

This cityLAB + Gensler Los Angeles publication instigates a new conversation about the future of office work, office buildings, and their impacts on downtown Los Angeles. This instigation takes place during an era of urban resurgence in the city and increased mobility in contemporary life. Los Angeles can be considered both America's last industrial, railroad city and its first post-industrial, automobile-centered city. As such, the trajectory of downtown Los Angeles's future potentially charts the future of other American downtowns—especially those in the West and in the Sunbelt. Office work in Los Angeles has been sheltered by multiple versions of the mono-functional office building, both high and low-rise, situated within many different settings; from the office parks and low-rise industrial buildings of the San Fernando and San Gabriel Valleys, to the landscape of logistics that is the Port of Los Angeles, to the autopia of Century City, to the creative offices spaces of the Westside, and to work-live spaces in a re-imagined downtown. The variety of Los Angeles's office landscape is the result of decades of architectural experimentation, and, according to some boosters, has contributed to its resilience to broad economic change. The reimagining that continues to transform Los Angeles's central business district into downtown Los Angeles does so by reconfiguring the regimes of time, place, and selves that set the temporal and spatial definitions of work downtown, and in particular, the kind of downtown work most often labeled "office work".



V1  
The Future of Office Work



# The Future of Office Work

Volume 1: How We Got Here

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# The Future of Office Work: How We Got Here

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# Introduction

This cityLAB + Gensler Los Angeles publication instigates a new conversation about the future of office work, office buildings, and their impacts on downtown Los Angeles (recently refigured as DTLA). This instigation takes place during an era of urban resurgence in the city and increased mobility in contemporary life. Los Angeles can be considered both America’s last industrial, railroad city and its first post-industrial, automobile-centered city. As such, the trajectory of downtown Los Angeles’s future potentially charts the future of other American downtowns—especially those in the West and in the Sunbelt. Office work in Los Angeles has been sheltered by multiple versions of the monofunctional office building, both high and low-rise, situated within many different settings; from the office parks and low-rise industrial buildings of the San Fernando and San Gabriel Valleys, to the landscape of logistics that is the Port of Los Angeles, to the autotopia of Century City, to the creative office spaces of the Westside, and to live-work spaces in a re-imagined

downtown. The variety of Los Angeles’s office landscape is the result of decades of architectural experimentation, and, according to some boosters, has contributed to its resilience to broad economic change.

The reimagining that continues to transform Los Angeles’s central business district (CBD) into DTLA does so by reconfiguring the regimes of time, place, and selves that set the temporal and spatial definitions of work downtown, and in particular, the kind of downtown work most often labeled “office work.”<sup>1</sup> As Los Angeles has transformed into a global economic pole, circuits of accumulation have become increasingly rapid; mass production and mass consumption have made way for more flexible systems of making and acquiring, as telecommunications technologies evolved towards instantaneity, and the region has become the playing board for Michael Dear’s “Keno Capitalism,” to cite but one interpretation of the late capitalist Angeleno cityscape.<sup>2</sup> These transformations challenged

“downtown” equivalence with the Southern California region’s political and economic center. Though visions of a revived downtown have sought to inspire strategies to overcome those challenges, most of them focused on repositioning downtown as the city’s central business district and the region’s preeminent location for office space. Prominent groups of professionals created plans for downtown over the years with this singular set of aims.

However, none of these efforts imagined an integrated downtown with high-speed rail access, LA Live, Disney Hall, a new football stadium, the Grand Avenue Park, a Broadway streetcar, new hotels, and tens of thousands of residents. Instead of being the CBD again, DTLA floats in a constellation of LODOs, EDOs, DUMBOS, if not SoHos. It has inspired new conceptions of metropolitan growth—ones that not only scuttle hoary models of the monocentric city—and more recent theorizations of polycentric urban form. In the midst of this vast formal change, an essential

Introduction

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Introduction

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twentieth century *echt*-Californian set of relational antonyms, both urban and suburban, has stopped making sense—rendering nonsensical a host of other once inherently incompatible, binary, relationships that described the city, the spaces formed there, and the patterning of urban lives and livelihoods.

Scholars of the particular shifts in technological, political, and economic paradigms that characterize the current moment, as well as critics seeking to make sense of the fragmented, consumerist, and decentered discourses surrounding these shifts, have focused their investigations on scales from the metropolitan to the global. At the same time, projections of potential DTLA growth, and the ability of downtown-as-planned to accommodate that growth, have already been accomplished by the Los Angeles City Planning Department. Urbanists, nevertheless, have yet to develop and delineate DTLA scenarios that speculate on the impact of the contemporary mobile workforce on the city,

recognizing an office workforce that is now, through technology, increasingly liberated from the desk and boundaries of the office building. How this liberation may amplify the positive changes already taking place and leverage the resources of the city as a whole remain in question. Our work begins with a retrospective look at the evolution of office work at the scale of the city, building and desk in order to understand the development of office work and its modern capacity for reinvigorating downtown Los Angeles.

The commodification of office space and relative ease of producing planametric “flexibility” by accommodating standardized office configurations made a lasting mark on the typological architecture of the office building. Certainly, the gathering of these predominantly single purpose buildings into a CBD command center remained a key objective of urban renewal and downtown redevelopment across North America. If the office building has been the

chief component of downtowns, providing both the fabric of the CBD and, in some places, contributing to its imageability through making skylines, office work—even more than the consumption of high culture and high-end goods—has been the signature activity of many downtowns, including downtown Los Angeles.

As such, office work has long been viewed as assembling a vast array of knowledge-based enterprises including administration, organization, exchange, management, logistics, marketing, planning, financing, deal making, governance, documentation and accounting related to the economy’s productive and consumptive sectors. While city dwellers could engage a variety of activities in downtowns, the one thing that no one from the middle or working classes did in or near the CBD, including those working in downtown offices, was reside there. Downtowns counted among their very few denizens typically only those with the capacity to choose any residential option and

<sup>1</sup> For further discussion on time, place, and selves, see among others, Bob Jessop, *The Regulation Approach, Governance and Post-Fordism, Economy and Society*. (Blackwell Publishing, 1995).  
<sup>2</sup> Michael J. Dear and Steven Flusty, “Postmodern Urbanism.” *Annals of the Association of American Geographers* 90, no 1 (2000): 80.

# MACHINE AGE

Downtown Los Angeles 1870 to 1945: A machine for office work  
Integrating the city, building, and desk through efficiency, economies, and scientific management

CITY

1781  
Pueblo called "La Reyna de Los Angeles" is founded



1870  
Spring and Temple Streets, Downtown Los Angeles



1876  
First oil well dug in Pico Canyon



1877  
Birds eye view of Los Angeles  
Railroads arrive in Los Angeles upon the completion of the Southern Pacific in 1876, contributing to the social vibrancy and economic competitiveness of downtown by making it a place to transport large amounts of customers, workers, and goods

1880  
Los Angeles population is 11,000

1880s

California Architect and Building News makes the point, "Every enterprising man seeks to get as near to the center as possible and will put up with great limitations and inconvenience rather than leave the heart of trade and commerce."

1885

Santa Fe railroad enters Southern California, setting off a rate war with Southern Pacific

1887

Electric trolleys first travel in Los Angeles



1890  
Downtown LA  
By the 1890s, the economic advantages firms realize by locating near one another concentrate Southern California commerce in an increasingly bustling Downtown Los Angeles

1890

The Los Angeles Times notes, "The geographical center of Los Angeles is the old Plaza, but that has long since ceased to be the center of population."

1889

Orange County breaks off due to population growth

1884-1888

Approximately 100 new towns are planned

1886

An acre of land goes for \$100

1887

An acre of land goes for \$1,500



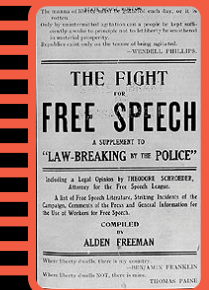
1894  
Pullman Strike

1896

Los Angeles population is 97,000

1903

First height limit ordinance enacted



1909  
Free Speech Ban  
The city fathers place a ban on free speech from public streets and private property except for the Plaza

BLDG

The punch clock fragments office workers' lives into public and private parts. The office becomes a downtown worker's second home



1879  
Telephone  
The telephone, once the most common (and essential) business appliance, supports a wide-ranging network of economic relations



1879  
Holcomb Acoustic Telephone  
Separated from both the domestic sphere and industrial zones, the office carves out new places in the city, where business planning and administration, as opposed to business itself, took place

1880s

Frederick W. Taylor promulgates methods to quantify human and mechanical processes to streamline and enhance overall productivity

An entirely new building type specifically devoted to knowledge-based work accommodates the explosive growth in managerial and business service activities



1891  
Wainwright Building

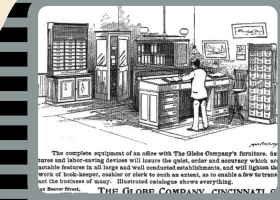


The Wainwright Building is a 10-story red brick office building in downtown St. Louis, Missouri. Designed by Dankmar Adler and Louis Sullivan, the Wainwright is a highly influential model for office buildings, and was among the first skyscrapers in the world. The Wainwright building features identical "honeycomb" plans to express in architecture the underlying economic relationships whereby owners and investors seek the greatest possible revenue with the least possible outlays



1893  
Bradbury Building

Built in the Romanesque Revival style typically associated with commercial office spaces of the period, the Bradbury Building is built in a period of optimistic growth for downtown office space. Typical of its period, the Bradbury Building features office spaces that are discretely segmented into autonomous units for individual or small-scale work entities



1896  
Globe Co. Office Furniture

Fully integrated within an architectural workspace and surrounded by the latest technology, the worker becomes a component of a system that integrates the space, the tools and the user equally

1901

Numerical Keyboard: Early form of the calculator and computer, allowed for quick tabulations



1904  
Larkin Building

Larkin Building is completed in Buffalo -- considered the first purpose-designed office environment for a specific organization. The innovation of the central atrium establishes a neutral, hermetic space with minimal distractions and visual links to the exterior, thereby increasing efficiency and greater worker identification with the firm; workplace as family

1906

Stenotype: Created a whole new segment of administrative workers who could transcribe quickly in short hand, and it is still used

DESK



1860s

Typewriter: Made writing more efficient & defined the modern keyboard



1870  
Calculating Machine

The calculating machine is marketed as a marvel of mechanical construction and a time-saver for the daily routines of financial institutions

1780

1860

1870

1875

1880

1885

1890

1895

1900

1905

1910



those with few or no choices clinging to shelter in the neglected zones at downtown’s edges.

Yet downtown Los Angeles was, and DTLA is—like so many Southern California phenomena—both exemplar and exception. Height limits that sought to preserve sunshine on downtown streets dampened the potential for crafting a signature skyline in downtown Los Angeles until the era of redevelopment.<sup>3</sup> Los Angeles’s CBD was developed at the cusp of the shift from railroad mobility to auto mobility. Industry and industrial employment continued to persist in areas adjacent to the CBD, making it among the most industrial of North American downtowns. Residential uses also persisted downtown, until redevelopment largely removed that possibility. The vast intra-urban rail system that brought everyone to downtown Los Angeles to work proved just as capable of moving them to the urban fringes, resulting in an urban decentralization that occurred as early as, but more quickly than any other North

American city.<sup>4</sup> Since then, Los Angeles has, at least according to some observers, re-urbanized in a broad, metropolitan manner that calls into question familiar oppositions like “downtown” and “suburban.” While DTLA partly echoes the ascendance, the decline and ultimate transformation of other North American CBDs, specifics of local history, geography, politics, economics, demographics, urban form, and culture must also be accounted for.

That being said, Los Angeles’s exceptionality has largely been refigured. Since the emergence of the Los Angeles School of Urbanism in the mid-1980’s, scholars have repositioned Los Angeles and its downtown through their observations of the city and the sense they have made of them, as paradigmatic rather than peculiar.<sup>5</sup> Having revised its downtown, Los Angeles may finally escape Dorothy Parker’s characterization of “72 suburbs in search of a city”—not with a traditional single center—but with a premiere downtown among

our multiple neighborhood centers, finally realizing Cal Hamilton’s 1970 “centers concept” for the Los Angeles Comprehensive Plan or, beyond that, the mat-like metropolitan urbanism posited by UCLA geographer Ed Soja.<sup>6</sup> DTLA has re-emerged as the chief locus in the region for professional services, entertainment and dining, and hosts visitors and tourists, culture, sports, and progressive design. At the same time, it is quickly becoming the region’s pre-eminent, 24/7 neighborhood, hosting a range of city living options and increasingly urban amenities.

This publication, volume one of three, is focused on developing a critical understanding of DTLA’s current situation as a site for knowledge-based work. Our conversation about the history and future of this particular kind of work could be said to be happening at various scales: the City, the Building, and the Desk. Yet the essential questions that drive this inquiry cut across scales, and implicate the dis-

tinct regimes of time, place, and self that supported industrial capitalism then, and support Los Angeles’s participation in the global system now:

- **What were the social, economic, political and cultural forces around office work that aligned for DTLA to emerge as the city’s CBD in the 19th and 20th centuries?** How did it differ in form and function from other central business places in North America? How has its centrality and pre-eminence been championed and why was it eventually repositioned as peripheral?
- **How did technologies of the CBD interact with the traditional office building to produce the places of downtown Los Angeles and how have they been reimagined there?** How should the place-based and technological assets of DTLA be leveraged to support new kinds of knowledge-based work? How do new arrangements of work once done in downtown offices and

that can now be done anywhere, including at home and in cafes, comport or conflict with bourgeois ideals of separate spheres for work, for public life, for consumption, and for domesticity? How have the architectures of those spheres changed to accommodate new kinds of office work? What are the implications of those changes for collective, urban life in downtown Los Angeles?

- **What were the various building forms taken by office buildings in DTLA? When and how did the generic office building type, with its central core plan emerge in Los Angeles?** Does the mono-functional office building type fit the new world of work? What is the future of this building type if it is not? Since these buildings take up so much of the real estate in our cities, what would the urban impact be if their DNA were to change?

- **What has been the range of experiments in organizing work inside the office building, particularly in DTLA?** As the nature of office work and the relationship of firms to work and workers have changed, have these principally been advanced on rational, cultural, or symbolic grounds? What are implications of privileging one or another of those standpoints when organizing office work? How have Los Angeles’s experiments in office interior architecture sought to resolve conflicts between new kinds of work and home and public lives that were once posited as separate?

In order to answer these questions for the case of DTLA, the writers of this volume attempt to make sense of the current situation of the downtown office, and the organization of work both within and outside them. We present research on the history of the Los Angeles downtown office district and review various past attempts to understand the downtown

office agglomeration, its dispersal, and its revision as DTLA. Through that application, we document the range of ways the particular urban form of office work in Los Angeles is understood and interpreted, both from historical and contemporary innovations in office building architecture and office interior design, and through innovations in building, interior architecture, and office technologies, the succession of ideas about how knowledge-based work is and should be accomplished. We also chart the changing nature of work in downtown Los Angeles, shifts in office work reflected in office interior architecture and furnishings, adjustments to paradigmatic practices in office architecture downtown, as well as adaptive reuse of office buildings. We review the implications of all of these for downtown as the metropolitan center for office work, with notes on how the is lived in the DTLA today.

Speculation would lead one to posit that the generic office building is obsolete due to issues of location, mobility, pace and timing of knowl-

edge-based work in the context of rapidly changing telecommunications technologies that seek to mediate the face-to-face communication that the office building facilitated. Any such obsolescence would necessitate change (tearing down, reconfiguring, or expanding with new program) that, given the scale and quantity of office buildings, would have a commensurately scaled impact on the city. Indeed whole sectors of cities have changed to provide local identity through the redesign of their interiors (e.g., New York City’s Meatpacking District and Los Angeles’s Old Bank District). The potential for a new, inside-out urbanism appears real and the current office fabric may provide its sites.

Thus, this first publication will be followed by a second volume reviewing the planning history of downtown and the political and economic regimes attached to various Los Angeles downtown planning ideals and an urban scale survey identifying key opportunities (“hot spots”) for reinventing the urbanism of downtown through architectural and

urban design interventions. Such interventions seek to address the office work of the future and the role the city plays as a place where technology facilitates the doing of such work, and imagines alternative futures for downtown’s increasingly obsolescent office building fabric. In turn, a third volume will follow that promotes new design ideas that address these opportunities. The intention will be to provoke new conversations among the down-town and metropolitan leadership about the future character of downtown as place, and point of exchange.

<sup>3</sup> Alexander Garvin, *The American City: What Works, What Doesn't*. (New York: McGraw-Hill, 1996).

<sup>4</sup> Martin Wachs, *Autos, Transit, and the Sprawl of Los Angeles: The 1920's*. (Irvine, CA: University of California Institute of Transportation Studies, 1984).

<sup>5</sup> Michael J. Dear and Nicolas Dahmann, “Urban Politics and the Los Angeles School of Urbanism.” *Urban Affairs Review*, 2008, no. 2 (2008): 266-279.

<sup>6</sup> Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions*. (Oxford: Basil Blackwell, 2000).

# CITY [PLACE]

In 1885, the Santa Fe Railroad entered Southern California, setting off a rate war with the dominant railway line of the area, the Southern Pacific. Competition and low fares made Southern California accessible to the rest of the country in a way it had heretofore never been. New cheap transportation, huge tracts of available land, temperate weather, popular culture, outrageous promotion, and avarice proved a combustible combination, enflaming the land boom that was the true genesis of Los Angeles's downtown. In 1886, an acre of land there went for \$100. The next year it was worth \$1,500. From 1884 to 1888 roughly 100 new towns were planned, and in 1889 Orange County was broken off due to population growth. Between 1880 and 1896, Los Angeles went from a population of 11,000 to 97,000.<sup>7</sup>

By 1889, the boom subsided, but Los Angeles had established itself. Too, prices eventually recovered and continued to rise into the 1900's. Infrastructure enhancements and the laying of

a street grid eventually brought development south of the original settlement into what today are labeled the Civic Center and Historic Core neighborhoods. In 1891, the *Los Angeles Times* noted, "*The geographical center of Los Angeles is the old plaza, but that has long since ceased to be the center of population....While at one time most of the population was north of the plaza, during the past ten years 90 per cent of the improvements have gone up in the southern half of the city....These are solid facts which it is useless to attempt to ignore by playing the ostrich acts, and level-headed property holders in the northern part of the city are beginning to ask themselves seriously what is to be done to arrest or at least delay the steady march of the business section from the old to the new plaza on Sixth Street ....*"<sup>8</sup> As occurred in other western and southwestern railroad cities (Albuquerque, El Paso, San Diego, and San Francisco among them), businesses and eventually residents migrated from the colonial city center to the new center, in the process producing a new urban

culture that was English-speaking, largely white, and increasingly Protestant, and with it a changed culture and ethic of work.



Southern California, thus, was somewhat late to the business of forming downtowns. The term, "downtown," originally intended to describe the burgeoning business district in southernmost Manhattan, had been in use in North America since the 1830's, a time when Los Angeles remained an agricultural market center.<sup>9</sup> Some steps in the formation of downtown, at least as understood by a morphologist like James Vance—his inception, exclusion, and segregation

<sup>7</sup> "Downtown History," Downtown Center Business Improvement District, accessed October 15, 2012, [http://www.downtownla.com/5\\_05\\_downtownHistory.asp](http://www.downtownla.com/5_05_downtownHistory.asp).

<sup>8</sup> Now Pershing Square. See "The City's Growth: Marching from the Old Toward the New Plaza: The Business Section Being Forced to the Southwest." *Los Angeles Times* (Los Angeles, CA), 1891.

<sup>9</sup> Robert M. Fogelson, *Downtown: Its Rise and Fall, 1880-1950* (New Haven: Yale University Press, 2003), 10.



phases—either occurred simultaneously or in very close sequence in Los Angeles.<sup>10</sup> For example, the inception of downtown Los Angeles and the boom that would exclude all but the highest capitalized users occurred almost simultaneously in the early 1890's. Although a few buildings from this era still stand (notably the Bradbury Building of 1893), the true explosion of commercial growth in the area came during the 1910's, 1920's, and early 1930's, completing downtown's division into sub-districts.

