

by

**MARY LYNCH-LLOYD**

Bachelor of Arts, Fine Art  
University of California, Los Angeles, 2007

**CHING YING NGAN**

Bachelor of Arts, Architectural Studies  
University of Hong Kong, 2012

**MAYA SHOPOVA**

Bachelor of Science, Architecture  
McGill University, 2011

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Architecture at the Massachusetts Institute of Technology  
February 2018

©2018 Mary Lynch-Lloyd, Ching Ying Ngan, Maya Shopova. All rights reserved.

The authors hereby grant to MIT permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known of hereafter created.

Signatures of Authors: .....

Department of Architecture  
January 18, 2018

Certified by: .....

Ana Miljacki  
Professor of Architecture  
Thesis Supervisor

Accepted by: .....

Sheila Kennedy  
Professor of Architecture  
Chair of the Department Committee on Graduate Students 1



by

**MARY LYNCH-LLOYD**  
**CHING YING NGAN**  
**MAYA SHOPOVA**

Submitted to the Department of Architecture on January 18, 2018 in Partial Fulfillment of the Requirements for the Degree of Master of Architecture

## **ABSTRACT**

Collective Home Office is a collaborative practice whose working process tests the propositions it makes through architecture. As a group of friends, willing test subjects, a union of producers, a jury, a family, or an army, CHO explores the frictions and benefits of collectivity in both method and content. The three words that form its name provide a framework through which the practice engages with its context, questioning how the meanings of collective, home and office have been historically shaped.

Targeting the agents most implicated in defining the current moment, namely the proto-state corporations, platforms and institutions that constitute Big Tech, CHO pitches a series of unsolicited projects to clients who are radically changing how we live and relate to one another. CHO believes that not only should these agents be held responsible for the drastic social and urban impacts they exert, but that they may become willing partners in designing new ways of living that respond to the social estrangement, imminent technological unemployment, and chronic housing crisis that have resulted from their unregulated conquest of market share.

Far from neglecting the notion of collectivity, the tech world has appropriated its surplus value and replaced sharing with a sharing economy and then with a gig economy. The “capitalist collective” fails to recognize its misuse of the word; collectives differ greatly from memberships rosters. CHO believes that collectivity is a shared motivation towards a common goal. Fundamentally ideological, it is accrued over time through social intimacy built on shared experiences, both positive and negative. Spatially, this notion of the collective requires a new organizational strategy. Modeled on both the city and the home, forms of domestic urbanism are fostered by intimate encounters occurring at overlapping scales of interaction, redefining the notion of household.

CHO focuses its practice on how this unlikely partnership can be used as an opportunity to rewire the collective with new priorities. Using the home office as a device, CHO emphasizes the increasing importance of care work and social grooming as means of coping with transitional post-work lifestyle no longer based on the binary of home and work.

Thesis Supervisor: Ana Miljacki  
Title: Professor of Architecture



## Thesis Committee

Advisor:

**ANA MILJACKI**, MArch, PhD  
Professor of Architecture

Reader:

**TIMOTHY HYDE**, MArch, PhD  
Associate Professor of the History of Architecture

Reader:

**RAFAEL (RAFI) SEGAL**, PhD  
Associate Professor of Architecture and Urbanism

## Acknowledgments

We would like to sincerely thank:

Ana, for the stimulating conversations, the personable morning meetings over coffee, but most importantly for believing in the collective throughout the tumultuous experiment of our group thesis.

Timothy, for his sharp eyes, apt critique, and incisive logic for building our case.

Rafi, for getting to know us from year one, for taking us to Rwanda, for continually encouraging us, and for pushing the experimental agenda of the project.

Chris Dewart, for his wonderful spirit, and his patient guidance in our furniture prototyping venture.

Duncan Kincaid, for three and a half years of witty emails and support beyond tech.

Ekaterina Zabrovskaya from MISTI-Russia, for generously funding our research trip to Moscow, which informed our project with rich historical precedents.

The MIT Department of Architecture for generous funding support, and for foregrounding so many strong female professionals who have inspired us.

Our amazing thesis helpers, whose incredible efforts we couldn't have done without: Benjamin Albrecht, Xiomara Paige Alvarez, Borislav Angelov, Alexander Robert Bodkin, Julian Blumle, Wenxin Cai, Stratton Coffman, Charlotte Isabel D'Acierno, Isadora Stahl Dannin, Valeria Rivera Deneke, Milap Dixit, Marlena Fauer, Daniel Joe Garcia, Ji Ye Ha, Ben Carlton Hoyle, Melika Konjicanin, Anran Li, Catherine Anabella Lie, Dijana Milenov, Emma B. Pfeiffer, Jung In Seo, Stefan Shopov, Cristina Solis, Sarah Wagner, David Allen White

Ching

**Thank you to my parents, sister and brother for the unconditional love and support that sustains my pursuit of dreams; thank you to Shan and Chuk for decades of friendship and caring; thank you to Olivia for being a caring roommate since the first day I arrived Boston; thank you to Sophia, Soyeon, MyDung, Christina, Jonathan, Sergio, Zain, Jorge, Rob and Tyler for the company and encouragement throughout the 3.5 years; and thank you to Mary and Maya for tolerance and trust in this collective exploration.**

Mary

**To the collective, for the countless happy hours; to my siblings Carrie and Johnny, for encouraging and making fun of me; to my big family, for being clever, raucous and caring; to my mom Eileen, for her endless love and support; to my father Jon, for inspiring me; to Benjamin, for getting me through.**

Maya

**To my parents Tatiana and Plamen, and my brothers Clement and Stefan, for your unconditional support and encouragement throughout my never-ending education; to my classmates and to the collective for being family; to my dear friends abroad for the care and inspiring conversations that helped me through it all.**

# Table of Contents

<b>01</b>	<b>Manifesto</b>	<b>11-91</b>
<b>02</b>	<b>Organization</b>	<b>12</b>
	<b>01</b> <b>Origin Story</b>	<b>12</b>
	<b>02</b> <b>Collaborative Structure</b>	<b>14</b>
<b>03</b>	<b>Devices</b>	<b>16</b>
	<b>01</b> <b>Archive</b>	<b>16</b>
	i. <b>Script</b>	<b>17</b>
	ii. <b>Closet</b>	<b>20</b>
	iii. <b>Publication</b>	<b>21</b>
	<b>02</b> <b>Matrix</b>	<b>24</b>
	<b>03</b> <b>Hat</b>	<b>26</b>
	<b>04</b> <b>Charette</b>	<b>27</b>
	<b>05</b> <b>Pattern Book</b>	<b>31</b>
	<b>06</b> <b>Molecule</b>	<b>34</b>
	i. <b>General Anatomy</b>	<b>36</b>
	ii. <b>Molecular Values</b>	<b>37</b>
	<b>07</b> <b>1:1 Prototyping</b>	<b>39</b>
	i. <b>T-Unit</b>	<b>39</b>
	ii. <b>Archive Unit</b>	<b>45</b>
	iii. <b>Group Bed</b>	<b>45</b>
<b>04</b>	<b>Clients</b>	<b>48</b>
	<b>01</b> <b>Amazon</b>	<b>49</b>
	<b>02</b> <b>Airbnb</b>	<b>57</b>
	<b>03</b> <b>MIT</b>	<b>68</b>
<b>05</b>	<b>Language</b>	<b>78</b>
	<b>01</b> <b>Collective Home Office</b>	<b>78</b>
	<b>02</b> <b>Collective Islands</b>	<b>81</b>
	<b>03</b> <b>Vocabulary</b>	<b>83</b>
	i. <b>Smoke Stair</b>	<b>84</b>
	ii. <b>Light Well</b>	<b>86</b>



	iii.	Bay window	88
	iv.	Porch + Balcony	91
	v.	Vertical Courtyard	91
	vi.	Slab	92
04		Pattern Book Projects	93
	i.	Amazon	93
	ii.	Airbnb	108
	iii.	MIT	128
05		Models	144
06		Graphic Standards	156
	01	Intuition	156
	02	Ugliness	156
	03	Colors and Gradients	156
	04	Font	157
	05	Annotation	157
	06	3D text	158
	07	Image Sourcing	160
07		Appendix	164
	01	Collective Brain Weekly	164
	02	Precedent Research	212
	03	Presentation Images	252
08		Bibliography	260



## **01 MANIFESTO**

**We formed our collective in the hopes of jointly producing architecture that will transcend the desires, tastes and opinions of any one of our three members. Designing a working process in which we are test subjects just as much as we are architects, our interests fundamentally rest on the definition of the three words that make up the name of our practice: Collective Home Office.**

# 02 ORGANIZATION

## 02-01 ORIGIN STORY



**Ching Ying Ngan**

Meeting for the first time at the beginning of MIT's Masters of Architecture program in 2014, our three founding members

gradually began to get to know each other through our design studios. With diverse backgrounds, coming from Hong Kong, California, and Canada/Bulgaria, and with degrees in architecture and fine art, we found common interests in the construction of identity and the architecture of everyday life.



**Mary Lynch-Lloyd**



**Maya Shopova**

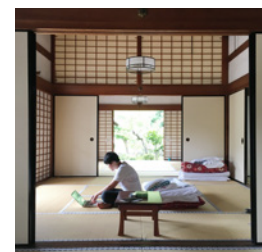
Taking opportunities to travel together, we joined several workshops abroad and designed our own research trips. In Japan we visited rural villages

facing the emptying crisis of urban migration and aging populations.

We experienced the flexibility of traditional

architectural based on the tatami unit that choreographed the possibility of spatial expansion and contraction and the ability to shift the threshold between inside and out.

In Hong Kong we saw the dense forests of pencil towers, packed with micro-units optimized down to the dimensions of beds. In Rwanda our design/build workshop visited Kigali, the "City of 1000 Hills," in which informal housing has precariously



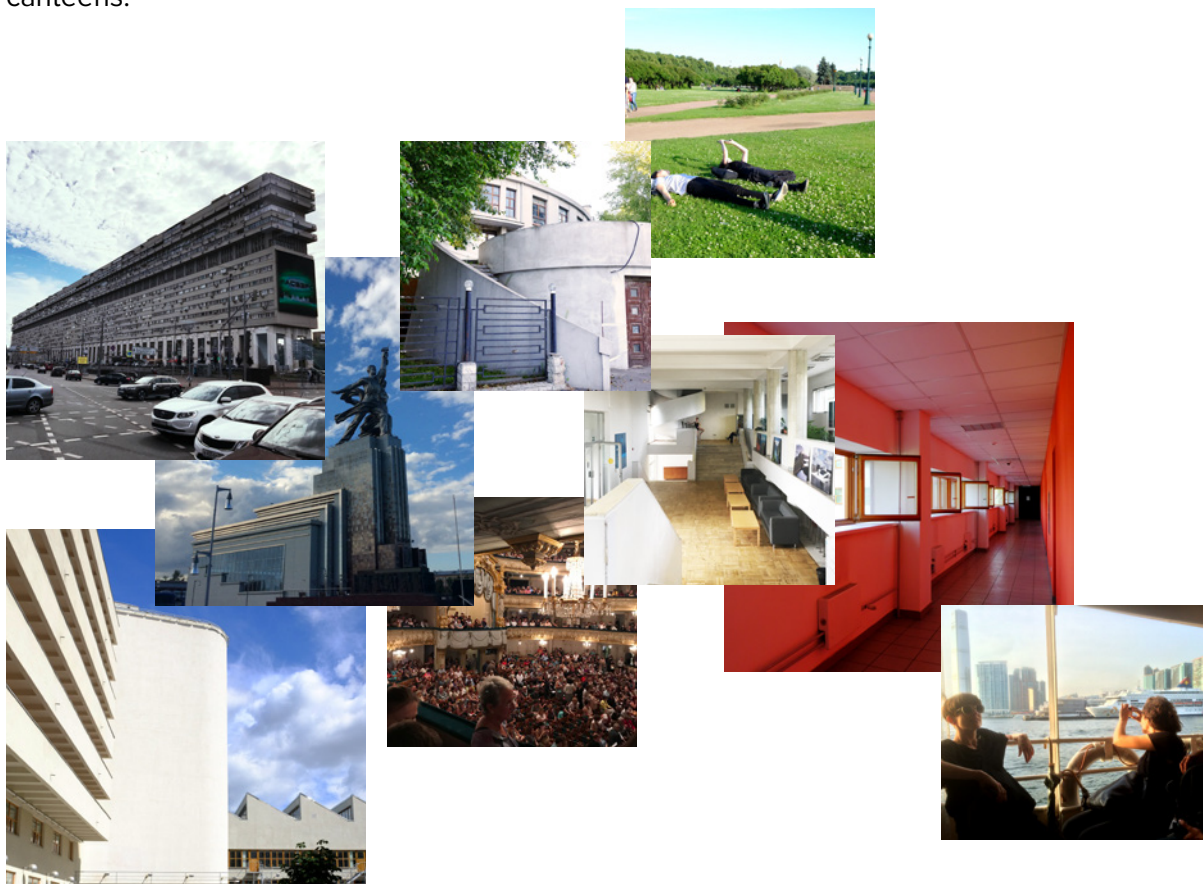
blanketed the hillsides and farmland occupies the flat valleys. We worked with the Rwanda Housing Authority to prototype a single-family brick home that enjoys the social

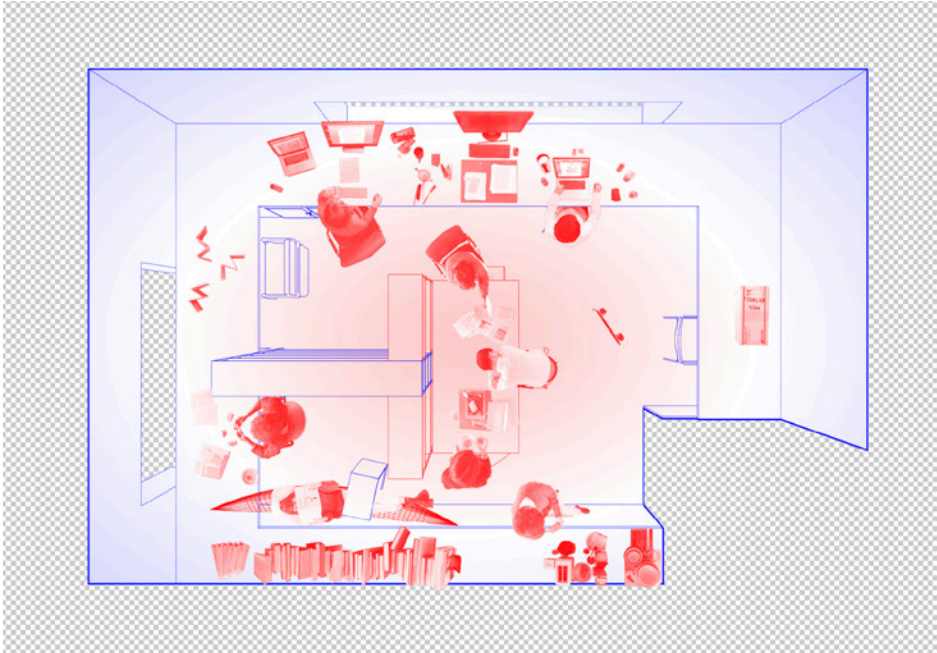


benefits of the mild climate by maximizing usable outdoor space and building in flexibility for family growth with a changeable partition wall system. In Russia we visited St. Petersburg and Moscow to document communal housing and workers' clubs of the Soviet period. We observed how the spatial organization of these projects was designed to cohere a larger social body, and the interesting ways of producing new collective identities through programmatic provision, like children's nurseries and canteens.



Credit: Taeseop Shin





## 02-02 COLLABORATIVE STRUCTURE

We take our collaboration as both an opportunity to engage in projects at a larger magnitude and to learn from and be challenged by one another. While every member has unique strengths, we are different from a group of experts in distinct areas, each of us with a specific job to do. In Collective Home Office we trade, borrow, give, bargain, sell, foist



upon, steal and bequeath tasks to and from each other, making our work the product of collective dialogue and effort. In this way we are placed in uncomfortable positions, occupying a space of friction amongst equals, but one that produces learning through the interface of individual authorship, collective reinforcement and logistical negotiation. In the end we all share the goal of building a collective language of design that withstands the challenges the neoliberal economy and corporate statehood have imposed upon architecture.



**In our process we persistently question these three words,**

We build this language outside of the traditional hierarchy that accompanies many architecture firms. The lack of hierarchy increases agility, flexibility and social well-being, but sometimes it can increase confusion and communication. Our unofficial mascot, the centaur, possesses the unique strengths of both human

and horse, yet it is a creature that is eternally restless. Like its air of unresolvedness, most visible at the awkward seam where the hair of the horse meets the skin of the human, we accept this edginess, and

organize it through a designed set of working practices and devices. A brief Code of Conduct reminds us of the ways we would like to practice collectivity:

- Everyone is important.
- Everyone is invited.
- Be direct.
- Share any thoughts.
- Interrupting can be good.
- Silence is also ok.
- Communicate any bad feelings/  
good feelings/  
confusion/  
misunderstanding.
- Challenge yourself.
- Keep calm.
- Play, enjoy yourself.

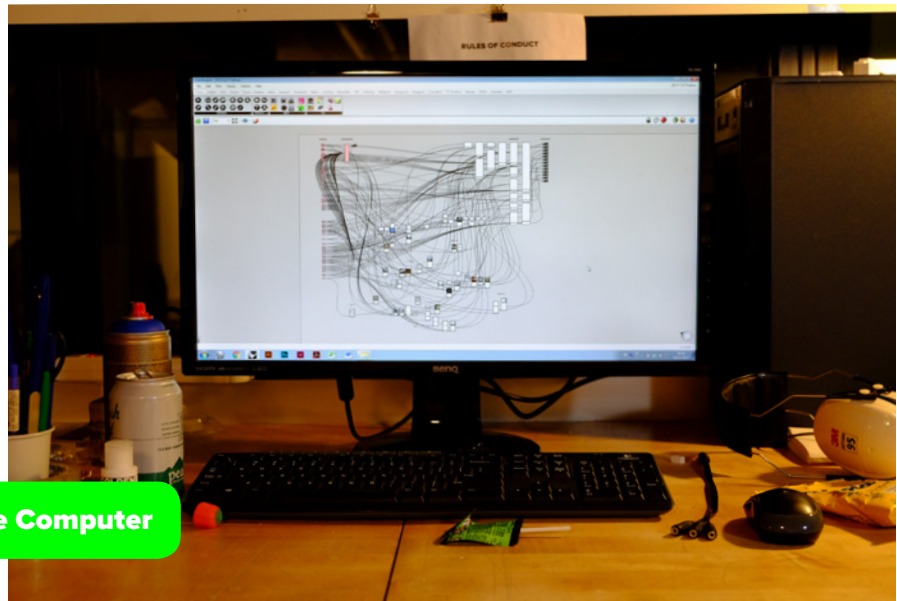


**examining how their meanings are underwritten by a history of governing entities who shape how we live, work and care for one another.**



## 03 DEVICES

As a design collective without an inscribed hierarchy, we rely on a series of specific devices that together form a design protocol. These devices variously serve to collect, organize, map, communicate, test, forge bonds, trouble authorship, and give options. They stimulate debate and discussion, but at the same time they create a space in which those discussions are carried out through a process of design. Design collaborations can sometimes yield way too much, and sometimes way too little. The following devices help us to modulate our production and to sustain a collaborative practice that can withstand the social, emotional and practical challenges of an increasingly individualized professional future.

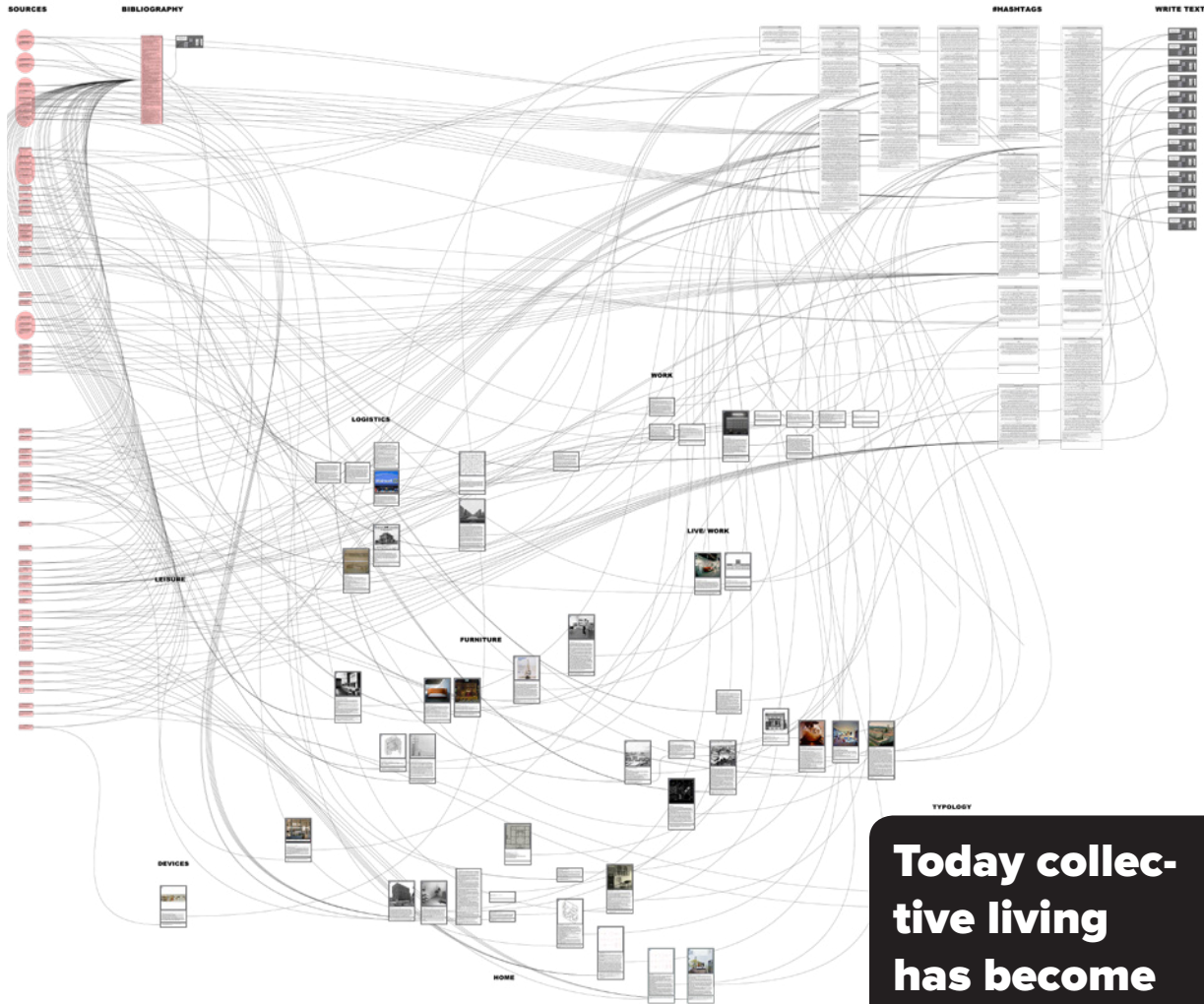


Archive Computer

### 03-01 ARCHIVE

More than just a storage space, our archive functions as an intelligent multi-media assemblage composed of one part script, one part closet, and one part publication. We call it The Collective Brain, our non-human fourth member who is good at remembering, organizing, and who sometimes makes surprising connections between areas of research. It is a device for collaboratively building a language through a disembodied imagination that shares knowledge.





### 03-01-I SCRIPT

The grasshopper script organizes our research into three types of information: sources, “items,” and hashtags. Source components record bibliographic information, which are connected to item components. Item components include an image, notes and quotes for a particular research idea. Hashtag components representing larger themes act as umbrellas, connecting related items and their corresponding sources. A text writer component compiles information from these items and automatically outputs it into a text file with its own bibliography. As the script grows, the network becomes more complex, yet a single idea can be easily traced to its roots and through the process, links to other ideas area revealed. As a platform for collaboration, this visual index of research from three different minds helps to document as well as creatively share knowledge among its contributors.

**Today collec-  
tive living  
has become  
a necessity  
because of the  
housing crisis  
happening in  
every major  
city,<sup>1</sup>**

<sup>1</sup> Reinhold Martin, Susanne Schindler and Jacob Moore, eds., *The Art of Inequality: Architecture, Housing, and Real Estate* (New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2015).

# Sources

# Items

- Connected Distribution**  
John McLaughlin, Thesis: Dissertation 'Connected Distribution - Planning Based on the Future Worker' Massachusetts Institute of Technology, 2016.
- WorkHotel**  
Alexander U. Dixon, Thesis: Dissertation 'WorkHotel' Massachusetts Institute of Technology, 2014.
- A-Typical Plan**  
Johanna Kus, A-Typical Plan: On Identity, Flexibility, and Ambiguities in the Office Building. (London: Black Dog Publishing, 2012).
- Work and the City**  
Frank Duffy, Work and the City. (London: Black Dog Publishing Limited, 2008).
- Time Conflict**  
Jack Seif, Time Conflict Volume 02, 2015.
- Work Alone**  
Jack Seif, Work Alone: On Work on Its Own Terms. (London: Black Dog Publishing, 2017).  
http://www.blackdogpublishing.com/work-alone
- The Intermediate Site**  
Liam O'Shea and John Crockett, The Intermediate Site: A Handbook for Collective Living. (Amsterdam: SUN, 2016).
- A Vertical Theory of Urban Design**  
Liam O'Shea, Reinventing The Skyline: A Vertical Theory of Urban Design. (Oxford: Black Dog Publishing, 2012).

**DISTRIBUTED WORKSPACE**

Based on the changing nature of work and the trend of decentralization of workplaces as a result of the changing nature of work and the trend of decentralization of workplaces as a result of the changing nature of work and the trend of decentralization of workplaces as a result of the changing nature of work...

**THE INTERMEDIATE SITE**

The intermediate site is a new type of site that is neither a traditional urban site nor a rural site. It is a site that is located in the urban fabric but is not part of the urban fabric. It is a site that is located in the urban fabric but is not part of the urban fabric. It is a site that is located in the urban fabric but is not part of the urban fabric.

**A-TYPICAL PLAN**

The deep plan in American office and the thin plan in European office. The deep plan in American office and the thin plan in European office. The deep plan in American office and the thin plan in European office. The deep plan in American office and the thin plan in European office.

**PRIMARY SECONDARY TERTIARY HORIZONTAL AND VERTICAL CIRCULATION DESIGN**

**A VERTICAL THEORY OF URBAN DESIGN**

Chapter 1: Response to a Vertical Theory. A response to a vertical theory. A response to a vertical theory. A response to a vertical theory. A response to a vertical theory. A response to a vertical theory.

Hashtags

Text Writer

ARCHIPPELLAGO

(6)

-----

- Based on the changing notion of work and the trend of decentralization of workspaces as a result of the burgeoning mobile technologies and sharing economy, this thesis proposed distributed co-working office in under-utilized areas within location. By tapping into the public amenities such as subway and dense housing stocks, the proposed shared office typology acts as a neighborhood office as well as a public resource. (McLaughlin)

- By juxtaposing office and hotel, work and leisure with a highly calibrated temporal and spatial organization, this thesis proposed a platform that redefines flexibility in office space, challenges the concepts of ownership and questions the distinction between productivity and relaxation, work and play. (Dixon)

- Given greater individual responsibility, major environmental advantages ought to follow. The potential advantages of distributed work for the majority perhaps of the working population include softening the impact of commuting - eg. More home working or perhaps, more accurately, the dispersal and opening up of work regimes, leading to less intense and more irregular patterns of commuting which have the potential to eliminate time-wasting peaks in public transportation and related congestion on crowded motorways and other roads. (Duffy, 18)

- "The Networked Office" - potential of 1. making knowledge based work more enjoyable and meaningful 2. facilitating more efficient and effective use of existing buildings and cities 3. making a huge contribution to creating sustainable cities (Duffy, 55)

- The reconfiguration of the workplace combined with radical rethinking of the pattern of use of working and living spaces over time supported by the introduction of a user based and responsible, demand-led system of procurement and delivery are the three necessary components of the complete answer to sustainability. (Duffy, 62)

-----

THE INTERMEDIATE SIZE

- For Doggers and Kolhoff, the size of the urban villa housing type should contain six to ten apartments, each one different. The number of floors should be no more than four. In a villa of that size it is possible to plan apartment units that differ in site and arrangement and in their relationship to the outdoor space (gardens, loggias and roof gardens) (42).

- The intermediate size is situated in between the two scales. As an individual object it primarily defines the space around it, but it does not yet define the urban space. The second scale factor is the relationship between the whole and the parts. In the urban context the parts - windows, dormers, balconies and so on - are usually subordinated to the whole (43).

- It is not possible to define the limits of the intermediate size in absolute terms. It is determined by the relationship between the autonomy of the parts and the unity of the whole. This relationship is reflected in the structure of the building (distribution of spaces and access), its use (collective use of the plot, and the degree to which the collective space is part of the public domain) and its volume (volumetric and organization of the facade). The limits of the intermediate size will be explored by comparing various scales of structures and arrangements (43).

- The architectural and cultural features of the intermediate size were grouped into three categories - monoliths, ensembles and additives.

- In the monolith, the aristocratic residential program is replaced by housing for workers in response to the emergence of ideological housing models which uplift the working class by enabling its members to live in palaces or villas. In the structure of its facade as well as its ground plan, the villa remains a spatial whole. Underlying the monolith is an ideology of uniqueness. The type is founded on an urban culture of collective land use and mixing of functions. The facade is neutral; the architectural specifics are located in the interior. Within the boundaries of the architectural volume there is great flexibility and diversity of ground plans (50).

- In the ensemble, the volume is grouped around a specifically designed outdoor space. The central area of the ensemble is enclosed and intimate, while the architectural details of the internal facade give the building type its specific character (52).

- The additive consists of a number of identical housing units, each with its own staircase, group together in a building volume that refers to the villa. The composition of the facade harks back to the classical compositional idiom; however, the ground plan does not display the spatial unity found in the classical villa. The ideology of this model is twofold, at the interface between collectivity and individuality. Standardisation of private use goes together with collective representation (64).

- To Solà-Morales, the juxtaposition of collectives or enclaves on different-sized plots, with differing degrees of publicness, is the main feature of urbanity. Urban planning in the historical city is always small-scale and is directly linked to a building typology. The historical fabric is highly stratified in its use (64).

- Intermediate-rise housing is presented as an autonomous unit at the boundary between architecture and urban planning. It is a small-scale vision of the city, based on architectural elements that can incorporate the collective and public domains. It introduces notions of interlinkage and stratification by incorporating semi-public or collective elements into a building typology. The main intrinsic values associated with this middle size are override at the architectural level; of scale and down-scaling at the urban planning level. At both levels this leads to flexibility and diversity in relation to program and spatial arrangements (76).

- The intermediate-sized building can introduce stratification into the fabric and create links between different networks and domains (77).

-----

A VERTICAL THEORY OF URBAN DESIGN

Chapter 1: Premises for a Vertical Theory

- A redefinition for more habitable working and living urban environments: more diverse, greater multiplicity, less regimented; with networks of planes, parts and enclosed spaces in the sky (12).

- The proposition that skyscraper design should be urban involves an integration of socio-economic-political-environmental and physical concerns with the architectural concerns of building design (14).

- Alexi Mazur Associates: People do not remain in one place in the skyscraper. They move about within their spaces over the working day and require a diversity of environments (18).

- As an urban design proposition we would need to design skyscraper spaces similar to the urban spaces found at the ground plane but with different types and scales (18).

- Would all the occupants of the high-rise have to make their way down to the ground plane or to the podium levels to find the basic amenities necessary to make their lives complete and diverse, and would these amenities be adequate to meet the multitude of needs of this sizable population (23)?

- Designing the skyscraper as urban design offers a greater set of opportunities for reforming its built form and, in effect, for rediscovering the many hidden opportunities in its built form. For the investor, it could increase the range of marketing features, to enhance sales or rentability and the building's long-term asset value (27).

- Simply stated, the basis for the vertical theory of urban design is the

-----

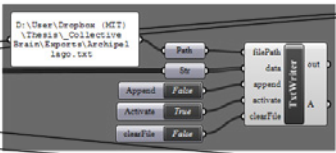
2 Ryan McLaughlin, Thesis Dissertation "Concrete Domains - Housing Beyond the Future Vision", Massachusetts Institute of Technology, 2016

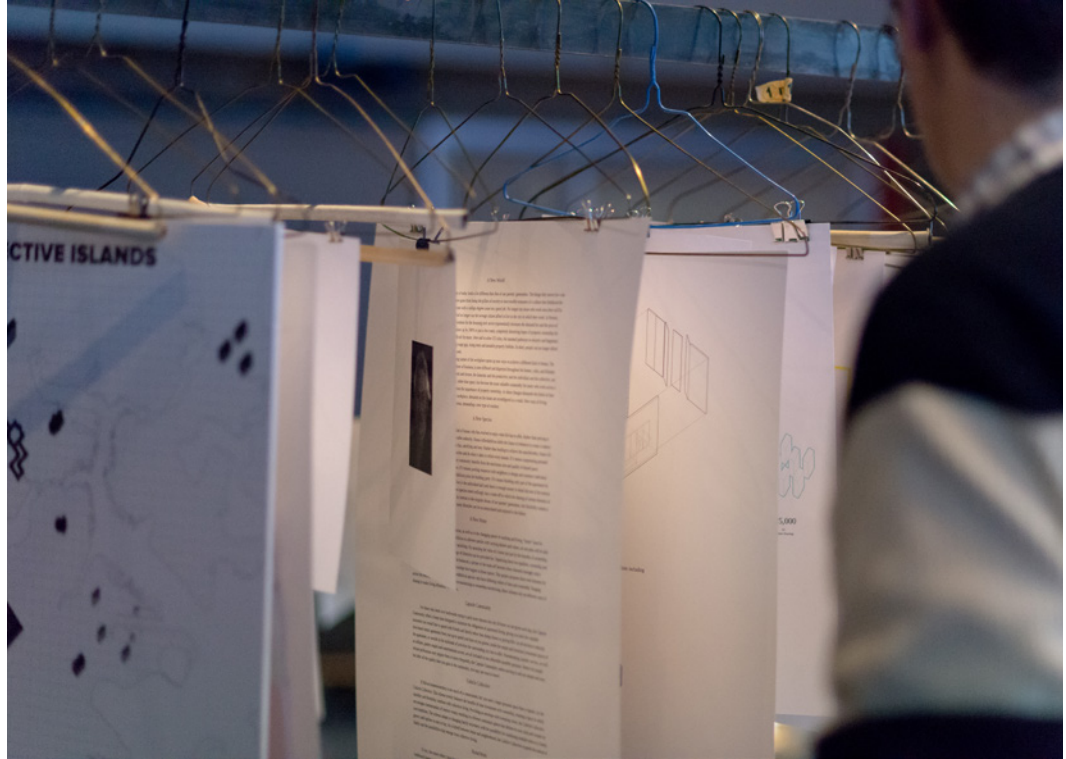
3 Alexander of Ghent, Thesis Dissertation "Networked", Massachusetts Institute of Technology, 2014.

4 Peter Dogger, Urban and the City, Columbia Books on Architecture, 2008

5 Lisa Apperly and James Greenwood, The Intermediate Size: A Handbook for Creative Thinking, Amsterdam: BUN, 2016

6 Ryan Mazur, Reforming the Skyscraper: A Vertical Theory of Urban Design, (Grad School Urban Academy), 2022.





Credit: Sarah Wagner

### 03-01-II CLOSET

As a physical space, our archive works like a closet. It holds the objects and ideas from our research to be recalled immediately, and serves to confront us with forgotten or uncomfortable notions conjured by the



historical precedents we have objectified and archived. Following one stream of research in the Collective Brain, historical precedents of collective living have been 3D printed and placed in the closet, sharing shelves with diagrammatic models of spatial organization for new projects. This evolving cabinet of curiosities helps to anchor the virtual network of our Collective Brain in our physical working space and asks us to measure our ideas against ones that have been tested before. The closet also hosts artifacts of our past work, allowing us to keep in mind the collective arc of thinking and production.

### 03-01-III PUBLICATION

Every week we published our most interesting research in a short newsletter called the Collective Brain Weekly. Taking the most pertinent information from the “item” components in our Collective Brain script, the CBW is meant to be a casual publication that opens our notes and references to a larger discussion beyond our collective. Bolded call-outs in the body of the texts act as notes to each other, offering syntheses or insights on the how the research directly applies to our ideas. We distribute the CBW on Fridays, leaving stacks in public spaces where it can circulate into the general population of the institute.

### VOLUME 1

In Volume 1, the CBW explored the impacts of educational institutions on housing in the Boston area, the history of speculative building as manifested in the Boston triple-decker, and its evolution into platform housing supported by the neoliberal sharing economy. It discovered that institutions like MIT have big impacts on the local housing market, contributing indirectly and directly to the housing crisis through both scale and policies of land acquisition and use, and that platforms will continue to consume and exacerbate the private market if left unregulated.

### VOLUME 2

Volume 2 probed the policies and administrations of affordable housing in Boston and investigated the condition of student housing at MIT in the context of a highly competitive housing market. It showed that lodging houses, which were a successful and prolific housing typology into the 1980s because they could flexibly and affordably house single people, have made a secret comeback under a new name: Airbnb. The issue also

VOLUME 1 FRIDAY, OCTOBER 21, 2017 CAMBRIDGE, MA

## COLLECTIVE BRAIN WEEKLY

**MIT Student Housing: A Short History of an Urban Institutional Agent**

**Institution as Agent**  
Educational institutions in the Boston area occupy large areas of land and have big impacts on the housing market. In the MIT-adjacent vicinity of Boston-Cambridge-Somerville, students make up 25% of the total population. Imagining that each student would occupy the distribution of living space allowed by sanitation code, this population of students would require an apartment with a bedroom larger than downtown Boston. In addition, rents are higher in neighborhoods closer to educational institutions. There is a \$100 average difference in rental price for the same unit between Boston neighborhoods with high and low numbers of student residents.

**Of the 65,000 renters in Cambridge alone, 4% are MIT graduate students.** This is double the amount of MIT graduate students renting off-campus in Cambridge 20 years ago (2007 Interim Report, 9). Graduate students can outpace low and moderate income renters on the housing market as “additional” renters in a tight housing market, and specifically as roommate groups who can negotiate local facilities for multiple bedrooms units (City Report, 45). From 2000-2015, Cambridge saw declines in low income (50-60% AMFI) and moderate income (50-80% AMFI) households. In the same period, it saw a small increase in very low income (<30% AMFI) households and a drastic jump in middle and high income (>80% AMFI) households (2017 Interim Report, 16). This fits correspondingly with the period in increasing graduate student presence on the rental housing market.

**From 2000-2013, asking rents for 1-bedrooms increased by 80%, for 2-bedrooms 65%, and for 3-bedrooms 60% (City Report).**

Graduate students clearly contribute to the demand for rental housing in the area. Combined with the declining stock of rental units due to condo conversion, this has produced a highly competitive rental market in Cambridge, which has a 5.5% vacancy rate, a rate which also extends to substantially less rent. As of 2015, Cambridge and Boston have been below this rate since 2010 (2017 Interim Report, 15).

On top of this, median asking rents for 1- and 3BR units have increased on average 45-6% per year since 2000 (as measured relative to the increase of student reports). From 2000-2015, BR asking rents increased 60%, 2BR 65%, and 3BR 60% (City Report). **Graduate students reported spending an average of 52% of their income on housing, sometimes even more.** The average MIT graduate student is about \$23,000 per year. Other schools can graduate students, if they even have stipends, at around the same level.

**A Short History of MIT Student Housing**  
In the early 1950s, MIT President Karl Compton publicized one of the need for graduate residences. “Graduate students are not only the social contacts, which the undergraduate are expected to maintain, but they also have their own social affectations, which depend on such contacts. The most natural bearing comes from free social intercourse between them during intervals but of equivalent intellectual outlook” (City Report, 5). Now with 75% of the 424 undergraduate students live on campus, only 36% of the nearly 4,500 graduate students live on campus. (2017 Interim Report, 21)

There is a shortage of graduate student housing. The actual number of the deficit has been difficult to determine, and there have been a series of

VOLUME 2 FRIDAY, OCTOBER 21, 2017 CAMBRIDGE, MA

## COLLECTIVE BRAIN WEEKLY

**What is affordable housing? How is it administered?**

Affordability is generally determined by whether one's income can pay for essential goods and services without causing undue financial hardship. (Moore & Schreier, 18)

Housing is considered “affordable” when the tenant in a metropolitan area pays no more than 30% of their gross income for housing costs. The affordability of housing is measured on an index of “housing affordability index” a ratio of 100 meaning that a family of median income can afford to pay for a mortgage on a median price home in Cambridge, Boston/Quincy, this value is calculated as the median 30% in the past 10 years.

Only 27% of Americans lived in affordable housing in 2015. It is estimated that a 1% increase in affordable housing units in 25 US cities will affect an average two-bedroom renter. (Moore & Schreier, 22)

Household is the central social unit of measurement. The US Census defines household as “a group of people who occupy a housing unit.” This is usually taken to mean a conventional definition of “family.” There are two major categories of households, family and non-family. Within a “family” is defined as two or more individuals “related by birth, marriage, or adoption and residing together in a ‘non-institutional’ household” in a single permanent dwelling, some or exclusively with one related adult. These household members are related to our understanding of what is “housing” socially but also what is credit worthy. (Moore & Schreier, 23)

Cambridge, Boston and Quincy have an Affordability Index of 133.7%, well above the 100 limit which indicates that a medium income family is able to take out a mortgage on a median income home. This means that middle class is being priced out.

In the early 1950s, federal policy regarding providing affordable housing was to create public housing projects. Voucher programs were used to help assist the construction of private rental developments, but to support residential mobility, the government's direct role in housing development. (Moore & Schreier, 24)

Boston administers affordable housing through the 15 Subsidized Rental Housing units for a subsidized rent that is linked to the tenant's income, adding a 1% percentage of income each month. This is used for households with very low income. (2) Income Restricted: It most cases the rent for income restricted units is fixed to the unit, the tenant pays the same set amount each month. This is one area where tenant's income changes. Income restricted housing is often considered under the Area Median Income. (2) Voucher programs: rental assistance helps tenants afford private market apartments. Vouchers give a set amount to go towards rent. The tenant pays any costs exceeding the voucher. (City of Boston, 2017)

**Section B Voucher Programs**  
We can define that your apartment (renting 30-40%) and the government pays the rest, or you can rent for market rate. Section B Program (renting 30% of income). There are 5 different forms of voucher that fit these two categories.

In the United States, the term “social housing” is being commonly used, but it is considered to be this market co-dependent system which comprises of 5% of the total housing, and it is to be expire after a certain amount of time after which it returns to market rates.

VOLUME 3 FRIDAY, November 3, 2017 CAMBRIDGE, MA

## COLLECTIVE BRAIN WEEKLY

**Care and Maintenance**

In 1980 the artist Mark Landman created a manifesto called “Manifesto for Maintenance” as 1980’s is the time of a proposal for an artistic unit called “CARE”, the document outlined the division between what one saw as “two basic systems” that governed the social and this political and economic system. Differently governed, organized, compensated and equally valued. Development and Maintenance each found their place attached to certain social roles and types of spaces. Suggesting a link between these systems and what she described as two like metaphors, one for death and one for life. Markie defined the implied values within each metaphor (death): “separation; individuality; Avant-Garde par excellence; to follow one's own path to death—do your own thing; dynamic change; life; unification; the eternal return; the perpetuation and MAINTENANCE of the species; survival systems and operations; equilibrium”.

As an artist and a mother, Markie began to see her life as divided into two, one which was devoted to art work, and one devoted to maintenance, or care, work in her proposal she

declares that in combining the two, “Everything I say is Art is Art” and “Everything I do is Art is Art” Divided into three parts: Personal, Global, and Earth Maintenance. Markie planned an exhibition which was never shown that discussed and addressed the scales of maintenance required to keep the world running, and in doing so revealed the prejudices and situations in how these practices were valued in society. Following are excerpts from her Manifesto.

**B. Two basic systems: Development and Maintenance.**  
The soulball of every revolution: after the revolution, who's going to pick up the garbage on Monday morning? DEVELOPMENT (Pure individual creation) the new change, progress, advance, excitement, light or feeling. (In parallel feedback system with

major room for change)

**MAINTENANCE**  
Keep the dust off the pure individual creation; preserve the new, sustain the change; protect progress, defend and prolong the advance; repair the excitement, light or feeling; show your work—show it again, keep the contemporary/eternum group keep the home



highlighted how Airbnb leverages images to reify the generic yet unique homey visions of its listings, while in parallel describing how Soviet Worker's Clubs, namely the one designed by Rodchenko, embodied socialist visions of leisure reconceived as active and collective. Historical precedents of Charles Fourier's Phalanstery and Carthusian monastery complicated the lineage of collective living, with the phalanstery designed to optimize passion, pleasure, multiplicity of love and labor, and the monastery designed to optimize solitude within a collective, making its residents truly feel, rather than simply be, alone.

### VOLUME 3

Volume 3 began to open issues of care and maintenance that are implicit in the idea of collectivity. The artist Meirle Laderman Ukeles' seminal 1969 manifesto revealed the gendering that is ingrained in the types of qualities of work, and demonstrated how motherhood is a form of maintenance labor that has gone completely unrecognized by society. The issue continues to delve into alternate ways of learning, through looking at the collaboratively taught class "Contested Spaces: Art, Architecture and Politics" that engaged with vernacular, interior and social spaces rather than the typical monuments and masterpieces that reinforce the centrality of white male authors.<sup>1</sup> Ideas of collectivity and working

were questioned with an assemblage of quotes from various disciplinary and extra-disciplinary thinkers, interrogating the division of home and work and the solitary nature of nuclear family living.

## VOLUME 4

Volume 4, the Toilet Issue, explored the frictions and benefits of sharing, which are experienced on a daily frequency at the toilet. From the Roman times when toilets were social spaces in which time, conversation and cleaning tools were shared by all, to art objects of toilet stalls made of two-way mirrors that explore the voyeuristic side of private body functions, to the comedic qualities of framing the shame and discomfort created by office toilet use, to the various cultural differences of toilet use that reflect political and ideological differences, and the gendering of toilet practices and associated cultural arguments attached, the Toilet Issue confronted the dirty secrets of these ubiquitous and seemingly neutral collective public spaces.

## VOLUME 5

In Volume 5 the CBW scaled up to urban questions of the complexity and makeup of the city. Theories of domestic urbanism eschewed high-rise buildings, favoring small living units arranged in close proximity with shared domestic spaces extending beyond the front door, while vertical theories of urban design proposed skyscrapers to recreate ideal urban conditions found at ground level. An intermediate size housing was described as an autonomous unit at the boundary between architecture and urban planning, incorporating both collective and public domains.

## VOLUME 6

Volume 6 was led by a guest editor, Milap Dixit. The issue dove into questions of gender roles in the products and processes of architecture that had been growing through previous issues. Care and maintenance again became the focus in the explication of Nancy Fraser's description of how the capitalist economy relies on unpaid female reproductive labor, and a history of utopian architecture proposals that aimed to liberate women's role in society

---

Olga Touloumi, "Counterplanning from the Classroom," *Journal of the Society of Architectural Historians* 76, no. 3 (September 2017): 277-280.

**but it has  
also acquired  
a sheen of  
desire as  
packaged by  
enterprises  
that capitalize  
on it, like  
WeLive and  
WeWork.**

VOLUME 6      FRIDAY, December 15, 2017      CAMBRIDGE, MA

## COLLECTIVE BRAIN WEEKLY

### Care Work

Socially reproductive labor has long been naturalized, rendered non-productive and devalued. Nancy Fraser describes how the capitalist economy benefits from the "free ride" it gets on women's socially reproductive work. The accumulation of surplus value is dependent on an arrangement of separate sites of production and reproduction where the economic production that occurs in the former becomes dependent on the unwaged work in the latter. However, capitalist economies have also taken social reproduction for granted as an inexhaustible resource. As Fraser puts it, the "social contradiction" inherent in capitalism surfaces in the paradox where capital makes its "official economies dependent on the very same processes of social reproduction whose value they disavow. This peculiar relation of separation-cum-dependence-cum-disavowal is an inherent source of instability. Destroying its own conditions of possibility, capital's accumulation dynamic effectively eats its own tail." (103).

**THE CONTEMPORARY CRISIS OF CARE**

Care labor accommodates a wide range of activities surrounding social reproduction. As both affective and material labor, social production is vital for any society to survive. Any society that compromises the structures and processes of social reproduction is in crisis. Fraser argues that this is exactly what is happening in today's society of financialized capitalism. She defines social production as the creation and maintenance of social bonds. This relates to both inter-generational bond-giving (birth, raising and socializing the young, looking after the elderly) and horizontal bonds: "maintaining households, building communities and sustaining the shared meetings, effective dispositions and horizons of value that underpin social cooperation" (105). She claims that while social reproduction is a "condition of possibility" for capital accumulation, unrestrained capital accumulation undermines the very structures of

social reproduction that it depends upon. This "social-reproductive contradiction of capitalism" is what lies at the heart of the crisis of care. (Fraser, 100).

**CARE WORK AND ARCHITECTURE**

Beginning in the late eighteenth century, there were several attempts by communitarian reformists to rethink these spaces. As Dolores Hayden has shown, the communitarian socialists saw the communal household as a world in miniature, a concept which at once "domesticated political economy and politicized domestic economy." In 1813, Robert Owen published several plans for ideal communities that included collectivized kitchens and nurseries. This was a clear disavowal of the private household and effectively aimed to end the isolation of the housewife. Crucially, however, these reformist programs were aimed at liberating the drudgery of women's work without questioning the sexual division of labor itself. As a result, the labor of collective societies continued to be gender-segregated.

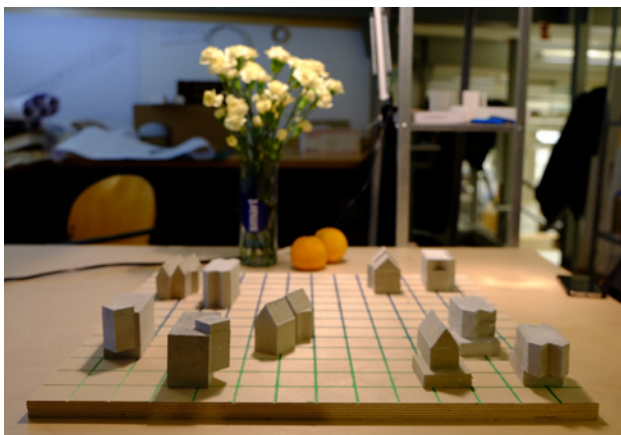
In the early twentieth century, radical utopian proposals aimed to counteract the gendered space of the household by insisting on women's equality. In her 1916 proposal for a housing cooperative, Alice Constance Austin proposed kitchenless houses connected by underground tunnels for the delivery of hot meals and laundry.



spanned from Robert Owen's collective kitchens to Alice Constance Austin's kitchenless housing collectives to Karl Teige's radical collectivization that destroyed the nuclear family home, including the marriage bed. bell hooks dreamed of a collective home for 10-12 that went against the leftist return to private property, and the Italian feminist group Campaign, the Black Women for Wages for Housework and the English Collective of Prostitutes all theorized and demanded a social restructuring that would liberate women from unpaid domestic labor. This activism manifested in the architecture discipline in the emergence of several female design collaboratives. Matrix Feminist Design Co-operative, Women's Design Service, and Open Design Office all made big impacts on the discourse and construction of architecture in the 70s and 80s. While Matrix designed spaces for women's needs and also explicitly created a design process for women, Women's Design Service researched women's safety and published pamphlets on women's spatial experiences, namely through the pamphlet Women's Convenience: A Handbook on the Design of Women's Public Toilets. Open Design Office tried to change the practice of architecture itself, rather than advocating for equality within existing professional modes. Equal pay, profits that stayed in the company, flexible schedules and the elimination of office hierarchy were some of the principles that differentiated this group from a typical architectural office and would change both the process and the architecture it produced.

### 03-02 MATRIX

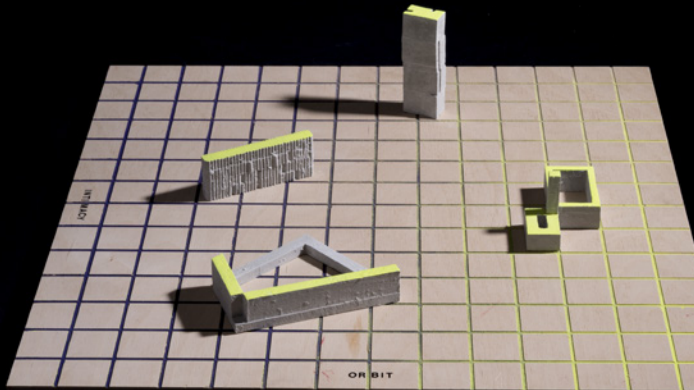
The matrix is a device we use to generate design options.



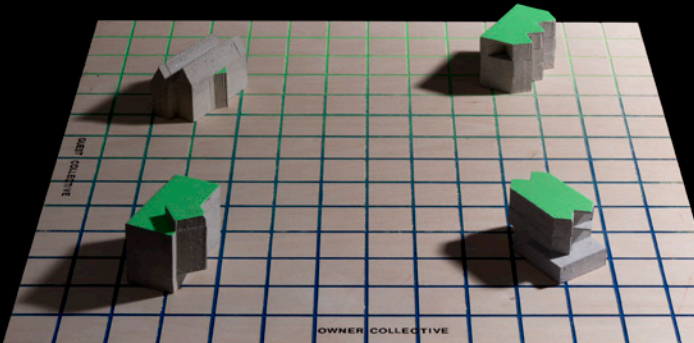
Deriving from the historic pattern book (03-05), the matrix spatializes the relationship of design variables between two axes, forming a gridded spectrum of conditions. This field can be used to analyze existing projects and locate zones for which no projects yet exist. In terms of housing, it could be used to find new markets and create new typologies that answer to the needs of those markets. Typically, our axes describe types of collectives, exploring the degrees of intimacy of spatial and programmatic sharing compared to the breadth of the social sphere.



Intimacy vs. Orbit

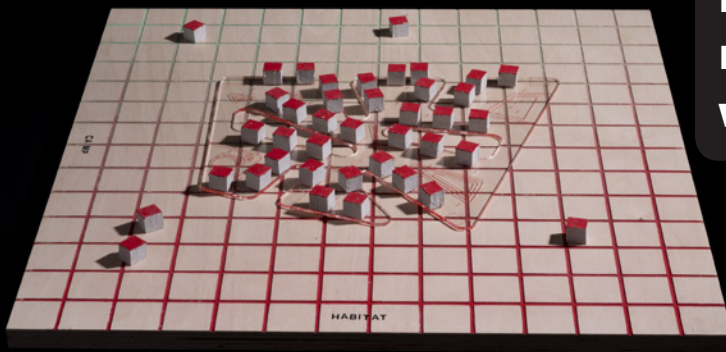


**Geared to the so-called “creative class,” these “capitalist collectives” point to a surplus value enabled by the sharing economy,**



Owner/Guest Collective vs. Owner/Owner Collective

**but fail to recognize their misuse of the word;**



Camp vs. Habitat

When we start a new project, we begin by defining value spectrums to compare on opposite axes of a matrix. Identifying moments of extreme conditions, we plan a series of exploratory schemes that creates a comprehensive field of design options. Visualizing the conceptual development of a project on a matrix supports collective design because it makes abstract ideas accessible and objectifies a space for discussion.

### 03-03 HAT



Picking names from a hat is an age-old tool for assigning responsibility through chance. Useful for collaboration in that it erases the possibility of emotional conditions affecting the allocation of duties, it is a neutralizing device that we rely on in the beginning of the design phase for any new project. The hat creates a level playing field in which no individual can claim ownership of a particular part of a project—and while ownership of ideas is certainly encouraged, as it strengthens project development, we strive for ownership that evolves through a collective process rather than one imposed from the outset.

Source: Rene Magritte, *The Pilgrim* 1966, accessed January 16, 2017, <https://www.renemagritte.org/the-pilgrim.jsp>.

We use the hat in conjunction with the matrix (03-02) as a way of distributing the set of different design schemes we've located on our field of variables. Each person starts with at least one scheme, but trading is allowed as long as it is consensual. In the case of extreme unhappiness, we negotiate to make sure that every collaborator feels that their contribution will be valuable.

This strategy of simultaneously developing multiple projects sets a precedent for collective coherence. It allows each individual to work independently within a set of shared constraints, encouraging the idiosyncrasies that emerge from personal processes, and providing a safety net of discussion or passing the scheme on to someone else during moments of conceptual blockage. This process multiplies and diversifies design options, resulting in a rich taxonomy of ideas that can be collectively refined.

## 03-04 CHARETTE

Originating from the French word for cart or chariot, a charette refers to a period of furious production towards a deadline. Legend has it this term was first coopted by designers in the 19th century at the École des Beaux-Arts in Paris, where architecture student teams would continue working on their models up until the final moments as they were carted out to the review space<sup>2</sup>. For us the charette mode of working generates intensity and expedites the collective development of each project.

We set a one-day timeframe to pool our labor and make as much progress as we can on a new project, culminating in the production of an artifact (model, drawing, or other) from each member which will be archived at the end of the day, and if judged to be successful, be further developed in subsequent sessions. Often the charette begins with the production of organizational diagrams, models, or drawings such as molecules (03-06), which bring a conceptual clarity to the setup while ensuring the development of a variety of schemes for each project. This variety in schemes is essential. In moving away from socially deterministic plans, we pursue design strategies that foster a spectrum of collective relationships (03-06).

During the charette we often work together, although independent work is also allowed in this phase, providing it supports the production of as many critical variations as possible. We embrace a fast-paced workflow in order to subject our scheme variations to scrutiny and allow for

---

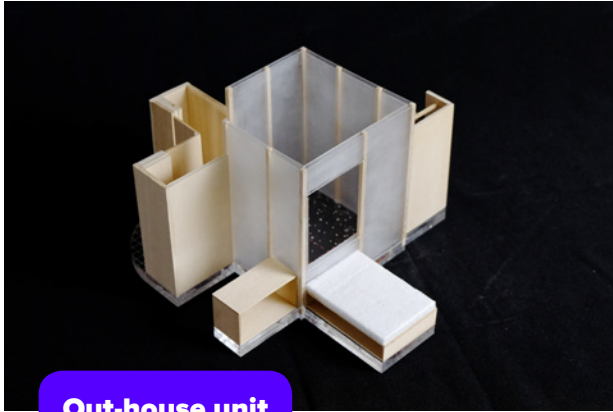
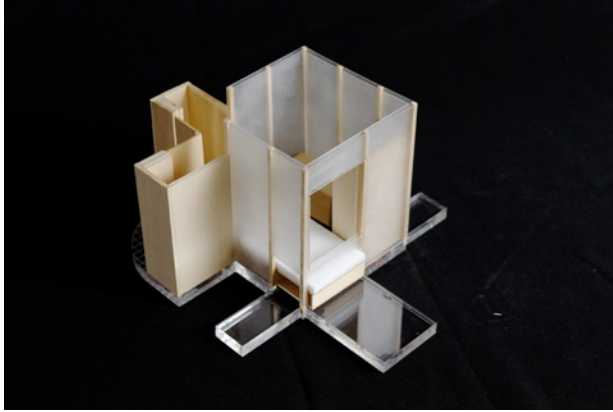
<sup>2</sup>Daniel Willis, "Are Charettes Oldschool?", *Harvard Design Magazine*, Design Practices Now, n. 33, Vol. II, (Fall/Winter 2010) <http://www.harvarddesignmagazine.org/issues/33/are-charrettes-old-school>.



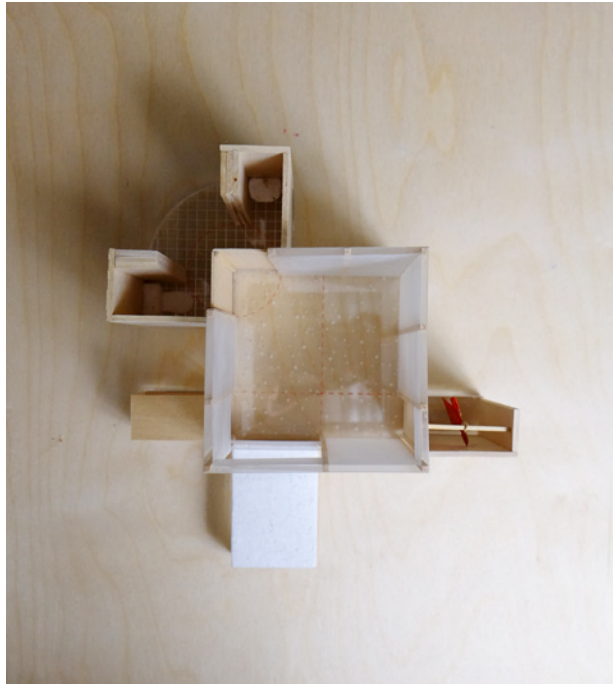
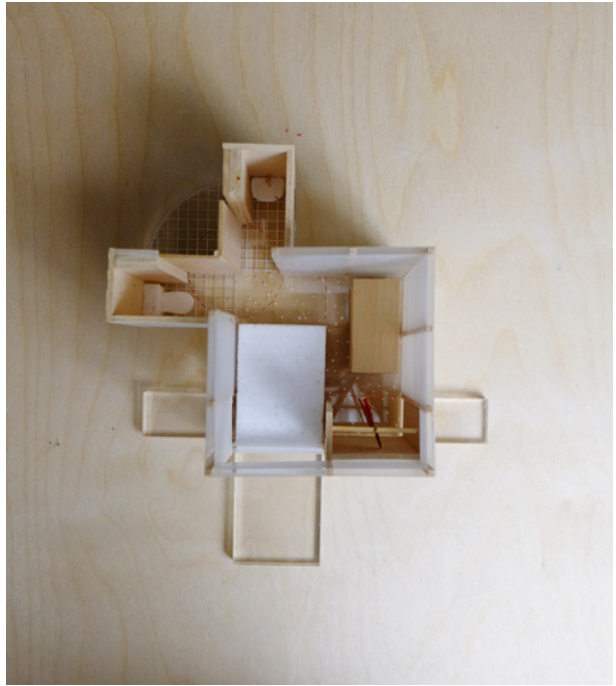
**collectives are different from membership rosters.**

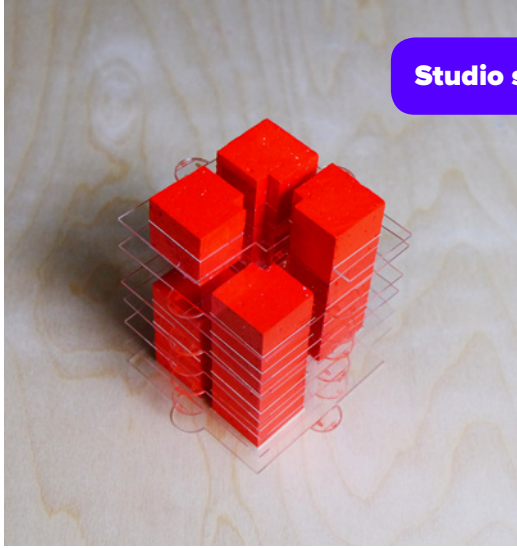
Source: L'Ecole des Beaux Artes, etching, date unknown.

**We believe collectivity is a shared motivation towards a common goal.**

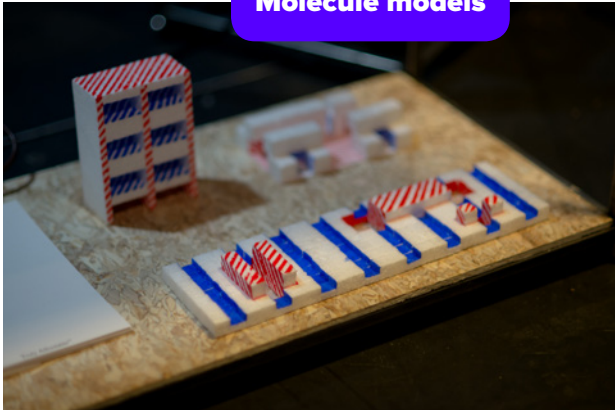


**Out-house unit**



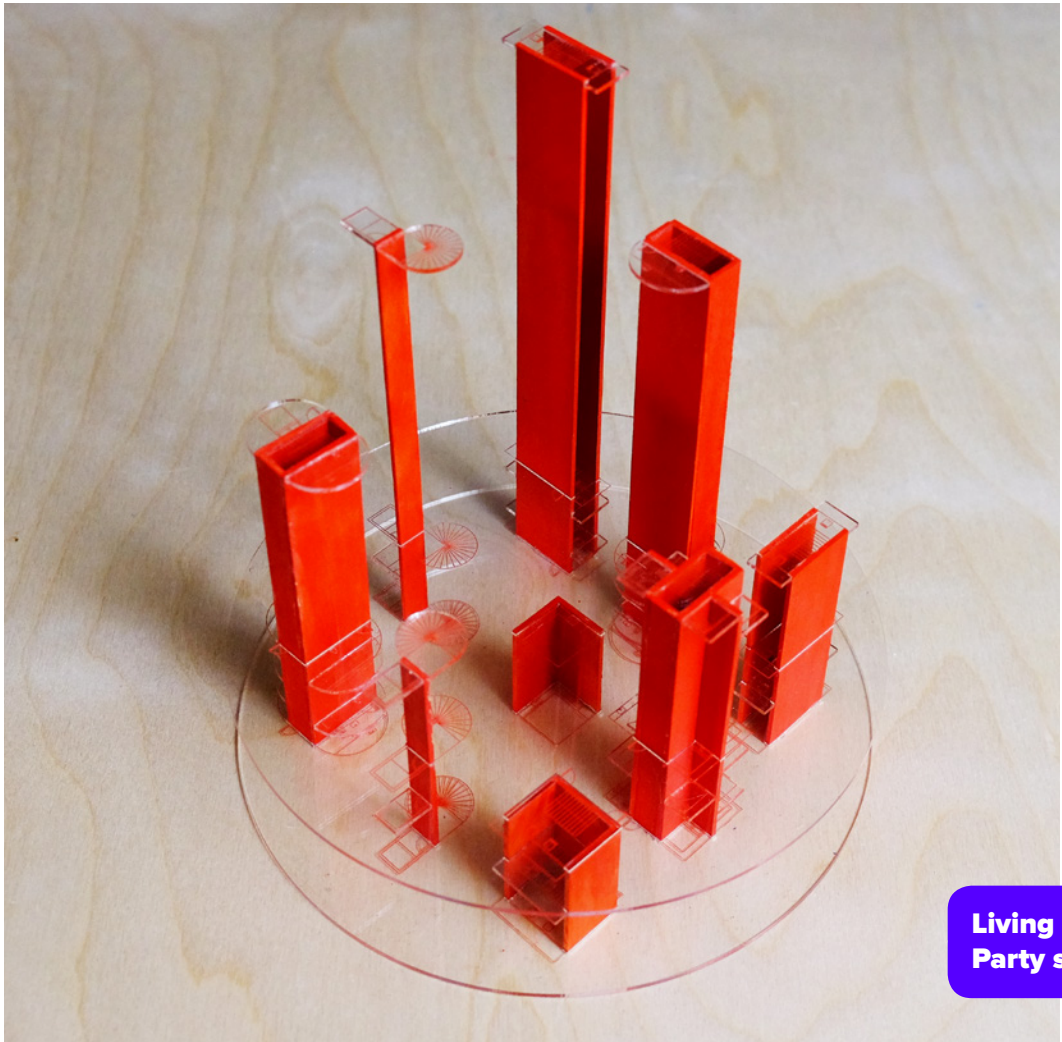


**Studio spiral**



**Molecule models**

Credit: Sarah Wagner



**Living cores  
Party slabs**

iteration. In this process, we also repeatedly question the values on the matrix, which define the framework for the series of schemes, and adjust them should we find a more interesting framing for the project.

At the end of the charette phase, we evaluate the work and determine which schemes have the most potential. Schemes that produce unusual household arrangements and create diverse scales of interaction are further developed. If too few schemes pass this phase for each person to lead one, those wishing to move on to a different project may do so. That being said, we also strongly encourage the rotation of projects in order to bring fresh eyes to tired schemes. In an ideal scenario, each collaborator would have different values at stake in each scheme, bringing complexity and at times contradiction to the design. Working in this way, we embrace Robert Venturi's Gentle Manifesto of "Nonstraightforward Architecture." We foster the hybrid, the "both-and," to accommodate the search for "messy vitality" over "obvious unity," and ultimately support our critique of single-authorship.<sup>3</sup>

3 Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1977), 16.

**THE MAGNOLIA**

"House Plan," No. 289. "Already Cut" and Fitted.

At this price you will receive all the material for the house, including all the material for the roof, the material for the walls, the material for the floors, the material for the stairs, the material for the windows, the material for the doors, the material for the trim, the material for the hardware, the material for the plumbing, the material for the electrical, the material for the heating, the material for the cooling, the material for the painting, the material for the landscaping, the material for the furniture, the material for the appliances, the material for the fixtures, the material for the finishes, the material for the accessories, the material for the decorations, the material for the plants, the material for the animals, the material for the people, the material for the things, the material for the places, the material for the times, the material for the people, the material for the things, the material for the places, the material for the times.

**First Floor** A Colonial style house with a central hall, a large front porch, a dining room, a kitchen, a breakfast room, a living room, a study, a bathroom, and a terrace.

**Second Floor** Two bedrooms, a bathroom, a study, and a terrace.

**Basement** A finished basement with a living room, a dining room, a kitchen, a bathroom, and a terrace.

Our Guarantee Protects You—Order Your House From This Book. Price Includes Plans and Specifications.

**FOR LESS THAN \$2,500<sup>00</sup> YOU CAN BUILD THIS ELEGANT CONCRETE AND FRAME CONSTRUCTION NINE-ROOM \$4,000.00 HOUSE**

BY USING OUR PLANS, SPECIFICATIONS AND BILL OF MATERIALS WHICH YOU CAN GET FREE, AS EXPLAINED ON PAGE 2.

