factors such as geography, income, age profile, and race-ethnic differences and model specific aspects of the relationship between immigration and urban sprawl by incorporating the microdata and implementing a multivariate statistic method, as so to further disentangle such a complex relationship. Finally, it is important to recognize that urban sprawl is a very complex process and people with different interpretations of the process may disagree over the measurement.

Although immigrants may not have a significant impact on current dispersed land-use patterns, they could induce sprawl in the future if they followed the residential patterns of their domestic counterparts and kept on moving to low-density residential areas. Along

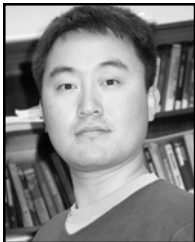
with their upward mobility, rising income tends to provide immigrant households with a higher residential mobility. Their children could also present certain concerns if they adapt to a similar residential pattern as the native-born population when they grow up. Previous research also shows that household behavior has a strong linkage with its demographic profile (Clark and Dieleman 1996). With the aging process of immigrant households, they might have a stronger implication to the urban form in the future. Although immigrants may not have caused urban sprawl, they could still be of concern to local governments. Because of the unique demographic characteristics of immigrants, they usually have different needs than their domestic counterparts, such as public services and infrastructure provision. The mismatch between demand and supply among immigrants could put certain pressure to bear on immigrant receiving areas (Ladd 1992).

Despite these caveats, this paper demonstrates a feasible framework of implementing dynamic demographic analysis in the study of urban form. It provides empirical evidence that may promote more analyses on urban sprawl and further explore whether the fundamental forces underlying urban sprawl have shifted over time.

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About the Author



Zhou Yu is a Ph.D. student in the School of Policy, Planning, and Development at the University of Southern California. He is interested in housing economics and immigration issues in an urban context. His current research pertains to residential mobility and housing tenure choices among immigrants, immigration, and urban sprawl, as well as housing reform in China. In addition to the Virginia Tech Graduate Assistantship and the USC Irvine Assistantship, he has also held the Early Doctoral Student Research Grant awarded by the U.S. Department of Housing and Urban Development. He received his B.E. in Architecture from the Northern Jiaotong University in China and his Master's of Urban and Regional Planning Degree from Virginia Tech.

Notes

¹ Immigrants and foreign-borns are used interchangeably in this analysis, as are U.S.-borns and native-borns. The term "foreign-borns," instead of "foreign-born population," is used when describing foreign-born population and foreign-born households as a whole. The paper uses definitions from the decennial Census on place of birth and citizenship to classify the population into two categories: native- and foreign-born. Members of the latter group, referred to as immigrants, were not U.S. citizens at birth. Natives were born in the United States or a U.S. island area such as Puerto Rico, or born abroad of at least one parent who was a U.S. citizen. The Census place-of-birth question asked respondents to

report the (U.S.) state, commonwealth, or territory, or the foreign country, in which they were born. Individuals born outside the United States were asked to report their place of birth according to current international boundaries. These data will be reported as immigrant place of birth.

- ² The U.S. Census Bureau will not fully release the 2000 census Public Use Microdata Sample (PUMS) files until the beginning of 2003 at the earliest. The largely released 2000 Census 100 percent data do not include important information on immigration status and certain geography. Produced by the Census Bureau, the Current Population Survey (CPS) and the Census 2000 Supplementary Survey (C2SS) are other data sources for this type of demographic analysis. However, the mechanism of the CPS and C2SS is not exactly the same as the Census PUMS dataset. Therefore, there is some inconsistency between the data sources, which is not suitable for comparative study. Therefore, the 1980 and 1990 PUMS have to be used in this analysis. Since residential patterns are rather stable over time, the 1980s and 1990s should be comparable in this analysis.
- ³ Previous research on urban sprawl largely treats it as a static phenomenon by which the urban form is analyzed at a fixed point in time. In this paper, the author suggests that it may be more meaningful to consider urban sprawl as a process-oriented phenomenon. In other words, it may shed more light on the sprawl discussion by focusing on the transformations of urban form and the changes of density over a period of time.
- ⁴ Both the 1 percent and the 5 percent data will be used in the analysis. PUMS 5 percent data in 1990 does not provide a comparable geography for the central city as that in 1980. Therefore, the 1 percent data will be used in 1980.
- ⁵ According to the Census Bureau, Metropolitan Area (MA) refers to a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core. Although the metropolitan area boundaries were fairly consistent between 1980 and 1990, the geographic matching could still be problematic under certain circumstances as observed by Ellis, Reibel, and Wright (1999). They note that, due to the boundary adjustment by the Census Bureau, some metropolitan areas grew larger and some became smaller from 1980 to 1990. Such problems could be significant in smaller areas or rapidly growing regions. At the local level, boundary shifts across metropolitan areas compromise the integrity of the data for comparative urban analysis over time. Ellis, Reibel, and Wright also observe that the mismatch problem is substantial when the research is conducted at the Public Use Microdata Area (PUMA) level. This is a geographic unit within PUMS. The problem could also be significant when the study looks at very narrowed subjects such as women's labor participation and interurban migration analysis, which are very sensitive to boundary shifts (Ellis, Reibel, and Wright 1999). Despite these concerns, the boundary shifts are not expected to present a problem in this analysis. Most immigrants lived in large metropolitan areas, such as Los Angeles, San Francisco, and New York where the geographic boundary shifts between 1980 and 1990 were not significant. The boundary mismatch problem has a crossing-out effect at the national level. Additionally, this paper conducts the analysis on major data categories such as population and number of households, which are less sensitive to the boundary shifts. Although it would be ideal to have the boundaries of all metropolitan areas perfectly matched between 1980 and 1990, there has not been such an adjustment procedure. Consequently, this analysis follows the available Metropolitan Area boundaries without any adjustment. This is in accordance with most previous comparative studies at the Metropolitan Area level (for example, see Barnard and Krautmann 1988; Mills and Lubuele

1995; Long and Nucci 1997a, 1997b; Gordon, Richardson, and Yu 1998; Fonseca and Wong 2000).

⁶ According to the Census Bureau, UA is an area consisting of a central place(s) and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum residential population of at least 50,000 people. The Census Bureau uses published criteria to determine the qualification and boundaries of UAs.

⁷ The central city construct in 1990 is available only at the PUMS 1 percent data. Therefore, we use the PUMS 1 percent dataset when the central city construct is involved. According to the Census Bureau, central city refers to the largest place in a metropolitan area and, in some areas, one or more additional places that meet official standards. A few primary metropolitan statistical areas do not have a central city.

The boundaries of the central cities present another concern regarding the geographic changes in the 1980s. Ottensmann (1996) notes that there has been a significant change in the concept of central city between 1980 and 1990. He found that the new definition added 107 new central cities while twenty-one municipalities lost their central city designations between 1980 and 1990. He observes that central cities as a whole experienced a 10.6 percent increase in population after adding all the new central cities. There have been attempts to adjust for this problem. Alba et al. (1999) adjust the geography based on a series of simulation procedures. Since their research has to use the PUMS 5 percent data to achieve more detailed information on race-ethnicity, the adjustment procedure suffers from loss of territory from 1980 to 1990. Therefore, it is not suitable for this analysis. Some other studies choose only a limited number of central cities in their sample for comparison to avoid the mismatch problem (for instance, see Kasarda et al. 1997; Galster, Metzger, and Waite 1999). These methods are not appropriate for this analysis either, since the selection process is subjective and the selected central cities may not be representative of the central cities in general. As with the argument in the previous section, the geographic shifts of central cities are not a major concern in this study, since this analysis focuses only on trends at the national level and includes all the population in the sample. In addition, enlarged central cities would only strengthen the results if there were significant out-migration from the central cities. In this case, the geography of central cities has been enlarged while the suburban areas shrank from 1980 to 1990. Many studies at the national level do not deliberately adjust for geography (for example, see Hill and Wolman 1997; Hill, Brennan, and Wolman 1998). However, it is necessary to interpret the demographic analysis with caution and keep in mind the potential implications of the geographic shifts problem.

⁸ For research using a similar method, see Myers (1999) and Myers and Park (1999).

⁹ In line with the two demographic methods, this analysis uses two ways to categorize population and households – one based on their immigration status and the other based on the recentness of arrival. The first way follows the cohort approach, categorizing all the people into three groups, which are U.S.-borns (born in the U.S.), immigrants who arrived before 1980, and immigrants who arrived after 1980. The membership is fixed in both 1980 and 1990. The second approach follows the immigrant group approach, separating people into three groups, which are U.S.-borns, settled immigrants who arrived here more than ten years, and new immigrants who just arrived in the United States within the last ten years. In the second approach, members of comparable groups have the same immigration status, or recentness of arrival, between 1980 and 1990.

¹⁰ It is possible that new immigrants may temporarily stay with their settled relatives upon

arrival. Therefore, measuring the immigration status of the householder might hide the status of a small number of recent arrivals. Since the way this research defines immigration status is consistent between 1980 and 1990 and this research is to measure the dynamic changes in the decade, this does not appear to be a major concern to the robustness of the research.

- ¹¹ Immigrants contributed 8.8 million more people and 2.8 million more households. At the same time, the population and household growth among native-borns are 12.4 million and 8.5 million respectively. If the growth rate among the native borns were the same as the foreign-borns, the number of native-born households would have increased by 4.0 million. Therefore, native-borns have added an extra of 4.5 million households or 114 percent more than if they would behave like foreign-borns. In his review of an early draft of this paper, Dowell Myers suggested that the differences in household formation between native-borns and foreign-borns were primarily due to their different age profiles, income, and many other factors. Therefore, it may not be appropriate to assume that native-borns could behave like foreign-borns. The constructive suggestion is well taken. The main purpose of this comparison is to reveal how much difference there is between foreign-borns and native-borns in household formation rather than to establish the causes of such differences.
- ¹² There are several reasons that could have caused the differences between native-borns and foreign-borns in the household growth. Native-borns tend to have higher income and mobility. Therefore, they have more liberty of residential choice. It is also more affordable for the native-born population to move to the suburbs and reside in larger lot sized areas. Next, the native-born population is more likely to be older and empty-nester than the foreign-born population. The native-born population has a lower fertility rate than the foreign-born population. Therefore, the family size of the native-born population is more likely to be small. Moreover, I speculate that cultural differences between native-born and foreign-born populations could also have an impact on the household growth. Further research is necessary to identify all the possible causes of such differences and see whether such causes are permanent or temporary to predict the future trends of the relationship between population and household growth.
- ¹³ Headship Rate denotes the percentage of total population in a group of people who are householders (owners plus renters).
- ¹⁴ This comparison is somewhat different from the previous one in the sense that it compares settled immigrants in 1980 with those in 1990, instead of comparing settled immigrants in 1990 with settled and new immigrants in 1980. This is to show the changes in household formation between the two decades.
- ¹⁵ Immigration has pumped new population into the central cities, enabling the cities to maintain their vitality despite increasing suburbanization. The cities have incubated newcomers and helped them achieve their upward social and outward spatial mobility. Without the replenishment of new immigrants, some cities experienced a downturn in population in the early 20th century.

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A Methodology to Evaluate Neighborhood Urban Form

A Comparison to New Urbanist Principles

LISA M. WESTON

The principles of New Urbanism have been widely applied to new development. People living in neighborhoods built to reflect these principles enjoy nearby destinations such as shopping and restaurants that are scaled to their neighborhood, and a public transit system that facilitates accessibility. However, little research has been done to investigate the application of these principles to existing neighborhoods, so that suburban residents may enjoy these same benefits without moving to a new development. Drawing from the New Urbanist literature, measures designed to evaluate these principles at the neighborhood level are gathered and applied to seven neighborhoods in Austin, Texas. The totality of the measures used are found to adequately characterize how well the study areas measure up to New Urbanist principles.

Currently in the fields of planning and architecture there are several proponents of an urban form reminiscent of pre-World War II American cities. These neighborhoods are characterized by short blocks of higher density housing mixed with shops and other commercial uses. An early advocate of this movement, known variously as New Urbanism, Neo-Traditional Development, and Transit-Oriented Development, has suggested that this philosophy of urban form should be applied only in undeveloped areas, and the millions of people living in low-density suburban areas should be written off (Duany 2000). In response to this provocative idea, this research was aimed at finding examples of retrofitting suburbia. However, it appears that a large-scale retrofit of a “typical” suburban residential area has never been attempted; therefore a new tack was taken.

Since some areas are better candidates for retrofitting than others, the first step is to characterize and evaluate suburban neighborhoods. The modern suburbs that New Urbanists rail against are often characterized by large areas of single-use zoning, wide streets without sidewalks, and few connections among streets. A large area of single family residences may have only one or two access points that connect it to an adjacent arterial street. In addition, the area might be surrounded by a wall or fence with no access points for walkers or bicyclists. Due to frequent looped streets and cul-de-sacs, there are few ways to move around other than by automobile and distances via the road system compared to the Euclidean (or straight-line) distance are substantially longer. Research in the Seattle area (Hess et al. 1999) suggests that the typical suburban road layout described above is associated with a low volume of pedestrian trips in a neighborhood. Their research found that in urban areas on average walking routes were 27 percent longer than the Euclidean distance between two points. In suburban areas they were 66 percent longer.

Alex Krieger says that it is time to “heighten the quality” of existing suburbs (in Langdon 1994, 219). While there is interest in the planning and architectural communities regarding the concept of retrofitting suburbs, there are few concrete examples in the literature. Completed projects include the complete razing of an area and building of new streets, as in the case of Lake Parc by the Chicago Housing Authority (Barnett 1995), and the retrofitting of a strip mall, as in the case of downtown Bellevue, Washington (Girling and Helphand 1997). The research interest here is more concerned with retrofitting the large areas of residential housing than strip mall retrofitting, but not complete rebuilding.

If the objective is to retrofit areas to resemble New Urbanist style neighborhoods, the guiding philosophy should offer direction on the measurement of important neighborhood elements. In the Charter of the New Urbanism (Leccese and McCormick 2000) there are twenty-seven principles; eight of these relate to neighborhood form. They are:

1. Neighborhoods should be “compact, pedestrian friendly, and mixed-use.”
2. Daily life activities “should occur within walking distance [and] interconnected networks of streets should be designed to encourage walking.”
3. Neighborhoods should contain a “broad range of housing types and price levels.”
4. Properly placed transit corridors can help organize metropolitan structure.
5. Appropriate land uses and building densities “should be within walking distance of transit stops.”
6. A gathering of “civic, institutional, and commercial activity should be embedded in neighborhoods [and] schools should be sized and located to enable children to walk or bicycle to them.”
7. Urban graphic design codes serve as predictable guides for change.
8. “A range of parks ... should be distributed within neighborhoods.”

