THE THIRD PLACE: A MIXED-USE BUILDING FOR OFFICE WORKERS IN THE CENTRAL BUSINESS DISTRICT

Mingming Zhao

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The Third Place
A mixed-use building for office workers in the central business district
A thesis submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts at Virginia Commonwealth University.

Mingming Zhao

B.A. English Studies with International Business
The University of Nottingham Ningbo China, 2015
M.F.A. Interior Environments
Virginia Commonwealth University, 2017

To the teachers who inspired and guided me
Roberto Ventura
Christina Lafazani
Sara Reed
Eleanor Barton
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Jillian Chapin
Jennifer Fell
Rob Smith
Emily Smith
Hillary Fayle

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Heather Overby
Lucy Dabney

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Qiang Yan
Yang Liu
Xilin Chen
Xiran Yang
Shiyang Yuan

I am so blessed to have spent the past two years with you. Truly grateful. Thank you.
manifesto

“I believe that the way people live can be directed a little by architecture.”

—— Tadao Ando.

If I am to design, I must be honest to materials, be critical of “truth”, and be brave to move beyond the traditional and accepted.

Embracing the constraints of nature as a jumping off point, not a barrier.

Speaking in a design voice that is respectful of humanity mindful of our planet and influences those who interact with my solution to be mindful as well.

I believe... less, but better.
Work-related stress is an issue of growing concern around the world. The relationship between work stress and individuals' psychological and physical health is well acknowledged. In the survey of “stress in the workplace” conducted by American Psychological Association in 2012, two in five (41%) of employed adults report that they typically feel stressed during the workday, up from 36% in 2011, while less than six in ten (58%) report that they have the resources to manage work stress.

Historically, Central Business Districts are a focal point of cities, and are occupied by a large group of office buildings and a number of retail spaces. According to Elsbach and Bechky (2007), office workers regularly leave their offices in search of more relaxed, creative environments. However, there is limited “third space” to serve office workers’ daily life in the central business district.

Most of the design research about wellness of office workers have done focus on the spaces in which people work during office hours. Consideration needed to support the life of the office worker and what kind of spaces they are looking for after hours.

Several primary research methods were adopted. First, a survey of research on how the design of traditionally planned CBDs fails to support wellness of office workers was made. Then, the thesis examined what is needed to support the wellness of workers to reduce stress, improve their health and enhance wellness of office workers.

Several primary research methods were adopted. First, a survey of research on how the design of traditionally planned CBDs fails to support wellness of office workers was made. Then, the thesis examined what is needed to support the wellness of office workers after office hours. In order to make it specific to the office workers in the CBD of Richmond, qualitative methodologies, including interviews and case studies of recently done CBDs that facilitate this kind of wellness. The Shibaura House, designed by Kazuyo Sejima, located in the business district of Tokyo in Japan, will serve as a case study.

There are three aims in this research. First is the design of a series of mixed-use spaces in an existing building in the Central Business District of Richmond to support the wellness of the office workers in the CBD of Richmond, and try to define the CBD in a new way. The preliminary results for this research indicate the importance of the concern for office workers after office hours. The results are based on the practical effects of the mixed use building in reducing work stress, improving office workers’ health and enhancing wellness of office workers.

What workers say about stress on the job

<table>
<thead>
<tr>
<th>Stress in the workplace (%)</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>2011</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Typically feel tense or stressed out during workday (%) 2011: 25%, 2012: 25%