**During the early 20th century, the construction of "downtown" as the city's central place and the place of business was inseparable from the process of urbanization of Los Angeles itself.**

The mix of economic concentration and easy access made downtown a regional magnet for a fast-growing metropolis, if only briefly. City Hall, other public services, schools, and newspapers were established, making downtown the city's administrative and government center. Agri-businesses—huge, corporate run farm industries sprouted throughout the region—were largely managed from downtown. By the 1920's, the nation's petroleum and banking industries were headquartered in downtown. The Spring Street Financial District became home to Bank of America, the Crocker National Bank, the International Savings and Exchange Bank and the Los Angeles Stock Exchange. The famous Biltmore Hotel was built downtown in the early 1920's as were the Ritz Hotel and the Astor Hotel. The Hall of Justice, the Japanese Union Church, the Great Western Savings, the Sun Drug building, the Westinghouse Electric and Manufacturing buildings, and the Roosevelt Office Building were also erected during the 1920's economic expansion.

In the same period the Broadway area became a central hub for entertainment and shopping. Department stores like Bullock's and the May Company purveyed goods to the gentry living in nearby suburbs. As in many North American cities, industry was restricted to downtown Los Angeles's edges. Unlike those cities, these uses have persisted in areas close to DTLA, where toys, garments, and jewelry continue to be manufactured and distributed. In fact, industrial employment has remained an important portion of all the work done downtown.



### Working Downtown

Downtown Los Angeles, like other downtowns across urban America, represented a new kind of city making. Indeed for most social theorists, the closure, autonomy and separateness of the urban community and urban work, including office work, locates the industrial city differently within the capitalist, political, and social organization. For at least one theorist, Ferdinand Tonnies, urban work engendered an entirely new way of life, and entirely new senses of time, of place, and one's self in relation to them.<sup>11</sup> Social relationships based on place were weakened by broad migrations to industrial cities like Los Angeles, and were replaced with relationships based on associations of common economic interests.

**Work, particularly office work, was central to the formation of downtown, more so than shopping,**

**entertainment, or even governance.**

As downtown work was like industrial work, wage work, done in the central business district outside of industry and retail activity, was primarily knowledge based and centered on recording, storing, and retrieval of information central to commerce.

**In many North American cities, downtown was a place where business services were provided rather than products produced. Thus the start of the service economy drove downtown growth and the mono-functional office building morphology that would serve it.**

While work like this had existed for centuries, principally in government, banking, and insurance, the quantity of it mushroomed by the middle of the 20th century, first with the increasingly rapid circulation of industrial capital, then compounded further by the advent of consumerism. Administration and management of goods production and service provision emerged as a logistical imperative of the new industrial economy.<sup>12</sup> The processes of the modern business enterprise and the hierarchical structure that guided its roles and tasks were first promulgated by railroads in the 19th century. Railroad companies were among the first firms faced with managing the cooperation of hundreds of spatially dispersed people and the logistical challenges of moving people and freight. In the United States, the railroads created a system of internal operations out of these challenges that could be supplanted anywhere and was organized to accomplish highly specific tasks, rather than some general sense of enterprise. The management structure railroads used to implement the system proved

<sup>10</sup> James E. Vance, Jr., *The Continuing City: Urban Morphology in Western Civilization* (Baltimore, MD: The Johns Hopkins University Press, 1990).

<sup>11</sup> 1887; *Gemeinschaft und Gesellschaft*, Leipzig: Fues's Verlag, 2nd ed. 1912, 8th edition, Leipzig: Buske, 1935 (reprint 2005, Darmstadt: Wissenschaftliche Buchgesellschaft).

<sup>12</sup> David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States*, (Baltimore, Maryland: Johns Hopkins University Press, 1984).

to be effective. Soon financial institutions, insurance companies and later manufacturers, importers, and chain stores adopted similar practices.

**Furthermore, observers at the time noted that with the increased specialization of business services and the growth of professions, the need for meetings increased, as did documentation of them.<sup>13</sup> Hence, entities organized in the railroad manner prized the opportunities for face-to-face communication, information sharing, and**

**high access to clients and consumers that only a central place, near a railroad hub, could afford.**

The need for meetings was supported by railroad time. Railroad time, which transformed temporal reckoning from being ambient, whole, and local to being abstract, standardized and universal, enabled an explosion in the number of business meetings that provided, arguably, most efficient opportunities for face-to-face communication.<sup>14</sup> In the 1880's, *California Architect and Building News* made the point, "Every enterprising man seeks to get as near to the center as possible and will put up with great limitations and inconvenience rather than leave the heart of trade and commerce."<sup>15</sup> More importantly, these organizations possessed the capital to outbid other users for those spaces, displacing first residents and then industry. Early images of downtown work—office work—show it taking place in rooms

arranged similarly to our contemporary image of an office: groups of desks with their respective occupants mulling through papers.

With limited residential choices and a public sphere that was at times intentionally undernourished, downtown was a place of administration, documentation, litigation, commerce and exchange among the city's elites.

**Though downtown Los Angeles remained a place of industry, a new building type was necessary to accommodate the scale at which new business service activities were now taking place.**

Office work in the mercantile city took place in buildings that looked like palaces (to wit Rome's Bank of the Holy Spirit), monasteries (the Inns of Court), or market halls (the original Lloyd's of London) as

original sites of knowledge-based work. The downtown office building of the industrial era had to be invented. To the British historian of art and architecture, Nicholas Pevsner, the closest predecessor of the office building was the warehouse. Like warehouses,<sup>16</sup> new office buildings were large. More importantly, as a result of new technologies and surging land rents, they were tall. Downtown was not immune to the particular economic logic of the skyscraper or popular antipathy to it. By 1929, downtown had 130 buildings ten stories or taller (as many as Detroit, Philadelphia or Boston) but only one more than twenty stories.



<sup>16</sup> Nikolaus Pevsner, *A History of Building Types*, (Princeton, NJ: Princeton University Press, 1976).

<sup>17</sup> Martin Wachs, "Autos, Transit, and the Sprawl of Los Angeles: The 1920's," *Journal of the American Planning Association* 50.3 (1984): 297-310.

Campaigns for height limits on downtown buildings that had largely been ineffective in other American cities were effective here. The first height limit ordinance in Los Angeles was enacted following the completion of the 13-story Continental Building in 1903, located at the southeast corner of 4th and Spring Streets. In Los Angeles, as elsewhere, tall buildings were vastly unpopular, largely because of the street congestion that they engendered. In Los Angeles they were also un-Californian, denying local streets of the region's plentiful sunshine.<sup>17</sup> The argument for height limits in Los Angeles were won based on its allowing California's sunlight to penetrate to sidewalk level, ensuring that downtown Los Angeles suffered none of the "urban canyon" effects of New York and Chicago. An updated height limit ordinance was passed in 1911, establishing a specific limit of 150 feet. Exceptions were granted for decorative towers such as those later built on the Eastern Columbia Building, the United Artists Theatre, and the since demolished Richfield Tower. With height limits en-

forced, downtown Los Angeles became increasingly distinct from other American downtowns. It sprawled across more land, and generated no distinguishing skyline during its pre-World War II heyday. The 1911 ordinance was repealed only in 1957. The first private building to exceed the old limit was the 18-story California Bank Building, located at the southeast corner of 6th and Spring streets.

### Living Downtown

**Railroad time resulted in fragmenting the sense of self of people who lived by it. People saw their lives divided into roles fulfilled according to clock time that divided the day and people into public and private parts.**

<sup>13</sup> Keith R. Ihlanfeldt, "The Importance of the Central City to the Regional and National Economy: A Review of the Arguments and Empirical Evidence," *Citiescape* 1.2 (1995): 125-150.

<sup>14</sup> Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the 19th Century*, (Berkeley, CA: University of California Press, 1986).

<sup>15</sup> Robert M. Fogelson, *Downtown: Its Rise and Fall, 1880-1950*, (New Haven: Yale University Press, 2003), 22.



Office workers were variously commuters, functionaries, and perhaps participants in public life in specific ways. Family life existed outside work and public life, and was construed as private. In the process, downtowns, in Los Angeles and elsewhere, became peculiar but particular places. Downtown was particularly bustling during the day, but moribund at night. It was devoid of children and old people. In fact, very few people lived downtown; fewer lived there by choice. Separate urban and suburban realms were created. Those who could afford to shelter themselves in exclusive islands of domesticity did so in secured isolation. In DTLA, this was Bunker Hill, Paris Beaudry's exclusive enclave of lavish two-story Victorian homes that were owned by Los Angeles's upper classes through World War I, including early titans like the Crockers, whose extravagant mansion overlooked downtown for a mere 22 years. Others lived in the new streetcar suburbs, like Angelino Heights and Highland Park, developed by Henry Huntington and others. Those left behind by the new urban prosperity

succored themselves within the shadows of downtown, a zone of neglect known as Skid Row. While the neighborhoods of the downtown poor would persist, the downtown elites proved more mobile, relocating first to new amenity-centered neighborhoods along the Wilshire Corridor, including Country Club and Hancock Parks and then to new suburbs further west. That allowed once elite housing in downtown and adjacent neighborhoods to trickle down as its exchange and cultural value depreciated. On the eve of downtown redevelopment, about 50,000 people, mostly working class whites, continued to live downtown in residential hotels and apartments carved out of one-time mansions in Bunker Hill, Court Hill and Fort Moore Hill.<sup>18</sup> About the same number lived in neighborhoods on the fringe of downtown to the south, southwest, west, and north.

### Being Public Downtown

A third kind of space, a burgeoning public sphere where the middle class and, to some extent, the

working class carved out space for public conversation about the city, struggled to gain a foothold in Los Angeles. While downtown boosters, particularly the owners of the *Los Angeles Times*, advanced the cause of expanding Los Angeles, they also endeavored to keep it free of organized labor and quashed public debate to achieve that end. Local fruit growers and local merchants, having endured the negative economic impacts of the 1894 Pullman Strike, joined them in this pursuit and formed the anti-union Merchants and Manufacturers Association to advance the cause of an open-shop Los Angeles. In 1909, the city fathers placed a ban on free speech from public streets and private property except for the old plaza, an area long considered an open forum by Los Angeles residents.<sup>19</sup> The area would remain a locus of concern to the owners of the *L.A. Times*, Harrison Grey Otis and his son-in-law Harry Chandler, whose borderland financial interests were the constant subject of reporting by Ricardo Flores Magón, publisher of the popular, bilingual, left leaning *Regeneracion* newspaper.

Nevertheless, the vestiges of a non-state public realm persist in downtown, whether they be private social clubs like the Los Angeles Athletic Club, the California Club, or working men's and working women's lunch counters and taverns, including Cole's and Phillippe's. Even today, some DTLA interests demand public faces for otherwise entirely private and commercial ventures (e.g., LA Live).



That being said, perhaps the true barometer of the state of downtown's public sphere is

the condition of its parks and plazas, such as Pershing Square. While current efforts like the opening of LA's Grand Park--the \$56 million renovation of 12 acres running from the base of City Hall to Bunker Hill show the promise of creating more robust public spaces downtown--the most recent renovation by Legoreta and Olin of Pershing Square was once invested with equal promise, only to become arguably first among the city's most vilified public spaces. While it is unsurprising that those marching for immigrants' rights might do so downtown, they begin at the church in El Pueblo, a sanctuary for organized protest since at least the time of Flores Magon and *Regeneracion*. Though they did hold events in Pershing Square, Occupy LA, the local manifestation of the loosely organized Occupy Wall Street movement, chose instead to occupy the park in front of City Hall as their site of resistance. Even in a global Los Angeles centered on the Westside, the open spaces of downtown remain public to some in a way that is largely unquestioned by many. In the end,

however, private life has been prized over public in Los Angeles. In many ways, the private backyards of Los Angeles have remained ascendant, at least among those who possess them, as the city's parks and plazas have languished.

### Downtown as Mobility Hub

In addition, business valued proximity to mobility; this came in the form of Los Angeles's transportation systems. The centrality of the downtown Los Angeles economy was under-girded by the intra-urban transport system. Electric trolleys first traveled in Los Angeles in 1887. Very quickly downtown went from being a patchwork of mixed uses accessed primarily on foot, to a hub in the city that radiated to increasingly distant hinterlands accessed through transportation systems. In 1895 real estate tycoon Henry Huntington created the Pasadena and Pacific Railway from a merger of the Pasadena and Los Angeles Railway and the Los Angeles Pacific Railway. Huntington tried, but

failed, to gain control of the Southern Pacific Railroad, which his uncle, Collis P. Huntington, founded. Eventually that failure came in the "Great Merger" of 1911, where most of the Pacific Electric Railway stock was purchased by the Southern Pacific Railroad. Thus the Southern Pacific Railroad system, popularly known as the "Red Cars," fulfilled its motto "from the mountains to the sea," where its hub was in located in downtown.



Huntington retained control of Yellow Cars of Los Angeles, formally the Los Angeles Railway (1895-1945) that ran down the center of city streets and connected downtown to

neighborhoods within about a six-mile radius. Henry E. Huntington became its owner in 1898. The system slowly morphed into a bus system over the years until the last streetcar went out of service in 1963.

A third transit system, Los Angeles's Pacific Electric Subway opened on November 30, 1925. It ran 1,045 feet under Fourth and Hill Street to a portal near Beverly and Glendale Boulevards. The Subway Terminal Building was a notable feature of the subway. It had 250,000 square feet of office space and five wings with natural sunlight filling its rooms.<sup>20</sup>

### Downtown within the Decentralized Metropolis

Los Angeles was not only arguably America's greatest railroad city; it was also arguably its last. Union Station, built in the northeast corner of downtown, consolidated the remaining service from its predecessors La Grande

Station and Central Station. It was dubbed the "Last of the Great Railway Stations."<sup>21</sup> As important as the railroad was to structuring the urban form of downtown Los Angeles, controversy over its expansion figured in downtown's decline. Further extension of the inter-urban transit network was resisted by some who claimed this was a power grab by downtown interests, thereby forestalling growth in outlying areas. While expansion of a transit system radiating from downtown was greeted by San Fernando Valley property owners, who saw it as the only way to gain access to development interest, it was opposed by champions of decentralization, including C.A. Dykstra, an executive at the Los Angeles Department of Water and Power. He was joined by Gordon Whitnall, director of the Los Angeles City Planning Department, who saw decentralization, automobility and horizontal growth as the key ingredients to rescuing Los Angeles from the urban problems that haunted large eastern cities, most notably New York. Decentralization

<sup>18</sup> Mike Davies, *Dead Cities and Other Tales* (New York: The New Press, 2003; orig ed. 2002), 132.  
<sup>19</sup> Rubén Martínez "Occupy's Deep L.A. Roots," *Los Angeles Times* (Los Angeles, CA), December 09, 2011.

<sup>20</sup> Jim Walker, *Los Angeles Railway Yellow Cars*, [Portsmouth, NH: Arcadia Publishing, October 2007].  
<sup>21</sup> National Registrar Information System, *National Park Service, National Register of Historic Places*, March 13, 2009; [http://nrip.focus.nps.gov/natreg/docs/All\\_Data.html](http://nrip.focus.nps.gov/natreg/docs/All_Data.html)

# MACHINE AGE

Downtown Los Angeles 1870 to 1945: A machine for office work  
Integrating the city, building, and desk through efficiency, economies, and scientific management

World War I

Black Tuesday

Great Depression

CITY

**1910**  
Pershing Square is renovated in the Beaux Arts style favored by City Beautiful reformers



**1911**  
Updated height limit ordinance of 150 feet is passed

**1911**  
The "Great Merger" occurs: Southern Pacific Railroad purchases most of the Pacific Electric Railway stock

**1912**  
Portable Typewriter: Becomes more widely available and increasingly used in business administration

**1913**  
Belinograph: First facsimile machine capable of using phone lines to send basic data

**1911**  
Fordist regimes around time, space, and the selves of workers begin influencing office space, particularly as firms and workforces grow larger to handle administrative functions



**1920**  
Broadway & 5th St. in downtown Los Angeles

**1920s**  
The Hall of Justice, the Japanese Union Church, Great Western Savings, the Sun Drug building, the Westinghouse Electric and Manufacturing buildings, and the Roosevelt Office Building are erected in downtown Los Angeles

**1920s**  
California is the largest petroleum industry in America, headquartered in downtown Los Angeles

**1924**  
Plans for the Hollywood Freeway officially begin

**1920s**  
The Spring Street area downtown LA becomes the banking center

**1924**  
Frederick Law Olmsted's, Jr., and Harland Bartholomew's 1924 Major Street Traffic Plan for Los Angeles is published



**1925**  
"May Live to See"

Projecting forward to 1950, this futuristic vision of the city is based upon a vertical layering of functions in the name of increased speed and efficiency, even as Los Angeles and many other US industrial cities continue on a path of decentralization that begins as early as the late 1920s

**1920s**  
Banking is centered in downtown. The Spring Street Financial District home to Bank of America, the Crocker National Bank, the International Savings and Exchange Bank and the Los Angeles Stock Exchange



**1930**  
Downtown Los Angeles: Broadway at Seventh Street

The largest electric railway in the world at its greatest extent, around 1925: the Pacific Electric Railway or Red Car system connected the downtown employment centers to worker dormitory suburbs in Los Angeles and Orange Counties, and beyond to San Bernardino County and Riverside

**1929**  
Downtown Los Angeles has 130 buildings ten stories or taller (as many as Detroit, Philadelphia or Boston)

**1931**  
Empire State Building is completed

**1930s**  
Numerous very old and historic buildings in downtown are demolished to make way for street-level parking lots



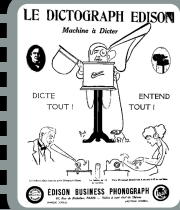
**1939**  
Johnson Wax Building

Frank Lloyd Wright's Johnson Wax Building was designed to clearly impart and reinforce corporate values, creating an architecture of work based upon the creation of a particular identity of work with its lack of any reference to the exterior beyond the space of work. The plan reinforces the internalized identification of the worker with the corporation

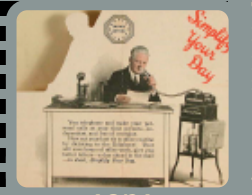
BLDG



**1911**  
Ad from the Sandusky Register  
Viewed primarily as a business appliance, telephone use by women for domestic use is at first discouraged and then celebrated by service providers



**1912**  
Edison Business Phonograph  
As had already occurred in industry, office work is subject to de-skilling. Stenography, once considered an essential skill among professional secretaries, is largely replaced by "business phonographs" - dictation machines



**1921**  
Ediphone Brochure

The Ediphone Dictating Machine promises to not only make the process of dictating more efficient, but also to ensure greater leisure time as a result, reinforcing time as the basic unit of work



**1920s**  
Selectomatic Elevators

**1922-1923**  
Biltmore Hotel, Ritz Hotel and Astor Hotel are built in downtown LA

**1921**  
Filofax Personal Organizer: Gives visual and tangible importance to an organized professional life through the organizer's calendar

**1924**  
Spiral Notebook: Production starts on the most used office notebook



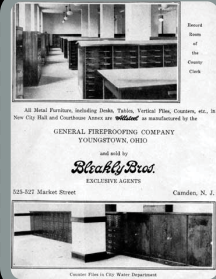
**1920s**  
Foot Lever Addressing Machine  
The Foot Lever Addressing Machine is described as a machine that is not only efficient but also easy to use, reinforcing the increasing integration of user and machine within the greater aspiration for efficiency

**1925**  
Single Use Carbon Paper: Predating the Xerox machine, people can create a copy of a document. Carbon Paper was coupled with typewriters



**1928**  
King Vidor film still "The Crowd"

The worker is valued for his ability to systematically replicate the efficiency of an industrial era machine



**1930**  
Bleakly Brothers, Camden Courier Post  
The standardization and efficiency of new storage equipment is highlighted. The question of the storage of documentation remains one of the key links between an increasingly mobile work being tied to a physical base

**1932**  
The Principles of Indexing and Filing is published as a guide to office managers and workers to gain maximum efficiency from major advancements in office furniture, like the vertical filing cabinet

The office takes on Taylorist aspects of the factory floor, systematizing operations by coupling new appliances with new business systems

**1937**  
Xerography: Copying process is invented without the use of liquid chemicals



**1940**  
Typewriter  
The image of the secretary is gradually emerging to take a more visible place beside the technological apparatuses of work, which previously had often been depicted devoid of users

1910

1915

1920

1925

1930

1935

1940



advocates focused their ire on a proposal to build New York City-like elevated transit in downtown Los Angeles; in the end, none were built.<sup>22</sup>

While some downtown businesses, retailers, and property owners became concerned about downtown's decline, and organized to marshal the local political will and resources to reverse it, not everyone shared their conception of downtown as central to the city's image or even necessary. It was no longer true that "every city must have one large central business district," wrote E.E. East, chief engineer of the Automobile Club of Southern California. "We find in the metropolitan area of Los Angeles more than a hundred trading areas where every commodity and service essential to everyday life may be obtained."

