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SHARING SCHOOL OF ARCHITECTURE

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Abstract

Pedagogical experiments played very important role in shaping architectural discourse and practice in the second half of the 20th century. Along the history, the architecture discipline developed and struggled for new territories by articulating its relationship to the technological, socio-political and cultural transformations of the time -- and education became a vehicle for these actions.

The rise of information technology brought sharing economy to urban life. Accessibility to spaces has been redistributed along with the notion of private and public territories. As companies starting to build platforms like Airbnb, Breather to accelerate the mixing of multi-programmatic spaces, institutional organizations tend to stay unchanged for their spatial arrangements.

With the title of “Sharing School of Architecture”, this thesis is putting together an argument as well as an attempt to push architecture school to the frontier of sharing economy by reimagining its spatial and programmatic organization in the contemporary urbanism context, which enables architecture elements to access, curate and reinvent spaces into pedagogical programs. Instead of a static campus with traditional curriculum, architecture school should be an ever-growing network of spaces as part of urbanization, and a system continuously generating creative content that fulfills people’s contemporary urban life.

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This thesis marks the end of my institutional academic journey, however, it is just a rough framework whose content will be filled with a span of a life time. As indicated in the writings as well: learning architecture is an ongoing process that kept growing with space and time.

To be able to pull out this framework and feel confident about it, I would like to express my sincere gratitude to my advisors, Anton Garcia, whose extraordinary talent and proposition on architecture inspired me through the whole course during my architecture study at MIT; and John Kennedy, whose rich experience and deep insight on business taught me what it takes to become an entrepreneur. I would also like to thank Professor Dennis Frenchman, whose energetic support made me believe that I’m not along in envisioning the future of architecture education; and Dr. Andrea Chegut, whose passion in innovation and real estate strengthened my belief as well.

In a larger sense, I would like express how blessed I’m feeling being able to spend my 3 years and half of my graduate study in the school of architecture and planning at MIT. I was able to see and explore a variety of horizons in life.

Most of my architecture education received from peers. Over the past nearly 10 years, I went through 3 institutions for my architecture education, and there are countless names I would like to put in the acknowledgement but unable to due to the limitation of the paper space.

My special thanks extend to I-yang Huang, whose last night support made it possible for me to curate my final presentation space; to Dan Li, Jie Zhang, Tengjia Liu and Jo Cai, together with whom we created an architectural family in the cosy apartment at 440 Mass Ave, which makes me feel back home every time I open the door; to Marwan Aboudib and Tengjia Liu (yes, again), together with whom we are able to elevate our friendship beyond study and entertainment, that gives me greater passion and confident after graduation, realizing that we are going to continue an amazing venture; and to my girlfriend Xi Zhao, for your accompany and support on everything — your presence is my endless source of courage, coming across you is the most beautiful surprise in life.

Lastly and most importantly, to my parents, thank you for your unconditional love and support. Being your son, as well as a member of the whole family is the most blessed event in my life, and I will continue make you feel happy and proud.
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This Tree of Architecture shows the main growth or evolution of the various styles, but must be taken as suggestive only, for minor influences cannot be indicated on a diagram of this kind.
I.
Revisiting History
At the Heart of the Campus in the University of Tokyo, stands a bronze statue, in front of which engraved the name: “J. CONDER”.

With the background of a massive maidenhair tree dressed with golden leaves even in late December, this statue becomes the most outstanding figure in the whole plaza.

Mr. Josiah Conder (28 September 1852 – 21 June 1920) served as a foreign advisor in the Japanese Government in Meiji Period. At the age of 24, Mr Conder was recruited by the Japanese Government as an architecture professor at the Imperial College of Engineering, which marked the beginning of his architecture career in Japan.

Conder designed numerous public buildings in Tokyo, including the Rokumeikan, which became a controversial symbol of Westernisation in the Meiji period. He educated many award-winning Japanese architects (notably Tatsuno Kingo and Katayama Tōkuma), earning him the nickname “father of Japanese modern architecture.”


