

Looking out across the landscape of architectural design in the 21st century, the same blandness and homogeneity that is the hallmark of globalization rudely manifest's itself in every corner of the world. From Moscow to Montréal and Tokyo to Toronto, the rapidity of progress and the seduction of newness have at once engendered uniformity and incentivized conformity within our built environment. It is the purpose of this research to act as a self-reflective pause in modernity's hurtling toward the inevitable. By reconnecting the traditions and skills of the past to the technological efficiencies of the present we may begin the process of, as Kenneth Frampton suggests in *A Critical Regionalism*, restoring regional identity without disconnecting from a global society.

Therefore, it is my proposal to travel to Japan and study the traditional wood joinery processes still being used today. Wood joinery has been applied on a great variety of scales – from jewelry boxes to palaces – and my objective is to observe and catalogue these existing techniques. This elegant and efficient mode of construction could meaningfully inform our western building industry, an industry addicted to toxic adhesives and an indiscriminate application of metal fasteners. Wood stands to be for our generation what steel and concrete were for the previous two or three, and Japanese joinery offers us a sustainable mode of assembly for a sustainable material with far less embodied energy.

Culturally, Japan stands amongst most other countries for having united an atmosphere of exceptional craftsmanship and industrial perfection. In downtown Tokyo tradition and modernity seem at odds at first glance, but upon deeper investigation one observes cultural practices intertwining with everyday life. Tradition becomes an integral part of progress as evidenced with the popularity of *rajio* (morning stretches), the *chashitsu* (tea houses) and their gardens on prime city-centre real estate, and traditional foods being served ubiquitously.

This unity of tradition and modernity is also having results in Japan's manufacturing sector. Recently, Bloomberg reported that Toyota is replacing some robots with skilled craftsman because the company has rediscovered it takes humans doing the work themselves to innovate complex manufacturing processes. *Kaizan* dictates continual improvement which simply cannot be attained with technology alone. Japanese culture is demonstrating the answer to Paul Ricour's challenge in *History and Truth* when he questions how we "become modern and return to sources." Progress need not have a direct inverse relationship with tradition. In fact, tradition may be the very key to a more humane advancement of design and, more broadly, of global society.

Both academia and architectural practice acknowledge the importance of craft in architecture – indeed it is a cornerstone of our discipline. However, westerners place emphasis on the maker and their acquired skill, often elevating these individuals to celebrity status. In contrast, *monozukuri* (approach to craftsmanship) places emphasis on the object made and the processes of making. Form is a by-product that emerges from process, and I intend to return from traveling Japan with a more intimate knowledge of applying and disseminating these processes.

As a newly inaugurated Canadian citizen my interest in the uses of wood within Japanese joinery stems from my own experience as an immigrant. Having been born in a very eastern part of the former USSR, my childhood thinking was a continual balancing act between a multiplicity of very diverse world-views. It could be said that I came into young adulthood at the very place where east meets west - where Islam and Christianity commingle, where Asia connects with Europe and where traditions of a bygone era were lost overnight. The ability to reconcile differentiating viewpoints is something honed simply to process the complexity of my environment. With this grant I will bring a wealth of knowledge on wood joinery detailing back to my new home country with the potential to take a leadership role in wood assemblies that unite old and new, east and west, tradition and modernity. Marco Frascari summed it up best when he wrote: "In the details are the possibilities of innovation and invention, and it is through these that architects can give harmony to the most uncommon and difficult disorderly environment generated by culture."

Japanese Wood Joinery Design Research

WEEK 1 | DAY 1- 5 | Tokyo

01_ First draft of a city cultural analysis (through sketching, filming, observing)

02_ Meeting with Naomi Pollock. (writer) Establishing a comprehensive list of crucial points to observe. Add recommended crucial locations to the existing itinerary.

03_ Visiting Atsushi Kitagawara Architects. Research on their own system of wooden lattice structure that uses wood bio properties. Start cataloging (through drawings, documentation) the wood joinery work that office explores in a great extent.

04_ Visiting University of Tokyo department of Biomaterial Sciences. Meeting with Associate Professor Satoshi Shida to explore their research in wood and wood-based materials and timber engineering.

05_ Visiting University of Tokyo, Graduate School of Engineering. Talking to Professor Fujii Keisuke regarding his research in Japanese wood architecture.

Also visiting School of Architecture.

WEEK 1 | DAY 6 -7 | Tokyo

Days reserved for the recommended additions to the itinerary, cultural emersion, exploration and personal time.

WEEK 2 | DAY 1 | Mino, Gifu

Visiting Gifu Academy of Forest Science and Culture. Recording architectural joinery tectonics as well as Atsushi Kitagawara trellis system.

WEEK 2 | DAY 2 | Kasugai-shi, Aichi

Visiting GC Prostho Museum Research Center by Kengo Kuma. Studying and recording through sketching, filming, writing the wood joinery technique used in the project.

WEEK 2 | DAY 3 | Tokyo

03_ Visiting Kengo Kuma Associates. Meeting with project leaders/designers to record and catalogue the extensive application of wood structures and connections on micro and macro scale. Meeting with East Japan Project (within the office) to coordinate the craftsmanship manufacturing meetings. Add recommended crucial locations to the existing itinerary.

WEEK 2 | DAY 4 – 5 | Tohoku region

04_ Heading to Tohoku Region – “the land of handcraft”.

05_ Exploring Tohoku Region. Meeting with Fujisato Woodshop in Iwate Prefecture. A day in the shop recording the process by sketching, filming, writing

WEEK 2 | DAY 6 – 7 | Tohoku Region

Days reserved for the recommended additions to the itinerary, cultural emersion, exploration and personal time.

WEEK 3 | DAY 1 | Sendai

Arriving to Sendai – a city of traditional furniture manufacturers. Exploring the craftsmanship and connecting with the workshops.

WEEK 3 | DAY 2 | Asahikawa

Visiting Asahikawa Woodworking – a manufacturer that works in a variety of scales of wood production, from mass production that employs latest technologies to solely handicrafts.

WEEK 3 | DAY 3-5 | Kyoto

03_Heading to Katsura Imperial Villa. Recording the observation through sketching, filming, writing.

04_Heading to Kiyomizu-dera wooden temple. Recording the observation through sketching, filming, writing.

05_Kyoto manufacturers visits. Exploring the detail and production of Kyoto Joinery tradition.

WEEK 3 | DAY 6-7 | Kyoto

Days reserved for the recommended additions to the itinerary, cultural emersion, exploration and personal time.

WEEK 4 | DAY 1 – 3 |

Participation in the construction of a traditional tea house with the use of traditional joinery within contemporary setting. Location TBD

WEEK 4 | DAY 4 | Tokyo

BAKOKO Design studio construction site visit. BAKOKO method employs modern Japanese precut timber construction.

WEEK 4 | DAY 5 | Tokyo

Visiting Shigeru Ban Architects. Cataloging a wood joinery and wood working the office explores.

WEEK 4 | DAY 6 – 7 | Tokyo

Days reserved for the recommended additions to the itinerary, cultural emersion, exploration and personal time.