Indeed, as experienced in other cities, new rivals to downtown sprang up with regularity, creating a distinct political constituency sep-

arate from downtown interests, and one eager to champion urban decentralization. Wilshire Boulevard became the conduit for decentralization and the city's new orientation to automobility. Bullock's Wilshire, a branch of the famous downtown department store, was among the first Los Angeles department store to cater to customers arriving by automobile. A.W. Ross developed Miracle Mile along Wilshire Boulevard with a clear orientation to the automobile, inventing car-oriented urban form in the process. Further down Wilshire Boulevard, the Janss Brothers established Westwood Village, a Mediterranean themed shopping center along side the new Southern Branch of the University of California.<sup>23</sup>

As retail activity followed consumers to the suburbs, downtown lost its hold on other kinds of employment too. The motion picture industry, having decamped from the east coast in search of a better climate for production and refuge from Thomas Edison's patent en-

forcers, located not in downtown but to the north, first in Edendale and then in Hollywood, where rents were cheaper and outdoor scenery more accessible. Office work also increasingly took place elsewhere. An agglomeration of insurance companies concentrated along a segment of Wilshire Boulevard in Hancock Park.

**With its long-standing antipathy to east coast style urbanism, its vast amounts of developable land (and much of it accessible by inter-urban transit), a bevy of decentralization advocates within local government, and a growing set of economic interests opposed to**

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**downtown's hegemony, Los Angeles decentralized more quickly than any other US city.**

By 1948, Los Angeles was the only city among the 18 largest US cities where downtown stores were responsible for less than 10 percent of the metropolitan retail trade.<sup>24</sup> Between the 1920's and the 1950's, a period when Los Angeles's population tripled, the number of people who went downtown increased by less than 10 percent.<sup>25</sup> On a typical day in 1953 only 15 percent of the population entered the central business district, down from 41 percent in 1926.<sup>26</sup> Downtown construction remained dormant even after the somnolence of the World War II years passed. In the meanwhile, 9 million square feet of office space were developed in Century City, on the former 20th Century Fox studio site. New concentrations of office uses occurred in Westwood and more recently in Santa Monica. And while offices would con-

tinue to be the predominant land use downtown, beginning in the 1960's the majority of Los Angeles office space would be located outside downtown, strung along the Wilshire Corridor as it wound its way west towards the Pacific Ocean.<sup>27</sup>

The increasing dominance of the automobile—that is private transportation—and downtown's antagonism to it led planners and engineers to suggest increased automobile access, particularly freeway access, as a remedy to downtown's languor. As early as 1916 plans were backed by the Automobile Club of Southern California whose primary goal was to build a fast road connecting downtown Los Angeles directly to Pasadena. Some City Beautiful era plans focused on the park like aspects of the road while other functional ones focused on its contribution to congestion relief. Frederick Law Olmsted's, Jr., and Harland Bartholomew's 1924 *Major Street Traffic Plan for Los Angeles*, while concentrating on traffic relief and noting

that the Arroyo Seco Parkway would be a major highway, suggested that it be built as a parkway, giving motorists "a great deal of incidental recreation and pleasure".<sup>28</sup> By the mid-1930's, plans for a primarily recreational parkway had been overshadowed by the need to carry large numbers of commuters into downtown. Plans for the Hollywood Freeway officially began in 1924 when Los Angeles voters approved a "stop -free express highway" between downtown and the San Fernando Valley. The first segment built was a one and a half mile stretch through the Cahuenga Pass above Hollywood; it opened on June 15, 1940.<sup>29</sup> As construction of the Interstate Highway System advanced after World War II, downtown freeway access was seldom neglected. Nevertheless, at the same time it seemed as if freeway access only provided more opportunities to bypass downtown. One observer of DTLA wrote, "*nobody loves downtown....downtown is something he and other freeway drivers are pleased to hurtle by everyday without stopping.*"<sup>30</sup>

Once access was provided, downtown automobile storage issues began. By 1930, 250,000 vehicles a day poured into downtown Los Angeles.<sup>31</sup> Pershing Square was renovated in 1910 in the Beaux Arts style favored by City Beautiful reformers, but having fallen into decline after World War II, the entire park was demolished and excavated in 1952 to build a four-story underground parking garage. From 1930 to the 1960's, numerous old and historic buildings in downtown were demolished to make way for street-level parking lots, a more profitable option than preservation of the buildings and finding new occupants for them. Much of this was arguably in response to zoning policies adopted by the City of Los Angeles, first in 1946 and then strengthened in 1960, setting high requirements for the provision of off-street parking.

The emphasis on automobile access and storage was accompanied by attempts to apply successful suburban formulations to a struggling downtown. Among these was the shopping mall, in a

<sup>31</sup> Simon, "Hollywood Freeway Spans Magic and Might of L.A."

new almost subterranean configuration at the Los Angeles Mall, named ARCO Plaza and then again more recently at 7th and Figueroa. Arguably now the most suburban of downtown boulevards, Grand Avenue was reconstructed with two-tiers, one above ground for patron drop-off and another below for parking and deliveries. The massive parking garages on which downtown's cultural palaces rest give many, especially the Music Center's various pavilions, an uncomfortable boost above street level making pedestrian accessibility to these places awkward at best. In portions of a redeveloped Bunker Hill, elevated walkways were constructed between buildings to allow pedestrians access to downtown opportunities without being in conflict with vehicle traffic. That being said, efforts to reinsert pedestrians downtown, often in the most inhospitable places, have been recurrent. To wit Park 101 is the resurrection of a twice-failed idea to span US 101 in downtown through pedestrian reconnections.

**The Non-central CBD: Downtown in the Polycentric City**

As downtown languished for decades, Los Angeles as a whole flourished, a testament to downtown's vestigial nature. A significant amount of scholarship has attempted to make sense of Los Angeles, and downtown in particular within the metropolitan economy.

**Telecommunications technology, the growth in information intensive work, deregulation, and globalization were all said to contribute to downtown's declining fortunes and the growth of new centers in the area.**

Vertical dismantling of firms, including the outsourcing of many office functions and the growth in network organization forms, has

<sup>22</sup> Martin Wachs, "Autos, Transit, and the Sprawl of Los Angeles: The 1920s," *Journal of the American Planning Association* 50.3 (1984): 297-310.  
<sup>23</sup> Robert M. Fogelson, *Downtown: Its Rise and Fall, 1880-1950*, (New Haven: Yale University Press, 2003), 22.

<sup>24</sup> Arthur L. Grey Jr., "Los Angeles: Urban Prototype," *Land Economics* (1959): 232-242.  
<sup>25</sup> Ibid.  
<sup>26</sup> Ibid.

<sup>27</sup> Genevieve Giuliano and Kenneth A. Small, "Subcenters in the Los Angeles Region," *Regional Science and Urban Economics* 21.2 (1991): 163-182.

<sup>28</sup> Frederick Law Olmsted, Jr. and Harland Bartholomew's Major Street Traffic Plan For Los Angeles, County of Los Angeles, May 8, 1929, [http://libraryarchives.metro.net/DPCTL/trafficplans/1924\\_traffic\\_street\\_plan.pdf](http://libraryarchives.metro.net/DPCTL/trafficplans/1924_traffic_street_plan.pdf).

<sup>29</sup> Richard Simon, "Hollywood Freeway Spans Magic and Might of L.A." *Los Angeles Times* (Los Angeles, CA), December 19, 1994.

<sup>30</sup> Fogelson, *Downtown: Its Rise and Fall*, 22

City [Place]

23



been identified among the culprits. So have vast industry consolidations that have left fewer firms overall in many sectors. Reliance on the automobile as the citizenry's primary mode of transportation has also been blamed. In the early 1990's Giuliano and Small identified 29 existing employment centers and three additional emerging ones in Los Angeles. The four largest centers and one smaller one are located on an east west arc traveling from Hollywood to the Pacific Ocean.<sup>32</sup> Despite the large number of centers, the traditional CBD, even in Los Angeles, remains important; while it no longer accounts for the majority of employment, it has twice as many employees as the next largest center in Giuliano's census. And the new office centers appear to be homogenous rather than heterogeneous. While some of them do mimic the variety of downtown, many appear too specialized and too homogeneous to compliment one another.

The polycentric thesis and downtown's place among the constellation of centers has been

challenged by new evidence about how Los Angeles continues to urbanize. Since 1970 the number of sub-centers declined from each year analyzed to the next, and the proportion of regional jobs in all sub-centers has remained small and fell from year to year, even when the number of sub-centers was held constant.<sup>33</sup> The results suggest that the Los Angeles region may more accurately be described as dispersed rather than a polycentric metropolis or as a kind of metropolitan mat, as geographer Ed Soja has described it, where the entire metropolis is more or less developed at a uniform density, though through a variety of levels of capital investment, employment is scattered throughout.<sup>34</sup> The implications for downtown under either scenario are significant.

Downtown boosters largely rejected revised thinking about Los Angeles and the questioning of downtown's importance to the city that came with it. Asserting that great cities require great downtowns, they aspire to first lure

businesses and then well-to-do residents to the central city. Many of them believed that the chief obstacle to achieving these goals was the presence of swaths of neglected residential areas subject to deferred maintenance ringing downtown. Chief among these was the once fashionable Bunker Hill, which had become one of the city's most densely populated areas due to the Victorian mansions being subdivided into apartments, but which had continued to decline with the decreasing fortunes of downtown. The Community Redevelopment Agency (CRA) of the City of Los Angeles undertook the Bunker Hill Redevelopment Project in 1955, including a massive slum clearance project that leveled homes, up-zoned the entire neighborhood, flattened the topography, and cleared land for future commercial skyscraper development.

**When the height limit of buildings for Los Angeles was finally raised, developers built some of the**

**tallest skyscrapers in the region to take advantage of the area's existing dense zoning, and the tax advantages associated with speculative office buildings.**

In approving such projects, the city sought to project a modern, sophisticated image and provide an iconic skyline against a backdrop of mountains it had not achieved in an earlier era.

Even as redevelopment efforts were posting mixed results, the champions of public transit in Los Angeles had begun designing and delivering a downtown-centered light rail system less than 30 years after it converted its original intra-urban rail transit system to a public transit system based exclusively on buses. The light rail Blue Line opened in 1990 at a cost of \$877 million, connecting downtown Los Angeles to Long Beach. The Red Line, a heavy rail subway running

between downtown Los Angeles and North Hollywood, via Hollywood and the Mid-Wilshire district, followed in 1993. Downtown and Union Station in particular, thus far remain the hub of the regional transit network.

At the same time, the redevelopment project aggravated downtown's loss of population. The population living within one mile of 7th and Broadway (the center of the DTLA for decades) was 105,800 in 1940. By 2000 the population had reduced by 55 percent.<sup>35</sup> This further challenged remaining downtown stores, restaurants, and movie theaters to succeed at when new, convenient shopping centers and cineplexes were blossoming on the westside and in the San Gabriel and San Fernando Valleys.

The Bunker Hill Redevelopment project was the longest of its kind in Los Angeles history, and ended prematurely with defunding community redevelopment agencies throughout California last year. However, the majority of the skyscrap-

ers on Bunker Hill were built in the 1980's under this project, with at least one building completed every year.<sup>36</sup>

**Alternatives to the Central Business District: Downtown as Entertainment Center, Barrio, and Upscale Neighborhood**

Re-attracting business to downtown proved a difficult task. Industry consolidations, particular in the financial and energy sectors, caused many of those firms to cease to exist. Many business service firms, decamped for new Westside locations closer to chief executives' residences. When downtown's remaining financial corporations moved to the newer buildings, they left former Spring Street Financial District devoid of tenants above the ground floor. Following the corporate headquarters' moving six blocks west, the large department stores on Broadway shuttered. By the 1980's all were closed.<sup>37</sup>

<sup>32</sup> Giuliano and Small. "Subcenters in the Los Angeles region."

<sup>33</sup> Ibid.

<sup>34</sup> Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions*, (Oxford: Basil Blackwell, 2000).

<sup>35</sup> Mike Davis, *City of Quartz: Excavating the Future in Los Angeles*. (New York: Verso, 1990).

<sup>36</sup> Richard W. Stevenson, "Office Clut Spreads California," *New York Times* (New York, NY, November 11, 1991).

<sup>37</sup> Davis, *City of Quartz*.

Momentum died down in the 1990's, with the economic contraction, after the fifty-two story, Two California Plaza was finished. At the turn of the century, the vacancy rate for downtown commercial skyscrapers was 26%, one of the highest in the nation for that time. Planned office towers were canceled, including California Plaza Three, and the 4-towered Metropolis.

Yet even as the vision of resurrecting downtown as Southern California's command and control center was dimming, alternative visions for downtown were gaining ground. For instance, Central to the resurgence of Bunker Hill has been the construction of new public venues along Grand Avenue to compliment the three existing venues at the Music Center. These include, in some cases, masterworks by some of the world's most renowned architects, while branding has largely trumped urbanism within the redevelopment project. These projects include Frank Gehry's Walt Disney Concert Hall Rafael Moneo's Cathedral of Our Lady of the

Angels, Arata Isosaki's Museum of Contemporary Art, Coop Himmelbau's High School 9, and immi- nently, Diller Scofidio + Renfro's Broad Collection. In February 2007, the LA City Council and the County Board of Supervisors approved the \$2.05 billion Grand Avenue Project, which over the next 10 years is planned to yield over 2,000 new residential units, with over 400 designated as affordable units for low-income families; 1 million square feet of office space; a Mandarin Oriental hotel; and 600,000 square feet of retail and entertainment space.<sup>38</sup> Office space and residential units will be in several skyscrapers ranging from 35-55 stories. Officials originally hoped to break ground in December 2007; as of February 2013, only the first part of this project, the civic park connecting City Hall to Bunker Hill, has been completed.

Popular culture and sport also claimed a stake in downtown. The Staples Center, opened in 1999, has contributed immensely to downtown's revitalization, adding 250 events and nearly

4,000,000 visitors per year to the neighborhood. Since the opening of the Staples Center, L.A. Live was constructed which includes the Nokia Theatre, the Nokia Club, the Ritz Carlton Hotel and Residences and more recently a plan to bring football back to Los Angeles has emerged in the form of Farmer's Field.<sup>39</sup>

Other areas underwent a kind of resurgence that, while highly productive for rents, was not always welcome. However, the Broadway theaters saw the potential of the Spanish-language movie houses in the 1950's, beginning with the conversion of the Million Dollar Theater in the 1950's to a Spanish-language film house. The "Mexicanization" of Broadway is all but complete, and is a challenge to preservationists and downtown Los Angeles boosters. Virtually all of the movie theaters on the street have fallen into disuse and disrepair, and some replaced with parking lots. The department stores have closed, but Broadway has for decades been the premier shopping destination for working class Latinos.<sup>40</sup> During

this time Little Tokyo redeveloped as Japanese firms sought to expand overseas, locate branch headquarters in Southern California, expand their off-shore banking system and develop new hotels and shopping plazas to serve overseas Japanese.<sup>41</sup> But Chinatown has not experienced the same level of renewal, as new waves of immigrants, particularly Taiwanese, have focused their investments of the new suburban Chinatowns in the San Gabriel Valley rather than among the Cantonese, and more recently Vietnamese that dominate downtown's Chinatown. As Westside rents rose, especially in places like Santa Monica and Venice, a once beach bound bohemia drifted east, first to Little Tokyo, then to new a new artist's district, and recently along Chinatown's Chung King Road.

### Alternate Downtowns: Adapting the Downtown Office Building

Because of the downtown office market's migration west to Bunker Hill and the Financial

District, many historic office buildings were left intact, used for storage or remaining empty during recent decades. In 1999, the Los Angeles City Council passed an adaptive reuse ordinance, making it easier for developers to convert outmoded, vacant office and commercial buildings into renovated lofts and luxury apartment and condo complexes. As of early 2009, 14,561 residential units had been created under the adaptive reuse ordinance, leading to an increase in the residential population.

**With 28,878 residents in 2006 and 39,537 in 2008, a 36.9% increase, downtown Los Angeles has seen new life and reinvestment.**

On August 7, 2007, the Los Angeles City Council approved sweeping changes in zoning and development rules for the downtown area. Strongly advocated by Mayor Antonio Villaraigosa, the

changes allow larger and denser developments downtown; developers who reserve 15 percent of their units for low-income residents are now exempt from some open-space requirements and can make their buildings 35 percent larger than current zoning codes allow. So downtown Los Angeles has reinvented itself. It is not as central to the regional economy as it once was, and the business of downtown is increasingly entertainment oriented. Furthermore, now with an influx of residents, it is now being transformed into a neighborhood, and becoming distinctly urban, offering the kinds of amenities and residential choices, if not conveniences that are difficult to access in such close proximity in other parts of Los Angeles.

### Summation

Architect Norman Foster has argued "the thing that attracts us to the city is the chance encounter, the knowledge that you'll be able to start here, end up here and go back there, but that

<sup>38</sup> Kathleen Nye Flynn and Kathryn Maese, "Grand Avenue's Grand Slam," *Los Angeles Downtown News*, February 19, 2007, [http://www.ladowntownnews.com/news/grand-avenue-s-grand-slam/article\\_16634787-5dc4-5c2f-a075-d5440e320174.html](http://www.ladowntownnews.com/news/grand-avenue-s-grand-slam/article_16634787-5dc4-5c2f-a075-d5440e320174.html).

<sup>39</sup> AEG "Nokia Theater L.A. Live Launches New Era for Live Entertainment," [Press Release, October 17, 2007].

<sup>40</sup> Don Parson, "The Search for a Centre: The Recomposition of Race, Class and Space in Los Angeles," *International Journal of Urban and Regional Research* 17.2 (1993): 232-240.

<sup>41</sup> Mike Davis, "Chinatown Part Two?: The Internationalization of Downtown Los Angeles," *The Urban Sociology Reader* 17 (2005): 232-240.

something unexpected will happen along the way that you'll make a discovery."<sup>42</sup> The serendipity Foster describes has long been a hallmark of the particular urbanism of downtowns. Yet, as anybody who has spent much time here knows a key element of the civic personality of Los Angeles—and many places like it—is that it manages to be an inventive and globally important city without giving its residents the chance to discover much “along the way” or through happenstance.

**Los Angeles's emergence in the 20th century suggested that metropolitan regions, for better and worse, could grow huge while seeming to rule out the chance encounter that Foster holds up as an urban ideal, and**

**that downtowns once fostered.**

<sup>42</sup> As quoted by Christopher Hawthorne in “Urbanized: Examines the Growth of City Life,” *Los Angeles Times* (Los Angeles, CA), September 24, 2011.



# BUILDING [ENCLOSURE]

With the rise of industrialization, specific areas of cities were established as mono-specialized zones. As a result, many of the previously mixed production/consumption programs of buildings in urban centers were emptying themselves of fabrication functions and becoming increasingly available to emerging professions. It was projects such as The Burgher House in the thirteenth and fourteenth centuries that demonstrated a combination of domestic and work space in an efficient striation of space based on a vertical organization that began to disappear. In this case, buildings with the ground floor devoted to commercial activity—selling the craft (for example, barrel making, silver working, or glass blowing) featured a wide frontage to the street. The space of production was either on the ground floor for ease of transport or on the top floor for maximum day lighting in the case of crafts. The second floor was often given over to the domestic space of the craftsman’s family. The rental component involving the apprentice and journeymen would typically be

in the attic or alternatively the third floor. Additionally, the Burgher House would also accommodate all storage requirements for the production of the craft on site. This was a fully self-sufficient domestic/work unit. While previously these mixed use buildings had been often dedicated to commercial activities only on the ground floor, the rise of entities such as larger department stores, which increasingly aggregated together to form a larger whole, necessitated an entire building devoted only to commerce. These factors led to the increasingly mono-functional office building. With the introduction of the elevator, the possibility of exaggerating this mono-functional stacking of office program was taken even further. In this stage we can see that although the program is entirely non-domestic, the public face of the building still alludes strongly to an established formal tradition, albeit on a grander scale – foreshadowing even bigger scalar shifts to come.

## The Rise of the Service Economy in the Postindustrial Age

The postindustrial economy of North America set off a wave of demand for space dedicated to office work in the 20th century. By 1998 it was estimated that 1 in 5 Americans worked in a dedicated office building.<sup>43</sup> This section aims to uncover many of the changes in the office building typology and how they manifested over time in built form. The overriding shift has seen Modernist spheres of separation, functional zones distinguished planimetrically—brought into closer contact with one another through vertical layering, blending and stacking.