Before visiting the University of Tokyo I did no research about the campus, while Mr. Conder’s statue was the first figure that came into my eye. before I checked the description I never thought he would be an architect.
It is time the stone made an effort to flower,
time unrest had a beating heart.
It is time it were time.

— Paul Celan, Corona, 1920
This thesis has nothing to do with Japan and very very little about Mr. Conder except the fact that he is definitely an important figure in architecture education history at Japan. However, the amazing thing about architecture is its omnipresence, a very normal scene in a trip visiting a foreign country -- or every moment in life could be built into the personal architecture history of each individuals. The architecture profession was rooted in the human civilization since the days its born, and it can only die out together with the civilization.

The acquaintance with the statue of Conder happened few hours before I started officially writing this thesis, and I decided to take it as the start of my chapter. In the past few hours I’ve been kept asking this question to myself: what makes an architect the most (or one of the most) important figure in the campus of the most important national higher education institution? regardless (or together with) all the noble prize winners, generals and prime ministers of this country?

The answer is time.

It is time that put architect on the stage of history and played a important role that marks the time. It is also time that bring it back to the seat of audience, to watch the current and incoming show. At certain moment, this person might leave his seat, walk into the back stage, change his costume and go back on the stage.
Architecture Education in Japan

“father of japanese modern architecture”, Condor started a new Era, where he introduced “architecture” into a new cultural context - the Japanese culture.

Located at far east on a small island, Japan played a crucial role in the world’s history of the 20th century. Despite of the massive war fare, Japan is the first Asia country successfully bridged the industry civilization from the western world into its own traditional culture, and in turn contributed its own. In the history of modern art and architecture, influence and achievement from Japan has always been a significant part in the 20th Century. Le Corbusier, Frank Lloyd Wright both spoke highly of Japanese architecture and its inspiration to the modernism movements in Europe and America; the country also played a leadership role in the post war architecture discourse, where the heritage of Metabolism Group was still influencing the theory and practice of the architecture profession in the world. Nevertheless, 6 out of the 37 Pritzker Laureates are from Japan, marking this country the 2nd largest Pritzker collector (America ranks 1st with 7 winners, while 6 out of the 7 was given 25 years ago, before 1991).

It must be surprising to know the fact that, with such achievements as a nation, Japanese people don’t have the notion of “architecture” until the late 19th century. It is Mr. Condor’s arrival to Japan brought modern architecture and architecture education to this country.

It might seems natural to today’s people that architecture is one of the most common subject
in higher education institutions around the world. However, how to carry “education” in architecture has always been a iterative, non-linear and completed thinking process, and an evolution frontier of the profession itself. Since the modern era, almost all the greatest architects are also great educators themselves.

Going back to the context of Japan. Condor brought modern architecture and architecture education to the ancient country — how to define the subject becomes more interesting topic because of the alliance of the subject in a new culture context: the language system don’t even have a word for “architecture”. A whole new system is about to setup, and it is very interesting to observe how an new architecture system is about to setup in an unfamiliar context.

The architecture education in Japan developed closely with this country’s modernization and industrialization process, which begins during the Meiji period. this context makes architecture education in Japan differ from Europe: it is more focusing on training engineers for the modern nation. There’s an urgency of constructing the modern city, so the architecture education program is situated in the engineering department and collage. (Condor’s first faculty position was in the Imperial College of Engineering)
One other point which is important to point out but always neglected: architecture in Japanese is translated as “建築”, which in Japanese character, is directly interpreted as “construction”. The way architecture is perceived in language significantly reflects its role in economy and society: Western architecture was introduced into Japan in the age of industrialization, which has been the key factory of this country’s development in the follow decades till the late 20th century. Therefore, the perception of architecture has significantly blended with construction.

Itō Chūta (伊東忠太) (1867–1954) is recognized as the leading architect and architectural theorist of early twentieth-century Imperial Japan. He led the translation of “architecture” to “建築”
Architecture Education in America

Japan played an important role in the modern history of architecture, while it is more important to state that America lead the architecture history in the 20th century. 15 years before Mr. Condor arrived Japan to start this country’s new era of architecture, Mr. Robert William Wares created the first architecture school within the Massachusetts Institute of Technology at the year 1861, marking the beginning of the institutionalized architecture education in the United States. The establishment of architecture school and the design of its program took efforts of several generations.