(Leccese and McCormick 2000, iii-iv)

Using these principles as a guide, measures of urban form were culled from the planning and social sciences literature and applied to seven neighborhoods in Austin, Texas. Two of the principles are not addressed here. Number five, appropriate density within walking distance of transit stops, is not addressed because the study areas are so small that density data are not available at this scale. Number seven, urban graphic design code, is not addressed because there is no such code in the selected study areas.

The next section of this paper evaluates the measures discussed in the literature. The third section presents the final list of measures for characterizing the six New Urbanism principles of interest. Results are presented in the fourth section and a discussion of the findings concludes the body of the paper.

Measures in the Literature

Land Use

Two methods of measuring diversity and spatial mix of land use of an area are selected from the literature. The first measure for characterizing diversity in land use was developed by Cervero and Kockelman (1997). They propose a dissimilarity index. This method first divides a study area into several smaller parcels (they propose one hectare). A value for one parcel is based on the land uses of the eight surrounding parcels. For each land use different from the parcel in question a score of one is assigned. If each of the eight parcels surrounding the parcel in question is a different land use from that parcel, a value of eight is assigned to that parcel. These scores are added for each of the parcels in a study area. The higher the value of the dissimilarity index, the more diverse the area under consideration.

The second measure, an aggregation index, is borrowed from the discipline of landscape ecology (Hong, et al. 2000). This index provides an approximation of how dispersed land uses are throughout an area. The index ranges in value from one to zero. A value of one indicates that one class of land use is gathered in a single clump, zero indicates that the land-use parcels are completely dispersed. This analysis can only be performed on data in a raster format. A detailed description of this methodology is provided in figure 1.

Street Network

Four measures used for the interconnected network of streets are based on work by Southworth (1997) and Ewing (1996). Southworth proposes a variety of measures based on

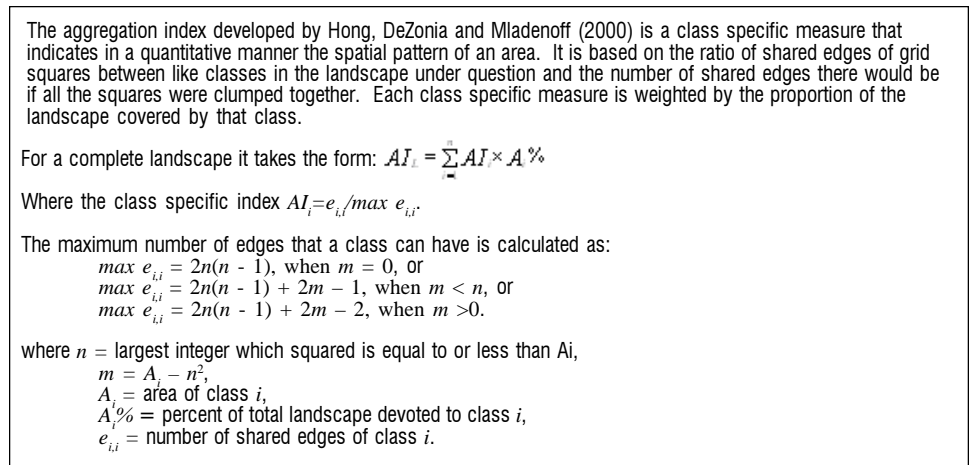


Figure 1. Aggregation Index

Table 1. Key Service Characteristics of Bus Routes Servicing the Study Areas

Type of Bus Route	Service Characteristics
Local	Multiple Stop service to and from Downtown
Limited	Limited Stop service to and from Neighborhoods and Downtown
Feeder	Multiple Stop service to and from Neighborhoods and Transit Centers or Park & Rides
Crosstown	Multiple Stop service that does not access Downtown
Special	Downtown Circulators and Special Services
University	Limited Stop service to and from specific areas and the University of Texas at Austin
Express	Limited Stop service to and from Downtown and Park & Rides

Source: Capital Metro 2001, 4

ratios of links and nodes and an accounting of cul-de-sacs and loop roads. Other researchers (Handy 1996) have used variations, such as ratios of three- and four-way intersections. The proposed measures are: lineal feet of streets (with and without alleys), ratio of links to nodes (with and without alleys), number of cul-de-sacs, and number of access points.

The first measure, lineal feet of streets (and alleys) in a neighborhood, represents how much of the area is devoted to public access. It is also a proxy for block sizes (another measure sometimes found in this type of analysis) since an area with smaller blocks will have more streets than an area with larger blocks. Alleys are considered separately since they carry specialized traffic such as pedestrians or vehicles for that block only and typically one way at a low speed.

The second measure, the ratio of links to nodes, provides an estimate of interconnectedness of the local transportation system. A higher ratio indicates more choices for traveling through an area. A situation such as this provides increased opportunities for residents to mingle and more opportunities for commerce (Jacobs 1961).

A third measure is the number of cul-de-sacs. This is another way to characterize the interconnectedness of an area. A high number of cul-de-sacs suggests the need for circuitous routes to avoid dead ends. Lastly, the number of access points indicates how well an area is integrated into the surrounding fabric of the city.

Housing

Two measures are presented for assessing the range of housing types. One is the percentage of residential land devoted to multi-family housing. The City of Austin land-use maps have four separate residential codes; however only two of them appear in the study areas—single family (SF) and multi-family (MF). The other measure presented is a subsection of the aggregation index for the two classes of housing assuming that they are the only two land uses.

Although the “proper” placement of transit cannot be assessed, as recommended in the Charter for New Urbanism (Leccesse and McCormick 2000, iii) general access by transit and the quality of transit can be determined. The local transit authority offers a variety of bus routes. The number and type of routes are noted for each study area. Table 1 provides a description of each of the types of routes servicing the study areas.

Open Space

The final measure presented here characterizes the amount of open space in the study areas. This measure includes open space and undeveloped areas since undeveloped areas are often used for park-type purposes. Although suburban areas are generally made up of large lots, the percentage of area devoted to open space and undeveloped land assesses how much open space for public use is available in each area.

Measures and the Study Area

The methodologies described above were applied within the Austin area. In order to evaluate Austin suburban areas, two “control” neighborhoods that represent the local manifestation of New Urban ideals were chosen – Hyde Park and a portion of East Austin. Five post-World War II neighborhoods are also evaluated: Govalle, Stassney, Spicewood, Jollyville, and Nuckols (see figure 2 for the location map of the seven Austin neighborhoods evaluated here and figures 3 - 9 for the land use maps). A square, four thousand feet per side, was chosen from each neighborhood. Pedestrian-oriented neighborhoods are conventionally built to make one-quarter mile trips convenient (Southworth 1997).

Two control neighborhoods were chosen to account for local variations. The Hyde Park neighborhood is often cited locally as an example of a vibrant, walkable neighborhood. Hyde Park is an early (pre-1925) suburb of Austin. It has many alleys running through its blocks and hosts a wide variety of land uses – a museum, gym, post office, park, churches, restaurants, corner groceries, etc. However, one whole side of the neighborhood is flanked by a large parcel of state-owned property that effectively presents a wall to the neighborhood. In order to account for potential effects from this situation a second control neighborhood was chosen in an area that is part of the continuous fabric of the city, East Austin. This neighborhood was also developed between the wars; it has alleys and a variety of land uses.

The five neighborhoods were chosen to represent different time periods of development, different parts of town and to exhibit some characteristics similar to the control neighborhoods. For example, the Jollyville neighborhood is adjacent to a highway with a wall-effect similar to the state property next to the Hyde Park neighborhood. The Nuckols and Stassney neighborhoods contain schools and some retail areas similar to both control neighborhoods.

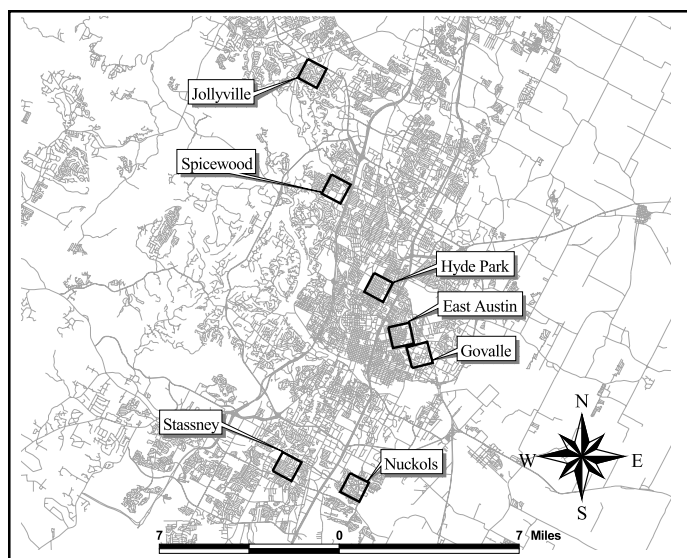


Figure 2. Location of Seven Neighborhoods in Austin

Source: City of Austin, 1995

Once the neighborhoods were chosen, land-use and street files were obtained from the City of Austin. The street centerline file was used to assess the street network (counting nodes, links, and lineal feet of streets). The metadata accompanying the files indicates unknown positional accuracy, source information, and type of source media. The City files date from 1995 and field verification was completed in 2001. None of the parcels checked appeared to have undergone any major changes in the recent past. When calculating the number of loops and cul-de-sacs for a study area, only those beginning in the four thousand-foot square area were enumerated.

To calculate both land-use measures the study areas were divided into two hundred-foot squares. The land-use value assigned to the square was determined by the surrounding land uses. If a land use in the square was not the majority land use but different than the surrounding squares, it was assigned the different value. In the older neighborhoods a two hundred-foot square area might be made up of four to eight residential and non-residential parcels. In the new neighborhoods there might be three parcels or just a portion of one. In order to characterize all the study areas, land-use data for an extra two hundred feet beyond the study area was used.

Between the seven study areas there are ten different types of land use: residential (single family and multi-family were considered one type of land use in calculating the dissimilarity and aggregation indices), commercial, office, industry, civic, open space, undeveloped, transportation, utilities, and unknown.

A few of the study areas have land-use squares completely comprised of transportation (a large intersection) or utilities. In these cases the land use was not considered dissimilar to the neighboring cells for the purpose of calculating the dissimilarity index. These types of uses are not trip origins or destinations and therefore of no consequence to the analysis.

Several parcels in the study areas were classified as undeveloped. Isolated parcels in residential, commercial and retail areas were classified the same as their neighbors. Large parcels, or groups of parcels, were classified as open space. Figures 3 through 9 show actual land-use data and the grid version of the data.

Proposed future research would include sidewalk and detailed transit information. Bus stops per lineal foot of street might also be an appropriate measure. The extent and completeness of the sidewalk would be a good indicator if local residences can easily



