

Mobility, Reluctance, and the Flattening City

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INTRODUCTION

The remarkable importance of physical, social, and economic mobility to Americans has resulted in an ongoing "flattening" of both urban attitudes and urban spatial practices across the American metropolis. These revisionist practices - seen most clearly in urbanizing suburbs and suburbanizing urban cores - are exemplified in the emergence of hybrid (sub)urban typologies such as inner city big-box retail and drive-through conditions, densification of suburban villages near transit, and "lifestyle centers", among others. One key component of these developing typologies is the provision of parking, a strikingly prosaic result of mobility that engages almost all urban spatial practice. A critical appraisal of the spatial and formal impacts of parking, as explored through examples in Chicago, reinforces the pivotal roles of mobility and reluctance in the contemporary American metropolis, reveals the history of the city in its parking systems, and points to the potential future of interstitial parking in the city.

THE (ANTI)URBAN

In *Jefferson, Thoreau & After*, J.B. Jackson articulates the "long chronicle of our American distrust of the city"¹ by explicating the "anti-urban" sympathies of Thoreau and Jefferson, as well as their impact on subsequent thinkers. This anti-urban bias underlies much thinking about American urbanism - particularly in work premised on the middle landscape - and on first read, seems to make sense; early American cities were often dense, crowded, polluted places, and much suburban development in America is attributed to a desire to escape the city for the benefits of the "country" without the difficulties of wilderness.

However, with the mobility inherent in advances in transportation and communication systems - technology that theoretically would eliminate the need for physical ties to the city - a truly anti-urban understanding might suggest the traditional city could ultimately dissolve completely, a relic of an obsolete time. If one can be fully connected and networked while residing in the pastoral landscapes of Livingston (Montana) or Telluride (Colorado) or Fort Hays (Kansas), then why live in or near Boston, or Chicago, or Dallas?

Instead, America continues to urbanize, and a certain level of proximity continues to be significant. The 2000 Census showed that 80 percent of Americans live in urban areas, while almost 33 percent live "in large metro areas of five million persons or more."² These numbers no longer reflect the strict urban/suburban dichotomy of the 1950s, when the suburbs were largely the province of white, middle-class families. Instead, the 2000 census showed that suburbs are becoming more similar to their central cities: many suburbs are diversifying racially and ethnically³, some suburbs are declining⁴, and the fastest growing segments of suburbia are non-family households and single people⁵.

Concurrently, in October 2006, a New York Times article articulated Silicon Valley's new "20 minute rule"⁶; start-ups looking for venture capital must reside within a 20 minute drive of the funding bodies, as an immediate physical presence is mandatory during the "get-to-know-you" process towards possible funding. In addition, proximity provides quick access to the intellectual talent needed to actually realize the start-ups: "Entrepreneurs who live in Silicon Valley also find the technical talent they need faster than they can in

any other place; they pay more for that talent, but speed is the sine qua non for success.”⁷

In marked contradistinction to the prevailing historical wisdom of America’s anti-urbanism, the move towards a speedy, fully networked, knowledge-based economy - combined with evidence of America’s ongoing urbanization - potentially makes the city more relevant than ever. However, these changes demand a significant shift in underlying thinking about American urbanization, away from an increasingly artificial opposition of nature and culture, towards an integrated understanding of mobility, reluctance, and the flattened city.

MOBILITY AND RELUCTANCE

As an essential characteristic of American culture and its resultant urbanism, mobility embodies not only physical freedom, but also political freedom, social status, and economic well-being. Although Americans want individualism, space, and status - as epitomized by comprehensive car ownership, highways, and the single family house on the individual plot of land - they also need proximity, networks, opportunities, and access, and have begun to recognize the city as the primary locus of mobility. These sometimes contrary, sometimes complementary values provide the underlying framework for a reluctant urbanism, embodied by a desire for optimal individual mobility and the best of both urban and suburban conditions, without the perceived messiness of real urban life. No longer predicated on the opposition of nature and culture, this overall attitude of reluctance is manifested physically in urbanizing suburbs and suburbanizing urban cores, and an overall flattening of spatial conditions across even the most traditional American metropolis.

