WorkHotel

by Alexander M Dixon

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Abstract

The office has for decades been touted as a model of flexibility, the super-generic shell facilitating the ultra-customized fit out. However, as technology fuels a de-territorialization of the workplace and employees are untethered from their desks, the definition of flexibility must be rewritten architecturally beyond furniture systems, organizational methodologies or leasable space to encompass, and even prioritize, the potential of productive geographies over a singular workplace. Accelerated by the burgeoning sharing economy, increased telecommuting and pervasive, these new working territories extend to public and private institutions alike, challenging our present concepts of ownership and demanding a re-interpretation of the office typologically. This thesis sets out to take on that challenge, and re-imagines the office through the lens of the hotel, mapping the broader attributes of our contemporary working culture onto the hospitality industries highly calibrated temporal management system in a bid to displace the outmoded workplace with a new typological model, the WorkHotel. Engaging the growing trend of decentralization, the proposal seeks to create a platform for the new urban working culture, embracing globalization and the necessity of distributed workforce models. As a typological synthesis, the project speculates on how productive overlaps between the office and hotel reveal new opportunities for optimization through architectural strategies, while at the same time questioning our prevailing cultural distinctions between productivity and relaxation, work and play, and the inherent spatial manifestations that these concepts create.
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To the MIT faculty, I would like to thank you all for providing a challenging and exciting 3.5 years, it has been a great experience to be part of such an evolving and unconventional institution.

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Acknowledgements
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Introduction
The WorkHotel

“In the past the man has been first, in the future the system must be first.”
- Frederick Winslow Taylor, 1911

Taylor’s quote, written over a century ago, signifies the beginning of the office’s inextricable synthesis of technology and architecture, at times symbiotic and at others reactionary. Historically, the office has evolved along both paths, but in its current state suffers from a lack of architectural invention that matches the advances on the technology front, continuing to endorse a simple generic fit-out typology that has been the standard for the past 50 years. The changing demographics as millennials replace the baby boomers, physical to digital and now ephemeral storage systems, the evolution of organizational structures; all have significant architectural implications that have yet to be explored on a fundamental level. The opportunity to work anywhere electricity and wifi are prevalent provides a whole new staging ground for the design of our future working culture, compared to 25 years ago when corporate compartmentalization flourished and the cubicle was at its height. The outgrowth of co-working spaces, coffee shops and other public venues as viable alternatives to the office suggest a shift away from the dedicated centers to a more distributed model of working spaces. This thesis challenges the very notion of the office, and ultimately suggests that the future of the workplace is not in the office, but rather, will be developed as a service attached to other typologies, such as the hotel.

An analytical history of the office yields two intersecting but discrete trajectories: the interior configurability of office systems furniture and the prototypical shell building, which over the past 50 years have become married in the conventional office tower that currently occupies much of our urban environments. A survey of more contemporary (some might even say ‘progressive’) offices such as those operated by Google demonstrates a tendency to offer fixed spatial variability over systemic configurability, dedicating on average 25 percent of their workplace to shared common areas, amenities, cafes, meeting rooms and lecture halls. However, their strategies still privilege the horizontal, and fail to mitigate the vertical segregation that the stacked tower type provides, continuing to abide by the unspoken rule of a fixed location in an urban center. Changes in managerial organization and corporate structures in many companies are gradually loosening the hold on employees, allowing them geographic freedom provided they complete their delegated responsibilities, but these changes have yet to translate directly into an architectural paradigm. Consequently, however, the evolution of company ideologies are giving rise to what might be thought of as a work sequence, rather than a workplace, where employees can tailor their lifestyle around various working locations - the home, the office, the coffee shop, the library, the lobby - complementing the range of different tasks required of the knowledge worker in our contemporary economy.

Following the recent innovations in car, bike and spare room rentals - ZipCar, bike shares and AirBnB - all of which harness a digitized management platform to create new economies derived from existing underutilization, this thesis explores how a similar decentralization of the office can not only produce new models of working, but how the technologically enabled mobility of the millennial workforce inherently changes the current workplace from a ‘place’ to ‘geography.’ Short term rental models have already begun to spring up across the country, known as co-working spaces, and often housed in conventional office buildings. The spaces provide desks for individuals or groups on daily, weekly or monthly bases, offering an alternative to the three plus year leases commonly expected from management companies while at the same time providing a communal atmosphere. Drawing on the success of the co-working spaces in the past few years, the thesis proposes to push even further the temporal aspect of our nascent working culture, embedding the elements of the office within a new context, that of the hotel. Overlaying the distinct use-time parameters present in the office and hotel, it is clear that both suffer from an underutilization of space: the office during the night and the hotel during the day.