Figure 3a: Hyde Park - actual land use

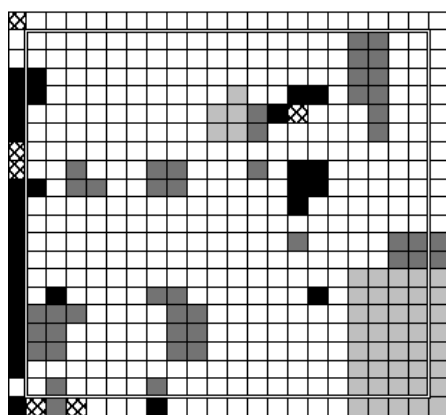


Figure 3b: Hyde Park - grid version of land use



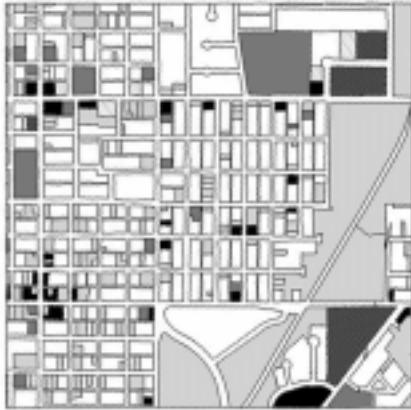


Figure 4a: East Austin - actual land use

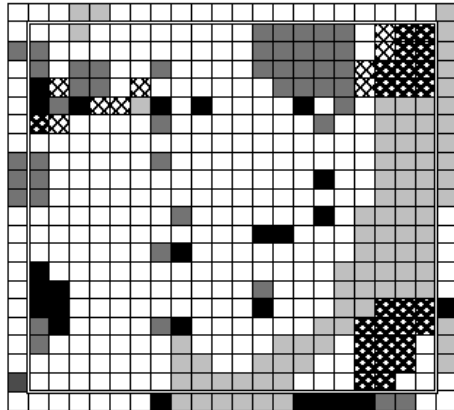


Figure 4b: East Austin - grid version of land use

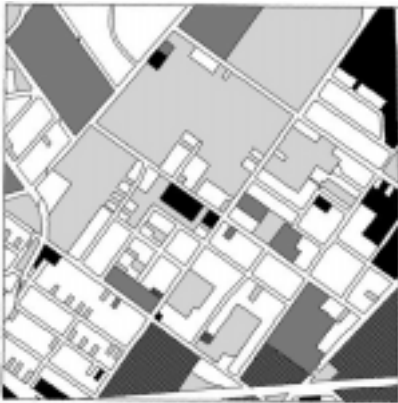


Figure 5a: Govalle - actual land use

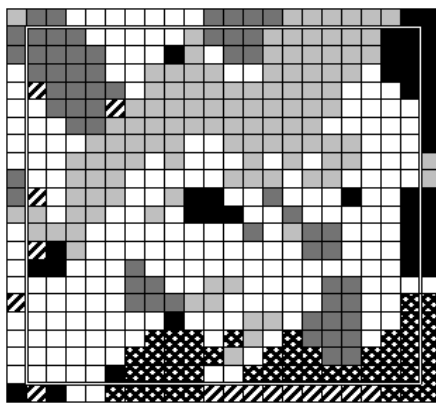


Figure 5b: Govalle - grid version of land use



Figure 6a: Stassney - actual land use

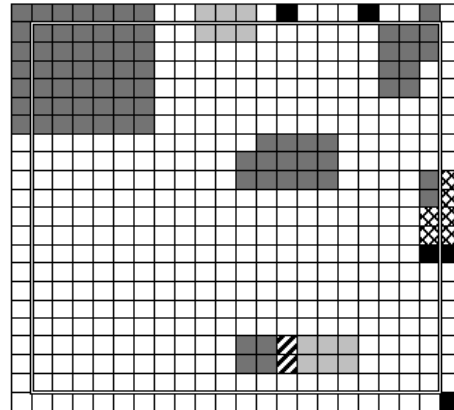


Figure 6b: Stassney - grid version of land use



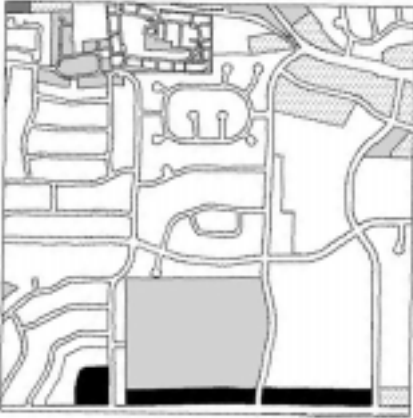


Figure 7a: Spicewood - actual land use

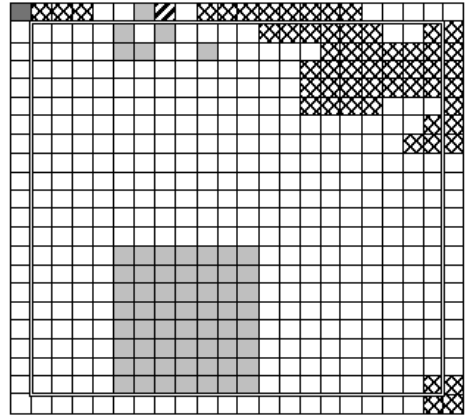


Figure 7b: Spicewood - grid version of land use



Figure 8a: Jollyville - actual land use

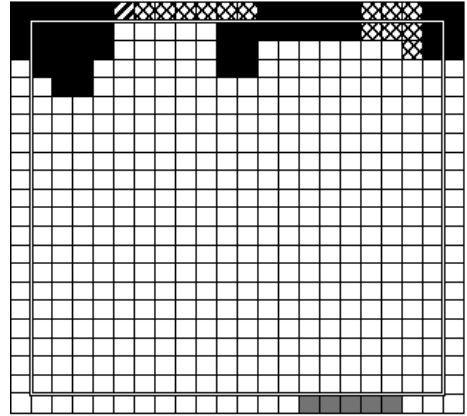


Figure 8b: Jollyville - grid version of land use



Figure 9a: Nuckols - actual land use

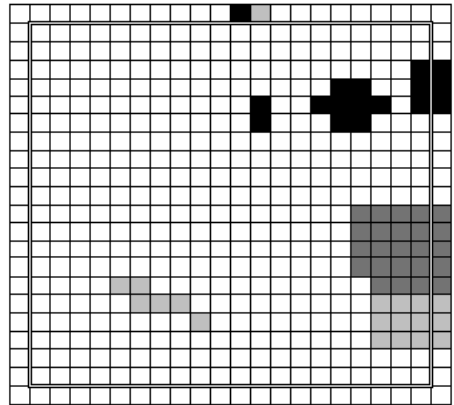


Figure 9b: Nuckols - grid version of land use

and safely access local shops and worksites. By adding sidewalk data, transportation system connectivity may be improved by adding paths through long blocks to facilitate the ease of movement of pedestrians and bicyclists.

Results

The results of the measures described above are presented in table 2. The seven neighborhoods are arranged in order of approximate age of development. This was determined by analyzing tax records for two to three dozen properties per neighborhood.

The first two measures describing mixed land use give an idea of how well mixed the different land uses are within the neighborhood. The results of the two measures rank the neighborhoods in the same order from most to least aggregated. The dissimilarity index gives an idea of how the study areas compare to each other, but it does not take into account the number of classes of land uses and there is no natural beginning or end to the scale. However, the break in the data between the three oldest neighborhoods and the four newest ones indicates the dramatic differences in the dispersion of land uses in the study area. In the four newer neighborhoods non-residential land uses are confined to the edges of the neighborhoods with very little penetration. The older neighborhoods have several parcels of non-residential use located well into the neighborhood.

On the other hand, the aggregation index does not show nearly as dramatic a break in the measures. Hyde Park, traditionally considered the local ideal of mixed-use development, has a comparable score to the Stassney neighborhood which has large blocks of residential use with few mixed-use areas. The Jollyville neighborhood is characterized by different land uses mostly clumped together and this is clearly indicated by the high score on the aggregation index. One potential reason for the Govalle and East Austin neighborhoods receiving lower scores on the aggregation index is that they have the highest number of different classes.

The next four measures are designed to evaluate the street network in the neighborhood. Both new and old neighborhoods have extensive street systems. The two oldest neighborhoods see a large increase when alleys are added; however there is a newer neighborhood with approximately the same total length of streets. It is especially telling to look at the next measure, the ratio of links to nodes, which provides an evaluation of the connectivity within the neighborhood. Looking at these values there is a definite downward trend in connectivity from the older to the newer neighborhoods. The increasing number of cul-de-sacs confirms that while there may be the same length of streets in two neighborhoods, one may have more streets that go nowhere. The grid-like layout of the older neighborhoods also offers more route choices, while the neighborhoods with curvilinear streets and many cul-de-sacs funnel traffic onto a few larger streets.

The last street network measure, access points, quantifies how well the neighborhood is connected to the surrounding fabric of the city. Here there is no real trend evident. However, none of these neighborhoods are gated communities, which are seeing increasing popularity throughout the country (Blakely and Snyder 1999).

With the exception of the Spicewood neighborhood, the newer neighborhoods have much less land devoted to multi-family housing than the older neighborhoods. The Spicewood neighborhood has a large portion of student housing and is serviced by a University bus route. The aggregation index as presented for just the two types of housing shows a clear difference between the three older neighborhoods, where multi-family units are more dispersed throughout the area, and the four newer neighborhoods where multi-family units are largely gathered together.

Transit access varies from the older to the newer neighborhoods. Since the transit

system is changing from a hub and spoke system to more grid-like system the neighborhoods closer in are served by several local routes that access downtown and have service that runs every ten to forty minutes. The express and limited routes primarily provide commuter service with limited runs in the morning and the early evening. Crosstown and feeder routes operate every thirty to forty minutes. They offer multiple stop service but do not access the downtown area. The four oldest neighborhoods have the most, and the most diverse, transit service. They are all well connected to downtown and to several other parts of the Austin area. The three newer neighborhoods are not well-connected via transit. The bedroom suburb nature of the Jollyville neighborhood is evidenced by its single crosstown route and four express routes. Spicewood has one route operating into the downtown area and the single limited access route running to the University. The Nuckols neighborhood is serviced by the single route accessing downtown and a single crosstown route.

The amount of open space and undeveloped lands in the newer neighborhoods is less than the older neighborhoods. It is possible that newer neighborhoods might have more undeveloped land since they have had less time to be built out. However, that is not the case here. The largest percentages of undeveloped land are actually in East Austin – an area of town with several industrial sites. Also, the newer areas are likely to be part of a much larger planned unit development that is built out in phases. In one of the newer areas, Spicewood, there are several large, undeveloped lots; however one is currently being developed into a religious center with buildings for worship, entertainment, school, and recreation.

Discussion

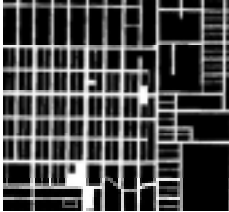

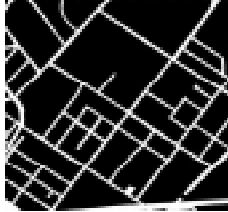
None of the measures presented here are by themselves ideal for the task at hand. Each one has different limitations. The dissimilarity index provides a good indication of the range of land use mixes in an area. The Jollyville neighborhood with its large residential area and edge of non-residential use was appropriately rated quite low. Hyde Park, East Austin, and Govalle were all rated high, but for different reasons. Hyde Park and East Austin are both neighborhoods with an integrated, diverse set of land uses. East Austin and Govalle both have industrial areas. This is a weakness of the dissimilarity index – it cannot distinguish between appropriate land uses. Therefore, an area like the Govalle neighborhood with lots devoted to industrial and utility uses scores high using this measure, although this kind of mix is not necessarily conducive to vibrant, urban living.



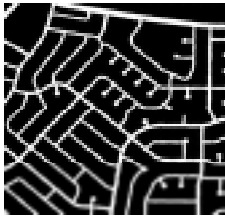
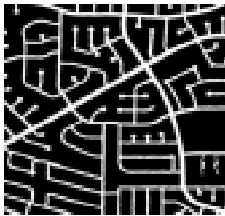
The aggregation index is an adequate measure of the dispersion of uses in the landscape. The four newest neighborhoods have a moderate amount of variation in land uses and show quite moderate levels of clumping. As the index is constrained in value from zero to one, it is easy to make comparisons between areas. It is interesting that the Hyde Park and Stassney neighborhoods have similar scores. This indicates that the land uses in these areas are similarly separated from each other. This measure has the same weakness as the dissimilarity index in that it cannot distinguish appropriate from inappropriate uses.

Together these two measures provide an index of how mixed the uses are in these neighborhoods. Although Hyde Park and Stassney scored similarly with the aggregation index they are dramatically different with the dissimilarity index. The second measure reflects the finer grain of the dispersion of land uses in Hyde Park.

Together the four measures of the interconnectedness of the street network offer a good description of the study areas. As noted above, these and similar measures have been applied in various research projects. The comparison of the lineal feet of streets to the ratio of links to nodes demonstrates not only the amount of streets providing access, but the ability to move between the streets. Including alleys, Hyde Park, East Austin, and Spicewood

Table 2. Results of Measures for Seven Austin Neighborhoods

Neighborhood and approximate age	Hyde Park 1900s	East Austin 1920s – 1950s	Govalle 1930s – 1950s
Southworth-style map			
Dissimilarity Index	681	916	1009
Aggregation Index (AI)	0.835	0.749	0.744
Lineal feet of streets w/alleys	95,691 114,191	95,623 115,223	18,256
Links/nodes	2.05	2.05	1.90
# w/alleys	1.87	1.90	
# cul-de-sacs	3	3	3
# access points	35	26	18
Ratio MF/total housing	17.84	7.59	11.47
AI – just SF & MF	0.802	0.862	0.745
Transit access	3 local 1 limited 1 crosstown 1 University	3 local 1 crosstown	2 local 1 limited 1 crosstown 1 special
% open space and undevelop.	8.14	21.75	27.20

Stassney 1960s–1970s	Spicewood 1970s–early 1980s	Jollyville late 1970s–1980s	Nuckols late 1970s–1980s
			
365	361	176	326
0.884	0.925	0.973	0.951
73,110	113,040	75,233	92,846
1.57	1.56	1.55	1.38
12	17	17	39
18	18	19	25
8.42	35.59	3.72	1.42
0.943	0.923	0.984	0.962
1 local 1 limited 1 feeder 2 crosstown	1 local 1 University	1 crosstown 4 express	1 local 1 crosstown
3.36	12.79	0.65	3.61

all have over one hundred thousand lineal feet of streets. However, the low links-to-node ratio for Spicewood indicates how much less interconnected these streets are. Also, the high number of cul-de-sacs indicates how many of these streets are dead ends, which further diminishes the connectivity of the neighborhoods. The number of access points illustrates how well connected the neighborhood is into the fabric of the city. However, the artificial boundaries created for this analysis weaken the usefulness of this measure, as a neighborhood may be well connected internally but have limited access to the rest of the city, or vice versa.

Using publicly-available electronic information, it is difficult to capture the New Urbanist principle of a range of housing types and price ranges. The measure of the proportion of multi-family housing demonstrates the low percentage of newer residential areas devoted to this kind of housing (with the exception of the student housing area in Spicewood). The aggregation index with the two housing types clearly demonstrates the mix of housing in the neighborhoods. As with the dissimilarity index and aggregation index discussed above, it is necessary to have both measures to clearly demonstrate what is going on in the area of interest. These measures do fall short, however, in measuring the price mix that makes up the New Urbanist principle on this issue.

As a gross measure of transit access the types of routes that service the study areas is a good indication of how well connected the neighborhoods are to the rest of the city via the bus system. Local buses run frequently and connect neighborhoods to the downtown area. Despite growth in the Austin area, several major employers such as the City, the State, and the University of Texas at Austin are located downtown making it a major commuter destination. A better measure for this aspect of the neighborhood might be the density of bus stops and, using a geographic information system, an assessment of the services near them.

The final measure—percentage of open space and undeveloped land—provides a measure of how much public space is available. This could be where children play informally or a destination for recreation. The inclusion of undeveloped land is appropriate since children like to explore unstructured areas (Hart 1977). Using solely electronic data it is difficult to develop a measure that accurately describes the diversity and general desirability of parks and open space. In general though, the percentage of open space and undeveloped land does give some idea of how much of the study area is devoted to public space.

Conclusion

If city planners are considering retrofitting built-out areas to more closely resemble New Urbanist ideals, a method to assess the current state of neighborhoods is essential. The measures presented here explicitly attempt to model the principles laid out for the neighborhood scale. Due to its qualitative nature one of the principles will never be able to be measured—the urban design code that helps create a sense of place. However, many aspects of the other principles can be measured: mix of uses, interconnectedness of streets, mix of housing, transit service, and amount of parks and open space. In several of these cases it is necessary to have more than one measure to fully explain a particular aspect of an area. With increased micro-scale data several of these measures could be improved.

The measures presented here are an initial effort designed to quantitatively analyze aspects of urban form that specifically reflect desired aspects of neighborhoods built to the specifications of New Urbanism. Using widely available electronic data and the measures presented above, neighborhoods can be evaluated for their nearness to neighborhoods embodying New Urbanist principles. As more data becomes available, the measures presented here can be modified to better characterize the micro-scale elements that are important to New Urbanism.

About the Author

Lisa M. Weston is a Ph.D candidate at the University of Texas at Austin. Her dissertation research will focus on the travel behavior of non-driving teens. She worked at Los Alamos National Laboratory and the City of Austin, Texas, before continuing her studies.

