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The decision to go to Japan, for me, was a relatively impulsive one having been made quickly during the thick of a difficult semester. Having only a cursory knowledge of the culture and architectural style (both vernacular and contemporary), gave me little preconceptions about what to expect. Upon arrival we spent time in Tokyo, mostly exploring post-World War II architecture including commercial spaces and urban intervention. However these typologies are fairly generic, reflecting relatively little about Japanese culture and society. It was not until we had been in Japan for five days and arrived in Kyoto that I began to see the Japanese aesthetic and it was another two days before I began to understand it. Our first stop was the Ryoanji Temple; I was overwhelmed by the vernacular experience so much so that I could not get over the texture, color, and overall experience of the floorboards (image 1). At each consecutive temple or shrine, I absorbed a little bit more; the Daitokuji Monastery offered the chance to see several temples as part of a whole in succession. I started to recognize the way that Japanese mediate interior and exterior as vastly different from the way we do in the United States (and Western Architecture in general.) The experience of nature was very much part of experiencing the architecture, but was somehow approached differently than in the contexts that I am familiar with.

I started to understand why it was different during a lecture we were given at the Kyoto Institute of Technology. Professor Akira Yoneda explained the concepts driving traditional garden design, specifically the types *shin*, *gyo*, and *so*. By understanding that there is an intentional choreography in all gardens, even if they appear organic, I realized that is the thought that drives the differences that I could not articulate. This organic choreography of nature exists in western spaces, but the way it is mediated with the built environment is different. In these spaces, the architecture lent itself to be an extension of the outdoor space and vice versa. At the Shisen-dô Hermitage, the garden was a framed view from the main space however it was not disconnected in the way that often we see in the “picture window” typology; there is a fluidity that unites the two spaces (image 2).

A major component of the fluidity has to do with the Japanese idea of flexibility of space and therefore their cultural mindset and approach to environmental issues. The day spent learning about machi-ya and our subsequent nights spent staying in one brought this to my attention. This was the experience that allowed me to better understand the relationship between the architecture and culture of New Orleans and that of Japan. In the machi-ya, the interior spaces can be arranged in an array of sizes based on the number of screens that are open. Spaces become more open in the day, when they are not being used for sleeping. Movement of the exterior walls allow for extension into interior garden spaces, much like what we experienced in the temples. These sliding panels were able to be changed from glass to bamboo to respond to the environmental demands of the changing seasons.

With a similar climate, one would think that there would be similar vernacular architecture in New Orleans. The main differences between these spaces seem to be influenced by their respective culture. The shotgun house, like most Western homes, it has a series of static rooms which separate private and public life. American culture does not allow for the flexibility that allows private space to become public space in a machi-ya. The opening of space is a sustainable strategy that the shot-gun does begin to incorporate as all of the rooms connect without a hallway, allowing for cross ventilation. However the walls are fixed, which reduces the efficacy. The only spatial overlap that occurs is on the path of travel through the rooms and is interrupted if a door is shut. Due to advances in cooling and how we inhabit homes, the vernacular architecture of New Orleans is losing its ability to operate the way it was designed.

My housing experience in New Orleans is not that of a shot-gun, but of an apartment that has been modified in a way that works against the vernacular design. In short, it is two rows

of rooms that run adjacent to each other along a rectangular lot. Theoretically in warm weather, we should be able to open up the 3 bedrooms and front room in one half as well as the kitchen and living spaces in the other half to get cross ventilation. As Americans we have been raised with the mindset of the individual, meaning that our bedrooms are our personal space. The result of that is that we keep the doors shut between the rooms, eliminating potential breezes. Based on my limited understanding of Japanese culture, this would not be the way a home would operate. The collective is much more of a driving factor, so this self-interested ownership of space might be less of an issue.

Privatization of space is a minor issue when it becomes evident that the wall that once would have provided an outlet to the front room and thus the outside through the bedrooms has been blocked by a closet. To add insult to injury, one-third of the windows are inoperable because they blocked by air conditioning units—this is a significant improvement over many apartment that have central air and all of the windows are nailed/painted shut (image 3). Another third of the windows, all of which are in the front room/living space, have had the hand-cranks removed and are latched closed on the outside (image 4). All of these seemingly minor modifications make it impossible to ventilate the apartment; this scenario is an indication of the American mindset of control.