**While suburban homes were located far from the homogenous concentration of office towers in central business districts, new working demands and economics**

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## of living are forming new proximity hybrids.

The postindustrial economy, in fusing enterprise and identity, has driven architectural form towards increasingly complex and intertwined spaces of living and working.

Throughout the 20th century, technological achievements in office tower design have revealed an unyielding positivist push towards performance – performance that was measured architecturally, financially and in worker productivity. Throughout history, each metric of performance pushed the other two in a reinforcing feedback loop. As such, the history of the office tower— the building form associated most symbolically with the autonomous separation of specific function—and of the image of downtowns reveals a deep integration of tectonics, economics and labor.

This feedback loop shaped the architectural tendency towards flexible shells capable of

accommodating a myriad of temporary and complex arrangements, and reveals the larger trends of postmodernism. To accommodate faster cycles of change, structural tectonics, material separations and environmental control systems increasingly manifest themselves as a robust but generic architectural frame of infrastructure capable of adapting to the rapidly shifting needs, both material and immaterial, of the work they shelter.

## Postindustrial Postmodernism in the DTLA

With significant swathes of Los Angeles’s downtown core of office towers built in the late 1970’s and 1980’s, DTLA stands as an exemplar of the postmodern architectural moment in which the image and identity of work caught up with and overtook the material necessity of office work per se. The quintessential postmodern architectural characteristic of historic references displaced in time and space is

symptomatic of the broader conception that the postmodern condition represented a deep disjunction between the particularities of place and the specificities of time. The generic, hollowed-out shell quality of many of DTLA’s office space, exemplified by the Bunker Hill redevelopment, represents an architecture that was built to accommodate the vagaries of speculation and the insertion of an unpredictable quantity and quality of interior of work.



We begin by examining how 20th century structural innovation of office towers developed to aid in the maximization of land-rental

<sup>43</sup> Jo Allen Cause, Mark Eppli, Michael Hickok and Wade Ragas, *Office Development Handbook* (Washington: Urban Land Institute, 1998).

# ELECTRONIC AGE

Downtown Los Angeles 1945-1979: A circuit for office work.  
Increasing the worker's flexibility among the building and city through consolidation, decentralization, and mobility.  
World War II

US involvement in Vietnam War

CITY

BLDG

DESK

**1940**  
The first segment of the Hollywood Freeway opens as a one and a half mile stretch through the Cahuenga Pass above Hollywood

**1940s**  
Numerous very old and historic buildings in downtown LA are demolished to make way for street-level parking lots



**1940s**  
Downtown Los Angeles at Broadway & Olympic

**1946**  
Zoning policies that set high requirements for off-street parking in downtown LA begin to be enacted

**1948**  
Los Angeles is the only city among the 18 largest US cities where downtown stores are responsible for less than 10 percent of the metropolitan retail trade

**1949**  
The GSA is established by President Truman to make administrative tasks for the federal government more efficient



**1951**  
City Hall Building Downtown LA

City Hall remains downtown's tallest building for decades. While strict building height limits are lifted in 1957, significant large-scale office tower construction and the creation of a downtown skyline does not occur until the late 1980s

**1952**  
Pershing Square is demolished and excavated in 1952 to build a three-story underground parking garage



**1952**  
View from City Hall

Early downtown is driven by a desire to provide the CBD with suburban functional separations and levels of automobile access

**1953**  
15% of the population enters the CBD

**1950s**  
Numerous old and historic buildings in downtown LA are demolished to make way for street-level parking lots

**1955**  
The CRA undertakes the Bunker Hill Redevelopment Project

**1957**  
1911 height limit ordinance is repealed



**1960**  
Redevelopment of Bunker Hill

The Federal Housing Acts of 1949 and 1954 kick-start an "urban renewal" program that would reshape American cities, including downtown Los Angeles, where working class housing is removed to make way for new office construction unfettered by earlier building height limitations

In order to increase a firm's flexible use of capital, physical office assets are converted into office expenses through changes to the federal tax code

**1950s**  
The widespread introduction of Thermopane insulated glass commences

**1950s**  
The Million Dollar Theater in downtown LA is converted into a Spanish-language film house

The Electronic Age brings about the continual compression of worker's appliances for increasing flexibility and portability

**1950s**  
Major engineering shifts: The core and the periphery of the building can now be held in tension reducing the number of interior columns thereby further opening up the office building floor plate

**1947**  
General Petroleum Company Building is completed in downtown LA

**1948**  
Magnetic Tape Audio Recorder: Replaces the phonograph as choice technology for audio recording

**1949**  
Rotary Phone eases use of traditional dial methods with the rotary phone's rapid-spinning dial-face

**1950s**  
Eberhard & Wolfgang Schnelle develop the Bürolandschaft or "office landscape" in Germany in response to the open-plan offices of 1940s America



**1940**  
A female telephone operator in a Bell Systems advertisement



**1945**  
LIFE Magazine. Supersecretary

This supersecretary consolidated many of the functions of a secretary into a single compact, mobile piece of machinery



**1950s**  
Techniplan - To Get Things Done ad  
Through ergonomics, the desk is re-formed to wrap around the worker, collapsing the immediate needs of his work from the scale of the building down to the scale of the desk

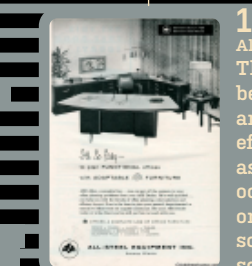


**1956**  
Letter Matic ad

Scientific management continues to seek the integration of human operators with their business appliance, focusing at the scale of gesture rather than the inhabitation of office space



**1957**  
Hughes Products Face to Face ad  
Completely de-spatialized, the worker and his technology appear in an abstracted, spatial void. Here attention has been focused entirely on the direct interaction between the worker and his tools at the scale of the desk



**1958**  
All Steel Equipment Inc ad  
The relationship between flexibility and worker efficiency is assumed not to occur at an urban or even building scale, but at the scale of the room

1940

1945

1950

1955

1960



profit, and thus the agglomeration of office work in the CBD before turning to a structural hollowing-out to allow for the flexible accommodation of increasingly, unknown and speculative future systems. Secondly, this summary will examine how the shift in environmental control systems in office towers gradually encouraged an increasingly hermetic work environment separating the worker not only from the environmental context outside the tower but also from the environmental context of other areas of the building leading to an increasingly atomized and untethered postmodern worker. Thirdly, this section outlines the increasingly flexible and unpredictable capital flows that underpinned this postmodern architectural moment, especially as they relate to the unmooring of the DTLA office worker from the particularities of place within an increasingly speculative environment. Lastly, this section concludes with commentary on the emblematic qualities that DTLA possesses as it stands for a particularly potent manifestation

of the unforgiving, unpredictable and unmoored qualities of the postmodern office building work condition.

### The Downtown Office Building in Los Angeles: Laying the Groundwork for Structural Integration and Separation

The structural developments of high-rise construction that occurred throughout the 20th century reveal an unwavering push towards the maximum structural expression of height at all costs as a manifestation of highest and best use, the regime of spatial efficiency and centralization that supported Fordist industrialism in Los Angeles and elsewhere. When this race for height peaked, pushing towers to extreme height limitations, concerns turned to external factors--mainly the optimization of structural performance. This drive for height was fuelled by a flourish of economic interest during the commercial boom that followed

World War II, which demanded greater and greater square footage of office space.



The structural innovation that facilitated this push was an increased separation between the core and the periphery of the building. This was due to the improved understanding of tensile forces, spread in no small part by the 1950's proselytizing of Buckminster Fuller. Previously, office buildings, like those designed by William Le Baron Jenney in late 19th century Chicago, had been of reticulated frames, masonry load bearing structures relying primarily on structural compression. In Los Angeles the

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downtown building boom of the 1890's-1920's, particularly in the Spring Street Financial District, consisted of this same category of reticulated frame construction. This included Los Angeles first skyscraper, the 13-story Continental Building of 1903.

Major engineering shifts in the 1950's allowed for the widespread acceptance of a new type of equilibrium among separate components functioning together through tensile strength. The core and the periphery of the building were now held in tension eliminating the necessity for a majority of the interior columns, drastically opening up the office building floor plate. Aided and abetted by economic enthusiasm, these structural advancements caused building heights to increase dramatically. However, with this newfound structural efficiency, a new vibration challenge arose with corollary increases in lateral and wind loads, which were dangerously amplified by these soaring new height expectations. By the 1960's this new challenge was being ad-

ressed through the introduction of damping mechanisms that could perform independently from the main bearing structure. A typical dampening solution involved a peripheral load-bearing frame paired with an absorbent mass in the central core.



A precedent in this new approach to knitting structure and dampening together was the Brunswick Building by SOM's Myron Goldsmith and Fazlur Khan completed in 1966. Their structural scheme pioneered a hybrid approach between tension and compression, periphery and core. Goldsmith and Khan knitted together the flexible sway of tension and the rigid resistance of compression within one unified curtain wall façade. This arrangement removed internal columns, creating a much more homogenous floor plate, opening the interior space up to a new level of adaptability. In Los Angeles this structural approach was exemplified by William Pereira's 611 Place completed in 1969. At the time of its completion it dramatically surpassed all other downtown Los Angeles towers in height, relying on its rigid exterior frame of vertical aluminum beams further strengthened by a massive blank concrete shear wall covering one whole face of the building. The race for height at all costs culminated with the 1969 John Hancock Centre by SOM in Chicago. In Los

Angeles this moment of fervor for achieving maximum height was realized in the form of the slender, 62-story Aon Center completed by Charles Luckman in 1973, 4 years after the completion of the Hancock Centre.

The 1970's were characterized by a switch from maximizing the structural and economic viability of height, towards optimizing structural and economic performance. The economic viability of maximum floor space was peaking just as the structural innovation of the period was pushed to its limit. At this moment, the challenge turned towards adapting structure to aid in the quest for efficient and flexible internal space. With the goal of optimizing structure, new attention was paid to the promise of hybrid concrete and steel structures. This new hybrid of concrete core and steel periphery allowed for an unprecedented amount of openings in the ground level curtain wall, improving the urban performance of these towers. A significant example of this new approach to performance and hybridity is the 1978

Citicorp Center in New York by Hugh Stubbins & Associates which generously opens itself out under a looming cantilever at its ground plane plaza. This search towards optimal structural performance through hybridity led to a major innovation in internal dampening based upon structural triangulation.



By triangulating steel as the inner core the necessary stiffness was maintained while the central

core of the building could be hollowed out to create a massive internal atrium. This was deployed dramatically by IM Pei in his 1989 design for the Bank of China, which features an unprecedented internal atrium girded with an equally dramatic triangulated steel dampening system. Through this series of structural innovations, the office tower took on the ability to house broader and more open interiors able to flexibly accept to a myriad of changing interior configurations. These structural innovations allowed the buildings to become increasingly hollow shells. By the 1980's this flexible adaptability was becoming emblematic of the architectural requirements of post-modernism--requirements to adapt to the quicksilver flows of both capital and identity.

### Technological Separation – Advancements in Glass.

Running in parallel to the structural advancements of towers were improvements in glass technologies that allowed for an increasing

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exaggeration of the already prevalent tendency towards definitively separating the interior and the exterior of the office tower. Responding to the demands for increased architectural performance as a means of developing increased labor efficiency, glass manufacturers delivered on demands to provide greater acoustical, thermal and optical separation. Building skin was transitioning from a thick load bearing mass of previous tectonic approaches to a layered accumulation of discrete barriers, each performing a specific type of separation from fireproofing to insulation. However, it was the glass barrier that proved to be able to absorb the broadest range of performative separation with emerging innovations such as layered glass, tinted glass and increasingly structural glass.

The introduction and widespread use of Thermo-pane glass in the 1950's made lightweight, thermally and acoustically insulating glass a central component in the standardization of office tower performance.<sup>44</sup> In creating hermetic inte-

riors, separated from the contingencies of exterior conditions, material innovations such as these glass advancements increased the ability to accommodate interiors that were divorced from the specificity of place and better able to accept the vagaries of global flows of capital in the increasingly networked world of work.

### **Environmental Control – Separating Interior and Exterior or Working Towards Postmodernism**

Parallel to the effect of structural issues on the design of office towers, is a trajectory of increased desire for environmental control, namely the increased separation between a controllable interior and an unpredictable exterior. As the periphery of the office tower began to take on a more integrated structural relationship to the core, coupled with advancements in the thermal qualities of glass, the interior space of the office became increasingly insular and hermetic. While the *mur neutralisant* approach of Le Corbusier

saw the vertical plane of the envelope as integral to the internal experience, the structural elimination of the internal column emphasized the horizontality of the interior, thus disassociating itself from this external vertical interface. With lighter structural requirements, services could increasingly be spread out horizontally across floor plates, again emphasizing a separation between the experience of an internal horizontality from the extreme verticality of the tower's exterior. As the technological capabilities of environmental control advanced, the parallel structural development served to further isolate the interior as an autonomous, internal space--self-contained and self-controlled.

The increasing commercialization of office space in the 1950's saw newfound pressure to improve the artificial interior climate controls. The construction of the United Nations Secretariat building in New York City, while being an utterly non-commercial structure, nevertheless marked this transition as the designers faced the challenge

of integrating environmental control systems within newly developing structural systems.

By 1969, Reyner Banham was noting, largely based upon his observations of Los Angeles in particular, this widespread phenomena of system integration in his *Architecture of the Well-Tempered Environment*. As structural advancements increasingly involved tension space frames stretching over the open floor office space, it followed most efficiently that the environmental control systems were threaded through this open structure. As environmental control became more readily available in commercial office space, standards were increasingly being established. Organizations such as the American School Construction Systems Development Project developed widely adopted internal climate control standards that served to homogenize office environments.<sup>45</sup> However, once these standards of office comfort were established it became complicated to maintain them while trying to adapt to the ever-shifting structural tower innovations of the period.

These structural developments were allowing for deeper floor plates, putting strain on the horizontal distribution of the existing environmental control systems. Dedicated mechanical floors were introduced in order to handle the exacting control standards across an ever-broadening floor plate and rising building height. The mechanical floors operated independently of one another to lessen the energy loss that would occur across one centralized system. As the towers were growing dramatically in height, the necessity for decentralizing the climate control became ever more necessary if the already established standards of environmental comfort were to be maintained. These dedicated mechanical floors were, in turn, able to contribute to the structural performance of the building by being crossed with the vertical stiffening systems prohibited from the open plan office plates. Thus within the extreme verticality of the office tower, the decentralization and increasing independence of individual horizontal floor plates was significant. Heavily influenced by both Taylorist concepts of

labor efficiency as well as the increasing clamor for spatial flexibility, coupled with the rapidly evolving technological capabilities of environmental control systems, a group named the Quickborner Team developed a standard for the ideally controlled office interior that included open flexible floor space, a ceiling that consisted of acoustical insulation, continuous lighting, evenly controlled air temperature and humidity and a sound absorbent raised floor placed over a network of electrical systems.

**The solidification of all these mechanisms of interior environmental control into expected standards quickly made the office interior ubiquitous.**

Significant advancements in structural engineering and building systems contributed to the growing awareness of hori-

<sup>44</sup> Inaki Abalos and Juan Herreros, *Tower and Office* (Cambridge: MIT Press, 2003), 111.

<sup>45</sup> *Ibid.*, 142.

zontal layering within a vertical extrusion. This foreshadowed future advancement that would begin to use this horizontal layering as a mechanism to blur functional boundaries between working and living. The horizontal layering of programmatically, environmentally and spatially distinct entities within a larger infrastructural shell tower is emblematic of the postmodern condition exemplified by Los Angeles office towers. The generic infrastructure maintains the basic standard of environmental comfort but is decentralized enough to accept a myriad of shifting configurations of identities—identities that were increasingly blending what had previously, in Modernist times, been considered sacrosanct in pure and fundamental architectural separation.

#### Changes in the Political Economy of the Office Building: Emergence of Postmodernism

The 1980's saw the solidification of the speculative office building, embraced within the larger

conditions of postmodernity. David Harvey referred to this symptomatic postmodern condition as “the regime of flexible accumulation.”<sup>46</sup> Capital flowed more readily and more widely, stripping regional identity as it accumulated in the form of speculative real estate.

**Federal, political, and economic factors all set the stage for increased office speculation in America.**

These factors built upon earlier tax law changes in the early to mid-1960s, which sparked the increasing separation of services between the design of corporate office buildings and corporate interiors. This led to the related advancement of workplace interiors as a design specialty. An early example of this is the Alcoa Headquarters building in San Francisco of 1964 in which the base building was designed by SOM, but the interior workplace design was executed by Gensler. In the 1980's several Federal Treasury decisions made Foreign Trade Zones within America

increasingly desirable for foreign investment. New financing vehicles were also being developed which allowed backing from a wider array of sources – including the newly developed commercial-backed-mortgage-security.

**These and other, increasingly complex debt structuring, gave developers wider leverage with the booming business of speculative office towers. Thirdly, important tax precedents on Tenant Improvement were established in the 1980's.**

The ruling of the 1987 Moss vs. US Tax Court established that commercial tenant improvements could be expensed as necessary operating cost repairs rather than capital expenditures and were thus exempt from prohibitive taxation levels. The court ruled that these improvements included

“...such parts of a building as walls, partitions, floors, and ceilings, as well as any permanent coverings thereof such as paneling or tiling, windows, and doors... and other components relating to the operation or maintenance of a building.”<sup>47</sup> With the financial encouragement to renovate interiors of office towers frequently it became increasingly desirable for the office tower shell to become as generic and flexible as possible to accommodate such changes. Office interiors were increasingly conceived of as impermanent, disposable and constantly subject to improvement. The focus on both financial and work performance meant that office interiors must now constantly be subject to improvements and change.

#### Birth of Speculative Office Buildings: Postmodernism in Full Swing

Emerging at the same time as Rem Koolhaas' influential 1978 interpretation of the New York Downtown Athletic Club, framed within a *culture*

*of congestion*, the modern North American speculative office building was born—a building that was flexible enough to accommodate a multiplicity of interiors and capable of accepting endless variety. The 1980's saw the confluence of these two major conceptions of the tower—the homogeneity and predictability of the generic, internationally funded speculative office tower and the horizontal interest in the completely heterogeneous activity that could be accommodated within these generic floor plates.

**Stripped of hierarchies and symbolic reference, the office tower boom of the 1980's was based upon the generic form of a tower capable of accepting a multiplicity of ever-changing interiors, just as varied, speculative and**

**temporary as the city itself.**

The tectonic results of these political and economic motivations towards speculative office towers were multifold. Maximization and standardization were the twin operatives. Floor plates spread to their maximum structural allocations. While previous servicing systems may have been displayed, the increasingly advanced and complex servicing equipment was kept as neutral as possible, often behind drop ceilings. With the focus on vertical homogeneity encompassing horizontal variety across the ever-flexible floor plates, new circulation systems were devised to negotiate these striations. Skip-stop and express elevators with designated floor destinations became increasingly commonplace. Tied so closely to the flows of capital, the towers were no longer conceived as autonomous from the city, but rather acknowledged their infrastructural dependence upon the city. The bases of the towers often acknowledged or negotiated these infrastructures. For example

<sup>46</sup> Ibid., 217.

<sup>47</sup> Robert Fesler and Larry Maples, “The Tax Consequences of Tenant Improvements,” *The CPA Journal*, 1996.

in Los Angeles, the Bunker Hill tower development of the 1980's was explicitly designed to accommodate a complex network of traffic circulation in and around its base. Also, the space of the lobby atrium began to take on an entirely different character just as structural innovation was allowing it to expand exponentially in size and grandeur. In a speculative tower accommodating a broad range of tenants with varying agendas, the atrium space, formerly a space of unification and public identity, increasingly became a generic space devoid of any identifying qualities paralleled by its decreasing public function in the private, corporate towers. Less hospitable to the pedestrian, fraught with the need to neutralize conflicting private interests, the atrium became a generic place of fleeting circulation.

The arrival of postmodernism in the realm of downtown Los Angeles office towers came definitively with the 1980's redevelopment of Bunker Hill. The winning scheme by Arthur Erickson featured sleek glass towers generic enough to

absorb any number of shifting corporate identities and polished enough to reflect the image of a bustling and productive place despite a much less crowded reality behind the tinted glass exterior. Numbers suggest that the towers remained woefully under-subscribed for a lengthy period of time. The ultimate example of this is Erickson's 1983 One California Plaza.