“The Earliest architects in the United States worked in the empirical mode. Their task was to create a working landscape for a newly founded nation.”

“Architecture education in North America has had a unique trajectory spanning three centuries. Initially architects in the U.S. and Canada acquired their skills through apprenticeship, a form of craft training adapted from England. They started to identify themselves as professionals by the late eighteenth century, but it would be another hundred years before programs in architecture — first modeled on the German polytechnic and then on the École des Beaux-Art — were widely established in universities. These mixed beginnings, with their American inflections, coalesced in the twentieth century into the institution we know today.”

(Joan Ockman, Architecture School — Three Centuries of Educating Architects in North America, Edited by Joan Ockman, The MIT Press)
Up until about 1986, architecture education meant one thing only: apprenticeship with a practicing architect, it might be supplemented by whatever could be craped together from books, travel, and the occasional public lecture series, but at its core was the hardy institution of apprenticeship.

*Formal architecture education came to the United States in two distinct forms: the French system of the École des Beaux-Arts, which treated architecture as a fine art, and the German polytechnical model, which treated it as a technical science. While each system did address both the aesthetic and technical aspects of building, they played the emphasis differently: the French student architect stood closer to the world of painting and sculpture, and the German to the world of engineering. As both models were imported into North America during the second half of the nineteenth century, they created what had not previously existed: an academic architectural culture.*


The German model was actually more influential at the second half of the 19th century thanks to the large number of architects immigrated from Germany to the US due to the disruptions in German States in the European revolutions in the 1848. The German schools treated planning and construction as the essence of architecture, and the ornamental embellishment of the facade as a secondary matter that could be left to the “individual fantasy of the artists”.

18
in 1861, the Polytechnic College of the State of Pennsylvania added architecture to its education curriculum, marking the first collegiate program of the polytechnic architecture education model. (Jeffrey A. Cohen, “Building a Discipline: Early Institutional Settings for Architectural Education in Philadelphia, 1804-1890”, Journal of the Society of Architectural Historians 53 (June 1994): 139-83)

The architecture education history in the US didn’t really credited Pennsylvania in terms of giving birth to the first collegiate school of architecture, neither did polytechnic model last very long. The Polytechnic Collage failed and replaced by the newly established University of Pennsylvania. The Cyclopedia of Education published in 1911 ignored the polytechnic collage and proclaimed MIT’s program the “first organized school of architecture.”

Before starting the new architecture program at MIT, Ware already spent time in Europe studying its schools of architecture. Ware did not consider the polytechnical model entirely appropriate for the United States; in fact, none of the European systems, he argued, could be imported intact: “The French courses of study are mainly artistic and the German scientific, and the English practical”, and so each was deficient in a critical respect. (Cecil D. Elliott, The American Architect from the Colonial Era to the Present, (Jefferson, N.C.: McFarland and Co., 2003), 71)
“Architecture in Robert William Ware’s mind”
In the End, Ware hybridized the French and German systems and created the architecture school at MIT. This model became a success and soon followed several other schools: University of Illinois, Cornell University, Syracuse University and the University of Michigan, which marks the beginning of the institutionalization of architecture education.


This short story briefly reflects people’s conflicts in defining what is architecture, which has direct impacts on how to design an architecture program in the university. Whether it’s an art, science or merely craftsmanship, it has been a question that kept being asked till today.
Architecture Education in China

China was behind Japan in bringing institutional architecture education for almost half a century. The first architecture department in China was established in 1928 in the China Northeastern University, appointing Mr. Liang Sicheng being the department head after graduating from the University of Pennsylvania in the United States.

Being a nation with a history of over 5000 years, China also has a long tradition of build and construction. The notion of “architecture” is still new in the modernization process of this country. How to interpret the imported term within the Chinese tradition and language context.