On an architectural level, the thesis seeks to conceptually reformulate the office as an infrastructure within the hotel model by developing an organizational logic that functions at the global scale of the building, distributing the prototypical elements of the office and hotel vertically as a continuous, traversable environment, establishing a multiplicity of circulatory connections. Instead of regularized floors that are modified by a potential client, the program is re-conceived for a building as a service, and trades the initial configurability of the past for the mobility of the present and future. Creating a variety of zones with different properties that are linked throughout the building, the nomadic worker can move between areas in order to ‘reconfigure’ their own environment through their own volition. Catalyzing the growing mobility of the workforce, the rise of contract workers, startups and satellite offices, the thesis proposes to re-define the office not as a singular, static destination but as a component in the urban framework, an infrastructure for working, which in turn re-defines the hotel not only as a place for rest and relaxation, but as a productive space on a compressed time scale. The juxtaposition of office and hotel, of work and leisure, establish new situations akin to Tschumi’s notion of crossprogramming, where a “confusion of genres” takes place, engaging the surreality of moving between environments that have become optimized for nearly every part of living and working, but on the scale of an afternoon, an evening or a three day weekend. The hotel becomes the backbone for the new workforce, the operative medium for the deterritorialization of the office, and in turn is transformed into a hybrid typology, the WorkHotel.

The Desk

A Visual History
1904: Larkin Building
1961: Chase-Manhattan Bank
1963: Osram Offices (Burolandschaft)
1969: Action Office II
1980s: Cube Farm
1999: Internet Giants
2000s: Deterritorialization
2005: Co-working
The Office

Critical Analysis
Taylorism, or scientific management, was theory of work management delineated by Fredrick Winslow Taylor and highly influential in the early era of the office. Born out of the manufacturing industry, the rationalization of the workplace under the auspices of productivity resulted in a specific arrangement of workers to be monitored by managers from peripheral locations. Frank Lloyd Wright’s Larkin Building demonstrates this type of model with the two large bays on either side of the atrium, allowing long linear rows of employee’s desks to be viewed strategically from either end.

*Larkin Building / 1904*
The post-World War II office saw the introduction of modular furniture and partition systems into the workplace, an intermediary step before the introduction of the cubicle which would personalize the panels to each employee’s desk. The period of modernist architecture between the 1950s and 60s also formed a high point of experimentation in the development of the prototypical office tower, with firms such as SOM exploring various elevator core positions and glazing systems, which would ultimately solidify into the central core and open plan shell buildings that dominated the latter half of the 20th century.
Burolandschaft
Quickborner Group / 1960s

Harbingers of the open plan, the designs of the Quickborner Group in Germany entitled Burolandschaft signaled a departure from the Taylorist rationalization and were built around an alternative metaphor of landscape. Their deceivingly random distribution of furniture, storage units and planters were intended to provoke greater interaction between employees while at the same time maintaining an open environment for managerial staff to survey their teams. Coinciding with the boom in clerical duties attributed to the growing complexity of the business world the designs include a plethora of storage utilities ranging from small filing units to an array of large standing cabinets.
After the introduction of the Action Office II, the movement to partitioned cells accelerated, and combined with the rise of call centers and software development, quickly became a standard element of the workplace. An infinite variety of panel sizes, shapes, heights and colors populated office merchant's catalogs, and further internalized the design of the office, as the cubicle became a space within a space.

The brainchild of Robert Propst while working for Herman Miller, the Action Office ushered in the era of the cubicle, and was so successful more recent iterations are still being sold today. Released originally in 1965 to a disappointing reception, Propst revised the system and upon its re-release in 1968 with a 'II' appended to the title its sales skyrocketed, cementing Propst's legacy, for better or worse, as the father of the cubicle.
Open Plan
Google Offices

A survey of a number of Google’s offices around the world show that they typically choose linear buildings that enable the interior street to develop axially, with smaller crossings at regular intervals. All but one of the examples below exhibit looped circulation, with parallel routes connected at the ends, and public meeting spaces distributed along the corridors. The other important element in their design is the use of larger, destination spaces at the ends of the streets, inviting employees to traverse the entire length of the building which increases interaction possibilities.
Synthesizing the last one hundred years of office designs, four distinct organizational types emerge: each a product of specific techno-social, economic and architectural atmospheres. The role of technology in facilitating the transformation between eras is underscored, and the current trajectory of the office argued in this thesis posits an accelerated decentralization of the ‘workplace,’ both in ideology and materiality.
Open Office
2000s

Distributed Office
2020s
Personal Space
Timeline

The size of the office has varied significantly over the past 110 years, modulated greatly by the mass adoption of technologies such as the adding machine, typewriter and personal computer. The physical implications of paper storage is apparent in the explosion of filing cabinets, bins and shelving during the middle part of the 20th century, which were gradually replaced by the digital apparatus of the our current state.
Demographics

2015

An aging baby boomer demographic is opening the workforce to an ever larger proportion of millennials, who by 2015 are predicted to make up over 40% of the U.S. labor market, and signals a potentially significant change in ideological preferences and motivations.
Driving the expansion and contraction of the office over the past 100 years is the inherent scaling of storage needs. As the bureaucratic machine grew, more and more space was needed to compartmentalize and store documents, files, folders. Filing cabinets, desk drawers, desktop organizers became standard equipment for the average employee. The introduction of digital storage with the desktop computer heralded the opposite trajectory, while the interface had grown the need for physical storage shrunk. The Internet brought a further reduction in spatial necessity with cloud storage, enabling information to be stored and accessed anywhere regardless of the interface, private or public. These new systems, in conjunction with ideological and demographic changes in the workforce have enabled the next generation to work everywhere, dismantling the infrastructure that was previously necessary to operate an office and distilling the office itself into simply a social or collaborative atmosphere.
Desktop HDD
1990s