The representation of downtown work via Bunker Hill, towering and imposing overhead, had finally given Los Angeles the skylined image of efficient productivity that it had long lacked. Media images such as the opening sequence of *444 South*

*Flower* in the television show *LA Law* further promoted the image of Los Angeles as the glistening international city of the 80's. And yet, given the interchangeable qualities of much of Los Angeles's downtown office towers—symptomatic of postmodernity—the skyline lacked the particularity specific to the city in the broad, squat proportions of many of its pre-World War II towers. While cities such as Chicago and New York were sending up slender spires, Los Angeles was distinctive for its relatively stout structures. While strict height restrictions had long been in place in downtown Los Angeles, capping buildings at 150 feet, these had been loosened by 1957. Nevertheless, regulations involving the accommodation of helicopter landing pads on the tallest towers did reduce the ability to cap buildings with slender, tapering peaks. But this alone does not fully explain the relative breadth of typical downtown Los Angeles floor plates when compared with their narrower counterparts in New York. Instead, it seems that the extreme maximization of the image of a robust, productive

interior pushed the Los Angeles towers to its outer horizontal limit – gaining the utmost breadth of identity imposition from a sidewalk, or perhaps more appropriately street-level perspective. The self-identity to Angelenos of a robust, corporate centre, despite a far more ephemeral reality, created a distinctly and reassuringly stout skyline emblematic of a postmodern condition based upon the image of productivity and work.

**General Services Administration.** The General Services Administration was established in 1949 by President Truman to make administrative tasks for the federal government more efficient. One method to achieve this charge was to provide design standard guidelines to be followed by federal agencies. Thus, they have played a critical and formative role in standardizing the expectations of office space—creating standards that have morphed from their public sector beginnings to the increasingly standardized speculative private sector of office space construction. At the time, the newly formed GSA was tasked with

creating a broad base of standard procedures following World War II including disposing of surplus military equipment, stockpiling necessary equipment in case of further military action and standardizing emergency preparedness. In the 1950's the GSA was tasked with a significant renovation to the White House. By 1962 the agencies' architectural responsibilities increased when they were asked to write recommendations for the Ad Hoc Committee on Federal Office Space. In the same year a "Guiding Principles for Federal Architecture" document was released. In 1994 the GSA introduced their Design Excellence Program to make the design professional selection process for federal projects more efficient. The process is based on a two-part architect/engineer hiring process and is characterized by its engagement with private sector consultants to provide assessments of the professionals in question. Currently the two main bodies of the GSA are the Public Buildings Service and the Federal Acquisition Service. Given this mandated cross-consultation between public and private sectors, the

standards initially introduced by the GSA have increasingly become integrated and implemented within private sector speculative office construction.

The policies of the GSA operate under the perspective that architectural form can determine the efficiency and productivity of work that takes place therein. Accordingly, good design is synonymous with the efficient and productive use of public money. In addition to such determinism, the architecture is also mandated to provide visual symbolism of the "dignity, enterprise, vigor and stability of the American Government." Within this mandate it is decreed that innovation is to be valued over precedent - the guiding principle being the evocation, "We do not imitate – for we are a model unto others." An extensive number of both qualitative and quantitative guidelines reinforce the belief in architectural determinism to produce efficiency and symbolic meaning, which in turn reinforces productivity through cultural association.



The architectural manifestation of such a belief in the formation of efficient and productive work through quantifiable design is demonstrated by the output of the Office of Design and Construction within the GSA. The motivations behind much of their guidelines is towards the optimum scenario of inserting the most recent scientific research towards efficiency (including optimum day lighting conditions, optimum environmental comfort control, best spatial hierarchies of proximity, optimum relationship between storage space and active space among other quantifiable factors) within an existing historically significant building, which cements the other main component of their work strategy—the culturally produced associations of patriotism with productivity. Their twin prerogatives of historic preservation and office efficiency, as well as the closely intertwining of standards between the public and private sectors are demonstrated in Los Angeles’s redevelopment of its downtown Federal Courthouse site. The GSA is currently planning to transfer the ownership of the historic Spring

Street Courthouse to a developer who would then in turn be required to construct a new federal judiciary office building, following all GSA design guidelines on the currently vacant lot at First Street and Broadway.

**This exchange of buildings between the public and private sector, circumscribed by a well-defined design efficiency mandate, suggests the full intersection of office standardization as the result of mutual concerns for speculation and productivity.**

*Urban Land Institute.* The Urban Land Institute, founded in 1936, is a non-profit research organization that aims to facilitate the exchange of

knowledge around broad issues of land use. One of the five main areas of research at the ULI is *office and industrial development*. The institute promotes and exchanges research that investigates strategies that optimize building performance, tenant satisfaction and financial return. This material, published in forms including the *Office Development Handbook*, is disseminated widely creating a broad standardizing influence. Similar to the GSA, architectural determinism based upon financial and productivity performance is at the foundation of its research initiatives.

The ULI guidelines on office design take financial feasibility as the starting point of all design decisions. The ULI touts office speculation as amongst the most financially rewarding and resilient of long term real estate investments. The ULI credits the predictable long-term speculative reward, in part, to the resilience of the medium scaled office building. The ULI states that medium sized office buildings, 10,000 square feet or less, make up over two thirds

of the existing office building stock in America.<sup>48</sup> This medium scale offers the most desirable ratio of initial capital expenditure in construction to maximum return of profit for flexible tenancy. The ideal scenario, according to the ULI, is for an office building to offer an open floor plate to potential tenants in continuous blocks of a minimum of 1,000 square feet. This ideal floor plate-to-service core ratio is determined through an equation of construction costs, zoning and rental rates to determine the most financially desirable investment. ULI notes that these investor driven design decisions have been on the rise since the mid-1980’s with the inverse decline in Build-to-Suit development.

Much of this shift has been attributed to financing changes in the mid-1980’s. **While Build-to-Suit office towers might be funded by local banks, the tendency began to**

**shift towards emerging vehicles of risk-accepting, speculative funding such as nationally and internationally run property trust funds.**

The real estate recession of the late 1980’s and its accumulation of private debt saw a switch towards increasingly public sources of funding for large-scale office tower projects. Risk profiling in such real estate financing became increasingly critical as public bodies exposed themselves to the market speculation.

**This fuelled increasing standardization of office tower design with quantifiable expectations to be derived from increasingly consistent design parameters.**

By the mid-1990’s the balance had tipped definitively towards speculative office towers, risk assessed through standardized design and funded heavily by publicly supported commercial mortgage-backed securities.

In Los Angeles, the turn away from Build-to-Suit office towers and toward speculative towers was dramatic, as it coincided with the full implementation of the long held strict height restrictions as well as broader incentives towards American foreign investment.

**The previously barely existent skyline of Los Angeles was brought into being through the confluence of standardization and speculation.**

Downtown Los Angeles saw a speculative office tower frenzy, largely backed by international investing in the late 1970’s and early

1980’s. Given the focus on profit-driven, speculative, maximized floor plates combined with a seismic wariness to reach the extraordinary height of towers elsewhere, there were widespread concerns about maintaining the regional qualities of sunlight on the streets and an overwhelming tendency for the office towers built in this boom was towards relatively wide, squat buildings. Fuelled by foreign investment, the rate of growth of such bulky towers, quickly forming a heretofore barely existent skyline, was exponential in the 1980’s. The Times reported that by 1985, 75% of the major downtown properties were foreign owned investments – a large proportion backed by Japanese investors.<sup>49</sup> In order to mitigate the risk of such cross-cultural speculative investment, the design emphasis was heavily placed upon proven metrics of standardized performativity.

**Guidelines such as those advocated by the GSA and ULI, outlining**

**quantifiable features such as depth of slab ratios, optimum lighting ratios and servicing standards, became increasingly necessary components of establishing and mitigating investor risk. Such quantifiable standards of architectural performance helped create the setting for the boom in speculative office tower construction, while defining spatial work habits for millions.**

### Summation

In summation, the recent history of the office tower shows a financial trajectory that increasingly encouraged speculative development amidst a loosening of capital flows. This developed through a confluence of multiple factors including increasing enticements for foreign investment, local and federal tax incentives as well as an ever-broadening scope of debt structuring through banking innovations. These financial forces drove the office tower away from purpose built specificity toward a generic, standardized shell infrastructure.

**The speculative office tower was characterized by its vertical homogeneity encapsulating the wildly disparate and fluctuating horizontal**

<sup>48</sup> Jo Allen Gause, Mark Eppli, Michael Hickok and Wade Ragas, *Office Development Handbook* (Washington: Urban Land Institute, 1998), 5.

<sup>49</sup> Mike Davis, *City of Quartz* (New York: Verso, 1990), 135.

# ELECTRONIC AGE

Downtown Los Angeles 1945-1979: A circuit for office work.  
Increasing the worker's flexibility among the building and city through consolidation, decentralization, and mobility.

US involvement in Vietnam War

CITY

1963

Last LA streetcar goes out of service



1963

BuroLandschaft Office Landscape



The BuroLandschaft office landscape is imagined as non-hierarchical space in which collaborations could easily be formed and reformed as necessary. Signaling a shift away from Taylorist ideas of industrial efficiency the BuroLandschaft focuses on the flexible and strategic deployment of human resources and the management of worker-to-worker, as opposed to operator-to-machine interactions

1962

The GSA is asked to write recommendations for the Ad Hoc Committee on Federal Office Space. GSA's "Guiding Principles for Federal Architecture" document is released; these standards influence and are eventually integrated within private sector speculative office construction

The strategic deployment of human resources begins to redefine the post-Taylorist worker from an operator to a team collaborator

1964

Herman Miller develops the Action Office as the first modular business furniture system, laced with low partitions and flexible work desks

1960s

The live/work loft first takes hold with artists in the Soho district of New York City

Commercial real estate practice is restructured to accord with tax code changes and urban renewal incentives, resulting in the speculative office as the primary mode for delivering office space downtown



1966

Alcoa Building San Francisco 1964, Architect: SOM Interiors: Gensler

As tax laws changed in the early to mid-1960s, American corporations began gaining financial advantages by leasing office space, rather than financing and building new headquarters or offices on their own. This change sparked a fundamental separation of services between the design of corporate office buildings and corporate interiors - and led to the related advancement of workplace interiors as a design specialty

1960s

Numerous very old and historic buildings in downtown LA are demolished to make way for street-level parking lots



1967

Jacques Tati, Playtime film still

1966

Brunswick Building is completed in Chicago - first bundled tube skyscraper provides open free spans

1968

Office Planning and Design (1968) by Michael Saphier is published -- one of the first books in the U.S. to discuss and guide the reader in designing the open office; one of the most important steps noted by the author is to interview employees

1969

Reyner Banham notes, largely based upon his observations of Los Angeles, the widespread phenomena of system integration in his book Architecture of the Well-Tempered Environment

1969

611 Place is completed - first Los Angeles bundled tube skyscraper

1969

100 story John Hancock Centre is completed in Chicago

1969

Andrea Branzi No Stop City plan The office landscape is re-imagined as an infrastructural matrix that could allow for a strategy of endless flexibility and mobility within its standardized system

1969

M. Hulot, the protagonist in Jacques Tati's 1967 film Playtime, is continually frustrated by the endless repetition of office cubicles. The drive towards flexibility in both office operations and International Style architecture increasingly produces a bland, featureless and standardized space of work

1970

Bunker Hill House The early luxury housing of Bunker Hill had been subdivided into smaller flats for low-wage workers. Their removal through urban redevelopment programs evacuates downtown of residents, pulling the rug from under downtown retail in the process

As urban agglomerations produce dispersed economies, desires for speed and mobility trump desire for access, resulting in the dispersed, polycentric city

1970

The American School Construction Systems Development Project develops widely adopted internal climate control standards, which serve to homogenize office environments

1970

Planning and Designing the Office Environment is published - outlines steps towards determining HVAC systems and industry standards for lighting

1970



1972

Herman Hertzberger Central Beheer Office

Herman Hertzberger expressed his interest in designing an office complex that was based around the concept of adaptability. Constant change is intended to be accommodated in the basic infrastructural system of assembled modules. Herman Hertzberger's Centraal Beheer offices in the Netherlands feature repeating cube modules. Hertzberger believed that it was the architect's task, not to provide a total solution, but to provide a basic framework within which users could operate flexibly according to their changing needs

1973

Downtown LA The longest redevelopment project in Los Angeles history, the renewal of Bunker Hill sees a new skyscraper or two completed every year. In 1999, commercial office vacancy rates downtown reach 26%, one of the highest in the nation for that time



1973

Aon Center

The 62 story Aon Center is completed making it the tallest building at the time in Los Angeles. The exterior of the building behaves as an iconographic branding for the corporation. The image of the space of work, in many cases, eclipses the necessity for the actual office space in terms of corporate functionality. In the name of efficient spatial flexibility, the core is maintained as distinct from the open floor plan, allowing for spatial customization on a mass scale

1970s

Planning and Designing the Office Environment is published - outlines steps towards determining HVAC systems and industry standards for lighting

1975

1970s

Live/Work lofts are transplanted and re-interpreted by artists in Los Angeles' Venice Beach area

1970s

Granada Building in Los Angeles near Lafayette Park is converted to a live/work space

At the outset of the Electronic age, the worker's machines and desk space have evolved to a point of increasingly liquidated mobility, which is continually evident in the cityscape, as well as the building plans



1976

Digi-Log Briefcase Portability

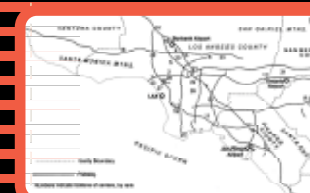
Not only is this technology advertised for its ability to improve worker efficiency, but now the focus of this efficiency is increasingly being tied to worker mobility. The office is reduced to the size of a briefcase that can travel with the worker



1978

Inryco In-Floor Electrical Distribution ad

The increasingly widespread deployment of the raised floor further facilitates the untethering of the worker as their mobility at the scale of the flexibility of the desk was strategically encouraged



1980

Giuliano's Polycentric LA map

The decentralized urban fabric allows for increasing accessibility and automobility from home to various work clusters



1980

Polycentric Los Angeles Photo

The Wilshire Corridor embodies the dissolve of the monocentric city in lieu of more polycentric arteries mixed with residences and offices

1980

BLDG

DESK

1960

1965



**conditions of each tenant's custom floor plate.**

Technologically, the recent history of the office tower shows an initial push towards maximum structural and performative achievement before turning the focus towards what it provided – an increasingly neutral landscape for horizontal user customization. From this initial vertical push to a more horizontal push, the focus shifted towards the performance integration of the core to the periphery within the self-contained entity of the horizontal floor plate. When examining these financial and technological factors in the architectural manifestation of Los Angeles's downtown office towers, compared with alternative work conditions, we see a general tendency towards the dense layering of heterogeneous functions. In stark contrast to the Modernist tendency to planometrically separate functions, the more recent history of office space suggests a closely inter knit horizontal layering of working and living – bringing previously

distinct and homogeneous spheres into intimate contact with one another. Furthermore, the postmodern condition, having taken deep root in Los Angeles, suggests the temporality and flexibility of such ever-shifting arrangements. Set within the necessary infrastructure provided by the robust office tower shells, the reassuring image and identity of work is maintained, while the far more complex and fragile interior condition of work is subjected to constant flows of change.

# DESK

# [EXPERIENCE]

**Among the many motivations expressed for particular arrangements of the space for office work, three kinds are particularly common: those stemming from instrumental rationality, those attached to the desire to reproduce firm culture, and those that would make firm symbols from office plans.**

Thus the production of office space and the manner in which the office interior "organizes" workflows have been variously figured as profit-supporting, productivity-enhancing tools; means for reproducing and giving material presence to the firm and the firm's values; and a way to telegraph both individual workers' status and

to broadcast the firm's reputation to the world. Where rational motivations seek gains in worker efficiency and productivity, cultural motivations seek to leverage worker comfort and emotion to support innovation, retention, and longevity of the enterprises. Symbolic motivations are about creating unique identities and positions for the firm's products and services and helping employees to understand their position within the enterprise, thereby distinguishing their offerings—and their work environments—from competitors. These different motivations reflect the changing character of the office worker as subject in relationship to equally profound changes in terms of regimes around time and space between the Fordist and Post-Fordist industrial city.

Much has been written about how to arrange office work, but the interpretation of office space and the making of some greater social or historical sense of these spaces, has yet to be taken up comprehensively either by the social sciences or by architecture. There is, in fact,

only limited understanding of the common or peculiar inner-workings of private business entities, as social activities. At the same time, historians of architecture have taken only a limited interest in the evolution of, and innovations in, the office interior, focusing their interests instead on office buildings, particularly in the form of urban towers—skyscrapers—as a building type. At any moment in the history of the office, the motivations for arranging the space of office work may be various and multiple, with some motivations being placed in the foreground, with others in the background. The subsequent discussion follows the interweaving of the above motivations in the office's arrangement, while placing these motivations within the historical progression of the office interior. Underlining much of this discussion is a much larger movement regarding the worker in the post-Fordist and postmodern economic system—one where the worker is free of specific location and an increasingly flexible asset.



**Productivity, Taylorism and Fordism.** With the advent of the industrial economies in the late 1800's and early 1900's, especially the version of it advanced by Henry Ford, productivity's relationship to standardized units of time became the ultimate measure of the value of any firm's investment in wage labor. Beginning in the 1880's, Frederick W. Taylor, one of the fathers of scientific management, promulgated the methods whereby human and mechanical processes were quantified, analyzed, and then adjusted to better streamline and enhance overall productivity. Taylorism, as it came to be known, depended on the temporal regime of railroad time that was standard, divisible, and abstract. It advanced spatial regimes of linearity and proximity wherein the subject worker was fragmented into a series of gestures and interactions.

Thus, the application of scientific management to the factory led to the standardization of tasks—leaving a specific duty in the overall course of production to a specific person or

group of people. This system of production reached its apotheosis through its application by Henry Ford, the automotive tycoon, and his efforts to standardize the mass production of products using new methodologies such as the assembly line. Fordism, as it came to be known, was the version of industrialism that placed the greatest emphasis on units and measurement of time, and production over time. It defined workers by their role in the grander scheme of productivity (and later consumption) and can be largely credited with shaping the concept of work and wage in the 20th century. It was Ford, too, that first refigured the worker ultimately as the consumer of his own labor, granting him a “living wage” for participation in mass production, which could be applied towards mass consumption of the same.

**The Taylorist Open Office.** By the 1910's, Fordist regimes around time, space, and the selves of workers began influencing office space, particularly as firms grew and required larger workforces

to handle administrative functions. The industrial office layout was directly inspired by the Taylorist approach to productivity: keeping the worker focused on his particular task and providing opportunity for surveillance by managers. Much like the factory floor was surrounded by various lookout points for supervisors, the Taylorist office kept workers at the center and the managers on the perimeter. Although there were no partitions between desks, we know that workers were to keep communication among themselves to a minimum. The basis for this type of office arrangement is strictly *rational*, following a notion that the more workers were kept on their specific tasks, the greater the productivity and the benefits for the company. The Taylorist office ensured that knowledge-based work was rendered as mechanical and repetitive as possible. With the completion of processes as the ultimate goal, the objective for the worker sitting at any desk was to minimize his/her distractions and errors, and increase the rate at which processes were completed and repeated.



**Early Office Layouts.** Built in 1904 in Buffalo, New York, the Larkin Building was designed by Frank Lloyd Wright as a building to fulfill administrative tasks at Larkin, a mail order soap and china company. Considered the first purpose-designed office environment for a specific organization, the focus of the building was the central work area where managers and clerks processed thousands of orders per day. The innovation of the central atrium was made possible by the recent introduction of the light bulb, enabling Wright to design the kind of neutral, hermetic space with minimal distractions and visual links

to the exterior that labor theorists of the period recommended in the name of both efficiency and greater worker identification with the firm.

The Larkin Building anticipates spatial Taylorist principles soon to be applied to offices nationwide. High levels of productivity were the goal and rationalizing tendencies were present. The Larkin interior was inspired by a deeply paternalistic culture meant to engender a strong sense of affinity between worker and firm, echoing efforts by Pullman, Cadbury, and Salt to mitigate the alienation associated with urban industry by providing echoes of an agrarian past. Workers were surrounded by quotations engraved on the walls directing them towards self-improvement. They were treated to midday educational lectures and concerts and given low cost loans to pursue further education. Much of this identity-forming activity took place in the central atrium, an early example of a workspace driven by rational goals, but accompanied by company-specific cultural and symbolic pursuits.