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Anytown U.S.A. in the Year 2050

Glimpses of the Future

BRUCE E. TONN

Over the past fifty to one hundred years, adoption of new technologies, such as the automobile, and substantial social changes, such as increasing population and decreasing household size, have had substantial impacts upon the design of our cities and towns. This article employs trend analysis and scenario writing techniques to explore how cities and towns may evolve during the next fifty to one hundred years in response to equally powerful forces. Trends in economics, politics, society, technology, and the environment are identified and discussed. Four scenarios depicting potential future cities and towns that play out the trends in different combinations and manners are presented. The names of these scenarios are Home Dwellers, Le Corbusier Meets the Jetsons, Ruins, and Islandia Revisited. After analyzing these scenarios, the article concludes that planners should begin to consider non-traditional mixed land uses.

The purpose of this paper is to stir the imagination about the future of human settlements in the United States. Trend assessment and scenario writing, two methods drawn from the field of futures studies, are used to create images of "Anytown" in the year 2050. In this way, this paper does its part to bring the future back into planning, which has recently been stated as an important goal for planning by Myers (2001) and Cole (2001), which in turn follows a similar plea by Isserman (1985) more than a decade earlier.

A review of the recent literature suggests that the future has not been totally ignored by planners. Indeed, there have been many good, future-oriented papers that focus on particular aspects of urban environments. For example, Barnett (1989) focuses on redesigning the future downtown metropolis. Vernon (1991) discusses long-term implications of large-scale immigration for cities in mature industrialized societies. Landis (1995) discusses the California Urban Futures Model, which is a large-scale metropolitan simulation model that uses a geographic information system for data integration and spatial analysis. Jacobs (1999) discusses future implications for land use planning of the private property rights movement.

Additionally, planners are beginning to address the potential future impacts and opportunities presented by information technology and environmental issues. For example, Japan has moved to design its cities with information technology in mind (Newstead 1989). Blakely (2001) assesses the impacts upon traditional economic development of the new information technology world. Beatley (2000) looks at how planners can work to preserve biodiversity for future generations. Visioning (e.g., Helling 1998) and long range planning (e.g., Platt 1995; Lapp 1985) are also important future-oriented topics in planning.

This paper is different from these other efforts in several ways. The major difference is that the four scenarios presented below incorporate a broader set of change factors, from climate change to nanotechnology, an aging population to economic globalization, than are normally considered. Another difference is that the time scale of this assessment (2050 is used metaphorically to represent the long-term, meaning the next fifty to one hundred years) is longer than most assessment horizons. In combination, the scenarios are necessarily more speculative than typical assessments, but that can be an advantage because futures different from today and from conventional wisdom about tomorrow can be more easily considered. For example, it may be quite difficult for today's generation of planners to imagine a world where zoning is superfluous but in fifty to one hundred years, human settlements could change so significantly that not only zoning but also infill, traffic congestion and downtown redevelopment could become completely irrelevant topics.

Kemp (2000) envisions changes in cities in the near to mid-future. He expects demographic shifts, economic factors, environmental concerns, and political considerations to change the socioeconomic landscape of cities to some degree. However, sprawl will continue to increase, like today, and technology, more specifically information technology, will provide planners with more capability, again a clear trend seen today. Overall, Kemp does not see future cities and their milieu appearing vastly different from today's urban environments. This is mainly because the trends are not played out as far into the future as they are in this paper and because several powerful change agents are left out of the analysis, such as nanotechnology and global climate change. To achieve the purpose of this paper, to stir the imagination, the scenarios presented below eschew a middle-of-the-road, conventional wisdom world in favor of four scenarios distinctly different from today's world.

Before the scenarios are presented, some groundwork needs to be laid. First, the point that significant change could occur within a fifty to one hundred year horizon needs to be supported. The next section does this by documenting change that has occurred during the

past fifty and one hundred years. Second, evidence of future change is needed to support the development of the scenarios. This is accomplished in the third section by assessing trends in five areas: society, economic, politics, technology, and the environment. The scenarios, presented in the fourth section, are written as depictions of plausible future worlds that are shaped by different combinations of these trends. It should be noted that the development of the trends and scenarios were patterned after methodologies presented by Schwartz (1991). The paper concludes with observations about how the results of the scenario analysis may be of value to today's planners.

Documenting Change

Change over the past fifty to one hundred years is easy to document. Table 1 lists major social changes over this time period. The U.S. has undergone a significant population growth. Today's population has a longer life expectancy and is more urban and educated. The ascendancy of the automobile, when combined with decreasing household size and urbanization, has transformed urban designs and land use patterns. In essence, the United States has been metamorphosed from a largely rural society with numerous concentrated urban centers in the 1930s to a largely suburban society by the 1970s. Changes in culture have also occurred, which include increased divorce rates, improved civil rights, and opportunities for women and minorities in the workforce.

Table 2 documents just a few of the major changes in technology witnessed in the past few years. Televisions, telephones, cell phones, and personal computers have permanently altered interpersonal communication patterns and American culture. The World Wide Web consisted of only a few sites in the early 1990s (Berners-Lee 1999) and has since grown exponentially, altering leisure, business, and educational activities, to name a few. Not included on the list are medical and agricultural technologies or changes in computing power and bandwidth or advances in recycling and renewable energy practices. Biotechnology, nanotechnology, space technology, and artificial intelligence are poised to further transform nearly every aspect of our lives.

In conclusion, change is a given. Rapid change is very possible. In the past fifty to one hundred years, culture, technology, population, and land use have changed significantly. The question, then, is really not whether change will occur but how it will occur. What are our potential futures? What can planners do today to move toward acceptable futures and away from unacceptable ones?

Table 1. Major Social Changes In the United States, 1900-2000

	1900	1950	2000
U.S. Population ¹	76 M	150M	274M
U.S. Life Expectancy ²	47.3	68.2	76.7
Percent Population 65 Years and Older	4.1	8.1	10.2
Percent Living in Urban Areas	40	64	75
Total Number of Cars	8,000	40M	129M
Average Household Size	4.76	3.37	2.61
Divorce Rate (per 1,000 population)	1.8	5.0	8.0
Percent Adult Population with College Degree	2.7	6.0	25.2
Percent Employment in Agriculture	22	12	2.6

Table 2. Major Technological Changes in the United States, 1950-2001

	1900	1950	2000
Percent of Homes with Television	9	95	98
Percent of Homes with Telephones	62	91	94
Percent of Homes with Cable Television	0	6.7	67
Percent of Homes with VCRs	0	0	85
Percent of Homes with Personal Computers	0	0	51
Estimated Number of Web Pages	0	0	billions
Estimated Cell Phone Users	0	0	117M

Trends

As explained by Schwartz (1991), a useful first task in imaging potential futures is to assess trends in areas that are likely to drive the characteristics of potential future worlds. Toward this end, trends are assessed in five categories: social, economic, political list, technological, and environmental. Due to space limitations, it is not possible to provide an extended discussion about each of the over thirty trends listed below. However, reference sources are provided in the endnotes for those who wish to learn more about the trends. It should also be noted that trend assessment is an art, not a science. The trends listed below are drawn from my review of a wide range of important information sources and my own distillation and synthesis of this information into succinctly stated trends. Other people with access to different information sources and different backgrounds could be expected to develop different sets of trends.

Social

- The average age of the U.S. population is increasing.¹
- Life expectancy is increasing.¹
- The U.S. population is increasing (400M by 2050).¹
- Social capital is decreasing.⁷
- Household size is decreasing.¹
- Globalization of culture is increasing.⁸
- Racial diversity in the U.S. is increasing.¹
- Fertility rates are declining.⁹
- Religious fundamentalism is increasing.¹⁰

Economic

- Globalization of the world’s economy is increasing.¹¹
- Telecommuting and telework are increasing.¹²
- Outsourcing is increasing.¹³
- E-commerce is increasing.¹⁴
- Customization of the production process is increasing.¹⁵

Political

- Cynicism about politics and politicians is increasing.¹⁶
- Voting rates are decreasing.¹⁷
- Political terrorism is increasing.¹⁸
- The number and power of private sector interest groups is increasing.¹⁹
- National and global environmentalism is increasing.²⁰

- The number and power of non-governmental organizations is increasing.²¹
- Experiments with direct and teledemocracy are increasing.²²

Technological

- Computing power is increasing.²³
- Bandwidth to businesses, homes, schools, and other locations is increasing.²⁴
- Advances in genetic engineering are increasing.²⁵
- Cost efficiency of renewable energy technologies is increasing.²⁶
- Safer and more cost efficient fission energy technologies are increasing.²⁷
- Advances in nanotechnologies are increasing.²⁸
- Deployment of space-based technologies is increasing.²⁹

Environmental

- Global temperatures are increasing (possibly as much as +5.8 C by 2100).³⁰
- Supplies of fresh water are decreasing as related to demand.³¹
- Biodiversity is decreasing.³²
- Toxic chemicals in the environment are increasing their disruption of endocrine systems.³³
- The quality of soils devoted to agriculture is decreasing.³⁴
- Invasive species are increasing their disruptive impact on ecosystems worldwide.³⁵

Which trends will combine to shape the future of human settlements is a matter of subjective judgment. My own approach is to assume that society and technology will continue to co-evolve and react/adapt to environmental and energy constraints. A few of the virtually infinite paths for this co-evolution are represented by the four scenarios presented in the next section.

Four Scenarios

The four scenarios are shaped by different combinations of driving forces. Globalization, technology, and global environmental problems are assumed to be the pre-eminent driving forces. I can envision these forces leading to more centralization of government, business, and human settlements or more de-centralization. I can envision those forces leading to even more decreases in social capital and loss of community or to new communities characterized by high vitality and cohesion. These forces may also transcend our ability to manage them, leading to catastrophic situations.

With these thoughts in mind, I started the scenario writing process with four intuitive shapes for the scenarios. One encompassed advances in information technology leading to new levels of social isolation. A second assumed the triumph of economic globalization and big technology. The third shape was dark, catastrophic. The fourth was environmental and non-market-based. With respect to the driving forces mentioned above, the first and fourth scenarios describe decentralized worlds, whereas the second describes a world of extreme centralization. The first and third scenarios are characterized by even more losses of social capital whereas there are some gains in the second and huge gains in the fourth. Environmental issues play out differently in each of the scenarios. Other trends mentioned above also help shape the scenarios.

I purposely had no preconceived notions of future urban designs when I started this process. As much as possible, I let the design of human settlements and ensuing patterns of land use evolve during the writing of the scenarios. It was interesting to me how human settlements took on forms different from today's world, which is dominated by urban cores and expanding suburban peripheries. The fourth section presents a more thorough summary

and assessment of the scenarios. Again, it should be noted that scenario writing is an art, not a science. The scenarios presented below represent my own thinking, background, and biases. Other people could, and should, create wholly different scenarios starting from the same goals as I did.

Home Dwellers

In this world, trends toward decentralization, individualism, cynicism, and mistrust are reinforced by co-evolving information technologies to produce a highly interconnected world almost completely devoid of face-to-face human contact (see figure 1). Most homes have numerous high-bandwidth connections to the Net that allow the streaming of real-time video images to viewing screens, virtual picture frames, and holographic interior landscaping scenes. Occupants are continuously connected to designated others on the Net, who may linger in others' homes as holographic images sitting in virtual chairs. Advances in energy systems, nanotechnology, hydroponics, and genetic engineering have turned homes into miniature factories capable of meeting most of the basic necessities of the occupants. Other decentralized production facilities are located within housing settlements. The few items not produced locally, such as some foods and precious and rare metals, are custom-ordered over the Net and delivered ASAP by autonomous intelligent delivery vehicles. Decentralized branches of ubiquitous multinational companies build and maintain the decentralized production and distribution system. Most of their employees, indeed most white collar employees, work from home. Because people can now spend almost every minute of every day in their homes, the homes are larger and more multi-functional than in the year 2000.

Cities and towns in this world are quite different from those existing in the year 2000. One major difference is that downtowns have largely disappeared. This is mainly because the need for centralized office buildings has disappeared due to nearly universal telecommuting and telework. Another reason is that department stores and other stores marketing clothes, shoes, linens, and retail consumer items have also virtually disappeared, due to home-based and local production and e-commerce. A third reason is that most people only venture outside when absolutely necessary (or to partake in extreme individual sports, such as hurricane surfing). That people want to exist almost wholly in their homes is no coincidence as the average global temperature has risen five degrees Celsius and the incidence of violent storms and exposure to mosquitoes bearing new and quickly evolving antibiotic resistant strains of tropical diseases has dramatically increased. Neighborhood walks and visiting with neighbors on their front porches are relics of the past.

Land use patterns in this world are much more homogeneous. The landscape is dotted with self-sufficient, highly Net-connected, spacious housing units. In a sense, this is the ultimate suburban world but without the sprawl and lawns. The footprints of the units cover almost the entire lot because lawns and other landscaping are no longer valued, and cannot be maintained in any case. There are large numbers of two- and three-story duplexes and triplexes. Some office buildings have also been converted into spacious housing units. Interspersed among the housing units are local nano-production and transshipment facilities for goods purchased over the Net. Gone are neighborhood schools, which were replaced by on-line education and holographic, artificially intelligent instructors with names like Madame Curious. Much of the surrounding land no longer needed for agriculture or transportation has been reclaimed by nature. Ironically, concern for the environment is not high in this world, as opportunities to save endangered species and re-establish native ecosystems have been destroyed due to climate change and invasive species. The home dwellers hardly notice these changes in the real world.

There is a constant battle over privacy and against Big Brother. There is only an illusion of citizen participation in public life. On one hand, everyone has access to government information on-line and can vote for this or that on-line, too. Everyone can interact with their representatives on-line, either through mediated discussions or real-time interactions with their representatives' artificially intelligent proxies. However, face-to-face interaction is rare. In-person confrontations with politicians or government officials are exceedingly rare. Because government and politics are conducted through the Net, to many people the government appears as remote and faceless and heartless as Kafka's Castle, only this castle is virtual. Few people see any benefit in trying to change the situation. This world is much less vulnerable to terrorism because of its low population densities and almost complete decentralization of production.