Laptop HDD
2000s

The Cloud
2010+
A further extension of the technological advancement over the recent decades, the sharing economy developed a number of innovative approaches to decentralized services, re-imagining what conventionally would be considered owned items. The platforms for car, bike and room sharing enable the use of underutilized resources, while at the same time offering a greater set of opportunities to those who might have been limited before by income or location.
Home Sharing
AirBnB / Short Term Rentals
The sharing innovations in other sectors have yet to paralleled on a architectural level, however, the original shared spatial example is the hotel. This thesis begins with the exploitation of both the vast amount of amenity space both types currently exhibit, and the interlocking use times: the hotel is heavily occupied from 5pm - 11 am, while the office is typically used during the hours of 9 am until 6pm.

Hotel Amenities

A prototypical Hyatt hotel: 30% of total building area is dedicated to amenities and lobby, forming the lower plinth.
Office Amenities
Google’s HQ: 25 - 30% of total floor area on average is dedicated to shared amenities, meeting rooms, cafes and lecture halls.
WorkHotel

*A Typological Experiment*
The design begins by re-organizing the conventional hotel, re-distributing the amenities normally occupying the hotel’s base levels throughout the tower to create smaller localized zones. A central atrium vertically links the amenity platforms or staging grounds for informal work-leisure activities with the partitioned levels above, providing a visual cue and open circulatory system to navigate the interior.
Resizing for Services
Amenity Support Spaces

Global Connection
Atrium Linking Amenities with Rooms

Figure - Void
Private - Public Spaces
The project is sited above an existing urban mall; a complex consisting of shopping concourses, hotels, condominiums, a convention center and above and below ground parking garages. Intervening in such a densely developed area offers multiple benefits, including an already captive audience for short term business stays with the existing convention center. Introducing a productive space within the consumptive arcades potentially stimulates the already prevalent shopping and dining facilities, establishing the urban mall as the lobby for the WorkHotel. Tapping into the concourse, the project draws on the enclosed connective tissue that extends between parking garage, subway station, train station and street, and continues this urban arcade vertically within the building itself.
Developed predominantly in section, every group of room types form a perimeter above an entry level and atrium which facilitate the visual and circulatory access from below. While every level is tailored to a different type of working methodology, each grouping of floors functions similarly as a vertical transition between a public lobby and gradually more private enclosed spaces.
The buildings circulatory system is comprised of a vertical core at the rear and localized circulation paths on every group of levels. As the programs of each vertical segment are different, so too the circulation changes, at times forming a perimeter around the central atrium, cutting across the void or alternating between interior and facade.
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Each group of levels is tailored to a specific set of criteria. The lowest levels are dedicated to capsule style rooms, providing small, individual sleeping spaces at night and transforming during the day into team desks. The second group consists of standard rooms, with multiple modes of entry to provide longer term living spaces while enabling short term occupancy during the daytime for business meetings and group work.

Executive suites form the third group, organized around the executives office, with a front room that can be used for secretarial purposes or as a waiting room - the futon doubling as seating and bed. The top level is dedicated to the loft style rooms, each of which are accessible from a lower, public entry, and from an upper, private entry. The most costly, these rooms offer visual discretion and the most privacy.
Executive Suite

Business by day, leisure by night.
The suite features a louvered divider separating the enormous bathtub from the sleeping area.
Loft Suite

Generously sized, the loft offers dual means of entry, a public and a private, useful for clandestine meetings or unnoticed exits.
Capsules

A set of basic mechanical systems enable the capsules to sleep four individuals, or provide a shared workspace for a team of 4-6.
Using the bathroom as a locker, the room transforms daily from a sleeping unit to a meeting space.
The End
Appendix A

Thesis Defense
Thesis Defense
19 December, 2013
Appendix B

Model Photos
Model Photos
Prudential Center
Appendix C

Alternate Experiments
A previous proposal to re-sequence the typical office day within a single building using a system of architecturally differentiated walls to delineate the various spaces used throughout a workday. Linearly juxtaposing the various types of spaces creates two distinct grains, with an axis along each wall and one crossing back and forth over every wall.
Typical Spatial Sequence

- Meetings
- Individual Tasks
- Group Tasks
- Entertainment
- Socializing
- Exercise
- Informal meetings
Re-sequencing of spaces
Bar / Meeting

Process Work

Presentation

Group Process
This proposal suggested creating specific, operable walls for each of the four distinct types of work spaces: individual tasks, group work, meetings and social areas. Spaces that require enclosure are placed within the moving walls, while those that benefit from open areas are placed in the floor, and are revealed and changed as the walls above are reconfigured.

*Resizing the conventional cubicle*
Conference Room: Social Dimensions
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