Since the similarity of the language between China and Japan, China used the same character “建筑” as developed in Japan. As the first department head of China’s architecture school, Mr. Liang also used the Chinese character of “construction” as the translation of “architecture”. However, as a renounced scholar with extensive understanding and research on Chinese traditional architecture culture, Mr. Liang did have his own interpretation of “architecture”. In several of his writings, he recommended that architecture to be translated as “营建”, arguing that, this translation reflects better the essence the the word “architecture” in Chinese language. In fact, under his leadership, the Tsinghua University (one of the highest ranking Universities in China) also renamed it’s architecture school from “建筑” to “营建” in its 1949 reform.
What's the difference between “建筑” and “营建”? In Chinese character, “建” means build/construct, while “营” stands for curate/manage. The word “营建” contains the meaning of build, construction, curation and manage, it is a combination of building structure and curating atmosphere. Therefore, Liang also believe the character “营建” interpret better of the word architecture, which also ties back to China’s traditional architecture culture. In his writing, he further illustrated: “the western term ‘architecture’ contains several layers of meanings. It is an inter-disciplinary subject which overlaps with art, science, and sociology. It is easier to see architecture as an individual building structure, however, in traditional Chinese culture, people put more emphasize on the atmosphere curated through a collection of individual building structures and the contents within. The construction takes only once, while the curation spans through architecture.”
II.
Challenge and Opportunity
The “Golden Age” of Architecture and Architects
— Another Diary From A Traveller

This is a hard topic since people have different definition about what a “golden age” is. And “golden age” is such a cliche description that has been used thousands of times.

I would first gave our an very narrow definition about what does “golden age” mean here: the period when architects played leadership role in the world’s civilization. if it’s still not clear enough, then this image might illustrate a little bit better:

Rem Kookhaas has used this graph over and over and over and over in his lectures around the world, trying to illustrate why architects became less as less significant today. I not necessarily agree with his reason which is the rise of market economy (or simply a Dow Jones growth line).
But I do agree that this graph is telling us some fact: the golden age of architect in America was between the 30s and the 60s.

American though, wasn’t really playing an leadership role in the world in the beginning of the 20th Century, (it really became the true leader after WWII), so this graph has a little bit delay, while it gives an idea of when an golden age is in America. If we take a look in the scale of the whole world, the golden age of architecture happened at the dawn of the 20th century.

These text is answering my question in the previous chapter though, about why Josiah Conder, a foreign architecture advisor, is able to stand as the most important stature in the country’s national university: Conder lived through a time when architects are completely shaping people’s perception of urban environment that our civilization is sitting on. Despite the weapons that has been used during the war, architects are handling the most advanced industrial technology that shapes the city.

"The rise of the market economy has meant the end of the architect as a credible public figure. Since Philip Johnson in 1979, no architect has appeared on the cover of TIME magazine. Starchitects accepted a Faustian bargain where they became more prominent, but their role less significant."

Rem Koolhaas, Public Lecture, 2013
An Extremely Brief History Of Architecture

By Kun Qian

Begining of civilization

"The man is willing to make himself an abode which covers but not buries him..."

Marc-Antoine Laugier, 1755

Greece and Rome

"Architecture depends on Order, Arrangement, Eurythmy, Symmetry, Propriety, and Economy"

Vitruvius, De Architectura
An Extremely Brief History Of Architecture

By Kun Qian

Medieval

Architecture has recorded the great ideas of the human race. Not only every religious symbol, but every human thought has its page in that vast book.

Victor Hugo

Renaissance

Beauty will result from the form and the correspondence of the whole, with respect to the several parts, of the parts with regard to each other, and of these again to the whole.

Andrea Palladio
An Extremely Brief History Of Architecture

By Kun Qian

1st & 2nd Industrial Revolution
The Crystal Palace, the first time architecture is designed and built like a cathedral to display and celebrate the magnificent progress of mankind.

Modernism
A great epoch has begun. There exists a new spirit.

Le Corbusier
An Extremely Brief History Of Architecture

By Kun Qian

3rd Industrial Revolution

Computer architecture, like other architecture, is the art of determining the needs of the user, and then designing to meet those needs as effectively as possible.

F. Brooks

Today

Design is not just what it looks like and feels like. Design is how it works.