**MODERN HOME No. 111**

The arrangement of this house is as follows:

**FIRST FLOOR**

Main Room 12'0" x 12'0" (12'0" x 12'0")

Living Room 12'0" x 12'0" (12'0" x 12'0")

Dining Room 12'0" x 12'0" (12'0" x 12'0")

Kitchen 12'0" x 12'0" (12'0" x 12'0")

Bathroom 12'0" x 12'0" (12'0" x 12'0")

Hall 12'0" x 12'0" (12'0" x 12'0")

Front Porch 12'0" x 12'0" (12'0" x 12'0")

**SECOND FLOOR**

Bed Room 12'0" x 12'0" (12'0" x 12'0")

Bed Room 12'0" x 12'0" (12'0" x 12'0")

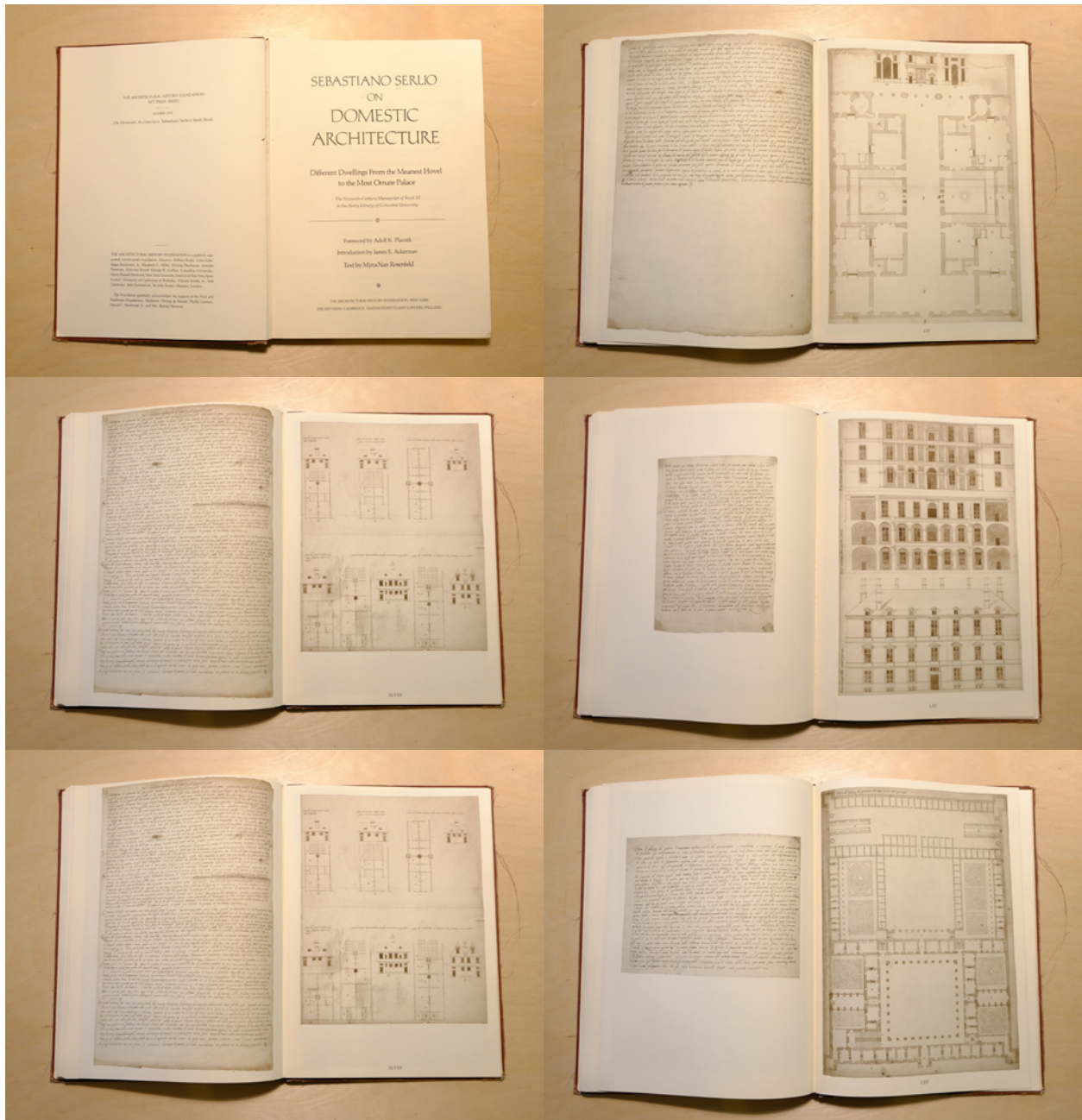
Bed Room 12'0" x 12'0" (12'0" x 12'0")

Bed Room 12'0" x 12'0" (12'0" x 12'0")

Hall 12'0" x 12'0" (12'0" x 12'0")

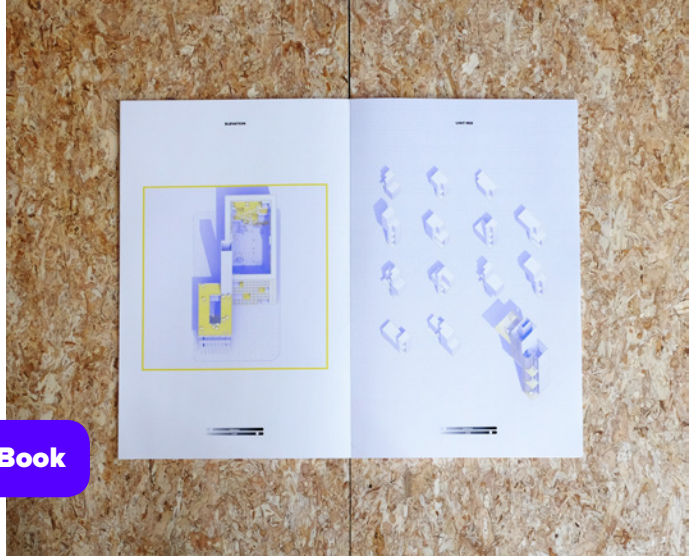
Back Porch 12'0" x 12'0" (12'0" x 12'0")

BOOK OF MODERN HOMES —13— Sears, Roebuck & Co., Chicago, Ill.

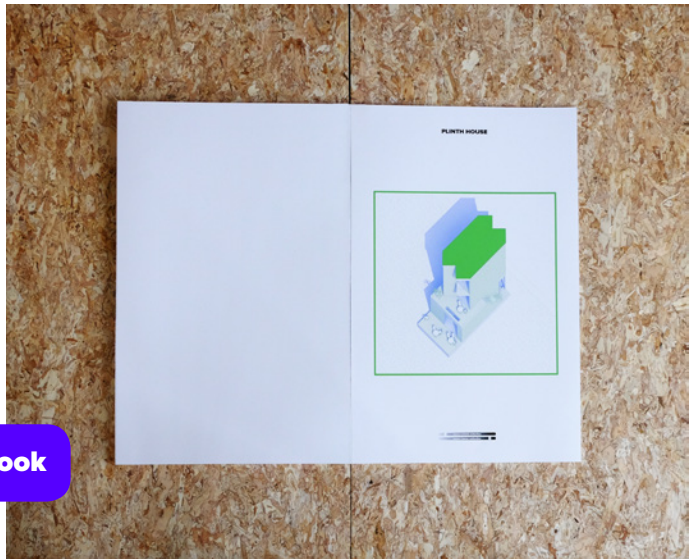


### 03-05 PATTERN BOOK

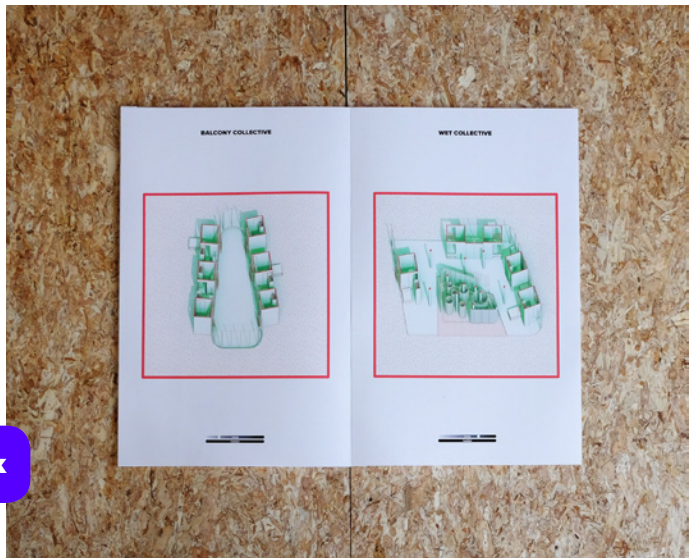
The architectural pattern book is a device for comparing designs on scales of variability. The inherent logic of the pattern book is a gradient of options that appeal to a diversity of lifestyles. First explored by 15th century Bolognese architect Sebastiano Serlio in his treatise on architecture titled “On Domestic Architecture,” Serlio illustrated a spectrum of dwellings on an scale of



**Amazon Pattern Book**



**Airbnb Pattern Book**



**MIT Pattern Book**



increasing plot sizes.<sup>4</sup> Offering a design solution for the entire social spectrum of 15th century Paris from “the meanest hovel, to the most ornate palace,” Serlio defined a convention of architectural cognition that would evolve well into the.<sup>5</sup> Three centuries after Serlio, Claude Nicolas Ledoux proposed his own pattern book, “L’architecture considerée sous le rapport de l’art, des mœurs et de la législation,” which, unlike “On Domestic Architecture” did not order buildings by size relative to the economic status of the dweller, but on the dweller’s type of labor as the basis for social and architectural order.<sup>6</sup> Expanding the parameters to include 370 different designs offering the latest technology, Sears Houses in the early 20th century created home kits that could be purchased and delivered by mail. This innovative evolution of the pattern book included high quality pre-cut construction materials, affordable, fixed cost packages enabled by efficient logistics, and optional construction services.<sup>7</sup> While Sears Houses were well liked, only 100,000 homes were built and the program ended due to low profit margins.

Following this lineage, we appropriate the pattern book as a historically rooted device that can order lifestyle preferences, degrees of sharing, and/or scales of collectivity. While Serlio left the family unit unquestioned, Ledoux assumed collectives based on profession, and Sears Houses proliferated the nuclear family, we read more potential into the pattern book to suggest unconventional lifestyles in which tradeoffs between space, time and ownership (03-02) can lead to opportunities for negotiation. This negotiation can bring a larger complexity to the notion of the collective.

---

4 Sebastiano Serlio, *On Domestic Architecture from the Meanest Hovel to the Most Ornate Palace* (New York: Architectural History Foundation, 1978).

5 Serlio, *On Domestic Architecture*.

6 Claude Nicolas Ledoux, *L’architecture considerée sous le rapport de l’art, des mœurs et de la législation* (Paris, Chez l’auteur. Paris, Reprinted by F. de Nobele, 1961).

7 Katherine Cole Stevenson, *Houses by Mail, A Guide to Houses from Sears, Roebuck and Company* (Washington DC: The Preservation Press, 1986).

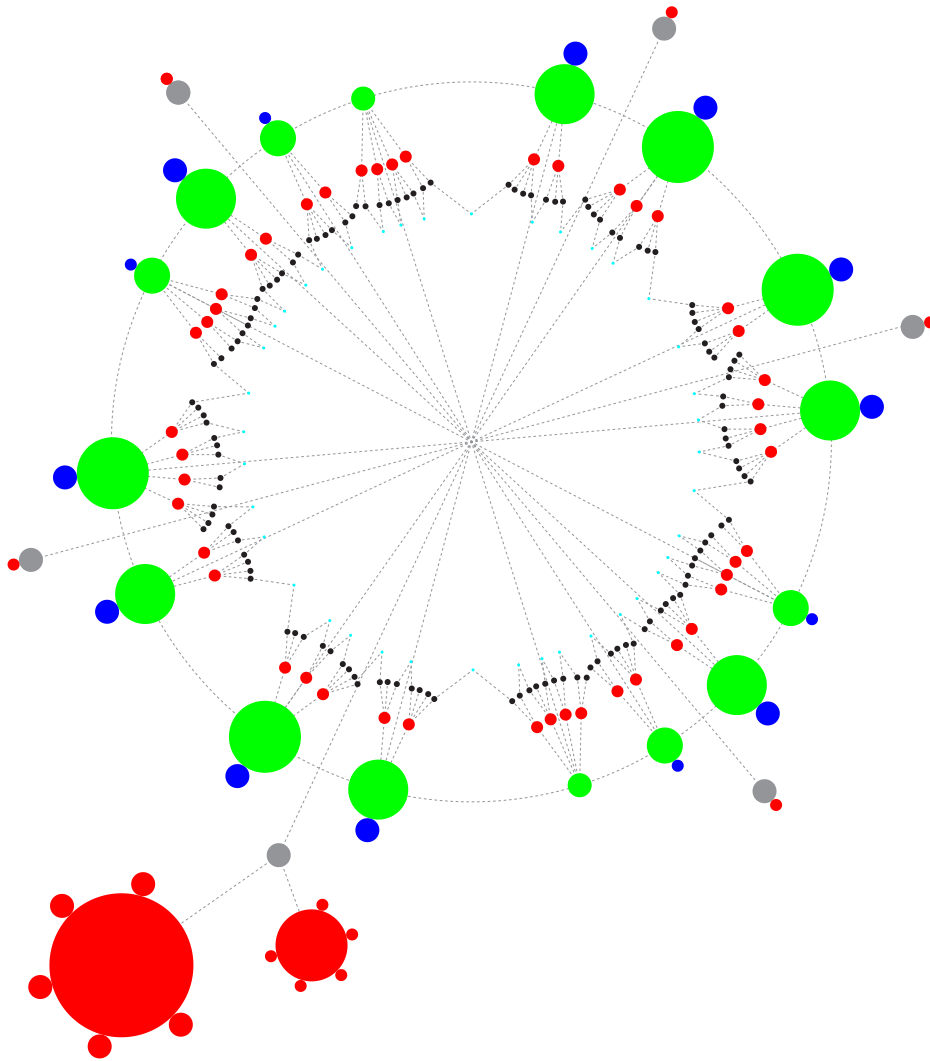
**Fundamentally ideological,**

**it is grown over time through social intimacy fed by shared experiences,**

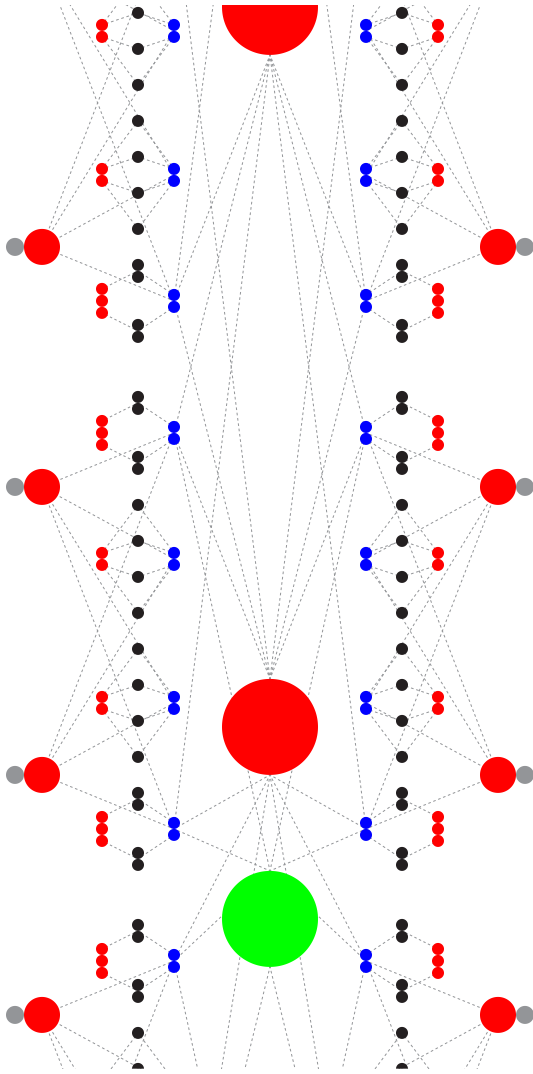
**both positive and negative.**

### 03-06 MOLECULE

Much too complex to be properly demonstrated in a rendering or plan, the diverse contingencies of the collective we envision make it an entity not easily comprehended as a whole. Metahaven describes the necessity of the corporate logo as a stand-in for the totality of the corporation because “corporations (especially large ones) cannot be seen in their entirety



- Rooms
- Collective Amenities
- Porch
- Balcony
- Collective Amenities
- Core

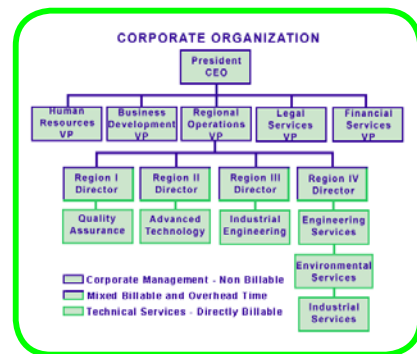


**The membership-based collectives of today, on the other hand, are simply typical office and residential models decorated with signifiers of togetherness.<sup>2</sup>**

[nor are they] able to fit in the frame of a photograph.”<sup>8</sup> Like Metahaven, we find that a practice of borrowing representational techniques becomes necessary in order to signify the collective and its vast social network in a comprehensible way. To do this, we design molecules. Organizational devices that are scientifically inspired, our molecules map social connections and visualize programmatic networks. They appropriate the factual “scientific” aesthetic from corporate organizational charts and organigrams, which graphically describe relationships and relative ranks in companies. Organizational charts enable the visualization of complete organizations and the relationships between positions within. While they typically depict formal relationships rather than social,

<sup>2</sup> Jack Self, “Work On, Work On, but You’ll Always Work Alone,” *The Architectural Review*, February 1, 2016, <https://www.architectural-review.com/rethink/work-on-work-on-but-youll-always-work-alone/10002024>. article.

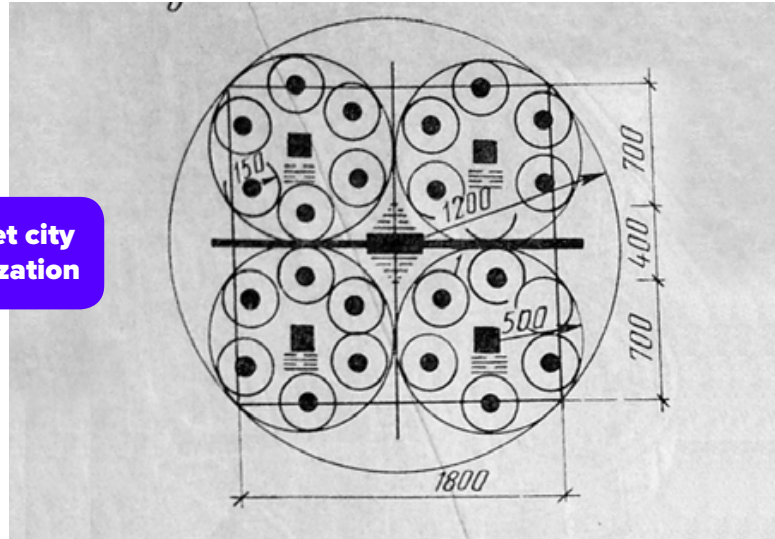
<sup>8</sup> Metahaven and Marina Vishmidt, eds., *Uncorporate Identity* (Switzerland: Lars Müller Publishers, 2010), 7.



Source: Corporate Organization Chart, PhD Online, accessed January 16, 2017, <https://www.pdhone.com/courses/p132/fig1.gif>.

Source: Anna Bronovitskaya, "Open City - The Soviet Experiment", Volume Magazine, n.21 (October 2009): 20.

**Concentric soviet city planning organization**



our molecular organization charts map spatial and scalar relationships.<sup>9</sup> Through the abstraction of spatial relationships, the molecule helps us develop and evaluate the social organization yielded by a project. Molecular units reflect the scale and program of a collective through color-coding and size differentiation, allowing an evaluation of its structure through a reading of the complexity of the molecule. The greater the frequency of non-hierarchical interconnections in the molecule, the more spatial diversity exists in the collective.

### 03-06-I GENERAL ANATOMY

When composing a molecule, a programmatic strategy must first be established for each site according to the concept of collective islands (05-02), which leverages the pre-existing amenities of the site as much as possible. Missing amenities should then be provided by the project, creating a symbiotic relationship with the site. Second, depending on the demographics of the surrounding context, we introduce work spaces at appropriate distributions and scales. Often the work spaces establish relationships with some of the domestic environments. For example, a conference room can be integrated within a children's playground. The remaining domestic programs are dispersed in ways to create unexpected overlaps and connections.

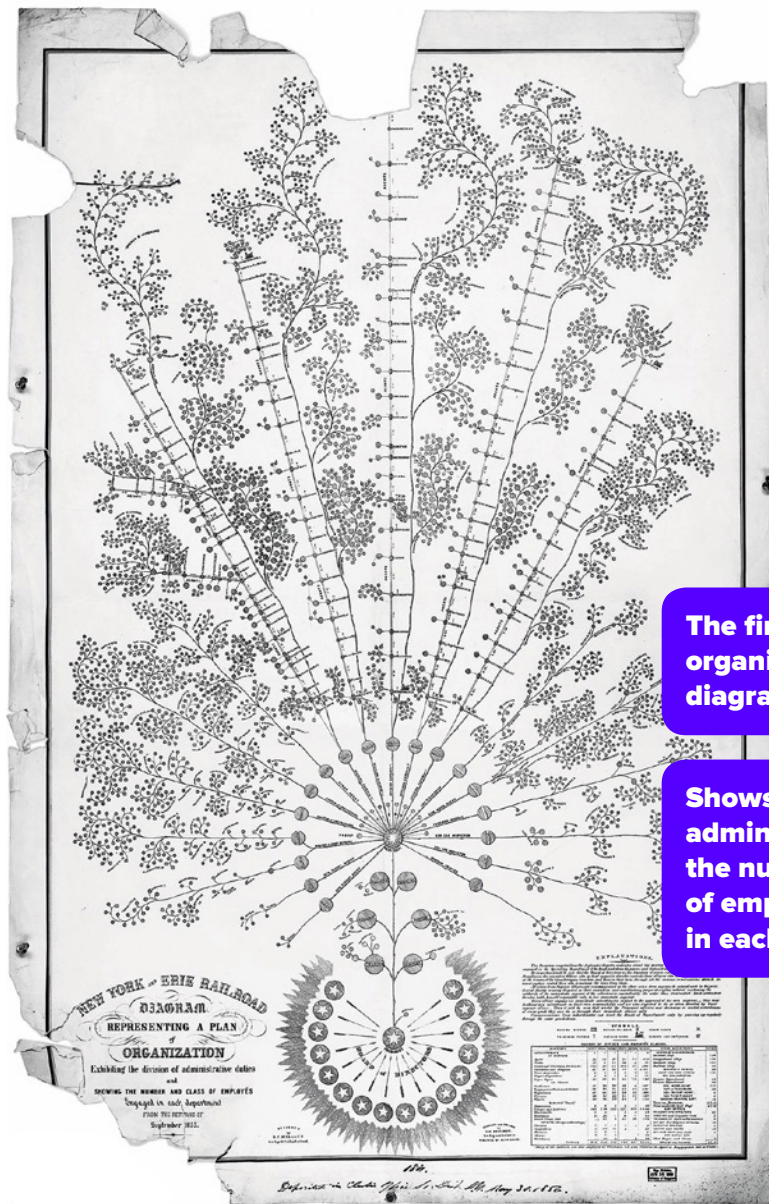
<sup>9</sup> Eva Franch i Gilabert, Ana Miljacki, Ashley Schafer, Carlos Minguez Carrasco, Jacob Reidel, eds., *OfficeUS Manual* (Switzerland: Lars Müller Publishers, 2015), 46.

### 03-06-II MOLECULAR VALUES

We avoid molecules that uniformly scale collectives, in which every shared space leads to a slightly larger collective space. Instead, we strive for a collective that

- (1) does not have a center,
- (2) has a variety of scales of shared spaces at every level of a branch and where connections span across branches,
- (3) has interspersed work spaces of various sizes and intimacies, and
- (4) inspires a diversity of molecules across different projects.

**They lack the architectural and social vocabulary necessary for a collective language.**



**In our practice,**

**The first modern organizational diagram, 1855**

**Shows division of administrative duties, the number and class of employees engaged in each department.**

Source: New York and Erie Railroad Diagram, September 1855. Geography and Map Division, Library of Congress



These molecular acrobatics yield short-circuits in the logic of branching and create spaces and programs that are shared across molecule branches. The positioning of the work spaces within the molecule reflects the conceptual framework of the project. There is no perfect molecule, and the construction of different molecules across a



variety of projects fuels an array of possibilities of sharing and scales of interaction.

### 03-07 1:1 PROTOTYPING

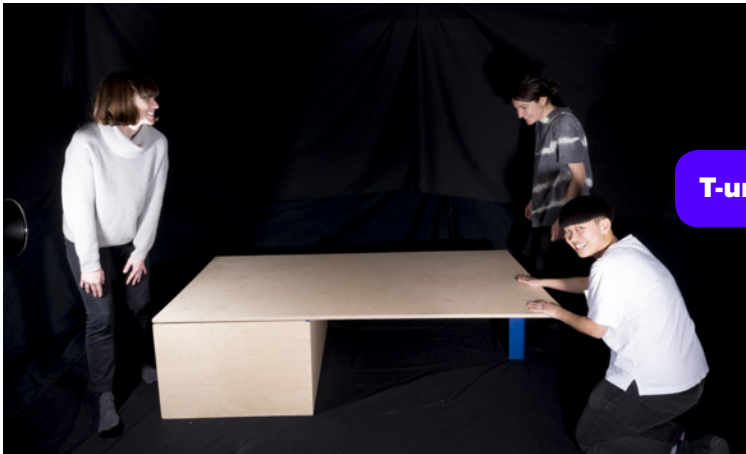
Collective Home Office is a collaborative experiment that explores collective living and working. Testing our propositions on ourselves with 1:1 scale furniture prototypes is integral to our practice. Going beyond the cliché of the long table, we foster collectivity on spatial and temporal scales. We question the proportions of conventional furniture and tweak or distort them, asking how a queen bed can be adjusted to become a group bed? At which point is the bed-ness of a bed lost to its couch-ness? How many objects must clutter a shelf before it becomes a wall? We are inspired by the ambiguous furniture pieces of Donald Judd, which embrace objecthood but, through a manipulation of proportions, blur clarity of intended use. The low table is indeed a bench, and the rigid couch is instead a bed framed with a low wall. We host events and invite others into our space to test our ambiguous furniture.

### 03-07-I T-UNIT

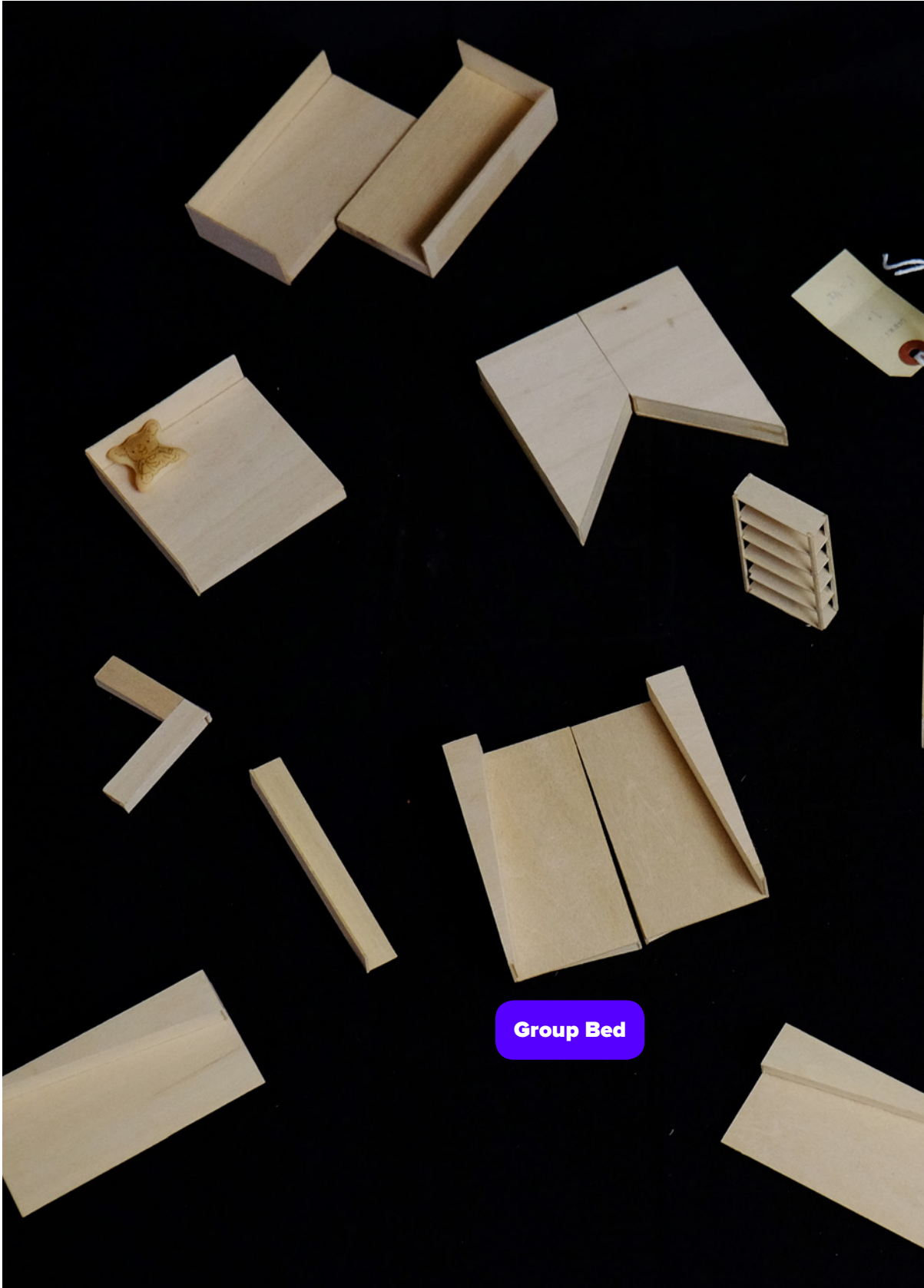
Conceived as a furniture workhorse, the T-unit supports a range of scenarios from work or dinner table, to coffee table or bed, to high-backed chair on one side and pin-up board on the other, to a bar with storage space. The versatility of its uses is enabled by the carefully dimensioned base box that is hinged to the surface board. As our first furniture prototype, the T-Unit has been tested heavily by us, primarily as a collective work table, and has been dis- and re-assembled many times.

**we test  
different  
modes of  
collectivity,  
both in how  
we work,**

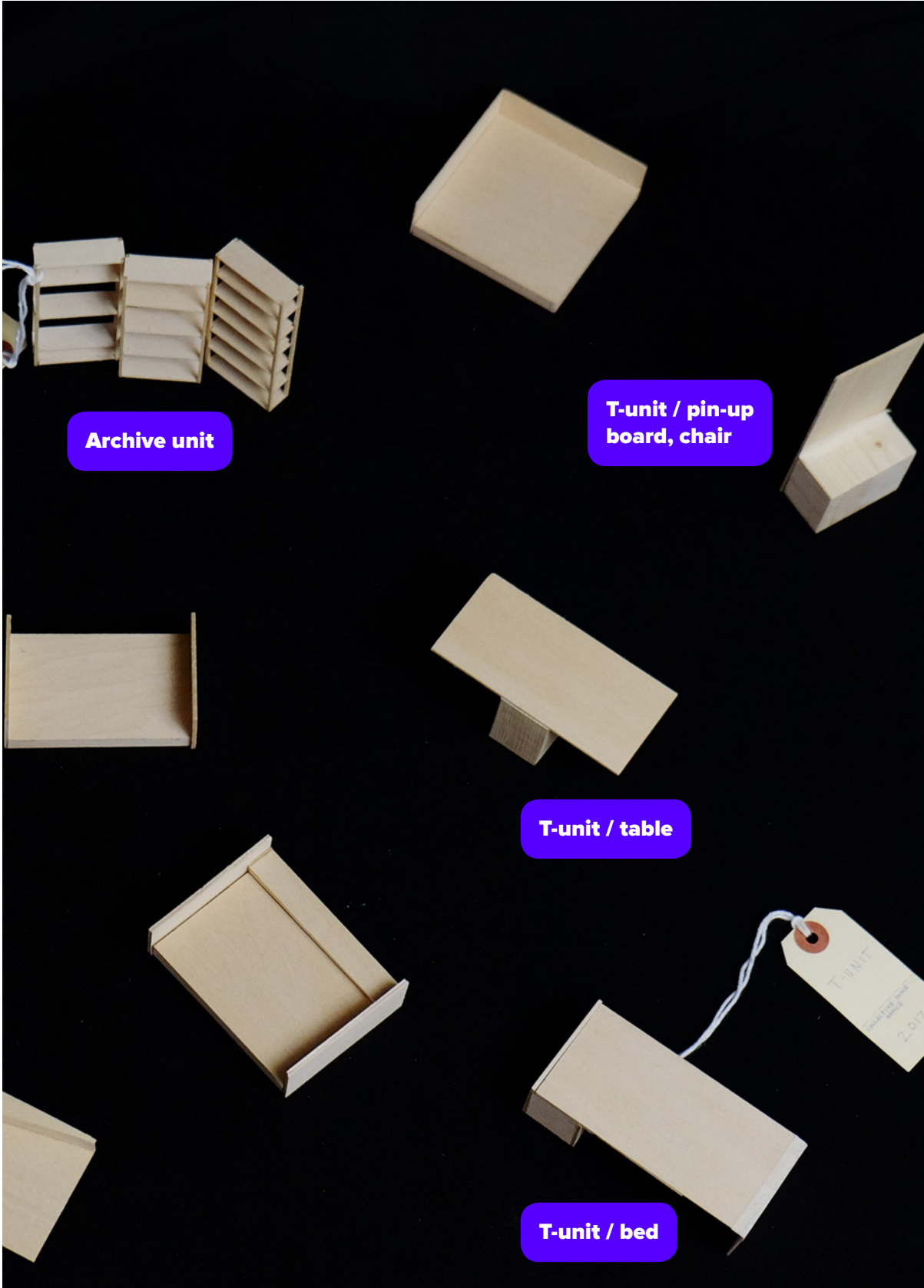
**and within  
the contents  
of our  
architectural  
proposals.**



**T-unit / bed formation**





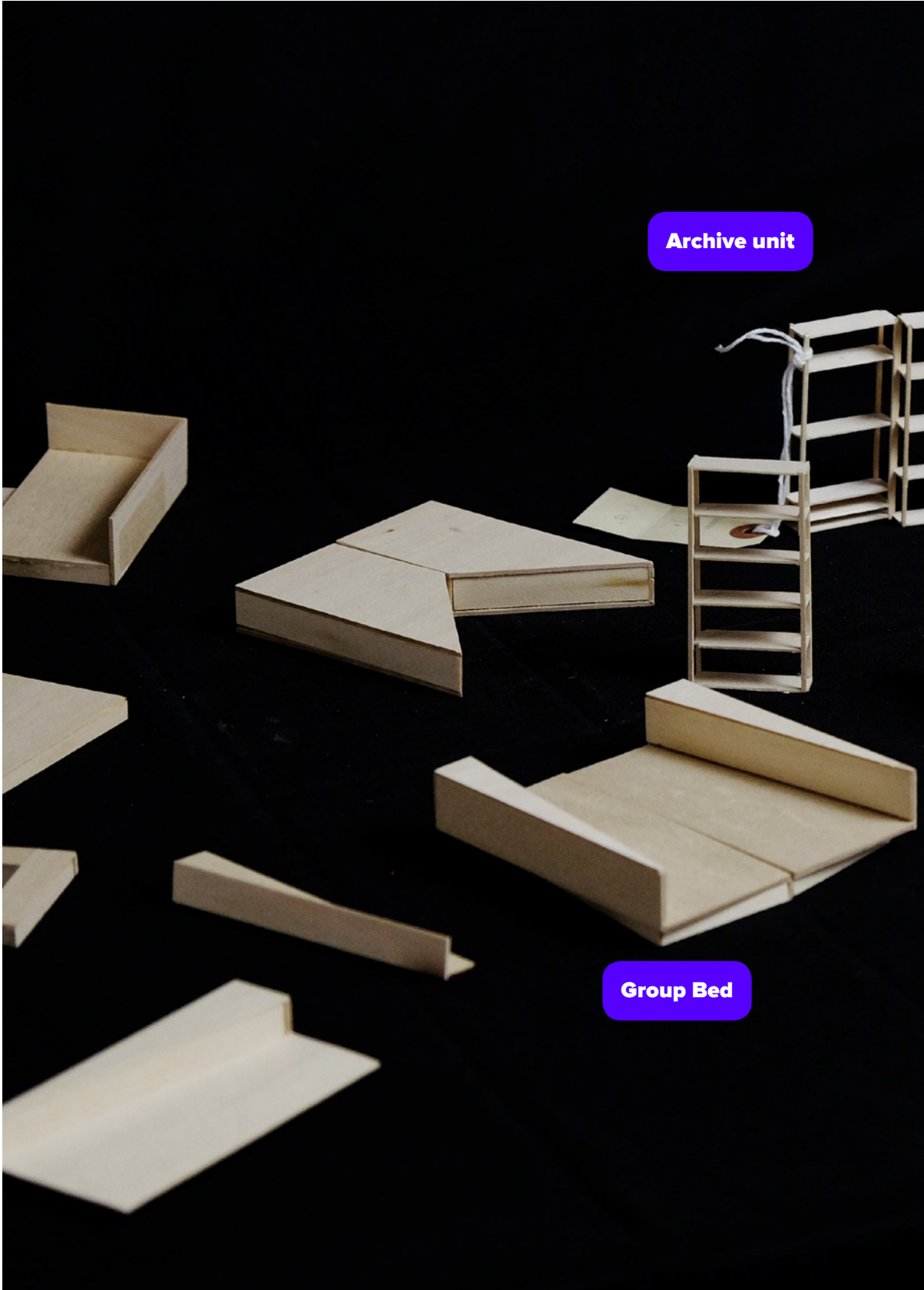


Archive unit

T-unit / pin-up board, chair

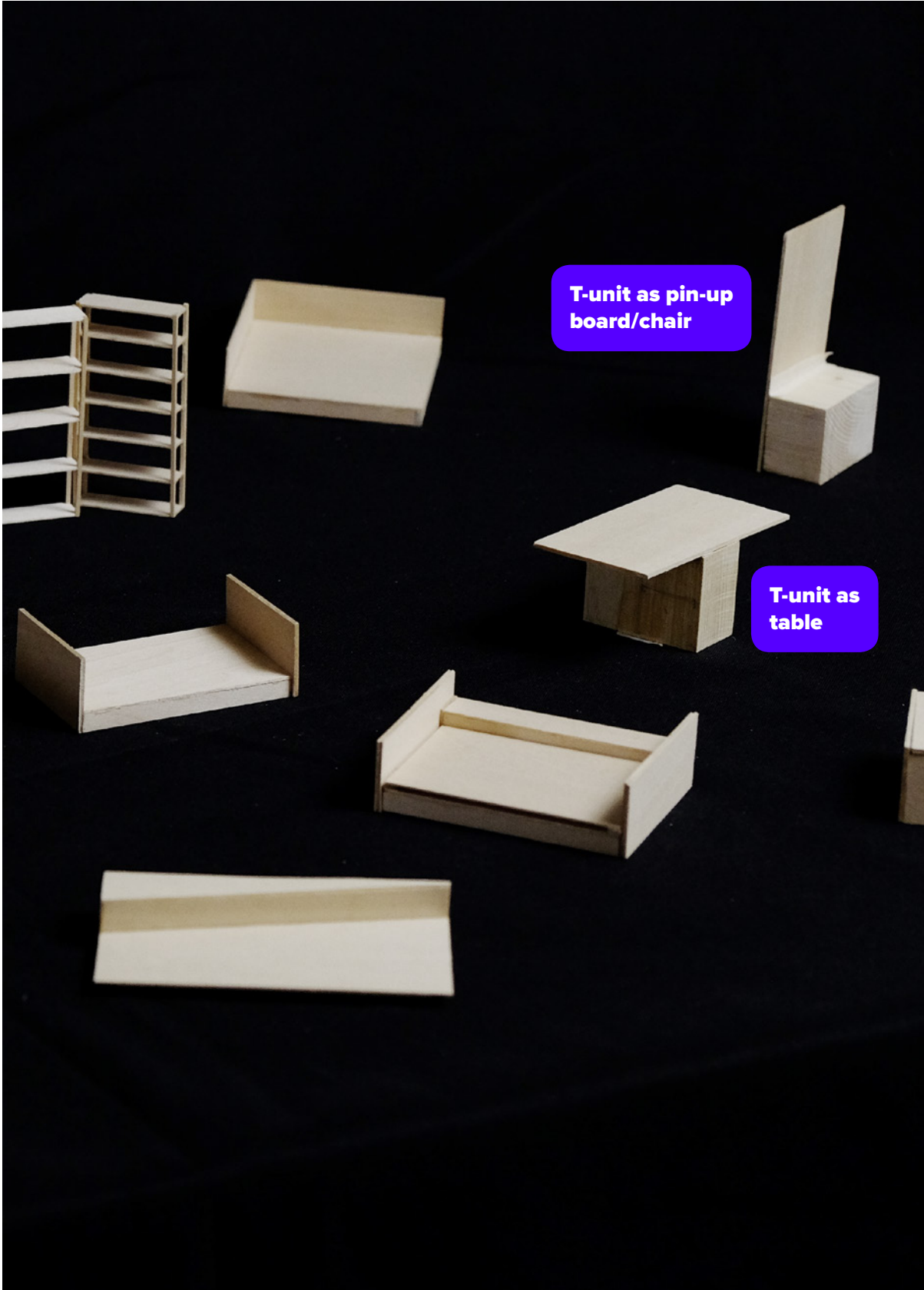
T-unit / table

T-unit / bed



Archive unit

Group Bed



**T-unit as pin-up board/chair**

**T-unit as table**



### 03-07-II ARCHIVE UNIT

The Archive Unit is a porous partition wall that is designed to flexibly separate a work space from a living space. Able to accommodate a closet on one side and a desk on the other, this partition becomes more private the more it is filled with storage items. Comprised of three steel shelf skeletons hinged together at the corners, the Archive Unit can be folded into different configurations, spreading out in a line or compressing to fold in upon itself. In its compressed form, it can hide some its items, a flexible advantage in the event of houseguests.

### 03-07-III GROUP BED

The Group Bed is a low 8' x 8' platform whose dimensions conform to none of the conventional bed sizes. Its triangular "headboards" prevent it from cleanly hosting a mattress, embracing the latent awkwardness of the ubiquitous soft surface. With a mismatched mattress, the bed allows for harder surfaces to suggest other ways of sitting, working, and socially relating, as well as other directionalities. Inspired by the squareness of

**The things we  
produce are  
not cleanly  
divisible by  
three;**

**they are  
messy,**

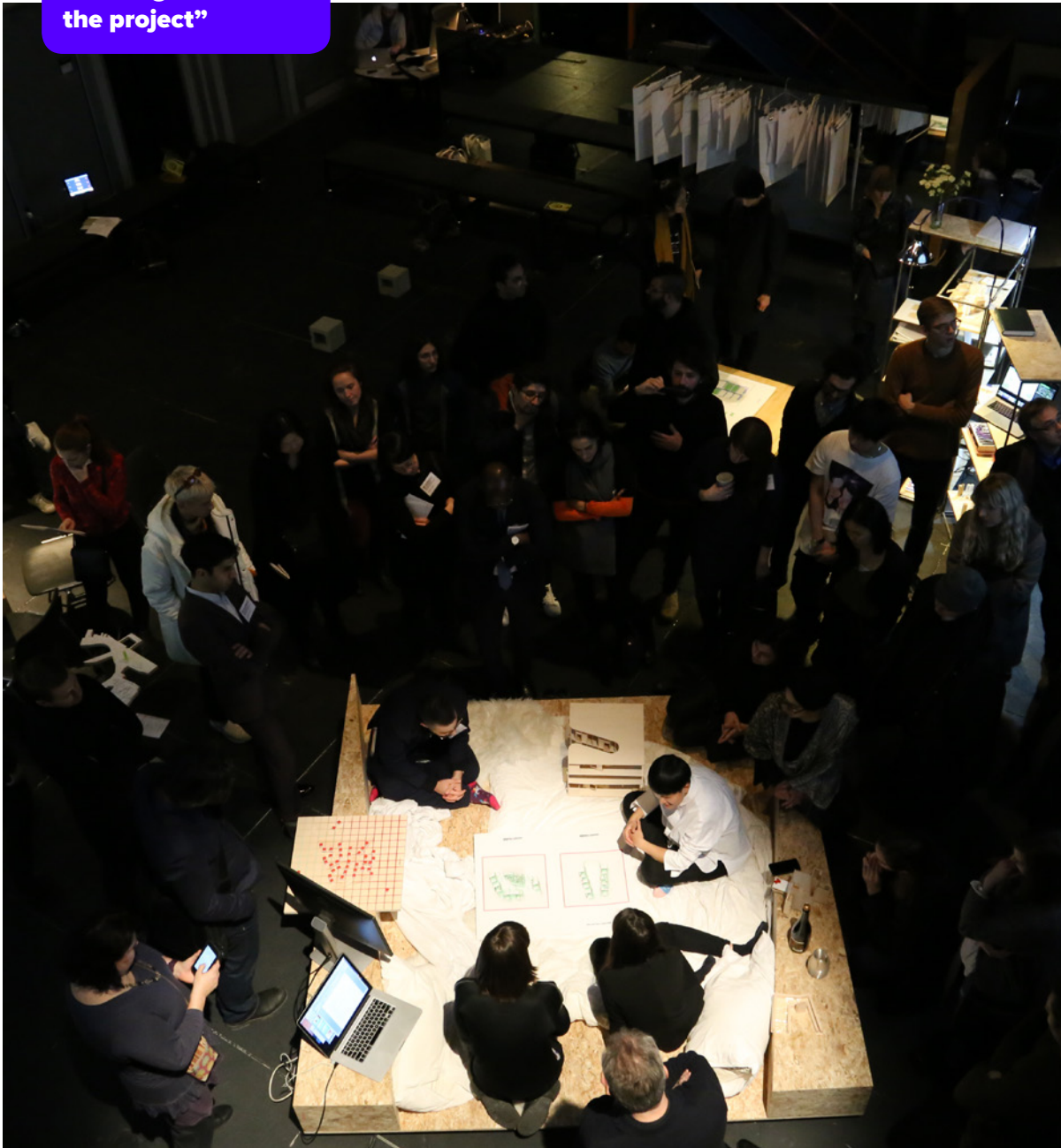
**synthetic  
creatures**

**whose blood-  
lines are hard  
to trace.**



the California King bed, in which lack of directionality obscures its intended technique of occupation, our Group Bed is too big for one person, but ambiguous in exactly how many people it implies it should host. When placed in a room, this awkwardness is also its virtue—the bed can be anything it wants. Our group bed is designed to form a modular swarm of many pieces that define a landscape of social spaces in various organizations. Its multiple orientations can define partitions or combine to form

**“Getting in bed with the project”**





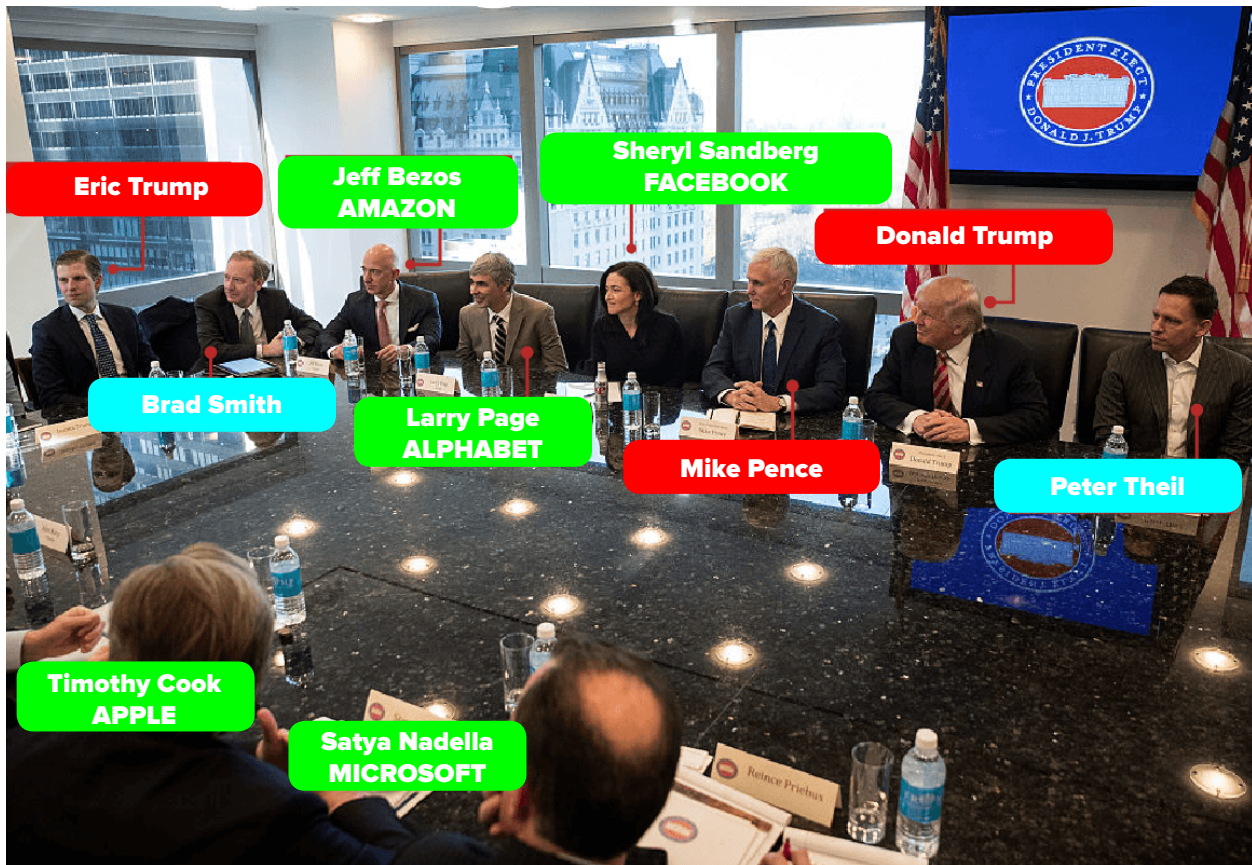
**“... and three is a party”**

Credit: Sarah Wagner

large open spaces that can be shared with twelve people sitting, or four people sleeping. The awkwardness of its size and geometry is its flexibility.

## 04 CLIENTS

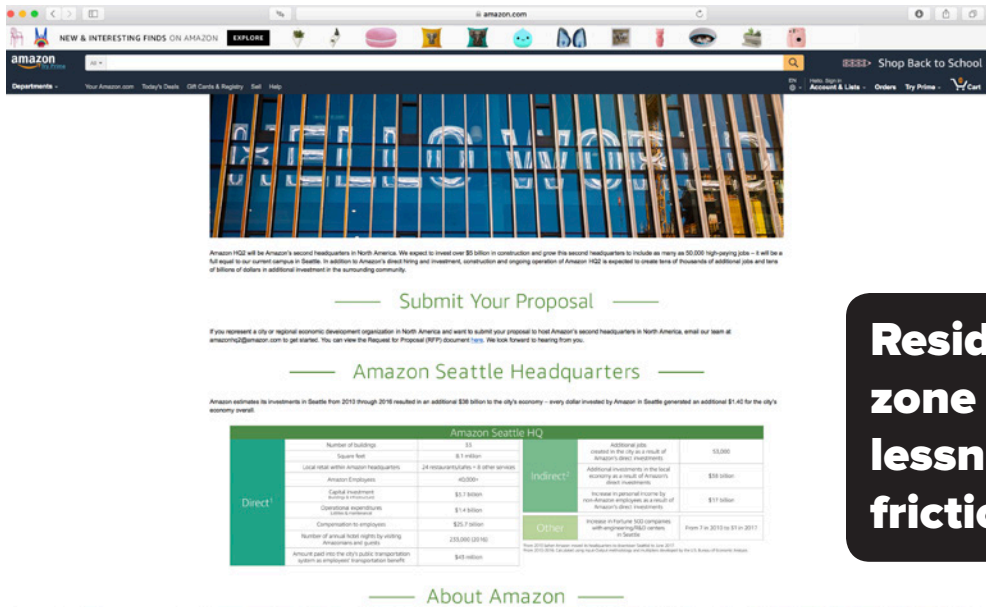
Although unsolicited by our clients, we offer architectural services where we see opportunities for productive partnerships. We choose clients who have significant impacts on the housing market, possess the capability to effect change in the future of housing, and who are transforming the ways we live and interact with one another. Today, these are the corporations of Big Tech. While many of these platforms, companies and institutions



Source: <http://www.businessinsider.com/donald-trump-sat-next-to-tim-cook-and-sheryl-sandberg-2016-12>

have already formed their own agendas regarding user collectivity, it is our professional opinion that they would certainly benefit from a renovation – both to relieve the housing strain and to rewire the collective with values that will carry it into the future. Who knows, Big Tech might be our next patron of architecture.





## 04-01 AMAZON

Amazon invites you to submit a response to this Request for Proposal (“RFP”) in conjunction with and on behalf of your metropolitan statistical area (MSA), state/province, county, city and the relevant localities therein. Amazon is performing a competitive site selection process and is considering metro regions in North America for its second corporate headquarters.

When Amazon announced its search for a new headquarter host city this past September, it ignited a nation-wide scramble, pitting townships against municipalities, cities against states, and citizens’ tax dollars against the unlikely odds of The Big Win: a new HQ2 with 50,000 corporate workers making six figures just down the block.<sup>1</sup> With Boston as a frontrunner in the HQ2 campaign, spurred by its thriving tech industry, strong university system, and accessible international airport, the city must consider strategies to manage the

**Residing in a zone of restlessness and friction,**

**our collective disrupts the preconceived norms brought by each of us.**

**Amazon HQ2 RFP**

**INSTRUCTIONS TO RESPONDENTS**

Amazon invites you to submit a response to this Request for Proposal (“RFP”) in conjunction with and on behalf of your metropolitan statistical area (MSA), state/province, county, city and the relevant localities therein. Amazon is performing a competitive site selection process and is considering metro regions in North America for its second corporate headquarters. We encourage states, provinces and metro areas to coordinate with relevant jurisdictions to submit one (1) RFP for your MSA. The RFP may contain multiple real estate sites in more than one jurisdiction, but we do encourage you to submit your best sites to meet or exceed the needs of our Project described in this RFP. Any questions regarding the information or items requested in this document can be submitted using the email below. We encourage you to go through the process as outlined in the RFP and ask questions of the team using the email provided below.

**PROPOSAL REQUIREMENTS**

Please provide an electronic copy and five (5) hard copies of your responses by **October 19, 2017** to [amazonhq2@amazon.com](mailto:amazonhq2@amazon.com). Please send hard copies marked “confidential” between the dates of October 16<sup>th</sup> – 19<sup>th</sup> to:

Amazon  
Office of Economic Development  
c/o Site Manager Golden  
2121 1<sup>st</sup> Ave  
Seattle, WA 98121

For electronic submissions, please send a password-protected website URL or a USB only. If using a password-protected website, the submitting agency should also submit written responses to the RFP questions (Information Requested section).

**TIMELINE**

September 7, 2017	RFP Phase I Available
October 19, 2017	RFP Phase I Response Deadline
2018	Final Site Selection and Announcement

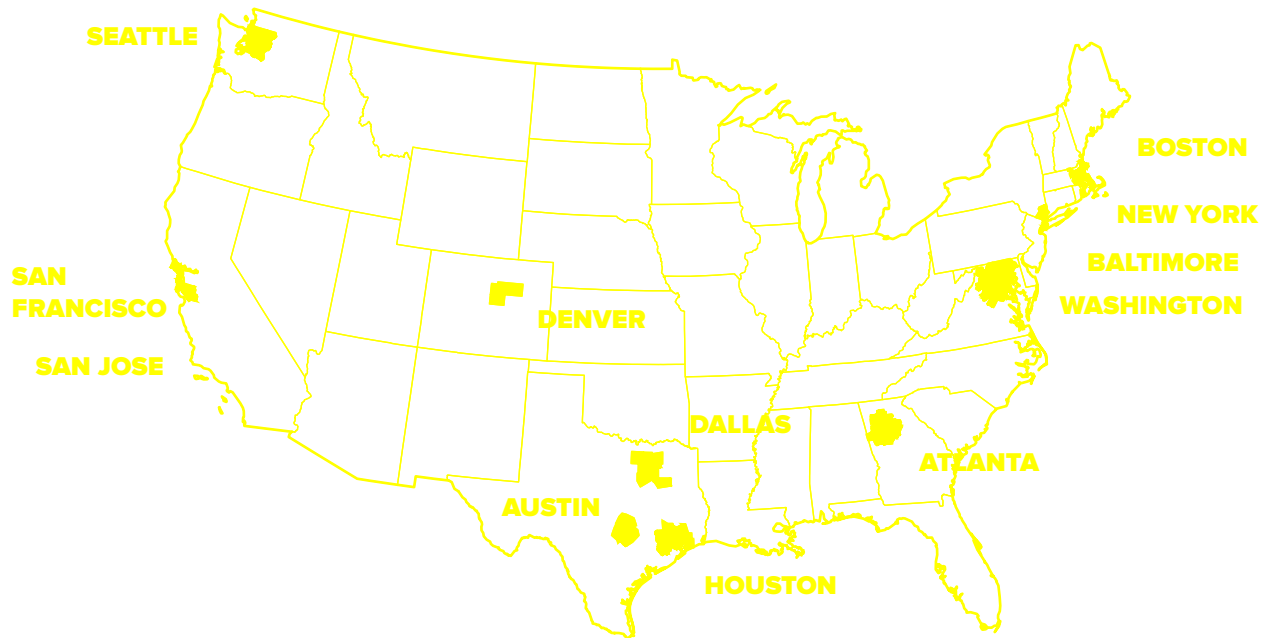
<sup>1</sup> “Amazon HQ2 RFP,” Amazon, accessed January 16, 2018, [https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP\\_3\\_V516043504\\_.pdf](https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP_3_V516043504_.pdf).

Boston: “We are excited to present the best of Boston to Amazon!”

Baltimore: “Dear Amazon, please come to Baltimore City. We’ve already successfully worked together, we can and we will do it again!”

Chicago: “Chicago’s unmatched workforce, world-class universities and unparalleled access to destinations throughout the world make it the perfect headquarters location.”

Dallas: “Amazon already has an extensive amount of business here. They’ve been good corporate citizens and we look forward to future conversations.”

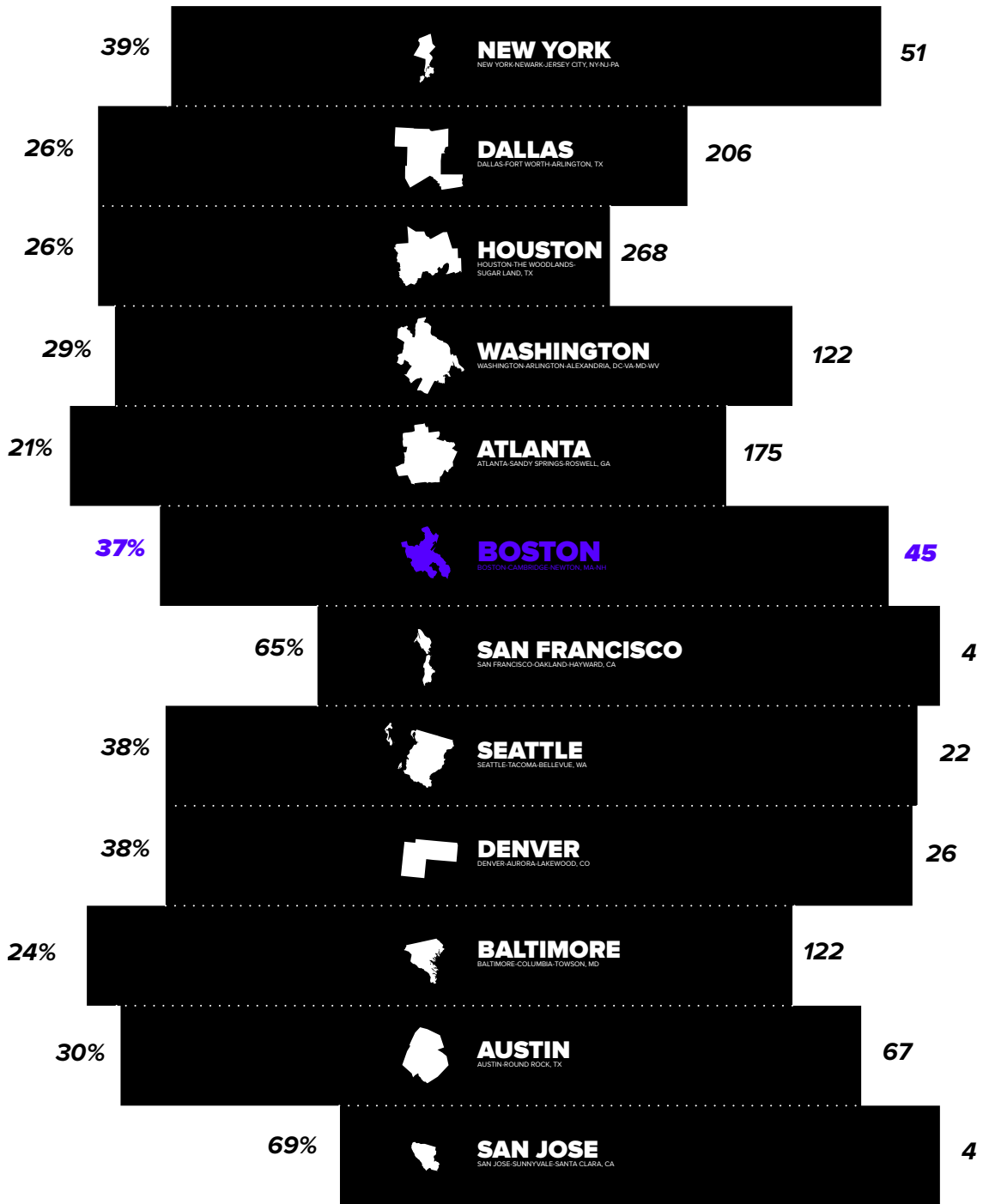


Philadelphia: “We think Philadelphia would be a PRIME location for Amazon that would make people SMILE!”

Pittsburgh: “This is a transformational opportunity unlike any that we’ve ever seen.”

Toronto: “City staff are working with Toronto Global to make sure we put together an attractive bid for this opportunity. I will be leading the charge to make the case that Amazon should call Toronto home.”

Washington, D.C.: “The District is open for business and provides the amenities and talented workforce to be a competitive location for major tech firms.”



**Median payment-to-income ratios and quality of life ranking.**



impact of such a “win,” especially in the context of an already severe housing crisis.

We all know Amazon, and probably most of us use it. Yet, its presence in our daily life goes far beyond what most of us perceive. For instance, Amazon owns 1/3 of the internet – Amazon Web

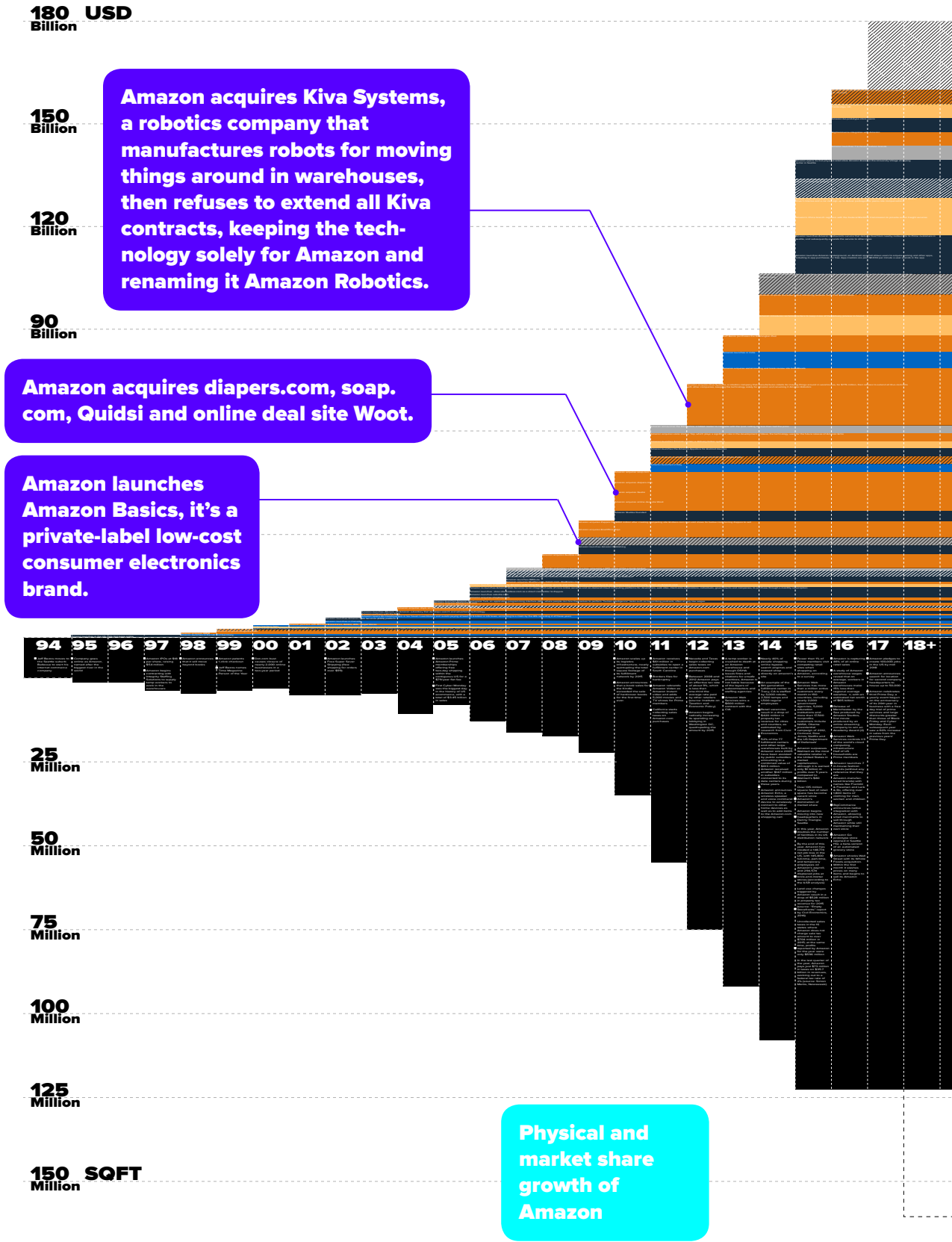


Services has contracts with Netflix, Adobe, Airbnb and the CIA.<sup>2</sup> The online retail giant has been quietly swallowing new markets by acquiring competitors as “partners,” studying them, then driving them out of business by providing the same products or services at cheaper rates, through their vertical interventions in the supply chain.<sup>3</sup>

<sup>2</sup> Olivia LaVecchia and Stacy Mitchell, *Amazon’s Stranglehold: How the Company’s Tightening Grip Is Stifling Competition, Eroding Jobs, and Threatening Communities* (The Institute for Local Self-Reliance, 2016), 18.

[https://ilsr.org/wp-content/uploads/2016/11/ILSR\\_AmazonReport\\_final.pdf](https://ilsr.org/wp-content/uploads/2016/11/ILSR_AmazonReport_final.pdf).

<sup>3</sup> Ibid, 18.



It has already colonized our domestic sphere through its wide selection of home goods, food delivery, home maintenance and entertainment services. Passively plugging in to pre-existing markets and taking them over, it has used tax evasion strategies for locating its distribution centers.<sup>4</sup>

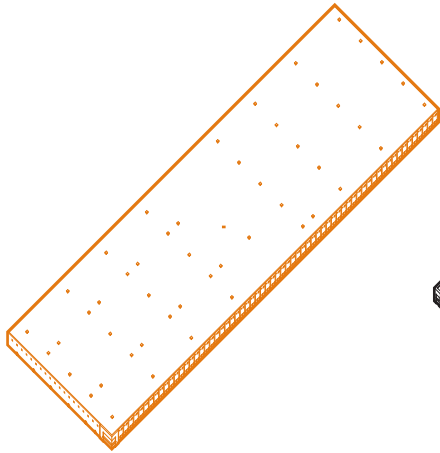


And as its markets have grown, so has its physical network. But its physical presence remains unremarkable – a series of generic warehouses – with the exception of the architectural icon in Seattle. Why, when it has

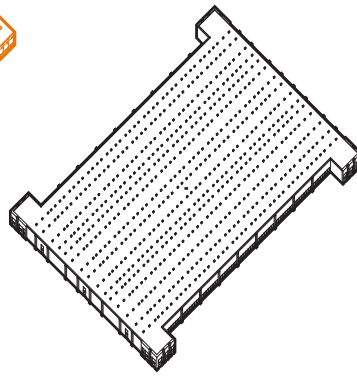
---

<sup>4</sup> Ibid, 56.

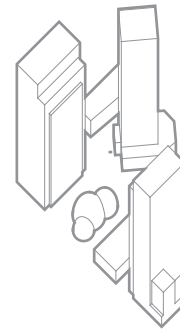
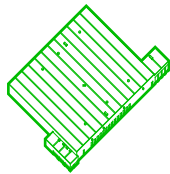
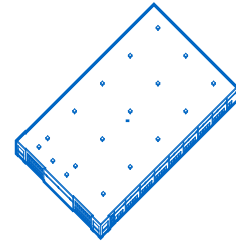
**Fulfillment Center**



**Inbound Cross Dock**



**Regional Sortation Center**

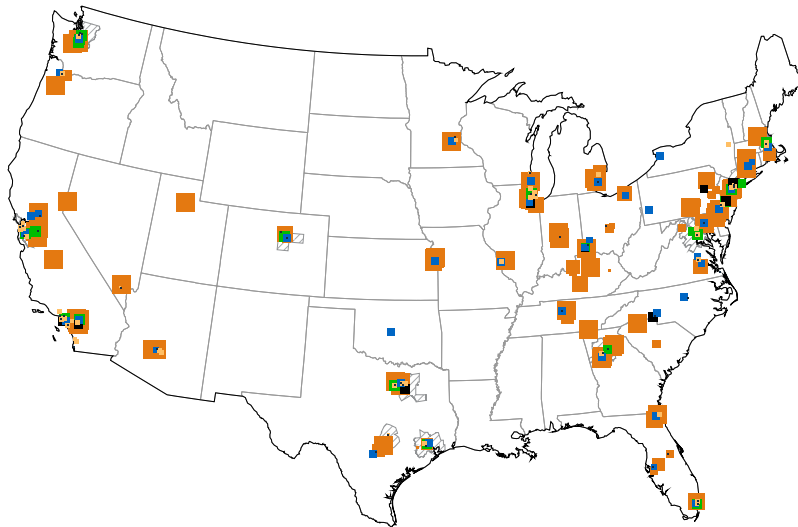


**Prime Pantry and Fresh Distribution Center**

**Delivery Station**

**Prime Now Hub**

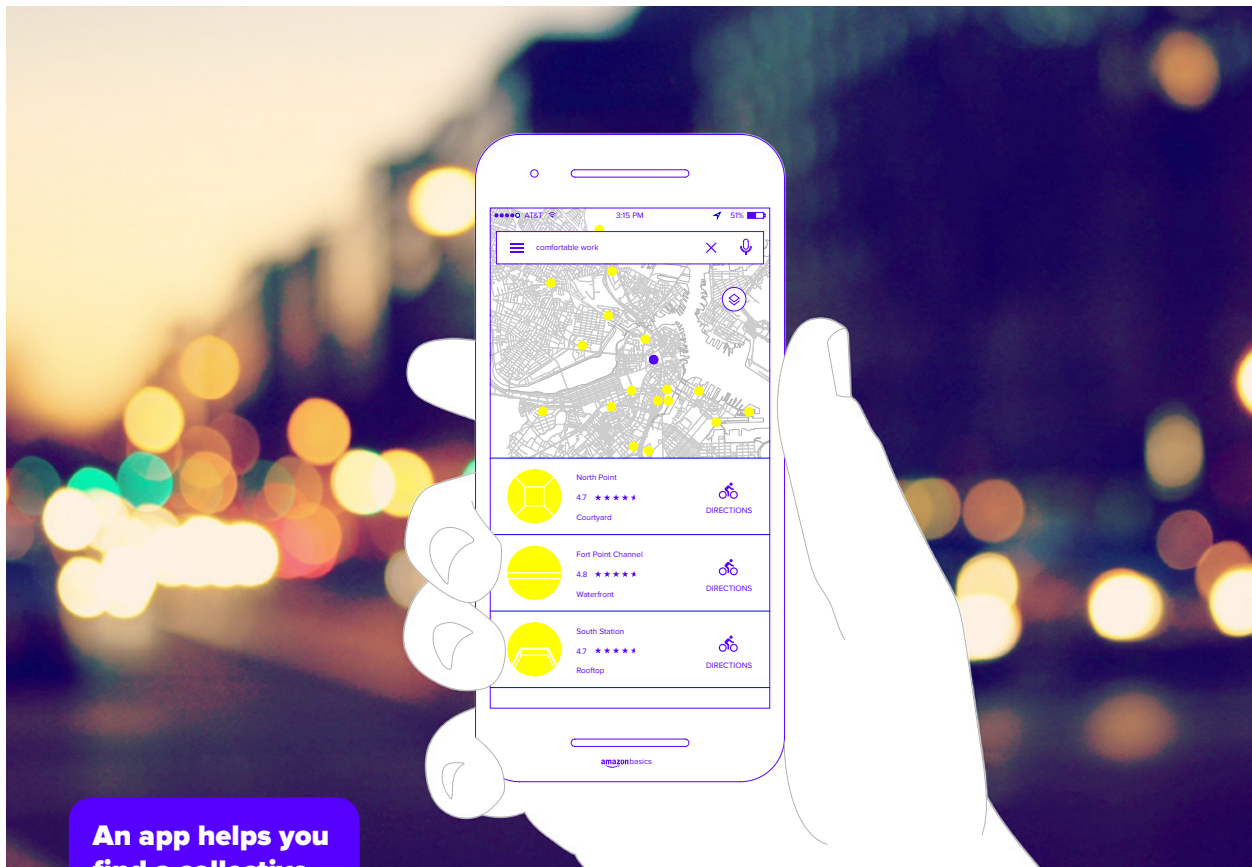
**Amazon HQ Seattle**



Source: [http://www.mwpl.com/html/amazon\\_com.html](http://www.mwpl.com/html/amazon_com.html)

already established such a stranglehold on the city with its vast network of Amazon Prime Now Hubs and last mile delivery stations, has Amazon shied away from architecture and design?