I noticed that in Japan many of the buildings did not have air conditioning and those that do keep the temperature at a level that is not significantly lower than that outside. This strategy works with the environment, not against it. In the example of my apartment, the idea is that the inhabitant will control their thermal comfort with air conditioning; we are not using the natural temperature swings to our advantage. The mindset towards water/flooding in New Orleans is similar; as opposed to working with the ebbs and flows that have existed longer than the land has been occupied, we try to control the Mississippi River. In working against the river, human intervention has exacerbated the effects of flooding.

Japanese building tradition fundamentally incorporates the way the natural environment influences the built environment. Traditionally the joinery in timber construction utilized pins instead of nails or screws which provided enough flexibility for movement during earthquakes. In Nara, we observed timber warehouses where logs had been hewn into triangular sections, allowing for expansion and contraction with the seasons. Shinto beliefs are so incorporated into Japanese culture that nature is intrinsically part of the built environment. If we could incorporate more of this essential approach into how New Orleanians view nature, we might begin to mediate how it affects us.

Image 1

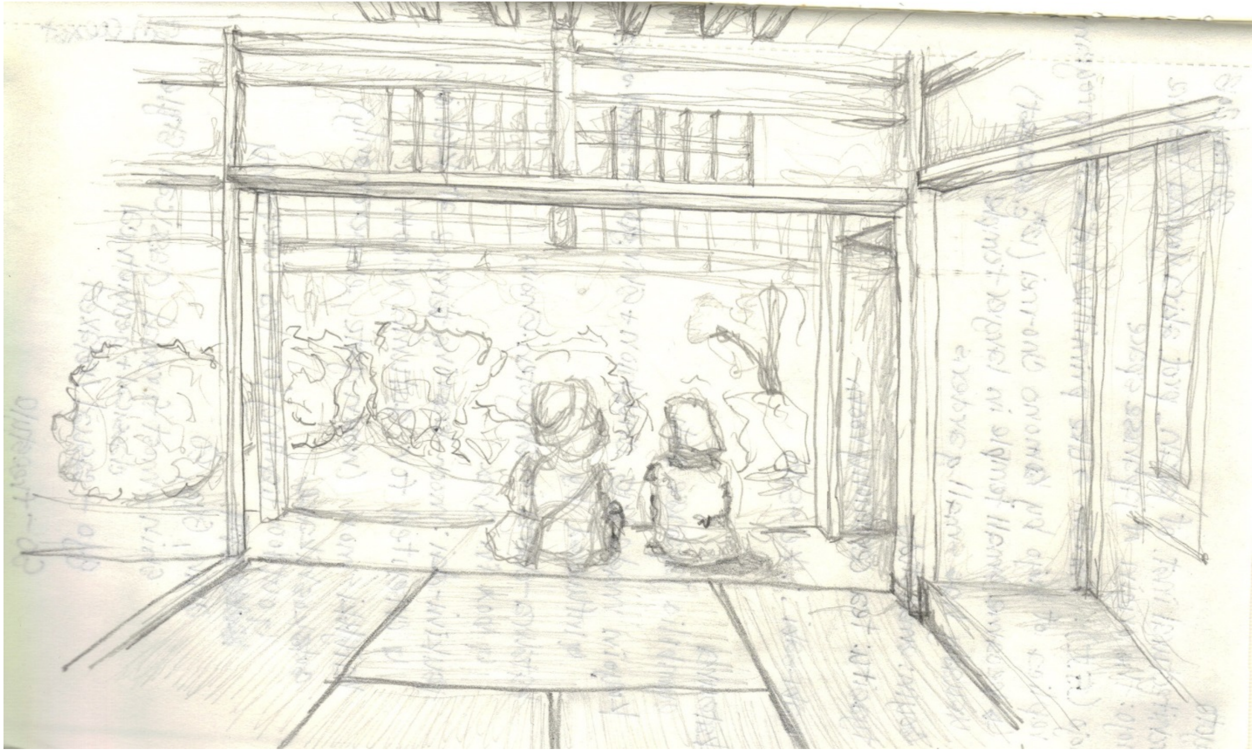
Image 2

Image 3

Image 4