Concerns about declining social capital, globalization, and the loss of cultural diversity and indigenous cultures no longer exist in this world because individualism, fostered by the Net and other technologies, has virtually eliminated ancient forms of culture. This has led to a re-conceptualization of culture and society. Life within the highly net-connected yet spatially adjacent housing units can be startlingly diverse, as the occupants pursue different careers, eat different foods, wear different clothes, partake of different forms of entertainment, and design the virtual interiors of their homes in different styles. However, society has gone beyond being "homogeneous" to another realm because there is very little face-to-face interaction not related to economic activities. People are no longer needed to play the roles of teacher, mentor, shaman, priest, hunter, or gatherer. People no longer depend upon other individuals directly for their sustenance; they just depend upon many unnamed individuals

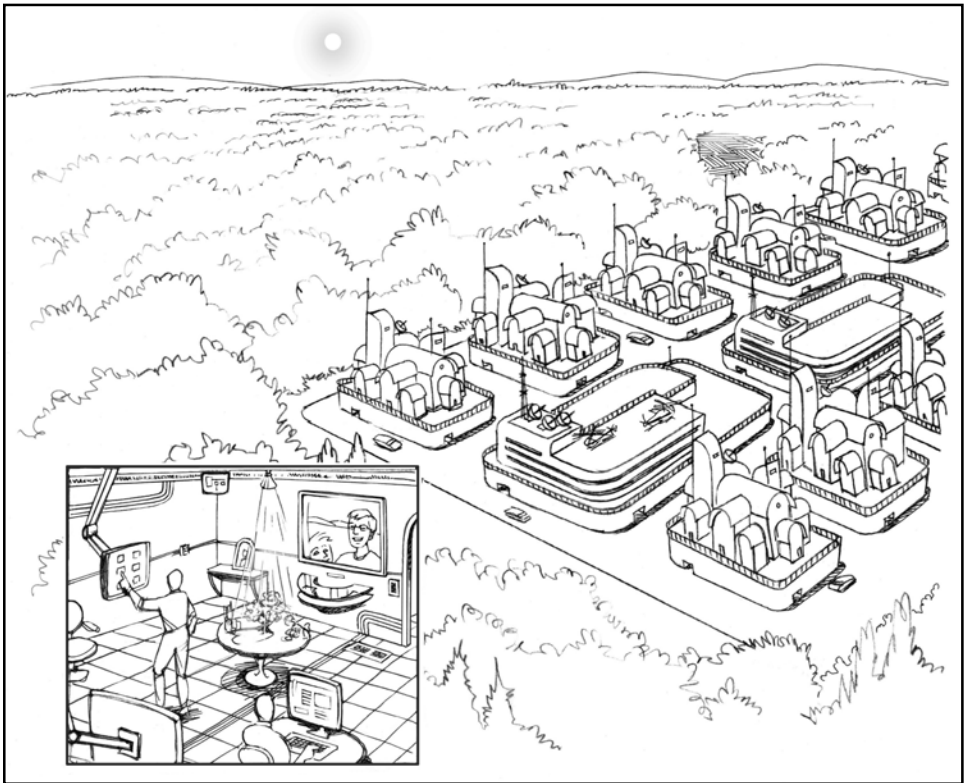


Figure 1. Home Dwellers Scenario

and their in-home and local nanotechnology units for their sustenance. Information technology and the decline of spatial, face-to-face communities have led to the rise of governments without borders, known as non-spatial governments. People now can change state and even national citizenship without moving. Without meaningful social interaction, culture, at least as understood as something rooted in common norms shared by spatially defined communities, has changed forever.

LeCorbusier Meets the Jetsons

Massive technology dominates this world, just as it did in the cartoon world of George Jetson and his family. Not just information technology, but all forms of technology, including robotics, artificial intelligence, nanotechnology, near-space exploration and colonization, and mammoth fusion energy plants. For the most part, technology is large scale and managed by centralized government and private sector bureaucracies.

Globalization of the world's economy is complete. The private sector is dominated by a few transnational corporations in each industry, producing oligarchic markets. Large scale economic enterprises manage agriculture, nuclear fission and fusion stations, and high temperature superconducting transmission lines, transportation systems, production of goods and services, and education, health care, and financial institutions.

Globalization of the world's cultures has resulted in a polyglot of behaviors, norms, cuisines, religions, and manners. Advanced technologies support intensive urbanization, the urban form which best supports consumerism and corporate culture. This is a gregarious world. People are drawn to urban centers to have access to the finest and widest range of restaurants, stores, live entertainment venues, jobs, and cultural exhibits. Fifty to one hundred story apartment buildings are commonplace (see figure 2). Corporations are drawn to this environment also, as their employees desire this lifestyle and companies still benefit from the agglomeration of like businesses in close spatial proximity to each other. Massive multipurpose public buildings, most no taller than five stories, house office space, schools, stores, theaters, and other commercial activities and sit squat amongst the apartment buildings so as not to diminish views of surrounding countryside. These buildings are connected by skyways above and subways below. Transportation outside the city is fostered by land-based intelligent highway systems, high speed rail lines, and personal flying vehicles.

In this world, the outside is highly landscaped within and next to urban areas and the cities are ringed by elaborate green spaces, greenways, constructed rivers and rapids, and managed ecosystems. These areas replaced the suburbs, which proved to be too socially isolated and economically and time inefficient. People like to be out and about in this world. Mega-sports involving hundreds of competitors at a time are played on mega-fields in mega-stadiums, mirroring the "bigness" of this world. Conversely, because people are so mobile and active and crowded in urban areas, their homes are relatively small. Farms still surround the cities but because of the unpredictable weather and damaging storms, most food is grown in the squat buildings using energy intensive hydroponic technologies. This is why coffee trees grow in Seattle and tuna comes from Chicago. Much of the land outside of the urban areas has reverted to wilderness, although many ecosystems have been destroyed by mining and other extraction and exploitation technologies to support the natural materials appetite of this consumer culture.

Government is dominated by moneyed interests, befitting this commercial culture. This does not mean that government officials are faceless. Indeed, like everyone else, these individuals enjoy being out in public. They can be approached (and influenced) if one is connected or has money. Division between the haves and have-nots in this society is

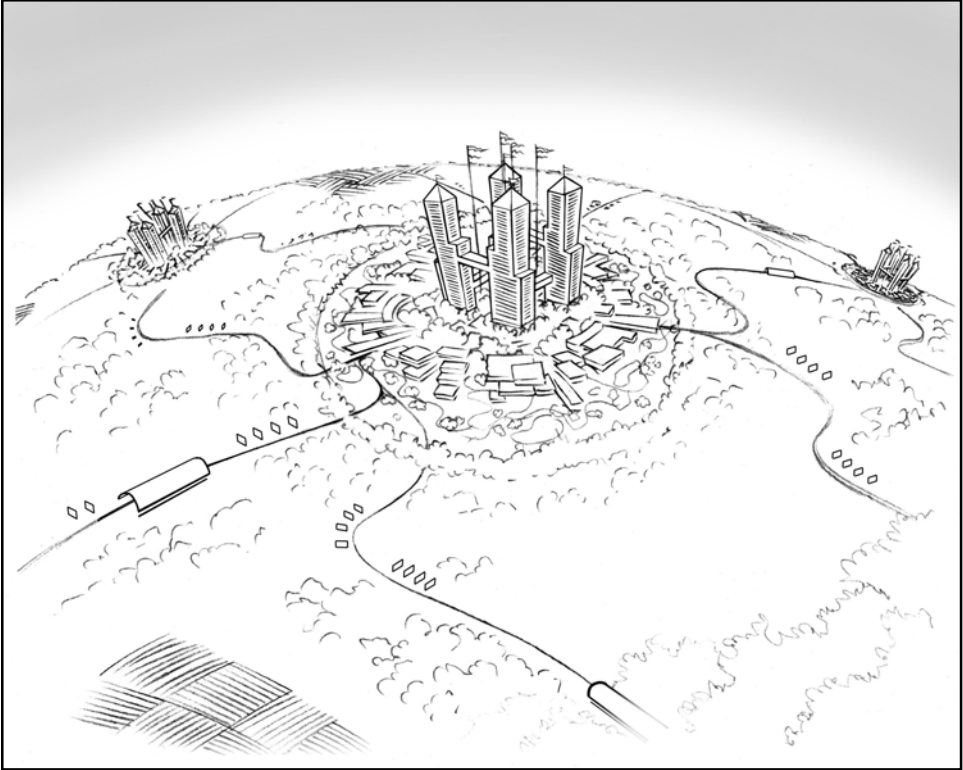


Figure 2. Le Corbusier Meets the Jetsons Scenario.

immense and a source of horrific violence. Terrorism, especially attacks upon energy, information, and transportation infrastructures, is a constant threat to this society. Thus, Big Brother has a real presence in this world. This world belongs to the young, as did the world at the turn of the century. The only difference is that people of one hundred years of age are still considered young, due to spectacular advances in medical science.

Ruins

Civilization has crumbled from its zenith at the beginning of the 21st century. Human institutions proved utterly incapable of managing the pressing problems during the first two decades of the new century. The accidental detonation of a nuclear weapon in Moscow by a rogue band of terrorists pushed the world into chaos that was primed for a fall by such problems as climate change, soil erosion, depletion and degradation of fresh water supplies, crushing poverty, AIDS and even more virulent autoimmune diseases, and permanent shortages of oil and natural gas. The destruction of Moscow led to a domino effect of catastrophes, including collapse of the global financial system and disintegration of the world's energy, information, and transportation infrastructures. All transnational corporations fell victim to the ensuing chaos.

These catastrophes were joined by general anarchy, revolution, violence, and war. Over a billion people perished. The loss as a percentage of the population came close to that experienced by Europe during the Black Plague. The remaining inhabitants suffered from severe depression, high suicide rates, and lowered levels of fertility.

The urban form of this world resembles the walled medieval cites of the distant past

(see figure 3). City-states re-emerged to dominate the landscape as regional, national, and international institutions failed. People now huddle in crumbling urban cores. Only the hardy remain in rural areas, which are regularly threatened by roving gangs of thugs. The suburban areas no longer exist; they were looted and then torn down for raw materials and to make way for local subsistence agriculture. Enough technological knowledge was preserved to guide inhabitants of the city-states in the cultivation of already existing high-yield, genetically-modified food and biomass energy crops. For the most part, they were also able to devise effective water and material recycling systems and were able to reclaim material from local landfills. Thus, the city-states are largely self-sufficient.

The global telecommunications system did not survive the upheaval. The city-states gradually lost touch with each other, especially those not adjacent to each other. As a result, city-states have begun to evolve their own cultures, languages, arts, and music. In this future world, an external observer could still find substantial similarities among these cultures and styles of government across city-states in North America but the drift toward uniqueness is unmistakable.

The environment receives no special attention in this world. People are too pre-occupied with survival. Global warming is taking its toll on marine life, coastal estuaries, and formerly temperate ecosystems. Conversely, one could also use the word perversely, other threats to the environment have abated. Population pressures are greatly reduced, polluting economic activities are reduced, out of necessity use of renewables has increased, and habitats outside of the urban cores and belts of local agriculture that were previously fragmented are coming back together. Unfortunately, the threat of massive species extinction, and with it the threat



Figure 3: Ruins Scenario

of the extinction of the human species, is real and growing each day. This society will survive into the long-term future only by chance.

Islandia Revisited

In 1942, Austin Tappen Wright's lengthy utopian novel entitled *Islandia* was published. *Islandia* is a fictional island nation in the Southern Hemisphere facing the Antarctic that combines the best features of an agricultural society with the best features of a society that is technologically advanced (at least at the turn of the 20th century). Wright's utopia of the past was characterized by strong and extended families, generations of ownership of agricultural lands, local sustainable communities, unquestioned generosity, and the allocation of "surplus labor" to organizations that conduct medical, agricultural, and other forms of research.

Islandia Revisited is characterized by two significant changes in social organization. First, major political jurisdictional boundaries are drawn to be consistent with ecosystem boundaries. For example, in the southeastern United States, new states of Southern Appalachia, Piedmont, Low Country and Everglades were created. Second, economic production and communities are organized around groups of two hundred people. These "clans" serve to foster local sustainability efforts and to re-establish strong social bonds among people at the community level. Two hundred seems to be a magic number, which is reflected in the size of pre-historic clans and modern-day military units and divisions within large bureaucracies. The number is small enough for people to keep track of their obligations to others and others' obligations to others yet large enough to encompass the needed diversity of skills and social roles to allow the group to survive. Each clan elects a representative who joins with others representatives to make decisions and support a smaller set of representatives for higher positions in government.

Each 21st century clan is largely self-sufficient in food, water, and energy (see figure 4). Nearly all adults in the clan contribute some time to self-sustaining activities. Elders once again are revered for their knowledge and wisdom. There are few cities and no classical downtowns in this world. Consumerism is gone, replaced by commitments to self-sufficiency and large social projects. The private sector has virtually disappeared also, replaced by two-hundred-person cooperatives, other non-profit organizations, and public sector programs. Therefore, there is no need for major shopping districts or malls or office towers or office parks.

Advanced agricultural, recycling, and decentralized energy technologies greatly reduce land needed for food production and human settlements. Heavy use of information technologies and focus on self-sufficiency greatly reduce the size and scope of the transportation system. Therefore, the landscape is dotted with small yet high-density human settlements of clusters of clans that are intimately integrated with the surrounding natural environment. Roads are smaller, uncongested, permeable, and easily crossed by animals. There are relatively few larger settlements, which resemble large, high density college campuses instead of cities. They exist to manage large scale research and technology projects, such as those related to space exploration.