Amazon's recent acquisition of Whole Foods hints that it pose that Amazon continue its strategy of leveraging public infrastructure in exchange for taking on the burden of housing its employees. By plugging in to Boston's mass transit corridor with a series of distributed headquarters



**An app helps you find a collective home office workspace across the city**

comprised of collective home offices, Amazon can have the low impact, diffused effect it always seeks.

Amazon's organizational structure, based on the "two-pizza team," requires workspaces for the 6-12 employees that can share a meal of two pizzas. As the members and projects of these teams frequently change, a permanent, bespoke office is unnecessary. A series of home offices, offering variety in spatial conditions and comfort level, are spread around the city, forming an archipelago of



**Two-pizza teams in the city**



**Like the centaur,**

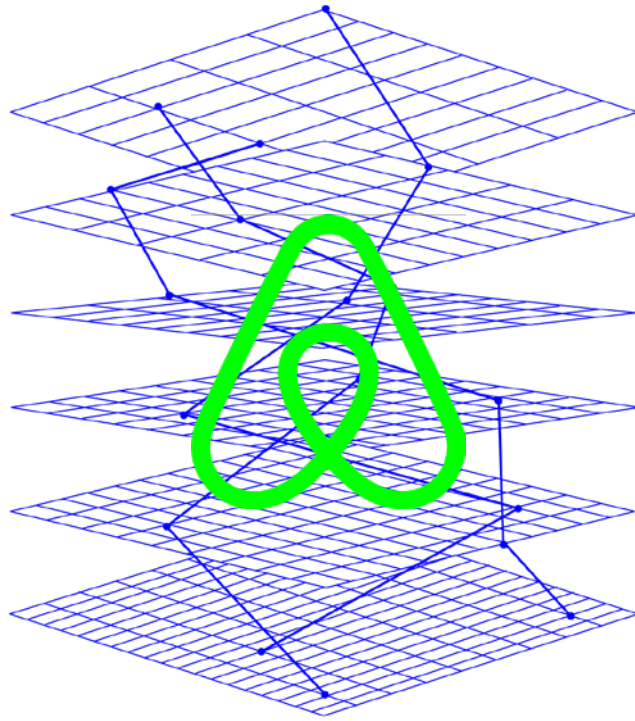
collective islands. We deploy architectural devices, like the stair, balcony, and window, to mediate amenities between the building and the city, creating collectives at the neighborhood scale. An alternative to segregated corporate models and the normalized single-family home, our proposals blur the borders of home and office, household and family, being and caring.

**04-02 AIRBNB**

Airbnb stands out as the most dominant home-sharing platform in the global market. Operating as a platform with little, if any, physical presence in the city, Airbnb serves as a financial transaction mediator – a third party who provides the necessary logistics to connect renters/users and leasers/providers. As such, it is what Benjamin Bratton calls, “an empty diagram” that “structures the value of content that other users produce.”<sup>5</sup> It ensures that payments between the users are exchanged

**whose awkward seam where the hair of the horse meets the skin of the human is never resolved,**

<sup>5</sup> Benjamin Bratton, *The Stack, On Software and Sovereignty*, (Cambridge: MIT Press, 2015), 49.



successfully, offers secure communication through its own messaging app, and uses “predictive analytics and machine learning” to evaluate, background check, and assign “risk scores” to users.<sup>6</sup> Platforms such as Airbnb thus takes on “an institutional logic” that is neither state nor market, but both.<sup>7</sup> Its successful virtual security aside, as Airbnb starts to occupy state roles, it falls short of providing the kind of physical services that are required for managing users in space.<sup>8 9 10</sup>

---

6 “Your Safety Is Our Priority”, Trust and Safety, *Airbnb*, accessed January 15, 2018, <https://www.airbnb.com/trust>.

7 “Platforms can be based on the global distribution of interfaces and users, and in this, platforms resemble markets. At the same time, their programmed coordination of that distribution reinforces their governance of the interactions that are exchanged and capitalized through them, and for this, platforms resemble states” (Bratton, 42).

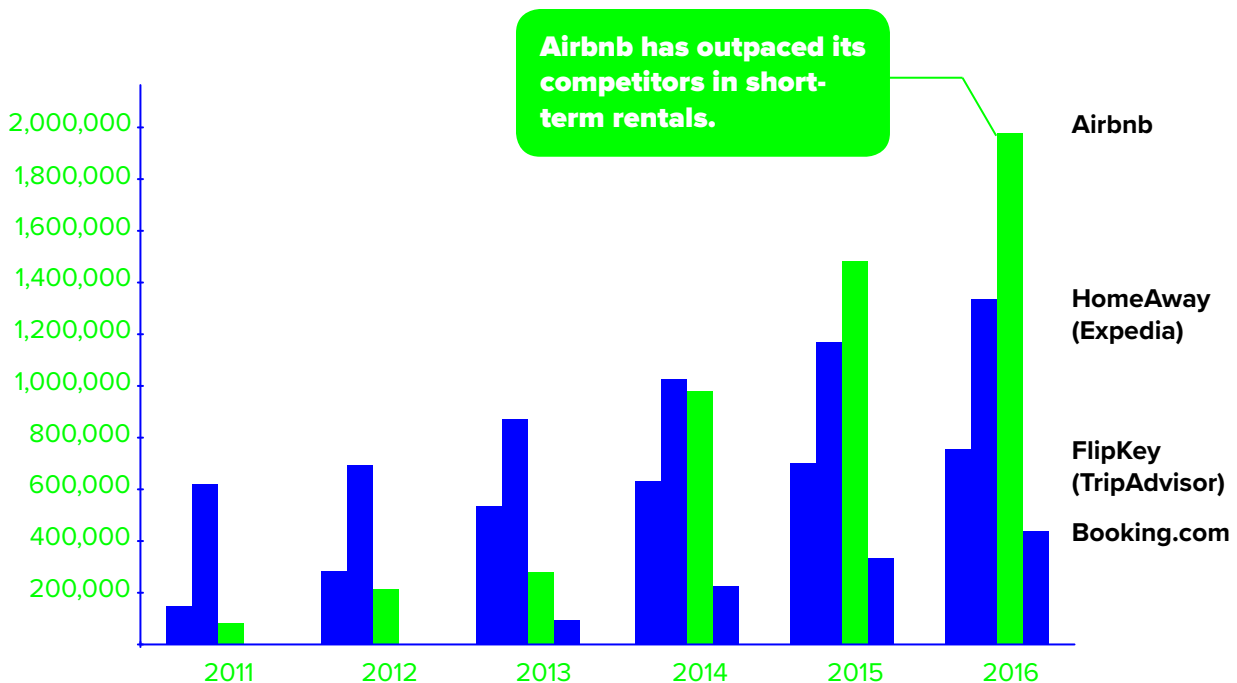
8 Bratton, *The Stack, On Software and Sovereignty*, 41-51.

9 Evan Bleier, “American Tourist Claims He Was Held Captive and Sexually Assaulted by His Transsexual Airbnb host in Spain”, *DailyMail*, August 15, 2015, <http://www.dailymail.co.uk/news/article-3199338/American-tourist-Jacob-Lopez-claims-transsexual-Airbnb-host-Madrid-sexually-assaulted-him.html>.

10 Michael Rosenfield, “Massive Party at Airbnb Disturbs

The success of platforms such as Airbnb lies in their sheer invisibility and thus their lack of responsibility to physical space. Avoiding regulations through their inherently virtual nature allows them to capitalize on the outdated legal boundary between residential and commercial zoning. While residential zoning allows for landlords to rent out their real estate as a “right of disposition” which comes with property ownership, it is currently unclear whether a third party like Airbnb, who capitalizes on this mediation, actually transforms the enterprise into commercial hospitality unfit for residential zoning. Fourth parties exist as well: platforms like Pillow, among others, mediate between hosts and Airbnb while pocketing an additional percentage for property management.<sup>11</sup> Platforms have thus transformed the sharing economy into a

**we are also always re-negotiating the ways that we work together**

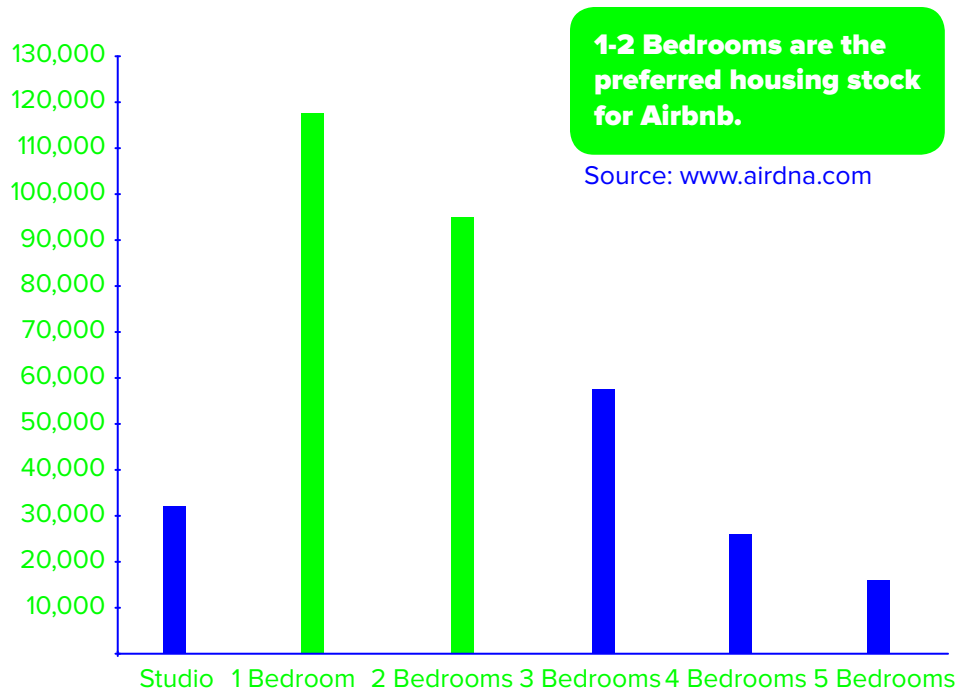


layered mediation economy. Short-term rental platforms have become new players in many large cities that struggle to protect their affordable housing stock.

Neighbors in Wellesley”, *NBC Boston*, September 13, 2017, <https://www.necn.com/news/new-england/Massive-Party-at-Airbnb-Disturbs-Neighbors-in-Wellesley-444337983.html>.  
<sup>11</sup> “About Pillow”, *Pillow*, accessed January 15, 2018, <https://www.pillow.com/>.

**and contribute to the broader conversation.**

In Boston as in other cities, the threat to affordable housing that Airbnb poses lies in the tendency for landlords to list one or more apartments year-round in which they do not live,<sup>12 13</sup> Generating more revenue from Airbnb-ing an apartment in Boston 12 days of the month than renting it long term, these apartments have little in common with the notion of home sharing and transform residential zoning into a commercial venture. The Airbnb market, which greatly prefers one- to two-bedroom apartments<sup>14</sup>



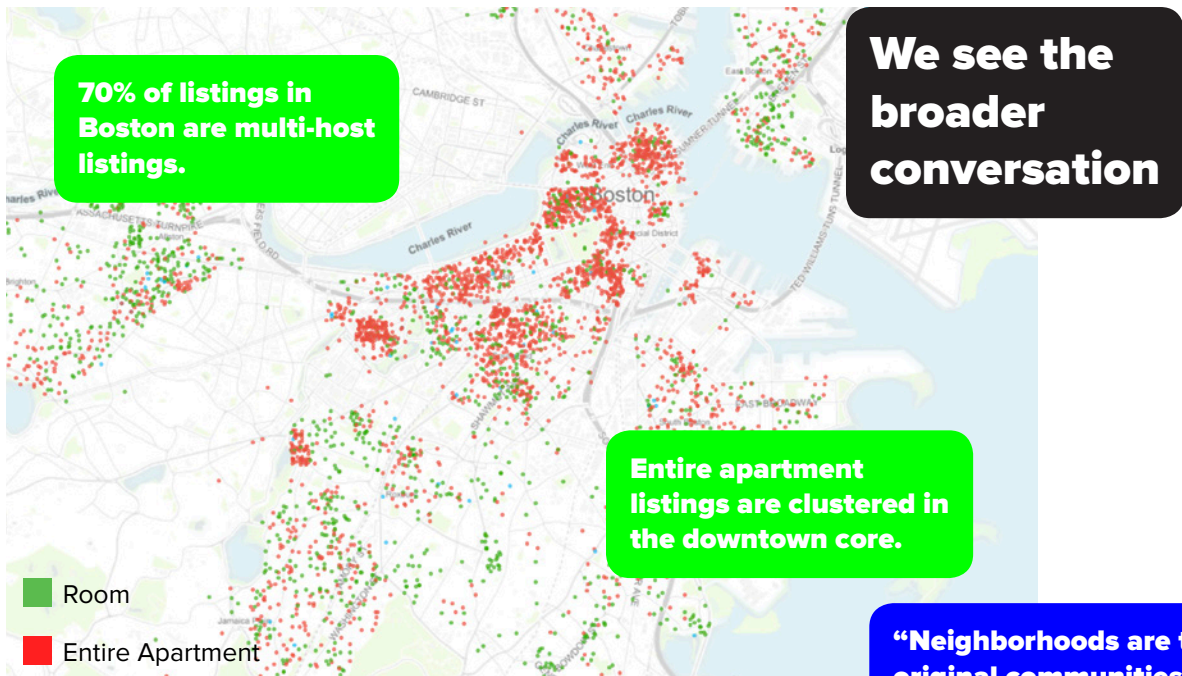
over family housing also mirrors the current Boston developments saturated with one- to two-bedroom luxury condos that clearly target some demographics and exclude others. Pushing local families out of the urban core is something Airbnb is adamantly being accused of by community groups such as the Chinatown S.O.S group.<sup>15</sup>

12 “Boston”, *Inside Airbnb*, accessed January 15, 2018, <http://insideairbnb.com/boston/>.

13 “Boston”, Market Overview, *Airdna*, accessed January 15, 2018, <https://www.airdna.co/market-data/app/us/massachusetts/boston/overview>.

14 Ibid.

15 “Chinatown Airbnb Protest”, *Chinese Progressive*



**70% of listings in Boston are multi-host listings.**

**We see the broader conversation**

**Entire apartment listings are clustered in the downtown core.**

**“Neighborhoods are the original communities. They are the keys to unlocking local culture and one-of-a-kind experiences” - Brian Chesky, CEO**

Source: [www.insideairbnb.com/boston](http://www.insideairbnb.com/boston)



Source: Chinese Progressive Association Boston

Airbnb is further pushing the definition of residential zoning with its latest market expansion – “Business

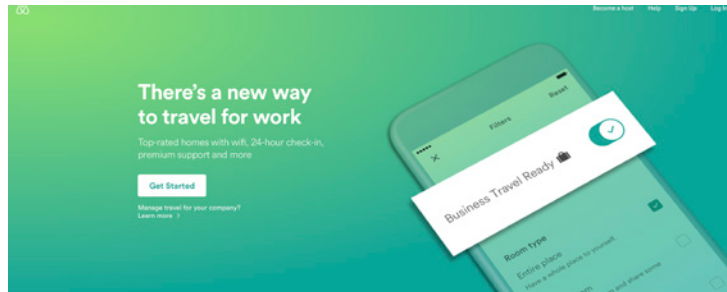
**as embedded in the shifting power dynamics of today's governing entities.**

Association, accessed January 15, 2018, <http://cpaboston.org/en/news-events/news/chinatown-sos-short-term-rental-regulation-tour>.

## The “Business Travel Ready Homes”

- Internet
- Laptop ready surfaces

- 24/7 check-ins
- Hotel essentials (Shampoo, Dryer, Iron, etc.)



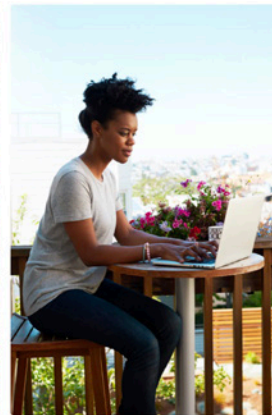
## The best version of any trip

The comforts of home while you work, or while you don't



### Group Trips

Work with your team all in the same space. Get to know each other better



### Extended stays

From long-term projects to training sessions, find a place that feels like home



### Relocations

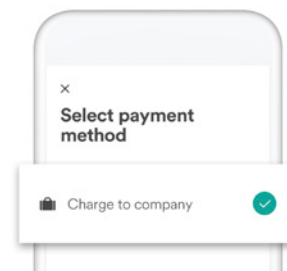
New surroundings with a familiar feel

“Group Trips: Work with your team in the same space. Get to know each other better”

### One-click expensing

Instead of entering your credit card, charge to your company directly

[Learn how to enroll your company](#)



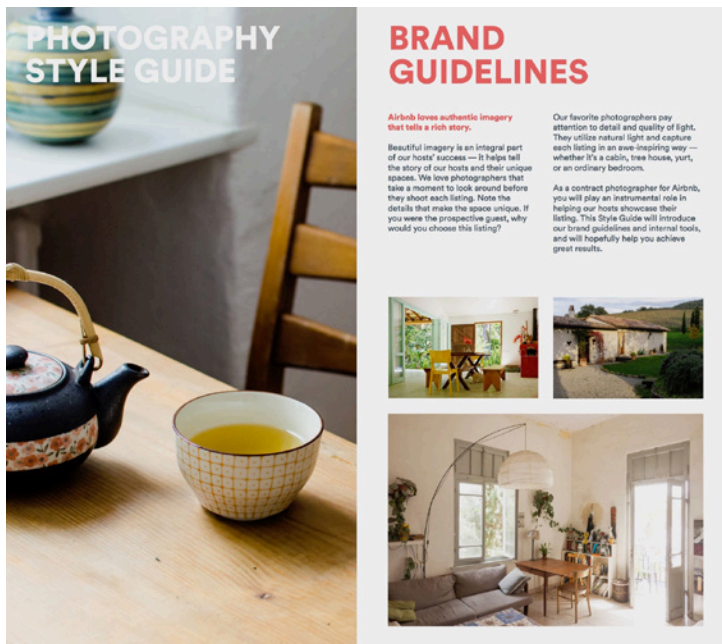
Source: [www.airbnb.com](http://www.airbnb.com)

Travel Ready Apartments”, which is a complementary platform that qualifies apartments based on their Wi-Fi access, “laptop ready surfaces,” 24/7 check-in, and “hotel essentials” (shampoo, dryer and iron).<sup>16</sup> These apartments mirror the hotel industry but host users who both travel and work together. Airbnb claims to already be hosting 250,000 companies, of which many belong to Big Tech, such as Alphabet – owner of Google – pointing to a

<sup>16</sup> “Business Travel Ready Homes”, *Airbnb*, accessed January 15, 2018, <https://www.airbnb.com/business-travel-ready>.

lucrative market of work/live short-term rentals.<sup>17</sup>

Airbnb sells travel at a “hyper-local level” by offering services, such as “Neighborhoods” to help guests choose where to stay by filtering neighborhoods according to their attributes, and offering unique “experiences” in the city. However, these strategies act against Airbnb’s fundamental premise which tries to host users in “unique places.” The commercialization of the host homes not only drives rents up and gentrifies their neighborhoods



Source: [www.airbnb.com](http://www.airbnb.com)

but also drives the very character of “place” it claims to offer out, leaving environments as caricatures of themselves populated with sterile Ikea interiors that do everything they can to not look like hotels.

In Boston no measures have yet been implemented for the taxation of short-term rentals, while other cities in the US and abroad have instituted different kinds of regulations.<sup>18</sup> These range from limits to days listed (New

<sup>17</sup> “Home-Sharing Sites Are Targeting Business Travelers”, *The Economist*, May 2, 2017, <https://www.economist.com/blogs/gulliver/2017/05/airbnb-or-not-airbnb>.

<sup>18</sup> Andy Rosen, “Airbnb Tax Dropped from Massachusetts Budget, Negotiations Continue”, *The Boston Globe*, July 7, 2017, <https://www.bostonglobe.com/business/2017/07/07/airbnb-tax->

**The visible  
and invisible  
merging of  
state and  
capital**

**has yielded  
proto-state  
corporate  
platforms  
that render  
nation-states  
obsolete.**

**National and International Regulations of short-term rentals cling to a historic notion of home-sharing.**

**Barcelona**  
- Short-term Rental Licenses, there are **9,606 licenses in Barcelona.**

**London**  
- **90 day limit to full flat listing.**

**Berlin**  
- **Ban on full apartment listings, or more than 50% apartment**

**Amsterdam**  
- **Only unit owner can rent out**  
- **60 days max**  
- **4 people max**

**Chicago**  
- **“One Host, One Home” policy**

**New York**  
- **Ban on short-term rentals, less than 30 days.**

**Santa Monica**  
- **14% occupancy tax**  
- **Host must live on property**

**TIME LIMITS:** 30-120 days

**INCOME LIMITS:** maximum earnings

**TAX:** occupancy tax (14%)

**OCCUPANT LIMITS:** maximum guests

**HOST LIMITS:** Host must live on property

**RENTABLE AREA LIMIT:** percentage of apartment area

**AIRBNB LICENSES:** fixed amount of licenses in the city that are tied to the property.

York, Paris), maximum limits on earnings (Reykjavik), to issuing a fixed number of licenses attached to properties (Barcelona), to requiring that the host live on the property with the guests (Chicago, Santa Monica), and to setting a limit of 50% of the apartment being rented short-term (Berlin).<sup>19 20</sup> All the aforementioned measures cling to more historically accepted notions of home-sharing.



Source: <https://www.nbcboston.com>

[dropped-from-massachusetts-budget-negotiations-continue/pica9RqCEyxhLPhgGR0t9H/story.html](https://www.nbcboston.com/dropped-from-massachusetts-budget-negotiations-continue/pica9RqCEyxhLPhgGR0t9H/story.html).

<sup>19</sup> Feargus O’Sullivan, “Europe’s Crackdown on Airbnb”, *CityLab*, last modified June 20, 2016, <https://www.citylab.com/equity/2016/06/european-cities-crackdown-airbnb/487169/>.

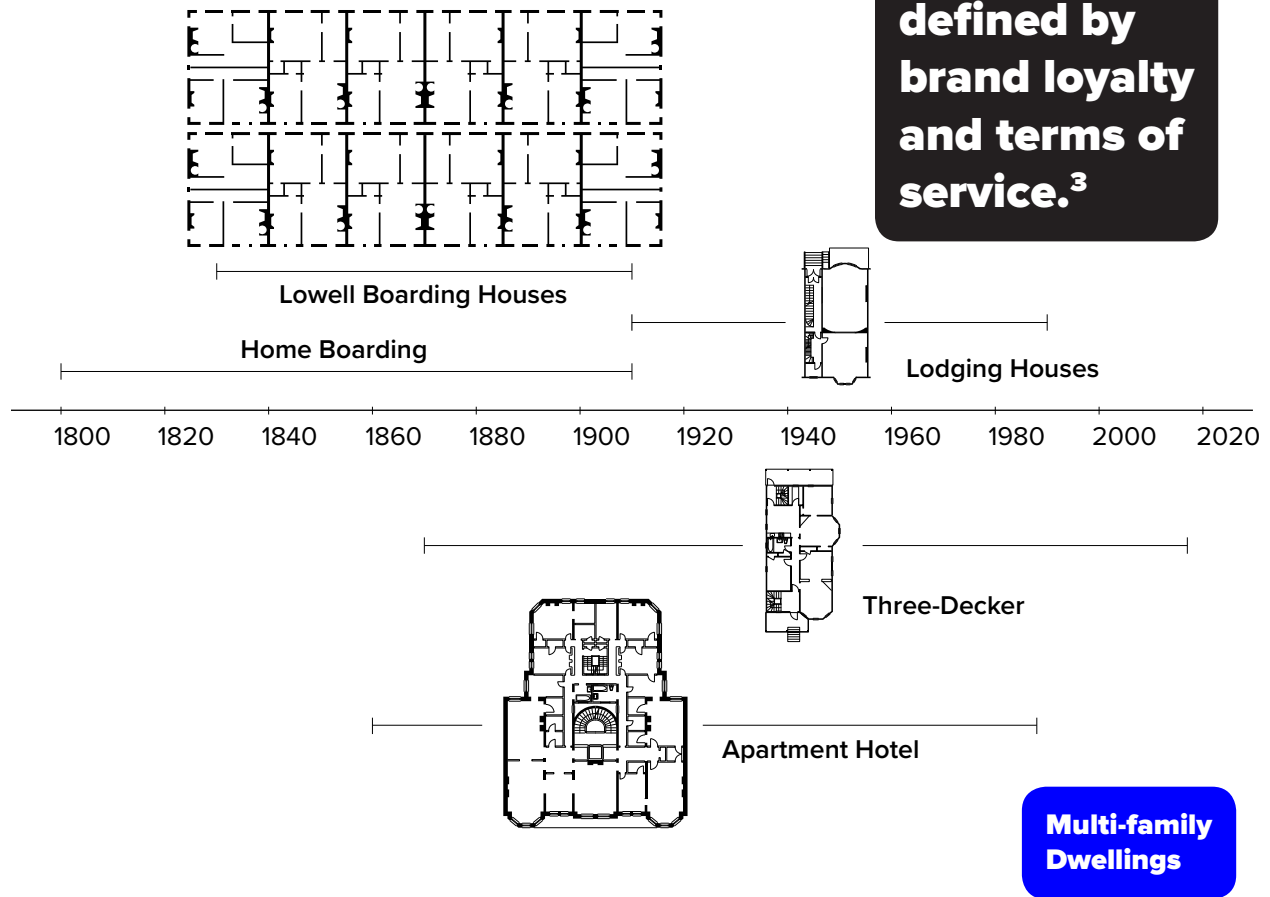
<sup>20</sup> Katherine LaGrave, “8 Cities Cracking Down on Airbnb”, *Conde Nest Traveler*, June 20, 2016, <https://www.cntraveler.com/galleries/2016-06-22/places-with-strict-airbnb-laws/8>.



The concept of home sharing is not new to Boston. Boston is a city that has seen a rich lineage of multi-family dwellings since the 19<sup>th</sup> century, one of these typologies is the boarding house which was so popular that it was estimated that about a third of urban Americans boarded or took in boarders to help pay the rent.<sup>21</sup> From boarding houses to lodging houses, from the residential

**Under this regime, citizens are reorganized into consumers defined by brand loyalty and terms of service.<sup>3</sup>**

**Single Room Occupancy**



hotel to the three-decker, diverse economic and spatial arrangements have since accommodated people living alone, together, or both.<sup>22</sup> While boarding or lodging addressed the demand for the single room, the triple decker, another made-in-Boston typology, allowed families to gain ownership of a multi-family building by

<sup>21</sup> Paul Erling Groth, *Living Downtown*, (Berkeley: University of California Press, 1994), 3-4.

<sup>22</sup> Douglass Shand-Tucci, *Built in Boston*, (Amherst: University of Massachusetts Press, 1999), 101-130.

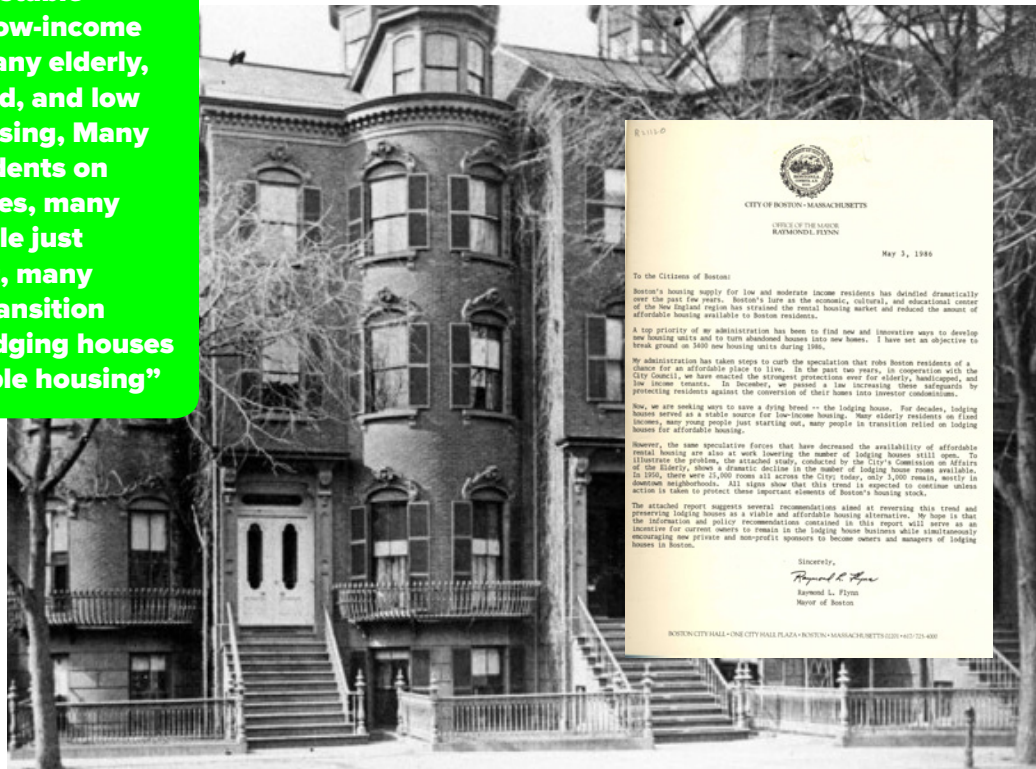
<sup>3</sup> Willie Osterweil, "Liberalism is Dead," *The New Inquiry*, September 15, 2017, <https://thenewinquiry.com/liberalism-is-dead/>.



renting out two of its three apartments. Designed to emphasize its own house-ness and bridge between the suburban and the urban, this awkward typology was the speculative house of 19th and 20th century in Boston.<sup>23</sup> Today, the triple-decker has moved away from housing families as it has become a prime stock for short-term

**“Now we are seeking to save the dying breed - the lodging house. For decades, lodging houses served as a stable source for low-income housing. Many elderly, handicapped, and low income housing, Many elderly residents on fixed incomes, many young people just starting out, many people in transition relied on lodging houses for affordable housing”**

23 Arthur J. Krim, “The Three-Deckers of Dorchester: An Architectural Survey”, *Internet Archive*, 1977, [https://archive.org/stream/threedeckersofdo00krim/threedeckersofdo00krim\\_djvu.txt](https://archive.org/stream/threedeckersofdo00krim/threedeckersofdo00krim_djvu.txt).



rentals aimed at both students and transients such as Airbnb guests<sup>24</sup>

In our pitch to Airbnb, we acknowledge the indispensable logistical value of platform intelligence to manage housing by filling existing voids in the housing market, while also recognizing it is consequentially creating many more. As it is already occurring around the globe, we foresee the future of these home-sharing platforms as increasingly threatened by regulations that fight gentrification and aim to protect neighborhoods. While abolishing these platforms is not a long-term solution,

Airbnb

## Something in the Airbnb: hosts anxious as New York begins crackdown

The city has levied fines on users of the apartment-rental site, often a source of vital extra income, but a politician insists: 'We're not going after the little guy'



an attitude that capitalizes on their attributes could be beneficial to municipalities. We therefore propose that Airbnb adopt a more symbiotic relationship with the state.

A future is possible in which the virtual platform begins to secure mortgages for residential collectives who wish to buy homes but cannot afford them. Airbnb, on a trajectory of destroying its own premise of authentic hosting, could

<sup>24</sup> Catherine Cloutier, "Boston's triple-deckers in demand, families getting pushed out", *The Boston Globe*, October 9, 2015, <https://www.bostonglobe.com/metro/2015/10/08/boston-three-deckers-remain-mainstay-but-bigger-buildings-are-rise/s15Oc6pXXMHe8sB2wL0UZK/story.html>.

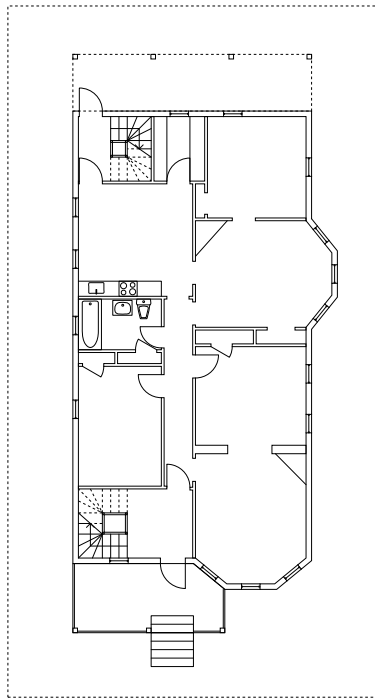
**This is a moment in which the collective is being rewired,**

**but by whom and for what ends remains a question.**

Source: <https://www.theguardian.com/technology/2017/feb/12/airbnb-hosts-new-york-fines-government-illegal>

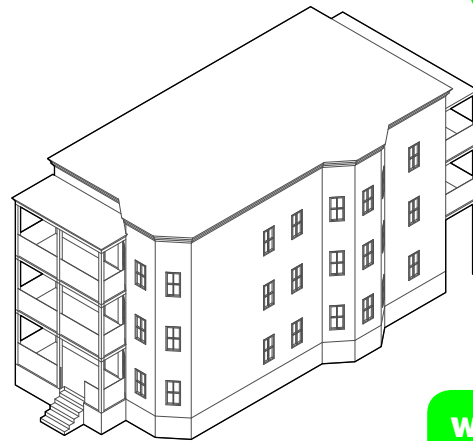
**3 identical residences stacked.**

**1:2 Proportion  
25ft x 50ft**



**One family rents and maintains the building to eventually gain ownership.**

accept this proposition as a means to secure “neighbors” and “experiences” on site. Further, this strategy also foresees that in the advent of the dissolution of work as we know it, the value of care-work and hospitality will increase and Airbnb will adapt. Hosting short-term guests will become a means of socialization. Elderly Airbnb hosts are already experiencing this aspect of Airbnb by both using the service to afford their homes, but also to create a more social environment for themselves. Our proposal for Airbnb in Boston takes the parameters of the triple-



**Porch**

**Wood Frame**

**Looks like a single house but it contains 3 condos.**

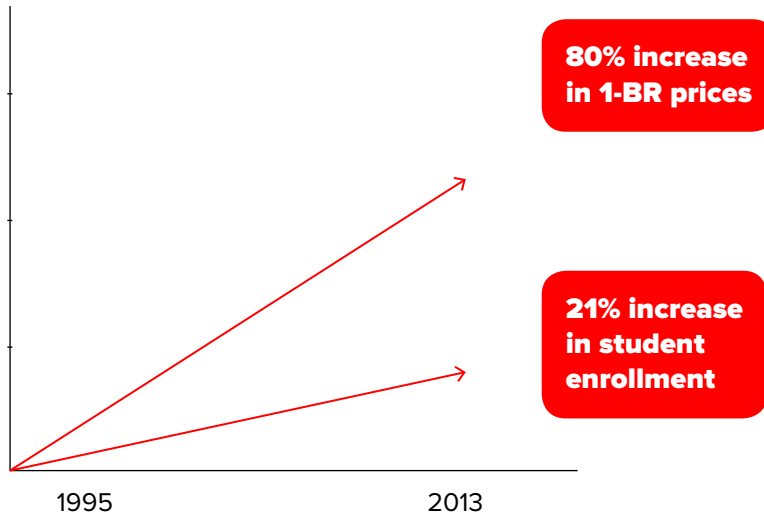
decker to rethink new forms of collectivity for both short-term renters and permanent owners, who may co-exist in various degrees of collectivities.

#### **04-03 MIT**

In the 1930s the President of MIT said, “Graduate students now lack almost completely the social contacts which the undergraduates enjoy throughout their manifold organized activities. Their cultural development, and hence their social effectiveness, depend on such contacts. The most natural cultural training comes from free social intercourse between men of differing interests

but of equivalent intellectual outlook.”<sup>25</sup> Nearly 100 years later, MIT has expanded spatially, but has done little to enhance the opportunities for “free social intercourse” between the graduate men, and now women, who attend the institute. While the dorms play a central role in defining communal identities of undergrads, 75% of whom live on campus the majority of graduate students are dispersed throughout Cambridge, Boston and Somerville, missing the opportunity afforded to undergrads to form critical masses which evolve from their educational pursuits.<sup>26 27</sup>

Graduate students must contend instead with the rental market, forced to navigate a problem which they themselves have unintentionally shaped. The numerous higher education institutions in the area flood the market with a predictable yearly influx of students, keeping rents high, and enrollment growth accelerates the increase in rental prices even further.<sup>28 29</sup> In Cambridge, asking prices for apartments increased by 60-80% (depending on how many bedrooms) in the same period that student



<sup>25</sup> Graduate Student Housing Working Group, *Report to the Provost*, MIT, May 2014, 10.

<sup>26</sup> MIT Division of Student Life, *Architectural Principles for Undergraduate Residences*, October 2016, 2.

<sup>27</sup> Graduate Student Housing Working Group, *Report to the Provost*, 12.

<sup>28</sup> *Ibid*, 17.

<sup>29</sup> Graduate Student Housing Working Group, *Interim Report*, MIT, October 2017, 23.

**Some very dark futures have been projected,**

**like Willie Osterweil’s prediction of fascism ruling on both the left and the right,**

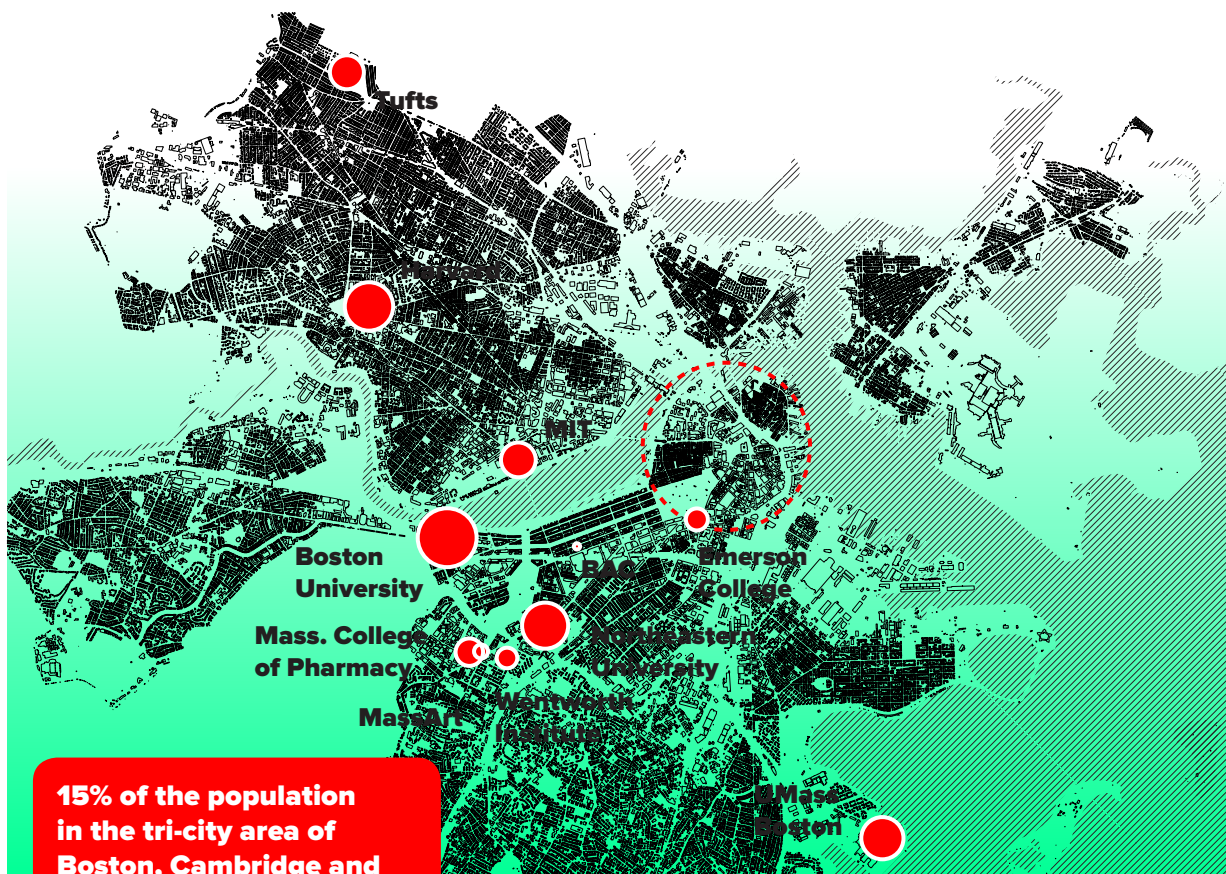
**with a private police-state, corporate libertarianism on the left,**

**countered by an authoritarian ethnonationalism on the right.<sup>4</sup>**

<sup>4</sup> *Ibid*.

enrollment increased by 21%.<sup>30</sup>

The large scale of these institutions means that unmet student needs have big impacts on the market, impacts that reverberate in the demographic makeup and urban experience of the surrounding area.<sup>31</sup> If combined, the students from all the universities in the area would require a dorm with a floor plate larger than downtown Boston. The demand resulting from concentrations of these students in certain neighborhoods drives rents up by as much as \$700 per month, when comparing identical units in non-student dominated neighborhoods.<sup>32</sup>

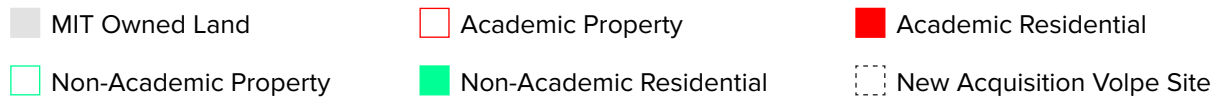
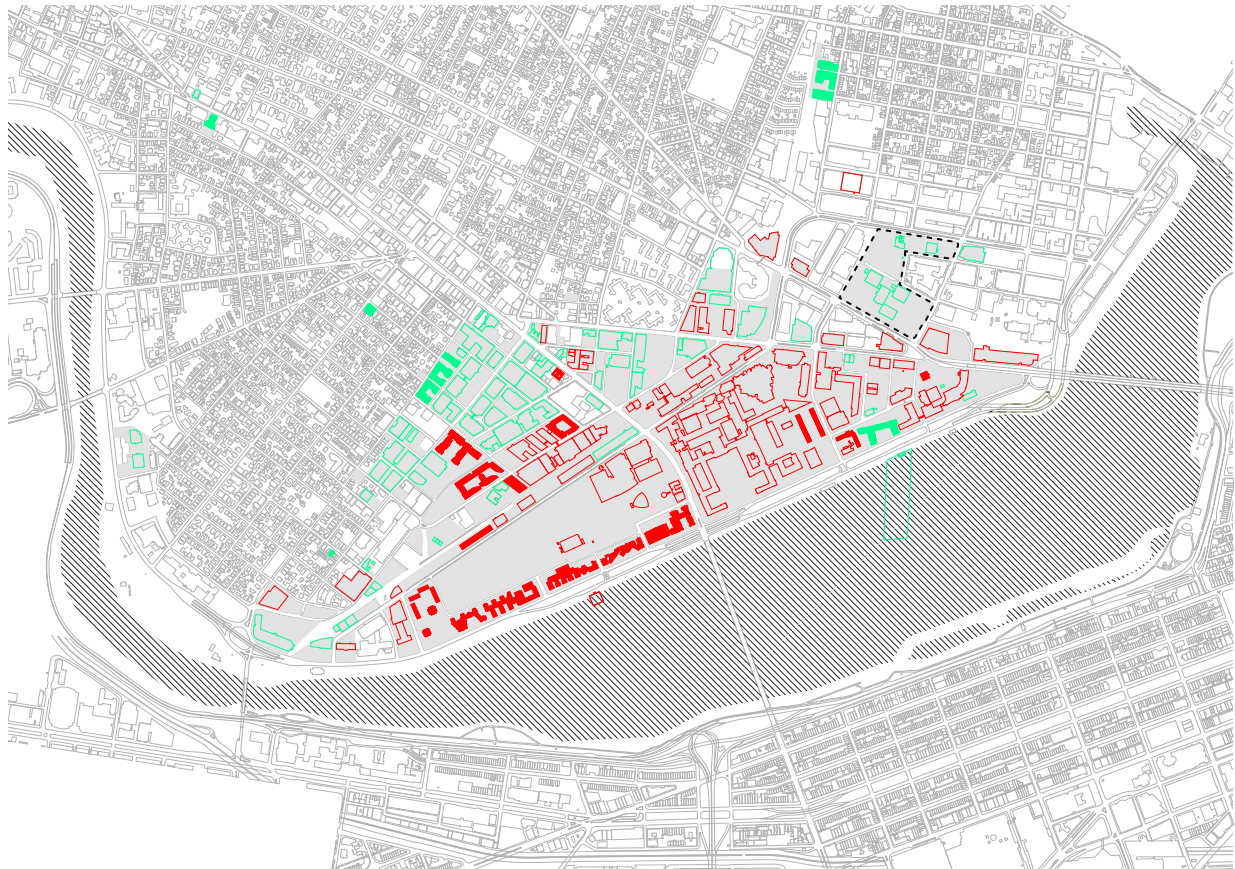


**15% of the population in the tri-city area of Boston, Cambridge and Somerville are students (131,328). 39,399,869 square feet is the minimum cumulative living space for these students, an area larger than downtown Boston.**

30 Graduate Student Housing Working Group, *Report to the Provost*, 40.

31 MIT Graduate Student Apartments Now, Zoning Petition: Section 13.913 Graduate Student Housing Production Requirement, 15 (citing 2016 Greater Boston Report Card).

32 Graduate Student Housing Working Group, *Report to the Provost*, 45.



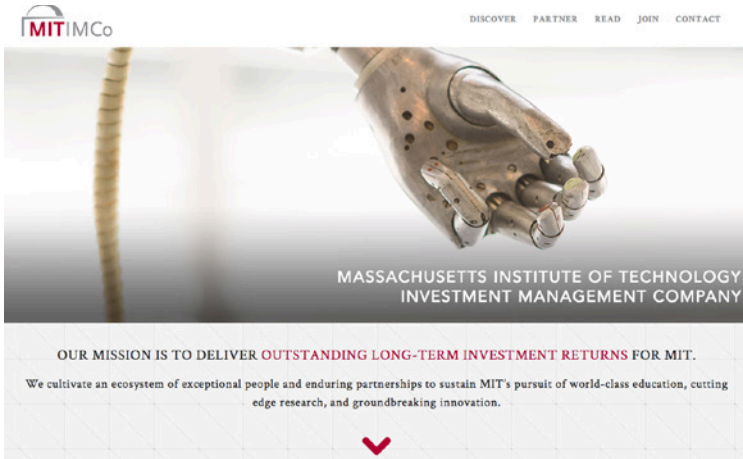
MIT has consistently supplied too little campus housing, but it's not for lack of land.<sup>33</sup> The institute is the biggest landowner in Cambridge paying 14% of the city's property taxes, exclusive of its designated non-taxable educational properties.<sup>34</sup> But recent shifts in land acquisition policies have reoriented MIT more strongly as a private developer.<sup>35</sup> The MIT Investment Management Company (MITIMCO), the entity that handles MIT's investment portfolio, has been criticized for changing the priorities of its program from ensuring the academic (spatial) expansion of the institute to focusing on maximizing returns for the endowment and, like a Wall Street firm,

**But we allow ourselves to hope that this may be an opportunity to implant the collective with new priorities,**

33 MIT Graduate Student Apartments Now, Zoning Petition: Section 13.913 Graduate Student Housing Production Requirement, 35.

34 MIT, *2016 Town Gown Report to the City of Cambridge*, 8.

35 Editorial Board, "Graduate Student Housing." *MIT Faculty Newsletter* XXX, no. 1 (September/October 2017): 3.

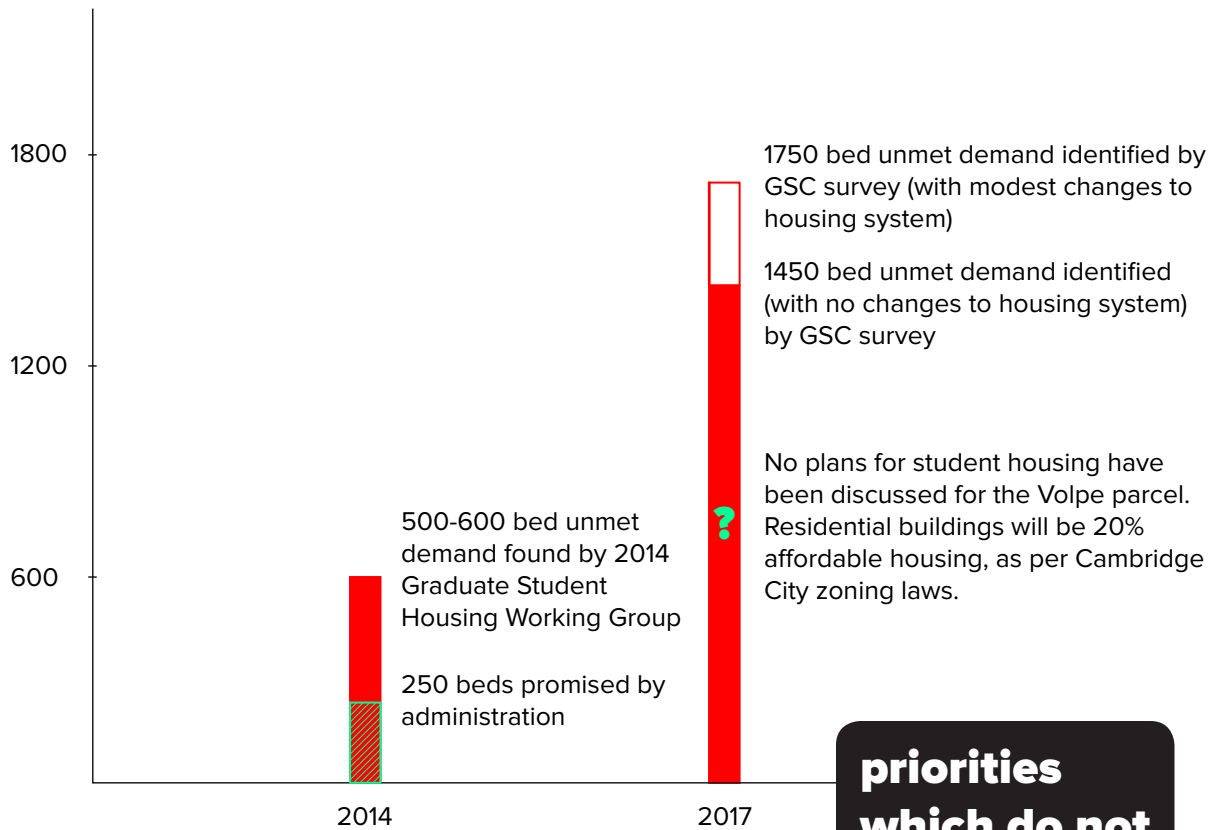


compensating its employees with incentives based on their performance.<sup>36 37</sup> It acquires land only to lease it out to private companies for unusually long periods, creating spatial bottlenecks in both the dorms and classroom and office space.<sup>38</sup>



36 O.R. Simha, “MIT 2030: Concerns for the Future” *MIT Faculty Newsletter* XXIV, no. 2 (November/December 2011): 12.  
 37 Frederick P. Salvucci, MIT Construction Plans Continue to Undervalue Graduate Student Needs.” *MIT Faculty Newsletter* XXVIII, no. 1 (September/October 2015): 13.  
 38 O.R. Simha, “A Brief History of MIT’s Land Acquisition





**priorities which do not necessitate defining oneself by ones profession.**

**The possibility of the end of work, a precondition of some of these dark visions,**

The newest and largest recent land acquisition, the Volpe parcel, presents an opportunity for the institute to think differently urbanistically and architecturally. The efforts of student activist groups like Graduate Student Apartments Now have led the administration to commit to 950 new units of graduate housing on or near the new parcel, a significant step towards addressing the longstanding shortage. While thus far no student housing has been included in early plans for the site, and early releases of



Source: GSAN

Policies." *MIT Faculty Newsletter XXIV*, no. 2 (November/December 2011): 12.

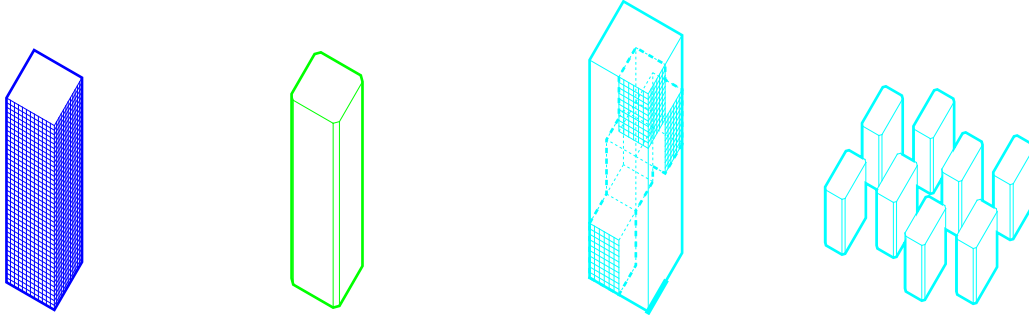
renderings replicate the out-of-scale, anonymous clusters of reflective edifices that are so common in tech havens, the site is so large that, if planned with an attention to the ways that people really want to live, it could create much more value than the current formula. It's a chance to



question the developer vision of maximized office space and market-bolstering housing aimed at high-income tech workers while providing the required allotment of affordable housing squeezed into the tightest space possible.<sup>39</sup> By re-computing the spatial requirements for living and working according to the home office model, a spatial void can be created that makes room for collective student housing.

<sup>39</sup> Volpe MIT, *Cambridge Planning Board Zoning Submission Overview*, July 2017, 14, <https://volpe.mit.edu>.

$$\begin{array}{ccccccc}
 ( & \mathbf{850,000} & + & \mathbf{850,000} & ) & + & \mathbf{1,100,000} & = \\
 & \text{SF} & & \text{SF} & & & \text{SF} & \\
 & \text{Office Space} & & \text{Innovation} & & & \text{Residential} & \\
 & & & \text{Office Space} & & & \text{Building} & 
 \end{array}$$



$$\begin{array}{ccccccc}
 \mathbf{850,000} & + & \mathbf{850,000} & = & \mathbf{1,275,000} & + & \mathbf{425,000} \\
 \text{SF} & & \text{SF} & & \text{SF} & & \text{SF} \\
 \text{Innovation} & & \text{Residential} & & \text{Collective} & & \text{Student} \\
 \text{Office Space} & & \text{Building} & & \text{Home Office} & & \text{Housing}
 \end{array}$$

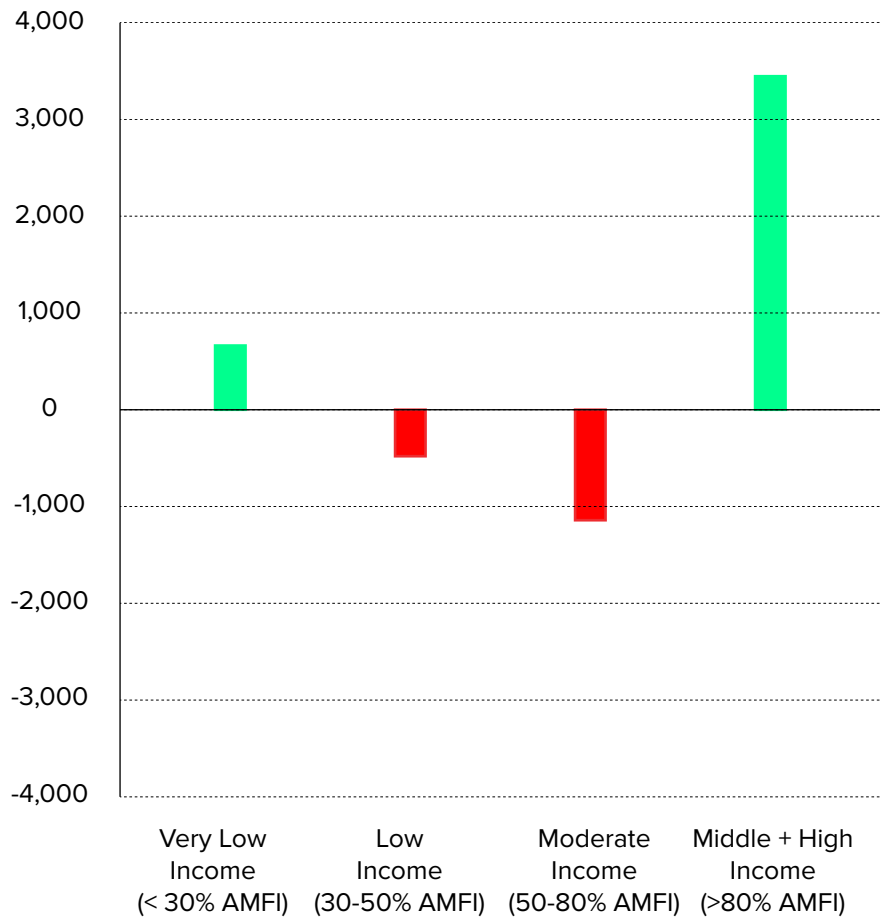
Graduate students already live collectively. In this economically and spatially squeezed landscape, students are forced to band together, combining incomes in order to afford apartments originally designed for a single income. In this way, students outcompete local families for the limited housing stock, resulting in the exodus of low and middle-income families to the outskirts, and in the creation of thousands of student households formed by economic necessity.<sup>40</sup> These unintentional collectives are facilitated by Venmo, Paypal, Googlesheets, and other innovations in cost-sharing and financial organizing apps. But innovation in space-sharing lags far behind, happening in spite of, rather than thanks to, the architecture.

**underscores  
the imminent  
value of  
care work  
and social  
grooming as  
practices for  
coping with a  
new lifestyle**

<sup>40</sup> Graduate Student Housing Working Group, *Interim Report*, 23, citing Envision Cambridge Report.

**Changes in the number of households.**

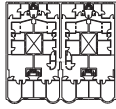
Source: Envision Cambridge Report



Even on campus, in both the undergraduate and graduate dorms and in the small allotment of graduate housing, student collectivity is a matter of the efficient packing of beds. In the MIT dorms, 85% of the floor area is devoted to individual private space, with the remainder falling to mechanical, housemaster quarters, and then finally, communal space.<sup>41</sup>

Our scheme upends this ratio, creating a minimum unit which has maximum possibilities for expansion, and which shapes intimate yet collective spaces in between. Aggregation strategies create different kinds of collective habitats at varying scales. Expanding the lightwell language from Boston’s historic apartment hotels, these “dorm-trees” grow within a courtyard created by the office space required by the Volpe master plan.

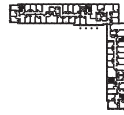
<sup>41</sup> Graduate Student Housing Working Group, *Report to the Provost*, 12.



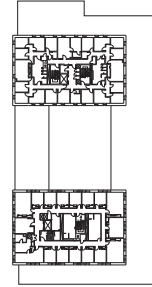
Random Hall  
(93 Occupants)



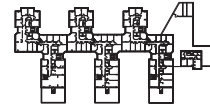
The Warehouse  
(120 Occupants)



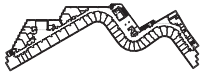
70 Amherst  
(133 Occupants)



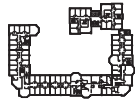
Mccormick Hall  
(233 Occupants)



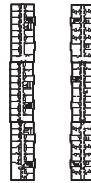
New House  
(287 Occupants)



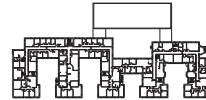
Baker House  
(318 Occupants)



Macgregor House  
(318 Occupants)



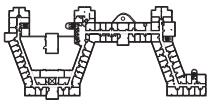
East Campus  
(357 Occupants)



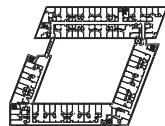
Burton Conner  
(346 Occupants)



Simmons Hall  
(344 Occupants)



Next Hosue  
(347 Occupants)



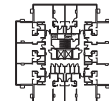
Eastgate Apartments  
(424-468 Occupants)



Edgerton House  
(462 Occupants)



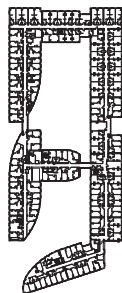
Maseeh Hall  
(490 Occupants)



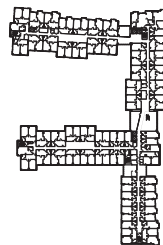
Westgate Apartments  
(390-510 Occupants)



Tang Hall  
(1,308 Occupants)



Ashdown Hosue  
(1,123 Occupants)



Sidney Pacific  
(1,162 Occupants)

**MIT dormitory  
architecture**

Source: <http://web.mit.edu/facilities/maps/floorplans.html>

## 05 LANGUAGE

### 05-01 COLLECTIVE HOME OFFICE



# COLLECTIVE HOME OFFICE



The “Collective Home Office” is an aggregation of terms whose spatial and temporal network of relations has evolved throughout history (01). From pre-industrial pastoral dwellings in which the field, the space of work, was also

a space of socialization, to post-war suburban housing, whose retreat from the city center was an act of segregating work and leisure spaces (while completely overlooking household labor as work), to today’s high demand for dense urban life from a new wave of precarious workers, the nexus of these three terms is still changing.



As technology replaces unskilled manufacturing labor in the west, a new division of labor is being drawn out between the categories of knowledge and maintenance work. While technology has changed the kind of labor that humans do, it has also transformed the spatial and temporal relationship between work and home. Today work is done all the time from anywhere, and as a result, labor time has increased. The “time freed by technology is turned into cyber time absorbed into the infinite production process of cyberspace,” while the “change in attitude towards labor, from manual labor to cognitive labor” has led to the expansion of the work day by the worker herself, even welcoming the additional workload as “an investment in desire”.<sup>1</sup> We are interested in both

<sup>1</sup> Franco Bifo Berardi, *The Soul at Work: From Alienation to*

this cognitive/knowledge worker and the maintenance/care worker, both of whom have challenged the temporal and spatial definition of work, as well as the zoning laws that divide the city into residential and commercial zones.

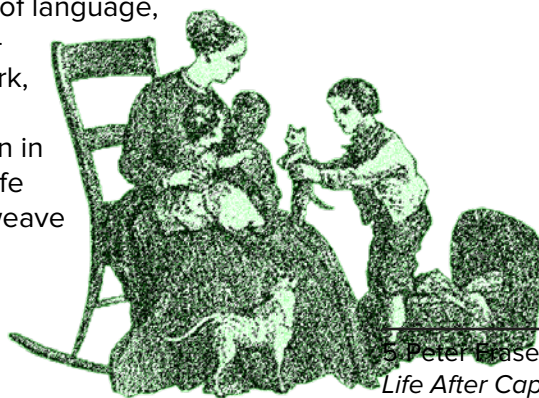
The ways people use architectural space, what architects call “program,” has historically been central to the discipline. But as Benjamin Bratton observes in *The Stack*, the task of “programmatically organization of social connection and disconnection in space and in time” is now also the task of software.<sup>2</sup> Given this relinquishment of yet another duty, Bratton asks what is left for architecture in the context of planetary scale computation.<sup>3</sup> Collective Home Office considers the inevitability of current technologies at play, and has witnessed the home office already become the status quo. We perceive that what is often described as an escape from work is certainly not spatial, but rather electronic — depending on when we choose to “disconnect,” “unplug,” or “go offline” — for a date, a movie,



a family dinner. In the nascence of technological unemployment, the forgotten practices of care-work and social grooming activated by collectivity become particularly important, and form the essential component of the “Collective Home Office.”

“Working so much has implied an abandonment of vital social functions and commodification of language, affections, teaching, therapy, and self-care. Society does not need more work, more jobs, more competition. On the contrary: we need a massive reduction in work-time, a prodigious liberation of life from the social factory, in order to reweave the fabric of the social relations.”<sup>4</sup>

Focusing on the missing collective for the home office, we explore ways for design to play a role in its rewiring.



<sup>1</sup> *Autonomy*, (Cambridge: MIT Press, 2009), 79.

<sup>2</sup> Benjamin Bratton, *The Stack, On Software and Sovereignty*, (Cambridge: MIT Press, 2015), 43.

<sup>3</sup> *Ibid.*, 43.

<sup>4</sup> Berardi, *The Soul at Work: From Alienation to Autonomy*, 213.



**no longer based on the binary of home and office,**

**and the other binaries, such as gender roles, that come with it.<sup>5 6</sup>**

<sup>5</sup> Peter Brase, *Four Futures: Life After Capitalism* (London: Verso, 2016).

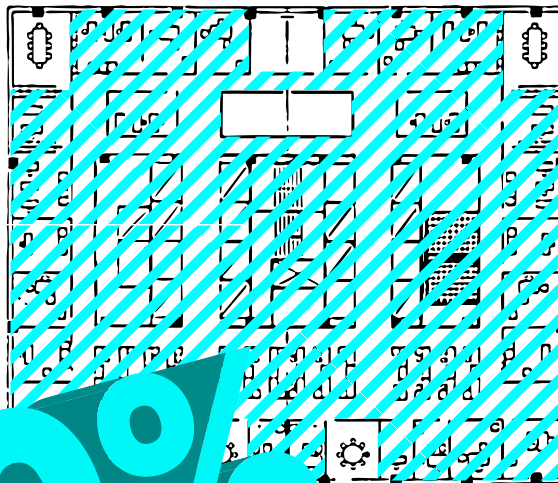
<sup>6</sup> James Livingston, “Fuck Work,” *Aeon*, November 25, 2016, <https://aeon.co/essays/what-if-jobs-are-not-the-solution-but-the-problem>.



We thus embrace the programmatic plurality – napping, emailing, eating, chatting, arguing, reading, going to the park with the kids – that accompanies this newly transformed typology, and we reject the typical office format which operates eight out of twenty-four hours, five out of seven days, and in the remainder

completely evacuates its downtown business district.<sup>5</sup> In our practice, we work to convince our clients to build collective housing instead of obsolete office buildings. As such, the collective home office is as much of a qualitative argument as it is a quantitative one. Overlapping home with office allows both to have more space; and housing, if microzoned with office program, can be larger ( $1 + 1 = 1.5$ ). If our Big-Tech clients agree to build housing equivalent to the number of employees they have, they would relieve the pressure they exert on the housing stock, making it easier for the state to provide affordable housing.

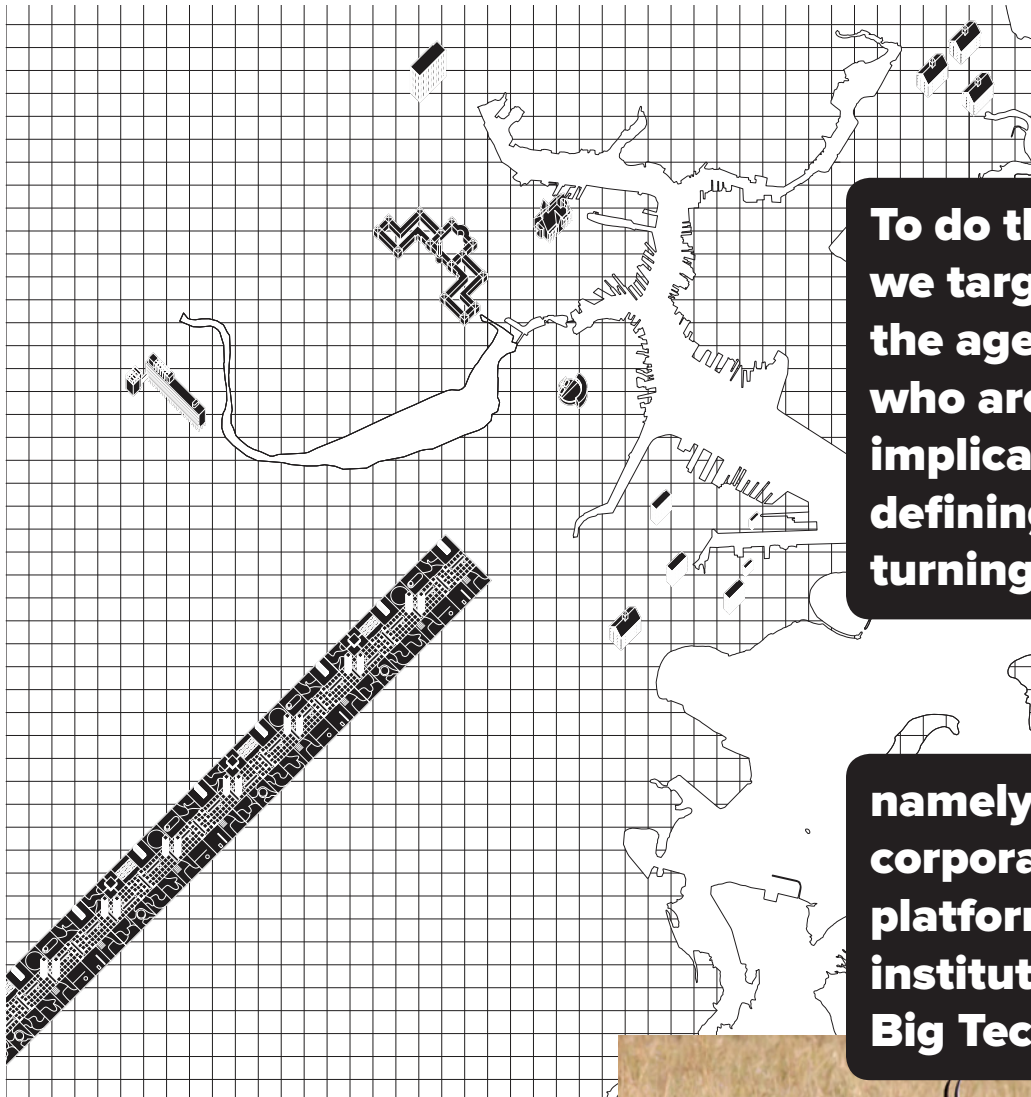
1+1=1.5



> 50%

<sup>5</sup> Frank Duffy, *Work and the City*, (London: Black Dog Publishing Limited, 2008), 13.





**To do this, we target the agents who are most implicated in defining this turning point,**

**namely the corporations, platforms and institutions of Big Tech.**

**05-02 COLLECTIVE ISLANDS**

“Collective Islands” is an urban concept that proposes a communicating network of Collective Home Offices throughout the city. Inspired by O.M. Ungers’ manifesto, ‘*The City in the City: Berlin: as a Green Archipelago,*’ which planned local activation to counter the shrinking of the city, our manifesto proposes to introduce and galvanize Collective Home Office across Boston.