In light of this remarkable privileging of mobility, it is not surprising that no other country in history so quickly embraced the car as a primary symbol of mobility. Car ownership affords individual mobility, collapses physical distance, and provides a means with which to choose where and how one lives. Car ownership often signals social and economic status, or political preference, based on the car being driven. Clearly a Hummer signals something quite different than a Prius, while an Art Car communicates differently than a Ford Taurus.

Although perhaps the most obvious spatial impact of the car on the American landscape has been the extensive system of highways, other spatial results of mobility are often overlooked, particularly in terms of their impact on the urban core. The car, however, has had a significant spatial and formal impact on the more traditional, centralized city as well, as seen in the adaptation and hybridization of inner city big-box retail, drive-through conditions, and “lifestyle centers”, among other examples; each condition strongly privileges the space of the car. However, it is the provision of parking – a cross-typological condition - that has a disproportionately large impact on the city.

PARKING HISTORY IN CHICAGO

Two key projects in Chicago portend the influence of mobility, as exemplified by the car, on the urban project. In 1958, the Inland Steel building became the first new skyscraper completed in Chicago’s central business district since the Depression. Designed by SOM, the building is well known for its open office floorplates, an innovation made possible by locating all structure at the exterior wall. Inland Steel also introduced other new ideas to Chicago: it was the first with steel pilings, the first with air conditioning, and, most importantly for this paper, the first with underground parking.⁸

Although Inland Steel accommodated space for only sixty cars, the provision of integrated parking reflected a major shift in the cultural and architectural landscapes of mobility. Culturally, America was becoming an increasingly mobile nation, exemplified by the suburban worker who commuted alone by car from a distant home. Architecturally, the car was becoming a distinct spatializing force in urban projects; the need to park the commuter’s car generated both specific requirements for how much space it needed for stalls, aisles, etc., and specific implications for the urban form of its housing.

Only five years later, the scope, speed, and significance of these fundamental changes became even more apparent upon the completion of Marina City. Designed by Bertrand Goldberg Associates, Marina City was comprised of two apartment towers, an officing block, a theater, retail, and a marina at the Chicago River. Although few resi-

dential projects were being built downtown due to rapid suburbanization, this project was specifically aimed at people who worked in the Loop and did not require schools, etc.⁹ Theoretically, this might also mean they didn't need or own cars. Instead, by 1963, the Marina City developer was providing 900 parking spaces for 900 downtown residential units, exemplifying how quickly ballooning expectations of extensive car ownership and parking became integrated into the urban project.¹⁰



Figure 1: Marina City, Chicago, IL.

ZONING

As zoning is a political means of expressing cultural values and attitudes about land use, density, etc., it is where attitudes about parking are manifested most vividly, through the codification of minimum parking requirements and sizes. Donald Shoup, in his exhaustively researched book The High Cost of

Free Parking, argues that parking requirements are typically set in one of two flawed ways: by using Parking Generation Surveys from the Institute of Transportation Engineers (ITE), or by benchmarking other cities.¹¹ Shoup argues that ITE Parking Generation Surveys look at "...peak parking occupancy observed at suburban sites with ample free parking and no public transit."¹² Often, the data is based on surprisingly small samples; according to Shoup "(h)alf of the 101 parking generation rates are based on four or fewer studies, and 22% are based on a single study."¹³ As a result, "documented" parking generation rates are often based on little actual, relevant data. While this is problematic enough for a suburban community using ITE surveys, it provides literally zero useful comparative data for cities with dense, mixed-use urban areas, extensive public transportation, and fee-based structured parking.

This condition is compounded by a fundamental lack of data on and understanding of the relationship between parking requirements and land use. Many cities base their off-street parking requirements on land use and floor area. However, Shoup reports on a study done by Parsons for Home Depot that showed that their parking demand was unrelated to floor area; instead, it was related to sales revenue. When Parsons investigated the projected peak demand on the fifth busiest day of the year (the "design day"), they found that the average city required literally twice as much retail parking – 5 spaces per 1000 square feet – than the actual expected peak demand of 2.5 spaces per 1000 square feet.¹⁴

To further the problem, if a city's minimum parking requirements are based on flawed ITE data, and then "benchmarked" by another city, the misinformation self-replicates.