Steve Jobs
In June 2013, the First Lady of China Peng Liyuan was caught by the media taking a picture with iPhone, the media start to criticize she’s using a foreign designed and produced cellphone, with the concern of the public image of China as well as the risk that information might be leaked through the phone. In the following year, March 2014, when Peng appeared in camera the next time with her husband president Xi Jinping, they are attending a national visit to Germany, and the First Lady is reported by the media by holding another phone while watching a soccer game together with her husband. The cellphone was named “Nubia”, made by a company called “Zhongxing”, which by that time, is the 4th largest cellphone producer in the world.

The short story has very little to do with architecture. It is telling the world is what could brought to public’s attention in representing a country’s image. Obviously, the ability to make a cellphone as a commercial product somehow symbolizes the country’s strength. Today’s country could be represented by an object as small as a cellphone, this would not be imaginable 100 years ago. It was magnificent architecture that was taking the role.

In his book “The Edifice Complex”, Deyan Sudjic used several example’s illustrating the relationship between power and architecture, telling a few stories in the history about how architects were sneaking between the power of politics and capital to building up and physical mixed their ambition.
Today’s people is shifting their attention. Although more skyscraper than ever has been built all over the world and the world record is still being refreshing; building taking all kinds of shapes ands structures, standing successfully on the ground resisting the gravity — architecture as building in our time has become more and more irrelevant. The generic city phenomenal is dissolving the monumentality of architecture.
"People can inhabit anything. And they can be miserable in anything and ecstatic in anything. More and more I think that architecture has nothing to do with it. Of course, that’s both liberating and alarming.

“But the generic city, the general urban condition, is happening everywhere, and just the fact that it occurs in such enormous quantities must mean that it’s habitable. Architecture can’t do anything that the culture doesn’t. We all complain that we are confronted by urban environments that are completely similar. We say we want to create beauty, identity, quality, singularity. And yet, maybe in truth these cities that we have are desired. Maybe their very characterlessness provides the best context for living.”

— Rem Koolhaas, interview in Wired, July 1996

The passed 20th century has been the most significant century in for construction. In the 20th Century, human beings has built more structures to provide habitable spaces than ever before, which marks the climax as well as an end of the “Monument Age”. In fact, the human civilization has lived through “Monument Age” through thousands of years. It has just ended as the Information Age arrives. During the Monument Age, people’s perception of world is always complete shaped through the physical built environment; while in the Information Age, as greater amount of digital content become part of people’s daily life, the interface of physical and digital content is playing an increasingly critical role.

In a larger sense, the architecture as monumental structure died long time ago, today’s “starchitect phenomena” is merely a zombie form of architecture’s body, not its spirit.

The spirit of architecture reincarnated in the form of inter connected networks.
1784 1st Industrial Revolution
based on mechanical production equipment
driven by water and steam power

1870 2nd Industrial Revolution
based on mass production enabled by the
division of labor and the use of electrical energy

1919 sWeimar

1930 Closure of production plants
1969 3rd Industrial Revolution
based on the use of electronics and IT to further automate production

Today 4th Industrial Revolution
based on the use of cyber-physical systems
“A Network of Schools”

"Priscilla and I are investing $15 million in AltSchool to help build a network of schools that use technology to offer every student a personalized learning experience."

Mark Zuckerberg shared a page. May 5, 2015

"Priscilla and I have a long-term commitment to improve education. Today I want to highlight a small, early project that Facebook is embarking on to help students reach their full potential. The approach is called "personalized learning" -- and it's already driving positive outcomes for students."

Mark Zuckerberg, September 4, 2015

Zuckerberg’s post has significant implication for the future of education. As he further illustrated in his September post: "Technology in personalized learning enables teachers and students to create personal learning plans, track progress and find materials to help them learn best. When technology is tailored to students' needs, it frees up time for teachers to do what they do best -- mentor students."