**Layout and Equipment.** As noted, the Taylorist office was arranged hierarchically: workers in the middle, management on the perimeter. Desks were lined up end-to-end, and desk clutter was kept to a minimum. This rational approach stressed the workers' function as a means to an end, spokes in an otherwise characterless wheel. The employee was essentially abstracted—devoid of any space to define individuality and forbidden unnecessary communication with colleagues. This work/worker dynamic, the imperatives of assembly line production, the almost tyranny of the time clock, and the railroad man's pocket watch, removed most connections between workers and the ultimate results of their collective efforts. The traditional association between an individual and his labor was irrevocably rendered asunder.

With the office taking on aspects of the factory floor, systems for filing and organization were developed to further systematize operations. Numerical and alphabetical systems kept track of the increasing amount of paper being used,

marked, catalogued, stored, and retrieved. These systems were coupled with new office equipment like typewriters, stenographs, and telephones. Male clerks and scribes were replaced by a new, less expensive, workforce of women trained to operate the new machinery. Beginning in 1910, the Hoskins Manufacturing Catalog proclaimed, “The Vertical Filing System permits expansion and contraction without limit and without necessitating troublesome rearrangement.” The 1932 text, *The Principles of Indexing and Filing*, guided office managers and workers to gain maximum efficiency from major advancements in office furniture, like the vertical filing cabinet. “Secretarial colleges” sprang up to inculcate women workers to the new regime and familiarize them with the new technologies.

Leading into the 1920’s, as advances in technology allowed for the construction of taller high-rises, the open office layout persisted along production-oriented lines. This manifested itself as large open workrooms with several rows of lined-up

desks, allowing the segregation of specific repetitive tasks in areas of the workspace, and the close supervision of workers by managerial staff. As administrative services increasingly occupied downtowns, a strictly economic reason dictated interior arrangements—namely, the cost of interior space and the desire to keep costs down by fitting a lot of desks into one space. In some firms, secretarial pools replaced secretaries assigned to any one executive. While firms had long separated the back office, the space dedicated to running the company, from the front office where customer-facing staff worked, given the price of downtown rents these were increasingly located outside the company headquarter, first at the edge of downtown, and then in places far afield with cheaper rent and lower labor costs.

At the basis of any organization’s offices is the desire to support the bottom line—increased productivity leading ultimately to greater profit. In that sense, Taylorist concerns—the effect of keeping office processes efficient through scien-

tific management and spatial arrangement—remain central to office interior design. But other concerns have also been advanced, and in many firms flexibility and quick response to change has trumped concerns for efficiency. While understanding the processes of work remains important to any office designer, the Taylorist approach has been subdued and repackaged, widening its focus now to include the exigencies of real estate, worker comfort, firm culture, and eventually extending the firm’s brand.

The Johnson Wax Building (1939) designed by Frank Lloyd Wright carried on Taylorism, but, like the Larkin Building before, imparted a cultural element that communicated a set of corporate values to workers. While the earlier Larkin took the office as a place of familial identification, the Johnson Wax takes this identification to a whole new level of aspirational, transcendent fervor (ultimately leading to better and more efficient work habits). The building is dominated by the completely hermetic Great Workroom in which

the totally circular identification of the employer with the corporation is unsullied by any exterior reference. The worker no longer has any reference point beyond this dominating atrium space. Their work is introverted within the building just as the emergent knowledge worker internalized their tasks as abstracted from physical production. In this case the completely internalized atrium has not only become a place of identity-building communal gathering, as in the Larkin, but also subsumes all of the work within this identity.

***Post War Interiors: Open Layout and the Burolandschaft.*** Dominating the early incarnations of the office tower was the work of Chicago architect Louis Sullivan and his aestheticized *tall office building artistically considered*. Embedded within Sullivan’s own “form follows function” was the seed of performative empiricism in office towers to come. Historian Colin Rowe asserted Sullivan had already accepted the conditions of the speculator when discussing the precedent setting Chicago frame. It was deter-

ined by the 1920’s office boom that the open plan floor plate was the most flexible and effective speculative real estate proposition. Since comprehensive electrical and mechanical systems were still in the future, this flexible rentability was directly tied to access natural daylight, resulting in a narrow floor slab that prioritized window-proximity. The 1922 design competition for the Chicago Tribune Tower, a neo-gothic skyscraper, stood as a seminal moment in the formal battle for a new typology of a hitherto unknown building type.

In the years of economic recovery after World War II, corporations began locating their headquarters within urban centers. Their need for high capacity spaces that could handle the centralization of operations and employees was a catalyst to the modern steel and glass corporate office building. The interior of these buildings took great advantage of advancements in air conditioning and fluorescent lighting to essentially detach the interior from the resources of light and air

in the exterior. Thus, there was no more need to have interior arrangements consider the need for access to windows or natural lighting.

As the market of knowledge-based organizations grew in the 1940’s and after the Second World War, the office layout was still very much open without partitions like the arrangements seen in the Larkin and Johnson Wax buildings, and in skyscrapers like the Chicago Tribune Tower. But now the office composition was open, considering particular worker functions. Rather than a strictly Taylorist approach, Burolandschaft based itself in human relations.<sup>50</sup> Desk compositions, like a pinwheel arrangement for designers, not only made communication easier for an occupation that required worker interactions, but also changed the visual quality of the office area. Burolandschaft or “office landscape” was developed in Germany during the 1950’s and 1960’s by Eberhard & Wolfgang Schnelle in response to the open-plan offices of 1940’s America. Low profile partitions came into use to create some

<sup>50</sup>“Origins of the Office,” Caruso St. John, accessed June 2012, <http://www.carusostjohn.com/media/artscouncil/history/origins/index.html>.

degree of differentiation and privacy, along with carpets and ceiling panels for noise absorption.<sup>51</sup> Their work typified various desk arrangements based on the work conducted and levels of interaction for the work.

A unique characteristic of Burolandschaft was the flexibility of use in pieces of furniture. Desks and chairs could be arranged to support collaborative work in environments where collaboration was essential. Burolandschaft was “the first attempt to design a truly cybernetic office on entirely new free-flowing, inter-connective principles with a subservient architecture simply wrapped around it.”<sup>52</sup>

#### ***The Individual and the New Rationality.***

Whereas the rational Taylorist office did not recognize the individual worker in its design, the open-plan office landscape took some further steps to consider the worker. The German office landscape was a response to this lack of human character, and an expression of socialist

ideals in the office interior. Meanwhile in the United States, research by psychologist Abraham Maslow in the early 1940’s argued for a work environment that inspired workers’ motivation to pursue and fulfill their own potentials. Maslow drafted a Hierarchy of Needs for employers to use in assessing their workforce and what could be done to motivate them.

One of the first books in the U.S. to discuss and guide the reader in designing the open office was *Office Planning and Design* (1968) by Michael Saphier, where one of the most important steps noted by the author was to interview employees. Executives have one idea of what employees may need to complete their work, but the workers themselves often know better. In this recognition of the worker and his specific thoughts on the workspace, greater symbolism is given to the office space as an extension of the individual. At this point in the evolution of office interiors we begin to see some sign of individuality in the expression of office layouts. Regardless of this

trend, the rational motivation was still very much present. But now it became reasonable to consider a level of human relations in the rational pursuit of innovation and productivity. This belief is in part still evident today as reflected in the numerous worker surveys that are performed to determine user needs. Research such as Gensler’s annual WorkPlace Index (WPI), which has become an industry resource on global workplace trends, bases much of its information and conclusions on user surveys and post-occupancy data.

Several books like *Office Planning and Design* appeared in the late 1970’s. Works like *Planning and Designing the Office Environment* delved further into the logistics and mechanics of office design, outlining steps towards determining HVAC systems and industry standards for lighting. And most, if not all, encouraged the open-office landscape. Office planners and designers now brought a new element into the rationality of an office’s design—worker comfort that could

be influenced by the environment. Although planning the office landscape still maintained rational elements, the worker was given a bit more consideration through interviews to determine needs, likes and dislikes.



***The Action Office System.*** In 1964, Herman Miller was inspired by the office-landscape and developed the Action Office as the first modular business furniture system, laced with low partitions and flexible work desks. Originally designed by designer Robert Propst for Herman Miller, the

Action system is what has come to define the office interior in the latter part of the 20th century. More commonly identified as a cubicle, the Action Office was developed to respond to the growing need for efficient office furniture in the United States. The furniture designs began incorporating built-in partitions and storage to give users a greater sense of a personalized “room” within a larger space. This was also in great part due to what some would call an American sensibility towards individual personal space. The organization of the modules, along with the partitions and drawers, could increase the status of an employee through the use of privacy.

***Symbolism of Burolandschaft and the Action Office System.*** Burolandschaft developed during Northern Europe’s post-war Social Democratic movement, which carried a message of egalitarianism. The development of German office landscape intended to foster an egalitarian environment by encouraging a leveling of ranks: all staff were to sit together on an open floor plan, creat-

ing a non-hierarchical environment.<sup>53</sup> The layout tried to accomplish this by giving equal workspace to all workers, including management. The Action System could do the same thing, but further on, Herman Miller’s offering of accessories easily made a cubicle bigger, more private and distinguishable from other cubicles. In both scenarios, Burolandschaft and the Action System, the workspace strongly symbolizes the value and role of a worker, and represents an attempt to level the space-status association. But the need for some to differentiate between roles prompted greater latitude in the Action Office and thus any sense of egalitarianism was diminished.

***Cubicles and Taylorism.*** Embracing the cubicle’s easy and efficient standardization, cubicles were and still are the rational and Taylorist answer to fitting as many people as possible within a particular space. In that same breath, the sea of cubicles of the 1980’s communicated a “down to business” brand for organizations to project to their clients and to other firms. Meanwhile, the

<sup>51</sup> Ibid.  
<sup>52</sup> Francis Duffy and Jack Tanis, “A Vision of the New Workforce.” *Site Selection and Industrial Development* (April 1993): 430.

<sup>53</sup> “Origins of the Office,” Caruso St. John, accessed June 2012, <http://www.carusostjohn.com/media/artscouncil/history/origins/index.html>.



cubicle gained notoriety for its bland disposition and general dehumanization of its users—much like the workers of early 20th century offices.

**Cubicle and Symbolism.** The sea of cubicles common to corporate offices reinforced the hierarchical structure of large organizations, by concentrating workers in a space not much different from the “great work room” of the past, and pushing executives to corner offices on the fringes. It also placed great gravity and value on any office with direct access to a window and natural lighting. As noted in the 1995 book *Workplace by Design*, the question of access to natural lighting became analogous to the question of public access to beaches lined by private luxury homes—only the very well-to-do could engulf themselves in such amenities. While the use of the cubicle is utterly a rational choice based on costs and savings, the cubicle became increasingly symbolic as workers sought to find some personal meaning in the space in which they spent so much time. We always seem

to establish a layer of significance to a space we inhabit, and the cubicle is one clear example of the layers of symbolism in user space. On one level, the cubicle can be symbolic of the employee’s value to the organization and the employee’s commitment to the work—something environmental psychologist Jacqueline Vischer calls the socio-spatial contract. Thus, workers try to personalize their cubicle space with photos and indications of their personal distinctiveness to overcome the cubicle’s dreary work environment that pegs the individual to a confined and grey place, sterilized and over-lit by fluorescent lighting.

**Culture of the Cubicle.** A combination of technological, political and cultural movements came together to support the general corporate culture of the 1980’s, characterized by the surge of employees in the private financial sector of the U.S. economy. Cubicles could be outfitted with direct phone lines, clunky computers and storage to keep the worker settled. This rational control to office planning was indicative of the corporate

culture that emerged in the 1980’s. In order for a corporation to operate efficiently and produce for its shareholders, every operation had and continues to be scrutinized for maximum gains. The clearly defined and controlled workspace delineates a corporation’s ethos of value over investment: reasonably low investment in real estate led to higher net value for the corporation and the bottom line.

#### Since the 1980’s

Computer technology and its refinement for widespread use have greatly influenced the interior of an office and its design and arrangement since the 1980’s. As the computer has changed in size and capabilities, the office has responded to accommodate those advancements. DEGW, an early figure in office design and development, was prompted in the mid-1980’s to conduct studies on how to evaluate the needs of an office with computers, in a series of studies entitled ORBIT 1 and 2. One trend the DEGW

found was the user’s voice continually being cast off in favor of needs for an office’s keeping up with technologies—namely, the desktop computer. The cubicle of the time clearly became the bold image of standardization of space and new technology.

#### Retrofitting the Suburban Warehouse Interior as a ‘Work Village’

Pioneered by the LA School of architecture in the 1990’s this postmodern trend saw the retrofitting of generic suburban office park interiors and industrial warehouses into ‘urban villages’. Such building types, with their basic shell enclosures of previous industrialized facilities, was ideal for flexible, speculative office space. They were also in much closer proximity to the suburban home, bringing work and domesticity closer together. Individual parking and a distinct front door entry aided in the symbolism of work being done at “home.” The interiors of these warehouses were broken down into ‘streets’ and

‘squares’ as the interstitial space between the discrete objects holding individual office spaces.

**The creation of hermetic cityscapes removed all traces of the danger of the real city and acted as a simulacra for urban engagement.**

This approach simultaneously blended both the urban and the domestic into the work environment during a time in which the relevancy of office space in the face of cybernetics was a growing issue. The place of work here becomes an ambiguous blend of programmatic types in the face of this cybernetic threat to physical presence. Examples of such projects are: Bright and Associates office by Frank Israel, Venice, CA (1990); National Boulevard office by Eric Owen Moss, Culver City (1991), and Chiat Day by Frank Gehry, Venice, CA (1991).

#### The Office Interior as a Place of Inspiration

While previously offices were fundamental to the function of work, the decentralization of cybernetics, many have argued, has rendered their role less and less physically critical. Instead, the office has become an optional destination where one would choose to go in order to gain something that could not be gained through working elsewhere; in short, the office space must imply some inspirational quality.

**While previously, the office interior functioned as a corporate cathedral, a place to reinforce one’s sense of belonging to the employer, the contemporary office must continually reinforce the necessity**

**to return. Additionally, the role of storage becomes foregrounded as the office space must become a repository of all the equipment and material that is not mobile and which additionally provides further impetus to return.** In forging the formal language that encourages the need to return, many new office spaces have begun taking on domestic references to reinforce their continuing relevance. It is again in these moments of transition that we see most clearly this mis-registration between formal language and program.

**Chiat Day and Hot Desking.** In an intrepid attempt to harness the available technology, LA advertising agency Chiat Day in 1993 introduced

a system of hot-desking—whereby no specific employee had a particular or individual desk. Workers were encouraged to reserve a workspace as well as a computer in order to actually do work. The Chiat Day offices had all kinds of areas for work, including coffee tables, couches, and project rooms for team tasks. Corridors in the building were given a neighborhood aesthetic to express an almost leisurely independence. Jay Chiat, the company’s head, felt that this sort of arrangement would promulgate a sense of freedom, much like the freedom found in college where students gather to access specific information and then head to whatever space in which they feel comfortable working.

As much as this concept was heralded and supported by many, in practice the office did not turn out to be a success. People had a difficult time finding each other; there was not enough storage space; shared laptops were taken home to ensure that people could

do work the next day; and the project rooms were dominated by groups.<sup>54</sup>

Undoubtedly, Chiat Day was ahead of its time. Jay Chiat was attempting to instill an air of innovation and a culture of unbounded creativity into the corporation’s psyche. But the experiment and the expectations given to the space and technology did not match the reality. Jacqueline Vischer argues that the lack of personal space is a major reason for the experiment’s failure because individuals felt alienated and they desired to have their own private workspace. As much as this may be an important reason, the technology was simply not there to support the true flexibility that Jay Chiat hoped for.

Regardless of Chiat Day’s general failure at the time, it added to the discussion of what progressive office interior would look like and how it functioned; an interior that could be mindful of economic constraints, instill corporate ident-

# DIGITAL AGE

Downtown Los Angeles 1980-present: From Center of Command and Control to Neighborhood Firms deploying digital technologies to expand work space and time

Rodney King beating      The Los Angeles Riots: widespread looting, assault, arson, and murder occurred causing over \$1 billion dollars of damage to the city      Northridge Earthquake

CITY



1980

Without transit, LA's poly-nucleated form relies on freeways and cars. Traffic congestion and smog denigrate Southern California's quality of life, and the public clamors for alternatives while seeking to protect suburban idylls from increased density. Metro opens 22 years after the streetcar system closes. Its wheel-and-spoke service pattern increases access to the former CBD while creating transit oriented development opportunities near outlying stations

BLDG

1981

Economic Recovery Tax Act is enacted - encourages construction by allowing developers to deduct taxes from 25% of the value of their project



1983

One California Plaza



Having completed One California Plaza, Two California Plaza opened with only 30% leased space, at a time when the downtown vacancy rate hovered around 25%-among the nation's highest. Given the lack of demand for downtown office space, construction of new office buildings in the area would come to a halt. The construction hiatus would persist for a decade. Built as speculative office space, the generic, open floor plate is as flexible and accommodating as office space architecture can be

1980s

All the large department stores of downtown LA along Broadway are closed

New modes of communication and rapid transportation services support 24-hour global markets where knowledge spreads quickly, capital circulates rapidly, and relationships span great distances

1980s

New financing vehicles are developed, which allow backing from a wider array of sources - including the newly developed commercial-backed-mortgage-security

1987

Moss vs. US Tax Court establishes the ability for commercial tenant improvements to be expensed as necessary operating cost repairs rather than capital expenditures, and are thus exempt from prohibitive taxation levels

1980s

David Harvey's "the regime of flexible accumulation" begins - more readily and widely available capital pools and accumulates itself in the form of speculative real estate

1990

The light rail Metro Blue Line opens in 1990 at a cost of US\$877 million, connecting downtown Los Angeles to Long Beach

1993

The Metro Red Line opens downtown Los Angeles to North Hollywood, via Hollywood and the Mid-Wilshire district



1995

Downtown Los Angeles

Downtown is re-imagined through the mixing of luxury residential high rises, green spaces and office towers, reversing both early zoning and later redevelopment efforts to create a homogenous corporate landscape in the CBD. Civic leaders and downtown boosters abandon efforts to re-establish the CBD and instead follow the cues to changing housing preferences among a small group of downtown residential pioneers, planners and developers. Downtown is transformed into DTLA by the addition of 15,000 housing units

1997

The City of Los Angeles legalizes home-based businesses, requiring them to register with the city in order to pay city business taxes

1998

The 1903 Continental Building in downtown is converted into lofts

1999

Staples Center Sports Arena opens

1999

The Los Angeles City Council passes an Adaptive Re-Use Ordinance - encourages the redevelopment of buildings in the downtown core that are either of "historic significance" or "economically distressed."

2000

The 1906 San Fernando Building in downtown Los Angeles completes its conversion to lofts - one of the first to take advantage of the 1999 Adaptive Reuse Ordinance

DESK



1980

The telephone is now subsumed into telecommunications, data management and transmission devices. The drive to unplug through cloud computing, wireless communication, and contactless energy—not the more flexible raceways advertised here—ultimately expands firms' spatial and temporal reach over workers and flexibility in managing them



1981

Honeywell "What the Heck is Electronic Mail?" ad Long the iconic office appliance, the telephone is now subsumed into telecommunications, data management and transmission devices. Desks and offices become temporarily cluttered with digital age appliances and infrastructure as workers are increasingly disciplined through office technologies

Through digital technologies, firms colonize the domestic and public realms as new workspaces, and lengthen the workday beyond its traditional 9 to 5 bounds

1980s

LA City institutes an Artist in Residence program - encourages some initial live-work reuse in the downtown area on a small, experimental scale



1987

Ad for Radio Shack Lightweight Handheld

New technologies increase the efficiencies of communication and transportation, and make instant interaction in distant places possible. These technologies also produce the expectations of 24-hour commerce, on-call access to employees, and mobile productivity.