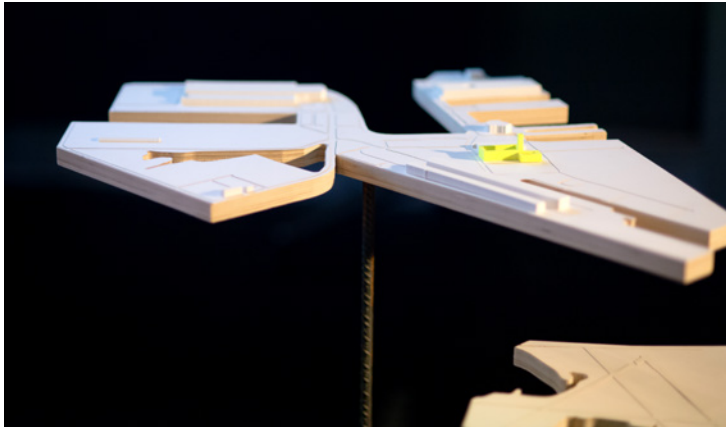


**Mutualism!**

Source: [https://en.wikipedia.org/wiki/File:Impala\\_mutual-im\\_with\\_birds\\_wide.jpg](https://en.wikipedia.org/wiki/File:Impala_mutual-im_with_birds_wide.jpg)

Placed opportunistically along transportation spines, the collective home offices have a symbiotic relationship to their sites. Taking advantage of the amenities that the city provides, these projects fill gaps with programs

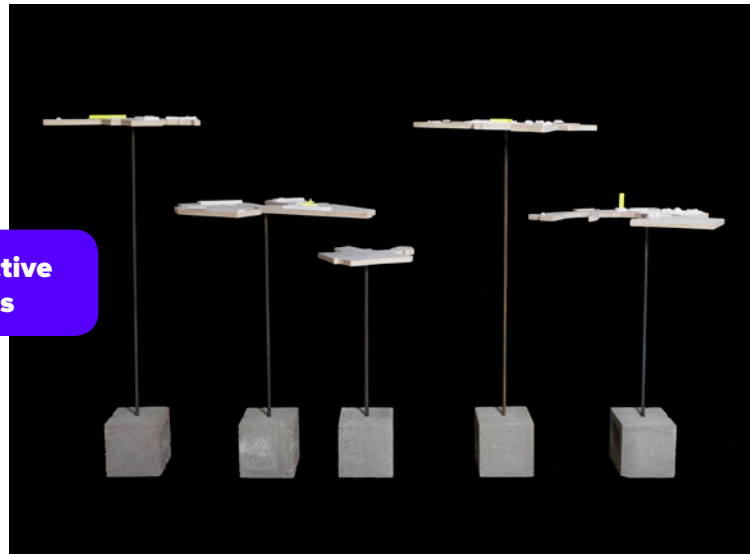
that are lacking in their host sites. “Collective Islands” is thus a proposition that rejects the conventional large-scale urban planning development culture in which a single function or program predominates and a default division between public and private domains prevails.<sup>6</sup> Neither planning without architecture, nor architecture without planning, the Collective Islands communicates an



Source: Sarah Wagner

inclusive mode of thinking through its multi-scalar design agenda; from the furniture scale (03-07) to the architectural elements (05-03) to the building scale (05-04) to the city scale. Especially noticeable at this scale is the tremendous impact Big Tech headquarters have on certain parts of the city; triggering gentrification but also causing it to become vacant in the non-work hours of the week (05-01). Our small interventions across the city aim to diffuse the impact. We see the

architecture that we propose as part of an intermediate scale that bridges between urban planning and inhabited experience, redrawing the city as not a singular entity in the public domain but as a set of interconnected collective domains in various building typologies.<sup>7</sup>



**Collective Islands**

<sup>6</sup> Like Bijlma and Jochem Groenland, *The Intermediate Size: A Handbook for Collective Dwellings*, (Amsterdam: SUN, 2006), 56.

<sup>7</sup> Ibid, 58.

## 05-03 VOCABULARY

Corporate residential memberships masquerading as collectives (the capitalist collective), which have emerged as a Band-Aid for the wounds of precarious employment and exorbitant living costs for urban workers, have completely disdained architecture. Slaves to the camera, photographed and thus sold from always the same viewpoint and lens depth, they only project interiors, replete with an eclectic combination of modern and vintage furniture and chachkis available for purchase at stores like Urban Outfitters. With a scope limited to

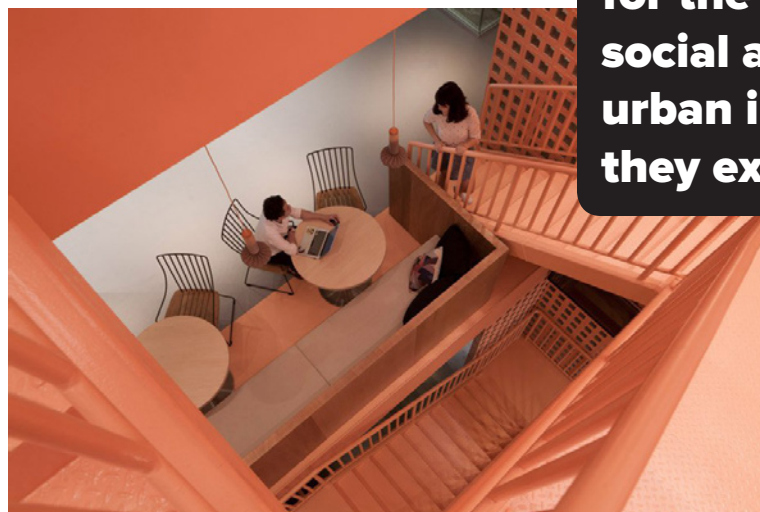


**As they approach or surpass national governments in determining how and where we can afford to live,**

interior design, the capitalist collectives' design inspiration is a frat house for the eternal twenty-something child-less user. Its philosophy is maximizing return on investment. It never bestows architectural figuration to its environment, and rarely draws attention to the exterior of the building it inhabits. Its architectural language is one of invisibility.

Our challenge is to define an architectural language that signifies the new collective, one that runs counter to the vision proffered by companies like WeLive. Like the task of Soviet architects of the last century who developed constructivist

architecture, this attempt to imbue architecture with agency in the figuration of the collective is a multi-scalar design challenge. We work from the furniture scale (03-07) to the scale of architectural elements (05-03-i-vi), to



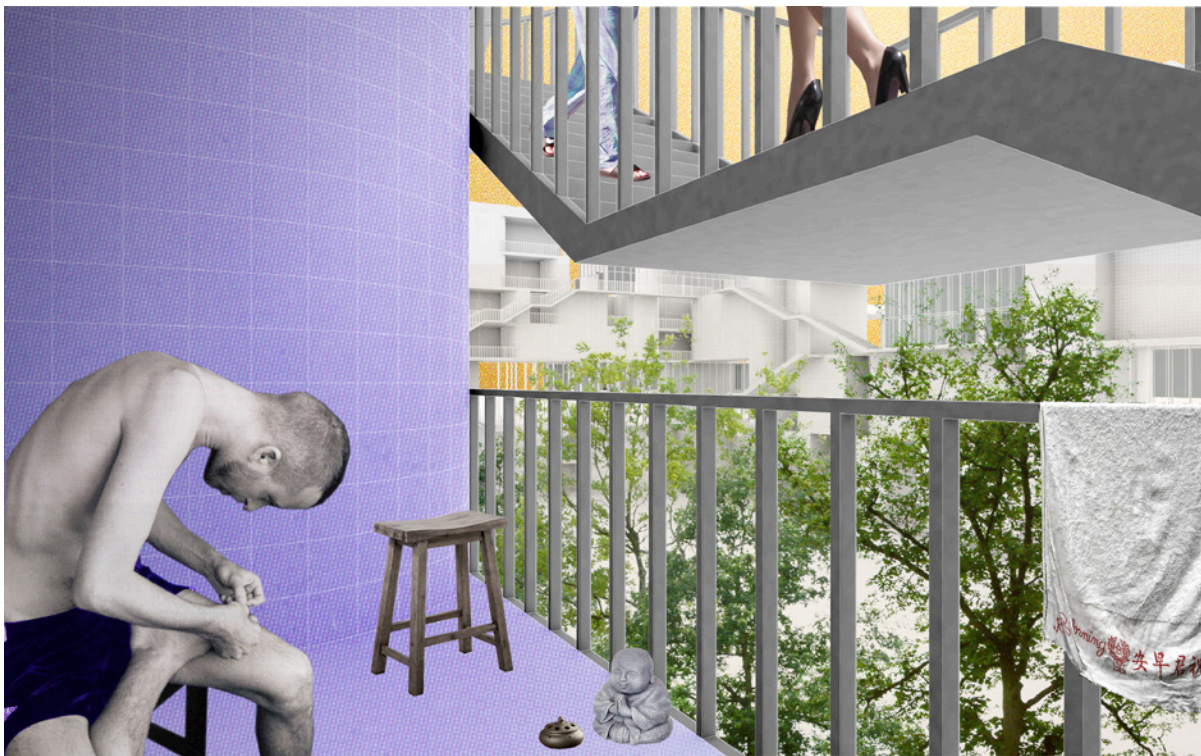
**we must hold these agents responsible for the drastic social and urban impacts they exert,**

Source: <https://www.dezeen.com/2016/05/06/airbnb-adaptable-office-space-designs-london-sao-paulo-singapore/>

the overall massing of the project and its integration into its immediate context through careful programming (05-02).

We make a practice of researching architectural elements that hold the potential to foster collective living. These elements are typological; they are often contextual to the city in which they exist but we re-conceptualize them as devices to foster interactions. In the wake of user culture, architecture and its form still plays a critical role for the collective. We believe that as Collective Home Offices spring up around the city, they will need to increasingly assert themselves as new urban forms, no longer strictly home nor only office, but a contrast to the formless, high return-on-investment, mixed-use developments.

### 05-03-I SMOKE STAIR



The fire-stair of Boston brownstones (image: brownstone stair) is the site of the casual morning coffee, the herb garden, or the unexpected intimate conversation during a party. It is at once sufficiently public in its visual connection with other fire-stairs, but also just private enough from the apartment it is attached to. This second

front door condition – connecting directly and intimately to other apartments –is an architectural element that can bridge across branches in a molecule (03-06). With the smoke-stair users, one may not share anything but the privacy from one’s own home, the morning coffee, the herbs, and the intimate exchanges.

**threatening  
the housing  
stock,**

**reorganizing  
the city into  
consumers  
and providers,**



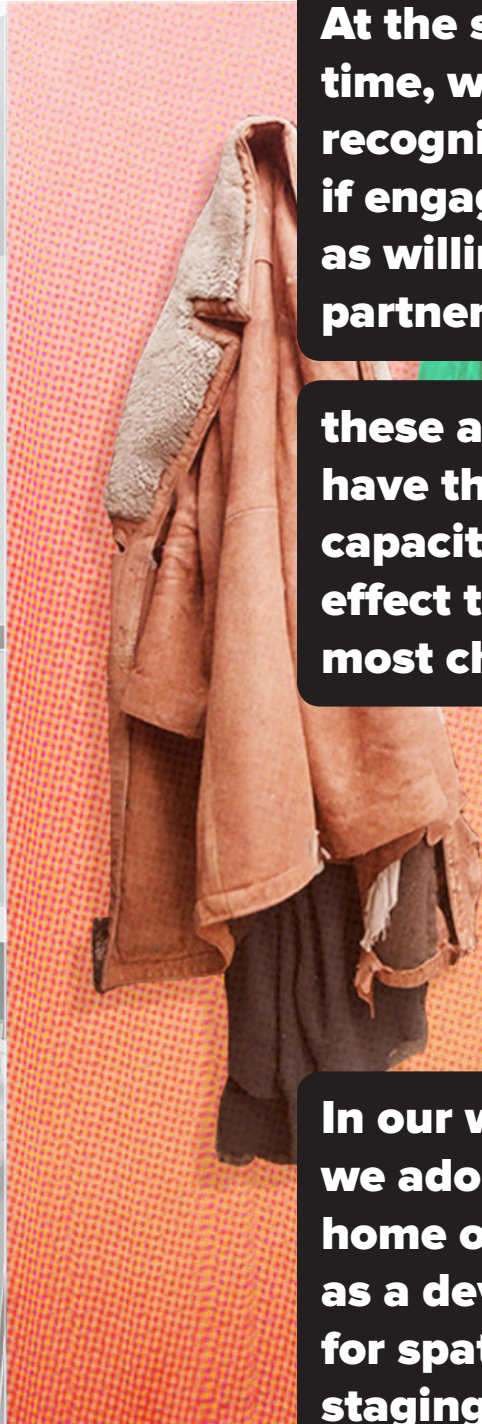
**and extracting  
maximum  
resources from  
free public  
infrastruc-  
tures.<sup>7</sup>**

<sup>7</sup> Osterweil, “Liberalism is Dead”



### 05-03-II LIGHT WELL

The light well is the fundamental architectural element that made the dense urban block of industrial cities such as Boston and New York possible. As the critical design strategy in row housing, the light well brings natural light



**At the same time, we must recognize that, if engaged as willing partners,**

**these agents have the capacity to effect the most change.**

**In our work, we adopt the home office as a device for spatially staging collectivity here in Boston.**

and air to the center of a deep slab which otherwise would lack habitable space. It creates pairings across the row as apartments start peering into one another. In contrast to the front door collective, a different, more voyeuristic collective forms across the light well.



To break away from the generic double-loaded residential corridor which occupies the border of the maximum offset from opposite façades, sandwiched between livable spaces on either side and inevitably always leading to bar-building typologies, we use the light well to carve into large floor plates. These vast but fragmented slabs enable a placement of private bedrooms that doesn't compromise collective access to natural light (05-04-iii). Like the Ansonia in New York, which innovated new modes of communication within the building we celebrate the different connections that can occur across the light well in contrast to those that occur across bedrooms.<sup>8</sup>



Source: <https://ny.curbed.com/2013/2/13/10273862/from-utopia-to-scandal-to-luxury-the-history-of-the-ansonia>

### 05-03-III BAY WINDOW

The bay window of New England is a ubiquitous architectural element that celebrates common space in different housing types. For example, in the Boston Triple Decker the half-hexagonal bay window projects from the front facade to announce the parlor and from the side to mark the dining room.

By simplifying the geometry of the bay window into a right triangle, we transform the vernacular signifier to create rooms that are simultaneously of the exterior window and the interior space. In the “Whisper Lodge” (05-04-ii), we design a system of pivoting walls that can extend the space of an unused room into the shared space.

<sup>8</sup> Anna Puigjaner, “The City as a Hotel,” in *Together! The New Architecture of the Collective*, ed. Mateo Kries, Mathias, Ilka Ruby and Andreas Ruby (Berlin: Ruby Press, 2017), 66.



Our new bay window draws upon the status of the traditional bay window as a signifier of housing. When



Source: <http://www.jstor.org/stable/1181147>

viewed from the street it has departed little from its original form, but in plan it reads as a series of pitched roofs. We are interested in how this play with the house signifier performs in projects, such as the Airbnb proposals, that seek to integrate perhaps contested commercial ventures into residential neighborhoods.



**We propose a series of unsolicited projects in partnership with clients of Big Tech: Amazon, AirBNB, and MIT.**

**In this context of social transience and housing crisis, these unlikely partnerships explore new strategies for collectivity that architecturally expand the front door, the threshold between public and private.**

**Amazon Familystair  
playporch**



**Amazon Party Island  
vertical courtyard**



Credit: Andy Ryan

### 05-03-IV PORCH + BALCONY

The porch or balcony is an architectural element that detaches collective outdoor spaces from the front door in order to reach the depths of the block. If the street is where one encounters global users, the back porch is where one can begin to form a more local, filtered, collective (05-04-ii), and the balcony creates intimate sharing conditions at a smaller scale. Placing balconies on the interior also serves to create outdoor-like collective spaces that sew together larger living collectives through intimate instances of overlooking more vast spaces.

### 05-03-V VERTICAL COURTYARD

Courtyards give form to negative space. In its search for forms of collectivity, Collective Home Office proposes a vertical courtyard that acts as an urban window, a void that gives figure to its surrounding mass. Acting as a courtyard that different dwellings feed into, it visually asserts itself as shared space, but also brings the city in (05-04-i).

**Together, our projects form a domestic urbanism of collective islands,**

**redefining the household through intimate encounters occurring at overlapping, non-concentric scales of collectives.**

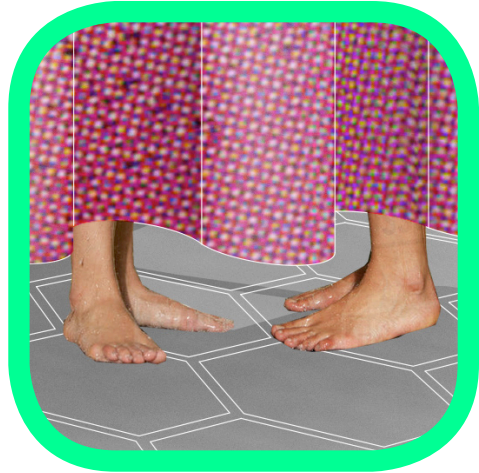


**Amazon Familystair playporch**

### 05-03-VI SLAB

Within the simplicity of a horizontal surface lays a maximum of potential for a multitude of events to occur.

The slab is an architectural element whose strength is its simplicity, which both invites fantasies of all the activities it can host, and which has been co-opted by developer architecture which simply replicates and stacks slabs to achieve maximum floor area and construction efficiency. Through a process of microzoning we designate areas on the slab that suggest a specific collective use, making a collective landscape on the interior (05-04-iii).



**MIT Dorm-tree  
wet'n'wild!**

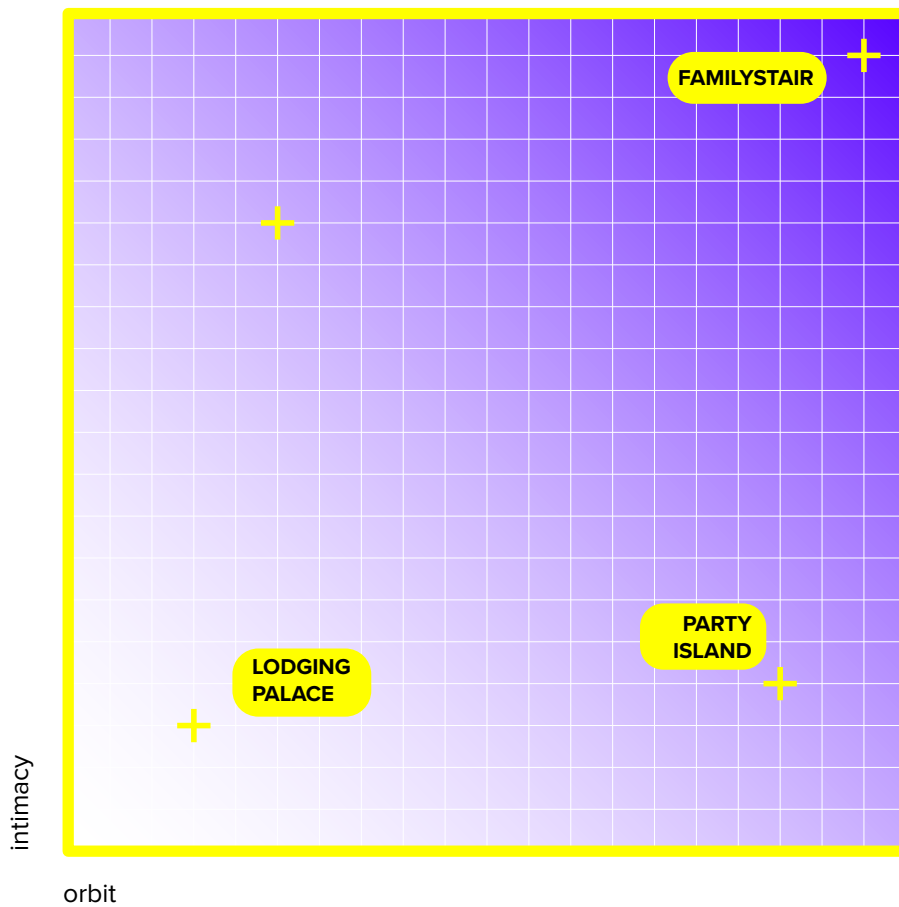


## 05-04 PATTERN BOOK PROJECTS

This series of pattern books organizes projects for each of our clients. Each book has its own parameters of organization based on a matrix (03-02).

### 05-04-I AMAZON

See 04-01 for project research.



## **PARTY ISLAND**

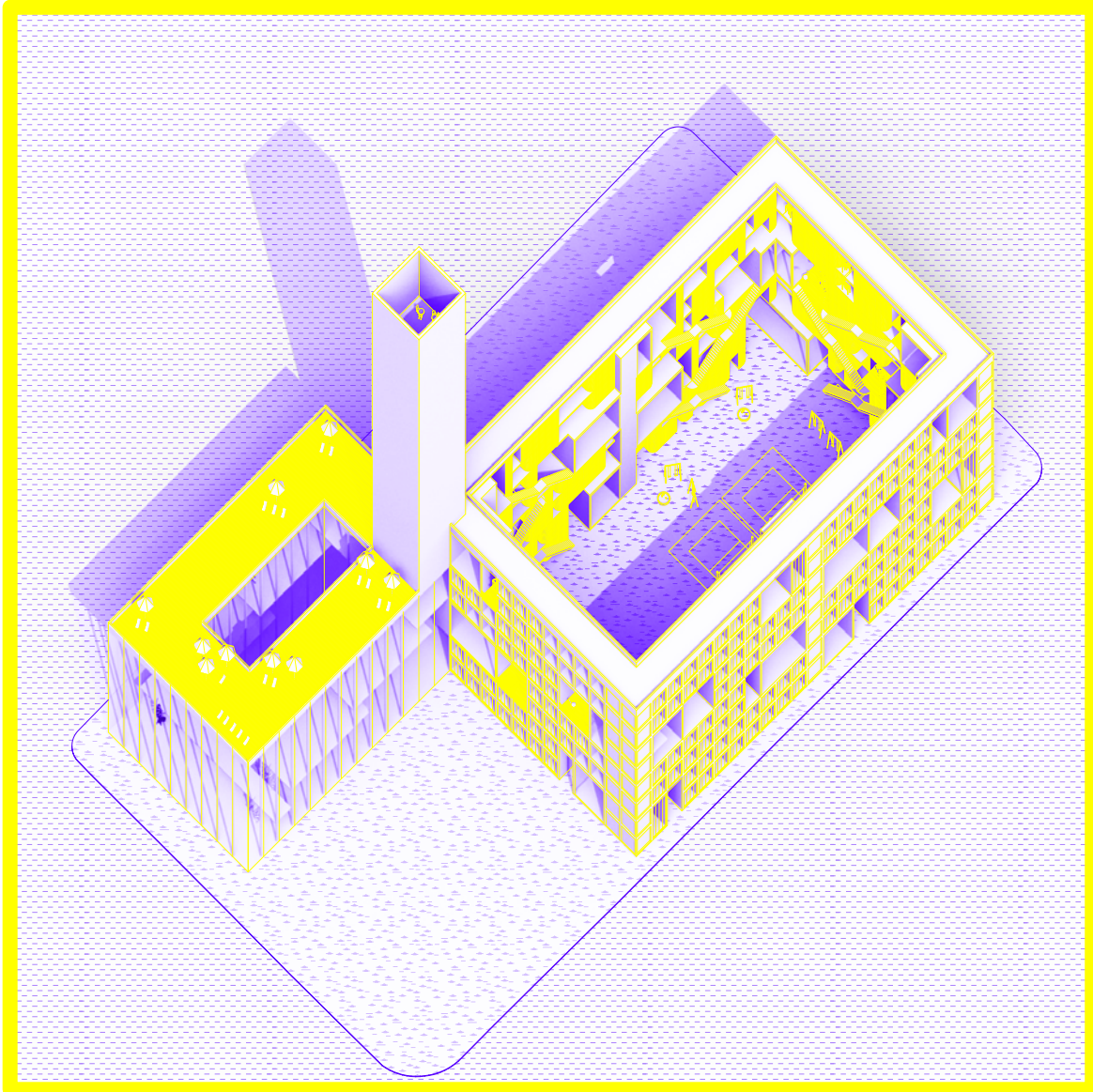
The Party Island is located at a vacant site in the post-industrial, soon-to-be developed desert of Boston Seaport. With convenient public transit access to the Boston Convention and Exhibition Center, many business hotels, and a short water taxi ride to the Boston Logan International Airport, the site is prime for temporary and short term professional visitors and events. What it lacks is housing and spaces for informal social gathering and fun. After 5pm the neighborhood becomes a ghost town, driving people searching for entertainment to other parts of Boston.

The predictable influx of visitors to the convention center creates a stable demand that could support a party atmosphere on the site, who would mix with new residents employed by Amazon's HQ2. At the Party Island, just one building within an archipelago of typologies that would make up the HQ2, a collective housing that maximizes social orbit and moderates intimacy appropriates the courtyard typology as a massing strategy. Consisting of two courtyards, one large and one small, residential and office loops hinge at a shared amenity tower.

A "forest" defines the void space of the residential loop, which adopts and transforms the architectural element of the smoke stair, elongating and aggrandizing the threshold between the collective and the individual. The grand smoke stair composes the daily circulation path between residential units and double-height collective office spaces, offering an intimate and informal space for encounters between diverse groupings of residents.

# PARTY ISLAND

BOSTON SEAPORT



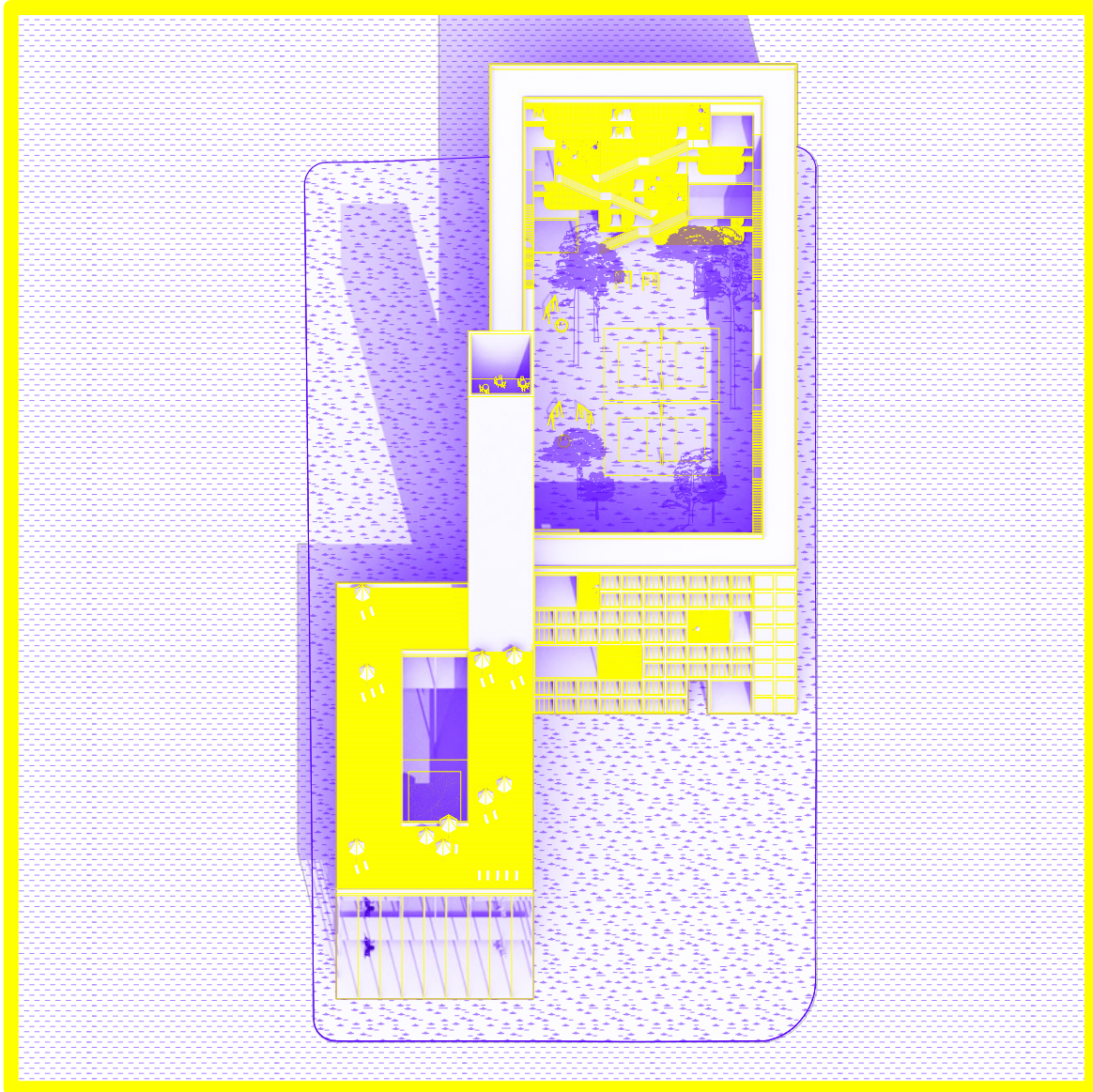
Connected by the continuous fire stair, a variety of elevation configurations provide units with two to eight individual rooms with shared kitchens, bathrooms, and balconies that bridge across different units. Collective home office spaces are interspersed among the residences, acting as extensions the smoke stair landings that become vertical courtyards, opening up the building façade to draw visual connections between the housing and the city.

A “beach” is nestled into the smaller office loop, containing a pool in the courtyard and a sun deck on the roof. An office space by day, it offers flexible working and meeting spaces for Amazon residents from all over the city in addition to other city dwellers. By night, it transforms into a nightclub, providing the entertainment destination that is so sorely needed in the area, as well as another setting for cultivating collectivity among residents.

Connecting the two loops, the amenity tower provides a combination of living, working and leisure amenities such as a crossover bar and laundry room. Mail rooms, communal kitchens, work shops, and bike storage are some of the programming that occupies the tower. At the top is a public rooftop dance floor, a beacon that marks the location of the Party Island for the rest of the city.



# ELEVATION



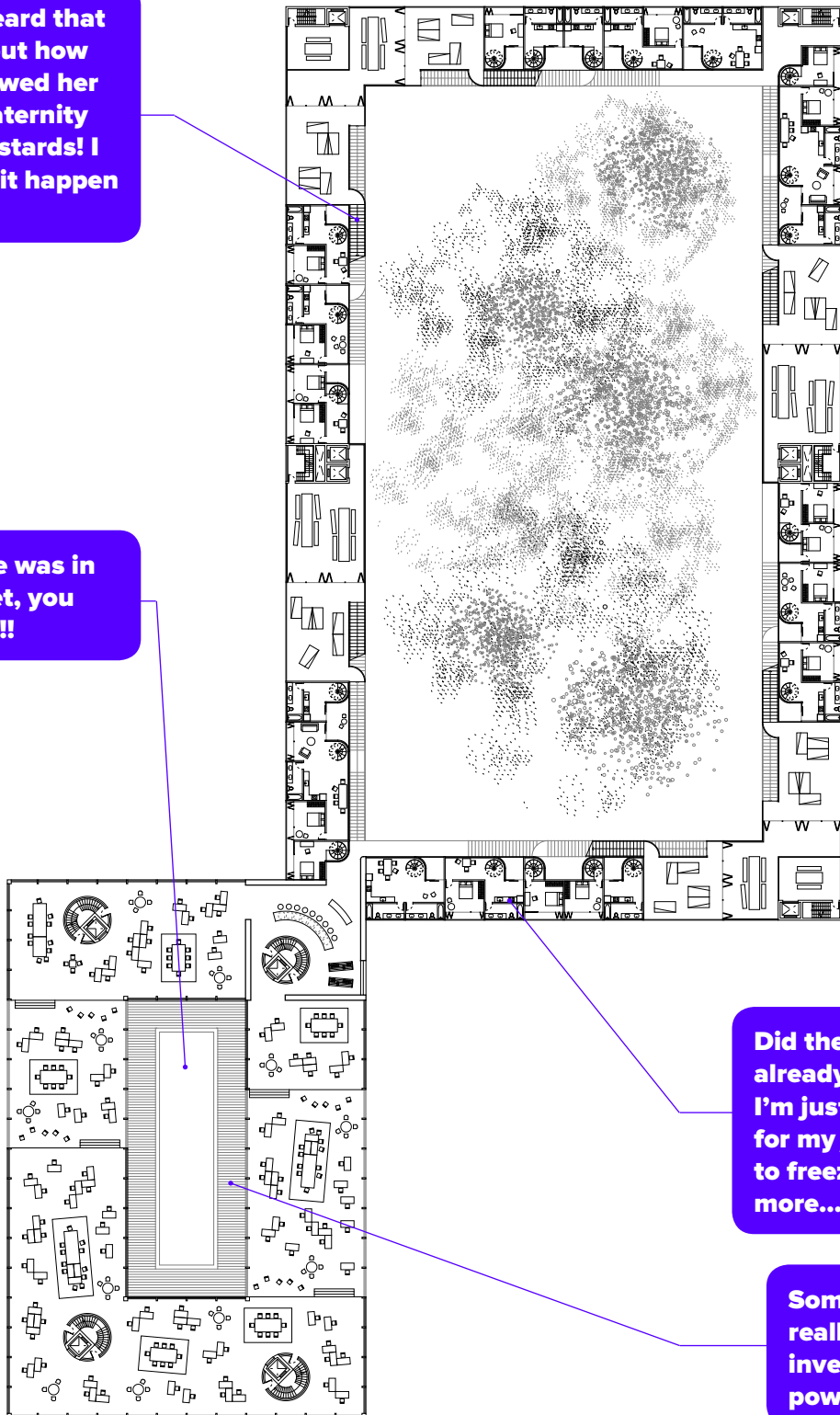
**PLAN**  
**1/64" = 1'**

**Yeah, I heard that story about how they screwed her out of maternity leave. Bastards! I won't let it happen to me!**

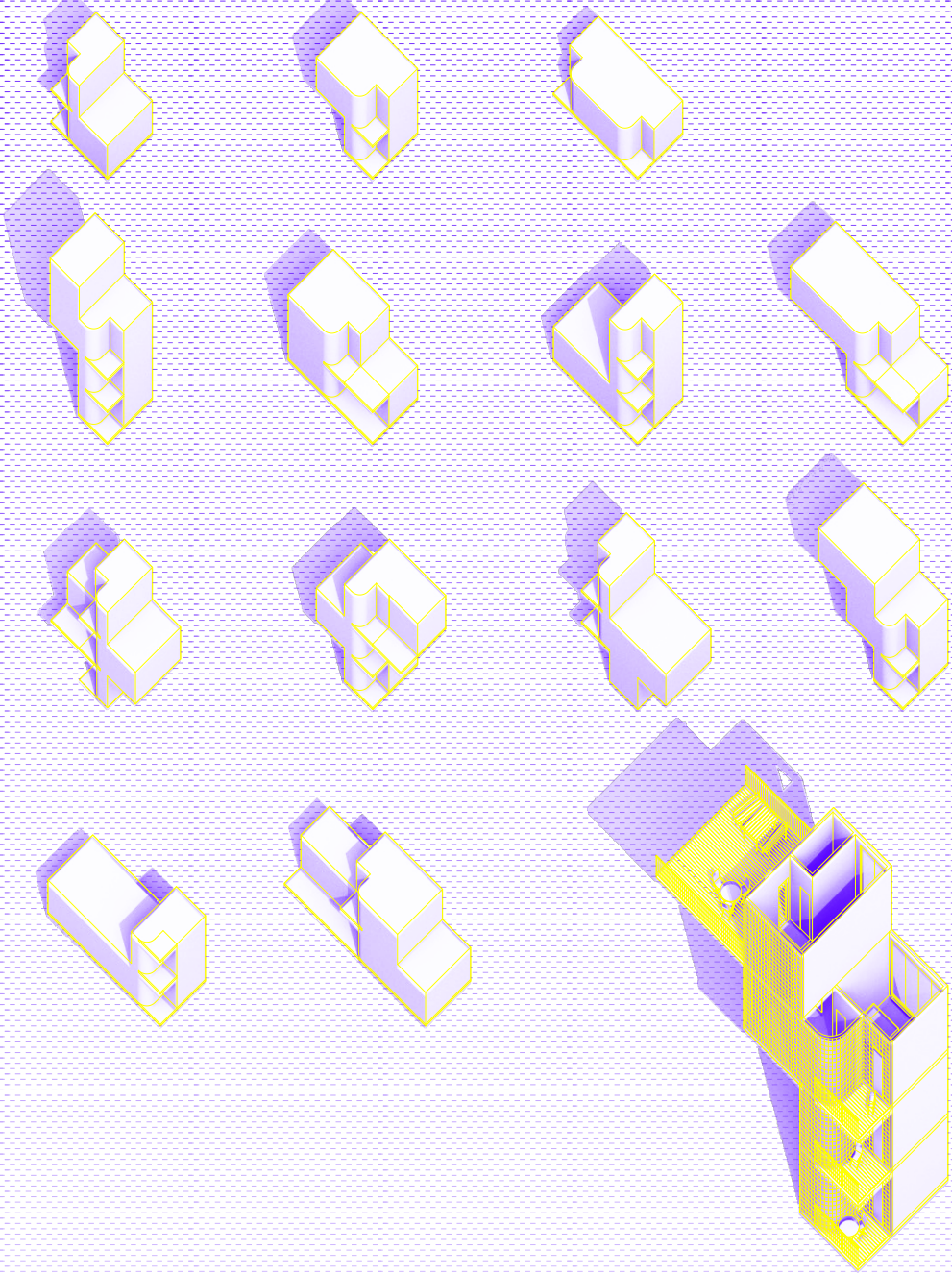
**My phone was in my pocket, you assholes!!!**

**Did the BBQ already start? I'm just waiting for my jello shots to freeze a little more...**

**Someone really needs to invent a solar-powered laptop**



# UNIT MIX



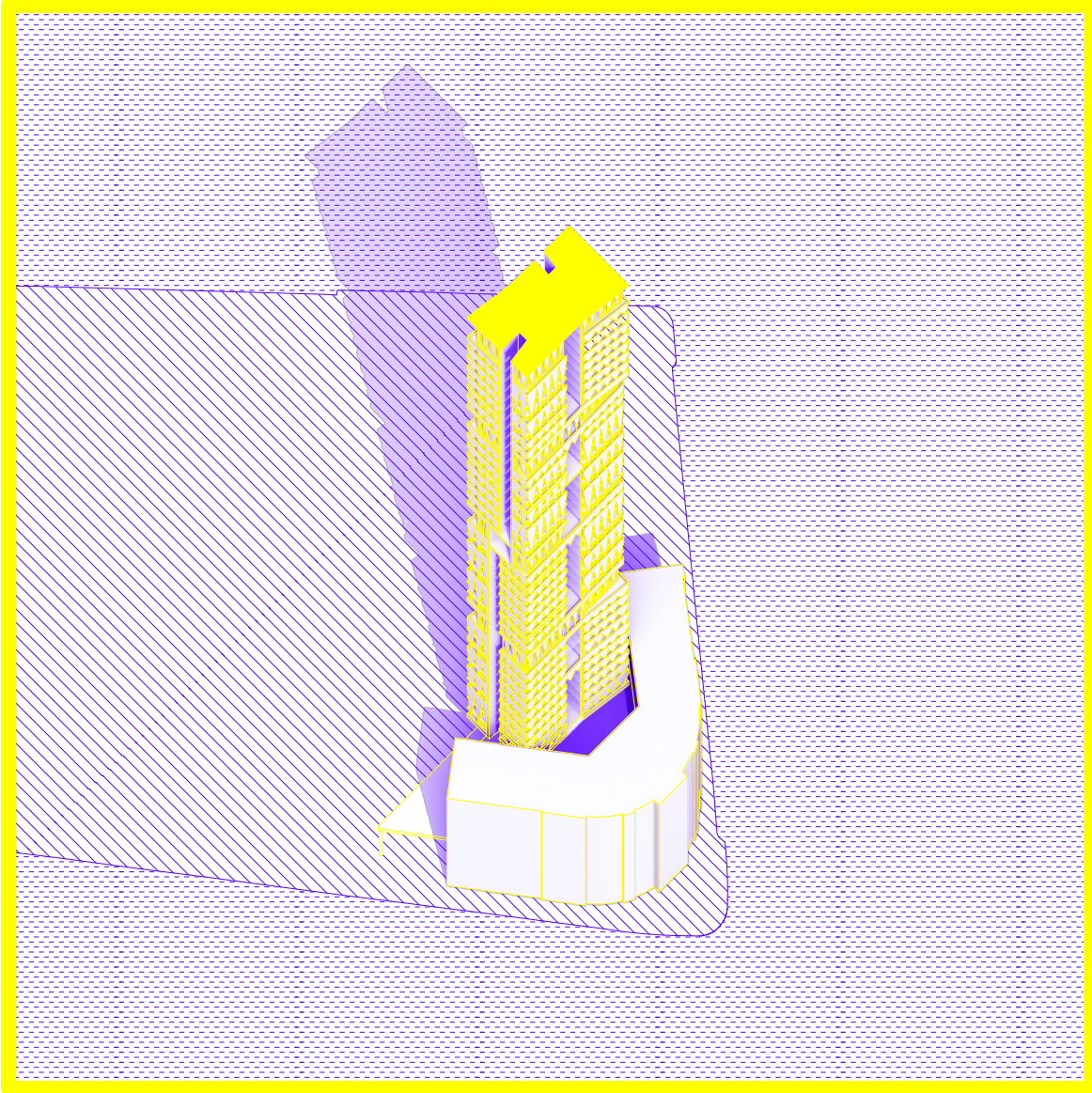
## **FAMILYSTAIR**

Originally build with foundations to accommodate a tower, South Station has yet to see an acceptable proposal that would integrate into its downtown transit hub location. With convenient access to Boston Commons, Chinatown and the airport, South Station is an attractive site for Amazon's distributed HQ2. With the city already providing a multitude of amenities, a family-focused development would add a unique flavor to the business and culture-heavy environment downtown. The site suggests a multi-family collective home office that maximizes intimacy between family members and moderates orbit across the vertical neighborhoods.

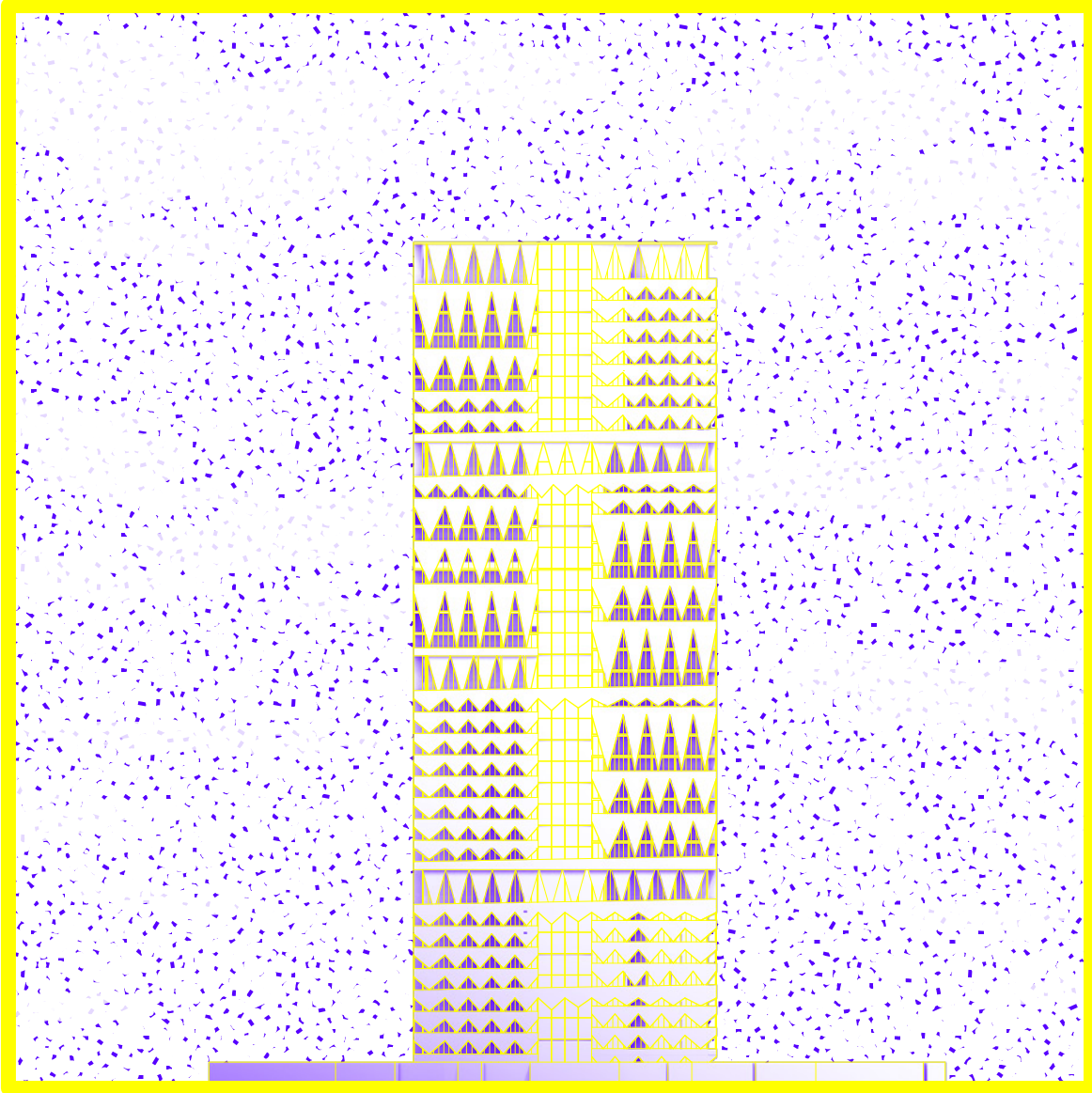
A major challenge in a tower typology is to create vertical connections that bridge the horizontal floor plates and elevator core. Our proposal appropriates and utilizes the core as a shifting collective spine between four vertical neighborhoods, each of which spans across ten floors. The two cores, each accompanied by a light well that brings light into the deep slab, organize the living units around a multi-level collective work and playscape at the center. Together, these architectural devices render deep interior spaces inhabitable for collective living.

At a transition between two vertical neighborhoods, one of the cores changes its orientation, generating variety in the unit layouts. Furthermore, the units range from one to four floors, flexibly accommodating individuals, a single family or multiple families who create a collective household that connects vertically across several floor plates. This game of shifting units is reflected in the structural façade, identifying the collectivity of each cluster. At the base of each vertical neighborhood a larger-scale playground and flexible work space is made publically accessible, enabling workers with children to parent, work and socialize.

**FAMILYSTAIR**  
**BOSTON SOUTH STATION**



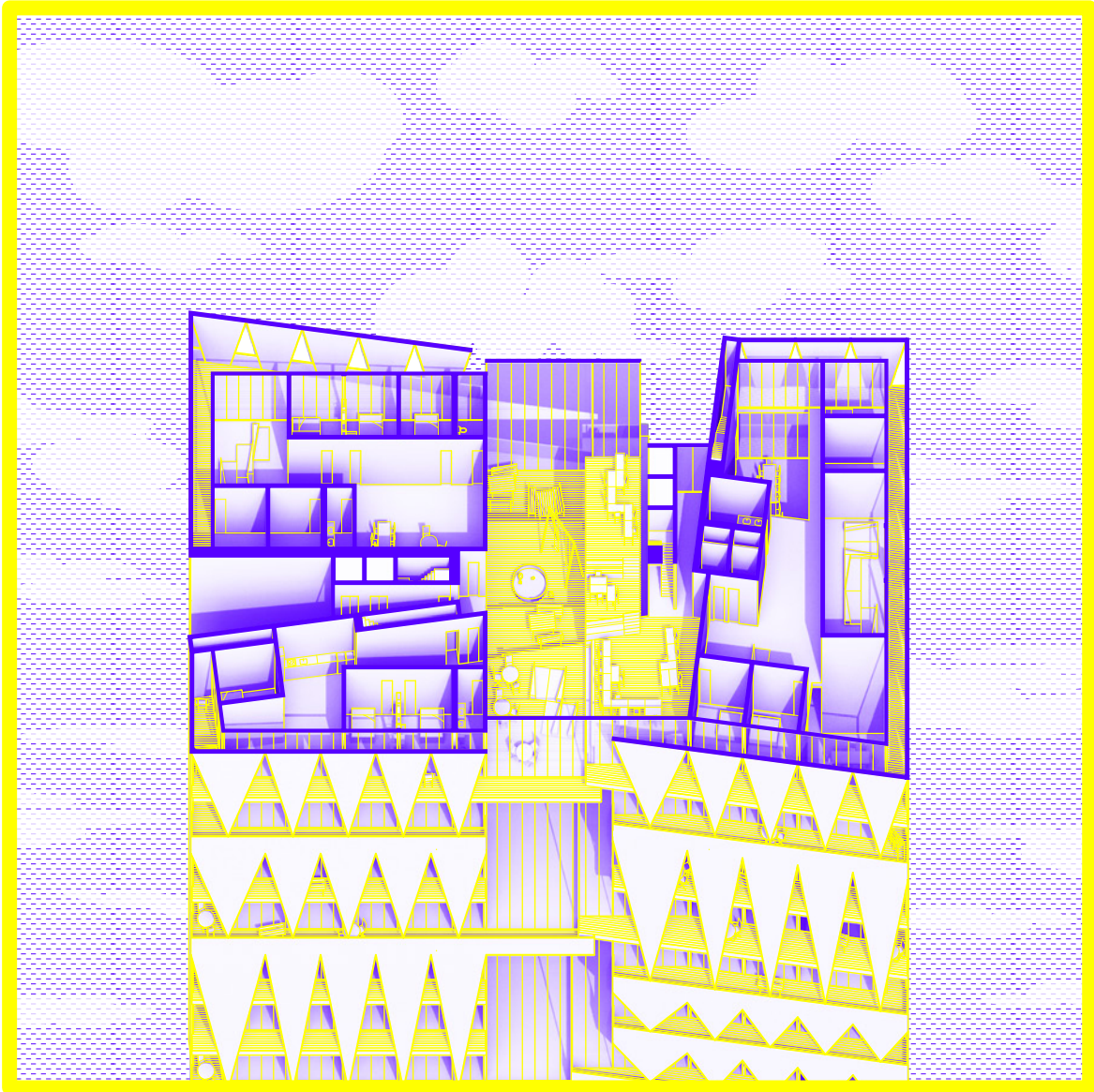
# ELEVATION



intimacy ●

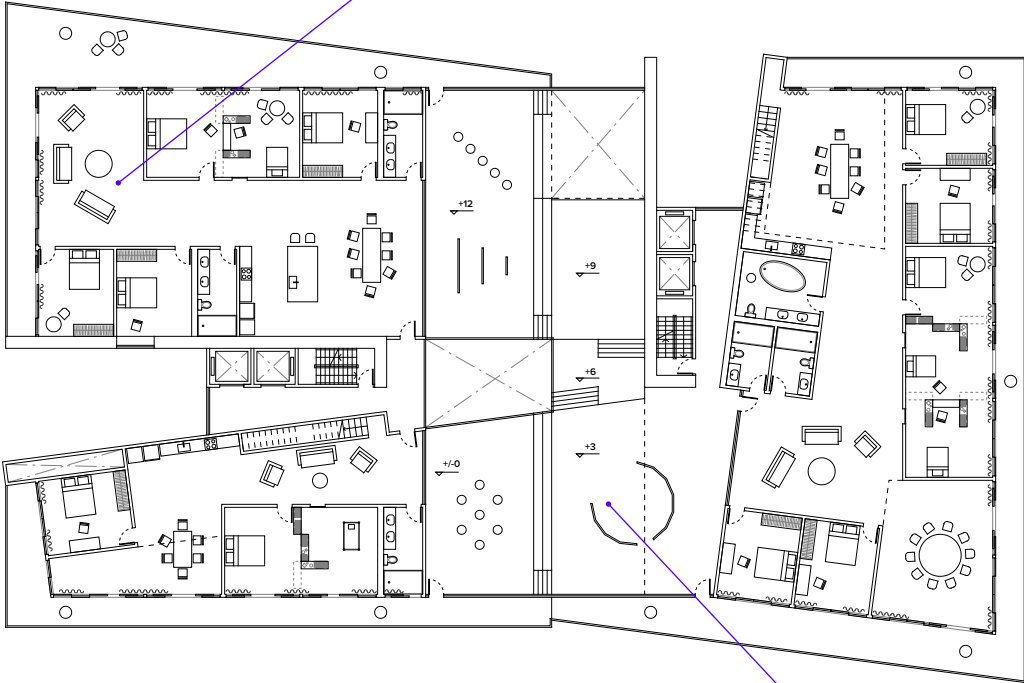
● orbit

# ELEVATION



**PLAN**  
**1/32" = 1'**

**The dog is missing again. Last time we found her at that old lady's place up on 37, being fed Kit-Kats and Spam**



**I'm going to make a golf course even bigger than the president's!**

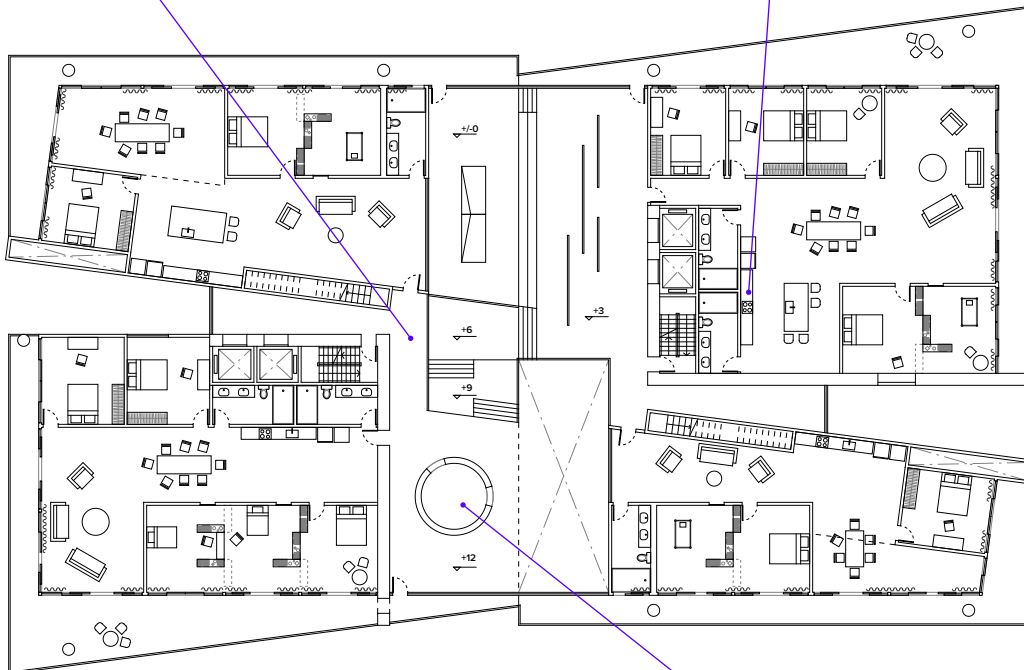




**PLAN**  
**1/32" = 1'**

**Wow, that perfume almost knocked me over. Close the doors, before it can drift into our unit!**

**I think it's time to take the compost bin down to the park-- it's starting to smell like microwaved broccoli in here**

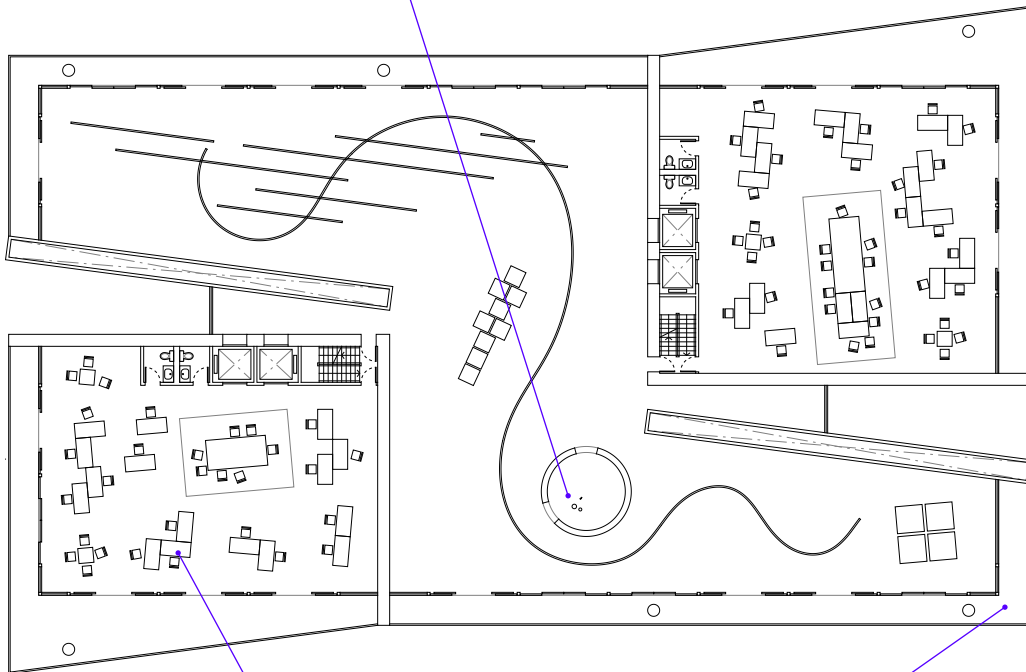


**Haley found the neighbor's kid's missing hamster dead in the sandbox today. Now she thinks we have a serial killer in the building.**



**PLAN**  
**1/32" = 1'**

**I found the missing tooth!  
It was stuck inside the  
baseball.**



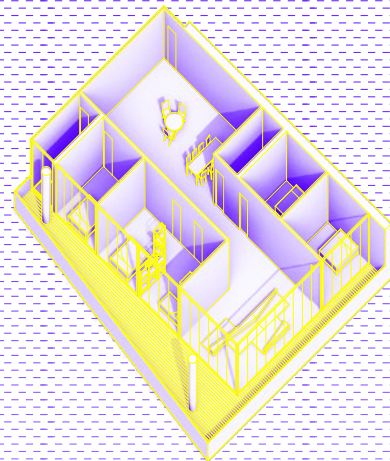
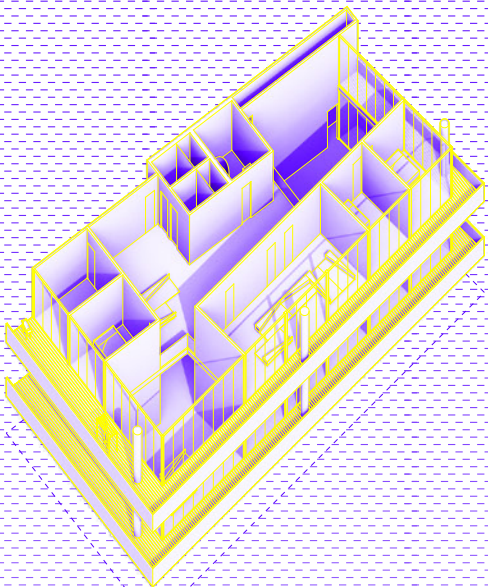
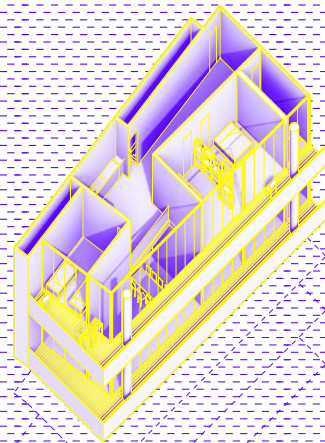
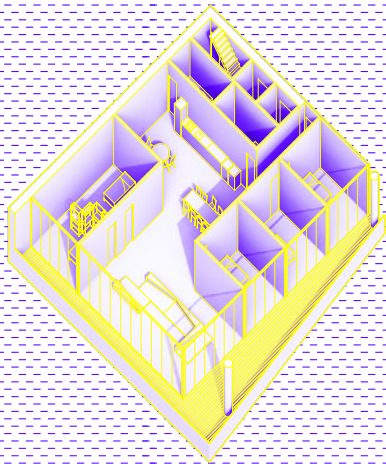
**Can you take  
my calls for 10  
minutes? I can  
hear my kid  
crying.**

**It's an E-cigarette. It  
doesn't really count as  
smoking.**

intimacy

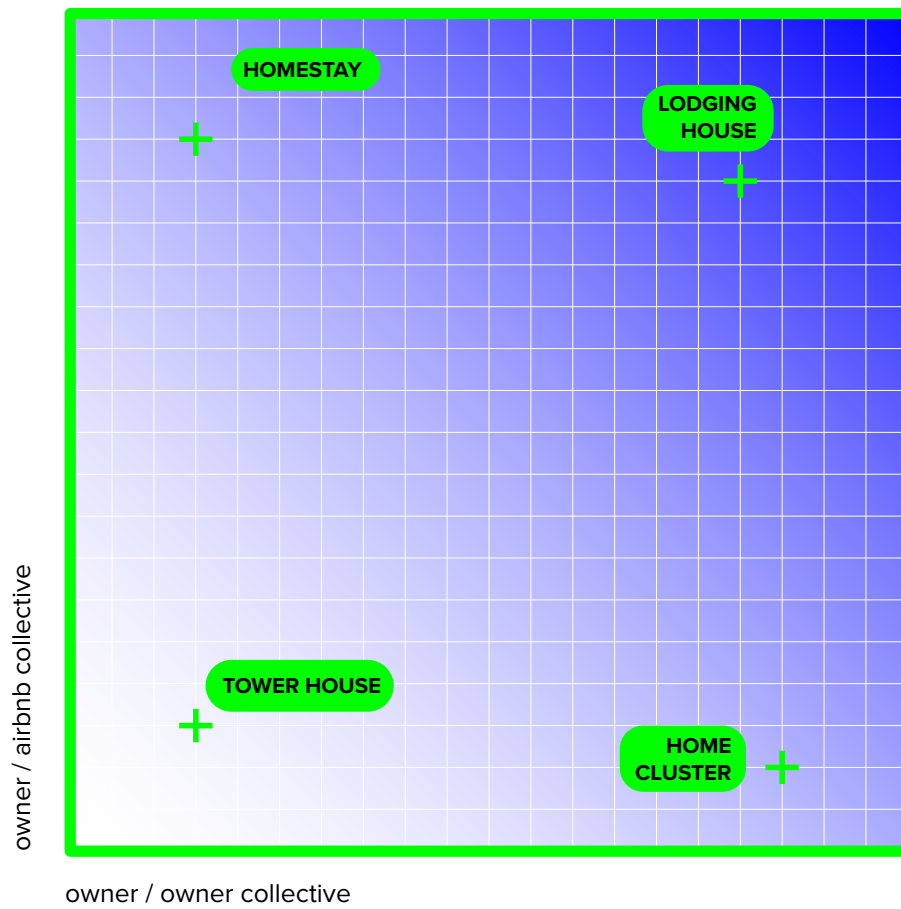
orbit

# UNIT MIX

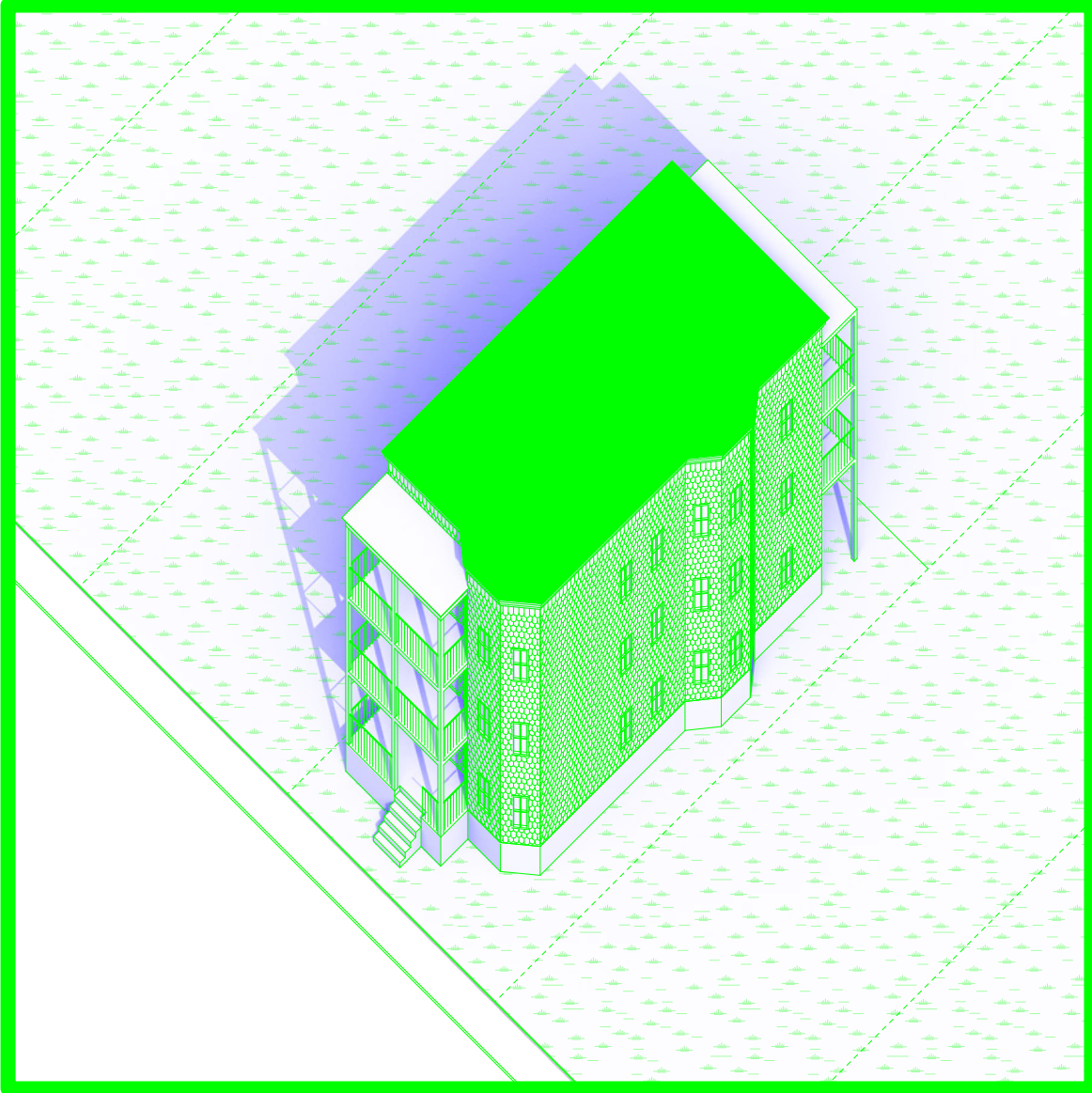


## 05-04-II AIRBNB

See 04-02 for project research.



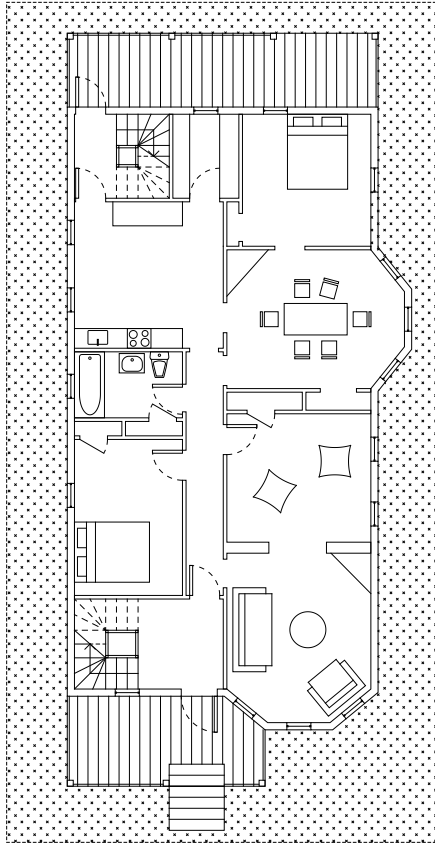
# THE THREE DECKER



## **THE THREE DECKER**

The proposed designs adopt the vernacular architectural language of the triple-decker, such as the porch, the bay window and the staircase, and exaggerate, distort or misuse their signification in order to modulate a spectrum of collectivity between owners and Airbnb guests.

**PLAN**  
**1/32" = 1'**

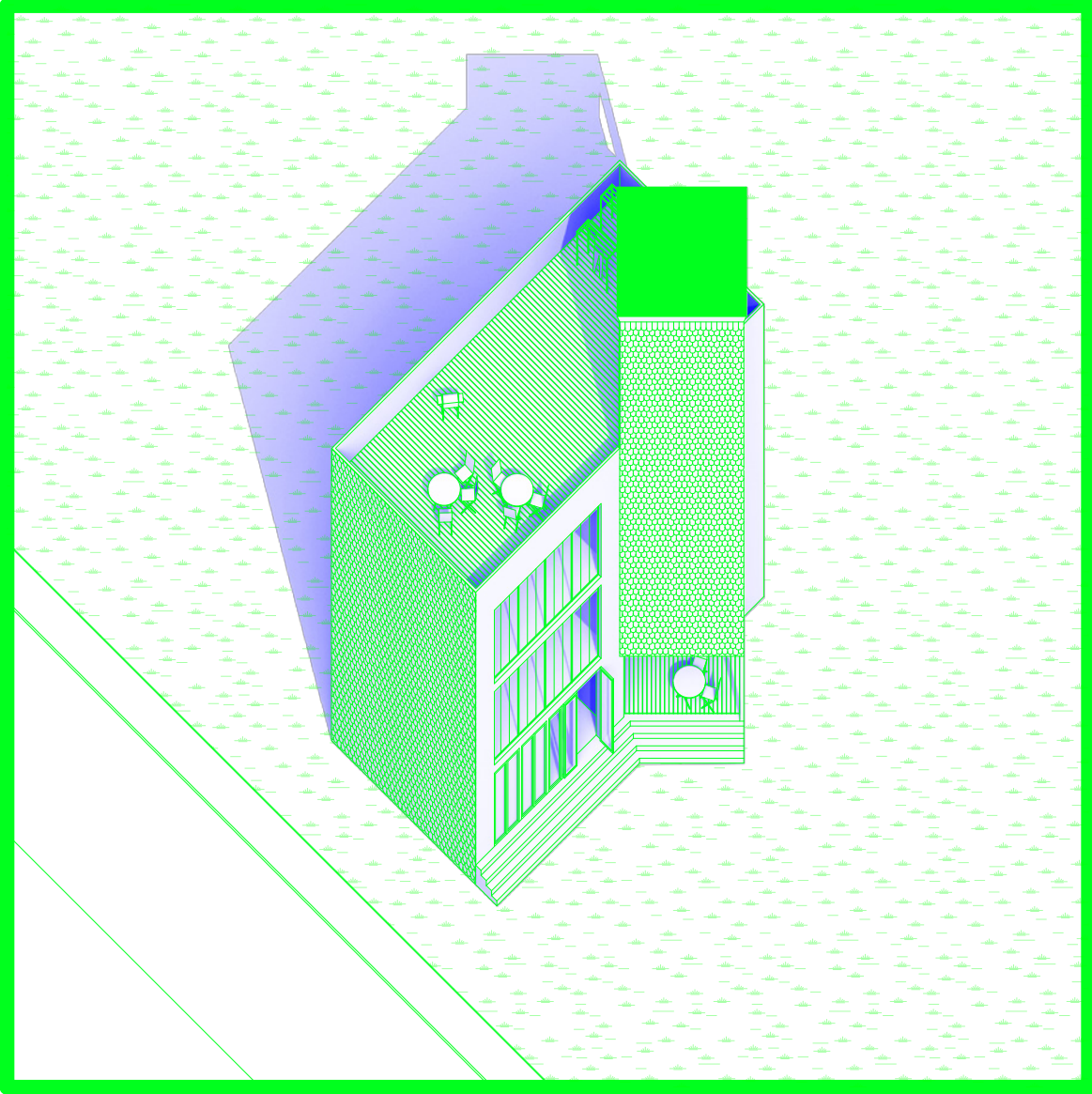


## **TOWER HOUSE**

With the most extreme separation between owners and guests, the Tower House accommodates Airbnb guests in a tower that shares a stair with three individual owner households. The placement of the tower massing towards the back alley draws the front door and its front yard urban condition deeper into the block to activate a communal backyard.