The concept is not only limited to education for middle school and high school students, but also universities. Today’s technology gives people unprecedented access to information, knowledge and even capital or physical asset from different levels. This approach is also shaking the university system.
In the history, the purpose of creating centralized universities campus is to concentrating the education resources such as knowledge, facilities and people, so that the people who are given the privileges of staying in the universities has access to these resources. Today, however, the premium of geographical concentrate has been weakened by the infrastructure shaped in the information age. Being able to stay in the universities become less of privileges, and the financial pressure is increasing.

Therefore, the future of education is networks, the future of university and as well professional education are networks too. The network includes 3 layers: network of people, network of information, and network of spaces.

As opposed to “decentralization”, the networks are actually an re-centralization of resource taking a discrete form.
III.
Sharing School of Architecture
Architecture Education in the Information Age

This thesis is to propose a new program as well as an urbanism arrangement for architecture education.

The current collegiate architecture education program is a hybridization of the ideology of education, which comes from the European tradition of liberal art education in the university; and professional training school, which is the result of the huge amount of demand come from the construction industry. It is carrying a momentum of the force of history and social economics.

Instead of an static and established system, the architecture education should be interpreted as a dynamic, ongoing process. Therefore, it always leaves spaces for evolution and reformation.

As discussed in the previous chapter, the future of education is going to take the form of networks: networks of people, networks of information and the networks of spaces. The most powerful feature of network is its ability to access and be accessed. Same applies to architecture education.

Today, the architecture education has become a globalized subject. The inter connections and communications between different architectures schools around the world has been enhanced then ever before, however the community itself is also marginalized in a social perspective. As a
Conventional architecture school is a highly selective, closed system
Sharing School of Architecture is an open, integrated system that is part of the urban development and regeneration.
profession taking the responsibility of shaping our built environment through spacial design and construction, the education is alienate itself in carrying such missions. It is still a place where people come over to form a community and generate creative content. However these creative contents have little effect on actually shaping the currently living spaces.

The future of architecture school is a expanding network of information and well curated spaces, where a growing innovative community is formed by participate from various background, where creative contents are formed with inspiration, consolidated with design and shared through this growing network of information and spaces.

Under this program, the focus of architecture is shifting from building structure to create habitable spaces to building content to fulfill the existing spaces, and curation is becoming an increasingly important element.
Sharing School of Architecture

The key of Sharing School of Architecture is the interconnection between the 3 layers of networks: people, information and spaces.

The core of the education element is still studios and workshops, which also built along with a collection of lecture classes and tutorial about history, technology and aesthetics. Most of the lectures and tutorials will be available through online cloud, while the network of spaces, some with specific facilities are provided for studios and workshops.

An online infrastructure is built to acquire, access, manage and access these spaces, allowing certain class to be taken as certain time and location.

When there’s no class in the place, people could also require access to use the place as their study or work space.

Every spaces in the networks has its own profile online, which includes its functionality and course content, hosting professors or tutors. According to the content of different studios, various forms of artifact are created. It is also a gallery itself, which artifacts created in the class are displayed both physically in space and digitally online.

Since most of the spaces in the network are residential units, they also include the function of living. As students and professors are able to stay in the bedrooms for either short terms or long
term. When there’s vacancies, the space is also listed on Airbnb to host travelers from outside the architecture school.

In this case, the content that is generated in the school is shared again to the guest, and it is also creating values to the spaces. The longer the space is running, the richer it becomes; and the longer the network is running, it will keep growing and enables more spaces and people to participate in the network.

The Sharing School of Architecture is an education system that grows.
In the system, each person is carrying his or her own gallery in the cloud, an online portal where they can upload, edit and manage their own creations and put them together as collections.
In the system, each person is carrying his or her own gallery in the cloud, an online portal where they can upload, edit and manage their own creations and put them together as collections.
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Every spaces in the networks has its own profile online, which includes its functionality, hosting professor or tutors. According to the content of different studios, various forms of artifact are created. It is also a gallery itself, which artifacts created in the class are displayed both physically in space and digitally online.
Learning about architecture is a self motivated, self disciplined life long process. It is a language that tooks long period of time to understand, and a longer period of time to form ones own. The contemporary infrastructure of information enables more people to access the education content online, which has become a crucial in the future of education.