1989

Regus hotel offices are founded in Brussels - seeks to fill the niche for the mobile worker



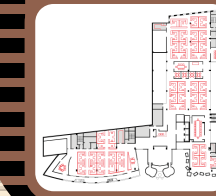
1991

"World Wide What?" news page Sophisticated yet affordable technologies encourage office workers to stay connected to the office even when they are not physically there, and provide firms with new forms of technological control over office workers. Controlling the technology and access to it, firms expand the accountability of office workers beyond the bounds of the traditional workday as well as beyond the perimeter of the office workplace



1993

Chiat Day, Frank Gehry



Gehry's design for Chiat Day in Venice, Los Angeles is unconventional, as is the new system of hot-desking that Chiat day introduces, whereby no specific employee has a particular or individual desk

With limited demand for downtown office space, the notion of downtown as CBD is largely abandoned. A neighborhood emerges



1998

TBWA/Chiat Day



Conceived of as an office interior that could morph into a myriad of configurations, the conceptual framework behind the interior of this advertising firm's office relied on correlating increased productivity with an enhanced control of one's own working environment. Taylorist concepts of efficiency are abandoned as office work is increasingly seen as moments of collaboration, information sharing, problem solving and reflection, each of which requires a discreet environment. This office interior is conceived to accommodate a range of configurations, allowing the workers to customize office environments to their preferences



1999

Hayden Tract: Umbrella Building

Designed by Eric Owen Moss, the Umbrella Building, in Culver City's Hayden Tract, is one of a series of Westside office buildings seeking to satisfy a burgeoning market for "creative offices;" commercial spaces that seek to catalyze innovation, curiosity, and risk-taking, to challenge the status quo among employees by creating fully immersive office experiences



2000

Micron PC ad This advertisement claims that in order to work, all one needs is a computer, a website and a company car suggesting the ideal worker is a nomad

1980

1985

1990

1995

2000



ity and culture into the space and its users, and support innovation and productivity through the work environment. In 1996, DEGW—the British office design firm now called Strategy Plus—published its “Workstyle 2000” that, with the British telecom company as its case study, tried to follow these maxims. Workplaces were open and non-territorial, with neither staff nor management holding on to a cellular office. Telecommuting, was encouraged for all staff who could easily work from home, while three days a week work could be done in the office.

### The Post-Fordist and Post-Modern Worker

The shifts and expansion of economies since the early 1970’s, as argued by David Harvey, have created a global economic system that has redefined the role of workers in the post-industrial era. These changes in the capitalist system are best described by the French Reg-

ulation School, which argues that systems of production go through cycles of success and crisis that result in a new system of production. Along with that system is a set of norms, values and rules (written and unwritten) called the modes of regulation that govern how the system operates. With the globalization of economies, more and more knowledge workers are not operating within the professional trajectory that past individuals previously worked in.

**Whereas an individual in the past developed a career within a private or public entity, receiving welfare benefits, retirement, and a steadily increasing pay, workers in the twenty-first century—in this current economic**

**system—can be better characterized as freelance; working at a particular job for a particular company before moving on to the next project.**

The concept of flexibility in the post-Fordist context, besides describing the emergence of new sectors of production and new rates of technological and organizational innovation, also aptly describes the flexibility that knowledge-based employees are now experiencing. Whether within the fluid space of an office, a workspace in their home, an airport, or a café, the space where work is conducted is untethered and flexible—responding to whenever and wherever work needs to be accomplished. Time is also fluid, with many workers hearing the resounding support for the completion of a task without necessarily being tied to a specific time frame that operates within a specific workspace.

This breakdown of modernism’s rationalization of time brings the current trends in office interior architecture to a status of postmodernity—whereby the economic system and cities within it are best described as a variance on capitalism, operating in a global context and progressively organized at the international scale.<sup>55</sup> Post-modernity privileges heterogeneity and difference as a liberating force in the redefinition of cultural discourse.<sup>56</sup> Thus the office interior has progressed to satisfy the productive needs of a postmodern economy by implementing whatever arrangement supports productivity and work. The following trends exhibit efforts for the productive processes of knowledge-based, service-based companies to reflect these norms and values, rooted in flexibility and heterogeneity, in the interior built environment.

### Current Trends

Although many administrative offices in the public and private sector continue to look like

the neutral and bland offices of the 20th century, there is a growing trend to embrace the advances in mobile technology and its influence over how and where work is accomplished. Technology has been the supportive catalyst in the globalization of economies, resulting in a new paradigm for the way work could be done in order to support creativity and innovation, all while underscoring productivity and the bottom line. The major trends in office interior architecture are: branding/enculturation of space and people; opportunities for collaboration; flexible configurations of furniture; and nomadic workspace—spaces and scenarios where the post-Fordist, knowledge worker is kept in mind. In all of these trends, we see the simultaneous movement of motivations: rational, cultural and symbolic. Rationally, there is the pursuit for the greatest value possible in productivity and space; culturally, the organization is instilling a system of physical and emotional values to support innovation and worker commitment; and symbolically, the organization is relating a nar-

rative about its own maxims to employees and the outside world. While the most intensive examples of these trends are visible in large corporate headquarters that thrive on creativity and execution of those ideas, these trends are overarching and thus changing the way all offices are now being designed and implemented.



**Branding.** The attachment of specific emotional meanings and ideas to images and objects is part of the growing magnitude of the experiential economy. Branding is the experience economy’s essential tool—fusing meaning to things and environments, from tangible products and services, to workers and the office. In the con-

text of the office interior, authors Jeremy Myerson and Philip Ross of the book *The Twenty-First Century Office* refer to the branded experience as a *narrative*, whereby the fictional aspect of the brand is told through the “interior journey.” Beyond brand logos, the branding of the interior office is executed through whatever design ultimately supports the business culture and its goals. The corporate headquarters of technology firms like Apple and Google are widely talked about for their encouragement of unfettered creativity. These spaces communicate an aesthetic message of productivity in the postmodern economy. Google’s Mountain View, California headquarters is meant to feel much like a college campus, leading back to its founding by Stanford University students. Basic ingredients of a Google work environment include whiteboards everywhere, casual meeting spots, and local task lighting—offering various spaces where ideas can be conjured and articulated. Although the style of these interiors vary dependent on their location in the world, the design approach is specific to Google and its image as a leading innovator.

**Collaborative.** An overarching trend in office interiors today is collaborative spaces. Much of the knowledge work conducted today requires some collaboration with colleagues—from design services to IT and banking. Unlike 20th century office culture and the every-man-for-himself directive, the individual worker is expected to play an integral part within a team initiative.



These interactions are promoted through the availability of spaces conducive to collective interfacing. These spaces range in character from private conference workrooms to open tables in proximity to clusters of individual workstations. Collaboration can also occur in less formal office

settings, like living room inspired seating areas, micro-kitchens (as fashioned by Google) or private work pods. The hope for these collaborative spaces is to “energize people, put them at ease, make them feel connected with their colleagues and open them up to exploring ideas.”<sup>57</sup>

### Technology and the Nomadic Work Space.

Advances in mobile technology have given greater latitude to when and where work can be accomplished. A recurring theme in case studies on mobile technology in the office, and when discussing the office culture of companies like Google, is the college-like mentality of an assignment and its completion: a task is given and you must get it done—no matter how and where it is done. This was a driving idea behind Chiat Day’s experiment in the 1990’s, but lacked the technology that is available now to make it a reality. Cisco Systems in San Jose, California is one prominent example of how its own mobile Internet devices were considered in the layout and design of its offices. In 2004, employees of a particular unit at Cisco

<sup>55</sup> David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Oxford: Blackwell, 1990).  
<sup>56</sup> Ibid.

<sup>57</sup> Kristy Groves, Will Knight, and Edward Denison, *I Wish I Worked There!: A Look Inside the Most Creative Spaces in Business* (Hoboken, N.J.: Wiley, 2010), 13.



were given a tablet or notebook computer, and no one had a designated personal desk. When needed, employees could sit at a docking station or a cubicle and connect their mobile devices to a larger screen and phone console. Collaboration was accomplished by several open and private conference tables with large TV screens.

**Cisco could fit more people in its current building by not assigning specific desks, saving money on real estate costs.**

Cisco also saved money on technology infrastructure, avoiding costly Ethernet jacks by using more wireless internet-based devices. Cisco is a technology firm using some of its own network innovations to cut costs and support a certain kind of work culture.

**The Internet, its declining cost, the availability of private networks,**

**and mobile devices (i.e. tablets), have also given rise to the nomadic worker, who can work from almost anywhere.**

This trend speaks to the knowledge worker who, as a population of our economy's workforce, is larger than in the past and will continue to grow.

**In 2006, WorldatWork reported the nomadic knowledge worker represented roughly two thirds of the American work force.<sup>58</sup> These people spend a large amount of time working outside of the traditional office. On average, they work from 3.4 locations, ranging**

**from coffee shops and airports, to customer**

**sites.<sup>59</sup> Some companies are now asking employees to work part of their week from anywhere outside of the main office. Companies like AT&T and Sun Systems have seen a large reduction in turnover rates due to their flexible work arrangements that allow employees to work from home.<sup>60</sup>**

Cisco's example of investing in technology infrastructure and their support of telecommuting also highlights an increasing characteristic of the post-Fordist economy. The post-Fordist knowledge worker produces knowledge work with limited tools, relative to the tools of production in the Fordist economy. Tools such as the mobile phone were once seen as an expense to the employer for the workers use. In more recent years, especially with the popularity of smartphones, the mobile phone is an expense taken up by the individual worker who not only uses it for her personal communication, but also for her work-

related communication. On the same thread, the mobile computer is the essential tool of production for knowledge workers, and increasingly the workers' own personal computers are becoming part of the tools as well.



**As the worker becomes more flexible and freelance, they are bringing their tools of choice along with, as opposed to relying on the employer to**

**provide those tools. This further underscores the flexibility of the worker and how work can in fact be done anywhere at any time desired.**

**Flexible Work Spaces.** Moveable office furniture is a concept that was important to the early open office landscape and the Action Office system in the 20th century. Giving workers options for moving furniture according to their needs aligns with current attention to worker comfort and its relationship to productivity. More importantly, the flexibility of furniture allows for new configurations that repurpose certain spaces and minimize costs. On one end of *flexible workspaces* you have the modular items like desks and accompanying storage that can be reconfigured dependent on certain job functions—some which may require more surface area or storage space. This type of flexibility is consistent with the trad-

itional, cost effective approach to office layout. On the other side of *flexible workspaces* we have spaces and accompanying furniture that can be used in any way conducive to worker productivity. As highlighted in the Cisco example, this could be in the form of a rolling conference table that can be a site for collaborative or individual space. Then you also have more casual configurations of chairs and couches that provide a setting that encourages a level of ease.

In all current trends in the office interior, worker comfort is a heightened issue of rational importance, influencing the symbolic and cultural underpinnings of a corporation. The interior built environment reflects, in an effort to reproduce, the corporation's image of itself and the expectations of its employees. Thus, in current and on-going articulations of the office, interior architecture is argued as a critical opportunity to influence a company's sustainability—through the encouragement of creativity supported by comfortable physical environments.

<sup>58</sup> "Set Them Free: How Alternative Work Styles Can be a Good Fit," hermanmiller.com, last modified 2007, <http://www.hermanmiller.com/research/research-summaries/set-them-free-how-alternative-work-styles-can-be-a-good-fit.html>.

<sup>59</sup> Eileen McMorrow, "Americans are working from many locations outside their employer's office," last modified December 1, 2005, [www.mcmorrowreport.com](http://www.mcmorrowreport.com).

<sup>60</sup> "Set Them Free: How Alternative Work Styles Can be a Good Fit," hermanmiller.com, last modified 2007, <http://www.hermanmiller.com/research/research-summaries/set-them-free-how-alternative-work-styles-can-be-a-good-fit.html>.

## Summation

In closing, office interior architecture has followed a physical trajectory that is rooted in the early managerial approaches of the late 19th/early 20th century—an era strongly rooted in Fordism and scientific management. Simply because of the nature of business management and its concern with monetary successes, this rational motive has always been and will continue to be present in the office interior. But, the role of rational choices à la Taylorism in designing and laying out the office has been subdued due to the rise and recognition of the individual employee as a source of an organization's innovations and ultimate sustainability. Beginning with the German Büro-landschaft of the 1950's and later the Action Office system of the 1960's, worker processes were looked at from a new perspective—one focused on how the interior environment could make the worker experience more comfortable and efficient work by paying attention to what the worker's daily processes were and how they

were being accomplished. Moves and choices that are supportive of worker comfort and communication, as well as the equalization of space between staff and management, have taken a strong hold over the office. It is unclear whether a hierarchical structure has been completely eliminated from the office interior, but there is certainly a trend of spaces free of status-heavy indicators (i.e., office cells).

**Moreover, these movements in the office are an indication of the development and emphasis of a post-Fordist economic system that relies heavily on a new worker that has been shaped by a new global economy.**

The office interior has also been identified as an important channel of communication for companies to project their brand

on employees and on the outside world. Following a particular aesthetic that aligns with a corporation's products and/or ethos, the office interior has moved beyond the objective minded, bland, grey cubicle farm as a business strategy of vital importance.

**With the Internet and mobile technology as critical catalysts, the office interior will continue to be an experiment in flexibility and spatial efficiencies—especially as more and more knowledge workers work outside the confines of the traditional office.**

# ALTERNATIVE WORK SPACES [CONVERGE]

As an alternative to downtown speculative office towers, looser configurations of live/work have their roots in two specific Los Angeles variations on established typologies: the loft and the converted storefront. The adaptive re-use loft space, with its precursors in SoHo, were characterized by an open, horizontal plane of domesticity and work. The adaptive re-use of Venice Beach storefronts into artist live/work studios was modeled on the vertical stacking of domestic space hovering in a mezzanine mass over the more public ground level workspace. Currently, in more recent Los Angeles incarnations of live/work space, which are purpose built, we begin to see a blurring of the formal distinctions between the two types, providing yet another alternative to the office tower.

**Live/Work.** The history of the Modern incarnation of live/work space begins decisively with the artist's loft space in SoHo. The loft as a former space of industrial production was taken over by the growing creative class as a new hybrid space

able to accommodate the soft production of an expanding culture industry. As such, the personal identity and enterprise of the loft inhabitant more intimately overlapped than in the case of a suburban-dwelling, office-tower working persona. The live/work loft first took hold in New York City in the early 1960's as SoHo artists began illegally occupying empty manufacturing space south of Greenwich Village. The former industrial space, located near rail yards and emptied due to the offshore transition of the garment industry, was over-built for the purposes of inhabitation. As such, it was economically advantageous to convert space already overly accommodating for mere living, and thus able to absorb the additional demands of working. Broad, open floor plates allowed for a horizontal spread of inter-mixed enterprise and identity. The local government saw the economic opportunity of the adaptive re-use of the former industrial area and quickly moved to legalize the occupation through rezoning and taxation. This regulation of loft conversions on the part of the local government was further

enhanced by projects such as the Westbeth Artist Community building. In 1970 the creation of the Westbeth Artists Community in the West Village of New York City was supported by both civic and federal levels of government. This community was the first major government sanctioned low cost artist live/work studio space. It was also significantly the first major adaptive re-use project of its kind, inserting itself into the former Bell Telephone Laboratories. The strategy to densify underutilized industrial urban areas while preserving historic urban fabric—establish economically viable neighborhoods through increasing mixed use, to reduce commuting congestion through co-location, and to build a self-sufficient employed tax base—were all major benefits of the new live/work ideal actively encouraged by government. In Los Angeles a similar sanctioning of live/work space occurred with the Granada Building near Lafayette Park, which flourished as a frenetically mixed-use artist studio and residence in the 1970's. These live/work loft spaces, inserted into existing purpose-built buildings,



maintained their economic desirability and viability by relying on the simple efficiency of a single horizontal open layout combined with its already overbuilt infrastructure that could more than meet the needs of the working inhabitants.

Soon after the SoHo lofts were established, the approach was transplanted and reinterpreted in Los Angeles's Venice Beach area where artists began occupying the empty storefronts of the beach community. From the beginning, the West Coast version of the artist live/work space took on not only a more exhibitionist, but also distinctly speculative nature. While the SoHo artists rented their spaces, the Venice Beach artists typically bought their inexpensive storefront spaces anticipating that the self-sufficiency of the space would shift the urban frontiers of gentrification in their favor. Given that the former retail space was not as overbuilt as the industrial spaces of SoHo, a different spatial approach of layering had to be introduced to accommodate the blending of live/work. Typically, mezzanines were inserted above the

glass-fronted storefront to allow for a striation of private dwelling above semi-public working. This type of purpose-driven renovation of an existing typology to accommodate this new type of inhabitation was a precursor for later Venice moves towards completely purpose-built work/live spaces.

After the establishment of both the horizontal loft and the striated store front as alternative live/work spaces, a blending of the two types emerged, as purpose-built live/work spaces began to take root in Los Angeles. The typical hybrid of these spatial strategies was the purpose-built live/work townhouse studio. A noted concentration of these developed in both Venice and Hollywood. These spatial arrangements tend to have an open floor plate at ground level suitable for a semi-public workspace, which according to local by-laws can typically accommodate up to five employees. Close in proximity, but spatially distinct, the dwelling space is stacked above in a narrow vertical configuration.

**Not unlike Koolhaas' conception of a vertically stacked, frenetic, multi-functional tower, the townhouse replicates this proximity of disparate programs within a smaller, more controlled scale. Here, the inhabitant/worker is given jurisdiction over their own vertical slice of densely intermixed congestion.**

The increasing prevalence of work/live space represents a dramatic spatial departure from the Modernist spatial understanding. While the Modernist city presented a planar spreading of discrete functions across an urban-scape, the

work/live scenario presents a stratified layering of functions—densely interlocked spheres of previously autonomous categories. This profound shift often materializes architecturally in a literal stratification of the live/work Functions. Mezzanine lofts of private dwelling space are typically hung over the semi-public workspace below. This standard configuration is reinforced in countless Los Angeles typologies including the storefront studio adaptations in Venice Beach and the downtown historic office space adaptations, encouraged by the Adaptive Re-use Ordinance to insert dwelling mezzanines above existing workspace. The dense spatial layering of dwelling mezzanine hovering over productive working space represents an altogether hybridized configuration of previously planar separated divisions of domesticity and work.

In March of 1997 the City of Los Angeles legalized home based businesses, requiring them to register with the city in order to pay city business taxes. The range of commercial activities

remained circumscribed through zoning but the general tendency was towards encouraging home-based business. Los Angeles City Council allows up to five employees to work in any given registered live/work space. In 1998 an unsuccessful attempt in the California Assembly aimed to exempt home-based writers, musicians and artist from paying city business taxes. The legitimization of commercial work in apartments as well as the increasing professionalization of creative endeavors has been progressively strengthened through taxation and civic regulation. The civic government became well aware of the wide-spread economic benefits of densely layering work and domesticity and has taken active steps to both promote and regulate this.

The hard loft or true loft conversion is a residential retrofit of a previously industrial building whereas a soft loft is a newly constructed, purpose built facsimile of an industrial space. A hard loft is typically left as a large open interior

maintaining the original unfinished surfaces while a soft loft is more likely to be partitioned with enclosed services and could be detailed with softer finishes. The hard loft is overbuilt with multiple extraneous spatial features whereas the soft loft, being purpose built, might only deploy these extraneous spatial features as a reference point. Often a hard loft is zoned as a live/work space while a soft loft is less likely to be zoned as anything but residential. Carrying through the historical precedent of the original SoHo artist live/work loft conversions of the 1960's, the hard loft maintains its connection to the space of production, albeit of an artisan and small-scale nature. Whereas, the soft loft, taking on only a particular selection of the formal qualities of a hard loft as a simulacrum for a space of physical labor, is representative of the tendency towards an increasing inflection of the work place within the domestic sphere. The formal qualities of a hard loft become a referential cue towards the inescapable merging of work and domesticity.

**Co-office.** Given the growing economic pressures amid an environment increasingly favourable to small scale contract work, the co-office scenario has seen a marked rise. Flexible in their spatial and contractual arrangement, such shared offices typically adapt to existing office infrastructure under the motivation to lower the cost of administration services through a shared model, and allow small organizations to thrive through collaboration within the office rental market. The basic premise is that small-scale tenants pool resources to share common office space. Often there is the ambition that such space sharing would soon spread to include more systemic, organizational collaboration between the tenants. Often co-location is depicted as a catalyst for future collaboration. In the face of the virtual, such arrangements reinforce the primacy of the physical sharing of space. The co-office took the coffee shop as their guiding model. In some versions, such as the Centre for Social Innovation in Toronto, the project was

partially funded through community bonds, which enabled the tenants to become shareholders in the larger project. The specific spatial organizational strategies of these office renovations include various space sharing techniques. One such strategy is the hot desk, which is a temporary shared workspace available in a communal area. Another strategy, the incubator, includes some basic administrative support, which facilitates program advice, short-term staffing support, as well as financial support for small scale, short-term projects. A third strategy, the hub, contains access to networked equipment and tools. Other shared spatial resources include a common reception area, common kitchen/dining area, shared meeting rooms and a common lounge area. Such co-office spaces assert that mutual physical presence is ultimately more productive than mobile, virtual networking.