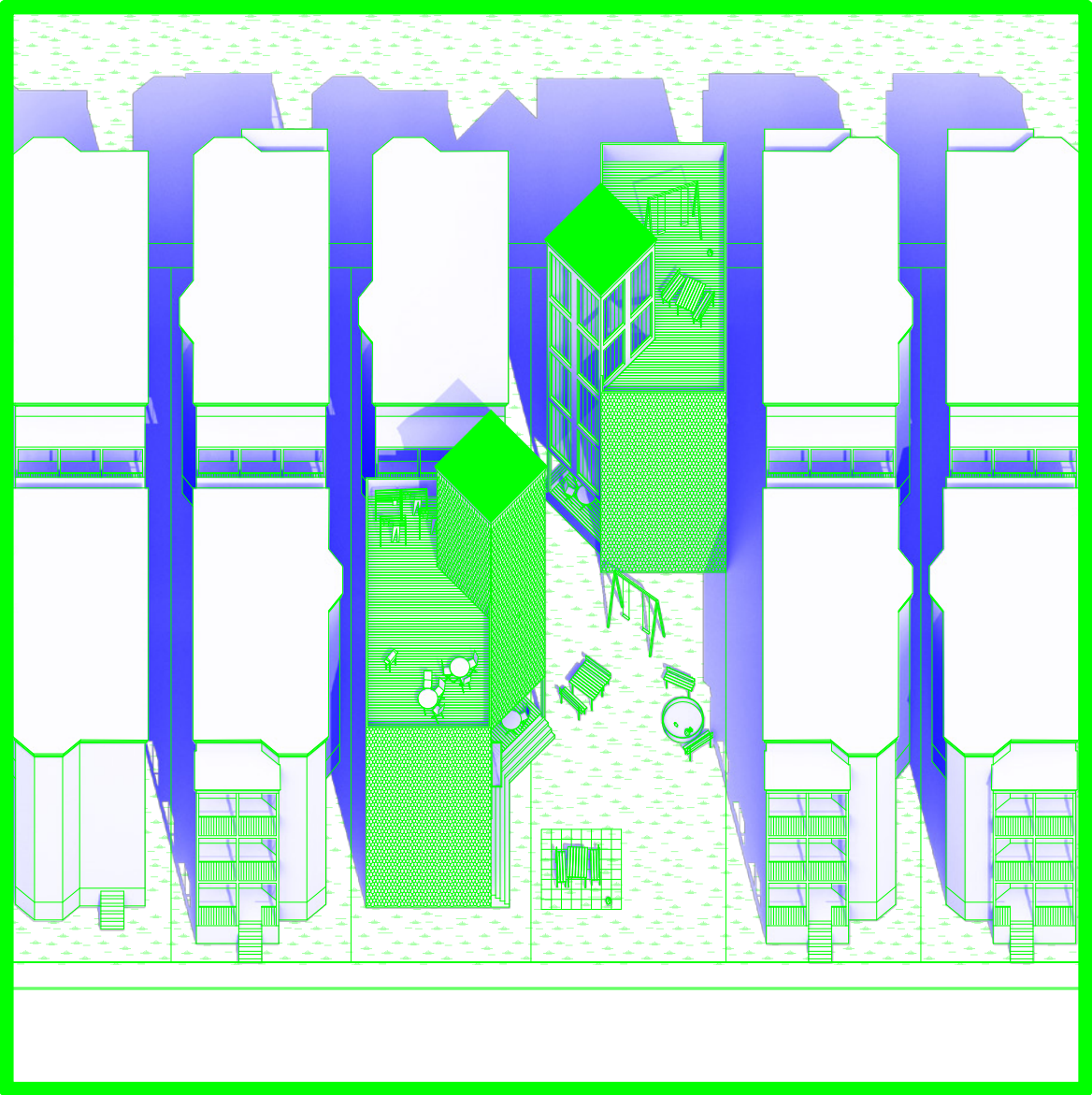


# TOWER HOUSE



- owner/airbnb collective
- owner/owner collective

**STREET ELEVATION**



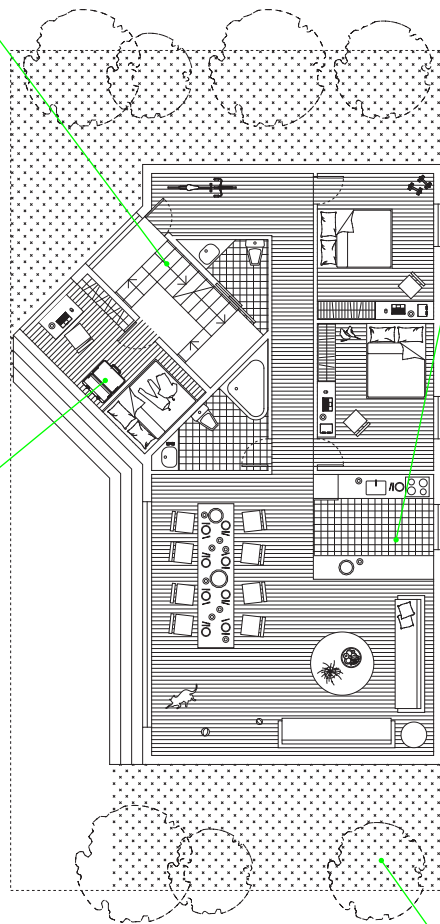
- owner/airbnb collective
- owner/owner collective

**PLAN**  
**1/32" = 1'**

I think the girl above me winked at me on the stairs as I was coming out of the shower-- or was it just an eye twitch?

SHIT, I forgot tampons. Maybe the host has some.

That guy on 3 was wearing the most expensive suit. I can't believe he was dancing out in the rain.



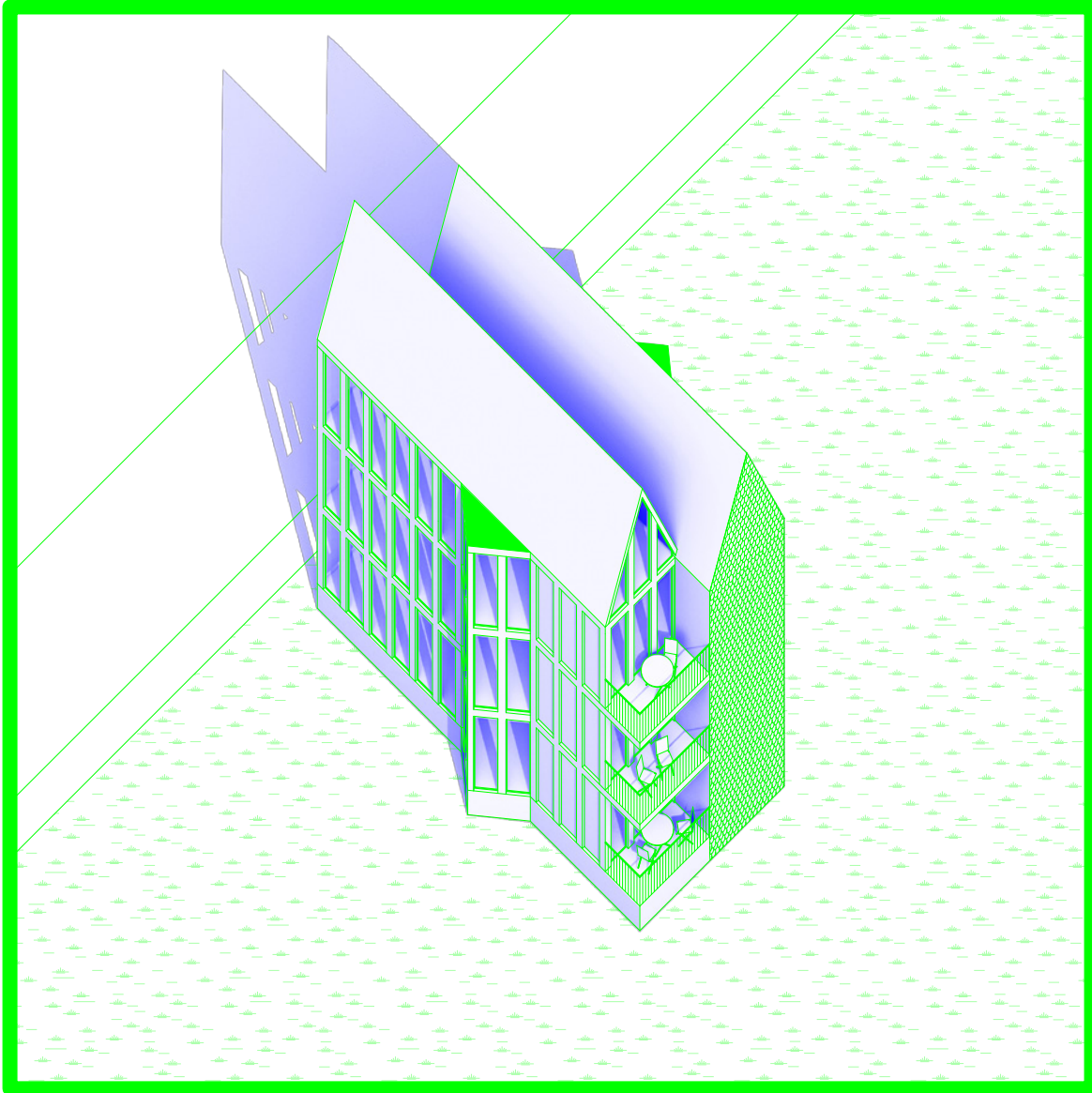
Growing cache of Amazon packages and mail--the postal carrier cannot decipher a "front" door.

- owner/airbnb collective
- owner/owner collective

## YIN YANG HOUSE

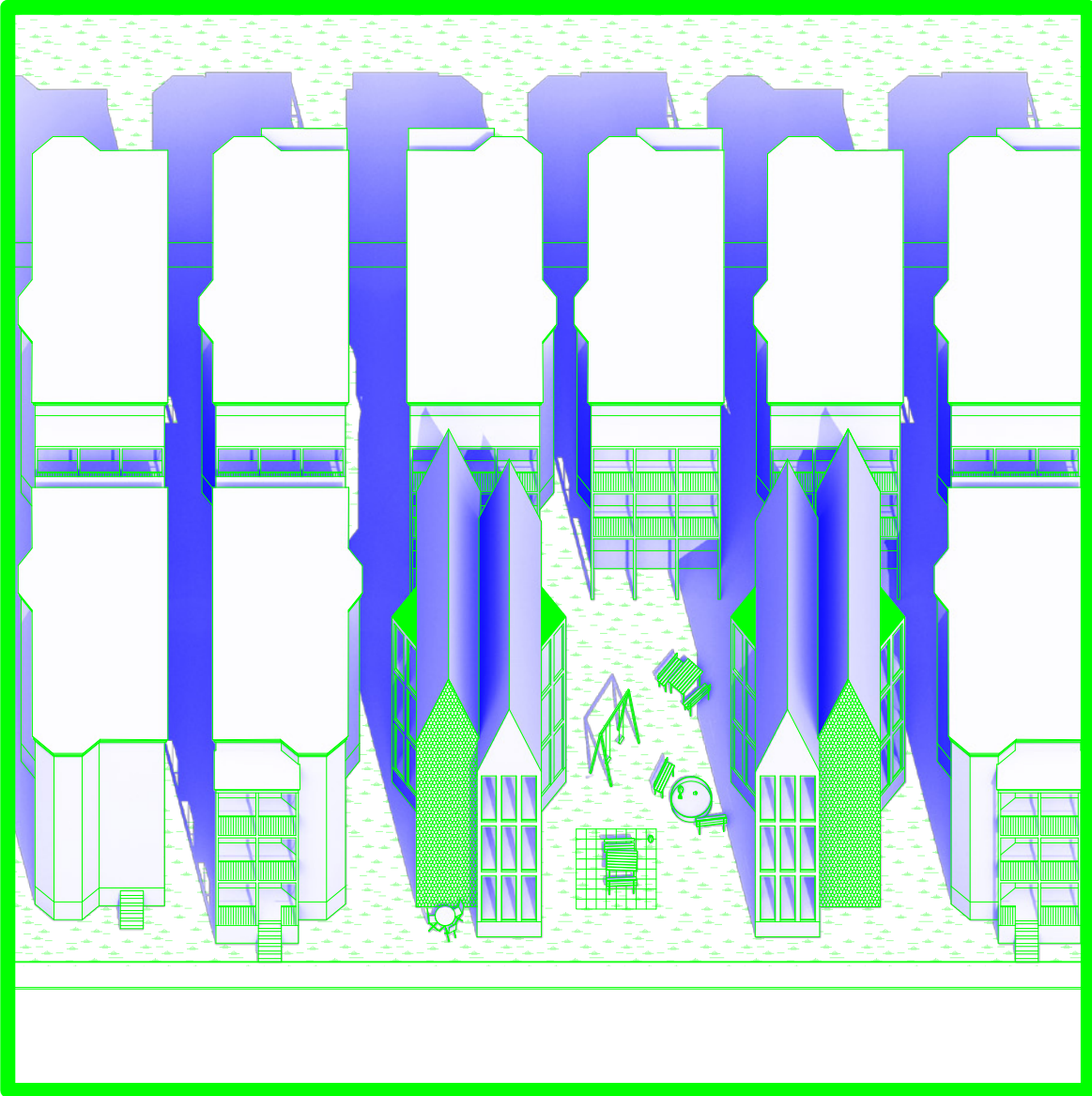
Also composed of three distinct households, the Yin Yang House creates temporary owner and guest collectives within each floor. With half of the floor plan designated for private space and half for public, a transverse pairing of bay windows (05-03-iii) signifies a central zone that can flip-flop between public and private. A furniture designed to switch functions between bed and large table (03-07) facilitates the flexibility of this space, turning it variously into an Airbnb guest room or a communal dining space.

# YIN YANG HOUSE



- owner/airbnb collective
- owner/owner collective

**STREET ELEVATION**



**PLAN**  
**1/32" = 1'**

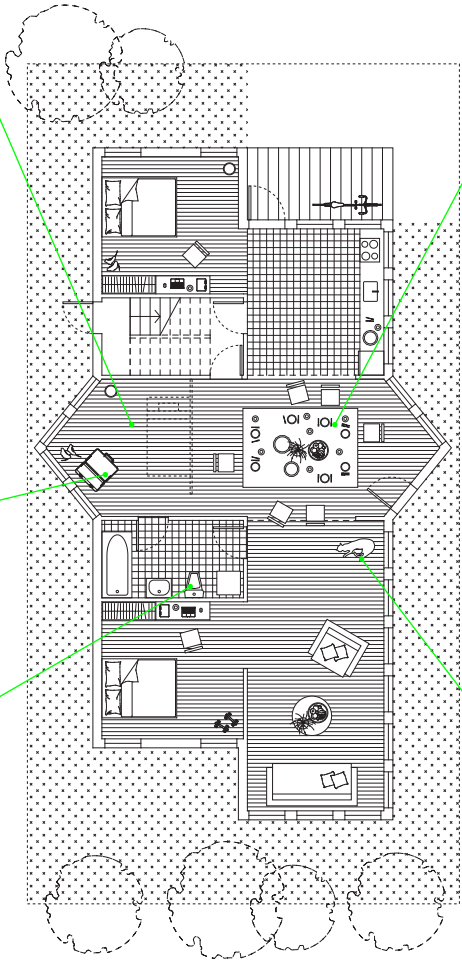
“Hey Josh, do you still want to go to that protest rally?”  
“Hell yes! If that bastard revokes my visa...”

“I’m so glad I met you-- this was the best anime convention yet. I wish I weren’t leaving tomorrow.”  
“I’ll come visit you. and I’ll be sure to bring that furry costume you love...”

I wonder if they smell my weed.

Oh my god, I think I forgot to lock the other door.

I’m allergic to cats.

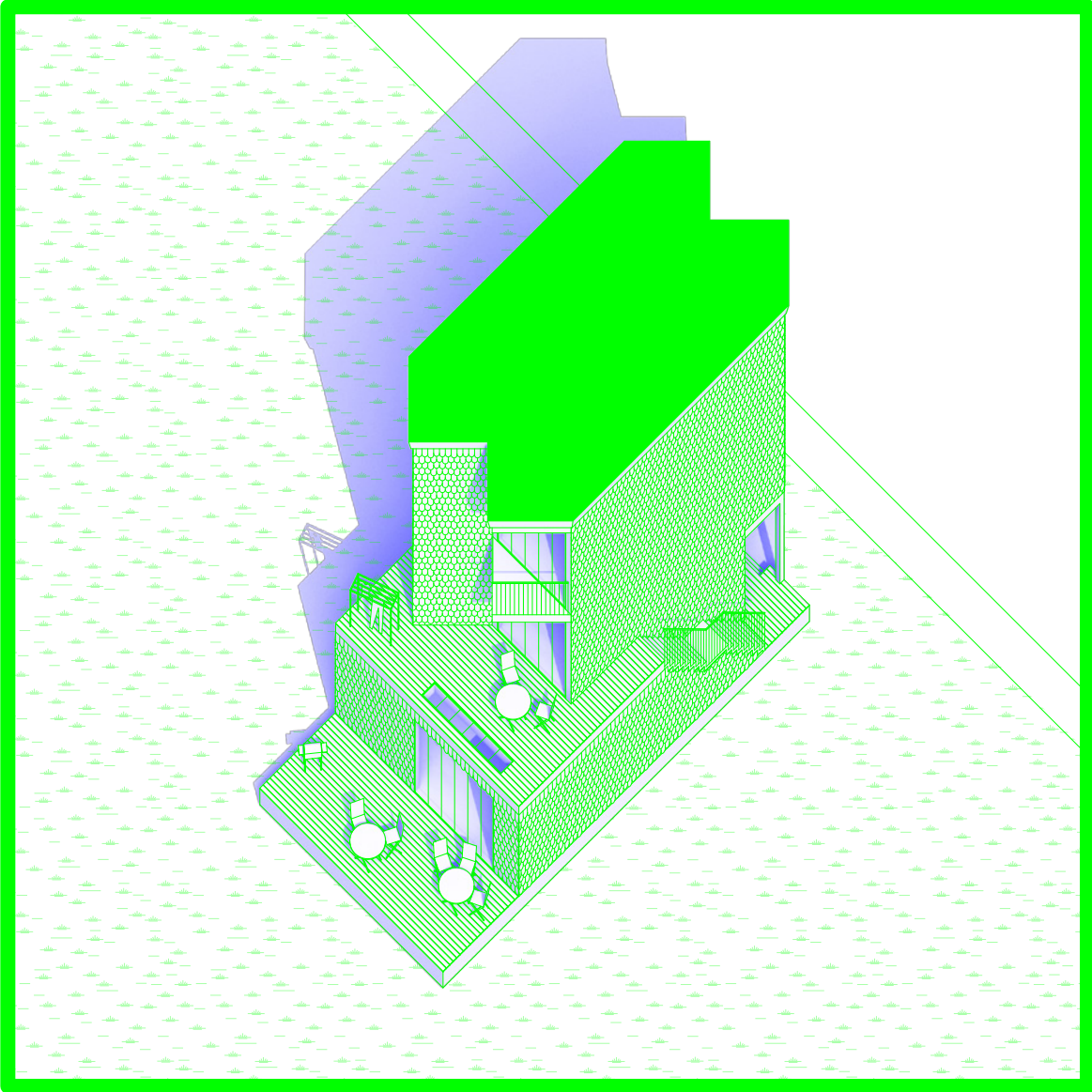


## **PLINTH HOUSE**

In the Plinth House, Airbnb guests are separated on the ground floor from a large collective of owners who live on the second and third floors together. The two volumes are offset from one another to create a covered porch (05-03-iv) at the street front, suggesting a commercial frontage for the Airbnb plinth. At the back, terraces of porches celebrate the social potential of the dense triple-decker urbanism, with separate terraces for guests and owners.

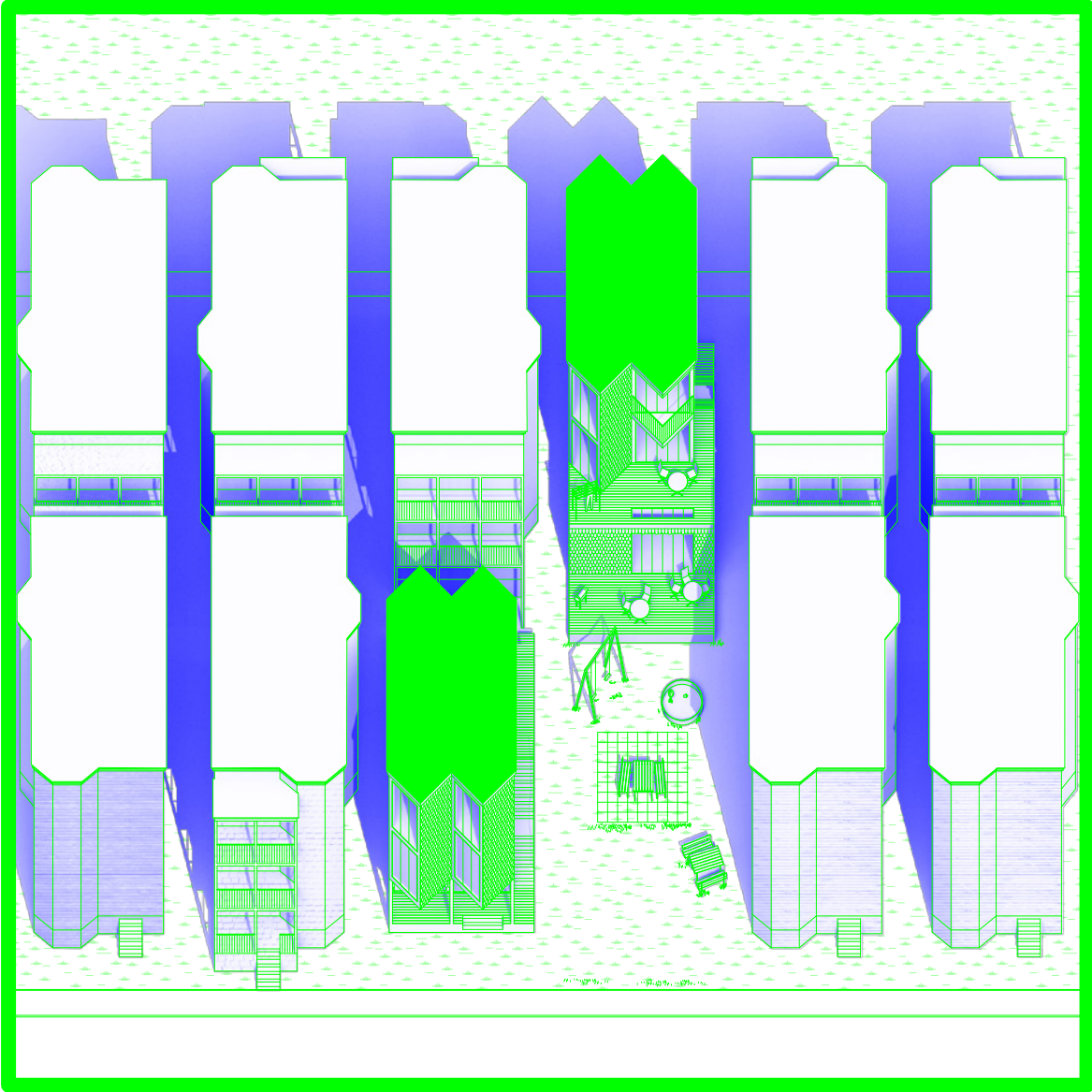


# PLINTH HOUSE



● owner/airbnb collective  
● owner/owner collective

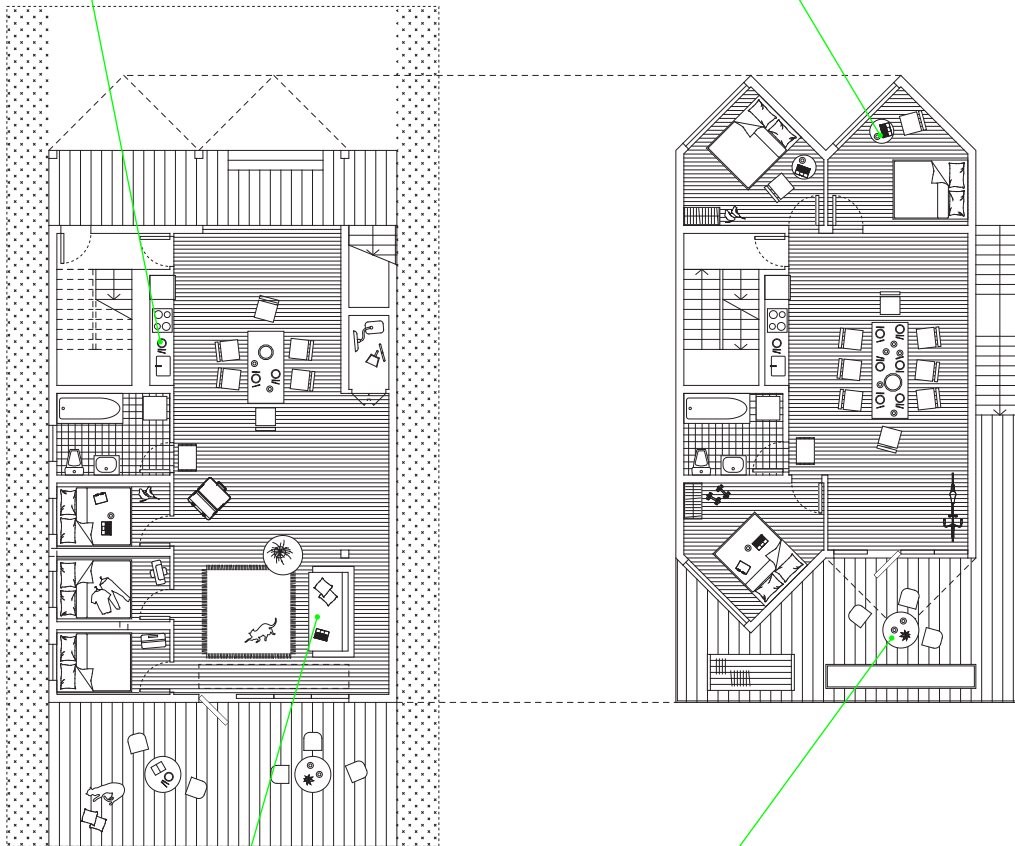
**STREET ELEVATION**



**PLAN**  
**1/32" = 1'**

Leftovers from a first and last date collect mold and sentimental value.

I have to go check on my other listing today. Looks like a water pipe burst.



“Let’s go on a bike ride. I can show you how bad the city’s potholes are.”

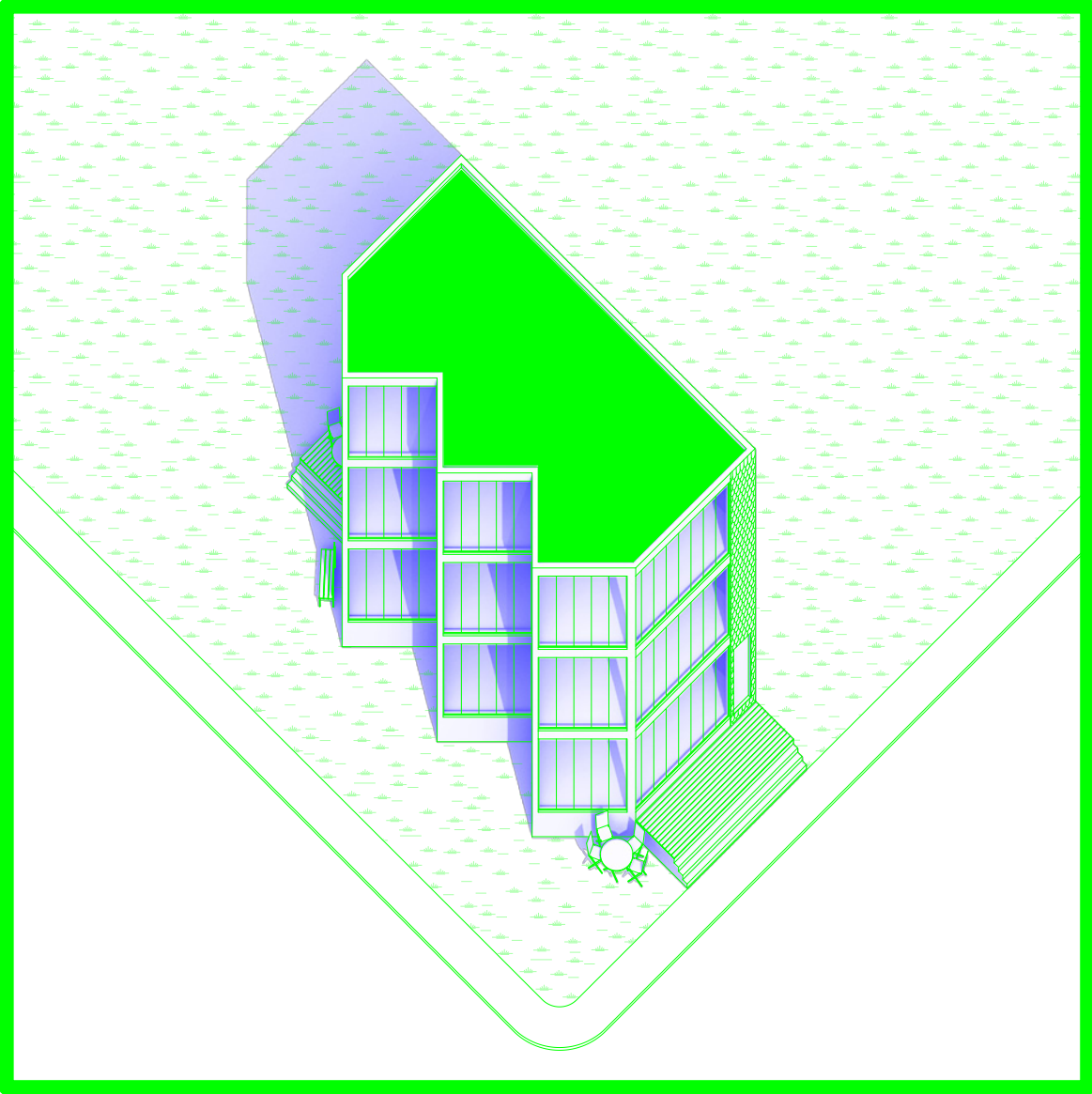
I think I saw her eating the tomatoes from our garden last night.

- owner/airbnb collective
- owner/owner collective

## **WHISPER LODGE**

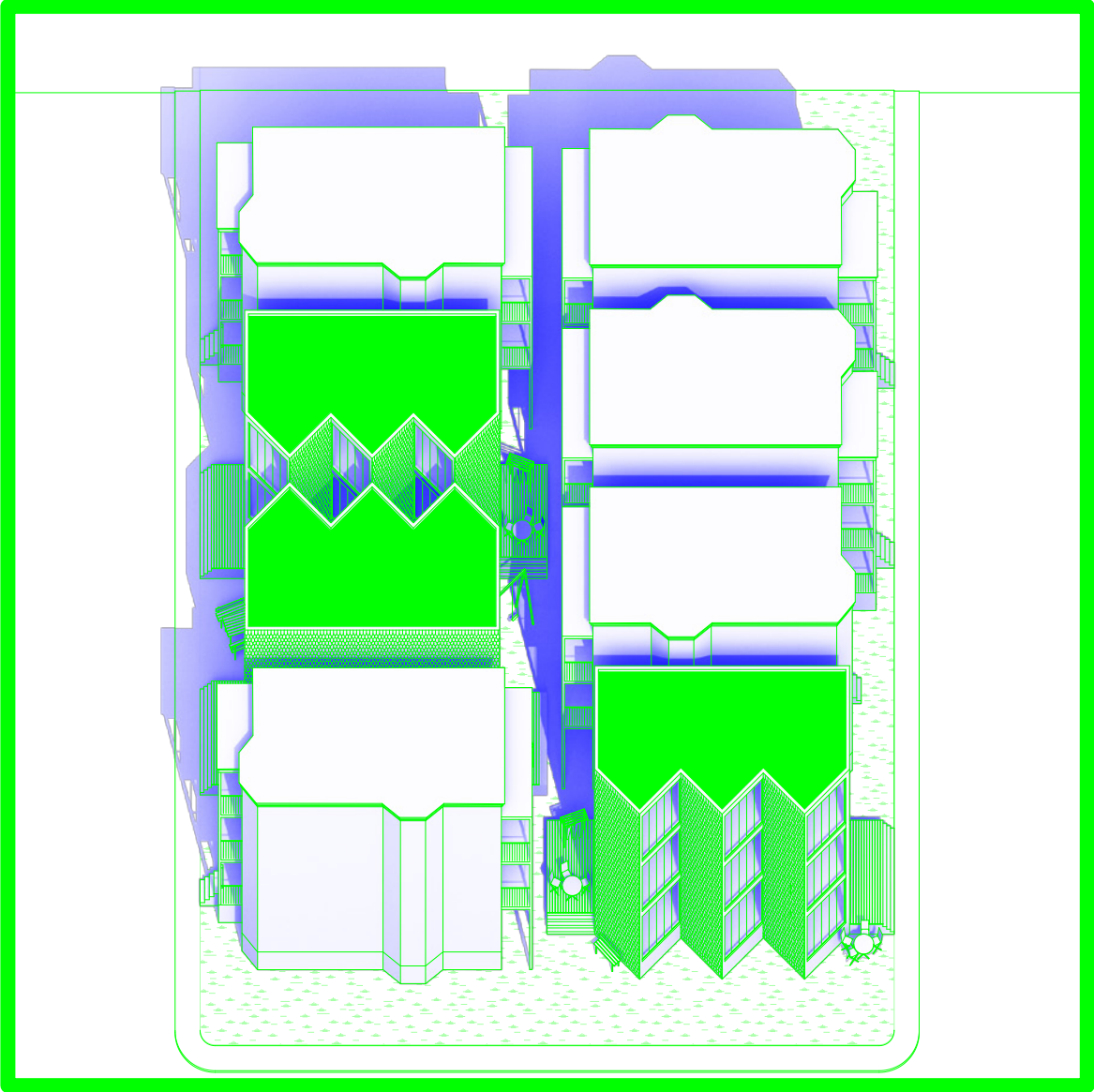
Making a room out of the bay window (05-03-iii), the Whisper Lodge forms a large collective that integrates owners and guests into one household. The design consists of three levels connected through a continuous staircase, each level with the potential to hold three private bedrooms. These rooms are formed on two sides by the triangular pop-out of our bay window geometry, and on the opposing sides by hinged partition walls that can open to expand into communal space or close to privatize the bedroom. On the exterior, these rooms form a staggered urban façade with directional transparency and solidity.

# WHISPER LODGE



- owner/airbnb collective ●
- owner/owner collective ●

**STREET ELEVATION**



owner/airbnb collective ●

owner/owner collective ●

**PLAN**  
**1/32" = 1'**

“Jody, your tinder date is here!”

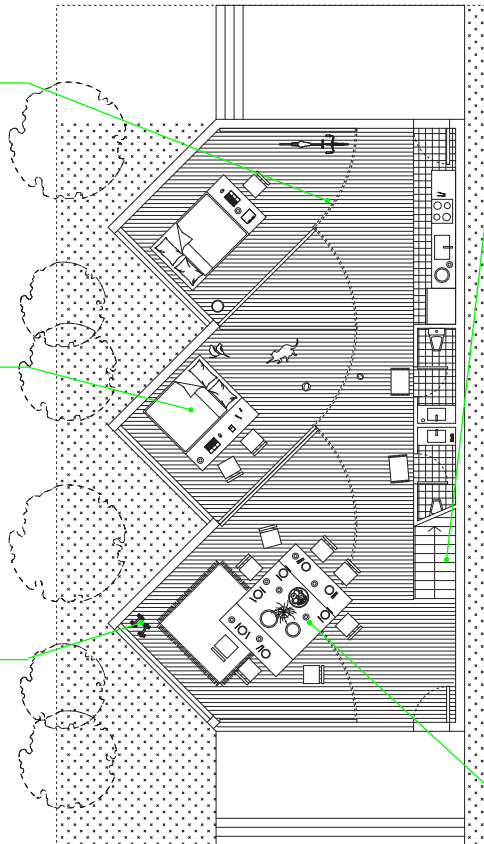
“Shit, let me close my room; can’t expose my dirty underwear!”

How many times can she press the snooze button?! I think I’m getting a migraine.

I love catching a glimpse of him working out. I wonder what his abs are like.

I’ve got to fix that squeaky step. My guests always wake me up when they come home from a night out.

This ouzo from your hometown is unreal. Can you ship me a whole crate when you get back?

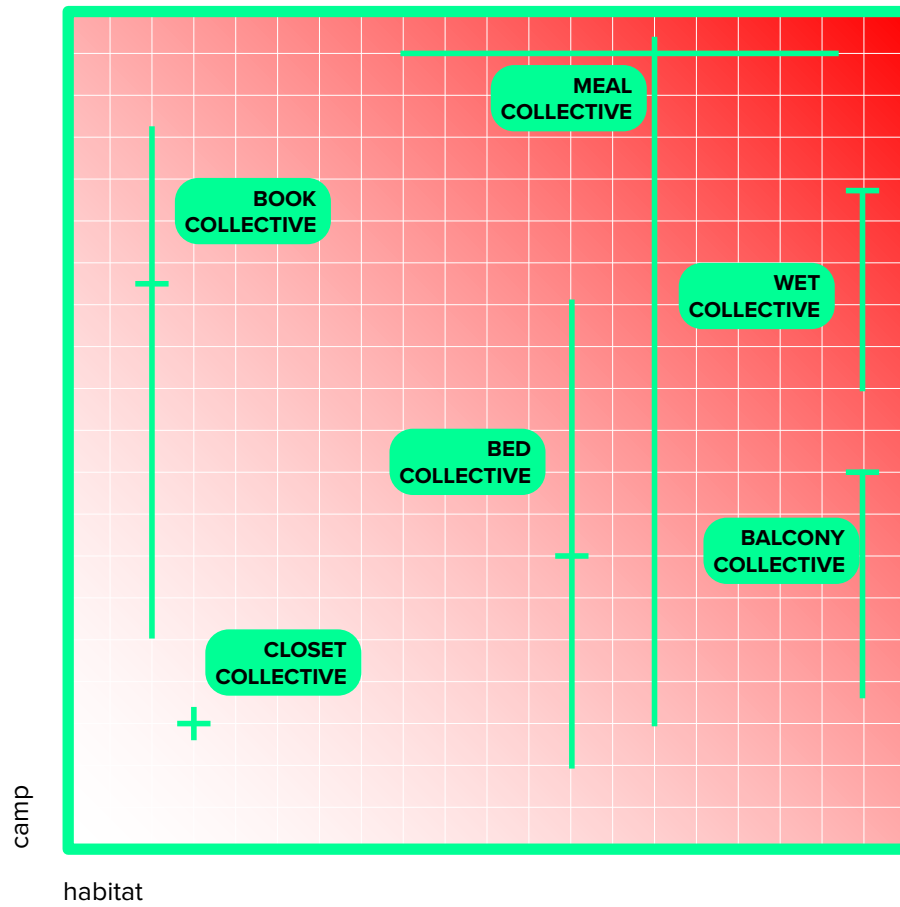


owner/airbnb collective ●

owner/owner collective ●

### 05-04-III MIT

See 04-03 for project research.





## MIT DORM-TREE

Existing MIT dormitory buildings are characterized by the efficient packing of beds at the cost of communal space. Private space accounts for 85% of the total square footage of existing MIT student housing, with the remainder split between mechanical, housemaster and communal space. This project investigates the needs of the personal sphere and the ways they define collective living. By optimizing a small but well-appointed individual room unit, space is gained which can be combined to create flexible collective layouts that contrast to the existing rigid dormitory structure.

Our “out-house” unit is a flexible individual room designed for sliding furniture in and out of its footprint. With the bed, desk and closet moved completely out, a pure, empty private space remains on the interior for any use determined by the occupant, and the typically private functions defined by furniture are exported into the collective space, negotiating social events out of dressing, studying, and sleeping.

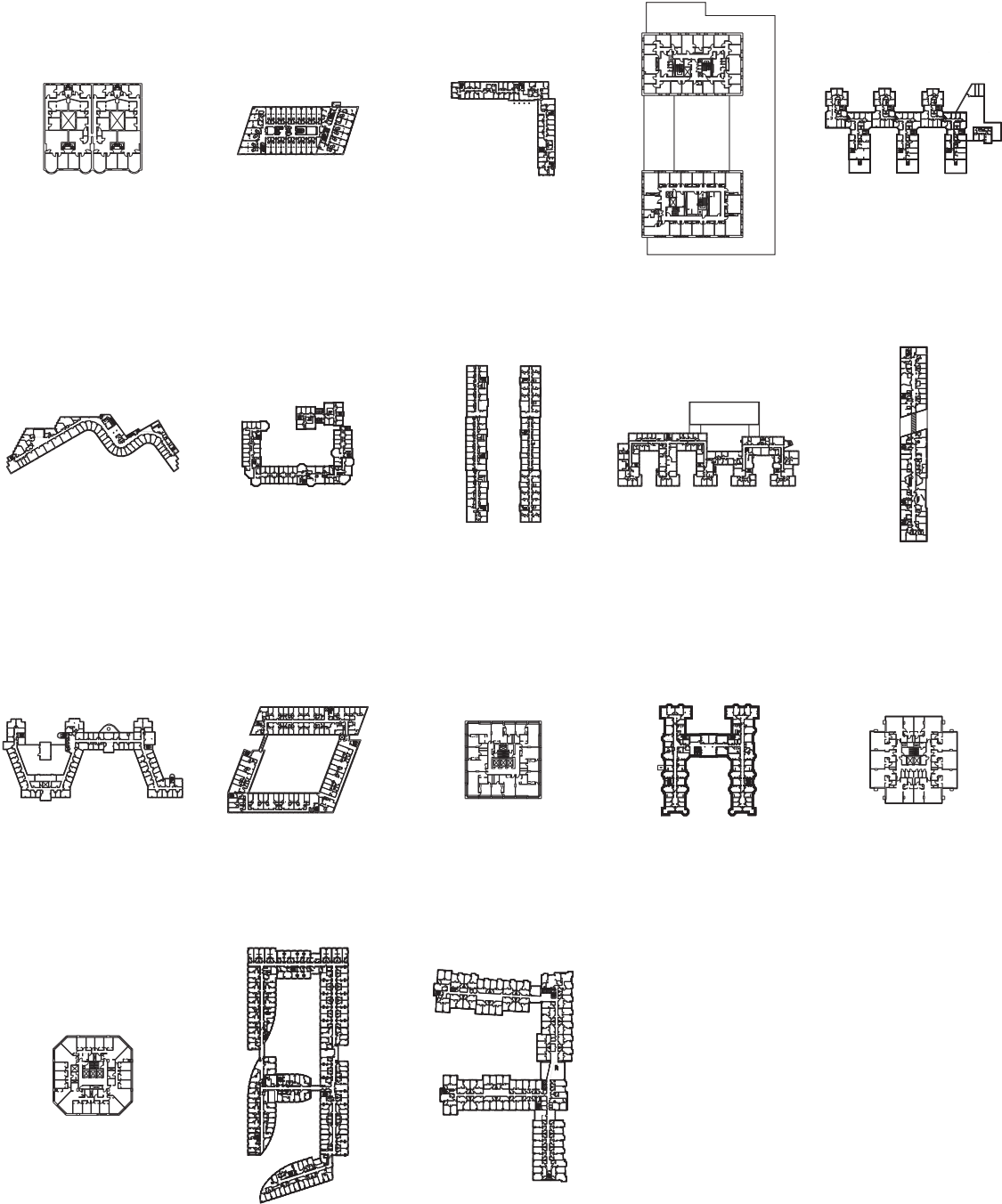
The project takes the Volpe site as a testing ground for a flexible collective living. The approved master plan proposes a total GFA of 2.8M SF, including 1.7M SF of commercial space and 1.1M SF of residential space. By combining 0.85M SF of commercial space with 0.85SF of residential space as collective home office, a spatial void of 0.425M SF can be obtained for the provision of graduate student housing.

The new massing consists of 1.275M SF of collective home office forming an exterior urban wall and 0.85M SF of regular office space forming an inner wall on the U-shaped site, enclosing the proposed Volpe office building and 0.425M SF of regular residential space. The urban wall buildings generate a widening gap between which a checkerboard of student housing and courtyards are arrayed. As deep, low-

rise massings, the student housing parasitically taps into the infrastructure of the exterior wall office buildings for service and wet cores.

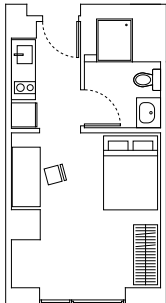
Light wells (05-03-ii) configure the perimeter of the open floor plan into a range of habitats of varying sizes and programs with different scales out-house collectives. In each habitat, a floor landscape (05-03-vi) or a super-sized furniture (03-07) characterizes the collective gathering space. As the different bedroom furniture units slide out from the out-houses, the communal space acquires individualized domestic codes established by the residents and programs based on negotiation between the neighbors.

# MIT DORMITORY ARCHITECTURE



**ASHDOWN EFFICIENCY UNIT**

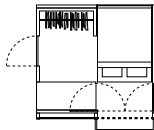
**1/16" = 1'**



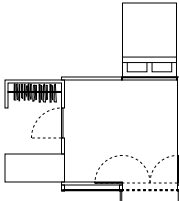
330sqft

**OUT-HOUSE UNIT**

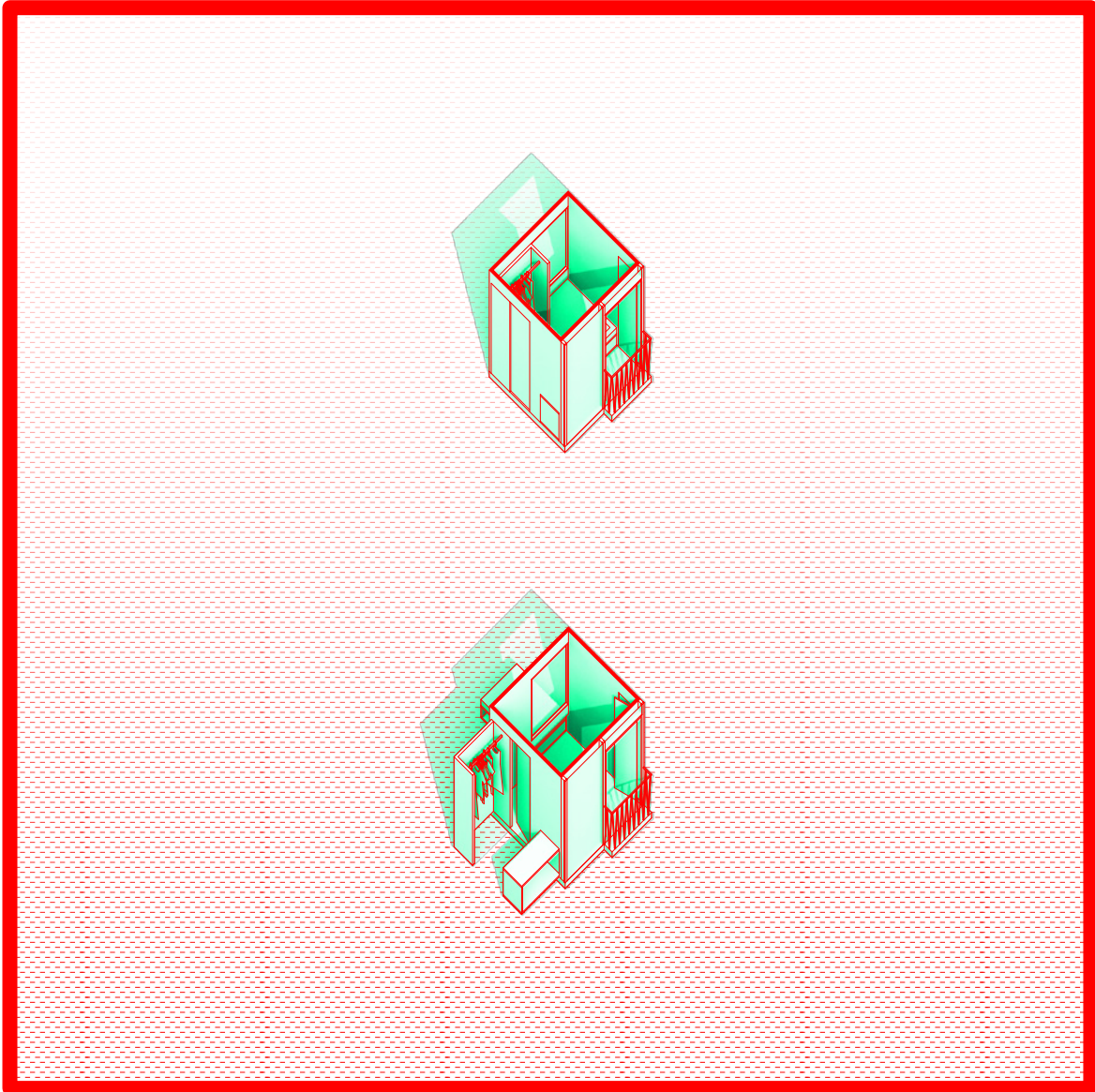
**1/16" = 1'**



95sqft

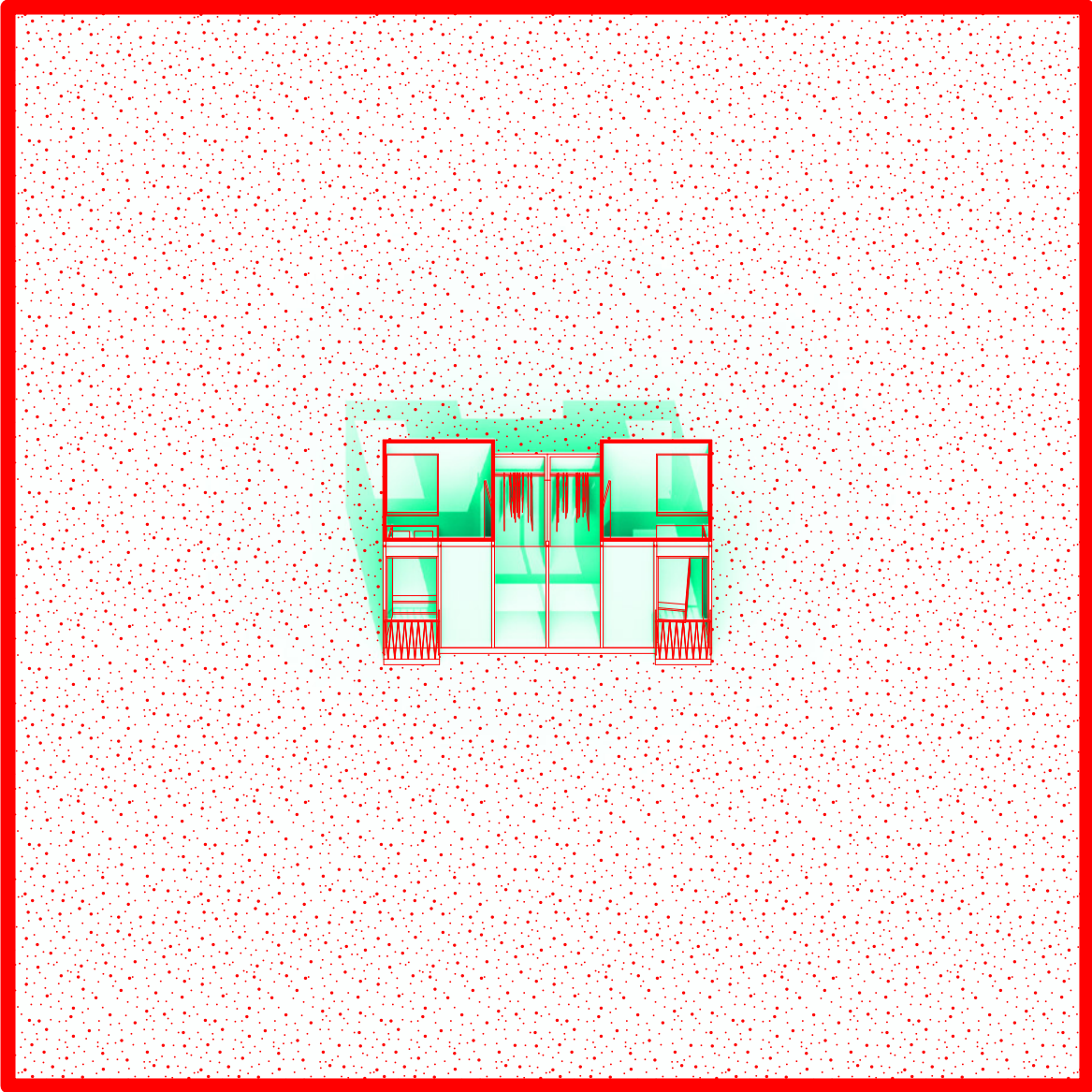


# OUT-HOUSE



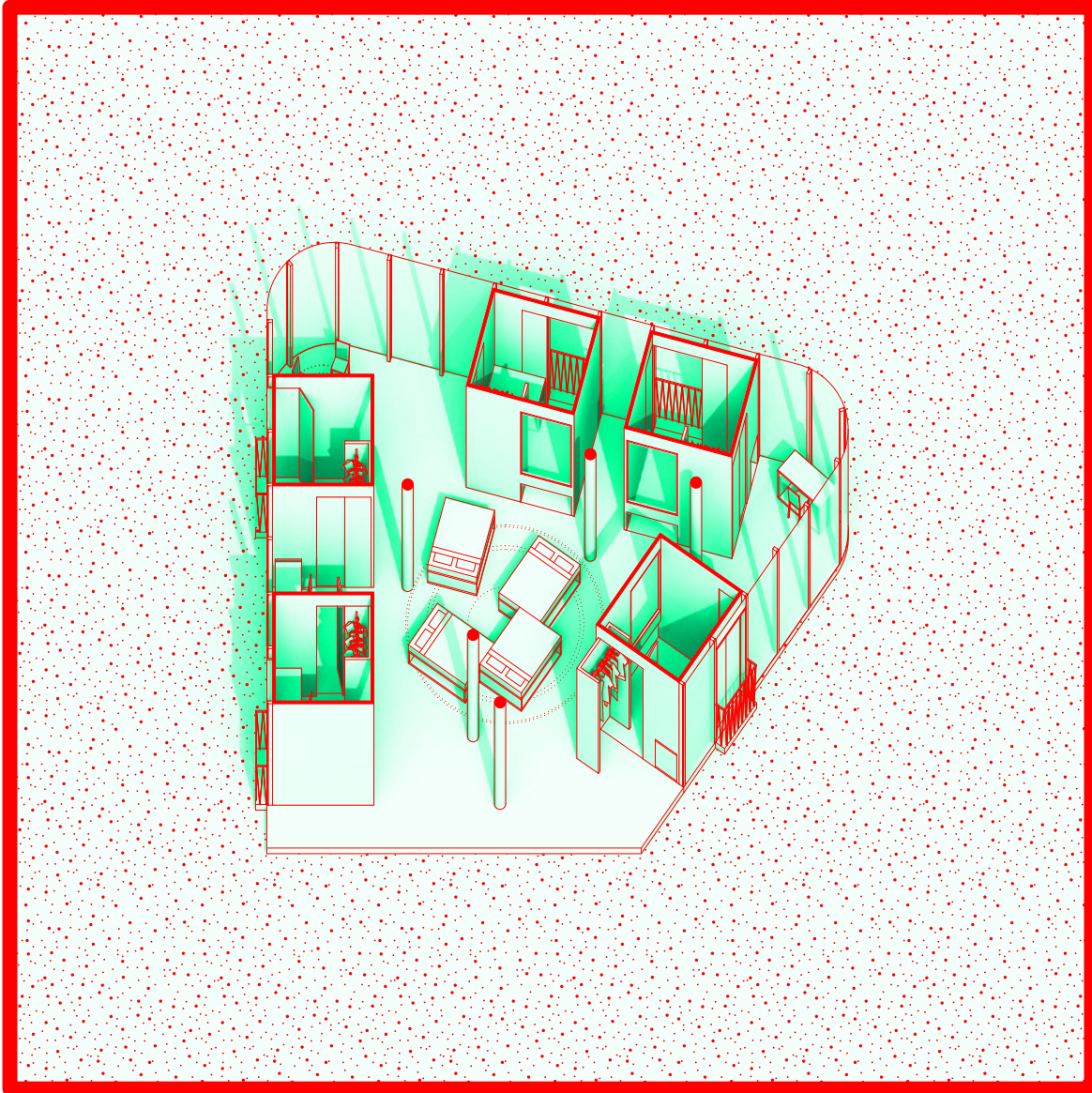
camp  
 habitat

**CLOSET COLLECTIVE**



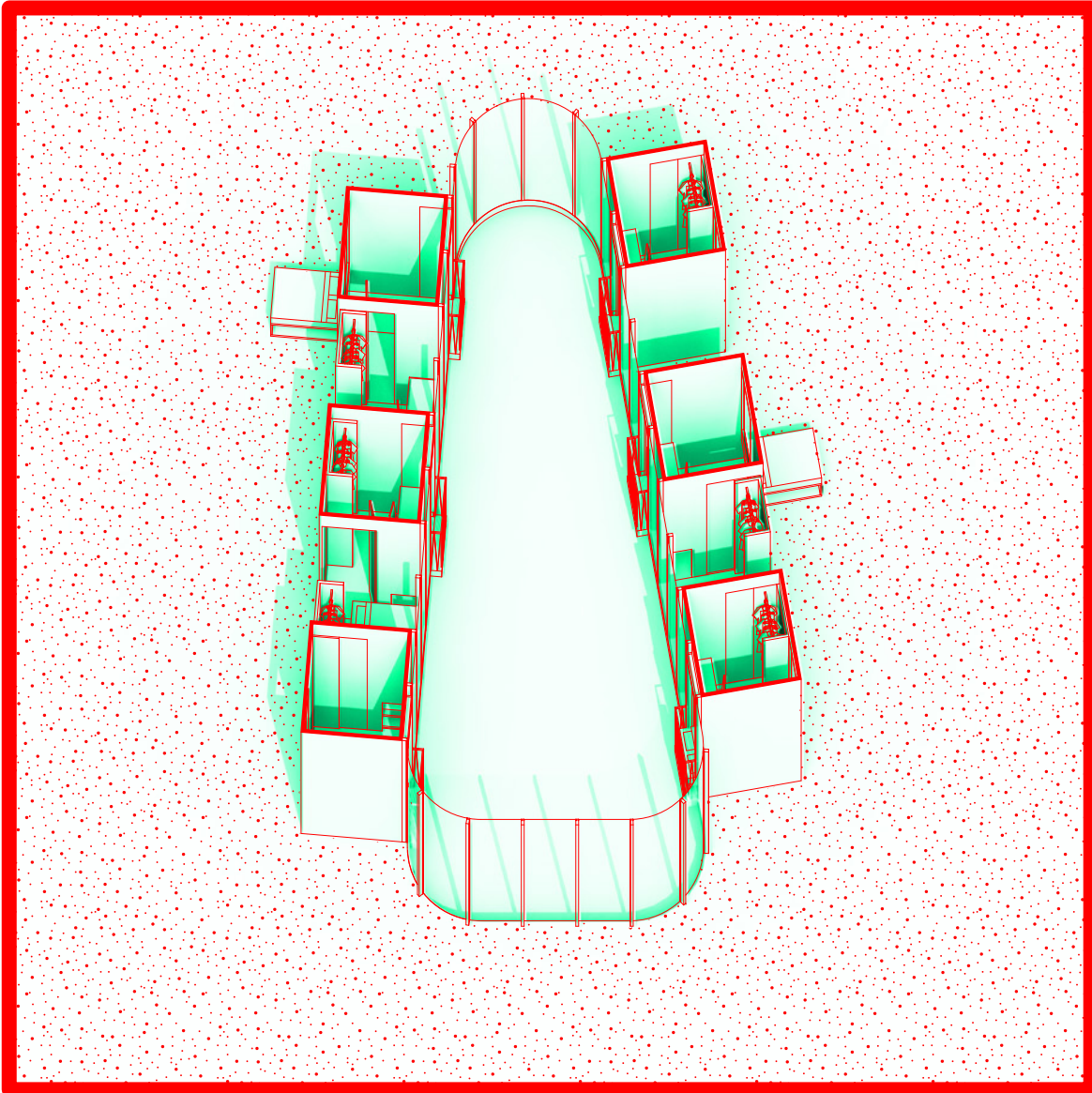
camp  
 habitat

# BED COLLECTIVE



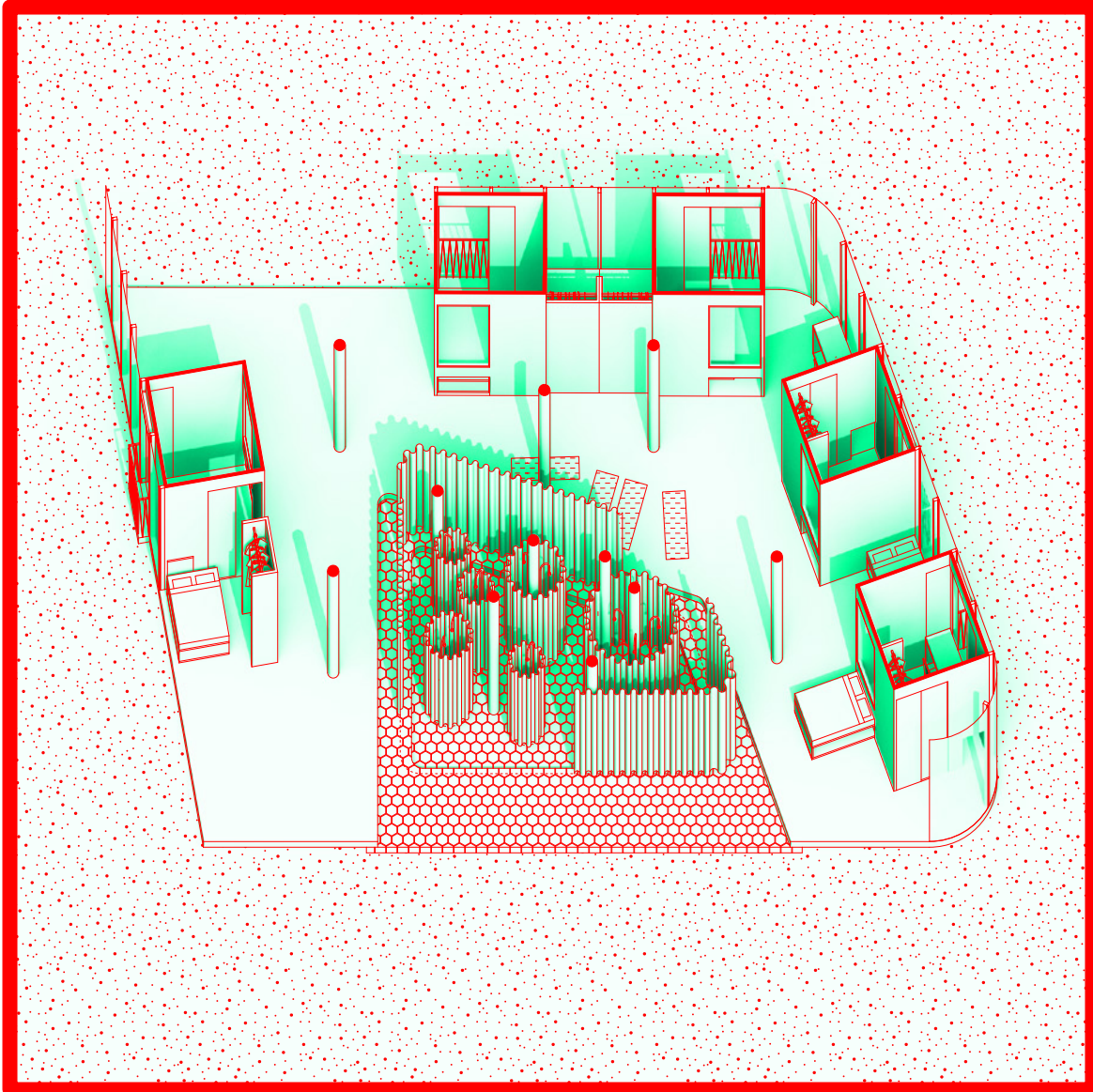
● camp  
habitat

# BALCONY COLLECTIVE



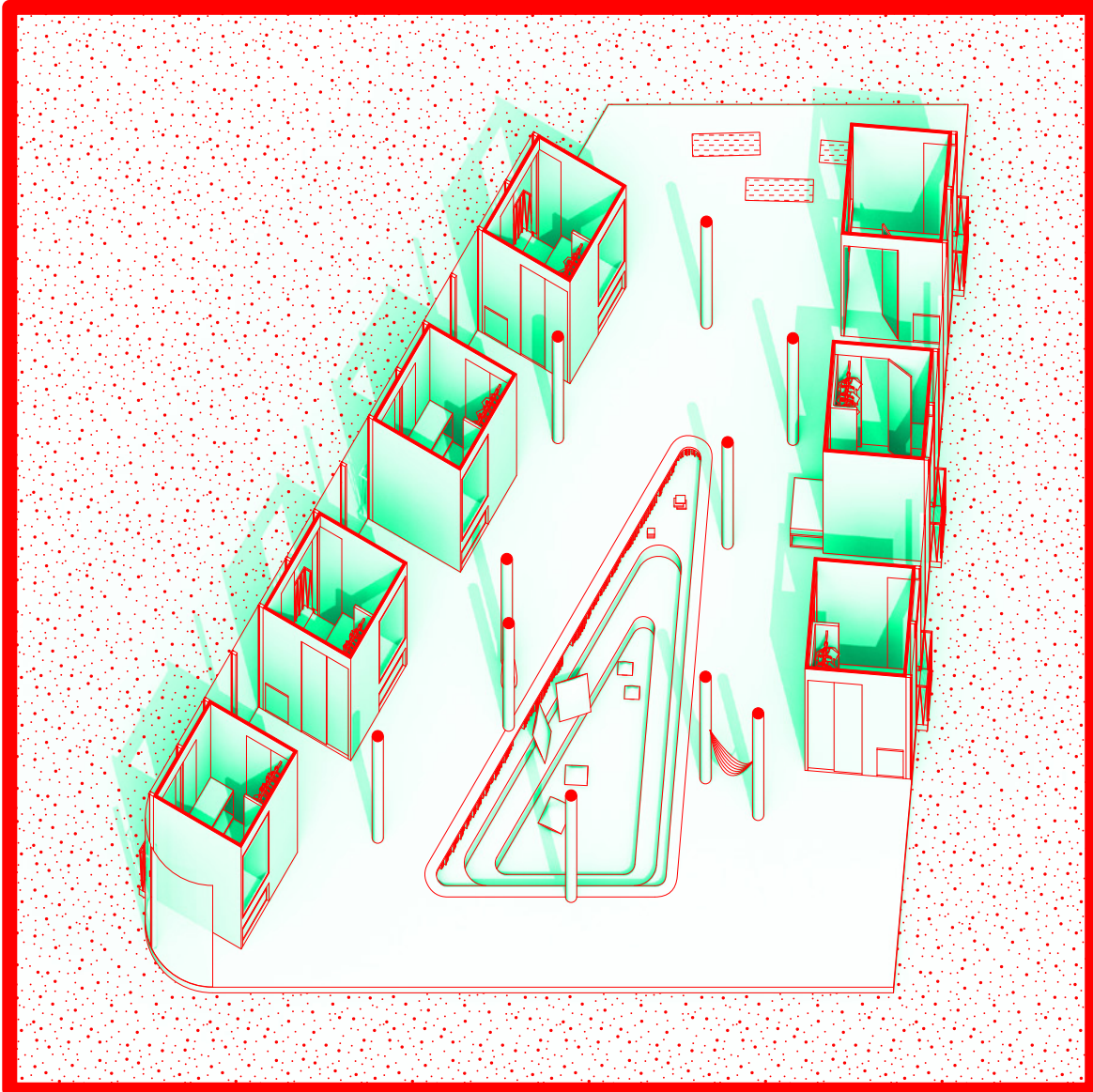


# WET COLLECTIVE

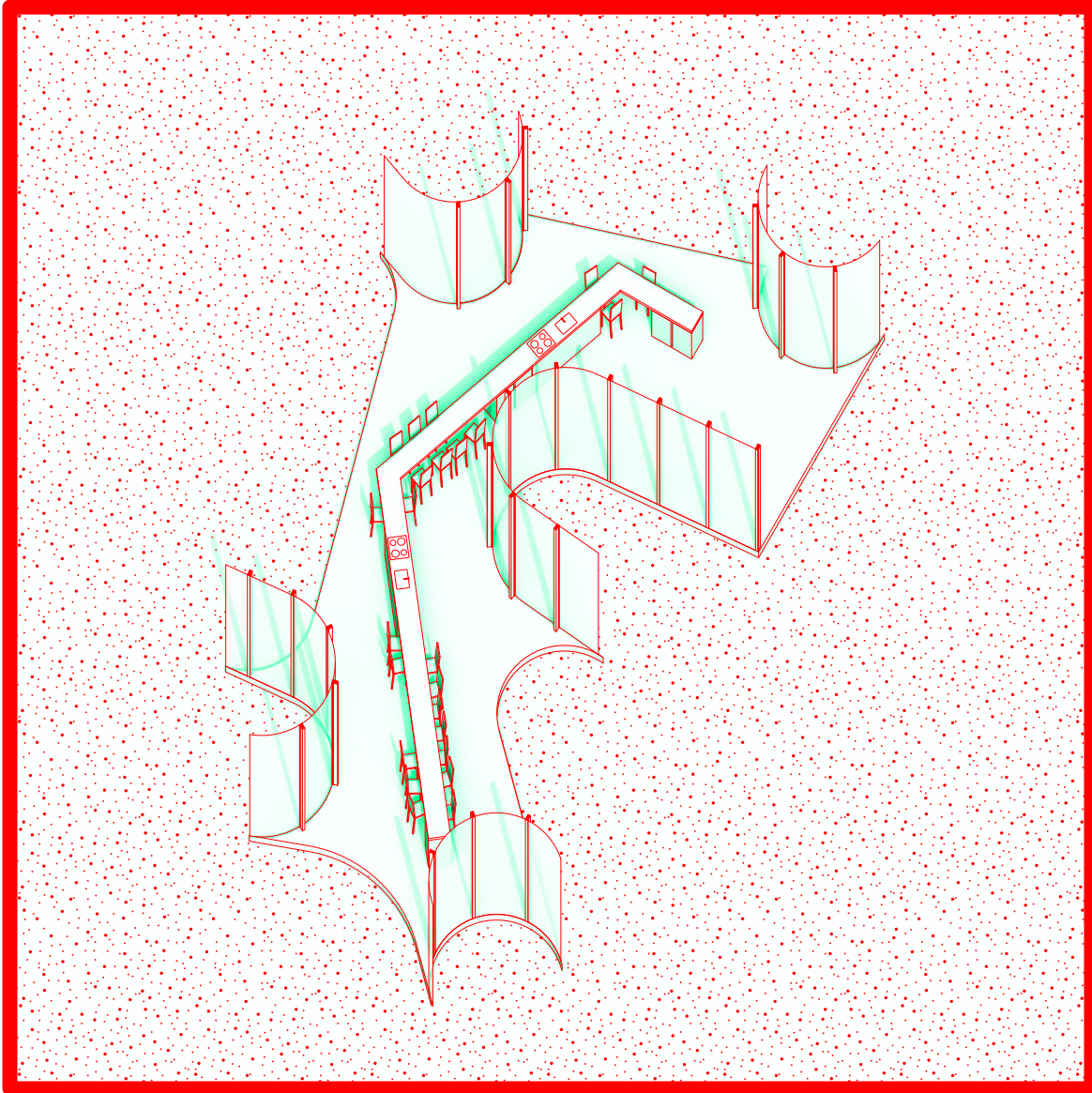


camp ●  
habitat

# BOOK COLLECTIVE



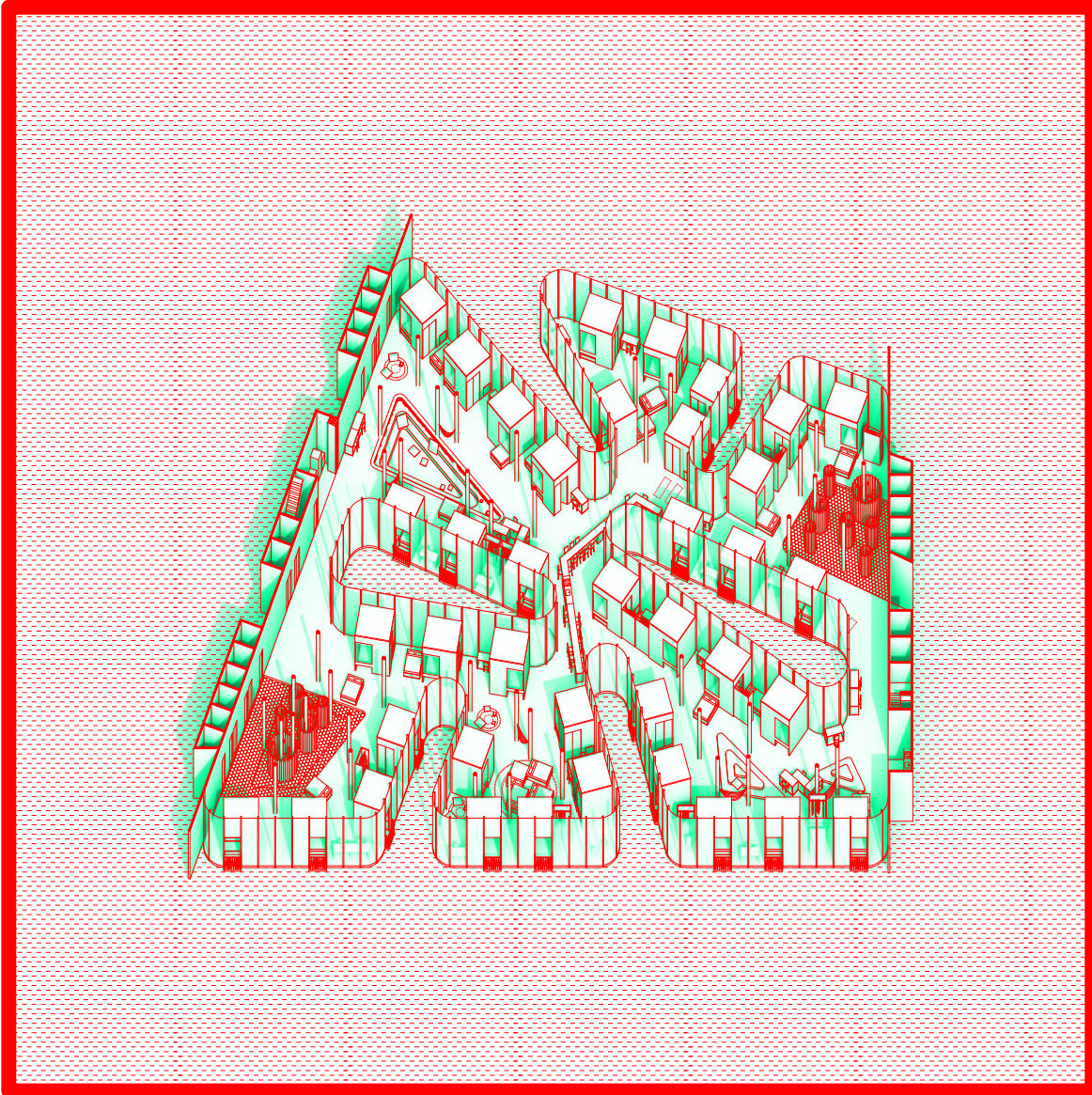
# MEAL COLLECTIVE



camp

habitat

# FULL HOUSE



camp

habitat

# DORM-TREE



camp

habitat

**PLAN**  
**1/32" = 1'**

**Someone clogged the drain. Jenny, I know it was you, nobody else on this floor has pink hair!**

**This omelette is SO GOOD. It's vegetarian, right? .....**



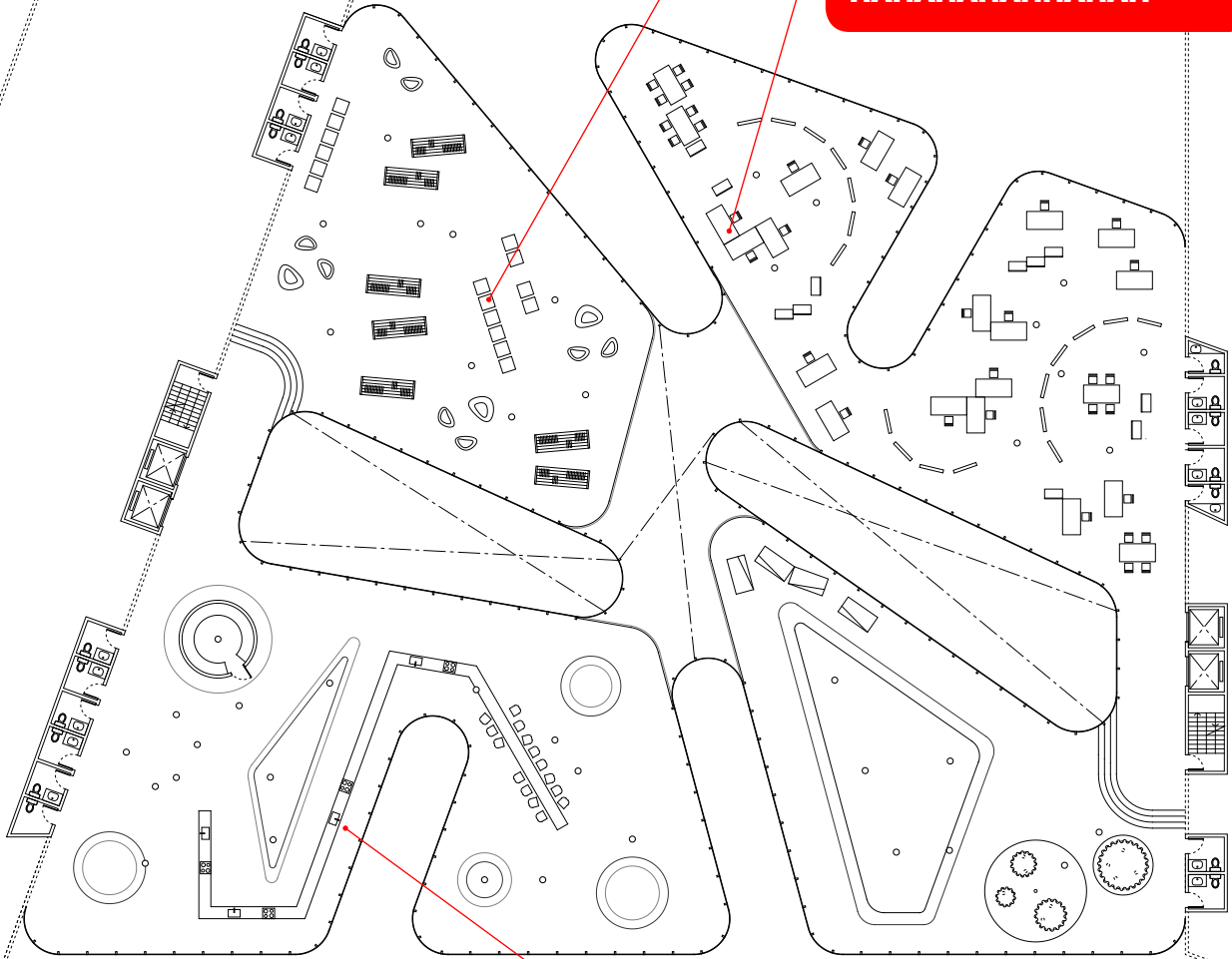
**Who took my vibrator?**

**He was snoring ALL NIGHT. It's not normal, I think he has a cold or something. But if it happens again tonight I might have to smother him with his pillow.**