All spaces could be activated as individual classroom, for a certain a amount of time. Bedroom, for instance, is becoming an increasingly important space for today’s learning.
Stress and frustration, never officially listed in any education materials but are key experiences in becoming an architect of any kind. It takes great effort and courage to manage things.

Architecture is about seeing through things.
Stress and frustration create tension. As long as the tension is well managed, it will transform into the force of thinking.
Being a host.

Everyone is deemed to be a host of his or her own space, the space generates energy together with the host, whose personality embedded in his or her curation of space through time. Being a host, telling the story, is a way to synergize the energy within it.
Talking to Clients

Being able to effectively communicate is a core capability for an architect.

Clients are the customers of architects. Talking to Clients is about listening, interpreting and conveying messages. It is a process of externalize the internal thinking, where language and drawings are carrying the conversation.
Architecture conversation polishes and inspires ideas.

it is the moment that high lights the long journey of persistence.
Architecture is a profession that engages with people’s hands, brain and hearts. Collaboration with dedication, which brings along with friendship and love.
Knowledge is always a key to open the door of any profession.

In the past, knowledge is documented in books, which are put together in a space. This is the origin of library. Today library space has been monumentalized, but it still remains in the architecture school network for a symbolism reason.
From even the very beginning, travel has been one of the core elements of architecture education. Along with studio, workshop and libraries, seeing the world, meeting people and experiencing the culture has been as fundamental in training an architect.

Today, being able to travel is no longer a limited privilege, while architecture education still enables people to see the world differently.
Practice is an everlasting part of architecture education.

The working space could take place in the living room or play room in a residential unit. There’s not reason why students could not be working while still in school. As a matter of fact, half of their time could be utilized in working on real world projects.
Presentation is crucial key stones among the iterating process of design development in both studio and practical projects.
A studio session can take place on a dining table in a kitchen.
The professor will decide when and where to host a class, after that, he will spread the message to the students and student can therefore book a slot in the online portal to get into the space in the requested time.
A small gallery, is a window that connect the architecture with the rest of the cities. It is usually place at the entrance level of the building next to the street. It is a showroom as well as an event space, it provides opportunities for the host, either students or teachers to do a solo-shows for their creations.
Making, is an unalienable part of architecture.

Garage, probably the most neglected element of a house, do has the most potential for creativity: countless world level innovations were actually born for garages.

In the Sharing School of Architecture System, garages are turned into legitimate workshops, which allows creators to quickly prototype their ideas.
About this listing

Amazing building located at the center of Cambridge (I would be proud to give an architectural tour). And you will be enjoying a 1200 sqft apartment. The building is 2 blocks away from the subway, 8min walk to MIT, 15min to Harvard. 1min walk to Star Market/car rental. A good place for an Cambridge experience.

Accommodates: 3
Bathrooms: 1
Bedrooms: 1
Beds: 2

House Rules

Amenities
- Kitchen
- Internet
- Essentials
- Shampoo

Prices
- Extra people: $20 / night after the first guest
- Cleaning Fee: $50
- Monthly discount: 30%
- Cancellation: Moderate

Availability
- 3 nights minimum stay
- Weekly discount: 15%

Contact Host

Check In: 2:00 PM
Check Out: 12:00 PM (noon)
Property type: Loft
Room type: Private room

Save to Wish List

Request to Book
IV.