While Chicago's parking requirements in the recently overhauled zoning code may not be explicitly based on either method, they do communicate an on-going negotiation between urban and suburban spatial practices. The non-residential requirements, particularly downtown, strongly embrace a dense, pedestrian condition by providing opportunities for substantial reductions in parking requirements based on proximity to transit, underground parking incentives, and shared parking, among others.

The residential requirements, however, seem to have been deeply influenced by the expectations and requirements of comprehensive car ownership and use. Single family homes and townhouses in the City of Chicago generally must provide two parking spaces per dwelling unit, exactly the same requirement as in Houston, a city that epitomizes decentralization. Chicago's two-flats, which typically house two bedroom units, must provide 1.5 spaces per unit, while in Houston a two bedroom duplex must provide 1.666 spaces per unit.¹⁵

Zoning codes also define the dimensions of a typical parking stall. In Chicago, the current zoning code mandates a minimum parking stall of 8'-0" x 18'-0" or 144 square feet.¹⁶ The true impact of the car is felt, however, in the space concomitant to the stall. In Chicago, the rule of thumb for planning an *efficient* integrated garage is approximately 350 square feet per car; that includes the parking space, and the proportionate percentage of the structure, aisles, ramps, etc. Unfortunately, few people can visualize how minimum parking numbers and sizes are manifested physically. Using Chicago as a primary example, once required numbers become space, the often substantial impact on a city's urban form is revealed in four primary systems: surface lots, detached garages, parking podiums, and emerging interstitial conditions, each of which traces a particular moment in urban history. Importantly, these systems were never conceived as such; they were built over time as a series of seemingly unrelated moments, with little consideration for the summary effect.

PARKING SYSTEMS

Surface parking lots are the baseline condition of empty lots in or near downtown Chicago. Owned by a handful of large parking system operators, the lots probably generate consistent revenue but relatively low taxes because of the lack of "improvements" on site. Initially, many of these lots had buildings on them, which were torn down due to dereliction or obsolescence, reflecting the devaluation of urban cores and the emergence and dominance of the de-centralized city in the 1950s. Surface lots remain sites of latent opportunity until the value of the land on which they sit becomes high enough to warrant either a detached garage, or a residential or office tower with integrated parking.

Detached parking garages are found most frequently in the business heart of the City. They date primarily from the 1960s and 1970s, when the need for parking in the CBD outstripped supply due to the prevalence of older office buildings without any parking, and the lag time of newer office towers with required parking. As individual structures they often have little architectural merit; instead, the detached garage is decidedly utilitarian, without consideration for the street life of the city. However, their near-by presence is often a deciding factor in the preservation of important historic buildings that cannot provide parking on their own, of which Chicago has many.

Currently, podium parking is the most prevalent system in downtown Chicago due to geography and economics. While underground parking is perhaps preferred - because it is "hidden" - it is also an exceedingly expensive method of accommodating the car, prohibitively so in areas of Chicago where the water table is high due to the proximity of Lake Michigan. Conversely, the podium provides not only a less expensive solution, but also the advantage of height. In both residential and commercial buildings, height equates to revenue; the higher a unit or office is, the better the views, especially of Lake Michigan. This was true even in the less densely built downtown of 1963; John Morris Dixon noted that raising the residential units above the twenty levels of parking at Marina City "...gave all apartments sweeping views, (with no close-ups of the immediate neighborhood), raised them above the densest layers of atmospheric pollution, and took advantage of the premium on high-floor apartments in the rental market."¹⁷ The parking podium allows even the lowest residential or commercial floor to be raised above the street, with a chance of a good view.

Unfortunately, even talented architects have failed to match the architectural innovation of Marina City; instead, the parking podium typically results in overwhelmingly massive, blank street facades, deadening the vitality of the street, and grounding equally awful towers. Although the ground floor usually contains active retail, the scale of that floor is often too small to counteract the parking base that fills the site, lot line to lot line, with essentially blank facades.



Figure 2: Residential podium, Chicago, IL.

In the twenty first century, parking remains a significant driver of urban space and form, especially in cities in which downtown continues to grow and densify. In Chicago, the growth of two particular areas of the city – Millennium Park/Lake Shore East, and the North and Clybourn retail area – portend a potential fourth model for parking as an interstitial system.