**PLAN**  
**1/32" = 1'**

**OMG who put my laundry in the dryer?? Those are wool sweaters, they will be sweaters for ants after this.**

**HAHAHAHAHAHAHA**



**Dishes in the sink AGAIN? What a cliché.**

## 05 MODELS

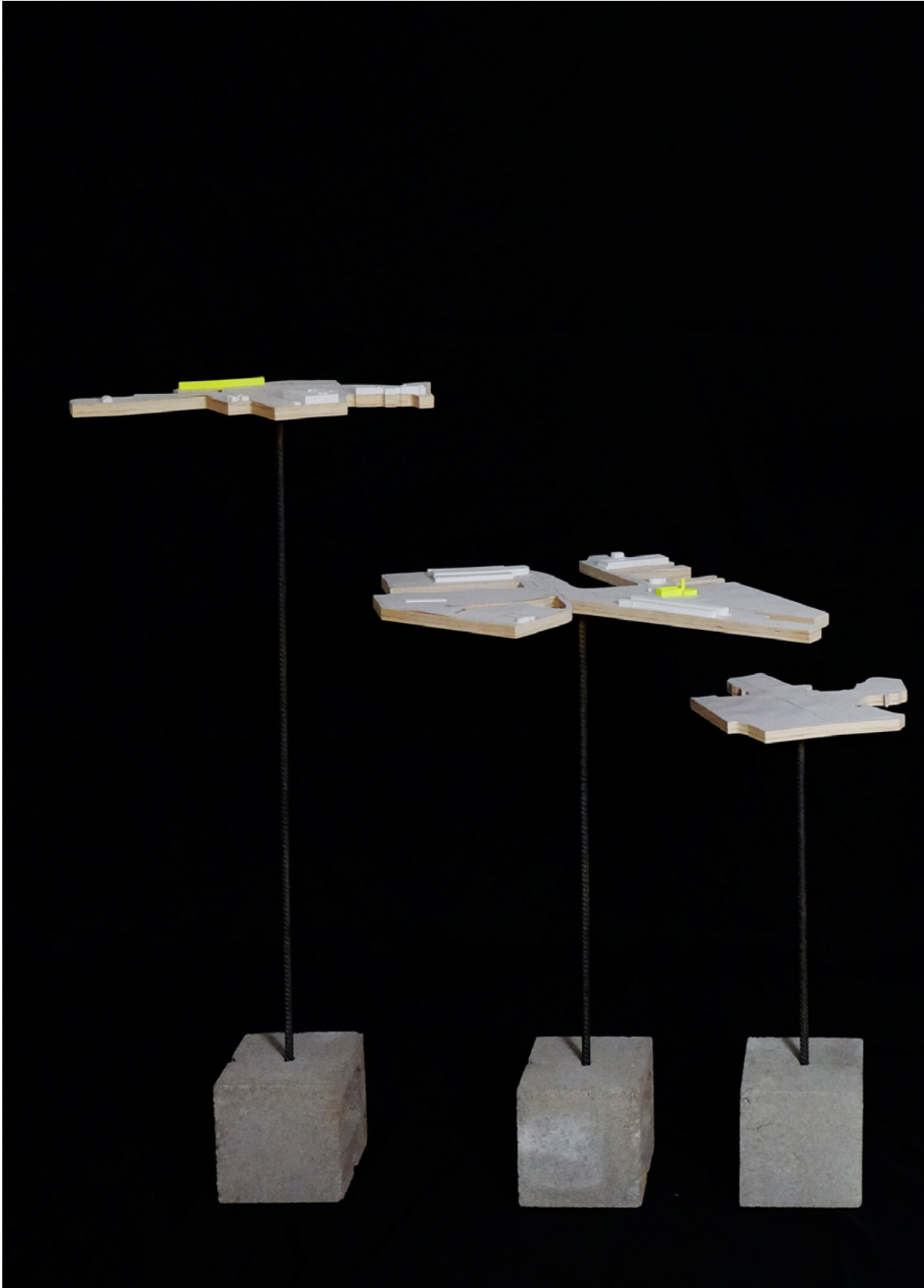
The products of our charettes (03-04), these models help us to better understand our projects through being physically confronted with their aesthetic language.

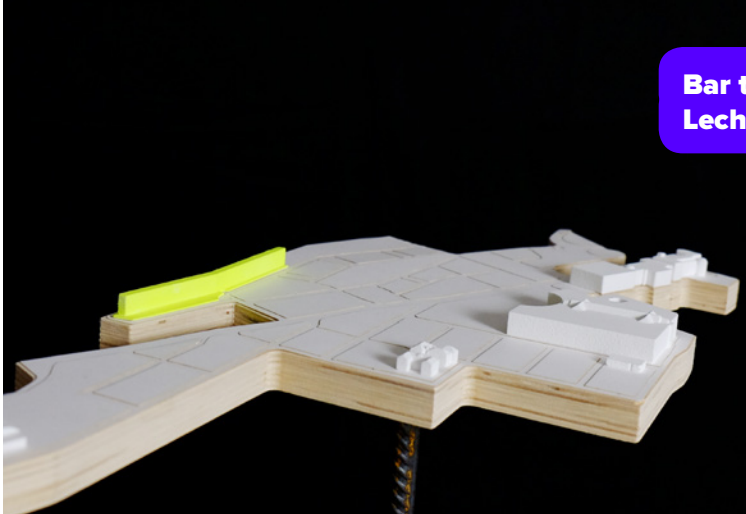




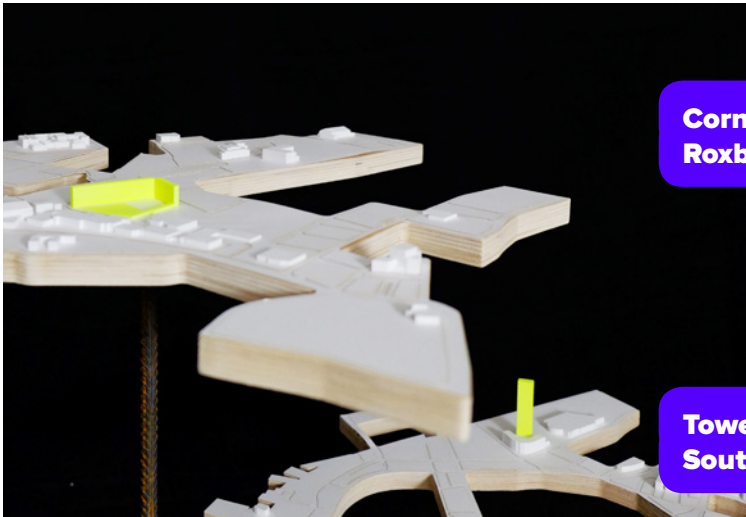
Precedent models  
for archive





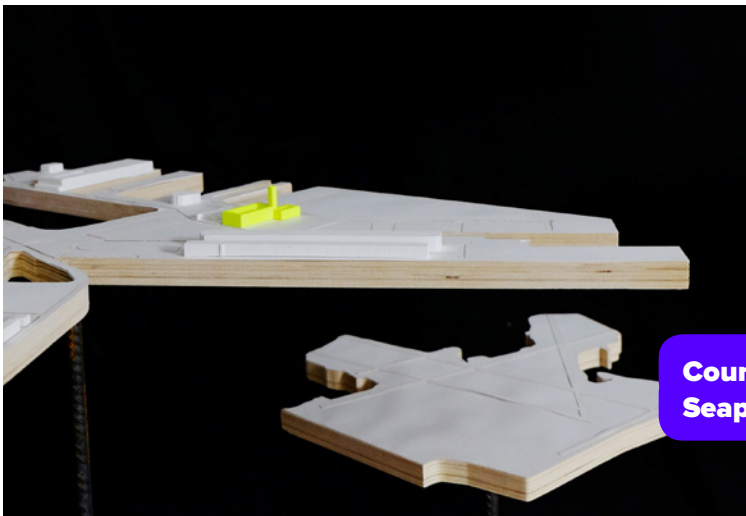


**Bar typology  
Lechmere site**



**Corner typology  
Roxbury site**

**Tower typology  
South Station site**



**Courtyard typology  
Seaport**



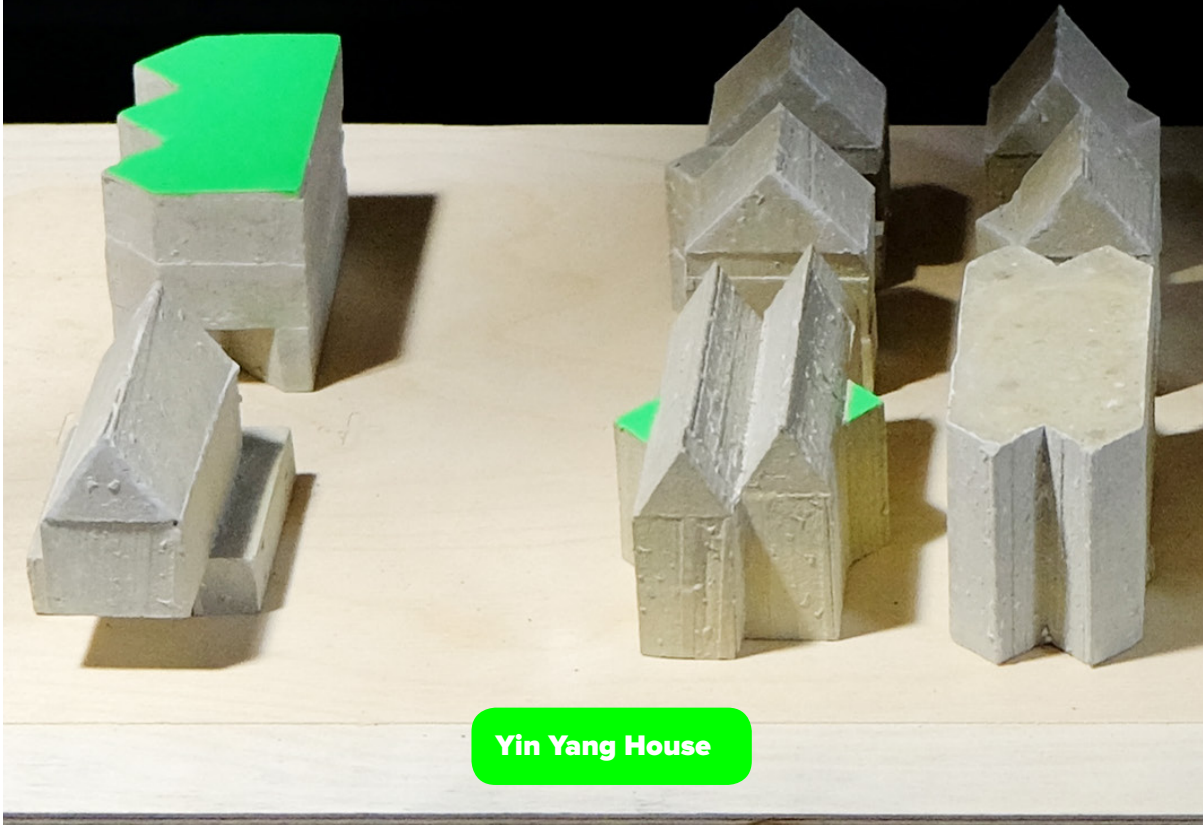
**Tower partial model  
Amazon Familystair**

**Elevation model  
Amazon Party Island**



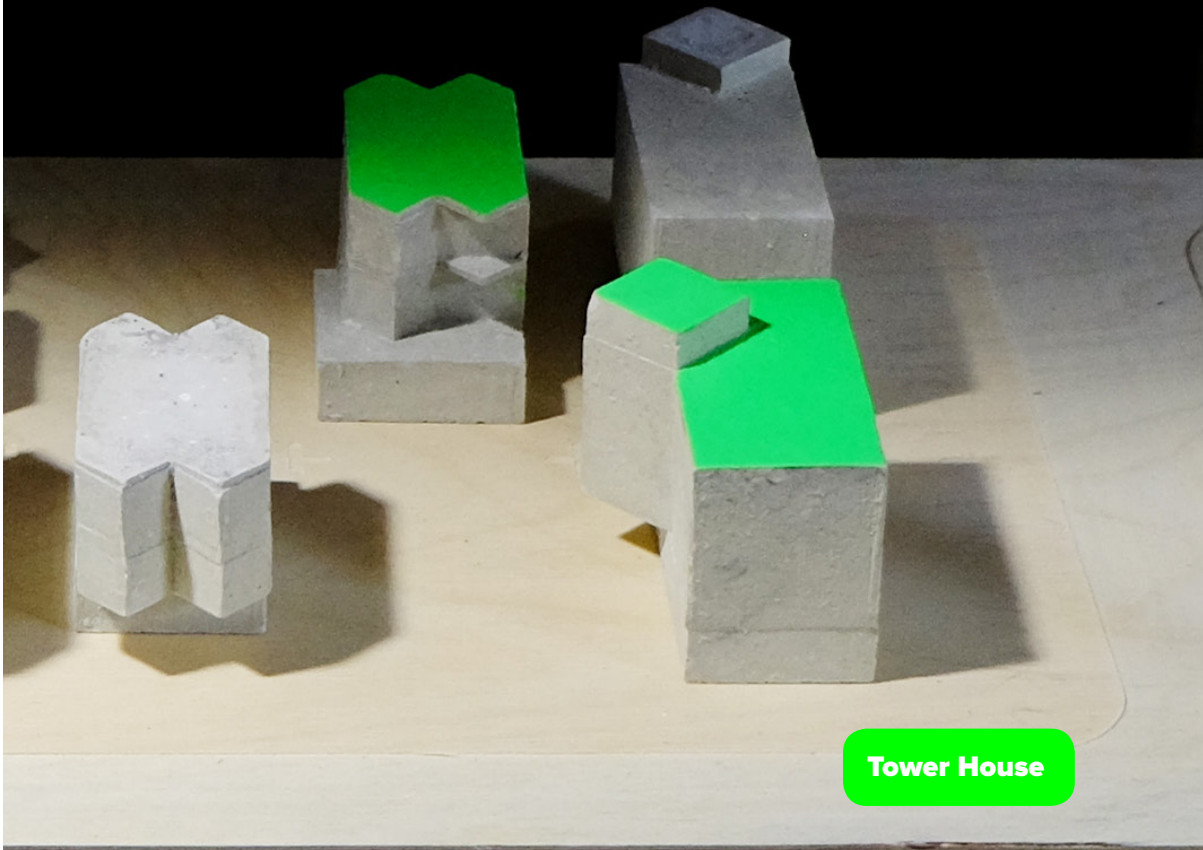
Credit: Andy Ryan

Whisper Lodge



Yin Yang House

**Plinth House**



**Tower House**

**Massing option for MIT  
Towers on the mat**



**Massing option for MIT  
Four connected towers**





**Massing option for MIT  
Dorm-trees grow  
between the walls**



**Partial model  
MIT Dorm-tree**



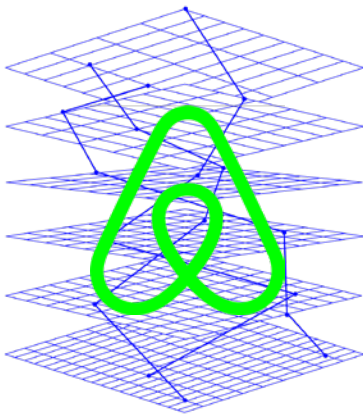


**slab microzoning**  
**#slumberparty**



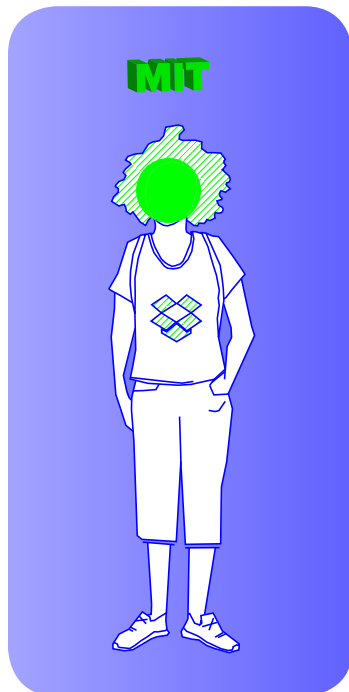
## 06 GRAPHIC STANDARDS

Our collective requires its own aesthetic. This aesthetic cannot arise pre-packaged from any single hand, it must be a new creation undertaken together, defining a language of form and format. Our approach to the construction of our aesthetic relates to the content of our projects. With clients in Big Tech, we require an aesthetic that bridges our two worlds. We translate our skepticism and antagonism to our own engagement with Big Tech into a distortion of this common bridge. Glitch, off-color, blur and unclarity are just some of the techniques of such a distortion.



### 06-01 INTUITION

Intuition is another tool we employ, although our relationship with it is complex. We understand intuition as a phenomenon in which information is cognitively processed too quickly to explicate as it is happening. Honing intuition to function in a collective is challenging, but through this we draw connections, find references, and extrapolate our collective lived experience into how we design for collectivity. At the same time, intuition is to be scrutinized. Our collaboration requires us to translate our gut feelings into conversations we can each engage in. We therefore critique intuition and give it words, build some sense from it, and ultimately, create a language for ourselves.



### 06-02 UGLINESS

Liking is mode of engagement of which we are skeptical. For us, liking something translates into comfort, and comfort is what one feels towards something that is close to oneself. In approaching our new work together, we should be uncomfortable with what we create. As a new conception stemming from three discrete minds, we cannot rely on habit or taste. We believe that if we are thinking, what we produce will feel ugly.

### 06-03 COLORS AND GRADIENTS

We encrypt our aesthetic with the coding of the screen, using RGB colors across our work. Because virtual platforms are branded and thus

only recognizable by their palettes, we bestow each of our projects with its own colors that typically hold some association to the client, but might be slightly off-tone. As Big Tech organizations are too big and expansive to be understood in their totality, we appropriate ideas of corporate identity, or what Metahaven refers to as “uncorporate identity,” in which the optimism of the user experience is critical. Treading a fine line between tech-optimism and a dystopian nightmare, we allow the ugly, the chaos, and the complications, or simply life itself, to contaminate our aesthetic.

## 06-04 FONT

Favoring a clear font, Proxima Nova, we use various means of displaying it to connote different tones and voices. Whether it is in 3D-text, text-messaging bubbles, or technical call-outs, we try to blur the voices of the text.

## 06-05 ANNOTATION

Annotation is a strategy for embedding our drawings with additional levels of subtext. A perfect plan implies a perfect consensus, which, as Markus Miessen has argued, evacuates possibilities for thought and critique, resulting in stasis rather than progress.<sup>1</sup> No design can erase the frictions of living collectively, nor should it. We use annotation to reveal the moments where negotiations must be made, where conflict lays in wait, where new relationships might be formed and where the contingencies of life insert themselves in ways that are not usually read on a plan. This second reading of the plan supports the double-agency of our proposed collaborative model with unsolicited clients of Big Tech. We believe in proliferating our values and desires through architecture, but in order for these to carry through they must come embedded within a design that will be accepted by the client. The annotations we use, snippets of thoughts, casual conversations, rumors, gossip, and arguments, are formatted such that they flirt with both the thought bubble and the technical description, but really stem from the research stream aesthetic born in our archive.

---

<sup>1</sup> Markus Miessen, *The Nightmare of Participation: (Crossbench Praxis as A Mode of Criticality)* (Berlin: Sternberg Press, 2011), 83.



Source: Wolfgang Tillmans

**“Hey whatcha reading?  
Oh, I wrote my  
dissertation on that. Let  
me tell you about it...”**

**“Did she take  
my charger,  
AGAIN?!?!?!”**

**“The guy on 3 was  
wearing the most  
expensive suit. I  
can’t believe he  
was dancing out in  
the rain.”**



**06-06 3D TEXT**

For the Collective Home Office, text is a critical tool that delivers both explicit and implicit messages. We write and represent, using text traditionally in addition to “writing



images” in dialogue with contemporary communication methods that have been produced by the encroachment of Big Tech into the cultural sphere. As capitalist collectives have contorted and capitalized on cultural signifiers, quietly severed from their signifieds, we seize upon this disjuncture and exaggerate it even further, questioning the now accepted broken link between



message and content. By appropriating and torquing conventions of tech-world communications, we imbue our media with multiple connotations.

3D text acts as a caption on steroids, loudly yelling its ardent message, obscuring the cultural naturalization process otherwise known as branding. We see 3D text as an extreme of the historical reversal observed by Roland Barthes when describing photograph captions: “the image no longer *illustrates* the words; it is now the words which, structurally, are parasitic on the image”.<sup>2</sup> In our images, the text is directly collapsed into the image and bestowed with a third dimension, awkwardly marrying into a space. This new informational totality lacks both earnestness and perspectival precision, an impotence which describes the “innocenting” process its language has undergone,<sup>3</sup> but also offers multiple readings to the critical eye.

---

<sup>2</sup> Roland Barthes, *Image, Music, Text* (New York: Hill and Wang, 1977), 25.

<sup>3</sup> *Ibid*, 26.



Source: Wolfgang Tillmans

## 06-07 SOURCE IMAGES

We construct our aesthetic with a careful mixture of self-generated graphics and source images whose references support our agenda and communications with clients. The clients who we seek to engage are diffuse and networked corporate bodies, with little clarity or resolution between the values and images they project and the products or services they offer. This gap, identified by Metahaven in their writings on corporate identity, is a space of abstraction in which new worlds can seem inevitable simply through their representation.<sup>4</sup> As we have witnessed, the danger of such a condition is that while corporate images rest on mere abstraction, they play upon very real needs, desires, expectations and fears.<sup>5</sup>

We tactically reinject our images, through the complex signification process of mediating source material, with their own hopes and values while simultaneously exposing their latent vice. By scanning the work of photographers, we harvest with an extremely high DPI the human moments they have captured. Scanning is a method for reproduction that leaves a trace of its own process, a texture of the duplicate that characterizes our image



Source: Nan Goldin

<sup>4</sup> Metahaven, and Marina Vishmidt, eds., *Uncorporate Identity* (Belgium: Lars Müller Publishers, 2010), 7.

<sup>5</sup> Ibid.



constructions as such, making explicit our use of others' work.

Wolfgang Tillmans is one of the artists whose photographs we appropriate because his work often communicates a profound intimacy in dialogue with the banal. Tillmans has described his own practice of photography, which admits to the emotional impulse associated with taking a picture of something, as being one kind of vehicle to speak the desires



Source: Nan Goldin



Source: Nan Goldin



Source: Nan Goldin



Source: Wolfgang Tillmans

of the producer: “When I photograph objects or living creatures, I kind of want there to be more of them in my world... I want to preserve it and to say, ‘This is true, this is important, I want there to be more of this’”.<sup>6</sup> In his career he has questioned grand assertions of truth and investigated the role of language in making the invisible visible, addressing the same interplay of projected value and object-value of imagery we explore in the Collective Home Office.

Nan Goldin is another photographer whose images we use because of their raw representation of the messiness of life. As Guido Costa has written about Goldin’s photographs:

“And yet, in spite of the traditional quality of the images, there is something excessive and dissonant about them. There is too much life, too much truth in them – consciously or unconsciously, they reject entirely

<sup>6</sup> Hans Ulrich Obrist, *Wolfgang Tillmans speaks with Hans Ulrich Obrist*, trans. Matthew Gaskins (Madrid: La Fabrica Editorial, 2009), 60.

the language of pretense or illusion. In short, these photographs have the roughness typical of reportage, but their context is different, more intimate and private, more participatory”.<sup>7</sup> Goldin’s characters imbue our images with a second life of care, intimacy, and new definitions of family.



Source: Wolfgang Tillmans

<sup>7</sup> Guido Costa, *Nan Goldin*, (London: Phaidon Press, 2001), 6.

# 07 APPENDIX

## 07-01 COLLECTIVE BRAIN WEEKLY

### SOURCES

#### MIT STUDENT HOUSING

"The Clay Report." Report to the Provost of the Graduate Student Housing Working Group, May 2014.

O.R. Simha, "A Brief History of MIT's Land Acquisition Policies," MIT Faculty Newsletter, Vol. XXIV No. 2, November/December 2011.

Architectural Principles for MIT Undergraduate Residences, MIT Division of Student Life, October 14, 2016.

Interim Report, Graduate Housing Working Group, October 13, 2017.

Cynthia Barnhart, Letter from the Chancellor to the MIT Community, Expanding Graduate Housing, October 16, 2017.

#### THE STACK

Benjamin H. Bratton, *The Stack: On Software and Sovereignty*, (Cambridge: MIT Press, 2015).

#### THE SHARING ECONOMY

David Murillo, When the sharing economy becomes neoliberalism on steroids: Unravelling the controversies, *Technological Forecasting & Social Change*, April 2017.

#### THE TRIPLE DECKER

Kingston Wm. Heath, "Housing the Worker: The Anatomy of the New Bedford, Massachusetts, Three-Decker", *Perspectives in Vernacular Architecture*, 10 (2005) 47-59.

City of Boston, Boston's Triple-Deckers

Richard M. Candee and Greer Hardwick, Early Twentieth-Century Reform Housing by Kilham and Hopkins, *Winterthur Portfolio*, 22, 1 (Spring 1987) 47-80.

Douglass Shand-Tucci, *Built in Boston*, (Amherst: University of Massachusetts Press, 1999), 101-130.

#### WORK

Beatriz Colomina, "The Century of the Bed" in *The Century of the Bed*, (Vienna: Verlag für moderne Kunst, 2014).

Frank Duffy, *Work and the City*, (London: Black Dog Publishing Limited, 2008).

Jack Self, "Time Confetti" in Volume #45, 2015.

#### PROLETARIAT FURNITURE IN THE USSR

Alexander Lavrentiev, "Experimental Furniture Design in the 1920s", *The Journal of Decorative and Propaganda Arts*, Vol. 11, Russian/Soviet Theme Issue 2, Winter, 1989.

"What are you sitting on: (Non) Mass Furniture in the USSR", *Strelka Magazine*, accessed October 4, 2017, <http://strelka.com/en/magazine/2017/06/20/soviet-furniture>

# COLLECTIVE BRAIN WEEKLY

## MIT Student Housing: A Short History of an Urban Institutional Agent

### Institution as Agent

Educational institutions in the Boston area occupy large areas of land and have big impacts on the housing market. In the MIT-adjacent trifecta of Boston-Cambridge-Somerville, students make up 15% of the total population. Imagining that each student would occupy the absolute minimum living space allowed by sanitation code, this population of students would require an apartment with a footprint larger than downtown Boston. In addition, rents are higher in neighborhoods close to educational institutions. There is a \$700 average difference in rental price for the same unit between Boston neighborhoods with high and low numbers of student residents.

### Of the 65,000 renters in Cambridge alone, 4% are MIT graduate students.

This is double the amount of MIT graduate students renting off-campus in Cambridge 20 years ago (2017 Interim Report, 9). Graduate students can outcompete low and moderate income renters on the housing market as "additional renters in a tight housing market, and specifically, as roommate groups who can outprice local families for multiple bedrooms units (Clay Report, 45). From 2000-2013, Cambridge saw losses of low income (30-50% AMFI) and moderate income (50-80% AMFI) households. In this same period, it saw a small increase in very low income (<30% AMFI) households and a drastic jump in middle and high income (>80% AMFI) households (2017 Interim Report, 14). This flux corresponds with the period in increasing graduate student presence on the rental housing market.

**From 2000-2013, asking rents for 1-bedrooms increased by 80%, for 2-bedrooms 65%, and for 3-bedrooms 60% (Clay Report).**

Graduate students clearly contribute to the demand for rental housing in the area. Combined with the declining stock of rental units due to condo conversion, this has produced a highly competitive rental market in Cambridge, which has only a 2.5% vacancy rate, a rate which allows landlords to substantially raise rents.

A 5.5% vacancy rate is the minimum at which rents tend to stabilize, and Cambridge and Boston have been below this rate since 2010 (2017 Interim Report, 10).

On top of this, median asking rents for 1, 2, and 3 BR units have increased on average 4%-6% per year since 2000 (a much higher rate than the increase of student stipends). From 2000-2013, 1BR asking rents increased 80%, 2BRs 65%, and 3BRs 60% (Clay Report). **Graduate students reported spending an average of 52% of their income on housing, sometimes even more.**

The average MIT graduate stipend is about \$33,000 per year. Other schools set graduate stipends, if they even have stipends, at around the same level.

### A Short History of MIT Student Housing

In the early 1930s, MIT President Karl Compton pontificated on the need for graduate

residences: "Graduate students now lack almost completely the social contacts, which the undergraduates enjoy throughout their manifold organized activities. Their cultural development, and hence their social effectiveness, depend on such contacts. The most natural cultural training comes from free social intercourse between men of differing

interests but of equivalent intellectual outlook." (Clay Report, 10) Now, while 75% of the 4,524 undergraduate students live on campus, only 36% of the nearly 6,355 graduate students live on campus. (2017 Interim Report, 21)

There is a shortage of graduate student housing. The actual number of the deficit has been difficult to determine, and there have been a series of

studies and surveys that place the demand for MIT graduate student housing between 100 and 1450 new beds.

The Clay Report, the 2014 findings of the Graduate Student Housing Working Group, was a comprehensive report that projected demand for graduate student housing to be between 500 and 600 new beds, based on the number of off-campus students who would prefer to live on campus.

The 2017 GSC Housing Survey found a demand for 1450-2450 new beds based on the number of off-campus students who would prefer to live on campus depending on what is offered. In 2017, there were 310 people in the on-campus housing lottery who did not receive accommodation. Of those, 100 stayed on the waiting list, hoping for a bed to open up. One way to interpret the diversity of the estimates for housing demand is that they correlate with the rising rents in the area and the rising enrollment of graduate students and post-docs who all compete for the same housing stock. As demand rises, market rates soar, and the slightly lower-than-market rates of campus housing and its moderate rate of increase per year (3.5%) become more attractive. Campus rents range from \$700 to \$1,926 for one person (2017-2018 academic year).

**The most recent report from the new Graduate Student Housing Working Group estimates the need for 1000-1100 new beds. Based on this report, the administration has committed to pledge 950 new beds to the graduate student housing stock.**

This number will include the following: The Kendall Square Initiative includes a new 450-bed graduate student housing building, designed by NADAA. At the same time, the Eastgate graduate student family housing building will be demolished. This addition and subtraction will net

250 new beds.

A new residence hall will be built which will accommodate at least 500 new beds. MIT is currently exploring sites for this and will apply for a discretionary, alteration or building permit no later than the end of 2020.

Convert existing beds to permanent graduate beds (i.e. 70 Amherst) and/or establish new beds on MIT's campus or properties owned by MIT, to create an additional 200 beds. The discretionary, alteration or building permit for this will be applied for before the end of 2020.

These three prongs total 950 beds, which is still less than the estimate of demand put forth by the current working group.

While MIT has been steadily adding to its stock of graduate housing (1470 units of graduate student housing between 1997 and 2017), it has always fallen short of the projected demand.

**Student and community activist groups like GSAN (Graduate Student Apartments Now) have organized to hold MIT responsible for housing its student population as a good neighbor within a larger community which it impacts greatly.**

GSAN has petitioned the Cambridge City Council to require MIT to provide student housing along with its new developments, beginning with its vast, new acquisition, the Volpe site.

#### **MIT as Landlord**

MIT is the biggest landlord in Cambridge, paying the lion's share of property taxes (14%), although all of its academic buildings are non-taxable. In addition to its academic property, MIT owns several properties in Cambridge that are a part of its investment portfolio. Acting almost as an invisible extension of the MIT campus, these properties are leased to companies or used and

managed as residential real estate, all revenues of which contribute to the MIT endowment. The original land acquisition policy of MIT was to lease land out "as is" so that the tenant would cover any improvements and "write down the capital cost of the property so that when it came time to transfer it into the academic category its cost would be low" (O.R. Simha, MIT Faculty Newsletter, 2001). Basically, these land acquisitions were ensuring the possibility of the academic expansion of the institute, while gaining some advantages in the interim.

In the 1990s there was a change in the way MIT handled newly acquired land. Its program "shifted from one whose primary goal was the assembling of land for future academic purposes, to one whose primary goal was the management and development of these properties to maximize the return on investment, until such time as it was needed for academic purposes" (Simha, 14).

In 2004 the MIT Investment Management Company (MITIMCo) was established, and began operating more like a business than as an academic department. Former employees of the MIT treasurers office employees joined this new entity with higher compensation based on market standards for investment managers and also had compensation incentives based on performance. "A key result of this arrangement is that the investment real estate group's employees, whose incomes are based in part on performance, were encouraged to seek maximum return for any land resource under their supervisors" (Simha 14).

A report in 1998 pointed to the **conflict of interest** between the priorities of ensuring academic expansion and seeking lucrative

investments. The report said that "the institute had failed to acquire some important properties that were key to its academic future, because the return on investment was not high enough to meet their benchmark for returns" (Simha, 14).

It seems that MIT's efforts to combat the escalating market rental rates for its students by finding ways to provide more campus housing are in part foiled by its other, more business-minded arm, MITIMCo.

**A bit like a snake eating it's own tail, the priorities of these two ends of the institution seem to be at odds with one another.**

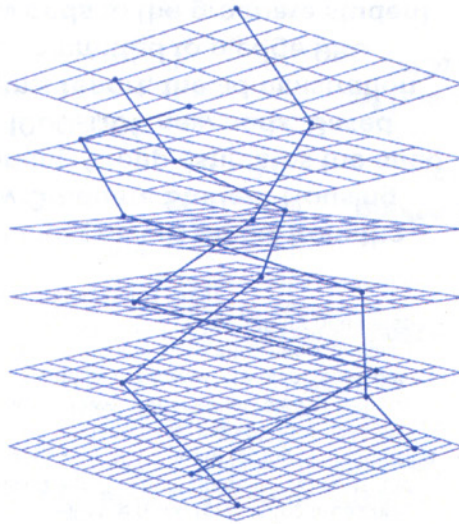
**"Since the 1960s, MIT has acquired a portfolio of nine apartment buildings in Cambridge that provide a total of 355 beds. These are in MIT's investment portfolio and are not part of the graduate housing inventory, but they are occupied 35% by graduate students. They are rented at market rates and don't have campus amenities" (Clay Report).**

Considered in the context that, although MIT has added significant graduate housing stock in the past decades, it has always fallen short of the demand, and even in its current pledge to create 950 new graduate beds, **continues to fall short by 150 units** of housing. Other recommendations made by the many well-conducted studies by MIT groups have also fallen on deaf ears. The Clay report recommended exploring new development options such as "partnerships

with developers, long-term leases on new housing, and incorporation of housing into non-residential buildings on campus and nearby" (Clay Report, 8). MIT has, however, moved beyond the traditional dormitories, shifting to a more "apartment, suite and studio-style living in buildings that look more like urban residential buildings than dormitories" (Clay Report, 8).

## The Stack, On Software and Sovereignty

Benjamin Bratton develops a way of thinking about the territories of information and software



beyond the military division of land, air, and sea. By thinking about computation on a planetary scale, Bratton develops the idea of the stack which is composed of layers which begin from a global scale and start to zoom into to a more local scale. Linkages across these scales can happen in different ways such that a path that connects one person to the cloud could take a completely different route than his/her neighbor

**Benjamin Bratton see platforms as being outside of the binary state and market. It is not just that platforms are beginning to acquire state power but that both the market and the state are acquiring platform qualities.**

and even be denied access along the way. This way of looking at the world, state vs. market now has an added dimension, which is the platform – neither state nor market, the platform takes and informs both with its logic. States have citizens, the market has consumers, and the platform has

users. Platforms centralize and decentralize at once, drawing many actors in a common infrastructure. (Bratton, 46)



**User**  
**Interface**  
**Address**  
**City**  
**Cloud**  
**Earth**

Another important point that Bratton makes, is that the cloud is innately physical due to the extraneous amounts of energy and mineral extraction it requires to take form earth to continue expanding, though we do not perceive its physical presence.

Additionally, platforms expand by accumulating surplus in two ways – the first is through user surplus – the information that a

**Our attitude towards the platform, in our case Airbnb, has to be first to accept that it is not going to go away with regulation. It will stay, but how do we work with it and contain it?**

user has access to is more valuable once involved with the platform, and the second is through platform surplus – where the accumulated data from users is more valuable than the cost of producing

and running the platform. Platform economics tend to monopolize power and wealth into centripetal consolidations as the platform surplus greatly exceeds the user surplus. Platforms are not neutral - this is what makes them useful as geopolitical design tools.



## The Three-Decker, Boston's Speculative Building of the 19th Century

The Three-decker, or triple-decker, is a vernacular type that emerged in Boston in streetcar suburbs of the late 1800s. It is part of the typology of the French apartment, prominent in downtown Boston at the same time, but designed for the lower and middle classes. Therefore, the Triple-Decker and the Apartment Hotel are part of the same type but reflect a social and therefore architectural hierarchy (Shand-Tucci, 121).

The common proportion of the three-decker is 1:2, 25ft to 50ft, and it is a free-standing wood-framed building of the same three (typically, but could be more) identical residences stacked on top of one another, where each family occupied one level. Two types of triple-deckers emerged in Boston (pitched roofs in Roxbury and flat roofs in Dorchester) in different areas and as they spread southward, the types eventually mixed as builders started sharing more knowledge. The flat roof was initially a strategy for building an extra floor because the gabled roof had limited habitable space, but some triple-deckers also had three levels with a gabled roof. The three-decker type was diffused across the city near streetcar lines.

The separate buildings were conceived to (1) allow light and airflow throughout the apartment (2) prevent from the spread of fire and disease, but also (3) for the aesthetic purpose of looking like a single-family large house. The room facing the street was the parlor, and the back room is the kitchen. The porch is the true invention of the triple decker, as it gives it its distinct character.

The triple-decker was the speculative house of the 1890s, designed to maximize rental capabilities. They presented the opportunity for home ownership as one family owned one level

and rented out the other two. The three-decker therefore allowed the middle-class citizens to become homeowners and to generate income from their home. In this sense, the triple-decker was considered as "democratic architecture. Built for the average family to have the benefits of suburban life while living close to the city jobs."

The building of three-deckers was competitive and did not require large amounts of capital so that the builders themselves tended to be drawn from the ranks of local tradesmen. Most of the three-deckers were built by immigrant groups. This set up provided affordable housing to families while keeping the government out. The family that owned the property would maintain it often by its own labor, marking a move away from the paternalistic models of the company town. The triple-deckers were well situated next to mills, sometimes even anticipating the construction of a new mill, so the density of the triple-decker and the mill were linked – axially, economically, politically, and socially such that the triple decker cannot be considered outside of this context [of distributed workplaces such as the mills that scattered Boston].

The end of the triple-decker was marked by a local architect in Boston, Kilham, who advocated for keeping the city more open

to air and to sunlight thus "champion[ing] a Massachusetts zoning statute which permitted local governments to outlaw wooden tenements higher than two and a half stories". The type also suffered as construction costs for three-levels went up.

Today, triple-deckers exceed the

density, setbacks, and height of current zoning regulations. They currently make up 14% of the building stock in Boston (this does not include Cambridge and Somerville) but also 21% of the foreclosed property in the city. While Boston is trying to preserve them as a valuable affordable housing units, owners often do not maintain them and allow them into disrepair – or they are rented out as rooms to students, who drive up the rents and take them off the affordable housing market.

**Three-decker was a speculative building since its conception, and it continues today through Airbnb.**

## Work

As technologies loosen the necessity of working at the same time and in the same place with the same people, the domain of work and non-work is increasingly collapsed. Work no longer constitutes a monolithic period of time but is scattered throughout the day, making leisure an in-between supplement (Self).

As work gains temporal flexibility and spatial mobility, interactions in work pluralize and transcend the conventional physical boundaries of office buildings (Duffy, 48). These convectional office buildings which operate eight out of the 24 hours and five out of the seven days in the week are lightly occupied with well over half of conventional Individual workplaces kept empty most of the time during the day (Duffy, 13).

### **The transcendence of work and the underuse of office buildings challenge the conventional spatial and temporal use of workspace.**

On one hand, Beatriz Colomina questions the nature of the new domestic interior in which night and day, work and play, are no longer differentiated (Colomina, 22).

On the other hand, Frank Duffy proposes "The Networked Office" that makes knowledge based work more enjoyable and compatible with other activities and facilitates more efficient and effective use of existing buildings and cities (Duffy, 55). The dispersal and opening up of work regimes have potential in leading to less intense and more irregular patterns of commuting which have the potential to eliminate time-wasting peaks in public transportation and related congestion (Duffy, 18).

## The Sharing Economy as Neoliberalism on Steroids

The definition of "Sharing Economy" is not clear especially as it relates to the "on-demand economy", "the gig economy", "the DIY economy", or "the crowd based economy".

The European Parliament defines the sharing economy as "The use of digital platforms or portals to reduce

the scale for viable hiring transactions or viable participation in consumer hiring markets [...] thereby reduce the extent to which assets are under-utilized" (Murillo, 2). This shows how the sharing economy optimizes and find gaps in the market where it can act to fill these voids.

**Perhaps the voids or inefficiencies that the Sharing Economy fills in the city are the reason that the city is more accessible to more classes. Wouldn't we achieve a fully segregated city if we complied to platform logic?**

SE is particular type of platform capitalism - "Platform capitalism": a market place for the hire of assets and services that would otherwise be underutilized or not even recognized as such, normally as a discount to those charged by traditional incumbents.

A *platform* is a set of online digital arrangements whose algorithms serve to organize and structure economic and social activity. Platforms are highly unequal and the sharing economy companies have the same strong incentives to eliminate competitors and establish monopolistic markets as any other segment of the economy. This is in contrary to the idea that SE is a grassroots initiative,

**Murillo de the sharin looking at as comme that have do with sh everything exploiting line of the which allo escape st**

and a democratic ideal. (Murillo, 4) ex. Is the purchase of Lyft and Zipcar by Avis an example of "sharing"?

"The SE is an example of a pure profit-based capitalistic economy in its earliest form."

Despite the attractive label and the entrepreneurial successes of companies like Uber or Airbnb, success is based more on their capacity to monetize human effort than on the sharing component." Platform workers move in and out of jobs with no secure role in the market, no occupational identity, and little future perspective. This is a shift away from contract work and towards short-term freelance work. (Murillo, 6)

Around 60% of workers claim to use the SE for less than 50% of their household income. Insufficient pay was identified as the main reason for leaving this type of work (43%) and not finding enough work was the main cause of dissatisfaction (49%). (6)

"If this on-demand economy can allocate resources more efficiently than the state, what is the implicit corollary of this statement? The benefits that markets provide are not necessarily the same as those that government action might achieve. It is against the interest of platforms to co-operate with law enforcement. (5)

**mystifies  
g economy,  
its platforms  
rcial agents  
little to  
aring and  
g to do with  
the blurred  
ir definition  
ws them to  
ate regulation.**

Making concrete the blurry like of platform capitalism will be the task of our time. This is essential in order to ensure that taxes are paid in accordance with the law and most of all that citizen rights are protected by ensuring that user information is not misused. (ie. The case Microsoft being confronted in the Netherlands as they are not outlining which information they are acquiring from users of Windows 10).

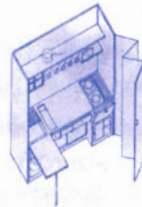
## Proletariat Furniture In the USSR

Given the housing crisis in the 1920s, the new furniture for the proletariat room had to be sturdy, small in size, multipurpose, cheap, hygienic, beautiful, "Soviet" in its general appearance, comprehensible to the amateur carpenter and, at the same time, capable of standardization and mass production according to a competition brief from 1924 (Lavrentiev, 143).

In the late 1920s, research into the processes of everyday living was dominated by ideas of

function and rationalization.

It was felt that if the communal dwelling could be properly designed with a well-developed network of social functions, everyday life could be totally reconstructed and practically all processes extended beyond the confines of the apartment (Lavrentiev, 146).



EI Lissitzky believed that furniture formed part of the organization of the household in addition to architecture. Based on the idea that furniture had to match architecture. He developed two furniture ideas. The first one was a movable partition that would divide the living space into various zones, depending on the time of day and the person's desire. The second one was "Combine Furniture" in which the consumer, the modern worker, could use to make

objects with various functions: a desk, a couch, a rack, a cupboard, a coffee table (Lavrentiev, 146).

## SOURCES

### AFFORDABLE HOUSING

Paul Erling Groth, *Living Downtown*, (Berkeley: University of California Press, 1994).

Reinhold Martin, Jacob Moore, Susan Schindler, *The Art of Inequality: Architecture, Housing, and Real Estate*, (New York: The Temple Hoyne Buell Center for Study of American Architecture, 2015).

"Affordable housing Options", City of Boston, last modified on August 15, 2017, <https://www.boston.gov/affordable-housing-boston#types-of-housing>.

### LODGING HOUSES

Paul Erling Groth, *Living Downtown*, (Berkeley: University of California Press, 1994).

### AIRBNB INTERIOR

"Top 5 photo tips for a stellar listing", Airbnb Blog, last modified April 8, 2015, <https://blog.airbnb.com/top-5-photo-tips-for-a-stellar-listing>.

### PHALANSTERY

Lukasz Stanek, "Collective Luxury: Architecture and Populism in Charles Fourier," *Hunch* 14, 128.

Lars Bang Larsen, "Giraffe and Anti-Giraffe: Charles Fourier's Artistic Thinking," *e-flux journal* #26, June 2011.

Peter Bathelor, "The Origin of the Garden City Concept of Urban Form," *Journal of the Society of Architectural Historians*, Vol. 28, No. 3, October 1969.

### CARTHUSIAN MONASTERY

The Charterhouse

"Living and Working: How to Live Together," *Dogma*

### MIT STUDENT HOUSING

"The Clay Report," Report to the Provost of the Graduate Student Housing Working Group, May 2014.

Architectural Principles for MIT Undergraduate Residences, MIT Division of Student Life, October

14, 2016.

Interim Report, Graduate Housing Working Group, October 13, 2017.

Cynthia Barnhart, Letter from the Chancellor to the MIT Community, Expanding Graduate Housing, October 16, 2017.

### RODCHENKO'S WORKERS' CLUB

Workers' Clubs 1925, MoMA, accessed October 26, 2017, [https://www.moma.org/interactives/exhibitions/1998/rodchenko/texts/workers\\_club.html](https://www.moma.org/interactives/exhibitions/1998/rodchenko/texts/workers_club.html)

"What are you sitting on: (Non) Mass Furniture in the USSR", *Strelka Magazine*, accessed October 4, 2017, <http://strelka.com/en/magazine/2017/06/20/soviet-furniture>

Christina Kiaer, "Rodchenko in Paris", *October*, Vol. 75, Winter, 1996.

Alexander Lavrentiev, "Experimental Furniture Design in the 1920s", *The Journal of Decorative and Propaganda Arts*, Vol. 11, Russian/Soviet Theme Issue 2, Winter, 1989.

# COLLECTIVE BRAIN WEEKLY

## What is affordable housing? How is it administered?

"Affordability is generally determined by whether one's income can pay for essential goods and services without causing undue financial hardship." (Moore & Schindler, 18)

Housing is considered "affordable" when the tenant or homeowner pays no more than 30% of their gross income for housing costs. The affordability of housing is measured on an index, the "Housing Affordability Index". A value of 100 means that a family of median income has the ability to apply for a mortgage loan on a medium priced home. In Cambridge/Boston/Quincy, this value has been fluctuating well above 100 in the past 10 years.

"Only 37% of Americans lived in affordable housing in 2010." "A household earning minimum wage should work 2.5 full-time jobs to afford an average two-bedroom rental" (Moore & Schindler, 22).

"Household is the central social unit of measurement. The US Census defines "household" architecturally: "a household consists of all the people who occupy a housing unit". This is directly linked to a more circumscribed definition of "family". "There are two major categories of households, family and non-family. While a "family" is defined as two or more individuals "related by birth, marriage, or adoption, and residing together, a "non-family household" is defined by a single person living alone or exclusively with non related others." These social constructs are central to our understanding of what is "decent", socially but also what is credit worthy. (Moore & Schindler, 25).

**Cambridge, Boston and Quincy have an Affordability index of 133.75, well above the 100 limit which indicates that a medium income family is able to take out a mortgage on a medium income home. This means that middle class is being priced out.**

In the early 1970's, federal policy regarding public housing shifted from new construction to a voucher system allowing eligible households to rent from private landlords. The aim was not only to work against the concentration of poverty in public housing developments, but to support market-driven initiatives and end the federal

government's direct role in housing development" (Moore & Schindler, 24).

Boston administers affordable housing under three categories: (1) Subsidized Rental Housing - the rent for a subsidized housing unit is linked to the tenant's income, paying a set percentage of income each month. This is ideal for households with no or very low incomes. (2) Income-Restricted - In most cases the rent for income restricted units is linked to the unit - the tenant pays the same set amount each month. This is true even if the

tenant's income changes. Income restricted housing is often calculated using the Area Median Income. (3) Voucher programs - rental vouchers help low-income households rent private market apartments. Vouchers give a set amount to go towards rent. The tenant pays for any costs exceeding the voucher (City of Boston).

### Section 8 Voucher Programs

You can either find your own apartment (paying 30-40% and the government pays the rest) or you can apply for Rental Assistance for Specific Properties (paying 30% of income). There are 5 different kinds of voucher that fit in these two categories.

**In the United States, the term "social housing" has rarely been used, but it is considered to be this market co-dependent system which comprises of 5% of the total housing, and is set to expire after a certain amount of time after which it returns to market rules.**

## Work for Passion in the Phalanstery

Fourier's unitary architecture centered on a social approach that synthesized "man's passions and

**The phalanstery, a container of collective luxury, put forth a design and that was based on work as the centerpiece of life, but with work redefined as full of passion and pleasure.**

desires" rather than "trying to change human nature."

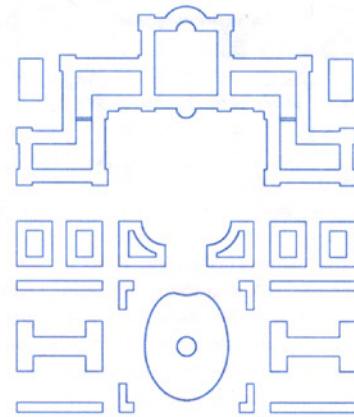
The ideal number of 1,620 residents was "mathematically based to achieve infinite combinations amongst people," but one that was not so vast as to dilute the energy formed by the collective (Larsen). In the phalanstery, Fourier's architecture strove to facilitate "the production of composed, collective, and integral pleasure... —a theory of architecture as the art of association and putting together senses, forms, bodies and ideas" (Stanek). These associations would not necessarily be complementary, but through the friction coming from contrasting ideas, new knowledge would arise. Thus, the phalanstery was to be a meeting place for a diverse group of

**"of all ages and types who would realize the multiplicity of relationships of love and labor".**

people (Stanek)

The phalanstery was organized as a four-story structure punctuated by courtyards and connected through galleries. Each house was required to have empty space surrounding it, an area no smaller than the surface area of the house itself. This rule was to guide the networked growth of the phalanstery system, creating an urban condition in which built and unbuilt had a

pre-determined relationship based on size, and which also made it much more affordable to live communally than to construct one's own house. Most structures would host 20-30 families with shared common services and places for meeting. The bourgeois family unit was questioned, with children raising themselves in groups and contributing to the everyday life of the phalanstery, while adults pursued their passions

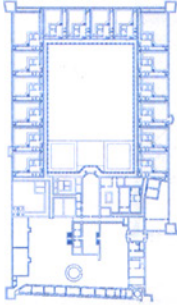


and pairings through work and pleasure.

Fourier's plan for transitioning into the familistere life was based on a buyout system in which former property owners would be compensated with certificates giving them an equal value of property in the new community. Dividends based on this certificate would be paid, in addition to dividends paid related to the productive efforts and diligence of the resident. Thus, "Fourier does not eliminate capitalism, and allows the wealthy to remain wealthy, but also allows for the hard-working laborer to increase material security" (Bathelor). It is a redistribution of the wealth of the community on a more equitable basis.

Fourier's writings and architecture inspired communities and buildings in the centuries following his life, including phalansteries in the US and communes like Togetherness, a 1960s San Francisco commune.

## Collective Solitude of the Carthusian Monastery



Organized as a series of layers arranged around a central cloister, the living quarters of the Carthusian monastery deployed the corridor as a device to modulate levels of privacy and collectivity in its community. Manifesting "with utmost clarity the tension between communal life and the possibility of being

alone," the monastery was a total environment for the lives of its 16-18 inhabitants, and the nested corridor organization provided variation within the whole. Rationalism and a desire for systematization underscored the plan, and "an ensemble of great beauty was created by the repetition of the same small elements" (The Charterhouse, 114):

In some senses a "form of ideal town-planning... that would have remained a Utopia in any other context," the Carthusian monastery was a world unto its own, which, through its internal arrangement, could exist anywhere without having to consider external factors (The Charterhouse, 114). There were two types of monks, the *conversi* and the *donati*. The *conversi* were bound by eternal vows, and the *donati* were not, but they both committed to an isolated life in a single cell (The Charterhouse, 113). The challenge of the architecture was to weld the three distinct areas of life in the monastery into one whole. These areas were (1) the monks' cloister and its dozen cells, (2) the group of community buildings including the refectory, chapterhouse and library, the church and the prior's cell, and (3) the precinct in which the *conversi* and the *donati* saw to the needs of the monastery and received its guests, but which also shielded the monks from the world. This area was the economic interface with the outside world, which allowed the monks a

greater degree of seclusion than the practice of begging, which was adopted by new Orders in the thirteenth century. The inclusion of this sphere into the monastery whole negated the need for the monastery to stipulate any specifications about the locale in which it was located. It was a security that "afforded against the intrusion of the world" and allowed these charterhouses to propagate in a multitude of environment types, from valleys and mountains to villages, outside of towns and even within towns (The Charterhouse, 113).

The monastery was strongly fortified and enclosed by a wall strengthened by seven towers. There was one entrance gate which led to the large domestic court of the monastery with the prior's house in the middle. From here one could access the church, the guesthouse, the stables, and the cells of the *donati*. Also occupying the border between the domestic realm and the cloister of the *conversi* was the kitchen, the refectory, the chapter-house and the small cloister, but these were only accessible from the larger cloister. The small cloister had a visual connection to the church at the height of the rood screen.

Around the large cloister eighteen monks' cells were arranged, forming "a kind of housing estate strung out round the passage or cloister," within view of the cemetery, which stood in front of the church. In this configuration, all were reminded that "the silence of the living echoed the peace of the dead" (The Charterhouse, 114). Each cell was arranged to enhance the solitude of the monks. A secondary corridor along the cloister shielded the monks' house and garden from noise from the cloister, and a small slit that opened into a closet was for passing food to the monk.

**"The layout took account of the monk's need for solitude in every particular. He did not only want to be alone, but also to feel alone"** (

The Charterhouse, 114). The cell consisted of three small living rooms, as well as a latrine, a larder, and a large garden that was three or four times as large as the whole house, and surrounded by a high wall (The Charterhouse, 114).

## Single Room Occupancy, an Affordable Type That Turned Speculative

The Single Room Occupancy is the most inexpensive kind of hotel - they are hotels that hosted people for flexible periods of time, so they did include transients, but on average the hotel residents moved as much as apartment renters (Groth, 11). The general demographic of the single room occupants was 43% under 40, 32% 40-60, 25% elderly people who did not want to live in nursing homes. The difference between boarding houses and lodging houses (rooming houses) was that boarding houses included meals whereas lodging houses did not. Boarding houses also had stricter rules, and surveillance

**In 1980, there were 50 million families in the United States compared to 21 million single people. Though, apart from homeless shelters, the state omits the single person, in favor of policy for the family. In 2016, 60% of households are families, and 40% are singles.**

that could have been considered oppressive at times. Lodging houses dwindled in Boston in the 80s as speculative development acquired their land as real estate prices rose, but also because they were converted to the more lucrative market of the tourist hospitality. In the 19th century and during the growth of the suburbs, lodging houses were the means for the lower classes to live alone and downtown. Though the practice of homeowners of taking boarders in a spare room for extra cash (with or without board) was also quite prominent. Social historians estimate that more than a third of 19th century residents took in boarders or were boarders themselves. Walt Whitman claimed that it is probable that nearer  $\frac{3}{4}$  than  $\frac{2}{3}$  of the all the adult inhabitants of

New York City lived in boarding-houses (3). The boarding house was described as an American institution, a symbol of the uniquely transient

**With the lack of lodging houses, the demand for the single room has been filled instead by bachelor condos, loved by developers, or by Airbnb itself, which provides the platform to distribute the supply.**

nature of American life. (4)

"Single room occupants are omitted in the language of housing legislation, written off in the communities, ignored and rejected in urban development plans and

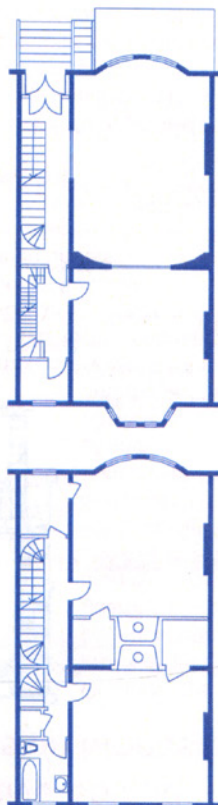
pushed from area to another on the wave of fluctuating real estate markets" (Groth, 14). Federal housing policies have always been more comfortable with the family, with little to no understanding of "non-family persons" that function with some amount of sharing (ie. Bathrooms). But the single room occupants make up a large portion of the American adult population (in 1980, 50 million family households compared to 21 million people living alone).

The typical rooming house had earlier been a boarding house. In 1875, boarding houses made up 40% of commercial housing listings in San Francisco. By 1900, boarding houses dwindled to fewer than 10%, and by 1910, less than 1%. During these declines, boarding house keepers were not quitting but getting out of food provision – shifting their businesses to rooming houses. Public space was at a minimum, there was only a wide area on the second-floor hall near a room that served as an office and part of the manager's unit. (Delta Hotel in San Francisco) (Groth, 97). Individual rooms often had their own sink, but shared bathrooms at a minimum of one bathroom to 8 residents. Despite the individual rooms and lack of public space, life was not isolated, it was directly social because the walls were thin and carried sound. As rooming houses



proliferated the downtown, organizations such as the YMCA brought back the boarding house at a larger scale with more centralized administration – offering more vigilant supervision and a parlor life, which was their main criticism of the boarding house.

**Typical lodging house, found in Boston's South End. The first level includes a parlor that was used as a common space. The owner/manager typically occupies the first level back room, and the basement.**



## The Airbnb Interior, Photographed

Airbnb currently claims to be working with 1,000 photographers. The platform works to locate photographers near a listing whose tenant needs the service of photographer and payment is deducted from the tenant by Airbnb once the photos are approved. For those tenants that wish to photograph their spaces themselves, the Airbnb blog has posted tips on the most effective Airbnb Interiors.

(1) Brighten up the inside – pull open the curtains, focus away from the window and shoot during the daytime when the room is sunny.

(2) Shoot into the corner – Shooting flat onto the wall makes the room seem smaller than in real life, whole corners give a sense of true perspective. Rule of thirds and composition.

(3) Remove clutter from the space to make the room seem more spacious, arrange flowers, fan magazines, dust surfaces, clean up.

(4) Highlight unique amenities, patio, bbq, awesome kitchen, great view, washer-dryer, fireplace, the details that *hotels wouldn't have*. Fill up the home with *life and personality*.

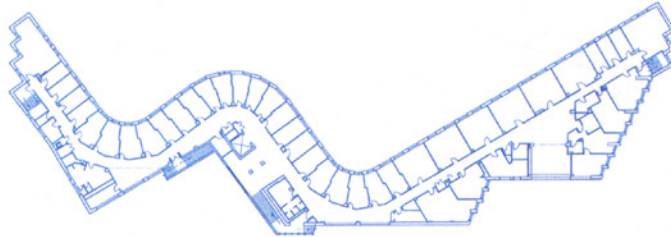
(5) Take photos outside – help set people's expectations of their arrival, shoot during the first hours of sunrise – "golden hour" when light is more diffused and brings out the broadest range of color. Don't forget the neighborhood – take pictures of your locale, a great restaurant, or gorgeous scene, local attraction. More is more, the more pictures, the more excited people will get about your listing.

**Perhaps, this way of framing interiors, as well as content can be studied for our proposed Airbnb interiors. We could highlight details that signal the overlap of home and work.**

## MIT Student Housing Now

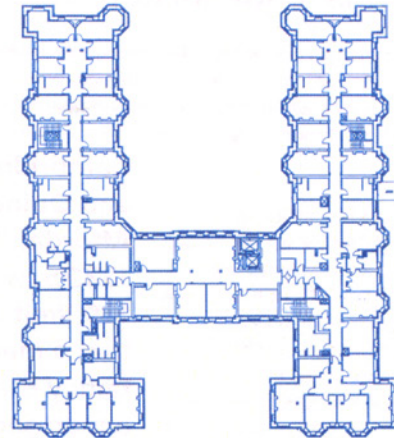
New research into campus housing discourages high rises, which reportedly increased feelings of isolation and negatively influenced patterns of interaction sense of community. The study encourages creating 350-student buildings in a "U" or "double tower" configuration, made up of clusters of 30 students in single and double rooms at a distribution of 40% singles and 60% doubles, connected to a nearby common space (Architectural Principles for MIT Undergraduate Residences, 3).

**On average, 85% of the square feet of the graduate residence hall is for bedrooms or private students spaces. House-master and mechanical space take up 25%, and common spaces and amenities the other 25% (Clay Report).**



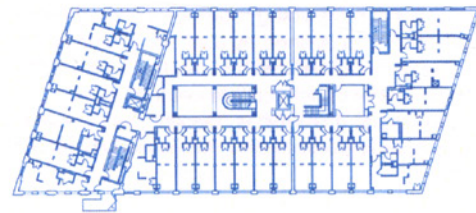
For graduate students, common space and programming are less important, with "price, unit type, short commute times, air conditioning, and access to grocery and restaurant options more than they value (and are willing to pay for) large bedrooms and building amenities such as community space, fitness centers, and parking" (Chancellor's Letter, 2017).

The MIT Campus Housing program currently operates at a small loss with revenues of \$29



million per year and expenses of \$30 million per year. This does not include the impending cost of deferred maintenance for much of the housing stock (2017 Interim Report, 36).

**The total cost (operating and opportunity) of amenities for the current housing stock is ~\$12 million per year—this includes utilities, internet and cable TV, fitness facilities, residential life programs, front desk and security, and opportunity costs of spaces to support the community**



## Rodchenko's Workers' Club

Rodchenko designed a Workers' Club as one of the Soviet exhibits for the International Exhibition of Decorative Art held in Paris in 1925. The Soviet exhibits were intended to project an image of the Soviet Union as civilized and progressive (MoMA).

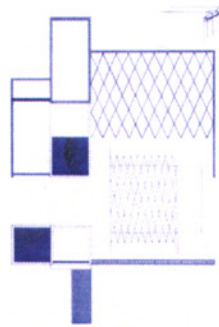
The geometric design of the Workers' Club by Rodchenko evoked a culture of hygiene, rationality and economy. It demonstrated the interior organization of an educational-informative club for the working people of the USSR (MoMA).

**It embodied the socialists' vision not merely by granting leisure to workers but by reconceiving leisure as active and collective rather than passive and solitary (MoMA).**

The design of the Workers' Club consisted of several components which served multiple functions. Most of them aimed at educating the worker through the most up-to-date information technologies (MoMA).

- The table consisted of the side flaps that can be raised or lowered, depending on the activity of the club member (Kiaer, 5-6).

- The chess ensemble consisted of two chairs separated by a nifty revolving chessboard on hinges which give the players access to their seats (Kiaer, 5-6).