Back injuries to back/shoulder work stress (%) 2011: 50%, 2012: 50%
The original idea for this project is to design a mixed-use building for the office workers after office hours. In the process of researching, keep finding existing projects all over the world with the similar starting point as mine. Two referential projects are the Shibaura House in Tokyo and the Hive On 16th in Denver. The Shibaura House in Tokyo is my spirit for mixed-use spaces. Another referential project is the Hive On 16th in Denver, it has quite similar operation mode for public spaces and proposed to use in my project. For my thesis project, it aims to change the single form of the central business district in Richmond, and improve the wellness of office workers. Therefore, the keywords for my research were mixed-use building, office workers, wellness, pressure reducing, co-working spaces, and sustainability.
The Shibaura House represents a new spirit for mixed-use spaces. It is a multistory building containing flexible workshop spaces which provide diverse areas within the various levels. It is capable of supporting a wide range of functions and activities, and individuals or groups may hold meetings, conferences, events, lectures and exhibitions within the unique interior and terraced plan arrangements. The way of mingling different programs but also making them be relatively independent is what I am looking for in the thesis project.
“What I really like, is the mix of people using the space during their lunch hours. On one hand, businessmen are having meetings, over there mothers converse, and in another area you find employees like us. It is wonderful to see all these things happening in one space, and I think it is great that we have managed to create this in the middle of the city.”

The first floor is equipped with a kitchen and drinking and eating is possible. It is great for a party. Also it is suitable for talks and workshops. The second floor is great for use as a lounge space, when using the 1st floor for a party. It is also a fitting space for a small exhibition as there is natural light from the southern terrace. The third floor is gently divided into two spaces, by a glass window and the terrace, which is suitable for presentations and seminars.

Perspective drawing shows interconnection between floors and programs. 4
The a21 house is a stylish traditional Asian studio with multilevel construct which uses natural sunlight, open spaces and skylights to create a relationship between nature and the building itself. The overall organic ambiance is amplified with simple white textured walls and hints of greenery growing indoors.

This project inspiring the way of bringing green from outside to inside, and it’s lack of fussy details, reuse of existing structure and surfaces, abundance of natural light, open breezy spaces, integration with trees and plants, an overall relaxed style and effortless beauty in the simplicity.
I simply want our studio like a wild cage which is bathed in sunlight, inundated by rainwater, fully surrounded by trees... and non-frontier space... And we are like wild beasts in cage, stay temporary but thirst for living.

The inspiration A21 house project give me is the concept of green and nature.
Oldenburg calls one’s “first place” the home and those that one lives with. The “second place” is the workplace — where people may actually spend most of their time. Third places, then, are "anchors" of community life and facilitate and foster broader, more creative interaction.

Oldenburg suggests the following hallmarks of a true "third place":

- Free or inexpensive food and drink, while not essential, are important
- Highly accessible: proximate for many (walking distance)
- Involve regulars — those who habitually congregate there
- Welcoming and comfortable
- Both new friends and old should be found there

After researching on workplace stress and health, wellness of office workers and the Central Business District environment, this proposed mixed-use building program will include a café, fitness center, work lounge, workshop rooms and a roof terrace. Most of the program supports entertainment and space which is not office workers in their after-office hours. However, the concept of the work lounge resembles a living office.

Living Office is a high-performing workplace that delivers an elevated experience of work for people, it provides an updated understanding of people and their work, founded on elements that are naturally human—how we experience the world and what motivates us. Informed by this understanding, applied design considerations for the arrangement of surroundings, furnishing, and tools to meet the needs of people and deliver an elevated experience of work. Food choices, high-quality lighting, water and air all serve to create healthier, energized surroundings.

As work activities have become more interactive and communal, the need for privacy hasn’t gone away. Private workstations or offices are no longer the way to provide this privacy. Many organizations are taking their exclusive- yet-vacant private offices and transforming them into smaller, better-equipped 'Haven Settings,' where anyone can work. From standard conference rooms to a variety of group settings: From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature. From the traditional conference rooms to a variety of group settings. People doing a variety of activities throughout the day. A majority of these activities are social and collaborative in nature.

In the past, circulation space was viewed as a necessary evil — of ces had to have it so people could comfortably move from Point A to Point B. But circulation space can become active connective space. When purposefully planned — with people’s needs, experiences, and activities in mind — it can become an active connective space.
This building was built in 1975, and it is connected to the high-rise Bank of America building which is built in 1973, located in heart of downtown Richmond’s financial district. It has excellent views of the Capital and James River. The total square feet for the connector section is 28,000. The property tax is Class A for the building. The construction material is concrete, masonry, metal and glass.