Economy

A Real Time Case Study
## Earning Potential and Revenue

### Annual Earning Potential (USD$)

<table>
<thead>
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<tbody>
<tr>
<td>Shared Room</td>
<td>$2142</td>
<td>$2307</td>
<td>$2478</td>
<td>$2100</td>
<td>$2170</td>
<td>$2100</td>
<td>$1847</td>
<td>$1420</td>
<td>$1588</td>
<td>$1597</td>
<td>$2280</td>
<td>$22028</td>
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<tr>
<td>Private Room</td>
<td>$2644</td>
<td>$2753</td>
<td>$2760</td>
<td>$2880</td>
<td>$2962</td>
<td>$2700</td>
<td>$2439</td>
<td>$2391</td>
<td>$2184</td>
<td>$2480</td>
<td>$2615</td>
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<td>Studio</td>
<td>$3738</td>
<td>$4010</td>
<td>$4495</td>
<td>$4350</td>
<td>$4504</td>
<td>$4350</td>
<td>$4159</td>
<td>$3894</td>
<td>$3609</td>
<td>$3798</td>
<td>$3922</td>
<td>$4493</td>
<td>$49321</td>
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<tr>
<td>1 Bedroom</td>
<td>$4800</td>
<td>$5183</td>
<td>$5325</td>
<td>$5400</td>
<td>$5580</td>
<td>$5250</td>
<td>$4066</td>
<td>$4105</td>
<td>$3780</td>
<td>$4619</td>
<td>$4650</td>
<td>$5599</td>
<td>$58356</td>
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<tr>
<td>2 Bedrooms</td>
<td>$6520</td>
<td>$6975</td>
<td>$6929</td>
<td>$7000</td>
<td>$8875</td>
<td>$8225</td>
<td>$6625</td>
<td>$5142</td>
<td>$4900</td>
<td>$6200</td>
<td>$6870</td>
<td>$7424</td>
<td>$81685</td>
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<tr>
<td>3 Bedrooms</td>
<td>$7769</td>
<td>$10892</td>
<td>$7750</td>
<td>$7561</td>
<td>$9683</td>
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<td>$6550</td>
<td>$7818</td>
<td>$10500</td>
<td>$11095</td>
<td>$103557</td>
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<tr>
<td>4+ Bedrooms</td>
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<td>$39309</td>
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</tbody>
</table>

### Median Earnings

- **Shared Room**: $2142 to $2280
- **Private Room**: $2644 to $2873
- **Studio**: $3738 to $4493
- **1 Bedroom**: $4800 to $5599
- **2 Bedrooms**: $6520 to $7424
- **3 Bedrooms**: $7769 to $103557
- **4+ Bedrooms**: varies

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**Earning Potential and Revenue in Cambridge Airbnb Listings**
(Source: Airdna_Report_US_MA_Cambridge, airdna.co)
This small section of this thesis is actually about making an economical proposition for the Sharing School of Architecture. The system does not only providing a new possibility of learning, but at the same time creating a premium for real estate asset.

This case study is conducted by the author together with Tengjia Liu and Marwan Aboudib, who created a group “Tekuma” during their architecture studies at MIT. Tekuma invested in the summer 2015 to rent two apartments at Cambridge, staged it with art and furniture, and then listed the apartment on Airbnb. The two listings was running fulltime as airbnb apartments, and we are able to track its revenue in the following 6 months.

At the mean time, we also reference the Cambridge Report created by Airdna.co, as benchmarks for the revenue proformance and the two listings we are operating. According to the airdna report, “The Earning Potential metric measures the performance of properties while they are available for rent and then calculates what they could have made the rest of year by analyzing their historical performance and that of comparable properties. Earning Potential shows the true value of full-time short-term rentals on the Airbnb marketplace.”
1-bedroom Apartment

Spacious Bright Harvard Apartment
Entire home/apt - ★★★★★ - 19 reviews
The revenue performance of the two listings has far exceed the average potential earnings of such apartment types, giving a premilary prove that art curation significantly increase the value of hospitality real estate. The reviews left by the travellers all highlighted the experience
Total Revenue

Apt Installed

Un

cld

Required

Funding I

2018

6/2017

2019

2016

94

60

C

20

Ries

Installed

Required

Funding II

1.5M

0

100 Galleries Installed

6500 Apt Installed

40000 Units Sold

Positive Cashflow

0

11/2015

6/2016

2017

2018

2019

2020

2021

Total Revenue

Operating Income

2016
The end of submitting the thesis also marks the beginning of a startup venture.

As the hospitality industry is entering a new stage, people are looking for staying at personalized, artistic spaces when they are traveling. Tekuma curates hospitality spaces with creative content, which allows the spaces to receive more views, bookings that can translate to higher revenues.

This effort also demonstrates an architectural manifesto, that space curation will become an increasingly important element for architecture.
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