Millennium Park, located along Michigan Avenue adjacent to the Loop, opened in the summer of 2004. Six years and \$475 million in the making, the park's major features include Frank Gehry's Jay Pritzker Pavilion, Anish Kapoor's Cloudgate, Kathryn Gustafson's Lurie Garden, and Jaume Plensa's Crown Fountain. Located in the highly visible northwest corner of Grant Park, for years the site was a large, open hole to the operational rail yard and parking lots several levels below. As this was clearly not the "front door" image the City of Chicago wished to communicate to the world any longer, the construction of this park was also an exercise in mobility – in this case the desire of the City to project its own upward trajectory.¹⁸

The City's decision to construct a major new downtown park in that location also necessitated innovative thinking about how – and with what – the hole would be filled while train operations continued. More parking would be necessary given the projected success of the project, but parking revenue was also intended to pay for the debt service on the park.

Essentially the solution was simply to put all support systems "underground"; however, in this case it wasn't quite so straightforward. While

"underground" literally meant below the ground plane of the park, it wasn't below any actual existing ground, and instead was tied into the complex system of existing infrastructure underneath the Loop. Unlike underground parking beneath a building, which has a certain clarity in its relationship to the surface, the vast underground condition of the park creates myriad vertical and horizontal connections, both vehicular and pedestrian, to the park, its buildings, and the adjacent city. It also allows for a potentially invisible service system for the park, somewhat like that found at Disneyworld.

According to Blair Kamin, architecture critic for the Chicago Tribune, the "cake beneath the icing" entails two key parts, each engineered by structural engineers McDonough Associates, Inc. of Chicago. The first is the structure beneath the park that spans the railroad tracks and dedicated bus-way below, with a construction cost of almost \$61 million. The second is the multi-level parking garage that holds approximately 2,200 parking spaces, with a construction cost of \$106 million. On top of both is approximately four feet of soil, grass, etc., essentially creating a giant, public green roof in the middle of Chicago.¹⁹



Figure 3: Sectional condition where slip ramps emerge from underground parking at Millennium Park, Chicago, IL.

Immediately north of Millennium Park in Lake Shore East is a similar model for parking in Chicago. Lake Shore East is an extremely large, residentially focused mixed-use development at an enviable location at the corner of Lake Michigan and the Chicago River, immediately north of Millennium Park. Originally developed in 1969, by

2004 the project site encompassed eight buildings containing a hotel, some commercial space, and approximately 3000 residential units, all developed around the edges of a giant, gaping hole, not unlike the one at Millennium Park. Recently, work has begun on the remaining site.

The current project, masterplanned by the urban design group at Skidmore, Owings and Merrill in Chicago, is organized about a large, central park of approximately five acres, while linear green spaces connect the park to the lakefront and the river's edge. The site has a particularly complex section; the grade change from Randolph Street at the south edge of the site, to the park below, is approximately 50 feet. Similarly, on the northern edge, Wacker Drive varies between two and three levels; buildings proposed along that edge must address all levels of Wacker, as well as the primary frontage on the new park.



Figure 4: Sectional condition at Lake Shore East; all three levels of Wacker Drive are visible in the background.

Hidden in the project is Chicago's only "parking condominium", which opened recently as a response to an unmet demand for parking downtown. The Field Harbor Parking Garage offers "indoor heated and deeded" condo garage spaces, ranging from \$35,500 to \$62,500, with a monthly assessment. Phase One sold out 205 spaces in eleven months, and Phase Two's 197 spaces were 25% sold as of August 2005.²⁰

Like Millennium Park, the parking condominium takes advantage of the complex infrastructural

section at that location in the city; although it is relatively large at 400 spaces, the garage has no physical presence above street level. Also like Millennium Park, this parking garage is about more than physical mobility; in no small part, this garage is about economic mobility and status. Although many owners buy only one space, some buy multiple spaces, and rent them out while they appreciate in value. However, for the individual interested in extreme status, developer Dick Delaney is developing a million-dollar, physically separated, "private entrance", 20x20 parking space, complete with wet bar, sound system, flat-screen TVs, and "a special façade for a buyer. Maybe make it look like a Tuscan villa."²¹ Although not built yet, he feels confident it will sell, as he's already sold one other space like it, albeit unfinished and thus less expensive.