- The orator stand expanded and collapsed elements in the fold-out screen for projecting slides, contractible bench and speaker's platform (Kiaer, 5-6).

- The wall newspaper incorporated a speaker's tribune, a place for the president or editor

of a newspaper, a sliding partition for showing illustrative material, and a moving film screen for slides and slogans. The whole thing was collapsible and could be transported from place to place (Lavrentiev, 152).

These furniture pieces were made with two types of details: telescopically extending parts to alter their lengthwise dimensions, and the use of a ball-and-socket joint that made it possible in

some cases to fold back surfaces and in others to slide apart openwork grids (Lavrentiev, 152).

By using modular furnishings, the design of the Workers' Clubs

was possible to **modify objects and expand different portions of the space.**

Particularly important was the way information was presented, using mobile vitrines for showing documents and photographs, a mobile vitrine for posters and slogans, and a wall newspaper with moving strips for "automatic imposition" (Lavrentiev, 151).

## SOURCES

### CARE AND MAINTENANCE

Mierle Laderman Ukeles, Manifesto for Maintenance Art 1969!, Proposal for an exhibition "CARE"

Jill Steinhauer, "How Mierle Laderman Ukeles Turned Maintenance Work into Art," *Hyperallergic* (February 10, 2017).

### COLLECTIVE

Marcus Steinweg, "What is a Collective?" in *New Forms of Collective Housing in Europe*, (Basel: Birkhäuser, 2009).

Niklas Maak, "Post-Familial Communes in Germany", *Harvard Design Magazine* No.41 - Family Planning, 2015.

Jack Self, *Quantum Space - Privatisation and the End of Privacy*, 2015.

Bernd Upmeyer, "Domesticity: Interview with Herman Hertzberger" in *Monu #24: Domestic Urbanism*, Spring, 2016.

### CONTESTED SPACES

Ana Maria Leon, Tessa Paneth-Pollak, Martina Tanga, Olga Touloumi, "Counterplanning from the Classroom: Feminist Art and Architecture Collaborative," *Journal of the Society of Architectural Historians* 76, no. 3 (September 2017), 277-280.

### WORK ALONE

Jack Self, "Work on, work on, but you'll always work alone", *The Architectural Review*, accessed November 3, 2017, <https://www.architectural-review.com/rethink/work-on-work-on-but-youll-always-work-alone/10002024.article>

### HEINRICH TESSENOW

Lecture by Atelier Kempe Thill, accessed November 3rd 2017, [https://www.youtube.com/watch?v=obxVOJGh\\_](https://www.youtube.com/watch?v=obxVOJGh_)

"Heinrich Tessenow, Study of a House over a Lake, 1903", *Arquitectura en Dibujos Exemplares*, Francisco Martínez Mindeguía, accessed

November 3rd, 2017, <http://etsavega.net/dibex/Tessenow-lago-e.htm>.

# COLLECTIVE BRAIN WEEKLY

## Care and Maintenance

In 1969 the artist Mierle Laderman Ukeles wrote a manifesto called "Manifesto for Maintenance Art 1969!" In the form of a proposal for an exhibition entitled "CARE," the document outlined the division between what she saw as "two basic systems" that governed the social (and thus political and economic) sphere. Differently gendered, moralized, compensated and socially valued, Development and Maintenance each found their place attached to certain social roles and types of spaces. Suggesting a link between these systems and what she described as two life instincts, one for death and one for life, Ukeles detailed the implied values within each instinct

**(death: "separation; individuality; Avant-Garde par excellence; to follow one's own path to death—do your own thing; dynamic change;" life: unification; the eternal return; the perpetuation and MAINTENANCE of the species; survival systems and operations; equilibrium").**

As an artist and a mother, Ukeles began to see her life as divided into two, one which was devoted to art work, and one devoted to maintenance, or care, work. In her proposal she

declares that in combining the two, "Everything I say is Art is Art" and "Everything I do is Art is Art." Divided into three parts, Personal, General, and Earth Maintenance, Ukeles planned an exhibition (which was never shown) that thoroughly addressed the scales of maintenance required to keep the world running, and in doing so revealed the prejudices and injustices in how these practices were valued in society. Following are excerpts from her Manifesto.



“  
**B. Two basic systems: Development and Maintenance. The sourball of every revolution: after the revolution, who's going to pick up the garbage on Monday morning?**

**DEVELOPMENT**  
 Pure individual creation/ the new; change; progress; advance; excitement; flight or fleeing. *[[a partial feedback system with*

*major room for change]]*

### MAINTENANCE

Keep the dust off the pure individual creation; preserve the new; sustain the change; protect progress; defend and prolong the advance; renew the excitement; repeat the flight; show your work—show it again, keep the contemporaryartmuseum groovy, keep the home

fires burning. *[[a direct feedback system with little room for alteration]]*

### **C. Maintenance is a drag; it takes all the fucking time (lit.)**

The mind boggles and chafes at the boredom. The culture confers lousy status on maintenance jobs = minimum wages, housewives = no pay. A. Part One: Personal

**I am an artist. I am a woman. I am a wife. I am a mother. (Random order).**

**I do a hell of a lot of washing, cleaning, cooking, renewing, supporting, preserving, etc. Also, (up to now separately I “do” Art.**

Now, I will simply do these maintenance everyday things, and flush them up to consciousness, exhibit them, as Art.

I will live in the museum and I customarily do at home with my husband and my baby, for the duration of the exhibition.

(Right? or if you don't want me around at night I would come in every day) and do all these things as public Art activities: I will sweep and wax the floors, dust everything, wash the walls (i.e. “floor paintings, dust works, soap-sculpture, wall-paintings”) cook, invite people to eat, make agglomerations and dispositions of all functional refuse.

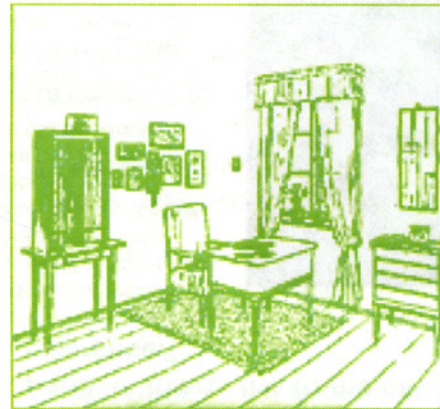
**The exhibition area might look “empty” of art, but it will be maintained in full public view.**

”

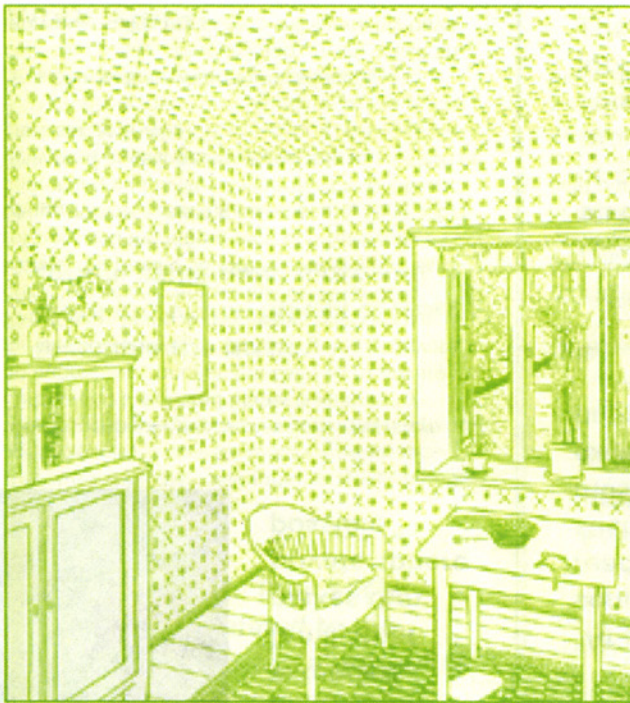


## **The Interiors of Heinrich Tessenow**

Tessenow was a German architect born in 1876, belonging to the same generation as Adolf Loos. His 19th century urban context was one of a rapidly growing proletariat due to the industrial revolution. This influx of workers to cities created typologies of extremely market driven architecture, formed by an urban-plan that maximized density while staying within precise fire-safety constraints. The housing type that was widely produced in Berlin at the time, the “mitskaserne”, or rental barracks, was a courtyard typology based on fire vehicles' turning circles. The substandard living conditions of the working class in Berlin, the largest tenement city in the world, was the context for which Tessenow sought to design an alternative.



Tessenow's proposals for worker's housing and his ideas for alternatives were rooted in the rural German cottage houses. With Schinkel's work and Goethe's garden house as precedents, he sought ways of connecting architecture with landscape, proposing working class housing in more rural environments. His work had a clean aesthetic, purged of ornament and decoration and focused on materiality. He was particularly interested in construction methods, actually



that the density of lines, and therefore detail of the material itself, acts as the device that gives focal attention. He even rendered trees with such specificity as to convey the actual type of tree he intended. His attention to the interior and on the particularities of everyday life was emphasized by his method of representation. He took a reduced interior and give it qualities. But most importantly, he gave attention to what gives affordable housing these qualities in the first place, which for him was also the crucial relationship to the outside, rendering the landscape beyond the windows in high detail.

**All elements are rendered important by Tessenow's drawing technique. He emphasizes domesticity, often beginning his projects through spatial vignettes.**

patenting his own process of erecting walls early in his career. This sensibility to the construction process is evident in the way that he rendered his projects.

It is said that Tessenow often started his projects from the interior. He made very precise vignettes of interior spaces in thin pen lines. With consistent line weights, he rendered important elements that conveyed the domesticity of the workers. His drawings convey coziness and familiarity, framing a habitable space. The materiality of his projects became the ornament as well as the device which gives depth in his interiors renderings. For example, a wallpaper is rendered as a hatch of geometrical crosses which gives spatiality to the room by defining the ceiling height. This method often erased hard lines. The wallpaper does not make the corners of the room, they are instead implied through the perspective of the hatch. His use of a consistent line weight across the same drawing requires



## Collective

Marcus Steinweg:

"The collective, which is a community existing through the absence of something in common, rejects the validity of this idea of grouping together, because the collective is to all intents and purposes a group whose members are too different to be able to submit to any principle of unity or any common ideal."

**"Where a collective takes shape or is beginning to do so, there is already a minimum of shared order and a minimum of coherence about its shared hopes and projects."**

"But there is also the common betrayal of this non-existence, which is what finally constitutes the collective. If there are no criteria for liaison which regulate the dynamic and the existence of the collective, then there is no collective, or rather there is only the non-existence or the pure possibility of a matrix latent within it."

Jack Self:

"The concept of the individual, which once seemed to offer the possibility of liberty, self-realisation and manifestation of the will, is now the mechanism of our subjugation and control. But perhaps it always was — certainly the dreams we projected onto it were never more than fantasies. Accordingly, all the things we associate with individual subjectivity, most importantly 'identity', are illusions."

**"Every category used to define the limits of the self is an invention."**

**"To transcend the injustices of neoliberalism, we must insist not on our individuality, but on our shared human condition. This form of solidarity is founded on the premise of our collective inseparability, not the class unification of atomic parts; it inverts the frame of reference."**

"Under late capitalism, and in the digital era, there are no meaningfully distinct identities. There are only economic metrics of the self. To even consider a collective position similar to that outlined above, we must violently reject individual definition. Paradoxically, self-obsession is the single largest barrier to any meaningful autonomy."



Niklas Maak:

"Skepticism arises especially from the concern that no one will take care of or feel responsible for spaces divided in a new way."

**"Changes in the way people work will allow for a more successful communal existence than in the past. If work can be done at home, then someone is always there"**



**– to take care of and use the space.”**

“Children can spend time with other parents and children and eat with other occupants in the option spaces, simplifying childcare through greater options. Nuclear families, or what is left of them, can dissolve into the extended family space. For single parents and their children, this is clearly a helpful arrangement – but one that benefits nuclear families as well.”

“If 30 people are gathered together for a family celebration, then one person’s bad mood – or absence – matters much less to the collective.”



**“It is precisely the presence of so many people in an extended family that makes the private sphere possible.”**

“The concept of privacy prevalent in Western Europe and the United States is shaped by an aggressive concept: the Latin word *privare* means “to deprive” or “to rob.” Being in private thus means being in a space wrested from a collective whole, which must be defended. Hence, the private sphere is conceived of as robbery and the emergence of property as an act of aggression against the community: one robs something and makes it inaccessible to others. Only then does it become possible to be *apud se*, *chez soi*, at home.”

“In a conception where there is initially a collective – say, common land – from which an individual splits, the private will invariably have

a negative connotation: intrinsic to the act of privatization is exclusion. Another conception would be that the individual came first and only later joined forces with other individuals.”

**“The concept of *privatum* itself predetermines the relationship between individual and community.”**

Herman Hertzberger:

“The principle idea for the *Centraal Beheer* building is that everything starts with a space with a table. This creates a space of around 16 square meters, which was a sort of theoretical building unit or building stone. It was the base for where you are supposed to feel accommodated and domestic. And for people to come together it is important to have this horizontal element, which you need to sit around, to make contact and to avoid people walking away too quickly.

**“At a table you can have something to drink; you can read your papers and other such things. Of course, the most terrible fights and exciting love affairs can happen at a table as well.”**

Collective Home Office:

“Is it a pooling of resources to accomplish something unattainable by just one? Is it an association of members, united by shared beliefs or faiths? Is it a carpool group of parents? Is it a café populated by millennials on their Macbooks? Is it a random crowd on the street corner waiting for the light to change? Does it have an ideal size? Does it fuel individuality? Does it make life more meaningful?”

## Contested Spaces: Art, Architecture and Politics

A university class created by two female art historians and two female architecture historians, this experiment situated the classroom as the site of structural questioning of gender and education in art and architecture. The professors created a syllabus collaboratively and then taught the class at the same time at three different institutions, with student communication across all three institutions within a web forum.

**They wanted to “test the boundaries and hierarchies of current teaching methods” as well as foreground “constructions of class, race, and gender at the level of content” (277).**

They intended for their syllabus to privilege different kinds of actors and objects than those supported by the conventional frameworks.

**“Thus, instead of engaging with monuments and masterpieces, reinforcing the centrality of white male authors, we decided to rethink our categories and replaced these iconic “buildings” (masterpieces or monuments) with “space,” clearing room, as it were, for vernaculars, interiors, and social spaces (277).**

Contested Spaces: Art, Architecture, and Politics: “traces the construction of modernity around key spaces, objects, and sites of struggle: the plantation, the museum, the school, the prison, the kitchen, the closet, and the urban slum” (277).

**The resistance to individual authorship that drives our working process also informs our consideration of history--specifically, of the individualistic and proprietary heuristics that shape both art and architecture” (278).**

They imagined their syllabus as a “positive manifesto for a more collective approach to both teaching and scholarship” (277).

**Joining forces created productive frictions, a resistance to individual authorship and the acknowledgment of many voices of history.**

Referencing Ukeles, the syllabus makes visible the “power structures and struggles that produce architectural space and construct aesthetic experience” (278).

**“Moreover, we have come to realize some of the enormous benefits of the shared production of knowledge, such as the amplification of our knowledge base and the compensation for any singular deficiency. Resisting proprietary models of monadic scholarship and individualized research, we do our work collaboratively” (278).**

## Work Alone

The presence of work in our personal lives convinces us that our work is indeed intensely personal and highly personalized. The office is everywhere and work is all around us.

What sets monastic life apart from that of the

**“At the same time, more and more our actual places of work resemble the home.”**

artist or creative is a certain relationship between solitude and collectivity. Monks labored alone, but when they did come together it was primarily to celebrate Mass.

**The strength of their society was directly related to the possibility of being alone, what they called a “community of individuals”.**

As a typology, the café is an environment where people choose to come and thus are free to go. There is no suggestion that people in a café form a community. It is the antithesis of monastic work: we are together, but alone; monks were together, though apart.

**The absence of strong interpersonal bonds in contemporary workplaces, and their aversion to the creation of community, produces an easily expendable and replaceable workforce.**

If we consider the statistics on how we live today, we seem to be returning to a monastic form of life: little or no sex, no children, one-room apartment in a closed complex, or little cells in a shared house.

**“The architecture of the monastery is today reflected in every dwelling.”**

The collapse of work and leisure means our sense of self and identity is defined almost exclusively by what we do, and what others say about what we do.

**We may have replaced God with Mammon, but this “always-on”, “stand-by”, “just-in-time” lifestyle is monastic in every sense: we are our jobs, just like the monks.**



## SOURCES

### **COMMUNAL PLEASURE**

Chelsea Wald, The Secret History of Ancient Toilets, accessed November 7, 2017, <https://www.nature.com/news/the-secret-history-of-ancient-toilets-1.19960>

Ancient Peoples, Roman Bathroom Habits, accessed November 7, 2017, <https://ancientpeoples.tumblr.com/post/51068743901/roman-bathroom-habits-the-romans-were-not-shy>

### **ALI WONG ON THE BENEFITS OF HOME TOILET USE**

Ali Wong, "Baby Cobra," Netflix Standup Special, Netflix Studios, 2016.

### **ZIZEK'S TOILET TRINITY**

"Zizek on Toilets", Slavoj Zizek during an architecture congress in Pamplona, Spain, <https://www.youtube.com/watch?v=rzXPYCY7jbs>

### **THE UP/DOWN DEBATE**

Toilet Seat Up Or Down? - Brit Lab, <https://www.youtube.com/watch?v=T0Cgt3sWrQ8>

Jay Pil Choi, "Up or Down? A Male Economist's Manifesto on the Toilet Seat Etiquette", (Michigan State University Department of Economics, November 2002).

Gerba, C.P., Wallis, C., & Melnick, J.L., "Microbiological Hazards of Household Toilets: Droplet Production and the Fate of Residual Organisms," *Appl Microbiol*, 1975.

### **A LOO WITH A VIEW**

"A New Way to View London: From a Toilet", NBC News, last modified May 3, 2004, [http://www.nbcnews.com/id/4326340/ns/world\\_news-weird\\_news/t/new-way-view-london-toilet/#.Wg974LaZPyg](http://www.nbcnews.com/id/4326340/ns/world_news-weird_news/t/new-way-view-london-toilet/#.Wg974LaZPyg).

VOLUME

FRIDAY, November 10, 2017

E, MA

# COLLECTIVE BRAIN WEEKLY

TOTO



## Toilet Politics

The introduction of "The Toilet", the yellow book from OMA's Elements compilation, begins with the statement: "The toilet is the fundamental zone of interaction – on the most intimate level – between humans and architecture." The power of this statement comes from the fact that this architectural intimacy which is found in the toilet has certainly been felt by all of us toilet users but perhaps has yet to be examined.

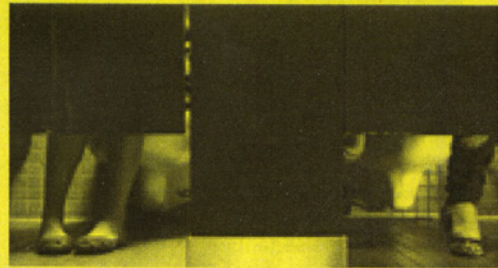
The toilet is often dismissed. As architects, we often consult Neufert, or the equivalent, to get minimum sizes. We proliferate gendered toilet cubicles in tower cores, we stack them for plumbing, but how often do we think about what it is to share this space of intimacy, this imprinting of private parts on surfaces shared with strangers? The toilet's status vacillates between an intimate and a public one, as one of the only places in the public realm where we know that no one is watching us. It offers a break from the collective, but by being shared by so many, is a site where collective actions take place.

**Do you squat or do you sit? Do you wipe the seat off after you accidentally piss on it, or do you leave it to the next person?**

The conflict between those who sit and those who stand, that arises in the domestic environment, arises even to gendered toilets as people mistreat the shared toilet seat. A collectivist thought would claim that if we all sat down, the seat would always be clean. In the public realm, the toilet collective, which is an invisible one, at once intimate and estranged, is a site where etiquette will always be illusive. On the other hand, inside the home, leaving the seat up in the toilet is highly contentious between identifiable users. The toilet is a site where the party lines of feminism and patriarchy become muddled, triggering questions of hygiene, aesthetics and gender politics. This issue of the Collective Brain Weekly sees the toilet as a crucial aspect of collective life and seeks to expose some of its embedded politics. ■

## Ali Wong on The Benefits of Home Toilet Use

*The following is a transcribed excerpt from Ali Wong's Netflix stand-up special "Baby Cobra:"*



I write for "Fresh Off The Boat" on ABC, which is a great show, I love it a lot, I love my coworkers, it's a great writing staff, and in terms of day jobs it's probably one of the best you could ask for.

**But I still gotta work at an office every day. Which means I gotta shit in an office every day.**

Housewives—they don't gotta shit in an office. Housewives get to shit in their house, skin to seat. They don't gotta use that horrible toilet paper cover, they don't gotta [mimes placing tissue cover gently on toilet seat] ten times a day every day [mimes again] like you're about to eat a sad ass meal. They don't gotta do that. They don't gotta use that one-ply toilet paper, that office toilet paper, that they purposely make difficult to pull out [mimes trying to pull toilet paper from dispenser]—they trying to ration me with their communist toilet paper, that's not even effective it basically just dehydrates your asshole, its basically like wiping your butt with the desert. I literally spat on my toilet paper two

days ago to try to make a MacGyver baby wipe to moisten it but then it backfired because my fingers broke through and digitally stimulated more doodoo to come out and then I had to start all over again.

**And you can never finish wiping at work because you always feel rushed cuz you're paranoid that your coworker is gonna recognize your shoes underneath the stall and you're like "oh no, Courtney's listening, she's waiting, she's timing me"**

and then you hurry hurry hurry and then you never finish wiping and then your buttohole feels caked in doodoo all day long and then if you scratch yourself your underwear at the end of the day looks like its been run over by the goonies.

Housewives, they don't gotta muffle their shit too. They don't gotta worry about the velocity with which their doodoo comes out. They don't gotta try to, you know, squeeze the butt cheeks to make sure that the doodoo comes out at a slow and steady pace so that no unpredictable noise suddenly escapes and brings you deep, deep shame. Housewives are free to just blow

ass into the toilet and let it echo and reverberate to the ends of their hallways while watching as much Netflix on their ipad as they want. They don't gotta take these boring, repressed shits. They can listen to podcasts, planet money, they can do whatever they want.

You know, it's very distracting for me when I hear my coworkers blow ass into the toilet. I lose respect for them. Nothing they say to me anymore holds any sort of credence. I heard one of my coworkers blow ass into the toilet the other day. This bitch has the nerve to come up to me and say "You need to get to work on time." I was like, "You need to eat bananas." I saw those green ballet flats, I know that shit was you. Don't try to tell me to get my shit together when I heard you not have your shit together. ■



## The Up/Down Debate

Should men leave the toilet seat down when sharing a toilet with women? This question is a highly contested one whose answer ranges from gender issues to hygienic ones. A BBC Brit Lab reportage comically calls it "one of the greatest sources of conflict in the world today," stating that the issue "has seen some of the most bitter fighting in the gender wars today due to some basic anatomic differences." A professor of economics at Michigan State University even wrote a scientific paper outlining issues of efficiency that may help resolve the conflict. But, can this question even be dumbed down to efficiency? Most people who feel strongly about the question apply biased value judgments which cannot simply be rationally addressed.

What are the popular arguments for leaving the seat up or down?

1. The first argument is a hygienic one, that states that flushing needs to be done with the toilet cover down to prevent bacterial aerosols from being released into the air in the bathroom. Stating 1975 scientific study stating that "invisible clouds of bacteria and virus mist traveled up to 8 feet up and out setting on surfaces throughout the bathroom [...] staying in the air for about 2 hours after each flush". This research is contested however, with other studies which claim that no such bacteria are found resting on the surfaces of the toilet.

2. The second argument is that both men and women can pee sitting down, but only men can pee standing up, therefore, the default position of

the toilet seat is in the down position leaving the burden of lowering the seat in the hands of men.

3. Some people use the argument of good manners or of gentleman-ism which can be contested, but accidentally slipping into the toilet bowl is claimed on many accounts to be an issue for women.

- Jay Pil Choi's essay "Up or Down? A Male

Economist's Manifesto on the Toilet Seat Etiquette" claims that the toilet seat should be left as it was last used, claiming the "down rule" as inefficient unless there is a large asymmetry in the inconvenience costs of shifting position of the toilet seat across genders. Using big math Choi shows us that the "selfish rule" spreads the inconvenience evenly across all users of the bathroom.

The politics of the toilet seat involve a collective that so far, in public toilets, has been divided among genders, but with the rise of non-gendered toilets, basic collective etiquette will have to be revisited. New etiquettes will need to be normalized and seeing the

bathroom as a site where collectivity is enacted, and not simply as a public space, would make room for resolving some of the issues that have already shown conflict in households.



**"One of the greatest sources of conflict in the world today," the toilet seat debate "has seen some of the most bitter fighting in gender wars due to some basic anatomical differences." BBC Brit Lab**



## Zizek's Toilet Trinity

The basic message of architecture is for me the exemplary case of how ideology is at work precisely where you don't think you will find it. In buildings, at the larger scale, but even house appliances where you think you have pure functional objects, even the most ordinary everyday objects, can be objects not only to use them but to think with them...

The paradox of toilets always interested me. Did you notice that when you travel, how different they are? I will mention only the three big civilizations. In France, the whole of the toilet bowl is in the back so when you excrement they quickly disappear in the toilet. The German toilet... the old type, it is opposite, the hole is in the front so that when you produce excrement, they are displayed in the back, they don't disappear in water. This is the German ritual, you should every morning sniff and expect your shits for traces of illness... Then in the Anglo-Saxon world, the United States, you get the toilet bowl that is full of water so that shit flows before it disappears.

I asked many of my friends, architects and interior designers, why this difference? They gave me two books on the structure of toilets. Nowhere did I get an explanation... and then a wild

speculation came to my mind. From the late 18th century, we have in Europe the idea of European trinity, it is a racist idea, but the three crucial

European nations are France, Germany, and England. Each of them standing for a certain level of certain social life and for a certain politics. France, politics is the privileged domain and political left revolution. England, middle of the road liberal moderate and economy. Germany, metaphysics and poetry, conservative.

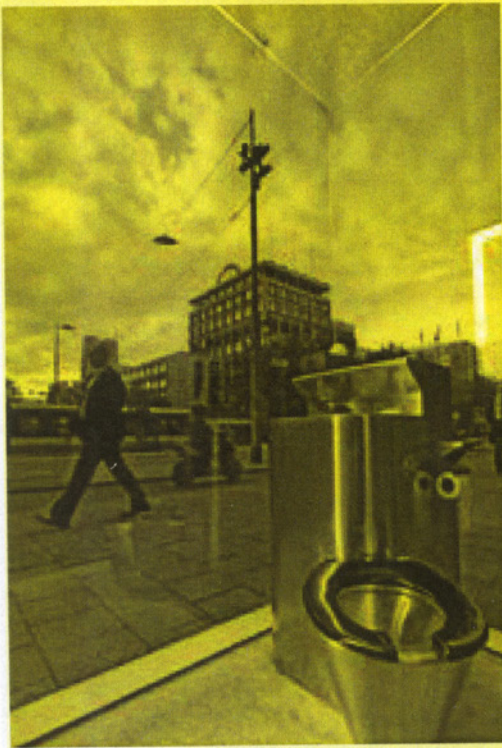
**Even the most ordinary objects, such as the toilet, have unexplainable differences in their design from country to country, that Zizek attributes to political and ideological differences.**

And my god, it struck me, isn't this the key? France, revolutionary approach, the hole for the shit in the back, it should be quickly liquidated, like a kind of guillotine. Anglo-Saxon, pragmatic, let it float, be rational. German, metaphysics and poetry you observe it you think. This may be madness, but you see what is my point? Something like this had to be at work to account for even such a common thing as the structure of toilets. ■



## “A Loo With a View”

Monica Bonvicini's work "Don't Miss a Sec" (2004) was a public toilet installed on the sidewalk in front of the Tate Modern in London. The curiosity of this toilet is its enclosure which is made of a one-way mirror. From the outside, it appears as a reflective prism, while from the inside, the surroundings are seamlessly observable as if through glass.



Addressing ideas about intimacy and voyeurism, the work emphasizes the toilet as a space that is at once, the most intimate and the most collective. The artist explains how the idea for the work was rooted in the culture of art openings where people put off going to the toilet with the fear of missing a key comment or gossip. In this context, the idea that the toilet is a break from collective life is coupled with its intimate nature.

Another layer to the work is Bonvicini's use of a prison toilet, a choice which references the history of the site which once housed a penitentiary designed by Jeremy Bentham. The panoptic nature of the penitentiary and the idea that one may not be disobedient in the fear of being surveilled is even more interesting within the context of the toilet cubicle that often mistreated/abused when out of sight to the public. Here one may feel observed while using the toilet and subsequently may change public behavior. ■

## Communal Pleasure

**“I had a lovely conversation with a few people while sitting on the toilet the other day.”**

Around 1st Century BC, public latrines became a major feature of Roman infrastructure. In a city with over one million inhabitants, ninety-five percent of the inhabitants did not have access to a private bathroom. Only wealthy Romans could afford the luxury of having a private bathroom by tapping directly into the public aqueducts. For the majority of Romans lacking their own bathroom, public latrines were the option aside from keeping urinal pots at home.

Public latrines were rooms lined with stone or wooden bench seats every few feet. The toilet holes were round on top of the bench with a narrow slit extending forward and down over the edge in a keyhole shape.

**Through these slits, it was believed that people cleaned themselves with a sponge-tipped stick shared by everybody.**

These sponge sticks were located in the small gutter in front of the seats. When people finished

cleaning with the sponge stick, they would scrape the sponge against the side of the stone hole that they were seated on and let it fall under the seats.

Constant running water flushed away the waste into a sewage system that ran under the streets of Rome. This system was made possible by several aqueducts that flowed into the city, keeping it supplied with fresh flowing water.

In some ancient bathrooms, there were space for one-hundred people at a time. The bathrooms were open to all genders and all ages. People were discussing business or gossiping to one

another while going to the bathroom. However, the public bathrooms were not only visited by the common citizen, the wealthy also frequented them. Since every location in ancient Rome where large crowds gathered was an opportunity for wealthy

Romans to pander to their constituents, the public bathrooms were a great location for mingling with each other.

**The public latrines were places for local gossiping, chatting and doing one's business. There were no barriers between the toilet seats, but people maintained sense of privacy with their long garments.**



## SOURCES

### **DIALECTIC CITY**

O.M. Ungers, "The Dialectical City", (New York, Skira Publishing House: 1997).

### **THE INTERMEDIATE SIZE**

Like Bijlma and Jochem Groenland, The Intermediate Size: A Handbook for Collective Dwellings, (Amsterdam: SUN, 2006).

### **A VERTICAL THEORY OF URBAN DESIGN**

Ken Yeang, Reinventing The Skyscraper: A Vertical Theory of Urban Design, (Great Britain: Wiley-Academy, 2002).

### **DOMESTIC URBANISM**

Bernd Upmeyer, "Domesticity: Interview with Herman Hertzberger" in *Monu #24: Domestic Urbanism*, Spring, 2016.

### **LIVING TOGETHER!**

Mathias Muller, Daniel Niggli, Ilka Ruby, Andreas Ruby, "Together! On the Renaissance of the Collective in Contemporary Urban Architecture" Vitra Design Museum and Ruby Press, Weil am Rhein (2017).

### **CITY AS HOTEL**

Anna Puigjaner, "The City as a Hotel," Together! Exhibition Catalogue, Vitra Design Museum and Ruby Press, Weil am Rhein (2017).

# COLLECTIVE BRAIN WEEKLY

## Dialectic City

Unlike the village, the small city, or the ideal city, today's big city is no longer uniform. It is a heterogeneous amalgam of different elements, systems and functions. The big city reaches out into the regions and is a fragmentary and open structure that can no longer be integrated within a coherent system because of the varied, self-contradictory requirements imposed on it.

The modern city is dialectical, it is both thesis and antithesis. It reflects the contradictions of society and also its technical systems. The idea of the city as a comprehensive unit has become increasingly evanescent in the course of history and what has remained is a confused, almost uncontrollable apparatus that tends towards increasingly large excrescences, perversions and dissolution. The individual nameable places play an important part in this trend towards the dissolution of the city center. Rather than being a unified concept, the city is now a structure made up of complementary places\*. An appropriate method of identifying the character of these disparate places, defining it and developing its specific features, either by adding the functions that are lacking, or by perfecting existing ones.

The city made up of complementary places consists of the largest possible variety of different parts, in each of which a special urban aspect is developed with a view to the whole. In a sense it is a system of the "city within the city". Every part has its own special features, without however being complete and self contained. Their value derives from the place itself and not from any

idealized concept of it. That is why in principle any form of building, high-rise or low-level, large-scale or solitary, is possible. The structural forms are not exclusive but inclusive, varied and as heterogeneous as possible. The aim is variety rather than uniformity. Contradictions, conflicts are part of the system and remain unresolved. The aim is not to resolve them but to demarcate them clearly and unambiguously. Every part, every place primarily exists for itself and evolves in its complementary relationship with another, self-contained place. The places are like autonomous entities, like small microcosms, independent worlds, with their own special features, advantages and disadvantages,

integrated in a larger, urban macrocosm, a metropolis and landscape made up of these small worlds.

The art of urban design is the art of discovery and not of invention. What exists through chance, necessity, inadequacy, is accepted and regarded as a layer. The city made of complementary places is open and can be interpreted, it is both mixed, and adaptable, useful, non-ideological and unpretentious, open to innovation while also preserving the past.

The city as layer approach to planning aims to create an instrument and a vocabulary for transforming the chaotic conglomerate of the modern-day city into an orderly, comprehensible structure while retaining, and if possible even increasing, its high level of complexity.

\*Nikolaus van Kues' "coincidence of opposites" defines a situation in which the existence or identity of a thing (or situation) depends on the co-existence of at least two conditions which are opposite to each other, yet dependent on each other and presupposing each other, within a field of tension.



## City As Hotel



Anna Puigjaner's essay "The City as a Hotel," published in the catalogue for the Together! Exhibition, makes a case for kitchenless apartments as instigators for collectivity. These apartments, which proliferated in New York at the turn of the century because they fell outside the bracket of housing subject to the Tenement House Law of 1901 (they were technically equated to hotels), eliminated domestic drudgery for the individual dweller by creating collective domestic services, more commonly associated with hotels.

Thus, "some elements normally found within the home" were "moved... into the public sphere" (65).

Collective kitchens, dining rooms, centralized vacuuming systems, nurseries, and shared maids

were some of the services that were exported from the private home into the larger, public collective of the building. This new typology "reduced the cost of living significantly but also modified the role of women in the home," and framed domesticity "in a much broader urban vision" (65).

### THE ANSONIA

The Ansonia was an apartment hotel in New York owned and developed by W.E.D. Stokes. Stokes had a vision for creating "an exemplary residential building with...collective household services and extraordinary facilities for the comfort of its residents" (65). From summer cooling via cold-water pipes along the façade, to integrated communication via pneumatic tubes that connected all apartments through which messages and small objects could be sent, to even a small farm on the roof to augment The Ansonia's self sufficiency and which provided fresh milk and eggs delivered via butler to each apartment, Stokes created an experiment in living together in comfort – a version of collective luxury.

The apartment layout was flexible in order to accommodate changing needs and fluctuating family size of residents. Many types of apartments were available, from one bedrooms with or without a bathroom to apartments of up to fourteen rooms with several bathrooms and with or without a kitchen. Out of the 340 apartments, only 140 had kitchens and dining rooms (66).

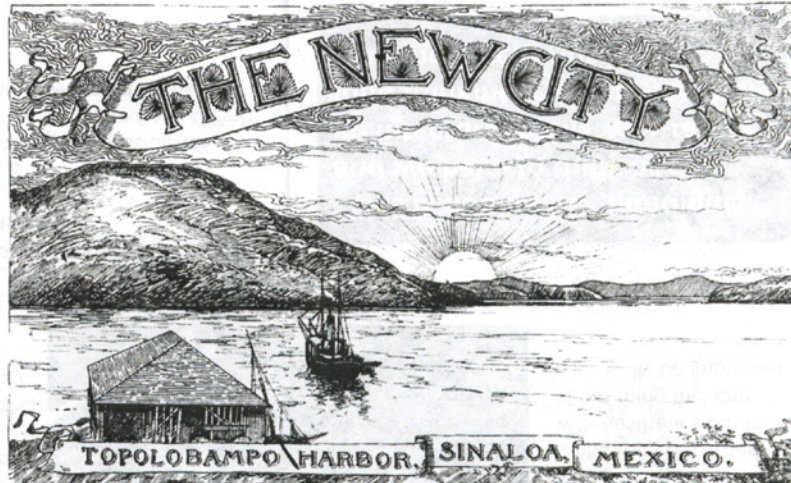
Because of the flexible layout, vacant rooms could be rented out at hotel rooms, ensuring profitability of the overall investment (67). Additionally, some apartments could be extended through adjoining rooms.

The loophole that was the apartment as hotel, while both a higher-yield investment for developers and a more affordable way of living for a broader range of people, such as single working women, could only exist if regulated by the more lax building code for hotels. The 1929 Multiple Dwelling Law put an end to the apartment hotel by directly targeting the kitchenless typology, stipulating height, occupancy, and size that eliminated the privileges previously enjoyed by the apartment hotel and caused it to no longer be a profitable investment (71).

#### TOPOLOBAMPO

Another visionary experiment that relied on the kitchenless typology was Topolobampo. Promoted by Albert K. Owen, who followed Fourier's utopian principals in designing a city of apartment hotels and cooperative domestic buildings, "believed that

**the city should be planned as a unitary grand hotel, where streets were halls and houses were rooms, everything planned, connected, and well served" (67).**



The city was designed as an orthogonal grid with three types of streets and three types of buildings (avenues, streets and alleys; residential hotels, terraced houses, detached houses), each typology with its own domestic service and a communal dining room on every corner (68). Innovation in transport was the main collectivizing principal, with electric cars planned to deliver food and goods all over the city at any hour. Electric and pneumatic systems "allowed cities to be imagined in which the whole urban fabric was organized and formalized based on the transport of cooked food, bags of laundry, goods, and other collective domestic supplies (69).

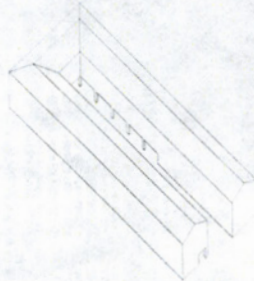
## The Intermediate Size

In *The Intermediate Size: A Handbook for Collective Dwellings*, Bijlisma and Groenland advocate for the intermediate size which situates in between two scales. The first scale is at an individual object scale which defines the space around it. The second scale is at the relationship between the whole and the parts. Hence, the intermediate size cannot be defined in absolute terms. It is determined by the relationship between the autonomy of the parts and the unity of the whole. This relationship is reflected in the structure of the building (distribution of spaces and access), its use (collective use of the plot, and the degree to which the collective space is part of the public domain) and its volume (volumetrics and organization of the façade) (43).

The handbook organized the architectural and cultural features of the intermediate size into three categories – monoliths, ensembles and additives.

### MONOLITHS

The aristocratic residential program is replaced by housing for workers in response to the emergence of ideological housing models which uplift the working class by enabling its members to live in palaces or villas. Underlying the monolith is an ideology of uniqueness. The type is founded on an urban culture of collective land use and mixing of functions (50).



### ENSEMBLES

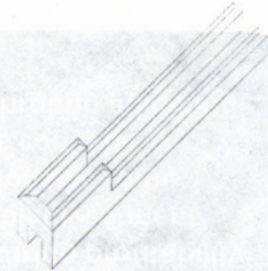
Volumes are grouped around a specifically designed outdoor space. The central area of the ensemble is enclosed and intimate, while the architectural details of the internal façade give

this building type its specific character (52).

### ADDITIVES

The additive consists of a number of identical housing units, each with its own staircase.

The units are grouped together in a building volume that refers to the villa. The additive emphasizes the interface between collectivity and individuality. Standardization of private use goes together with collective representation (54).



**The intermediate-size housing is an autonomous unit at the boundary between architecture and urban planning. As a small-scale vision of the city, they are architectural elements that can incorporate the collective and public domains.**

It introduces notions of interconnection by incorporating semi-public or collective elements into a building typology, allowing flexibility and diversity in relation to program and spatial arrangements. Intermediate-size housing network introduces stratification into the urban fabric and create links between different parts and domains (76-77).





## Domestic Urbanism

In an interview with Herman Hertzberger in *Monu #24: Domestic Urbanism*, Hertzberger talked about a few concepts about domesticity and urbanism.

### BASIC UNITS

Hertzberger believes that units have to be 30-40 square meters to make houses affordable in the future. The units should have everything fundamental inside, but with the possibility of extensions and manipulations according to family, age and other considerations.

### NEARBYNESS

For Hertzberger, high-rise buildings disconnect people from the street and from contact with their neighbors. According to him, the word domestic means first and foremost what is behind the front door. But it is important to have contact and mutual relationships with other things and people as well. The threshold between the apartment and the communal and the public spaces has to be designed and public space has to be domesticated.

### NEW THINGS

Hertzberger thinks that there are possibilities to create common spaces today but we have to find out what these new things are that bring people together.

### NEW LIFESTYLES

For Hertzberger, working at home does not have to make houses so different for that purpose. As long as space is domesticated, every space can work. But the workspace also needs to be open so there is connection between the different spaces.

### MAKE SPACE BUT LEAVE ROOM

Hertzberger thinks that architects can create guidelines and design the basics, but leave the rest to the users. He described the gridiron plan as an example where a very simple basic division of blocks exists but every block can have different functions. He believes that having rules allow it to be free because freedom is the way you interpret the rules and what you do within the rules. Without rules there is just chaos.

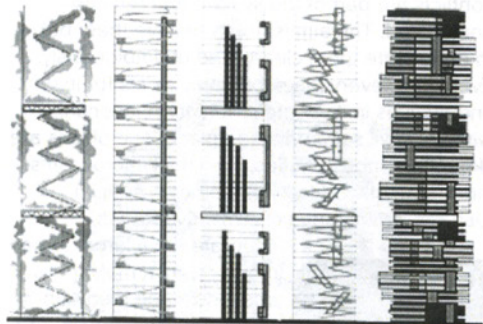
### NEW PARADIGMS

Hertzberger believes that architects should stop being too concerned with aesthetics but think about things that can practically be improved.



**“This is about new paradigms, and we have to think about architecture in this way, rather than thinking in terms of simply creating nice forms.”**

## A Vertical Theory of Urban Design



Reinventing The Skyscraper proposes a vertical urban design proposition for the skyscraper, redefining a more diverse; greater multiplicity; less regimented working and living environment in the sky (12). The intention is not to advocate tall buildings per se, but to propose to design and adopt this built form only if it is inevitable (34). Meanwhile, designing the skyscraper as urban design offers a set of opportunities for rediscovering the many hidden opportunities in its verticality (27). Below are some toolkits offered in the book:

**“Simply stated, the basis for the vertical theory of urban design is the recreation, up in the sky, of ideal habitable urban conditions found at ground level.”**

### DECOMPARTMENTALIZATION

Skyscrapers usually come with a condition of access that is dictated by the elevator cores in which the experiences of movement are

limited, noncontiguous, visually segmented and unpleasant. These transitional sites within buildings and at their edges provide design opportunities to create novel spatial experiences for the building's users (65). By blurring and dissecting the borders and edges, pleasurable crossings can be created to decompartmentalize the rigid stratification of the conventional high-rise (67).

### VERTICAL MAPPING

The three-dimensional matrix is not a system of zoning but a framework that allows a variety of uses close to one another (83). Mapping vertical land-uses and other aspects such as infrastructures, population density, income levels and so on can provide the basis for designing them as an urban design endeavor (85).

**The diversity of land use within the skyscraper can enable a life style where home, work and leisure are vertically interwoven within a single neighborhood.**

### DIVERSIFICATION

Through diversification of land uses in the high-rise, new closer links can be forged between the different components of city life within one single high-rise. Residential, commercial, leisure and educational uses can be combined or placed in close proximity within a given area, allowing a new synergy to develop between users and uses (99).

## Living Together!

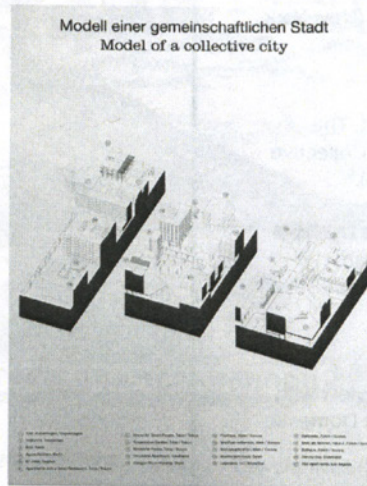
The exhibition at the Vitra Center in August 2017, "Together!," offered a timeline of collectivity, a model city of contemporary collective architecture, a 1:1 prototype of a cluster apartment, and an exhibition space featuring four firms who focus on different aspects of creating collective architecture, from financial structures to programmatic combinations. The introduction essay in the exhibition catalogue offered several insights on the evolution of collective living, emphasizing emerging trends that redefine how we live now. The authors posed that the reorganization of city life into new collective forms is "reinvigorating our cities and redefining urbanity" (38).

**The combination of collective living with collective work as well as social and leisure spaces softens the border between housing and the city around it, bringing the city into these new housing experiments.**

The architecture of the new collective is happening at three levels: individual apartment, apartment building, and urban space. Individual apartment:

Cluster Apartments, which consist of a large shared living area embedded with smaller studio

apartments with kitchenettes, function as a compromise between total independence and total collectivity. As a series of tiny houses within a larger grand house, this formation allows individuals to carry out daily tasks in privacy if they wish, but then also provide a large community space which and an overall infrastructure of pooled resources and responsibilities.



Apartment Building: Shared domestic facilities, like laundry, library, seminar spaces, workshops, play areas, collective kitchens with an employed cook, are supplementing traditional apartment buildings of individual apartments.

Urban Space: New apartment buildings that offer space programmed for neighborhood functions. As an antidote to the "stereotypical monofunctional housing developments of the post-war era, which tended to suffocate urban life thanks to the modernist dogma of functional separation," these new buildings recalibrate the relationship between private and public space, envisioning a city with in which housing does a lot of the work in creating it.

The Kalkbreite housing cooperative Zurich dedicated 50% of its program to non-residential functions. These public facilities include a cinema, a packaging-free supermarket, three restaurants/cafes, doctors offices, office spaces, and a public courtyard with playing areas for children. "These programs bring the city into the building and, conversely, make it a genuine part of the city" (38). Density control is a part of making this work. In Kalkbreite, there must be at least one person for each individual room, with an average of 33.2 square meters person, which is less than the city and country averages of residential space per person (39).

## SOURCES

### CARE WORK

Nancy Fraser. "Contradictions of capital and care." *New Left Review* 100 (2016): 99-117

Silvia Federici. *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. PM Press, 2012.

Karel Teige. *The Minimum Dwelling*, MIT Press, 1932/2010

### COLLABORATION

Andrea Merrett, Feminism in Action: the Open Design Office, <https://www.youtube.com/watch?v=KBqWUnCd5Dg&t=1911s>

Julia Dwyer and Anne Thorne, "Evaluating Matrix: notes from inside the collective," in *Altering Practices* (London: Routledge, 2007), 42.

### BELL HOOKS

bell hooks, Julie Eizenberg, and Hank Koning. "House, 20 June 1994." *Assemblage* 24 (1994): 22-29.

### THE PARADOX OF INCLUSION

Joan Wallach Scott. *Only Paradoxes to Offer: French feminists and the Rights of Man*. Harvard University Press, 1996.

Linda Nochlin, *Women, Art and Power and Other Essays*, Westview Press, 1988, 147-158

Denise Scott Brown. "Room at the Top? Sexism and the Star System." *Gender Space Architecture: An Interdisciplinary Introduction* (1989): 258-65.

Special thanks to Milap Dixit!

# COLLECTIVE BRAIN WEEKLY

## Care Work

Socially reproductive labor has long been naturalized, rendered non-productive and devalued. Nancy Fraser describes how the capitalist economy benefits from the "free ride" it gets on women's socially reproductive work. The accumulation of surplus value is dependent on an arrangement of separate sites of production and reproduction where the economic production that occurs in the former becomes dependent on the unwaged work in the latter. However, capitalist economies have also taken social reproduction for granted as an inexhaustible resource. As Fraser puts it, the "social contradiction" inherent in capitalism surfaces in the paradox where capital makes its "official economies dependent on the very same processes of social reproduction whose value they disavow...This peculiar relation of separation-cum-dependence-cum-disavowal is an inherent source of instability...Destroying its own conditions of possibility, capital's accumulation dynamic effectively eats its own tail." (103).

### THE CONTEMPORARY CRISIS OF CARE

Care labor accommodates a wide range of activities surrounding social reproduction. As both affective and material labor, social production is vital for any society to survive. Any society that compromises the structures and processes of social reproduction is in crisis. Fraser argues that this is exactly what is happening in today's society of financialized capitalism. She defines social production as the creation and maintenance of social bonds. This relates to both inter-generational bonds - giving birth, raising and socializing the young, looking after the elderly - and horizontal bonds - "maintaining households, building communities and sustaining the shared meanings, affective dispositions and horizons of value that underpin social cooperation" (101). She claims that while social reproduction is a "condition of possibility" for capital accumulation, unrestrained capital accumulation undermines the very structures of

social reproduction that it depends upon. This "social-reproductive contradiction of capitalism" is what lies at the heart of the crisis of care. (Fraser, 100)

### CARE WORK AND ARCHITECTURE

Beginning in the late eighteenth century, there were several attempts by communitarian reformists to rethink these spaces. As Dolores Hayden has shown, the communitarian socialists saw the communal household as a world in miniature, a concept which at once "domesticated political economy and politicized domestic economy." In 1813, Robert Owen published several plans for ideal communities that included collectivized kitchens and nurseries. This was a clear disavowal of the private household and effectively aimed to end the isolation of the housewife. Crucially, however, these reformist programs were aimed at liberating the drudgery of women's work without questioning the sexual division of labor itself. As a result, the labor of collective societies continued to be gender-segregated.

In the early twentieth century, radical utopian proposals aimed to counteract the gendered space of the household by insisting on women's equality. In her 1916 proposal for a housing cooperative, Alice Constance Austin proposed kitchenless houses connected by underground tunnels for the delivery of hot meals and laundry.



The centralized kitchen and laundry would relieve women of the drudgery of "an inefficient system by which her labors are confiscated."

In 1932, Karel Teige called for the abolition of the traditional family-centered dwelling and the "radical collectivization of all formerly private household functions" such as cooking, cleaning, child rearing. In Teige's scheme, the integration of women in all productive activities of society as equal partners with men also included the elimination of the marriage bed, liberating women from the bondage of "bourgeois marriage."

These schemes went beyond reformist efforts to liberate women's work which had focused solely on increased efficiency and the marketing of appliances. The greater efficiencies of labor enabled by innovations like the Frankfurt Kitchen (1926) merely allowed more time for women to engage in care work, ultimately reinscribing the role of the woman within the household. For Teige, the only way to ensure women's equality was to revise the whole concept of marriage and "give up the illusion of the traditional household as the social generator of the modern house plan."

#### HANNAH ARENDT ON THE GENDERED DIVIDE BETWEEN *POLIS* AND *OIKOS*

Drawing on the Aristotelian distinction of the *oikos* (the private realm of the household) from the *polis* (the public realm of the political community), Arendt argues that matters of labor and economy properly belong to the household and not the *polis*.

The confinement of the "political" to the realm outside the household has enabled the domination of politics by men and the simultaneous exclusion of women's experiences from legitimate politics. The absence of care work and other forms of reproductive labor from the category of labor as such, much less that of wage labor, is mirrored in architecture's blindness to care as a form of life.

#### THE INTERNATIONAL WAGES FOR HOUSEWORK

#### CAMPAIGN (1972)

This influential campaign by Italian feminists challenged the societal expectations that women perform unpaid labor in the home. At its core, the purpose was to "restructure social relations in terms more favorable to us [women]."

(19) By demanding wages for housework, the campaign aimed to create ways for women to ultimately refuse housework. Mariarosa Dalla Costa, Selma James and Silvia Federici were among the feminist theorists who were not only writing about women's everyday work, but were also heavily involved in international feminist organizing to improve women's daily lives and to recognize women's unpaid work as work. A number of other organizations calling for compensation for domestic labor, care work, and other forms of women's work were set up in 1975, such as the Black Women for Wages for Housework and the English Collective of Prostitutes (ECP).





## bell hooks' dream home

these days i no longer dream  
of myself and a house - i dream  
of small buildings - a feminist  
housing project - with day  
care on the premises, a library  
(everything small and simple)  
with a large common space  
- it is a space - this building -  
where folks who live together

share the belief that we must changethe world so  
that boys and girls, women and men, can embrace  
our differences, our commonalties and know  
freedom and equality - to affirm this difference  
there would be flats that reflect the diverse needs  
of dwellers -the overall feel would be communal  
antisexist space and private space that enables  
everyone dwelling to be safe - to know peace - i  
always think that if the feminist movement had  
created such space it would not have been difficult  
to change society because so many of us are hungry  
to live in a more just and free world - why not begin  
by making that world we dwell in community - if  
you are able to dream such a place with me - not a  
house for a solitary soul - but a building for ten to  
twelve people - some who only want a large room  
- that would be a separate space - i believe we can  
have private space and share space in a common  
dwelling - so many leftists who once dreamed  
about living this way - now want the lone dwelling -  
the "private property" - space is for me never about  
property but always about our lives, ways we make  
home - shelter - rather than live in a world where  
there is a need for "battered women's shelters" - i  
want to create a world in space where women can  
be safe - at home - live freely - to see such space  
would be a gesture of hope and possibility - there is  
a small brownstone near my flat in the village that  
i long for - everyday i walk past it - staring in - the  
gaze of my own longing looks back at me.  
see you soon,  
bell hooks

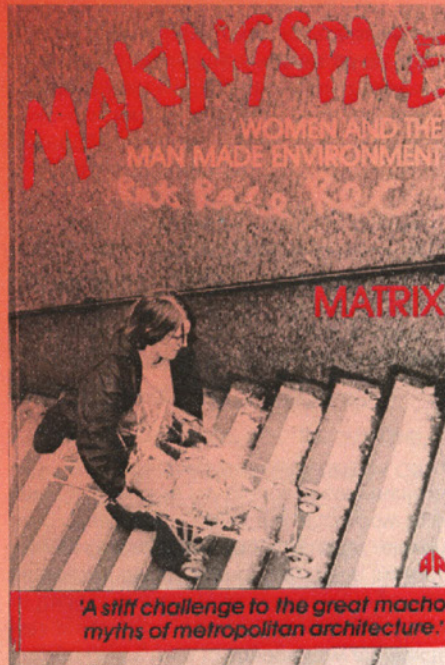
## Collaboration as a Feminist

## Project

MATRIX FEMINIST DESIGN CO-OPERATIVE  
(1980-)

"The use of the word 'feminist' was contentious;  
no architectural practice in Britain had previously  
stated their political position so overtly. The use  
of 'design collective', rather than 'architectural  
practice', indicated the group's intention to  
value non-architects as highly as architects and  
was influenced by contemporary critiques of  
professionalism and of architects' professional  
institutions." (*Evaluating Matrix*, 42)

The Matrix Feminist Design Co-operative, set up  
in 1980, was one of the first architectural groups



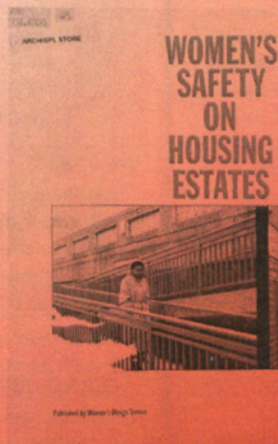
in Britain to take on an overtly feminist stance  
in both their design projects and design process.  
The work of the Matrix co-operative begins  
with the observation that "because women are  
brought up differently in our society we have

different experiences and needs in relation to the built environment.”

The group was run in the manner of a worker's co-operative. They worked in three main areas: design projects, which were all publicly funded social projects, technical consulting projects, and publications. Of particular note is the book *Building for Childcare*, which came about as a result of conversations with women involved in domestic childcare. Matrix not only sought to design spaces for women's particular needs but to involve women in the design process itself.

The book *Making Space: Women and the Man Made Environment* (1999) traces the architectural implications of the basic observation that domestic work, and care work in particular, is a form of labor. The book is divided into eight chapters each written by a member of the collective. The last chapter titled “House and Home” is a series of interviews with the author's friends and co-workers discussing how their home has transformed by having and raising children. The chapter is set within a cultural context where childcare and housework is privatized and where women have almost always

carried the real responsibility for young children, seeing “even communal households [as] merely individual attempts to find alternative ways of life, like islands in an ocean of nuclear families.”  
(*Making Space*, 122)



After a baby is born, women often feel isolated because of the interrupted routine of going outside of the house to work and also because of the difficulty to move around with a new-born baby. Places become inaccessible to women with babies as breastfeeding and changing nappies is problematic in public, coupled with the frequent urgent need to find a toilet. Within the home, babies require a lot of equipment which needs storage and a suitable space to use it. The fridge, the freezer, the washing machine, and dryer are essential.

(*Making Space*, 130)

#### WOMEN'S DESIGN SERVICE (1984-)

The Women's Design Service (WDS) was set up in London in 1984 as a worker's cooperative to improving the built environment for women. The WDS provided technical advice to groups who needed it, and advocated for family-friendly spaces including nappy-changing and access ramps. It also pioneered research on women's safety and published a pamphlet, *Women's Convenience*, about public toilets for women. There was substantial overlap and collaboration between Matrix and WDS, and the social and professional networks that developed then remain active to this day. WDS has had some impact on mainstream architectural practice in Britain: the adoption of in-store childcare facilities in Ikea stores, for example, was a result of a recommendation by WDS in 1986.

#### OPEN DESIGN OFFICE (1972-1978)





Influenced by the women's liberation movement in the late 1960s, the Boston and Cambridge area was a major center for feminist activism in the 1960s and 1970s and home to several women's organizations, including Woman Architects, Landscape Architects, Planners (WALAP).

In 1972, WALAP published an article "The Case for Flexible Schedules" in Architectural Forum. The authors argued that for women to succeed in architecture, offices needed to change the culture that equated long work hours to commitment. As women were the primary care givers to children, flexibility was needed to keep women in the profession. Moreover, flexible schedules would help both male and female employees searching for a better balance between work and life. And projects would benefit from architects having more time for outside pursue and a broader perspective.

In the same year, several participants from WALAP met to discuss the possibility of opening



**The Open Design Office responded to an office culture that glorifies the myth of the individual creator over the reality that most projects actually required a team of people.**

their own office with a more supportive working environment, called the Open Design Office.

Instead of advocating for professional equality within existing modes of practice, the Open Design Office tried to change how architecture was practiced. It aimed to serve as a critique of traditional practice as well as a model for alternative office organization. Thus, in Open Design Office, everything was up for reinvention, from relationships within the office, how to work with the clients to the means of communicating with the contractors. The Open Design Office established 3 principles:

#### **EQUAL PAY**

The first principle stated that all profits would remain within the firm. Contrary to the corporate model of traditional offices where senior partners were motivated by profits to exploit the employees, the Open Design Office strived to treat all their employees equally and fairly.

#### **FLEXIBLE SCHEDULES**

Secondly, working hours would be completely flexible as long as deadlines were met and members kept each other informed of their schedules. Regular meetings would be held to discuss projects and management issues.

#### **NON-HIERARCHY**

The third principle was the elimination of an office hierarchy. Each member was expected to take full responsibility of her projects and the office would only accept projects that everyone agreed on.

Despite the aspiration to establish a non-hierarchical office structure, the Open Design Office could was unable to prevent dominant characters from forming in the office. After the first year, four members left the office as it did not live up to the promise of non-hierarchical organization and others soon realized that they preferred the security of working as employees. By 1976, the economic downturn threatened the livelihood of the office as no profit surplus was reserved to support the office through a recession. Several members left to seek

employment elsewhere and the office was closed in 1978.

Despite the aspiration to establish a non-

**The members compared it to women preparing a meal together: “No one defines who is in charge.”**

hierarchical office structure, the Open Design Office could not prevent having dominant characters in the office. After the first year, four members left the office as it did not live up to the promise of non-hierarchical organization and others soon realized that they preferred the security of working as employees. By 1976, the economic downturn threatened the livelihood of the office as no profit surplus was reserved to support the office through a recession. Several members left to seek employment elsewhere and the office was closed in 1978.



## The Paradox of Inclusion

**“In the age of democratic revolutions, ‘women’ came into being as political outsiders through the discourse of sexual difference. Feminism was a protest against women’s political exclusion; its goal was to eliminate ‘sexual difference’ in politics, but it had to make its claims on behalf of ‘women’ (who were discursively produced through ‘sexual difference’). To the extent that it acted for ‘women’, feminism produced the ‘sexual difference’ it sought to eliminate. This paradox—the need both to accept and refuse ‘sexual difference’ - was the constitutive condition of feminism as a political movement through its long history.” – Joan Wallach, *Only Paradoxes to Offer***

In her seminal 1971 essay, Linda Nochlin suggests that by attempting to answer the question “Why have there been no great women artists?” its negative implications are tacitly reinforced.

**“Underlying the question about woman as artist, then, we find the myth of the Great Artist.”**

It is the way questions are posed that has greatly influenced - and often falsified - the greater consciousness of how things are in the world. Who formulates the questions and what purposes

such formulations may serve as preliminary questions that are to be considered first.

Nochlin argues that certain institutional factors produce social expectations against women seriously pursuing art, restrictions on educating women at art academies, and "the entire romantic, elitist, individual-glorifying, and monograph-producing substructure upon which the profession of art history is based" have systematically precluded the emergence of "great women artists."

The question of equality centers on the institutions and systems that propagate the myths that support inequality and create these conditions, rather than on the wills and reasons of individuals.



In "Room at the Top? Sexism and the Star System" (1989) Denise Scott Brown writes:

"Budd Schulberg defines 'Star Quality' as 'a mysterious amalgam of self-love, vivacity, style and sexual promise'. Though his definition catches the spirit of architectural stardom, it omits the fact that stardom is something done to a

**"There can be no mom and pop gurus in architecture. The architectural prima donnas are all male."**

star by others. Stars cannot create themselves. Why do architects need to create stars? Because, I think, architecture deals with unmeasurables. Although architecture is both science and art, architects stand in or fall in their own estimation and that of their peers by whether they are good designers and the criteria for this are ill-defined and undefinable. Faced with unmeasurables, people steer their way by magic. Before the invention of navigational instruments, a beautiful lady was carved on the prow of the boat to help sailors cross the ocean; and the architects grappling with the intangibles of design select a guru whose work gives them personal help in areas where there are few rules to follow. The guru, as architecture father figure, is subject to intense hate and love; either way the relationship is personal and necessarily one-to-one. [...] I suspect too that for male architects, the guru must be male. There can be no mom and pop gurus in architecture. The architectural prima donnas are all male." (Scott-Brown, 83-84)

**"The Star system sees the firm as a pyramid with a designer on top, has little to do with today's complex relations in architecture and construction. But as sexism defines me as scribe, typist, and photographer to my husband, so does the star system define our associates as 'second bananas' and our staff as pencils."**

# THE THREE- DECKER

**YEAR**

1800s

**HOUSEHOLD SIZE**

1 Family

**# HOUSEHOLDS**

3

The Three-decker, or triple-decker, is a vernacular type that emerged in Boston in streetcar suburbs of the late 1800s. It is part of the typology of the French apartment, prominent in downtown Boston at the same time, but designed for the lower and middle classes. Therefore, the Triple-Decker and the Apartment Hotel are part of the same type but reflect a social and therefore architectural hierarchy (Shand-Tucci, 121).

The common proportion of the three-decker is 1:2, 25ft to 50ft, and it is a free-standing wood-framed building of the same three (typically, but could be more) identical residences stacked on top of one another, where each family occupied one level. Two types of triple-deckers emerged in Boston (pitched roofs in Roxbury and flat roofs in Dorchester) in different areas and as they spread southward, the types eventually mixed as builders started sharing more knowledge. The flat roof was initially a strategy for building an extra floor because the gabled roof had limited habitable space, but some triple-deckers also had three levels with a gabled roof. The three-decker type was diffused across the city near streetcar lines. The separate buildings were conceived to (1) allow light and airflow throughout the apartment (2) prevent from the

spread of fire and disease, but also (3) for the aesthetic purpose of looking like a single-family large house. The room facing the street was the parlor, and the back room is the kitchen. The porch is the true invention of the triple decker, as it gives it its distinct character.

The triple-decker was the speculative house of the 1890s, designed to maximize rental capabilities. They presented the opportunity for home ownership as one family owned one level and rented out the other two. The three-decker therefore allowed the middle-class citizens to become homeowners and to generate income from their home. In this sense, the triple-decker was considered as “democratic architecture. Built for the average family to have the benefits of suburban life while living close to the city jobs.”

The building of three-deckers was competitive and did not require large amounts of capital so that the builders themselves tended to be drawn from the ranks of local tradesmen. Most of the three-deckers were built by immigrant groups. This set up provided affordable housing to families while keeping the government out. The family that owned the property would maintain it often by its own labor, marking a move away from the paternalistic models

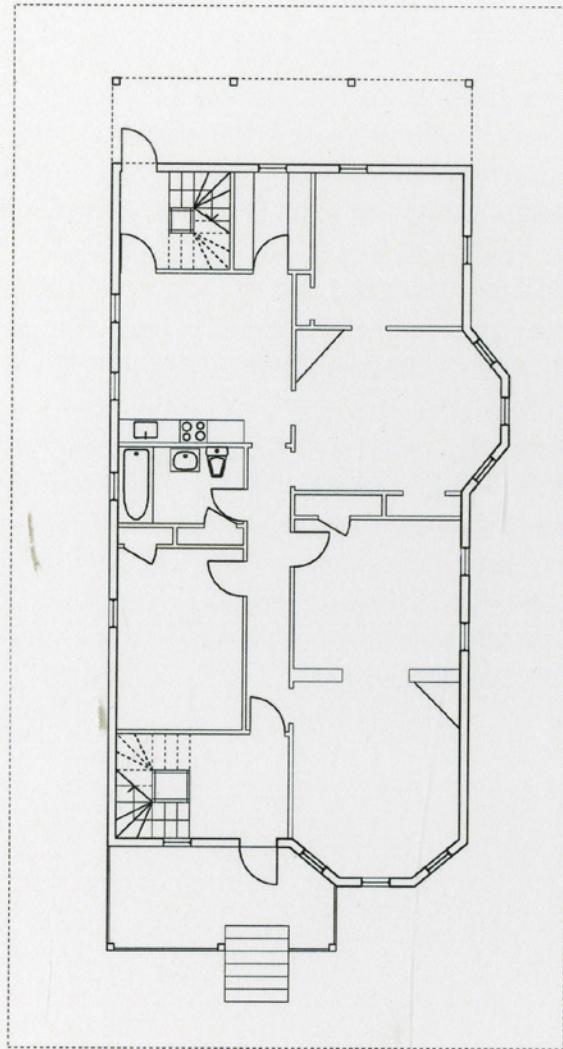
of the company town. The triple-deckers were well situated next to mills, sometimes even anticipating the construction of a new mill, so the density of the triple-decker and the mill were linked – axially, economically, politically, and socially such that the triple decker cannot be considered outside of this context [of distributed workplaces such as the mills that scattered Boston].

The end of the triple-decker was marked by a local architect in Boston, Kilham, who advocated for keeping the city more open to air and to sunlight thus “champion[ing] a Massachusetts zoning statute which permitted local governments to outlaw wooden tenements higher than two and a half stories”. The type also suffered as construction costs for three-levels went up. Today, triple-deckers exceed the density, setbacks, and height of current zoning regulations. They currently make up 14% of the building stock in Boston (this does not include Cambridge and Somerville) but also 21% of the foreclosed property in the city. While Boston is trying to preserve them as a valuable affordable housing units, owners often do not maintain them and allow them into disrepair – or they are rented out as rooms to students, who drive up the rents and take them off the affordable housing market.

Kingston Wm. Heath, “Housing the Worker: The Anatomy of the New Bedford, Massachusetts, Three-Decker”, *Perspectives in Vernacular Architecture*, 10 (2005) 47-59.

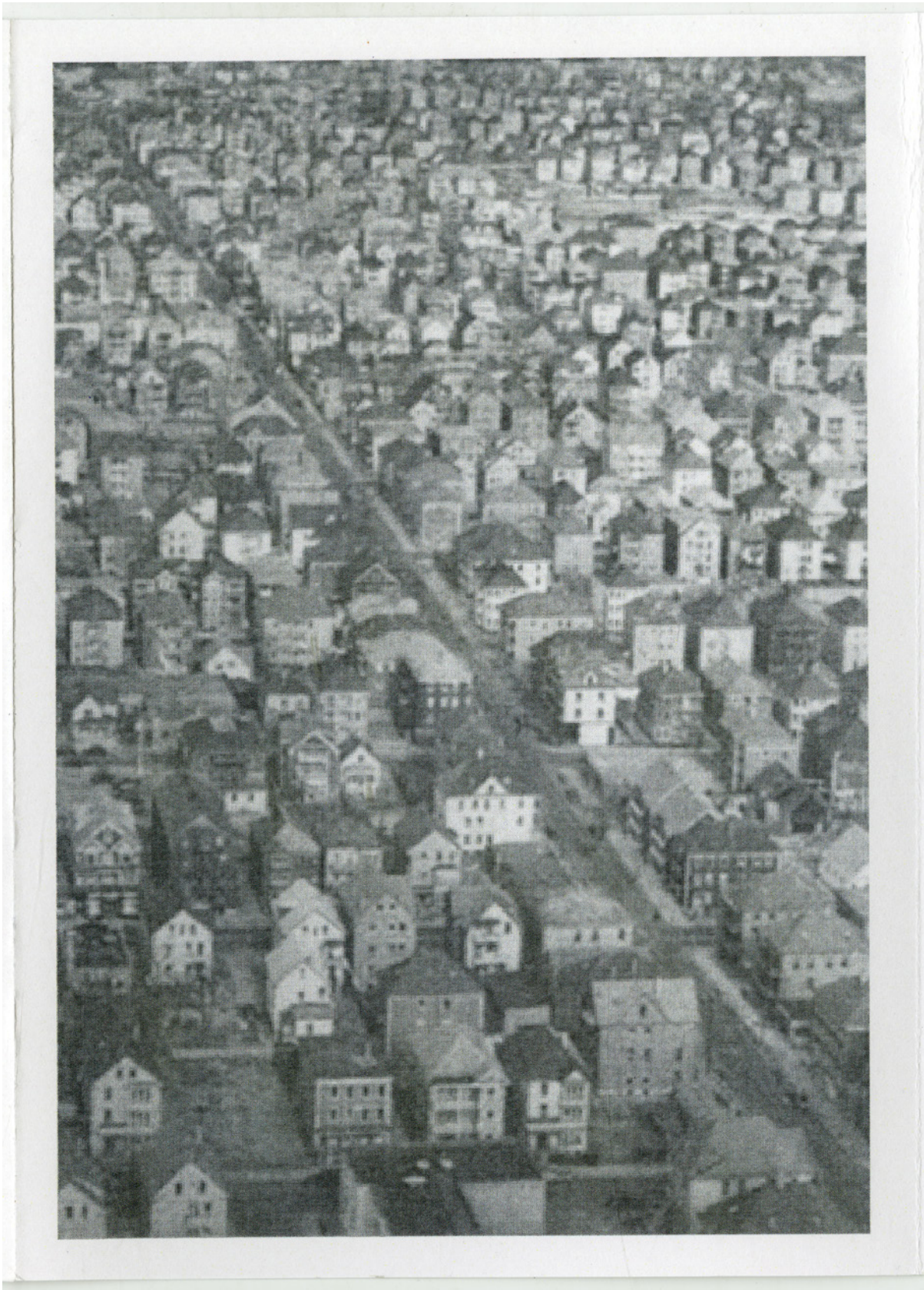
Richard M. Candee and Greer Hardwick, “Early Twentieth-Century Reform Housing by Kilham and Hopkins”, *Winterthur Portfolio*, 22, 1 (Spring 1987) 47-80.