The building is bounded on the north side by East Main Street, on the east by South 12th Street, and on the south side by East Cary Street. It has a 25-story office building, a three-level office building, a nine-level parking deck, and a pedestrian plaza.

The building was rezoned from B-6 Mixed Use Business District to B-4 Downtown Central Business District in 1999. To today, east of the building across 12th Street is zoned B-5 Central Business District. The property to north and west are occupied by high-rise office buildings.
The building is located in the Central Business District in downtown Richmond. The area of offices in downtown has transformed from a public functional district to the Central Business District of Richmond today. The CBD acts as a district connecting government, MCV campus, and James River, and also a boundary separating the downtown from the residential districts (R-6) and light industrial districts (M-1). A number of landmark high-rise buildings are located in the CBD such as the building of Bank of America Capitol, as a landmark, play an important role to note this area.

The CBD in Richmond has grown since 1998. Today, the west boundary of the district extends to North Harrison Street as shown in the following image. And the east boundary is Interstate 95. The north boundary is E Leigh Street, and the south is the James River.

According to the labor statistics from Richmond Government Information System in 2015, the total labor population is 1,218,864.
**Initial Programming**

**1. Quantities**

<table>
<thead>
<tr>
<th></th>
<th>cafe</th>
<th>work lounge</th>
<th>workshop rooms</th>
<th>fitness center</th>
<th>roof/terraces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**2. Required Areas**

- Coffee bar
- Kitchen
- Dining space
- Restrooms
- Housekeeping room
- Public work lounge
- Private offices
- Restrooms
- Performance room
- Individual studios
- Storage spaces
- Restrooms
- Roof/terraces
- Excercise area
- Fitness rooms
- Rest area
- Changing rooms
- Shower rooms
- Restrooms
- Housekeeping room
- Public rest area
- Public activity space
- Private sections

**3. Occupant Load**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>8</th>
<th>3</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>users</td>
<td>office worker members</td>
<td>their families</td>
<td>office worker members</td>
<td>organizer + invitee + audience</td>
</tr>
</tbody>
</table>

**4. Space Summary**

- A place to eat, talk, and have a break. The appropriate furniture elements, materials, colors, lighting and even music make workers relax in a day.
- The work lounges provide office workers a "third" place to work after office hours. Here one can work in a quiet atmosphere, in public or private, at well-lit tables or in overstuffed chairs.
- A space for office workers to organize activities, or for organizations to hold business workshops. It also could be a meeting space or business conference room.
- The fitness and exercise center includes multiple exercise areas such as aerobics, free weights, stretching and yoga studios. To counteract office workers' sedentary lifestyle.
- A multipurpose space for office workers to de-stress in a natural environment.

**5. Important Adjacencies**

- Lobby • Restrooms • Cafe • Lobby • Restrooms • Cafe
- Restrooms • Changing rooms • Shower rooms • Restrooms • Work lounge • Cafe

**6. Accessibility**

- Yes-ADA • Yes-ADA • Yes-ADA • Yes-ADA • Yes-ADA

**7. Plumbing Requirements**

- Kitchen + Restrooms • Restrooms • Restrooms • Shower rooms + Restrooms • No

**8. Specialized FF&E**

- Wood tables and seats, stainless kitchen equipment • Various types of seating • Moveable furniture • Water-resistant, Dirt-resistant furniture • Water-resistant, Dirt-resistant furniture