A unique feature of this world is that human settlements are integrated into the environment. In response to the threat of massive global species extinction due to climate change, fragmented habitats were re-assembled and effective habitat corridors were established to allow animals to move from habitat to habitat. In the new *Islandia*, all human settlements were re-environmentalized. In other words, the artificial separation of humans from the rest of nature was broken down. These green settlements are characterized by green

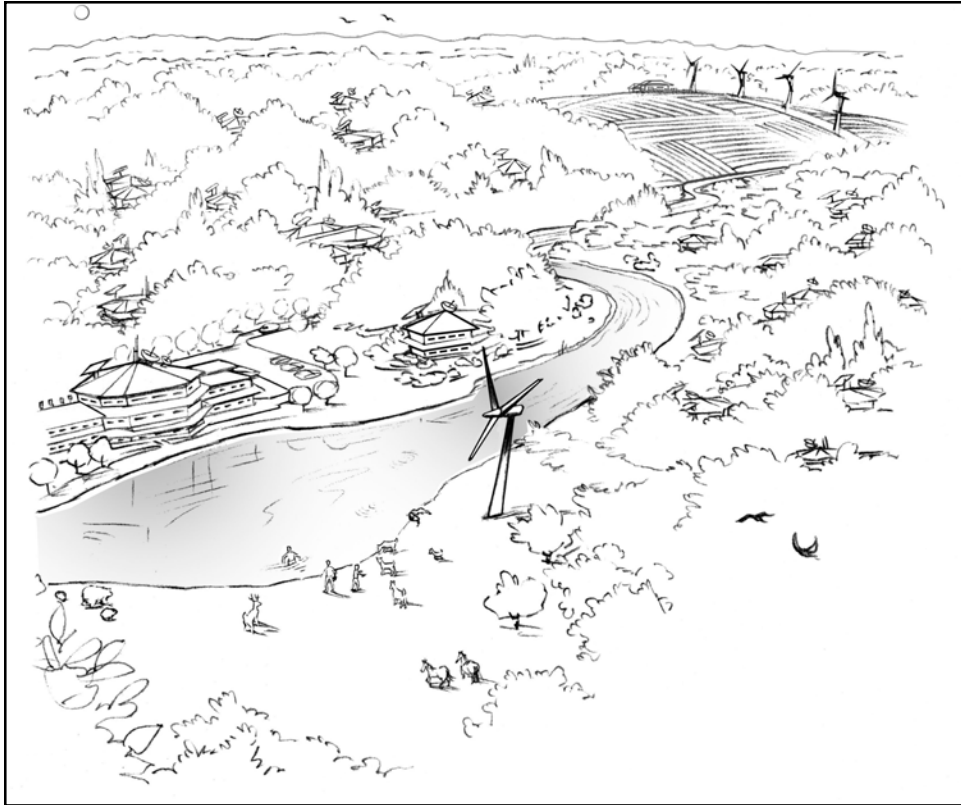


Figure 4. Islandia Revisited Scenario

roofs and have overhangs that are purposively homes for spiders and yards in which live native flora and fauna. In this world, people know how to, and enjoy, co-existing with nature.

Culture thrives in this future world but in a new form. The most important aspect of this new form is its environmental focus; culture is re-connected to the environment. Foods, clothes, and daily routines of the clans are heavily influenced by natural geography and local ecological conditions. Traditional social roles of story tellers, mentors, shaman, and elders are resurrected by the clans but in many different forms. The local environment and daily activities of the clans also influence local attitudes, language, and art. For example, groups heavily engaged in biological and genetic research evolve art and music based on patterns of DNA.

Observations and Conclusions

Table 3 presents a summary of the four scenarios across several factors. Clearly, each scenario was a product of a different set of primary driving forces, globalization, technology, and global environmental change. These forces plus specific instantiations of other trends lead to four very different potential futures for Anytown fifty to one hundred years from now. As shown in table 3, the resulting cultures and economic foci were quite different across the scenarios.

As noted above, I let the characteristics of the human settlements evolve during the scenario writing process. What I learned from this exercise is that future urban forms really could be quite different from today’s dominant urban-suburban form. In a couple of the

scenarios, Home Dwellers and Islandia, downtowns disappear. Only one scenario presents a vibrant downtown, which in essence draws people back from the suburbs. In all four scenarios suburbs as we know them today disappear, to be replaced by the amorphous “suburbs” of the Home Dweller world or the environmentally-based human settlements of Islandia. The suburbs are landscaped over in the Jetsons world or simply destroyed out of necessity in the Ruins scenario. In each scenario, there is an emphasis on mixed land uses, where mixed takes on a meaning somewhat different than how the concept is used today. In most cases, mixed means that a fair amount of local food, energy, and other production takes place either in the home and/or the neighborhood, even in the urban Jetsons world, rather than meaning a mixing of traditional residential and commercial retail land uses.

What do these observations mean for planners today? Six thoughts come to mind. First, new approaches to land use, in combination with various energy, food, and other production technologies, need to be explored. Even today, there are growing indications that there is a need to rethink land use decisions, as small scale wind and photovoltaic energy technologies are beginning to make in-roads into residential areas. Typical suburban developments are totally unsustainable, in that virtually all food, water, and energy needs to be imported. As worries about terrorism increase and the brittleness of highly interdependent and non-redundant economic systems becomes more apparent, more and more people may wish to have the capability and may make the time to manage home-based and local food, water, and energy self-sufficiency technologies.

Second, zoning and building codes need to evolve to allow for this to happen. It may even be the case in the future that zoning as we know it today no longer has any relevance, as seems to be the case in the Home Dwellers, Ruins, and Islandia scenarios and maybe even in the Jetsons scenario. If this does turn out to be the case, then wholly new types of land use regulations may need to be developed that better meet the needs of the future.

Third, the scenarios suggest that there is nothing particularly sacrosanct about today’s urban forms. Life goes on without downtowns in the Home Dwellers scenario, which, while being somewhat dismal from a social point of view, is already evolving to some extent, and in the Islandia scenario, which is somewhat more utopian. Life goes on without suburbs and their ubiquitous subdivisions in all four scenarios. In contrast, today, major efforts are being

Table 3. Scenario Characteristics

Scenario	Primary Driving Forces	Culture	Economic Focus	Downtowns	Suburbs	Land Use Pattern
Home Dwellers	loss of social capital, information technology, global warming	amorphous, fluid, individualist	home and local-based	disappear	everywhere	no core, all periphery, no distinction between residential, commercial, industrial land use
Jetsons	economic globalization, large-scale energy technologies	polyglot, urbane	global	focal point of society	replaced by landscaped environments	dominant core, mixed residential commercial, industrial land use
Ruins	terrorism, institutional failure	fundamentalist conservative	city-state	inhabited but in ruins	dismantled	mixed residential production
Islandia	environmentalism, small-scale technology	environmental, place-based	local regional	disappear	disappear	rural agricultural hamlet

made to save downtowns and even to revitalize the older inner suburbs. The point is that if it appears that an area is headed toward the Home Dwellers or Islandia scenarios then efforts to save downtowns may need a second thought. If a central city appears to be headed towards a Jetsons scenario, then extra efforts may be needed to plan to bring more residents back into the city, rather than trying to save the inner suburbs.

Fourth, it should be pointed out that the scenarios do not represent all-or-nothing views of the world. As is the case with most scenarios, each has some truth to it and it could be that all four scenarios will come into existence in different places at different times in the future. Many of today's suburbs and exurbs are taking on characteristics of the Home Dwellers scenario. Several modern metropolises, like Hong Kong and Singapore, are moving along the technology path toward the Jetsons scenario. Unfortunately, many urban areas are in ruins, including lower Manhattan following the September 11th attack. Many people hope that rural and gateway communities across the U.S. can find ways to become more sustainable, opening the avenue for the Islandia scenario.

Fifth, given that this is the case, planners need to understand that economic development strategies may need to be different in each case, e.g., Home Dwellers needs a focus on information technology whereas centralized large-scale energy technologies are needed to drive the Jetsons scenario. Sixth, planners also need to understand that they may be immersed in different cultures, or entirely new cultures in the case of Home Dwellers, and react accordingly. Planning will take place differently in these situations. For example, in the Home Dwellers case where political jurisdictions become more virtual, planners may work for meta-government agencies as caretakers of certain regions that may be populated by people of many states and even nations. In the Islandia scenario, planners will need to work, at a minimum, at the scale of regional ecosystems and place ecosystem values on par with design principles associated with human settlements.

In conclusion, the Anytown of the future may not be recognizable to today's planners and certainly will not be recognizable unless minds are allowed to imagine a robust set of plausible but different futures. This exercise used trends observable today to develop four distinct scenarios of the future of human settlements. The resulting scenarios were used to develop several important observations about planning that run counter to some of today's conventional wisdom.

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About the Author



Dr. Bruce E. Tonn is a Professor in the Department of Urban and Regional Planning, University of Tennessee, Knoxville, and a Senior Researcher in the Environmental Sciences Division of Oak Ridge National Laboratory. He is a consulting editor for the journal *Futures*. He received a B.S. in Civil Engineering from Stanford University, Master's in City and Regional Planning from Harvard University, and Ph.D. in Urban and Regional Planning from Northwestern University.

Notes

- ¹ U.S. Bureau of the Census. See <http://www.census.gov/prop/www/statistical-abstract-us.htm> (20th century statistics).
- ² U.S. National Center for Health Statistics. See <http://www.cdc.gov/nchs/fastats/lifeexpect.htm>.
- ³ See 1900-2000 Michigan Occurrence Divorce Files, Division for Vital Records and Health Statistics, Michigan Department of Community Health; <http://www.mdch.state.mi.us/PHA/OSR/marriage/g305.asp?MType=2>.
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Planning in the Age of Prosperity

Point/Counterpoint

EDITED BY MARK MAZZOLA

During the late 1990s the United States experienced significant economic growth. In this feature article we explore what effect, if any, that prosperity had on infrastructure development in the country, and how infrastructure improvement during the 1990s may have differed from past periods of economic growth. We sent several questions to experts in infrastructure development, urban planning, and community development, and present here the replies of these six experts.

Janice Beecher

Dr. Janice Beecher is the principal of Beecher Policy Research, Inc., a firm specializing in the structure and regulation of the water industry. She has previously worked in state government and as a senior researcher and adjunct faculty member at Ohio State University and Indiana University. Her research interests include privatization, planning, and pricing for water utilities.

Edward Blakely

Dr. Edward Blakely is Dean of the Robert J. Milano Graduate School of Management and Urban Policy at the New School University in New York. He serves on the National Academy of Sciences Panel on Urban Development and Transportation and has been a major economic development consultant for cities throughout the United States and Australia. Previously, Blakely served as Dean and Lusk Professor of Planning and Economic Development in the School of Urban Planning and Development at the University of Southern California.

Jim Diers

Jim Diers served fourteen years as the Director of Seattle’s Department of Neighborhoods. Under his leadership, the new four-person office with a budget of \$300,000 grew into a department of ninety employees with a budget of \$11.5 million. Dozens of cities—from Los Angeles, California to Port Elizabeth, South Africa—have modeled their programs after Seattle’s. Mr. Diers has also worked as the Assistant Director/Regional Manager for the Group Health Cooperative of Puget Sound, and as Director of the South End Seattle Community Organization.

Rudy Garza

Rudy Garza is currently the Budget Officer for the City of Austin, Texas. He has more than ten years of experience with municipal financial planning and accounting. Previous to his work with the City of Austin, Mr. Garza was the acting Director and Assistant Director of Management and Budget for the City of Corpus Christi, Texas; the Federal and State Grant Accounting Supervisor for the City of Corpus Christi; and Tax Auditor for the Texas Comptroller of Public Accounts.

Austan Librach

Austan Librach is the Director of the Transportation, Planning, and Sustainability Department for the City of Austin, Texas. For the past thirty years he has been director of various environmental, engineering, and physical planning departments for the City of Austin, the Metropolitan Washington Council of Governments, and the Northern Virginia Planning District Commission. Mr. Librach was also the chairman of the Earth Week Committee of Philadelphia, creators of the first Earth Day on April 22, 1970.

Frederick Steiner

Dr. Frederick Steiner is Dean of the School of Architecture at the University of Texas at Austin. Previously he was Director of the School of Planning and Landscape Architecture at Arizona State University, and has taught planning, landscape architecture, and environmental science at Washington State University, the University of Colorado-Denver, and the University of Pennsylvania.

Question 1

Planners have to respond to boom and bust cycles when deciding how and when to address infrastructure needs. How would you characterize the level and type of public investment during the prosperity of the 1990s?

Garza

Simply put, this investment could be characterized as “catch-up.” During the 1980s, cities and counties throughout the state struggled to provide adequate funding for proper maintenance of existing infrastructure and generally were unable to sustain any new investments for infrastructure enhancements or expansions. Local governments took advantage of the economic growth in the 1990s to invest current dollars for previously unmet maintenance, and leveraged future revenues through bond funding to correct immediate infrastructure needs which had deteriorated. Local governments also used bond funding to begin, on a limited scale, a timely repair and replacement infrastructure program. Unfortunately, for many cities, the economic prosperity resulted in new infrastructure needs due to increased demands, much of which may have been driven by rapid population growth, such as here in the City of Austin. In most cases, municipalities continue to “catch-up” on infrastructure needs.

Blakely

My assessment is that we have investments for the past and few for the future. Our major infrastructure investments continue to emphasize the auto and attendant individualized systems versus sustainable approaches. We have no national or even state infrastructure investment schemes for schools, telecommunications, mass transit, or approaches to new land use and development options.

Librach

Austin has been very strategic in its infrastructure investment decisions focusing on revitalizing the downtown and steering growth toward the areas that are less environmentally sensitive and thus less costly for the community to develop. We have decommissioned an airport not far from the heart of our city and have developed a Traditional Neighborhood Development plan for its reuse. Smart Growth programs in the latter half of the 1990s represented a different way of encouraging growth. It was not only about jobs but also about how and where development occurs. We have begun to consider the impact of design, location, and the relationship of transportation to land use. This community sought and just barely failed to get approval from the voters to build a light rail system that would, through the location of stations and park and ride facilities, become a major catalyst for managed growth where new transportation infrastructure investments are made available to accommodate newly generated travel demands. This expansion cycle has included huge expenditures to protect habitat for endangered species and aquifer recharge areas to protect drinking water sources. Austin has been successful, it would appear, in having created an open-space legacy for future generations to enjoy.

Steiner

The level and the type of public investment during the 1990s prosperity were mixed. A sea change occurred in American transportation planning through the Intermodal Surface Transportation Efficiency Act of 1991 (called ISTEA) as well as the Transportation Equity Act for the 21st Century of 1998 (called TEA-21). ISTEA and TEA-21 greatly expanded funding for rail and other non-highway transportation systems. Meanwhile, several city-regions, including Dallas, San Diego, and Phoenix-Tempe, initiated light rail systems. Park



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and open space funding generally increased across the nation as well. In several cities, citizens voted to tax themselves for new parks.

During the same time, support for water and sewer systems and public school construction and renovation did not keep pace with new development. Vital repairs to public university facilities and other public buildings went undone. Support for public housing also plummeted.

Beecher

Based on analysis by the American Society of Civil Engineers, the basic infrastructure (water utilities, bridges and roads, and schools) is not in great shape today, which seems to suggest a certain level of neglect during the prosperous 1990s. However, some of today’s conditions are simply related to demographics—the age of systems

and the communities they serve. A tricky issue is the uneven nature of growth patterns and economic circumstances.