Another version of the interstitial parking model is emerging in the North and Clybourn retail area, a vibrant, growing area with many industrial warehouses that are being converted into retail and residential uses. Many of the stores in this area are national chains, including historically big box retailers such as Best Buy, The Container Store, Circuit City, and Trader Joes. The Best Buy embodies a typical suburban condition transplanted to the city; it is a large, one level store with a equally large parking lot in front. The Container Store presents a nominal street edge along North Avenue, but its main entrance is from the large adjacent parking lot.

As the North and Clybourn location has filled in, later arrivals have had to develop alternative approaches to their traditional big boxes. The Circuit City and the Trader Joe's - each of which is located in a converted warehouse - present new and potentially significant interstitial parking conditions.

The Circuit City is located on the first and second floors of an existing brick and concrete warehouse, with a highly visible entrance at the street corner; additional officing is located on the floors above. The building is defined by streets on the east and south sides, as well as by a railroad track to the west. The conversion to high volume retail and officing in the building necessitated a new parking garage, as parking is otherwise limited in the area. Accordingly, a tall, narrow concrete garage was built in the slot between the converted

warehouse and the existing warehouse almost immediately behind it. The garage is literally vertical infill, and at first glance is hard to distinguish from the warehouse.

The Trader Joe's is located in a converted concrete frame warehouse nearby, albeit one much larger than the Circuit City. The ground floor has traditional retail stores along Clybourn Street, such as the Crate and Barrel outlet. The Trader Joe's is located on the second floor of the warehouse, also facing Clybourn. In this case, however, the new parking is fully embedded in the existing warehouse, immediately adjacent to the second floor store and largely invisible from the exterior. The primary evidence of the parking is the ramp on the back side of the building that leads from the street to the parking above.



Figure 5: Ramp to embedded parking at Trader Joe's, North and Clybourn, Chicago, IL.

Each of these examples – Millennium Park, the Field Harbor Parking Garage, Circuit City, and Trader Joe's – exemplifies a variation of this new approach to parking as an interstitial condition, whereby opportunity is found in the in-between spaces not typically considered optimal for parking.

CONCLUSION

America's ongoing urbanization is in large part predicated upon a continuing privileging of mobility, as well as a reluctance to relinquish the car as a primary symbol of that mobility. What were once fairly stark divisions between urban and sub-

urban attitudes – and their resultant spatial practices – have begun to flatten, resulting in hybrid (sub)urban typologies that initially emerge in urbanizing suburbs and suburbanizing downtowns. Since the space of the car is a significant aspect of all of these flattening typologies, parking has thus become both an independent typological system (seen in parking lots and autonomous garages), as well as a cross-typological system, embedded in almost all urban spatial practice. An exploration into the space of the parked car, illustrated by examples in Chicago, shows the disproportionate influence parking has on urban space and form in the city, and points to an interstitial parking system as a potential model for future projects that minimizes its impact. Even in the face of significant environmental challenges, Americans love their cars, and will have to park them somewhere. The challenge is to find innovative ways to do so.

ENDNOTES

1. Ervin H. Zube, ed. *Landscapes: Selected Writings of J.B. Jackson*. (University of Massachusetts Press: Amherst, MA), 1970. p1.
2. Bruce Katz and Robert E. Lang. "Introduction." *Redefining Urban and Suburban America: Evidence from Census 2000*. (Brookings Institution Press: Washington D.C.), 2003, p4.
3. William H. Frey. "Melting Pot Suburbs: A Study of Suburban Diversity." *Redefining Urban and Suburban America: Evidence from Census 2000*. (Brookings Institution Press: Washington D.C.), 2003, p155.
4. William H. Lucy and David L. Phillips. "Suburbs: Pattern of Growth and Decline." *Redefining Urban and Suburban America: Evidence from Census 2000*. (Brookings Institution Press: Washington D.C.), 2003, p117.
5. William H. Frey and Alan Berube. "City Families and Suburban Singles: An Emerging Household Story." *Redefining Urban and Suburban America: Evidence from Census 2000*. (Brookings Institution Press: Washington D.C.), 2003, p271.
6. Randall Stross. "It's Not Who You Know. It's Where You Are." *The New York Times*, Sunday, 22 October 2006, section 3.
7. Stross.
8. Alice Sinkevitch, ed. *AIA Guide to Chicago*. (Harcourt Brace & Co.: New York), 1993, p67.
9. John Morris Dixon. "Marina City: Outer-Space Image and Inner Space Reality," *Architectural Forum* v122, no. 1 (April 1965): p68-77.
10. Marina City was an early PD (Planned Development no. 13) in the City of Chicago, probably in part because the site encompassed two zoning districts (C3-5 and

B6-7), which had differing land use and parking requirements.