Douglas Shand-Tucci, *Built in Boston*, (Amherst: University of Massachusetts Press, 1999), 101-130.











# MAGNITOGORSK HOUSING

**YEAR**

1930

**HOUSEHOLD SIZE**

32

**# HOUSEHOLDS**

1

In 1930, the Russian architects group OSA, with Ivan Leonidov as team leader, took part in the competition of the urban design of the chemical and metallurgical settlement of Magnitogorsk, a new city on the extreme south of the Ural mountain range. When Stalin started out his plans for the industrialization of what was rural Russia, he planned the foundation of several settlements based on a single industrial activity and Magnitogorsk was one of the most significant and ambitious.

The master plan proposed by the OSA group was a 15-mile linear city which connected the industrial hub and the state farms. In this linear city, the square was the geometrical principle which organized the different scales of inhabitation, from the outline of the city to the layout of the single rooms. It organized the built functions in a low-density setting that responded to disurbanist theories. It also led the logic of the potential expansions of the whole

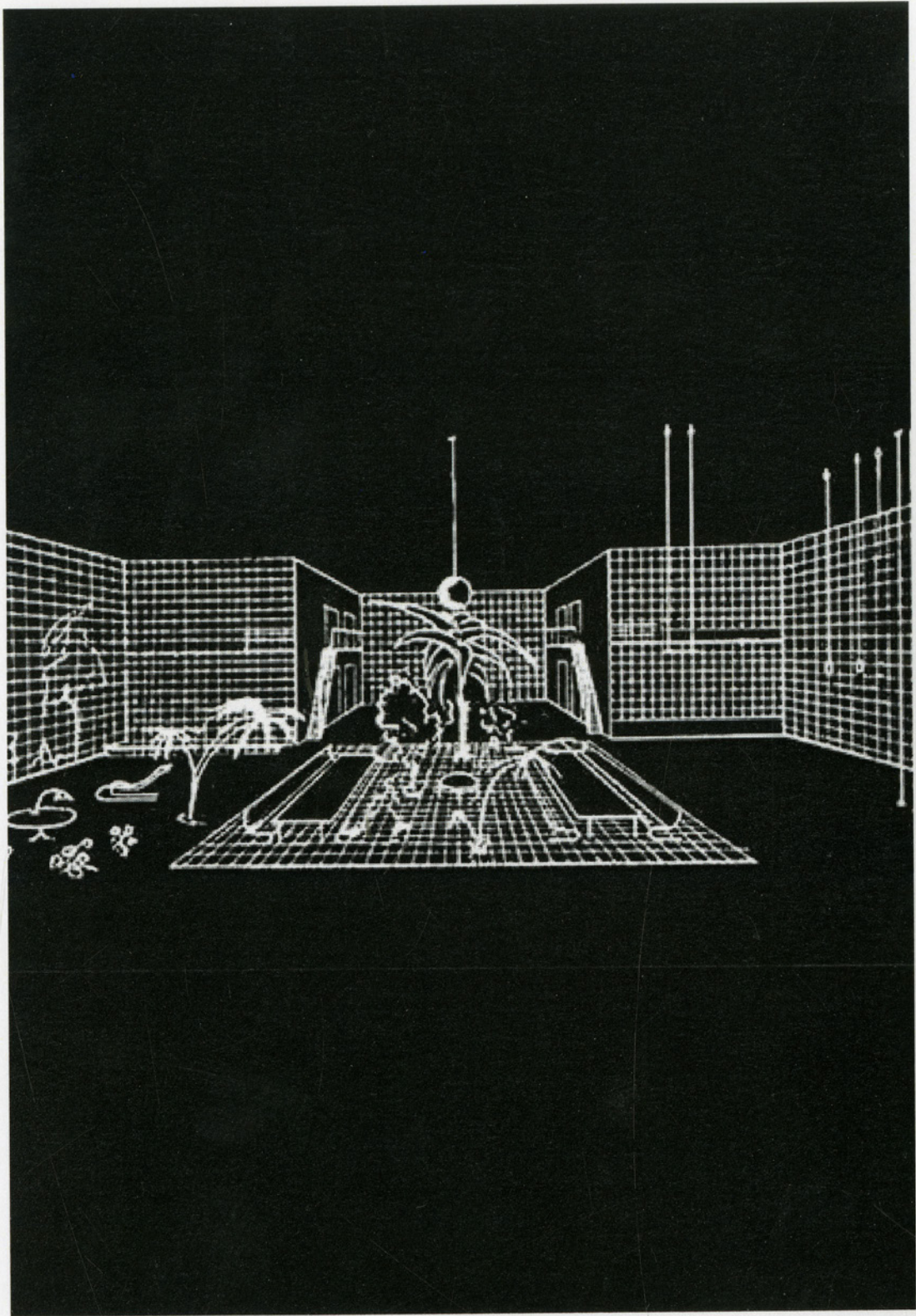
city, which can be augmented through the addition of other squares, making it an open system.

In the central strip of the city were the residential buildings constructed in timber and glass. On both sides of the housing were public buildings and spaces for leisure such as stadiums, sports facilities, parks and zoological and botanical gardens.

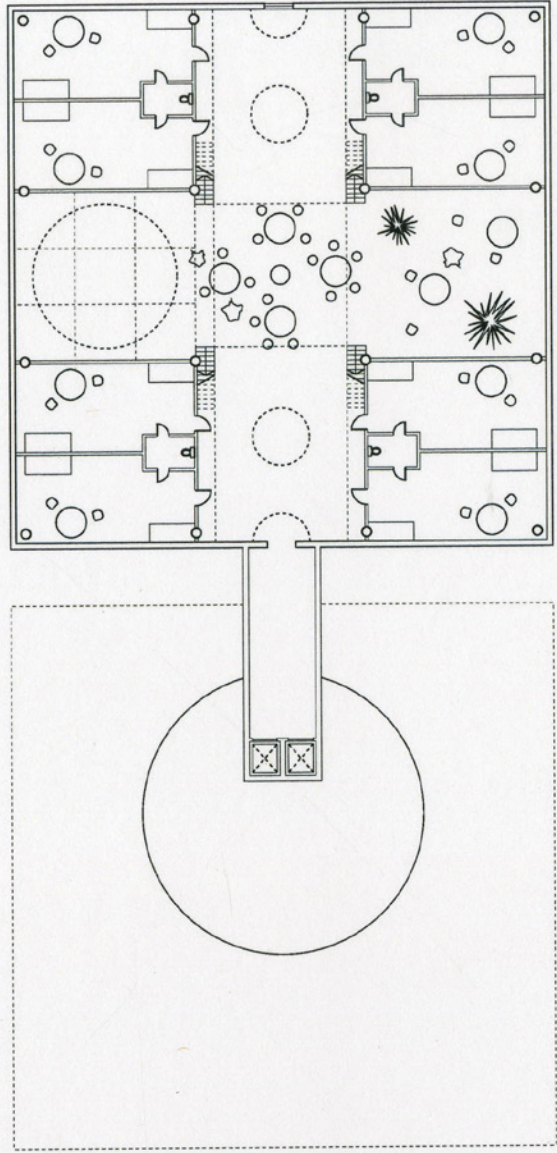
In the residential stripe, each housing complex was designed to accommodate 250 people in eight separate housing units. In the housing unit, sixteen small cabins which were shared between two people located in the corners on two floors. In the center of the unit was the communal dining room. To the sides of this there were two sanitary rooms with showers, a room for morning exercise and a room for collective leisure and cultural work.

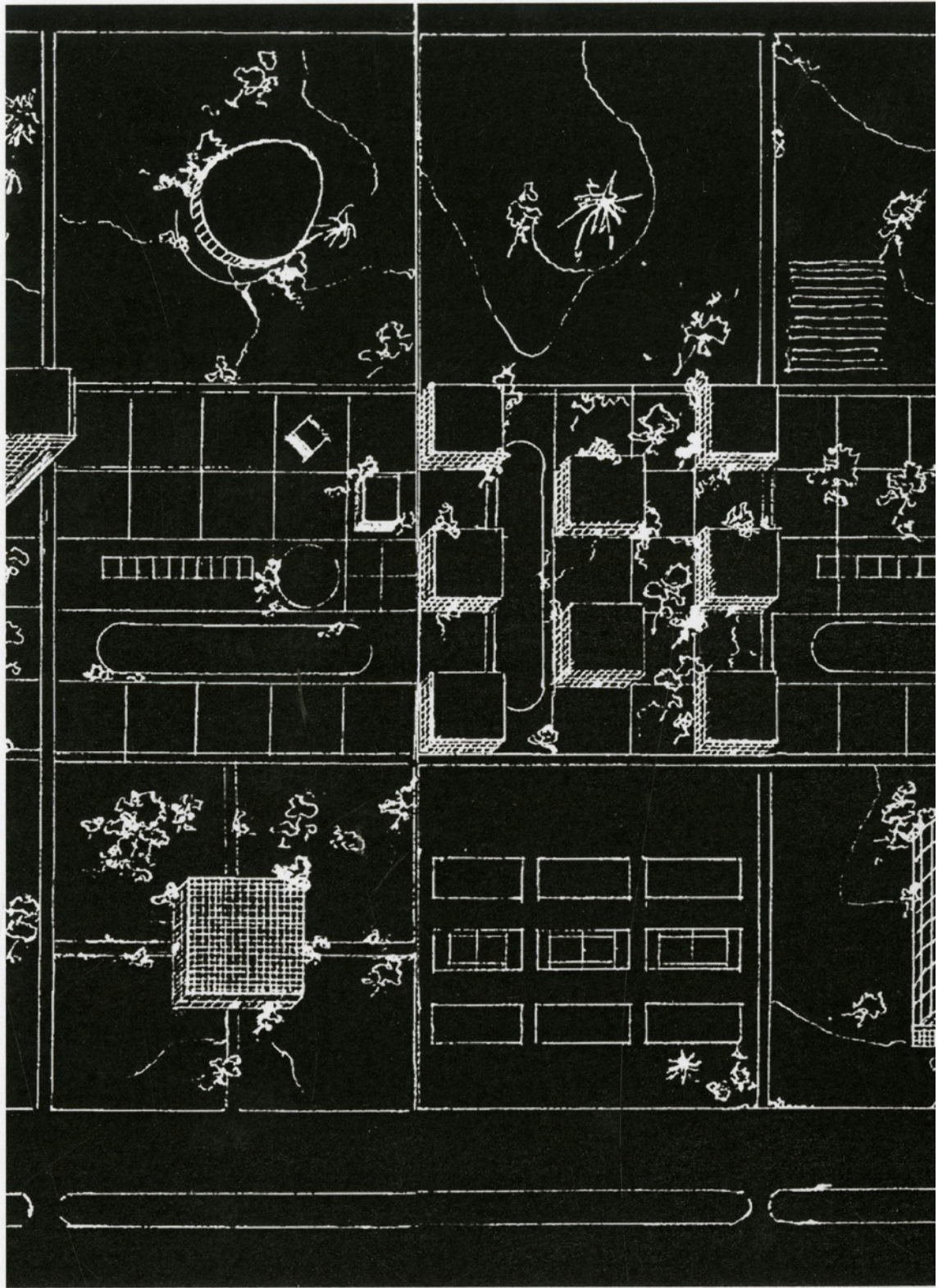
**“Ivan Leonidov’s Competition Proposal for the Town of Magnitogorsk (1930)”, SOCKS, last modified: April 12, 2016, <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>.**

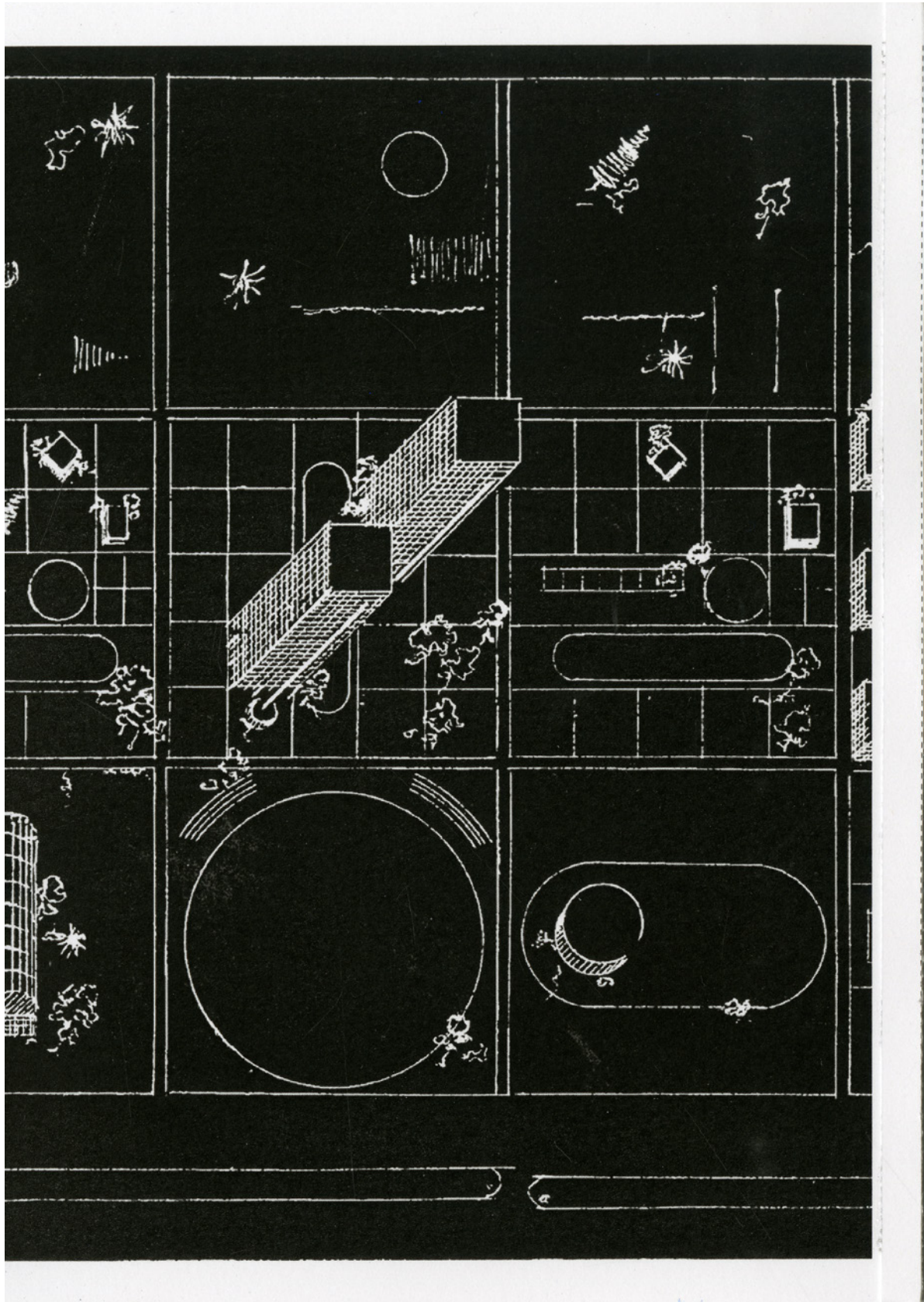
**Andrei Gozak and Andrei Leonidov, Ivan Leonidov: The Complete Works (New York: Rizzoli, 1988).**











# PHALANSTERY

**YEAR**

1800s

**HOUSEHOLD SIZE**

1,620 (50% male, 50% female)

**# HOUSEHOLDS**

1

Fourier's unitary architecture centered on a social approach that synthesized "man's passions and desires" rather than "trying to change human nature." The phalanstery, a container of collective luxury, put forth a design and that was based on work as the centerpiece of life, but with work redefined as full of passion and pleasure. The ideal number of 1,620 residents was "mathematically based to achieve infinite combinations amongst people," but one that was not so vast as to dilute the energy formed by the collective (Larsen). In the phalanstery, Fourier's architecture strove to facilitate "the production of composed, collective, and integral pleasure... -- a theory of architecture as the art of association and putting together senses, forms, bodies and ideas" (Stanek). These associations would not necessarily be complementary, but through the friction coming from contrasting ideas, new knowledge would arise. Thus, the phalanstery was to be a meeting place for a diverse group of people "of all ages and types who would realize the

Lars Bang Larsen, "Giraffe and Anti-Giraffe: Charles Fourier's Artistic Thinking," e-flux journal #26, June 2011.

Lukasz Stanek, "Collective Luxury: Architecture and Populism in Charles Fourier," Hunch 14, 128.

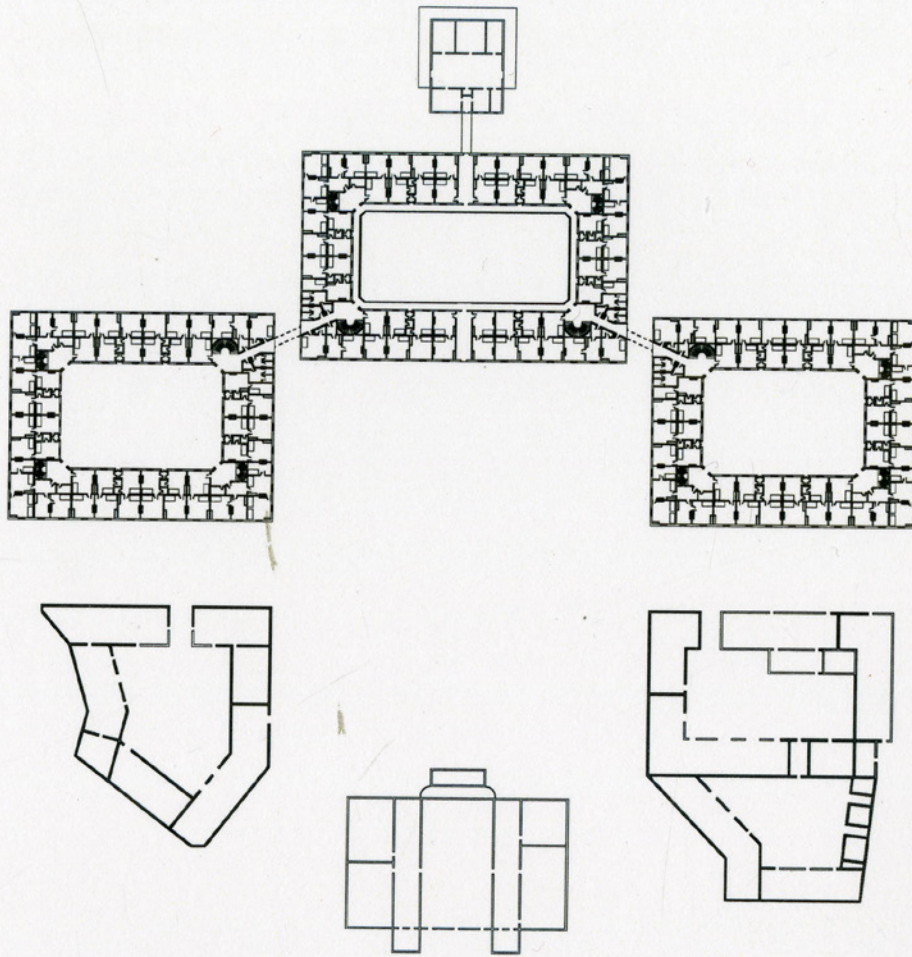
Fourier's unitary architecture centered on a social approach that synthesized "man's passions and desires" rather than "trying to change human nature." The phalanstery, a container of collective luxury, put forth a design and that was based on work as the centerpiece of life, but with work redefined as full of passion and pleasure. The ideal number of 1,620 residents was "mathematically based to achieve infinite combinations amongst people," but one that was not so vast as to dilute the energy formed by the collective (Larsen). In the phalanstery, Fourier's architecture strove to facilitate "the production of composed, collective, and integral pleasure... -- a theory of architecture as the art of association and putting together senses, forms, bodies and ideas" (Stanek). These associations would not necessarily be complementary, but through the friction coming from contrasting ideas, new knowledge would arise. Thus, the phalanstery was to be a meeting place for a diverse group of people "of all ages and types who would realize the

Lars Bang Larsen, "Giraffe and Anti-Giraffe: Charles Fourier's Artistic Thinking," e-flux journal #26, June 2011.

Lukasz Stanek, "Collective Luxury: Architecture and Populism in Charles Fourier," Hunch 14, 128.

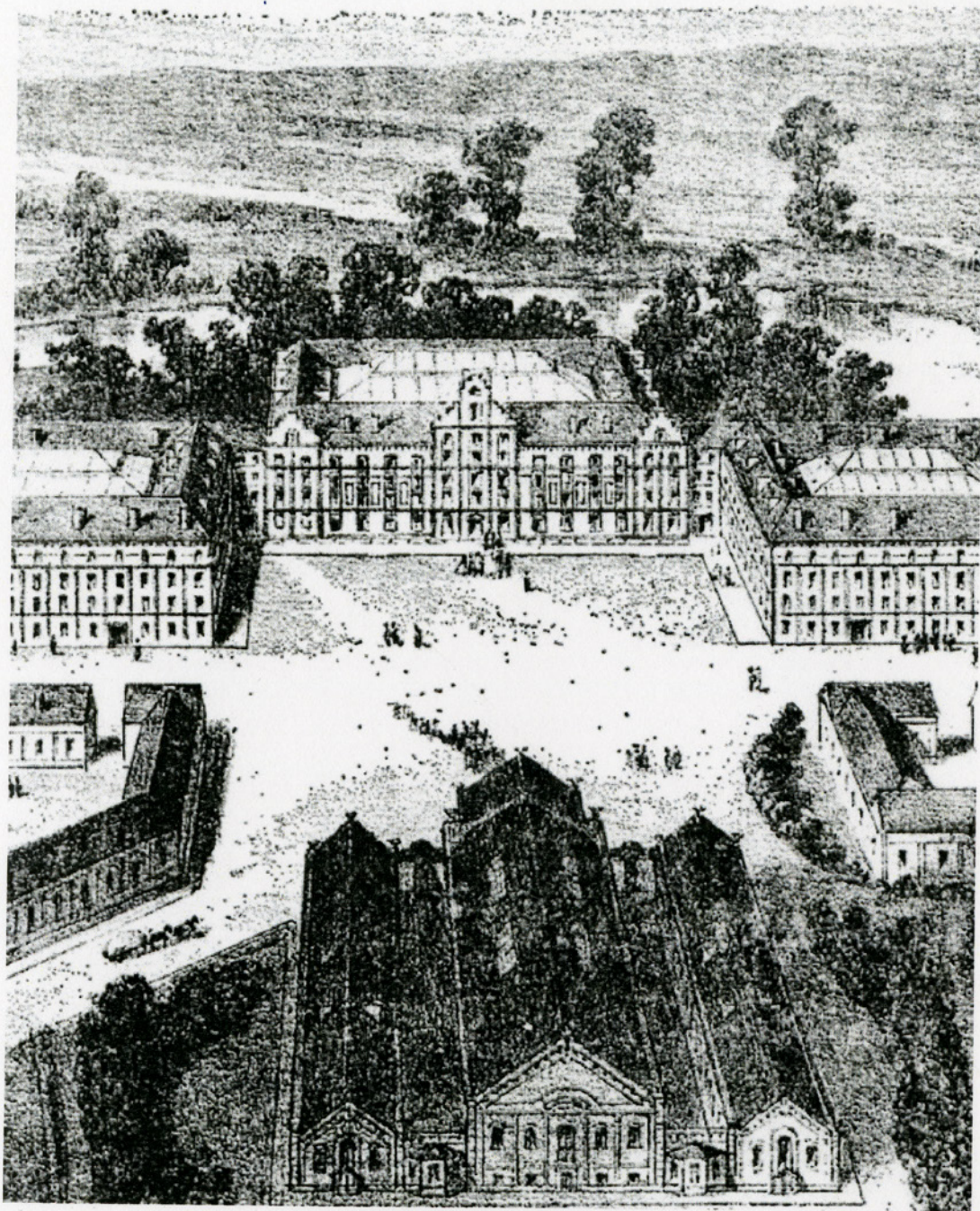
multiplicity of relationships of love and labor” (Stanek).

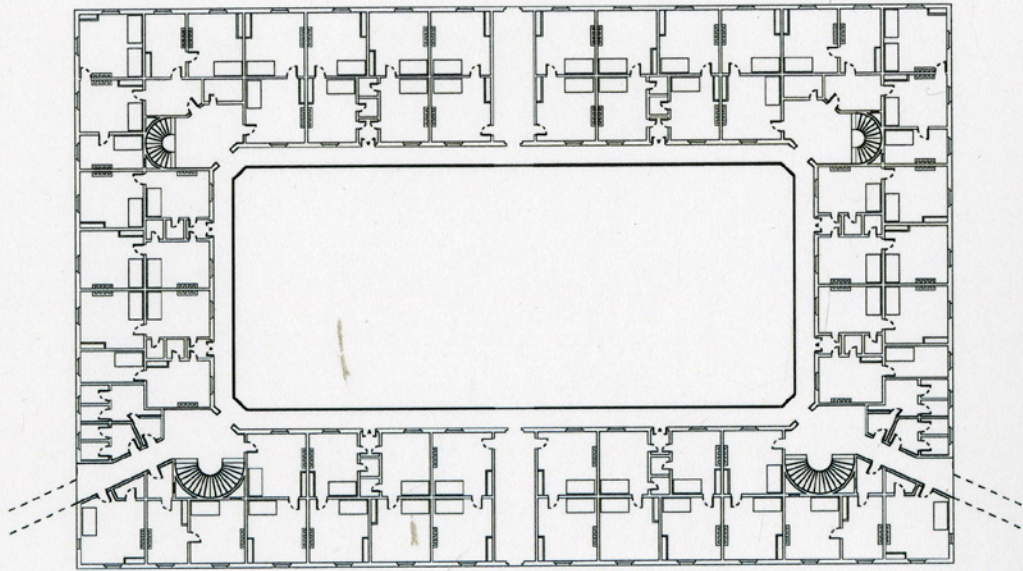
The phalanstery was organized as a four-story structure punctuated by courtyards and connected through galleries. Each house was required to have empty space surrounding it, an area no smaller than the surface area of the house itself. This rule was to guide the networked growth of the phalanstery system, creating an urban condition in which built and unbuilt had a pre-determined relationship based on size, and which also made it much more affordable to live communally than to construct ones own house. Most structures would host 20-30 families with shared common services and places for meeting. The bourgeois family unit was questioned, with children raising themselves in groups and contributing to the everyday life of the phalanstery, while adults pursued their passions and pairings through work and pleasure.

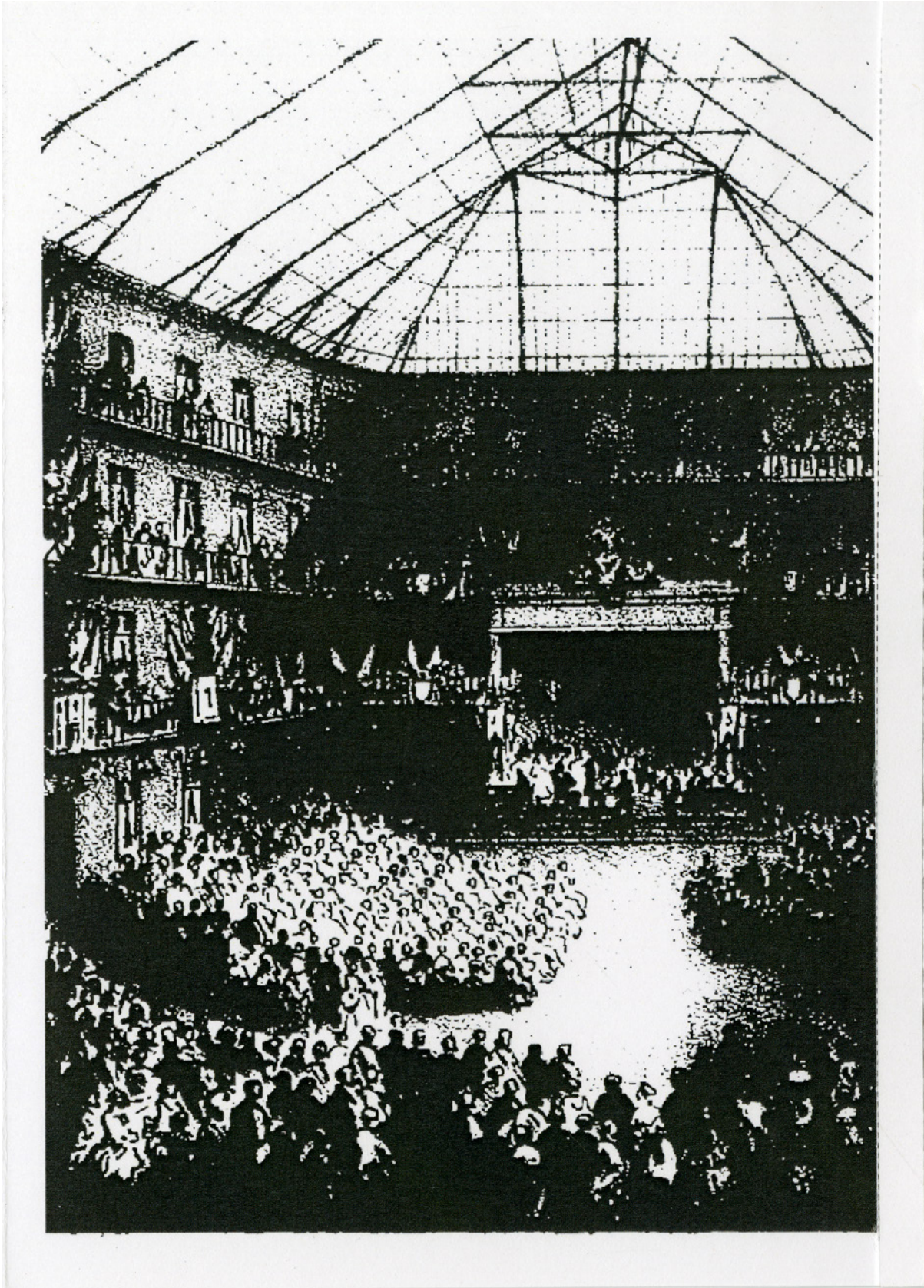




# LISTÈRE OU PALAIS SOCIAL







**CARTHUSIAN**

**MONASTERY**

**YEAR**

1084

**HOUSEHOLD SIZE**

16

**# HOUSEHOLDS**

1

Organized as a series of layers arranged around a central cloister, the living quarters of the Carthusian monastery deployed the corridor as a device to modulate levels of privacy and collectivity in its community. Manifesting “with utmost clarity the tension between communal life and the possibility of being alone,” the monastery was a total environment for the lives of its 16-18 inhabitants, and the nested corridor organization provided variation within the whole. Rationalism and a desire for systematization underscored the plan, and “an ensemble of great beauty was created by the repetition of the same small elements” (The Charterhouse, 114).

In some senses a “form of ideal town-planning...that would have remained a Utopia in any other context,” the Carthusian monastery was a world unto its own, which, through its internal arrangement, could exist anywhere without having to consider external factors (The Charterhouse, 114). There were two types of monks, the *conversi* and the *donati*. The *conversi* were bound by eternal vows, and the *donati* were not, but they both committed to an isolated life in a single cell (The Charterhouse, 113). The challenge of the architecture was to weld the three distinct areas of life in the monastery into one whole. These areas were (1) the monks’ cloister and its dozen cells, (2) the group of community buildings including the refectory, chapterhouse and library, the church and the prior’s cell, and (3) the precinct in which the *conversi* and the *donati* saw to the needs of the monastery and received its guests, but which also shielded the monks from

the world. This area was the economic interface with the outside world, which allowed the monks a greater degree of seclusion than the practice of begging, which was adopted by new Orders in the thirteenth century. The inclusion of this sphere into the monastery whole negated the need for the monastery to stipulate any specifications about the locale in which it was located. It was a security that "afforded against the intrusion of the world" and allowed these charterhouses to propagate in a multitude of environment types, from valleys and mountains to villages, outside of towns and even within towns (The Charterhouse, 113).

The monastery was strongly fortified and enclosed by a wall strengthened by seven towers. There was one entrance gate which led to the large domestic court of the monastery with the prior's house in the middle. From here one could access the church, the guesthouse, the stables, and the cells of the donati. Also occupying the border between the domestic realm and the cloister of the conversi was the kitchen, the refectory, the chapter-house and the small cloister, but these were only accessible from the larger cloister. The small cloister had a visual connection to the church at the height of the rood screen.

Around the large cloister eighteen monks' cells were arranged, forming "a kind of housing estate strung out round the passage or cloister," within view of the cemetery, which stood in front of the church. In this configuration, all were reminded that "the silence of the living echoed the peace of the dead" (The Charterhouse, 114). Each cell was

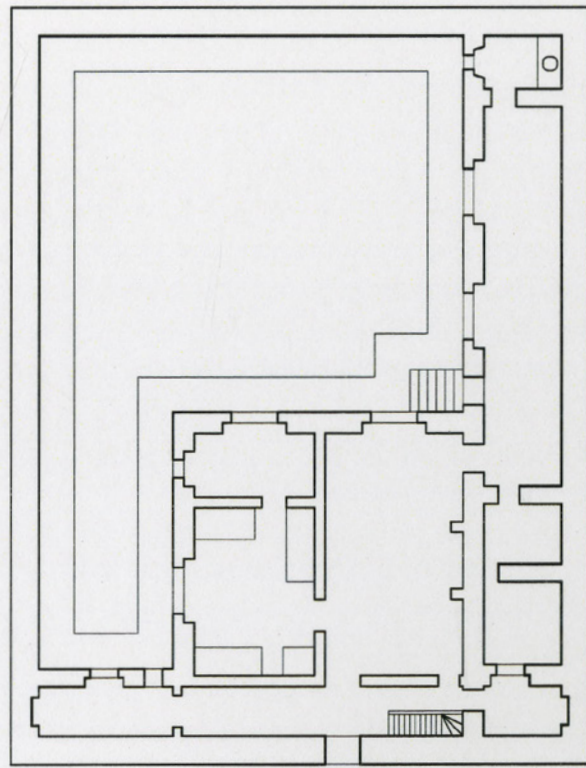
arranged to enhance the solitude of the monks. A secondary corridor along the cloister shielded the monks' house and garden from noise from the cloister, and a small slit that opened into a closet was for passing food to the monk. "The layout took account of the monk's need for solitude in every particular. He did not only want to be alone, but also to feel alone" (The Charterhouse, 114). The cell consisted of three small living rooms, as well as a latrine, a larder, and a large garden that was three or four times as large as the whole house, and surrounded by a high wall (The Charterhouse, 114).

The Charterhouse

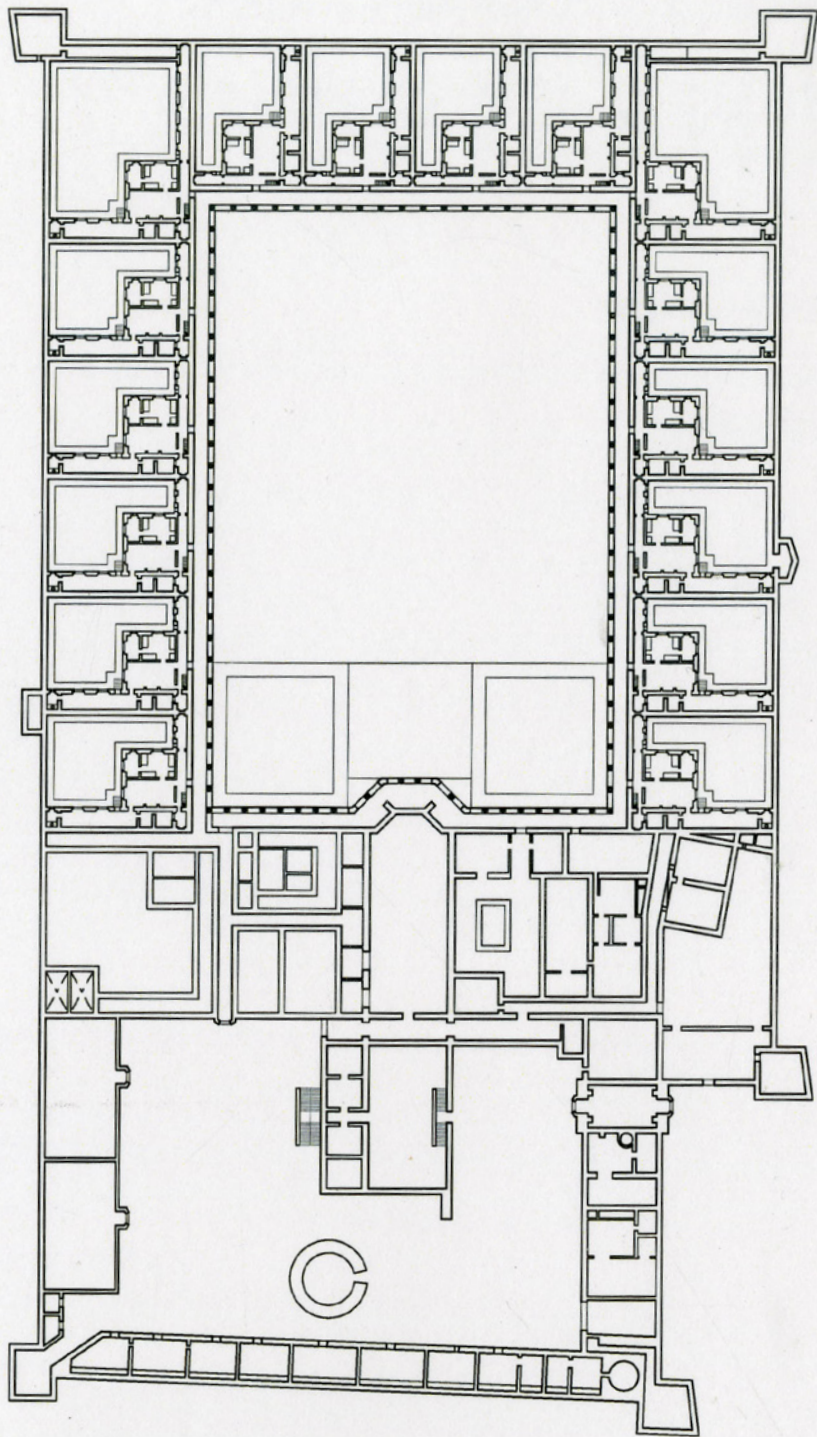
"Living and Working: How to Live Together," Dogma











# THE RESIDENTIAL HOTEL

**YEAR**

1857

**HOUSEHOLD SIZE**

1 Family

**# HOUSEHOLDS**

5

Residential hotels where people lived for a prolonged amount of time, (after 1 month of a residency in a hotel, Boston considers the tenant a resident) have a long history in Boston as well other metropolises in the United States. There were hotels for every class, and kind of community. ("We have fine hotels for fine people. Good hotels for good people. Plain hotels for plain people. And some bum hotels for bums" Hotel keeper Simeon Ford 1903, NYC). There were four types of hotels: the palace hotel, the mid-priced hotel, the rooming house, the lodging house. These four categories could be considered as two categories of hotel – a family residence, which was prominent among the upper class in the second half of the 19th century, and the SRO (Single Room Occupancy) which was meant to cater to individuals (though may have been used otherwise).

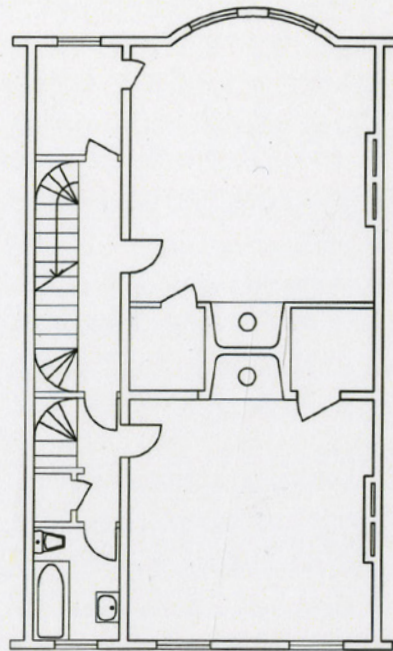
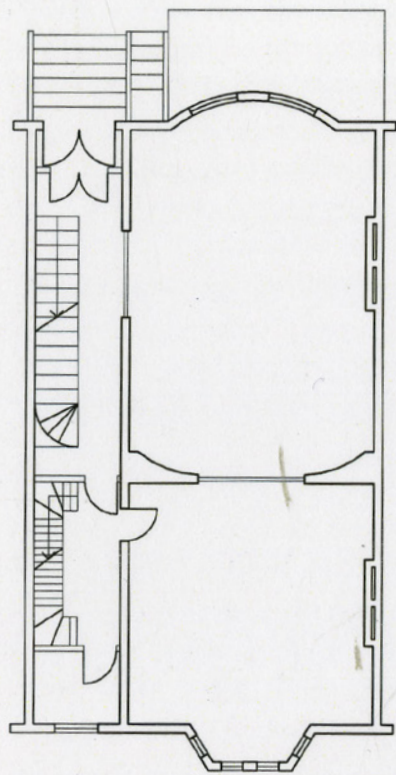
The family hotel was hotel was defined as a multi-family residence where a family occupies part or a whole floor but not multiple floors. It was in a way, the duplication of the three or four story single-family house but with the attempt to surpass it with new programs that occur on the ground floor. The Cluny Hotel (now demolished) in Boston for instance, was a luxurious hotel which included in its shared lower levels a reception area of five continuous rooms, reception room, parlor, library, dining room with a central hall with a coat room and water closet, and a smoking room off from the dining room. Each residence had 7 bedrooms with two full bathrooms, and 15 closets per floor. In many Boston apartment hotels, the kitchens of all the apartments were clustered at the top as to avoid bad odors (Shand-Tucci, 105).

residential hotels where people lived for a prolonged amount of time, (after 1 month of a residency in a hotel, Boston considers the tenant a resident) have a long history in Boston as well other metropolises in the United States. There were hotels for every class, and kind of community. ("We have fine hotels for fine people. Good hotels for good people. Plain hotels for plain people. And some bum hotels for bums" Hotel keeper Simeon Ford 1903, NYC). There were four types of hotels: the palace hotel, the mid-priced hotel, the rooming house, the lodging house. These four categories could be considered as two categories of hotel – a family residence, which was prominent among the upper class in the second half of the 19th century, and the SRO (Single Room Occupancy) which was meant to cater to individuals (though may have been used otherwise).

The family hotel was defined as a multi-family residence where a family occupies part or a whole floor but not multiple floors. It was in a way, the duplication of the three or four story single-family house but with the attempt to surpass it with new programs that occur on the ground floor. The Cluny Hotel (now demolished) in Boston for instance, was a luxurious hotel which included in its shared lower levels a reception area of five continuous rooms, reception room, parlor, library, dining room with a central hall with a coat room and water closet, and a smoking room off from the dining room. Each residence had 7 bedrooms with two full bathrooms, and 15 closets per floor. In many Boston apartment hotels, the kitchens of all the apartments were clustered at the top as to avoid bad odors (Shand-Tucci, 105).

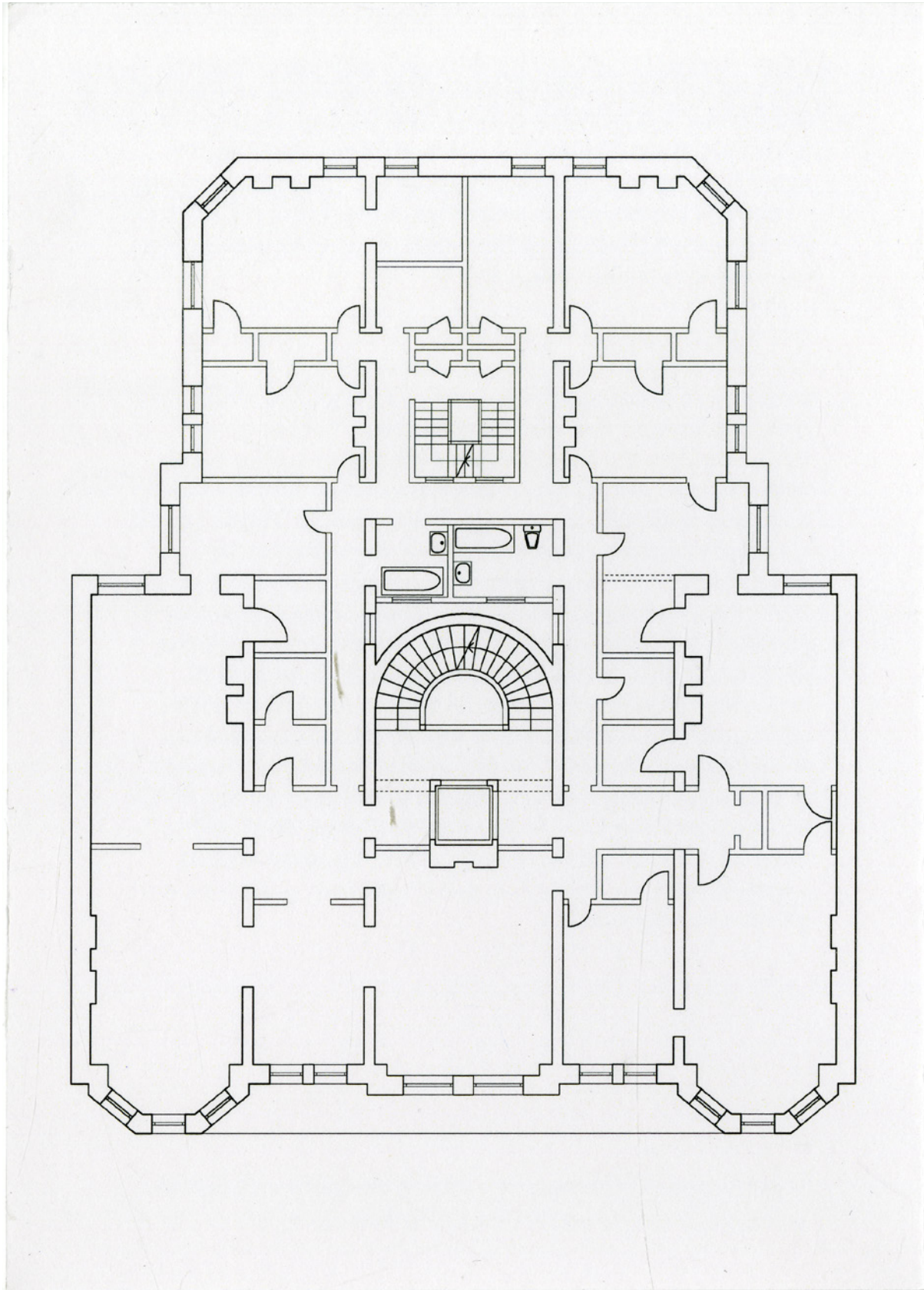
The Single Room Occupancy is the most inexpensive kind of hotel. They were hotels that hosted people for flexible periods of time, so they did include transients – on average the hotel residents move as much as apartment renters (Groth, 11). The general demographic of the single room occupants was 43% under 40, 32% 40-60, 25% elderly people who did not want to live in nursing homes. The difference between boarding houses and lodging houses (rooming houses) was that boarding houses included meals whereas lodging houses did not. Boarding houses also had stricter rules, and surveillance that could have been considered oppressive at times. Lodging houses dwindled in the 80s as speculative development acquired their land as real estate prices rose, but also because they were converted to the more lucrative market of the tourist hospitality. In the 19th century and during the growth of the suburbs, lodging houses were the means for the lower classes to live alone and downtown. Though the practice of homeowners of taking boarders in a spare room for extra cash (with or without board) was also quite prominent. Social historians estimate that more than a third of 19th century residents took in boarders or were boarders themselves. Walt Whitman claimed that it is probable that nearer  $\frac{3}{4}$  than  $\frac{2}{3}$  of the all the adult inhabitants of New York City lived in boarding-houses (3). The boarding house was described as an American Institution, a symbol of the uniquely transient nature of American life. (4)

“Single room occupants are omitted in the language of housing legislation, written off in the communities, ignored and rejected in urban development plans and pushed











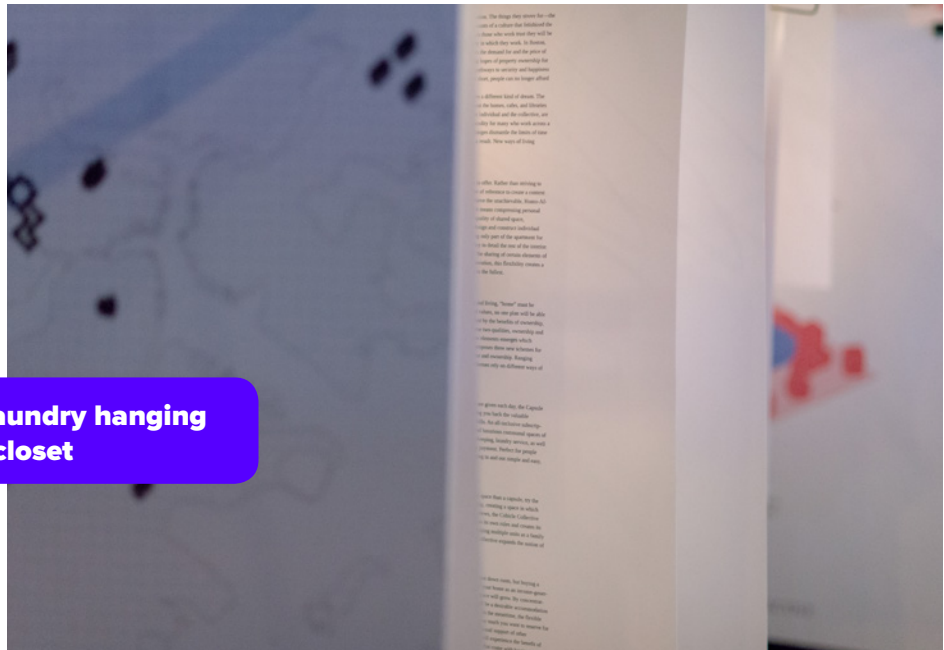
07-03 PRESENTATION IMAGES







Source: Sarah Wagner



Dirty laundry hanging in the closet



Collective Brain Weekly



Source: Sarah Wagner





Credit: Sarah Wagner





Credit: Sarah Wagner

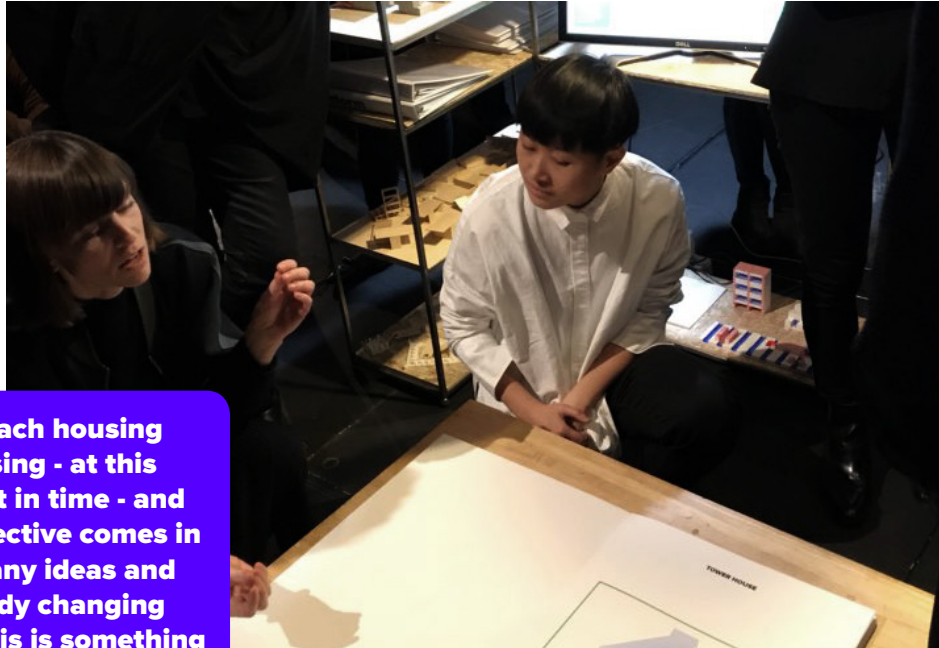


Credit: Sarah Wagner



Rafi Segal

**The way you approach housing - we approach housing - at this school, at this point in time - and the idea of the collective comes in here because of many ideas and platforms are already changing the way we live - this is something we need to discuss.**



**We can't separate the content of the design from the presentation, from setting up the jury like this. It is a completely different way to use design to access housing as an issue.**





Timothy Hyde

**I am used to being the one that is the most pessimistic about architectural form and its instrumentality.**

**Are you trying, through this work, to push us to the crisis of the collapse of living and working into a singular space and activity under contingent structures of employment in neoliberal capitalism, or are you trying to provide collective alternatives: alternative ways of structuring families, work units, living partnerships, working partnerships and etc. as a way of breaking that model?**

**But the question is that the regulatory apparatus and economic apparatus will and necessarily must perceive architectural form, or do you see some possibilities that the architectural forms that they put forward can produce different regimes of regulation, so that the city of Cambridge will take the Airbnb proposal and use that to write Airbnb regulations?**

Ana Miljacki

**Why would you take ideology off the table?**

Arindam Dutta

**Well, I'm trying to have an ideology with economics.**



## 08 BIBLIOGRAPHY

Amazon. "Amazon HQ2 RFP." September 7, 2017. [https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP\\_3.\\_V516043504\\_.pdf](https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP_3._V516043504_.pdf).

Airbnb. "Business Travel Ready Homes." Accessed January 15, 2018. <https://www.airbnb.com/business-travel-ready>.

Airbnb. "Your Safety Is Our Priority." Trust and Safety. Accessed January 15, 2018. <https://www.airbnb.com/trust>.

Airdna. "Boston." Market Overview. Accessed January 15, 2018. <https://www.airdna.co/market-data/app/us/massachusetts/boston/overview>.

Antonas, Aristide. "The Unhomely Bed." In *Hannes Meyer Co-op Interieur*. Berlin: Spekter Books, 2016.

Aureli, Pier Vittorio. "A Room without Ownership." In *Hannes Meyer Co-op Interieur*. Berlin: Spekter Books, 2016.

Aureli, Pier Vittorio. "Life, Abstracted: Notes on the Floor Plan." *e-flux*, October 17, 2017. <http://www.e-flux.com/architecture/representation/159199/life-abstracted-notes-on-the-floor-plan/>.

Aureli, Pier Vittorio. *The Project of Autonomy*. New York: The Temple Hoyne Buell Center for Study of American Architecture, 2008.

Barnhart, Cynthia. Letter from the Chancellor to the MIT Community. *Expanding Graduate Housing*, October 16, 2017.

Barthes, Roland. *Image, Music, Text*. New York: Hill and Wang, 1977.

Bathelor, Peter. "The Origin of the Garden City Concept of Urban Form." *Journal of the Society of Architectural Historians*, Vol. 28, No. 3, October 1969: 184-200.

Benjamin, Walter. "Louis-Philippe or the Interior." In *The Arcades Project*. Cambridge, MA: Belknap Press, 1999.

Berardi, Franco Bifo. *The Soul at Work: From Alienation to Autonomy*. Cambridge: MIT Press, 2009.

Bijlsma, Like and Jochem Groenland. *The Intermediate Size: A Handbook for Collective Dwellings*. Amsterdam: SUN, 2006.

Bleier, Evan. "American Tourist Claims He Was Held Captive and Sexually Assaulted by His Transsexual Airbnb host in Spain." *DailyMail*, August 15, 2015. <http://www.dailymail.co.uk/news/article-3199338/American-tourist-Jacob-Lopez-claims-transsexual-Airbnb-host-Madrid-sexually-assaulted-him.html>.

Bratton, Benjamin. *The Stack, On Software and Sovereignty*. Cambridge: MIT Press, 2015.

Buchli, Victor. "Moisei Ginzburg's Narkomfin Communal House in Moscow: Contesting the Social and Material World." *Journal of the Society of Architectural Historians*, Vol. 57, No. 2 (June 1998), 160-181.

Chinese Progressive Association. "Chinatown Airbnb Protest." Accessed January 15, 2018. <http://cpaboston.org/en/news-events/news/chinatown-sos-short-term-rental-regulation-tour>.

Choi, Binna and Maiko Tanaka, eds. *Grand Domestic Revolution Handbook*. Utrecht: Casco, Office for Art, Design and Theory, 2014.

Cloutier, Catherine. "Boston's Triple-Deckers in Demand, Families Getting Pushed Out." *The Boston Globe*, October 9, 2015. <https://www.bostonglobe.com/metro/2015/10/08/boston-three-deckers-remain-mainstay-but-bigger-buildings-are-rise/s15Oc6pXMXHe8sB2wLOUZK/story.html>.

Colomina, Beatriz. "The Century of the Bed." In *The Century of the Bed*. Vienna: Verlag für moderne Kunst, 2014.

Costa, Guido. *Nan Goldin*. London: Phaidon Press, 2001.

Cowen, Deborah. *The Deadly Life of Logistics*. Minneapolis: University of Minnesota Press, 2014.

Dixon, Alexander M. "WorkHotel." Thesis/ Dissertation, Massachusetts Institute of Technology, 2014.

Dogma. "A Room of One's Own." In *Volume #46: Shelter*, December, 2015: 24-31.

Dogma. *Living and Working: How to Live Together*. [https://architecture.mit.edu/sites/architecture.mit.edu/files/attachments/lecture/Tattara\\_living%20and%20working\\_intro.pdf](https://architecture.mit.edu/sites/architecture.mit.edu/files/attachments/lecture/Tattara_living%20and%20working_intro.pdf).

Duffy, Frank. *Work and the City*. London: Black Dog Publishing Limited, 2008.

Dwyer, Julia and Anne Thorne. "Evaluating Matrix: Notes from Inside the Collective." In *Altering Practices*. London: Routledge, 2007.

Easterling, Keller. *Extrastatecraft: The Power of Infrastructure Space*. London: Verso, 2014.

Editorial Board, "Graduate Student Housing." *MIT Faculty Newsletter* XXX, no. 1 (September/October 2017).

Evans, Robin. "Figures, Doors and Passages." In *Translations from Drawing to Building and Other Essays*. Cambridge: MIT Press, 1997.

Fabrizi, Mariabruna. "Ivan Leonidov's Competition Proposal for the Town of Magnitogorsk (1930)." *SOCKS*, April 12, 2016. <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>.

Frase, Peter. *Four Futures: Life After Capitalism*. London: Verso, 2016.

Fraser, Nancy. "Contradictions of Capital and Care." In *New Left Review* 100 (2016): 99-117.

Fraterrigo, Elizabeth. *Playboy and the Making of the Good Life in Modern America*. New York: The Oxford Press, 2009.

Federici, Silvia. *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. PM Press, 2012.

Galison, Peter and Caroline A. Jones. "Trajectories of Production Laboratories/ Factories/ Studios." In *Laboratorium*. Edited by Hans-Ulrich Obrist and Barbara Vanderlinden. Dumont, 2001.

Gilabert, Eva Franch i, Ana Miljacki, Ashley Schafer, Carlos Minguez Carrasco and Jacob Reidel, eds. *OfficeUS Manual*. Switzerland: Lars Müller Publishers, 2015.

Graduate Student Housing Working Group, *Interim Report*, MIT, October 2017, <http://chancellor.mit.edu/grad-housingworkgroup>.

Graduate Student Housing Working Group, *Report to the Provost*, MIT, May 2014, <http://chancellor.mit.edu/grad-housingworkgroup>.

Green, Hardy. *The Company Town*. New York: Basic Books, 2010.

Groth, Paul Erling. *Living Downtown*. Berkeley: University of California Press, 1994.

*Harvard Design Magazine No.41/ Family Planning*, F/ W 2015: Entire Issue.

Hayden, Dolores. *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities*. Cambridge: MIT Press, 2000.

Hookway, Branden. "Mobility as Management: The Action Office." In *OFFICEUS Agenda*. Zurich: Lars Müller Publishers and PRAXIS, Inc., 2014.

Hyde, Timothy. "Turning the Black Box into a Great Gizmo." *Threshold 38* (2010): 80-83.

Inside Airbnb. "Boston." Accessed January 15, 2018. <http://insideairbnb.com/boston/>.

Kiaer, Christina. "Rodchenko in Paris." *October*, Vol. 75, Winter, 1996: 3-35.

Krim, Arthur J. "The Three-Deckers of Dorchester: An Architectural Survey." *Internet Archive*, 1977. [https://archive.org/stream/threedeckersofdo00krim/threedeckersofdo00krim\\_djvu.txt](https://archive.org/stream/threedeckersofdo00krim/threedeckersofdo00krim_djvu.txt).

Koolhaas, Rem. "Typical Plan." In *SMLXL*. New York: The Monacelli Press, 1995.

Kuo, Jeannette. *A-Typical Plan, On Identity, Flexibility, and*

*Atmosphere in the Office Building*. Zurich, Park Books, 2013.

LaGrave, Katherine. "8 Cities Cracking Down on Airbnb." *Conde Nest Traveler*, June 2, 2017. <https://www.cntraveler.com/galleries/2016-06-22/places-with-strict-airbnb-laws/8>.

Larsen, Lars Bang. "Giraffe and Anti-Giraffe: Charles Fourier's Artistic Thinking." *e-flux Journal* #26, June 2011.

Lange, Alexandra. "Donald Judd's House." *New Yorker*, May 13, 2013.

Lavrentiev, Alexander. "Experimental Furniture Design in the 1920s." *The Journal of Decorative and Propaganda Arts*, Vol. 11, Russian/Soviet Theme Issue 2, Winter, 1989: 142-167.

LaVecchia, Olivia and Stacy Mitchell. *Amazon's Stranglehold: How the Company's Tightening Grip Is Stifling Competition, Eroding Jobs, and Threatening Communities*. The Institute for Local Self-Reliance, 2016. [https://ilsr.org/wp-content/uploads/2016/11/ILSR\\_AmazonReport\\_final.pdf](https://ilsr.org/wp-content/uploads/2016/11/ILSR_AmazonReport_final.pdf).

Lazzarato, Maurizio. *The Making of the Indebted Man*. Cambridge: The MIT Press, 2011.

LeCavalier, Jesse. *The Rule of Logistics, Walmart and the Architecture of Fulfillment*. Minneapolis: University of Minnesota Press, 2016.

Ledoux, Claude Nicolas. *L'architecture consideree sous le rapport de l'art, des moeurs et de la legislation*. Paris, Chez l'auturer. Paris, Reprinted by F. de Nobeles, 1961.

León, Ana María, Tessa Paneth-Pollak, Martina Tanga, and Olga Touloumi. "Counterplanning from the Classroom." *Journal of the Society of Architectural Historians* 76, no. 3 (September 2017): 277-280.

Livingston, James. "Fuck Work." *Aeon*, November 25, 2016. <https://aeon.co/essays/what-if-jobs-are-not-the-solution-but-the-problem>.

Madden, Steven and Peter Marcuse. *In Defense of Housing*. New York: Verso, 2016.



Martin, Reinhold, Susanne Schindler and Jacob Moore, eds. *The Art of Inequality: Architecture, Housing, and Real Estate*. New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2015.

Martin, Reinhold and Anne Kockelkorn, eds. *Housing after the Neoliberal Turn: International Case Studies*. Berlin: Spector Books, 2015.

Martin, Reinhold. *Utopia's Ghost*. Minneapolis: University of Minnesota Press, 2010.

May, John. Under Present Conditions Our Dullness Will Intensify. *PROJECT: A Journal for Architecture*, No. 3 (2014): 17-21.

McGuirk, Justin. "Honeywell, I'm Home! The Internet of Things and the New Domestic Landscape." In *Housing after the Neoliberal Turn: International Case Studies*. Leipzig: Spector Books, 2015.

McLaughlin, Ryan. "Connected Distribution – Planning Boston for the Future Worker." Thesis/ Dissertation, Massachusetts Institute of Technology, 2016.

Metahaven, and Marina Vishmidt, eds. *Uncorporate Identity*. Belgium: Lars Müller Publishers, 2010.

Miessen, Markus. *The Nightmare of Participation: (Cross-bench Praxis as a Mode of Criticality)*. Belgium: Sternberg Press, 2010.

MIT Division of Student Life, *Architectural Principles for Undergraduate Residences*, October 2016.

MIT Graduate Student Apartments Now, *Zoning Petition: Section 13.913 Graduate Student Housing Production Requirement*, <https://actionnetwork.org/campaigns/mit-graduate-student-apartments-now-gsan>.

MIT, *2016 Town Gown Report to the City of Cambridge*, <http://www.cambridgema.gov/CDD/planud/institutionalplanning/recenttowngown.aspx>.

*Monu: Communal Urbanism 18* (2013): Entire Issue.

*Monu: Domestic Urbanism 24* (2016): Entire Issue.

Mozingo, Louise A. *Pastoral Capitalism*. Cambridge: The MIT Press, 2011.

Nicoletta, Julie. "The Architecture of Control: Shaker Dwelling Houses and the Reform Movement in Early Nineteenth-Century America." *Journal of the Society of Architectural Historians*, Vol. 62, No. 3 (September 2003): 352-387.

Nochlin, Linda. "Why Have There Been No Great Women Artists?" In *Women, Art and Power and Other Essays*. Westview Press, 1988.

Obrist, Hans Ulrich. *Wolfgang Tillmans speaks with Hans Ulrich Obrist*. Translated by Matthew Gaskins. Madrid: La Fabrica Editorial, 2009.

Osterweil, Willie. "Liberalism is Dead: Silicon Valley's Techtopian Libertarianism Points to A Disruptive Left Fascism for the 21<sup>st</sup> Century." *The New Inquiry*, September 15, 2017.

O'Sullivan, Feargus. "Europe's Crackdown on Airbnb." *CityLab*, June 20, 2016. <https://www.citylab.com/equity/2016/06/european-cities-crackdown-airbnb/487169/>.

Pillow. "About Pillow." Accessed January 15, 2018. <https://www.pillow.com/>.

Puigjaner, Anna. "Bootleg Hotels". In *SQM The Quantified Home*. Zurich: Lars Muller Publishers, 2014.

Puigjaner, Anna. "The City as a Hotel," in *Together! The New Architecture of the Collective*, edited by Mateo Kries, Mathias, Ilka Ruby and Andreas Ruby. Berlin: Ruby Press, 2017.

Rosen, Andy. "Airbnb Tax Dropped from Massachusetts Budget, Negotiations Continue." *The Boston Globe*, July 7, 2017. <https://www.bostonglobe.com/business/2017/07/07/airbnb-tax-dropped-from-massachusetts-budget-negotiations-continue/pica9RqCEyxhLPhgGR0t9H/story.html>.

Rosenfield, Michael. "Massive Party at Airbnb Disturbs Neighbors in Wellesley." *NBC Boston*, September 13, 2017. <https://www.necn.com/news/new-england/Massive-Party-at-Airbnb-Disturbs-Neighbors-in-Wellesley-444337983.html>.

Rushkoff, Douglas. "It's Time to Break Up Amazon." *Fast Company*, June 19, 2017. <https://www.fastcompany.com/40432885/its-time-to-break-up-amazon>.

Salvucci, Frederick P. "MIT Construction Plans Continue to Undervalue Graduate Student Needs." *MIT Faculty Newsletter* XXVIII, no. 1 (September/October 2015).

Schindler, Susanne. "Architecture vs. Housing: The Case of Sugar Hill." *Urban Omnibus*, September 3, 2014. <http://urbanomnibus.net/2014/09/architecture-vs-housing-the-case-of-sugar-hill/>.

Scott Brown, Denise. "Room at the Top? Sexism and the Star System." In *Gender Space Architecture: An Interdisciplinary Introduction* (1989): 258-265.

Scott, Joan Wallach. *Only Paradoxes to Offer: French feminists and the Rights of Man*. Harvard University Press, 1996.

Sdobnov, Sergey. "What are you sitting on: (Non) Mass Furniture in the USSR." *Strelka Magazine*. <http://strelka.com/en/magazine/2017/06/20/soviet-furniture>

Sears, Roebuck and Co. *Sears Modern Homes 1913*. New York: Dover Publications Inc., 2006.

Sears Archives. "Sears Historic Homes." Last modified March 21, 2012. <http://www.searsarchives.com/homes/1908-1914.htm>.

Sergeant, John. *Frank Lloyd Wright's Usonian Houses: The Case for Organic Architecture*. New York: Whitney Library of Design, 1976.

Self, Jack, Shumi Bose and Finn Williams, eds. *Home Economics*. London: The Spaces and REAL Foundation, 2016.

Self, Jack. *Quantum Space - Privatization and the End of Privacy*. 2015.

Self, Jack and Shumi Bose, eds. *Real Estates: Life without Debt*. London: Bedford Press 2015.

Self, Jack. "Time Confetti." In *Volume #45: Learning*, September, 2015: 130-135.

Self, Jack. "Work On, Work On, but You'll Always Work Alone." *The Architectural Review*, February 1, 2016. <https://www.architectural-review.com/rethink/work-on-work-on-but-youll-always-work-alone/10002024.article>.

Serlio, Sebastiano, *On Domestic Architecture from the Meanest Hovel to the Most Ornate Palace*. New York: Architectural History Foundation, 1978.

Shand-Tucci, Douglass. *Built in Boston*. Amherst: University of Massachusetts Press, 1999.

Simha, O.R. "A Brief History of MIT's Land Acquisition Policies." *MIT Faculty Newsletter* XXIV, no. 2 (November/December 2011).

Simha, O.R. "MIT 2030: Concerns for the Future." *MIT Faculty Newsletter* XXIV, no. 2 (November/December 2011).

Smith, Neil. "The Housing Question Revisited." *ACME: An International Journal for Critical Geographies*, vol. 15, no. 3 (September, 2016): 679-683, <https://www.acme-journal.org/index.php/acme/article/view/1352/1210>.

Stanek, Lukasz. "Collective Luxury: Architecture and Populism in Charles Fourier." *Hunch*, No. 14, 2010: 128-137.

Steinhauer, Jill. "How Mierle Laderman Ukeles Turned Maintenance Work into Art." *Hyperallergic*, February 10, 2017. <https://hyperallergic.com/355255/how-mierle-laderman-ukeles-turned-maintenance-work-into-art/>.

Steinweg, Marcus. "What is a Collective?" In *New Forms of Collective Housing in Europe*. Basel: Birkhäuser, 2009.

Stein, Samuel. "De Blasio's Doomed Housing Plan." *Jacobin* 15/16 (Fall 2014): 11-18.

Stevenson, Katherine Cole. *Houses by Mail, A Guide to Houses from Sears, Roebuck and Company*. Washington DC: The Preservation Press, 1986.

Tafuri, Manfredo. *Architecture and Utopia, Design and Capitalist Development*. Cambridge: The MIT Press, 1976.

Teige, Karel. *The Minimum Dwelling*, MIT Press, 1932/2010.

The Economist. "Home-Sharing Sites Are Targeting Business Travelers." May 2, 2017. <https://www.economist.com/blogs/gulliver/2017/05/airbnb-or-not-airbnb>.

Ukeles, Mierle Laderman. "Manifesto for Maintenance Art 1969 Proposal for an exhibition 'CARE'." [http://www.queensmuseum.org/wp-content/uploads/2016/04/Ukeles\\_MANIFESTO.pdf](http://www.queensmuseum.org/wp-content/uploads/2016/04/Ukeles_MANIFESTO.pdf).

Ungers, O.M. *The Dialectical City*. New York, Skira Publishing House: 1997.

Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, 1977.

Vishmidt, Marina. "Self-Negating Labor: A Spasmodic Chronology of Domestic Unwork." In *The Grand Domestic Revolution Goes On*. Casco: Bedford Press, 2012.

Volpe MIT. "Cambridge Planning Board Zoning Submission Overview." July 14, 2017. <https://volpe.mit.edu>.