Diers

Many of Seattle’s major infrastructure investments during the past decade have come as a result of voter approved bond and levy measures. Voters approved City of Seattle measures including a low income housing levy; an open space bond measure to purchase hundreds of acres of undeveloped land for our parks system; two family and education levies to help make children safe, healthy, and ready to learn; a library bond for the building of a new downtown library and twenty-six new or expanded branch libraries; a community centers levy to rebuild the Opera House and a Festivals Pavilion at Seattle Center and to build or expand eleven community centers; and a parks levy to build or improve about one hundred parks. In addition, the Seattle School District approved two major bond issues for new or renovated schools. Likewise, County and Regional voters approved ballot measures for light rail and two new stadiums in Seattle.

A good economy certainly contributed to the passage of these ballot measures, but I think that it was widespread voter participation in creating many of the ballot measures that was the critical factor in their approval. The government received \$470 million in new resources because the voters were willing to tax themselves for infrastructure investments that they had requested.

By empowering communities through the Neighborhood Matching Fund and bottom up neighborhood planning (in which neighborhoods hire their own planners and define their own scope of work), the City has greatly expanded its resources for improve-ments to the infrastructure. Many innovative projects have resulted, because there is usually more creativity and whole systems thinking in the community than there is in the bureaucracy. The community has also become better educated about the City’s infrastructure needs and

the budgetary, legal, and political obstacles that the City faces in trying to address them. In short, I would argue that many of the new infrastructure investments in Seattle over the last decade had less to do with a strong economy than it had to do with programs empowering community organizations and building partnerships between them and City government.

Question 2

In what ways was the level and type of public investment that occurred in the 1990s similar to or different from past economic expansion cycles? Why?

Beecher

I cannot say for certain, and it is worthy of more study, but it does not seem that public investment was on par with the general state of the economy. It might be a matter of broader context. This past economic expansion took place in the information age, versus the industrial age. Some of the growth, represented by the stock market bubble, was actually illusory and now we are regrouping.

Steiner

The biggest difference was how the public viewed “public” investments. During the 1980s, the public had been vilified. “Privatization” and joint public-private partnerships were heralded as the means to address social, economic, and environmental issues. Gated communities created private streets.

Democrats, who had been branded as “tax and spenders” during the 1980s, became fiscal conservatives during the 1990s. Whereas in previous decades Democrats took the lead in public investment when they were in power, during the 1990s their focus shifted to balancing the budget. Many state governments were controlled by Republicans who were even less inclined towards public investment. While the economy expanded during the 1990s, there were fewer financial resources available for significant, new public investments.

Librach

We experienced a huge investment in public infrastructure in Austin during the 1990s. My sense is that this cycle has differed from those of the past in that, one, there are now major private investments from a newly wealthy community in partnership with the public sector that this community has never previously encountered. And, two, we have opportunistically protected thousands of acres of land for exclusively environmental purposes. Additionally, we have implemented projects like a privately financed Cultural Center for the performing arts on city parkland and moved toward the reuse of decommissioned public buildings using private partners as developers. Perhaps this represents a maturing of Austin and a growing ability and capability to capitalize on its infrastructure investments. We have seen a strategic success story with major public investments in downtown followed closely by major private investments during the 1990s. This story is not unlike many around the country where after many years suddenly the urban core and particularly downtowns have become desirable places to live.

Garza

The greatest similarity in public investment during the 1990s and past economic expansion cycles was in the area of needs and demands as compared to available resources. While in most cases, public leaders and citizens are quick to identify infrastructure needs and projects, both groups are reluctant to invest the required funding levels. Citizens are generally unwilling to tax themselves to provide the funding, which results in a political challenge to the public leaders to appease the taxpayers immediate concerns, or provide the

leadership and foresight necessary for meeting the levels of public investment.

There are three great differences in this period. First, the level of public involvement and influence is much greater. Citizens have become more informed and educated on local issues. Information technology has allowed individuals to learn about project needs, communicate with each other, and voice their opinions on a much larger scale. This knowledge and ability greatly influences the shaping, developing and look of the final products for projects in their community.

Second, the economic prosperity has created larger segments within communities that have the means, and are willing to tax themselves for investments today, to protect the future. This has created a group of individuals that not only are more informed, and can influence the public investment process through communication and information, but also influence the process through the financial willingness to invest their own dollars.



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Both these first two differences have resulted in the third greatest difference, “equity.” Because people are more informed, and they have a greater ability to communicate, those traditionally in the “have not” environment are able to pressure the local leaders to ensure that public investment is equitably distributed through all neighborhoods.

Question 3

Historically, what types of public works have been properly invested in and what types have been neglected?

Librach

I suspect that all types of public works have historically been neglected throughout the United States. Nationally we are facing a major problem with the rapidly aging and impending failure of much of our urban infrastructure. Roads, bridges, sewers, and pipelines are all aging and as a country we don’t have the resources to upgrade and repair that infrastructure adequately.

In Austin, our urban infra-structure, such as storm sewers, were put in place when this was a small town and they haven’t the capacity to handle the flows generated by a more densely developing central city core. We struggle, even during the economic expansion of the 1990s to both upgrade that infrastructure and to keep pace with requirements for new infrastructure as our growing region demands. We have continued to invest in major roads in the 1990s, but we are, even here in Texas, running out of space and money to provide the road infrastructure needed to keep pace with our rapidly expanding region. We, like most cities in the country, have a mobility and congestion problem that is growing alarmingly much faster even than our population rate. It’s not so much a matter of neglect, than a matter,

I think, of reaching a point where we can't afford any longer to sustain our post World War II automobile lifestyle. It would appear that congestion cannot be cured by building more roads.

Steiner

Roads seem to have received the most sustained investment historically. Generally, water and sewer systems have had pretty good support. Parks, schools, libraries, and the arts have fared less well.

Beecher

It does seem that we invested more heavily in the more trendy, high-tech infrastructures (telecommunications and computer networks), not to mention sports arenas, than in the less glamorous and often "invisible" infrastructures. No company that I know of has offered to put its name on a sewage treatment plant.

Garza

While it would be difficult to reach unanimous agreement that any area has been "properly" invested in, it is quite clear that the type of investments which have received the greatest attention are those related to roads and transportation. Since even before the creation of the automobile, society has had a desire to roam and go wherever they chose. As public investments have continued to improve transportation roads and highways, population growth and people's attitude for quicker and faster, has created the ongoing dilemma of "getting more people through and getting them through faster." Additionally, the increased use of roads has created the need for road improvements, from basic repairs to complete road reconstruction.

It would also be difficult to reach unanimous agreement on a specific type of project which has been neglected, but because of the large cost requirements, the most significant projects to be neglected are in the area of public utility infrastructure. Water line distribution systems and drainage utility systems are both basic fundamental utilities; however, citizens generally take this for granted. The need for these types of projects is only evident to the community when they begin to experience failures. These types of projects require significant investments and ratepayers, as well as public leaders, are reluctant to increase rates for systems that appear to be operating correctly. Unfortunately, because the level of public investment in these types of projects has been somewhat limited, maintenance costs continue to be high, and the urgency and level of investment need is increasing.

Question 4

Do you think the way that Americans relate to their public amenities (water and wastewater systems, public roads, electrical utilities, parks, etc.) has changed over the years?

Steiner

The biggest change has been in perception, as exemplified from the shift in terms from "public works" to "infrastructure." The public has disappeared from the notion of a public good—the public's health, safety, and welfare has been marginalized for private gain.

Beecher

The push toward privatization has commodified and commercialized many services once considered public goods. The good news is that people may come to appreciate the value of these services, particularly if prices are truly cost-based. The bad news is that equity and fairness issues are inevitable, not to mention the potential blurring of public and

private responsibilities (as can occur with so-called “public-private partnerships”). In the abstract, people place much value in the safety and reliability of public services, but it can be hard to translate this support to the practical level. People can be very conflicted about government roles. They tend to have a mostly healthy skepticism about government in general, but most have positive feelings about the services they get.

Blakely

There is one major change—people do not see the link between lifestyle patterns and future infrastructure requirements and impacts. In an earlier era, these were more transparent because the municipal systems were local; now they are distant regional and even national systems, as in the case of the power grid.

Garza

Americans are demanding more for their investments and do not want to be inconvenienced due to lack of adequate facilities or infrastructure. Information technology has facilitated the ability for individuals to become more informed and to communicate their needs, issues, and concerns more easily; because of this, they expect to be heard. In previous years, people were more likely to leave public investment issues to the public leaders, but today’s consumer has a greater influence on how, when, and where public investment in amenities will occur.

Librach

I think there has been a gradual change from the attitude that public infrastructure, wherever it is located and whatever its function, is simply a good quality of life enhancement for a community to a much more circumspect view. We have become aware of the potential negative consequences of improperly placed and designed infrastructure, the bias that has historically existed regarding the geographic placement of unwanted infrastructure in certain areas of the city, and the unintended induced growth effect that may come with the presence of new infrastructure. Planners must now focus their work with neighborhoods and communities on confronting major, usually negative, efforts to maintain the status quo. Our older communities and neighborhoods have, for one



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reason or another, quite often concluded that new infrastructure, while needed to support growth, should not be built near existing uses. This not-in-my-backyard attitude has grown during the 1990s and has come to dominate much of the political side of long-range planning and decision-making.

Question 5

The attitude of Americans towards their government has been long shaped by debates about the competency of government to do its job. How do you see this debate, currently regarding privatization and deregulation, impacting the work of the planners whose long-term plans are enacted by public entities?

Blakely

Few planners are engaged in long term planning—most planning is handing out permits based on political, not planning, decisions. As a result, planners are not in the long term debates at all. Few planners would say a new stadium is a useful economic development tool or that more roads and lower density are needed. In effect, we, as planners are not in the long term game at all.

Garza

The responsible approach to the planning process should not be impacted by who will do the work or who will take credit. It behooves planners and public leaders to identify the needs of the community and the required levels of public investment, regardless of the political environment or public/private sentiment.

Steiner

Perhaps the Enron debacle will help shift the debate back toward a middle ground, a balance between public and private costs and benefits. The Enron collapse helps illustrate the folly of allowing big business to have free reign over the economy (and government). In addition, the heroes of September 11th were mostly public sector employees and elected officials. Maybe this horrible event has helped Americans to trust their government again. After all, in a democracy, a government is merely a reflection of the aspirations of its citizens.

Librach

In Austin when public sector long-term planning occurs, it is done for the most part by functional area. To the extent that land use planning is done it is most often led by the private sector. In addition, coordinated long term comprehensive planning is so manpower- and resource-intensive that it is impractical to undertake on a regular basis. While a variety of debates make it very difficult to reach consensus on long-term planning issues, the decade of the 1990s has seen a renewed interest in planning first, at the neighborhood level, and second, for transportation at the regional level. I think the movement to privatize governmental functions has never been strong in Austin and with the events of recent months, including the Enron scandal, those types of initiatives will diminish in intensity.

In Texas there is a tradition of distrust of government in general but particularly as an entity that ought not to be engaged in the regulation of the use of land. So, it has always been difficult in Texas for planners to avoid the negative stigma associated with most long-term planning efforts that seek to develop tools and implement policies that focus on managing the development and use of land. Since there is little regulation in Texas requiring planning, there is little debate about deregulating to avoid the economic costs and property rights limitations that planning might induce. However, in Austin the exact opposite is the case for current planning or development review. The debate has raged throughout the 1990s about

the need to protect the environment by limiting development on the one hand and the need to streamline the approval process to allow growth to occur at reasonable cost on the other. This debate has dominated the politics of Austin for several decades and has impacted our ability as a community to achieve the consensus needed to sustain the development of long-term plans.

Beecher

People do expect more from government in terms of performance. They expect better services and information, particularly because they are getting it from the private sector. In the context of privatization, good governments will adopt some of the principles of good business (particularly efficiency), but good privatizers will adopt the values of public stewardship. The “competition” between the public and private models is generally healthy and improves performance on both sides; the best performers from the public and private sectors tend to look very similar. But privatization is not the same as competition, and regulatory protections will still be needed whenever there is a potential for monopolization or other forms of market failure.

Government will always play an oversight role, regardless of the reliance on markets and competition. Ultimately, community values will play a role in the choice among models. I think planners need to be aware of this new environment in which they operate; it is more complex, technically and institutionally.



Rubin, Herbert J. 2000. *Renewing Hope Within Neighborhoods of Despair: The Community-Based Development Model*. Albany: State University of New York Press.

Reviewed by Elizabeth J. Mueller, Ph.D.

The author of several books on qualitative research methods, Herbert Rubin spent five years carrying out the research for this volume. During this period he visited more than six dozen community-based development organizations, conducting interviews with activists, staff, and funders, attending meetings and community events, visiting housing developments and other community projects, and reviewing hundreds of documents related to their work and the larger context for it. He also attended many of the conferences held by the largest trade association for the field, the National Congress for Community and Economic Development. The result is a rich, readable volume, narrated largely by his interview subjects and where substantive points are made using examples from the field.

Renewing Hope represents an important contribution to the growing literature on community development. It goes beyond the foundation laid by past descriptive work characterizing the activities of community development corporations (CDCs) to focus on the theories held by those running CDCs about the purpose of their work. Throughout the book, he develops and advocates the view that CDCs, while small and financially dependent, are able to hold to their own agendas *and* to influence those of funders, technical assistance providers, and policy makers. He finds that CDCs are able to turn apparent disadvantages (fragmented funding sources, their small size, and isolation from each other) to their advantage, giving them the leverage they need to change the views and practices of their larger, more powerful partners. Rubin argues that it is through storytelling, particularly success stories, that small community-based development organizations are able to gain support for their work and, ultimately, shape the understanding of funders, policy makers, and other partners about community development, and their particular approach to it. These stories help small, financially weak organizations to persuade those with the money and power to help them meet their goals to support their agenda.

Rubin frames his discussion of what he calls “the organic theory of community development” using concepts drawn from “new institutionalism,” a fortuitous choice since this school of thought is concerned with understanding why and how organizations come together to form “independent social systems.” This leads him to focus on understanding the broad array of actors in the field, the basis for relationship-building among various actors or groups, power relationships, coalition building, and how all of these interactions produce a sense of common purpose among organizations. Learning from literature on social movements, he focuses on how practitioners (“developmental activists”) develop a shared narrative about their work.