11. Donald Shoup. *The High Cost of Free Parking*. Chicago: APA Planners Press, 2004, p22.

12. Shoup, p22. Shoup argues that the provision of enough free parking is a defining condition of parking requirements. However, in Chicago, free parking does not fully explain the demand for, or provision of, parking, as free parking essentially does not exist. At minimum, **all** parking for residents of the City of Chicago is predicated upon the purchase of a Chicago City Sticker, renewable annually for \$75.00 and up, depending on the size of the vehicle. All commercial streets are metered; in downtown, meters are being converted to pay boxes to maximize the number of cars that fit (and pay). One cannot even assume a parking space will come with the purchase of a residential condominium unit; it is now commonplace for developers to sell parking spaces separately from condominiums.

13. Shoup, p32.

14. Shoup, p34.

15. "Chapter 17-10 Parking and Loading," *City of Chicago Zoning Ordinance 2004*.

<http://w14.cityofchicago.org:8080/zoning/codetext.jsp?section=010>. (Accessed 7 March 2006), and "Chapter 26 Off Street Parking and Loading," *City of Houston Code of Ordinances*. <http://www.houstontx.gov/codes/index.html>. (Accessed 9 July 2006).

16. Shoup, p565. Shoup cites a study of parking in Montgomery County, Maryland by Steven Smith and Alexander Hekimian that showed that the implementation of a standard size for parking spaces simplified administrative oversight of parking "because the single size (1) simplifies parking regulations, (2) eliminates enforcement problems caused by large cars squeezing into compact spaces, (3) makes parking plan reviews easier", among other reasons.

17. Dixon, p69.

18. Harold M. Mayer and Richard C. Wade. *Chicago: Growth of a Metropolis*. (The University of Chicago Press: Chicago and London), 1969. Chicago's Loop infrastructure developed primarily as a response to physical, economic, and social mobility. The original elevation of the nexus of river and lake was low, and the ecology was swampy due to its firmament in clay. Early roads did not drain well, and would become muddy and unpassable after rains. As a result, "(i)n 1855 and 1856, the council simply declared that the grade be elevated. For two decades Chicago underwent an extraordinary transformation; streets were raised, buildings were jacked up, and new drainage and paving were installed." (p96) Traces of this action are still visible in some residential neighborhoods, where the random house is suddenly well below street level.

Almost thirty years later, Burnham and Bennett's 1909 Plan of Chicago proposed a two level boulevard system at the river that took advantage of Chicago's new elevation. Although only Wacker Drive was completed along the south side of the Chicago River from Lake

Shore Drive to Harrison Street, to this day its top level is primarily used by local traffic, while the lower level is used for service and through traffic.

Much of the existing lakefront was owned and used by the extensive railroad interests in the city, most of which occurred at original grade, below the primary infrastructural elevation of the city. Another Burnham and Bennett proposal in the 1909 Plan was for an extensive system of public lakefront parks, of which Grant Park - the "front yard" of the city - would be a primary piece. To achieve this goal, "(b)etween the wars, over a billion dollars went into new landfill on the Lake Michigan shoreline." (p292) This meant finding a way to negotiate the level change from street to shore while connecting the Loop to the lakefront and accommodating existing operational railyards.

The results of this succession of initiatives are a completely artificial public lakefront; an equally constructed river front; and an extensive multi-level transportation, service and access system in the Loop. This complex "underground" section reveals itself most fully in the area at the nexus of the Lake and the River, just north of Millennium Park.

19. Blair Kamin. "The cake beneath the icing," *Chicago Tribune*, Sunday, 18 July 2004, sec. 7.

20. "Millennium Park Condo Boom Creating Shortage of Affordable Parking." *Chicago Agent Magazine*, August 18, 2005. <http://www.fieldharborparking.com/newarticles.php?PHPSESSID> (Accessed 27 March 2006).