**9. Acoustic Privacy**

- Medium • High • Medium • Low • Low

**10. Visual Privacy**

- Low • Medium • Medium • Medium/high • Low

**11. Security**

- Low • Medium • High • Medium • High

**12. Light Requirements**

- High • Medium • High • Medium • Bachalpsee • High

**13. Others**

- Yes • Yes • Tbd • Tbd • Tbd • Tbd • Tbd
FITNESS CENTER NET AREA
1,500 ft²

WORK LOUNGE NET AREA
2,000 ft²

WORKSHOP ROOMS NET AREA
2,250 ft²

COFFEE BAR NET AREA
600 ft²

PRIVATE OFFICES NET AREA
100 ft²/each

WORK LOUNGE NET AREA
2,000 ft²

FITNESS CENTER NET AREA
1,500 ft²

INDIVIDUAL STUDIO NET AREA
400 ft²/each

CHANGING ROOMS NET AREA
225 ft²

SHOWER ROOMS NET AREA
225 ft²

COFFEE BAR NET AREA
600 ft²

PRIVATE OFFICES NET AREA
100 ft²/each

INDIVIDUAL STUDIO NET AREA
400 ft²/each

FITNESS CENTER NET AREA
1,500 ft²

WORKSHOP ROOMS NET AREA
2,250 ft²

TOTAL NET AREA
6,895 ft²

RESTROOMS (Net Area 100 ft²/each)

HOUSEKEEPING ROOMS (Net Area 25 ft²/each)

TOTAL GROSS AREA
11,493 ft²
code analysis

Minimum 2 exits required

Floor 1: OL = 153, 2 exits
Floor 2: OL = 153, 2 exits
Floor 3: OL = 153, 2 exits

(Based on 60% efficiency ratio, assembly 15 net occupant load factor)

<table>
<thead>
<tr>
<th>Floor</th>
<th>Function</th>
<th>OL</th>
<th>Exit(s)</th>
<th>Note(s)</th>
</tr>
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<tbody>
<tr>
<td>A-2</td>
<td>Coffee Bar</td>
<td>40</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A-3</td>
<td>Study Lounge</td>
<td>40</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workshop Rooms</td>
<td>150</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>A-4</td>
<td>Fitness Center</td>
<td>30</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A-5</td>
<td>Roof Mixed Use Area</td>
<td>40</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

A-2

A-3

A-4

A-5

WATER CLOSETS
LAVATORIES
DRINKING FOUNTAIN
design process

conceptual
Dining Space
Work Lounge + Interior Courtyard
Root Terrace
Opening

Thanks to the hard work of all my classmates, my professor Roberto Ventura to make this be real. It was a memorable exhibition night.
The Third Place: A mixed use building for office workers in the central business district

STRESS AND HEALTH

Wellbeing of office workers is related to job satisfaction, sense of ownership and a connectedness between colleagues. It is directly related to job satisfaction. A sense of ownership and a connectedness between colleagues leads to lower stress levels. Office workers also have a greater sense of ownership when they feel that they are working in a comfortable and well-designed environment. A sense of connectedness between colleagues also leads to lower stress levels, as it creates a sense of community. For example, a study by the American Psychological Association found that employees who worked in a collaborative environment had lower levels of stress than those who worked in a more traditional office setting.

WELLNESS OF OFFICE WORKERS

The wellness of office workers is related to job satisfaction and work-life balance. It is directly related to job satisfaction. A sense of ownership and a connectedness between colleagues leads to lower stress levels. Office workers also have a greater sense of ownership when they feel that they are working in a comfortable and well-designed environment. A sense of connectedness between colleagues also leads to lower stress levels, as it creates a sense of community. For example, a study by the American Psychological Association found that employees who worked in a collaborative environment had lower levels of stress than those who worked in a more traditional office setting.

References:
5. 8 Confidential and proprietary research with Fortune 500 companies conducted by Herman Miller, 2014.
WORK CITED


8 Confidential and proprietary research with Fortune 500 companies conducted by Herman Miller, 2014.


IMAGE CITED

1 http://www.myledlightingguide.com/office-lighting

2 http://www.sradigitalsolutions.com/the-company/

3 Confidential and proprietary research with Fortune 500 companies conducted by Herman Miller, 2014.

4 http://www.shibaurahouse.jp/en

5 http://www.archdaily.com/244645/a21house-a21-studio