In Los Angeles, with a high prevalence of

self-employed or contract workers, the emergence of the shared office space took on greater centrality. Socially and architecturally modelled as a hybrid between an office and a coffee shop, the co-office model performs as an overlapping of typologies. In Los Angeles this overlap is emphasized in examples such as Santa Monica's membership-based Coffee & Power co-office. Billing itself as a membership-based *workclub*, the space attempts to subsume the casual flexibility of a clubhouse within a generic coffee shop shell. The form of the renovated former-street front, retail space resembles a coffee shop with its coffee bar-like administrative centre surrounded by banks of movable café furniture. The space is horizontal, maintaining its shared quality by not spreading to multiple floors. No significant partitions separate areas—visual continuity across the entire space is available from any vantage point. The furniture is not selected for the ergonomic productivity-enhancing qualities of a Herman Miller desk set, but

# DIGITAL AGE

Downtown Los Angeles 1980-present: From Center of Command and Control to Neighborhood  
Firms deploying digital technologies to expand work space and time

September 11th Attacks

Great Recession

CITY

BLDG

DESK



2001 Hayden Tract: Complex Plan

Near revitalized downtown Culver City, California, abandoned industrial warehouses are repurposed to studios and offices for creative industry workers like graphic designers and software engineers. These firms in particular, given that their workers possess rare skills and are not easily replaced, are interested in creating work environments conducive to employee satisfactions and their desire to establishing meaningful relationships to one's work

2002 The 1955 Superior Oil Company Headquarters in downtown is converted to the Standard Hotel

2003 The 1949 General Petroleum Building in downtown converted into the Pegasus Apartments

2003 The twenty-first Century Office is published - refers to the branded experience as a narrative, whereby the fictional aspect of the brand is told through the "interior journey"

High office vacancies and persistent shortages in other real estate sectors result in the repurposing of existing office towers, transformed mostly from within, to host a variety of new uses



2003-2004 Ground Zero Masterplan

The Ground Zero Masterplan for the former site of the World Trade Center in NYC includes new office towers that re-asserts the symbolic importance of high rise office buildings in America

2006 Gensler begins a US survey of over 170 companies to begin indexing workplace trends and employee perception of workspaces

2006 28,878 residents in downtown Los Angeles

2007 iPhone launched

2007 The 1986 1100 Wilshire tower just west of downtown LA is converted to residential



2007 Google Mountain

Google's corporate base in Mountain View, CA is campus-like and highlights a casual creative working environment premised upon the campus model of educational institutions, marking Google as a firm whose relationship with their employees includes supporting their self-realization as creative subjects participating in an important firm mission

2007 The LA City Council makes further changes to the Adaptive Re-Use Ordinance, creating greater financial incentives to pursue such projects downtown

2007 The LA City Council and County Board of Supervisors approve the \$2.05 billion Grand Avenue Project

The Los Angeles City Council approves sweeping changes in zoning and development rules for the downtown area. These changes allow larger and denser developments downtown; developers who reserve 15 percent of their units for low-income residents are now exempt from some open-space requirements and can make their buildings 35 percent larger than current zoning codes allow

2009 14,561 residential units have been created under the adaptive reuse ordinance



2008 Park 101 Revitalization

Eschewing the concept of dense urban center formed by corporate headquarter towers and paced according to the rhythms of the work clock, Park 101 will cap the Hollywood Freeway, create new park space, and provide an important amenity for adjacent housing developments.

2008 39,537 residents in downtown Los Angeles - a 36.9% increase from 2006



2009 Although Downtown Los Angeles had a mix of uses more diverse than many downtowns, including uses not found elsewhere in the city, this map illustrates it moving towards a more densely programmatically mixed working-living environment with expanded retail and entertainment sectors

2008 1010 Wilshire Tower

In a mix of high rises, owners have maximum flexibility to customize the spaces in their live-work units; rather than dividing the units with walls, different areas are defined and linked by built-in furniture elements that act as low-height walls, preserving the expansive open plan originally built in 1959 and renovated in 2008



By the end of the Digital Age, both firms and office workers have relationships with downtown office buildings, office spaces, and desks that are increasingly varied and complex. Downtown continues to negotiate the need to function as a node and a desire to replicate its importance as place

2008 Gensler expands its national workplace survey to establish the Workplace Index (WPI), creating an industry resource around global workplace trends

2010 iPad Launched

2011 Membership-based Coffee & Power co-office "workclub" opens in Santa Monica



2011 Go Virtual ad

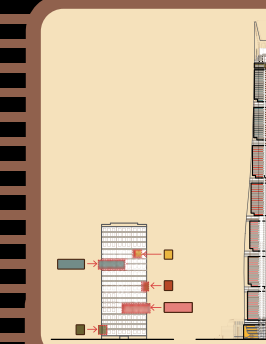


Firms with far-flung work forces increasingly abandon the expense of the office, relying on rent-by-the day facilities to provide nodes for virtual face-to-face exchange of information.

2010 Available office space



The 2009 percentage of rising office vacancies and falling rents was at an all-time high. Office work did not necessarily decrease, it was just redefined by mobility or housed in centers outside the traditional CBD



US (Existing) vs Asia (New)

2012 Coffee shop becomes workspaces



Two architectural strategies are proposed to address this emerging condition of work as it relates to global real estate realities. In North America where office vacancy is high, Hackable Buildings proposes an invasive method to convert mono-functional office buildings into synergistic multi-purpose entities. In Asia where new office building inventory is low, the 600 meter Shanghai Tower stacks various programs, including office, into a vertical city

2012 Downtown live work



The view from the top of a renovated live/work downtown tower features a view that encompasses both the leisure of a pool and the density of office towers beyond. Occupied by those seeking to attain the status of ideal workers, professionals, and entrepreneurs, residents accept no work-life separation and sideline their concerns about work-life balance



2012 Virtual Office ad

The imagery of contemporary knowledge-based work maintains visual association with the Mechanical Age office. This daily rental boardroom has the traditional trappings of corporate power even if it makes little sense as a place for interactions that take place virtually through the Internet

2012 Families are planned and middle class and upper class women's expectations about education, work force participation, and careers change as a result. New questions of work-life balance arise among professional and businesswomen seeking to manage work responsibilities and traditional household roles.

2012 The "physical social network" WeWork opens in Hollywood



2012 Coffee shop becomes workspaces

New office technologies allow the space and time of the office to encroach upon the public sphere. Longer work days and weeks result from the professionalization of wage work and the weakening of labor organizations. Working in public becomes the modal expression of engagement with wider urban society, and the middle classes abandon the public sphere and allow its institutions to wither

2012 The Grand Park connecting City Hall to Bunker Hill is completed

2000

2005

2010



rather for its approximation of a casual space of encounter. Bar stools, shared countertops and ambient lighting approximate the spatiality of a café. Tapping into the pre-existing café culture as a collaborative and discursive third space, this move towards absorbing café culture into working culture represents the definitive and inexorable overlapping of previously distinct spatial spheres, absorbing the formal qualities most conducive to the type of collaborative productivity encouraged therein.

Founded in 1989 in Brussels, the Regus hotel offices sought to fill this freshly observed niche for the mobile worker while simultaneously capitalizing on the increasingly interchangeable and flexible shell of generic speculative office space. Fully staffed, furnished and stocked office space was made available to hotel guests in need of somewhere to conduct their business as they travelled. Catering to the business traveler, the company quickly expanded globally and entered into numerous

partnerships to combine services and customer bases with airlines and airports. Operating as long-term leaseholders within hotels, airports and, increasingly, office towers, Regus provides meeting rooms, hot desks, video conferencing services, business lounges as well as administrative support staff. In Los Angeles, suited to the prevalence of self-employment, Regus has had remarkable success, opening instant office spaces in hotels, office towers and office parks throughout the metropolis. The success of the enterprise is the level of architectural predictability that allows the users to feel immediately familiar with their environment upon entering any of the spaces. Consistency in layouts, proportions, furnishings and material palettes are maintained. These virtual office services can be rented anywhere from a period of hours to a more long-term multi-year, part-time or full-time arrangement. Expanding past their original customer base of business travelers, Regus is now targeting the home office worker who they attract through the

out-sourcing of administrative support including multilingual telephone receptionists and a prestigious business mailing address coupled with mail handling services. Regus manager, Bob Gaudreau, described the appeal of these “instant offices” by stating: “There’s no capital expenditure; the office is completely furnished and customers decide how long they’ll stay.”<sup>61</sup>

**Ubiquitous and widespread, the Regus chain operates under the central understanding that the space of work should no longer be considered a capital expenditure but rather merely an operating expense.**

*Home Office.* The home office encompasses two broad categories of workers; the fully self-

employed worker and the employed worker.

**In both cases, one could assume that the worker is choosing working from home either by necessity or explicitly for improved productivity - both suggesting that the alternate, customization of the speculative office, is inadequate in its total separation and autonomy of work.**

In various formal configurations the traditional single family home morphs to accept a broader range of work. Once considered the purview of amateur, part time dilettantes or hobbyists, the legitimacy of the home worker has increased steadily since the 1980’s, paralleling the emer-

gence of telecommunicating technology. The initial boom in home office entrepreneurship was directly tied to the speculative office real estate boom and crash of the 1980’s with the market forcing the self-employed to seek alternative arrangements. Proximity to children by necessity or choice, proximity to a range of domestic resources, proximity to community resources and an overall far greater degree of environmental regulation suggests a worker capable of a broader degree of control – architectural and otherwise. Descriptions of typical home offices vary in the degree of separation between the space dedicated to office work and the rest of the domestic space – some with partitions, some delineated by the placement of a desk and others with virtually no separation at all. For example, the range of home offices spans from the retrofitted spare room architecturally mimicking a traditional office space to the casual work surface integrated completely within a room such as the kitchen. However, the degree of separation must be

weighed with taxation obligations if the worker is aiming to take advantage of the home office tax deduction. To qualify, the spatial arrangement of the workspace cannot be multi-functional, it must be primarily used only for work purposes – suggesting a regulated and definitive degree of separation from the domestic space. Tax regulation aside, varying degrees of visual and auditory supervision to the rest of the household while in a home work space that is integrated into the command-and-control positions such as the kitchen, suggests that the multitasking nature of such a worker whose attention can be divided and yet still productive enough to make the home office work worthwhile. With the increasing prevalence of those electing to work from home, it must be assumed that any amount of this spectrum of limited separation between domestic and work spheres is considered superior to the total separation represented by the traditional office tower. Either by necessity or choice, proximity to domesticity is seen as a mechanism for improving

work performance given the marked rise in teleworking and home offices. Furthermore, this reveals an underlying assumption that goes against the tendency towards speculative office space – here the homeowner is responsible for a new hybrid of the committed model of the purpose-*adapted* work space.

*Adaptive Re-Use.* Often presented as addressing issues of local identity, scale and visual continuity of urban fabric, the growing tendency towards the adaptive re-use of downtown office buildings also addresses pragmatic architectural issues of resources and financing. The overwhelming tendency in the adaptive re-use of downtown Los Angeles buildings has been towards converting purpose-built office space into speculative residential spaces. The current phenomenon in Los Angeles has focused almost exclusively on the core of 5 to 13 story office buildings largely built between 1900-1920, which are typically cast-in-place concrete and steel with masonry infill. As these spaces have been converted to residential

spaces, some attention has now turned towards adapting the ground floor spaces into restaurant and retail spaces.

The current boom of adaptive re-use in downtown Los Angeles has its roots in the early 1980’s when the city instituted an Artist in Residence program, which encouraged some initial live-work reuse in the area on a small, experimental scale. Adaptive re-use as a national phenomena took on force in the early 1980’s with sweeping tax reforms aimed at encouraging preservation and adaptive re-use. The 1981 Economic Recovery Tax Act had a swift encouraging effect on the depressed construction industry by allowing developers to deduct taxes from 25% of the value of the project.<sup>62</sup> To further encourage what quickly became a national phenomenon of adaptive re-use, fuelled by the tax incentives coupled with the growing reaction against Modernism, the Los Angeles City Council acted to magnify the tendency locally. In 1999, the Los Angeles City Council passed an Adaptive Re-Use Ordinance

to encourage the redevelopment of buildings in the downtown core that were either of “historic significance” or “economically distressed.” Eligible buildings had to be constructed before 1974, however exceptions could be made for buildings built as recently as five years previous as long as they could demonstrate that they were in economic distress. Zoning and building codes were relaxed in order to favor the redevelopment of former commercial or office space into either residential, live-work or hotel space. The ambition in replacing underutilized office space with residential space was for the creation of a “24 hour downtown.” The downtown Los Angeles adaptive re-use movement was revitalized again in August 2007 when the City Council made further changes to the Ordinance, creating greater financial incentives to pursue such projects. The powerful combination of local and federal tax and zoning incentives have helped turn the adaptive re-use of former downtown Los Angeles office space from a purely historic preservation activity toward a more speculative venture.

<sup>61</sup> Chuck Salter, “Office of the Future,” last modified March 31, 2000, <http://www.fastcompany.com/9937/office-future>.

<sup>62</sup> Barbarelee Diamondstein, *Remaking America* (New York: Crown Publishers, 1986), 14.



Architecturally, adaptive re-use is based upon the balance between restoration and renovation—updating services while maintaining the tectonics of a building. In the adaptive re-use of downtown Los Angeles buildings, the balance tends to fall towards restoration compared with the similar scenario of loft living adaptive re-use projects in New York. While much of the building stock subjected to adaptive re-use in New York is industrial in character, the equivalent building stock in downtown Los Angeles is slightly more recent purpose-built professional office and retail space from the 1910's and 1920's. As such, the buildings in Los Angeles tend to already have a greater degree of partitioning and servicing compared with their New York equivalents, making the adaptation process more tectonically intricate.

The San Fernando Building in downtown Los Angeles stands as an exemplar of the larger trends towards adaptive reuse in the downtown core. Among one of the first to take advantage of the 1999 Adaptive Reuse Ordinance, this 1906

Italian Renaissance Revival office building was converted into lofts in 2000. Many were dubious about the potential for luxury loft spaces in a downtown core bereft of the many typical residential neighborhood amenities, but its success proved it responsible for kick-starting other similar adaptive re-use projects in the Old Bank District. The original office space partitioning was adjusted so that each unit was completely continuous and open aside from small closed washrooms. The lofts were praised for maximizing the existing high ceilings and generous window apertures. Developer Tom Gilmore received some criticism for displacing the low-income residents of the adjacent skid row through gentrification that mimicked a “Disneyland Manhattan experience”<sup>63</sup> of loft conversions. But the tectonics of the space are of a different family from the industrial spaces of SoHo loft conversions. Purpose built as office space, this building differentiated itself by its high-grade finishes, integrated services and smaller scale partitioning.

The Standard Hotel proves to be an exception to—or an emerging indicator of—the general trend of adapting pre-1920's office buildings in downtown Los Angeles. Built in 1955 in the downtown Financial District as the Superior Oil Company Headquarters, the building was converted into a hotel in 2002 by Koning Eizenberg Architecture. The project, undertaken by the Columbia Development Group, deployed \$7.2 million in a Federal Rehabilitation Tax Credit as well as took advantage of the adjusted zoning requirements and streamlined review process of the Los Angeles Adaptive Reuse Ordinance. While the lobby space remained largely unchanged, the architects noted that the reconfiguration from office space to hotel rooms proved challenging given the depth of the open floor plate. Significant reconfiguring had to be deployed to ensure that the majority of the 207 rooms had at least some access to daylight. Amenities such as the fitness center, business center and meeting rooms ultimately had to be located in the center of the deep floor plate with no access to daylight.

Opened for residents in 2007, the adaptive re-use of 1100 Wilshire tower is also an exception to the general trend towards inserting residential units within pre-1920's purpose-built office buildings. Built in 1986 as a much-touted speculative office tower, the combination of being just west of downtown and the softening of the office market due to zealous over-building meant that the building was never used as office space and sat vacant for nearly two decades. This adaptation, overseen by Thomas P. Cox: Architects, is the first in downtown Los Angeles to convert speculative office space to residential units. The tower sits on a base of 12 floors of parking, and is relatively narrow in its floor plate, making it an ideal candidate for residential conversion. Taking advantage of the incentives offered through the Adaptive Reuse Ordinance meant that the developers, Forest City Residential West, promised 15% of the units would be maintained as affordable housing.

63 Steve Lopez, “POINTS WEST: A Skid Row Bistro Sounds Pretty Good, Despite Reservations,” *Los Angeles Times* (Los Angeles, CA), September 6, 2002

# Findings and Implications

The content contained herein represents year one of a three-year collaborative research effort between cityLAB and Gensler. The premise driving this research project is that various economic forces that have transformed the nature of work on a global scale have also had impacts at the scale of the city, office district, office building, and even various office technologies and furnishings. One indicator of this is the new range of office working behaviors and their relationships to office space. To borrow metaphors from the Space Age, these behaviors range from a core group anchored at Mission Control, to a group of space walkers like Alexey Leonov, tethering the mother ship while undertaking extra-vehicular activities, to Major Tom, David Bowie's mythical astronaut who slips the bonds of conventional space travel to journey among the stars.<sup>64</sup>

Other indicators are embedded within alterations to the various regimes that govern the space of office work within the city and within office buildings, the real estate market in which produces

office space, the expanding office workday, and the personhoods of office workers themselves. At the same time, the disciplinary divides between interior design, architecture, and urban design (and even to urban planning) have been again breached in the process.

At the scale of the city, the building, and the desk, old binary oppositions—that not only inscribed the old industrial regime lexically but structured our thinking about what was and what was not possible—founder and fail at sense-making. The incompatibilities that once inhered to these pairings (home and office, public and private lives, public welfare and private enterprise, white and blue collar work, boss and employee, downtown and suburb, interior architecture and building design) fail to describe the changed world of work, its place in workers' lives, its evolving material and performance cultures, its locations, its rhythms, its pace, and the urban and architectural spaces that both produce the office work world within the city and, in turn, are shaped by it.

**In summary, office work is no longer only done in mono-functional office buildings, and downtown is one potential firm location among many.**

Work that was once bracketed between the hours of 9 AM to 5 PM is done over morning coffee in pajamas and in the bathtub at night-time. Where office work was once conducted in office buildings equipped with almost Taylor-made technologies, those technologies have been miniaturized and have become portable.

**Moving from infrastructure to atmosphere, the territory claimed by the office and its work has encroached upon the airport, café, public park and plaza,**

<sup>64</sup> Leonov's spacewalk took place on the then USSR's Voskhod 2 flight on March 18, 1965. He was outside the spacecraft for 12 minutes and nine, connected to the craft by a 5.35-meter tether. At the end of the spacewalk, Leonov's spacesuit had inflated in the vacuum of space to the point where he could not re-enter the airlock. He opened a valve to allow some of the suit's pressure to bleed off, and was barely able to get back inside the capsule.

**cinema, the automobile, and—most poignantly—the home, where the home office, cell phone, and laptop colonize a once revered (now denigrated) domestic sphere. Just as the office desk is as portable as the office worker is mobile, professional fields like interior design transcend their traditional domain of furniture and move to affect city planning.**

Given this context, the objective of this research is to determine in which of several directions the space—the architecture and urbanism—of office

work will evolve. It also serves to understand how office work will affect, and be affected by, other urban programs, as well as to identify new sites for architecture and urbanism among the forest of mono-functional office buildings at downtown's core. Which parts of these buildings and, thus, which parts of the city are ripe for transformation and reuse? Are any among the species resistant to adaptation? To attack these issues, our research has been structured along a three-year timeline.

The research in year one focuses on charting the evolution of work activity as it relates to the evolution of buildings that have been developed to serve the office work function. The second year will focus on prognosticating how work will change due to the evolutionary research of year one. Sites within the geographical limits of this study most susceptible for this type of transformation will also be identified. The third year will be devoted to designing a speculative project that envisions what the future of work

activity will be at the scale of the city, building, and desk.

The reason for selecting Los Angeles's downtown, DTLA, is perhaps less objective than the selection of the city itself. There is no doubt it contains some of the oldest, and newest office buildings in Los Angeles. It also contains one of the broadest demographic cross-sections in the city. However, downtown Los Angeles is also home to Gensler's Los Angeles office, and this selection reflects the office's commitment to the area and what this collaborative effort hopes to offer its future. This partnership with cityLAB, the premier academic think-tank on the city, is designed to be a deliberate bridge between academia and the profession, where the legacy of Gensler's interior design and burgeoning architectural practice in Los Angeles is mated to cityLAB's tradition of provocative intellectual propositions on the city. Together, we believe that concepts are only as good as the realities they propose; downtown Los Angeles is a rich

and fertile ground to explore both.



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