21. Dennis Rodkin, "\$1 Million to Park Your Car?" *Chicago Tribune Magazine*, Sunday, 15 January 2006.

BIBLIOGRAPHY

"Architect Goldberg's Marina City Concept," *Architectural Record*, no. 9 (September 1963): 214-216.

Chicago Zoning Ordinance 1961. Chicago: Index Publishing Corp., 1961.

City of Chicago Zoning Ordinance 2004.

<http://w14.cityofchicago.org:8080/zoning/codetext.jsp?section=010> (Accessed 7 March 2006).

City of Houston Code of Ordinances. www.houstontx.gov/codes/index.html. (Accessed 9 July 2006).

Dixon, John Morris. "Marina City: Outer-Space Image and Inner Space Reality," *Architectural Forum* v122, no. 1 (April 1965): 68-77.

Flink, James J. *America Adopts the Automobile, 1895-1910*. Cambridge, MA: MIT Press, 1970.

Flink, James J. *The Automobile Age*. Cambridge, MA: MIT Press, 1988.

Frey, William H. "Melting Pot Suburbs: A Study of Suburban Diversity." *Redefining Urban and Suburban America: Evidence from Census 2000*. (Brookings Institution Press: Washington D.C.), 2003.

Frey, William H. and Alan Berube. "City Families and Suburban Singles: An Emerging Household Story." *Re-*

defining Urban and Suburban America: Evidence from Census 2000. (Brookings Institution Press: Washington D.C.), 2003.

Kamin, Blair. "The cake beneath the icing," *Chicago Tribune*, Sunday, 18 July 2004, sec. 7.

Kamin, Blair. "A no place transformed into a grand space," *Chicago Tribune*, Sunday 18 July 2004, sec. 7.

Katz, Bruce and Robert E. Lang. "Introduction." *Redefining Urban and Suburban America: Evidence from Census 2000.* (Brookings Institution Press: Washington D.C.), 2003.

Keegan, Edward. "Edge of the Millennium," *Architecture* v93, no. 12 (December 2004): 59-61.

Hall, Peter. "The City on the Highway," *Cities of Tomorrow Update Edition*. Oxford, England: Blackwell Publishers, 1996: pp274-318.

"Inland's Steel Showcase," *Architectural Forum* v108, no. 4 (April 1958): 88-93.

Lucy, William H. and David L. Phillips. "Suburbs: Pattern of Growth and Decline." *Redefining Urban and Suburban America: Evidence from Census 2000.* (Brookings Institution Press: Washington D.C.), 2003, p117.

Mayer, Harold M. and Richard C. Wade. *Chicago: Growth of a Metropolis.* (The University of Chicago Press: Chicago and London), 1969.

"Millennium Park Condo Boom Creating Shortage of Affordable Parking," *Chicago Agent Magazine*, August 18, 2005. www.fieldharborparking.com/newarticles.php?PHPSESSID. (Accessed 27 March 2006).

"Office Building for Inland Steel," *Architectural Record* v123, no. 44 (April 1958): 169-178.

Pickrell, Don and Paul Schimek. "Trends in Personal Motor Vehicle Ownership and Use: Evidence from the Nationwide Personal Transportation Survey." April 23, 1998. http://ntl.bts.gov/card_view.cfm?docid=5145 (Accessed 24 March 2006)

Rodkin, Dennis. "\$1 Million to Park Your Car?" *Chicago Tribune Magazine*, Sunday, 15 January 2006.

Schieterman, Joseph and Dana Caspall. "Zoning," *The Encyclopedia of Chicago*.

www.encyclopedia.chicagohistory.org/pages/1401.html (Accessed August 2, 2006).

Shoup, Donald. *The High Cost of Free Parking.* Chicago: APA Planners Press, 2004.

Sinkevitch, Alice, ed. *AIA Guide to Chicago.* New York: Harcourt Brace & Co., 1993: 67-68.

Skidmore, Owings and Merrill, The Lake Shore East Master Plan and Design Standards. March 15, 2001.

Stross, Randall. "It's Not Who You Know. It's Where You Are." *The New York Times*, Sunday, 22 October 2006, section 3.

Sullivan, C.C. "Point of Departure," *Architecture* v94, no. 6 (June 2005): 54-59.

Zube, Ervin H. ed. *Landscapes: Selected Writings of J.B. Jackson.* Amherst, MA: University of Massachusetts Press, 1970.