The book contains several chapters that could justify its purchase alone. Early chapters richly describe what CDCs do—beyond housing—and of the values underlying this work, according to those doing it. A later chapter details the various intermediaries operating in the field and then gives an overview, using frank statements from practitioners, about the tensions that commonly emerge between CDCs and some of the largest financial intermediaries. Intermediaries discussed are not just financial but include groups that provide access to vital information and technical assistance on more than just financial matters. Another chapter details the dizzying array of funding sources used by CDCs, matching each source to an explanation of how it can be used. Yet another chapter lays out the array of coalitions that have formed nationally around such issues as threats to the Community Reinvestment Act or to push (unsuccessfully so far) for a dedicated federal funding source for community

economic development. His depiction of the politics and tensions among the dense array of local networks in Chicago makes clear both the pitfalls and potential of coalition building to achieve common goals.

The book's great strengths are its rich stories and grounding in practitioners' experiences—it is less successful as a theoretical work. While Rubin makes creative arguments about how CDCs might influence the agendas of their funders, his own data do not always support his views. In particular, his argument about how CDCs are able to use the fragmentation of funding sources to retain their own agendas and push important funders to support them seems at odds with the stories presented about the tensions between CDCs and financial intermediaries. Nonetheless, he has provided a useful overview of the field and opened the way for further discussion of how community development activists develop and pursue their missions against considerable odds.

Fogelson, Robert M. 2001. *Downtown: Its Rise and Fall, 1880-1950*. New Haven and London: Yale University Press.

Reviewed by Gail Hook

Downtown: Its Rise and Fall, 1880-1950, describes the history of “downtown” first, as a geographical place, and second, as a state of mind. It is a history of the idea of downtown, about how downtown businesses and their clientele shaped the image of downtown, and about spatial politics, the battles between downtown business interests and outlying business interests, as well as battles among the downtown business interests. As Fogelson says, “It is about power, not feelings.”

The primary thesis of the book is that the history of “downtown” is inextricably related to opposition to it; that is, the ideas of “uptown,” the residential suburbs, and outlying business centers were what helped define the American idea of downtown. Uptown became synonymous with upscale residential and shopping areas and downtown was where business was conducted. When people started moving to the suburbs, mass transit (such as the “Loop Tube Magnet” in Chicago) brought them back downtown to work and shop. When multiple business centers developed in the city or at its periphery, the downtown area became the central business district (CBD).

Fogelson's second theme is that while most Americans have historically felt that a centralized downtown is inevitable and desirable, in the late twentieth century people stopped going downtown and began living and doing business exclusively on the periphery. Thus began the demise of downtown, which Fogelson describes in the last half of the book. Fogelson explains the development of the idea of downtown as inspired by European planning but uniquely developed in American cities like Boston, Philadelphia, New York, Chicago, Cleveland, Atlanta, Seattle, and Los Angeles. Weaving together entertaining anecdotes and scholarly research, he begins his history with strings of passages from early chronicles from the 1850s to the 1880s, such as *Harper's New Monthly Magazine*, *The Philadelphia Real Estate Record and Builders' Guide*, *American Architect and Building News*, and *The Chicago Real Estate and Building Journal*. He quotes architects including Henry Ives Cobb and W.L.B. Jenney who, in the 1890s, lauded the development of a CBD, in particular the coming of skyscrapers which provided a concentration of business activity not only horizontally but also vertically. He also provides opposing views prevalent at the time.

The two most interesting chapters in this book, “Derailing the Subways: The Politics of Rapid Transit,” and “The Sacred Skyline: The Battle over Height Limits,” explain what Fogelson perceives as the beginning of the demise of the CBD. Initially, people were moved

from the outlying areas to downtown via mass transportation in order to bring more business to the downtown business centers while relieving traffic congestion and parking problems. The inconvenience, unreliability, crowded conditions, and expense of mass transit systems inspired people to look closer to home (in the suburbs) and additional business centers appeared in the periphery. However, still convinced that a downtown was inevitable and desirable, people looked to the downtown business district as the central business district, endowed with a “Sacred Skyline” composed of the best and most important business and government centers—and the tallest buildings. The skyscrapers of the sacred skyline, however, prompted issues of fire and earthquake safety, sanitation, light, and even more traffic congestion. As one critic complained, “How does bringing more people downtown relieve congestion?” The tentative acceptance of mass transit systems such as the subway turned to disillusionment, and in the late 1910s and 1920s the “driving habit” of Americans soared. By 1930, up to one-hundred thousand autos poured into downtown Boston, Philadelphia, and Detroit on a typical weekday, more than one-hundred thousand in Chicago, and more than two-hundred-fifty thousand into Los Angeles. Parking became the major drawback to working downtown. The highways built to accommodate this “Automotive Revolution,” as coined by Fogelson, exacerbated the dispersal of people out of downtown in a reverse migration. Once-fashionable houses in the city were transformed into low-income housing, which presented a new set of problems for downtown planners. Fogelson describes the problems of the Housing Act of 1949 and the dispossession of thousands of low-income families in the name of “redevelopment.”

Fogelson leaves the reader with his own quandary, saying “I have no idea what downtown will be like a hundred years from now.” But he is sure the thrill is gone. It is no longer a thrill for most people to go downtown, and today we have a choice not to do so. But he remains optimistic, prescribing a solution. He says, “If there is reason today for optimism about the future of downtown, it can be found not in the many cities that have built downtown malls and convention centers, but in the few cities where many Americans have rejected the traditional concept of the good community and instead opted to live in or near the central business district.”

Landry, Charles. 2000. *The Creative City: A Toolkit for Urban Innovators*. London: Earthscan.

Reviewed by Ralf Brand

When I first heard about *The Creative City* I was crestfallen. It seemed that someone had already written my dissertation. Closer study of the book did not support my fear. Quite the opposite, it revealed lots of inspiration from the view of a practitioner. Indeed, Landry gets his ideas about urban creativity from real life. He is the founder of Comedia, a UK consulting company specializing in “urban strategy and cultural policy.” This experience gives *The Creative City* part of its credibility. It is also the source of Landry’s belief that cities can strike a balance between growth and sustainability and that they can maintain their local identity while operating in the global economy. The key ingredient is creativity, not of individual geniuses but of the whole societal fabric. The rest—commitment, attention, financing, external energy, and support—can then be galvanized behind these new creative proposals. This way of working can help people “transcend narrow thinking” and open up new avenues for action.

But how to trigger urban creativity? The trick is to look at cities as holistic and organic beings, a skill Landry calls “urban literacy.” Some of the characteristics of this new way of thinking are “boundary blurring, changing metaphors, focusing on ethos, and creating co-

operative space.” Readers may not find all of Landry’s recommendations equally groundbreaking. But many of his ideas are enlightening and several debunk commonly-held beliefs about urban places. Additionally, many of the examples and stories threaded throughout the text—especially Landry’s summation of the twenty “barriers to creativity”—will cause many readers (including this reviewer) to blush with self-recognition.

Landry suggests several tools to fight these barriers, for example: leadership, human diversity, urban facilities, local identity, and networking dynamics. His recommendations—“doing more with less” and moving “from hardware solutions to software solutions”—will be welcomed by more than just the environmentalists. People with an interest in socially-just cities will find the prescriptions for “living interculturally” and “valuing varied visions” inspiring. Landry also addresses the economic dimension in a section about “creating value and adding values.” The synopsis of these ideas makes the book an invaluable source for anyone who wants to know how to make sustainability work.

Landry tells his story from a variety of perspectives, sometimes at the expense of a compellingly consistent structure. Readers familiar with the book’s sixty-six page predecessor (also called *The Creative City*), written by Landry and Bianchini in 1995, may wish for something in between it and the current *magnum opus*. Landry also could have invested a chapter on the psychological mechanisms that make his recommendations work. But perhaps this is not the purpose of a toolkit. Landry is a practitioner and not a philosopher. Despite the lack of an all-encompassing theory he does make a contribution to the academic discussion with his Urban Innovations Matrix. This concept appears only in a rather raw form but is worthy of future elaboration and study.

The Creative City attempts to widen our horizons. It argues against frustration and encourages action. The motivating power of some chapters make this book a must for all practitioners—especially those who are stuck in their daily routines of meetings and deadlines. Unfortunately, these busy professionals may not have the time to read the whole book, which is why it is also recommended to future practitioners looking for an entertaining “key urban text of the next decade” as Sir Hall rightly expressed his compliments for this book.

Tate, Alan. 2001. *Great City Parks*. London; New York: Spon Press.

Reviewed by Sallia Vanka

Interested in reading how some of the most significant and enduring parks in our cities came into existence? Curious to know if there is a standard formula that enables the creation of vibrant public spaces such as Paley Park in New York or Regent’s Park in London? Alan Tate’s new book *Great City Parks* addresses these questions and many more. A planner and landscape architect by training, the author has more than twenty years of professional experience in urban park planning and design in London and Hong Kong. He is currently the Head of the Department of Landscape Architecture at the University of Manitoba, Canada.

The book seeks identifiable standards for the “successful planning, design and management of urban parks,” and leads the reader on a visual and descriptive tour of twenty urban parks across North America and western Europe. After a brief introduction to the evolution of urban parks in the Western world, the author proceeds to analyze each of the parks, which have been described in ascending order by size. So the reader’s journey starts at New York’s tiny Paley Park and ends at the sixty-five-hundred-acre Minneapolis Park System. The examination of each park begins with a review of the historic reasons for designating the site as a park, conditions at the time of construction, key figures in establishment of the park, and design concept and principles. Through these historic

overviews, we get insights into how each park was shaped according to the physical and cultural forces surrounding it. For instance, we learn that Paley Park was a philanthropic donation to New Yorkers in 1967 as a model “pocket” park, while Freeway Park in Seattle was built over Interstate 5 primarily to mitigate the visual and noise impacts of the highway.

Tate devotes the latter part of his examination of each park to studying current management and funding structures and inquiring into future plans for the park. These sections address the book’s main concern—identifying clear planning, management and funding criteria for “successful” city parks. However, the approaches to managing and funding the twenty parks are as diverse as the parks themselves, and seem to largely depend on local political and cultural attitudes. For example, Tiergarten in Berlin is eligible for government funds based on its historic status, but Bryant Park in New York is largely reliant on event fees and onsite concessions and only gets a small part of its income from the city itself. In the final chapter, Tate tries to draw some general conclusions based on his analysis of the twenty parks. He highlights the positive impact of “successful” parks on adjacent property values and emphasizes the advantages of “reliable, dedicated income sources” over “general government revenues” in park maintenance. However, his most significant finding seems to be that there is no standard formula for successful parks. In his words, “Parks, like cities, are constantly developing and are never completed.”

LaGro, James Jr. 2001. *Site Analysis: Linking Program and Concept in Land Planning and Design*. New York: John Wiley & Sons.

Reviewed by Andrew Tadross

Site Analysis: Linking Program and Concept in Land Planning and Design, by James LaGro Jr., is an instructional book that can be of value to a wide variety of professionals involved in the land development process, especially planners, engineers, landscape architects, and developers. LaGro’s focus is on the course of action that carries an idea through site inventory, concept development, master planning, and project implementation. The approach of the book is like a cookbook for site planning; almost every aspect is discussed in a systematic order, but not necessarily in great detail.

LaGro, a landscape architecture professor at University of Wisconsin-Madison, takes an approach that respects and attempts to celebrate the inherent natural and cultural features of a landscape. He advocates sustainable, people-friendly design. The information provided is tangible, relevant, and universal. He emphasizes the functional instead of theoretical aspects of planning, unlike other design treatises such as *A Pattern Language* by Alexander, et al. (1977) or *Site Planning* by Kevin Lynch (1962).

LaGro identifies programming as the starting point of development planning. This consists of establishing goals and objectives, determining operational and physical requirements, and communicating these to the client and stakeholders. Program objectives may include intended land uses, spatial requirements, design guidelines, and development phasing.

Like most of the instructional site planning literature, *Site Analysis* espouses that any large-scale land planning activity begins with a site inventory, which records the physical, biological, and cultural attributes. These attributes can range from topography to zoning to infrastructure, and are typically mapped using a geographic information system. This data can then be used to perform a land suitability analysis using a McHargian style overlay map, with a hierarchy of numerical values representing the appropriateness of the development. Design decisions are eventually based on the perceived opportunities and constraints of the site.

The concept development phase is the convergence of the inventory and programming phases and ultimately results in a final conceptual diagram. This diagram is the “spatial framework for the subsequent detailed design” (149). LaGro’s key components in a conceptual plan are open space, storm water management, circulation systems, buildings and utilities, and boundaries. A number of stylistic themes can be used to communicate the concept, i.e., bubble diagrams to show division of space, arrows to convey a pattern of movement, and points/nodes to represent different landmarks. Usually, these plans do not address actual building dimensions, but instead convey the general goals of the plan. Experience has taught us that final conceptual plans should be presented to the constituents and clients for evaluation, before using them to go on to the final design and construction documentation phase. It may be necessary to complete several conceptual plans to demonstrate that alternatives have been thoroughly considered.

The conceptual plan provides the framework for the master plan, which refines the earlier model and serves as the basis for construction drawings. The master plan goes into a higher level of detail including, for example, building orientation, dimensions, and trail locations. LaGro cites three design issues that are often weaknesses common to many projects. His discussion of site planning principles focuses primarily on these issues, while conspicuously ignoring the vast array of aesthetic and functional recommendations found in other site planning and landscape architecture books. This fact aptly demonstrates his emphasis on the process, rather than the product of development. His three design recommendations are:

- Pedestrian circulation should be efficiently connected, protected from traffic and other nuisances, and complimented by lighting, benches, and other amenities.
- Development should attempt to minimize impact on water quality through erosion control measures, non-point source pollution control, and prudent land clearing and grading practices.
- Visual quality can be enhanced or preserved by designing with a sense of “balance” and “compatibility” within the context of the site.

Most of the concepts presented in *Site Analysis* are not revolutionary. However, LaGro has done an admirable job of packaging the key theories and processes in a user-friendly way. His numerous case studies, which were borrowed from land planning and architecture firms, provide helpful examples of the planning process. For those in the planning and development profession, this book is an excellent resource. Using it will result in better development proposals, and guide you through to project completion.

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