

Repository of the Unnecessary: The Historic Legacies of Kura on Contemporary Japanese Cities

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Historic infrastructures often shape modern cities in unseen ways, forming surprising palimpsests where traces of a nearly erased past erupt into contemporary developments. Japanese kura present just such an infrastructure. They are the hardy residue of a pre-modern system of trade, tracing its network of routes through Edo period Japan (1603–1868) and offering some of the few remaining connections between older organizing principles of the pre-industrial city and modern development. These points of connections (or disruption) highlight the ways an obsolete infrastructure continues to shape urban transitions, and are often articulated through unique block geometries, block densities, property divisions and street grids. This paper proposes to bring to light the dissident narratives that the anecdotal and antiquated kura emphasize about our society’s cultural, ethical and urban biases. At a time when social unrest, rapid technological advances, and climate change’s earliest consequences are foreshadowing both gradual and abrupt changes, this on-going research project aims to reflect on the pre-modern infrastructure’s legacy today, and to ask what trade infrastructure should be, and which values and ideologies it should reflect.

The typology of the kura goes back to the Jomon period (14,000–300 BC). For the purpose of this paper, we will focus our attention on the dozo-kura only, which was built during the Edo period. Dozo-kura are a typology of small storehouses unique to Japan. As the repository for household goods, they facilitated the minimalist appearance and ritualized traditions often associated with traditional Japanese dwellings. Aside from storing domestic and commercial wares, their robust construction and stable internal climate made them easily adaptable to many industrial programs, such as sake and shoyu brewing and lacquerware production. (1) As domestic trade expanded during the Edo period, kura became a defining element of a growing trade infrastructure and an increasingly potent force in the development of an expanding urban fabric. Their heavy wooden structure and thick, reinforced plaster walls were calibrated to resist earthquakes and fires. This explains why they are some of the oldest standing structures in Japan..

INTRODUCTION

This paper proposes to look at three urban conditions in which kura prevailed within the infrastructural trade network. We will study Hakodate, Fushimi, and Kyoto as case studies. Each city provides evidence of the contemporary disruptions with

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former national trade infrastructures, but also presents a different type of Edo period infrastructure which is challenged by more modern construction:

1. Hakodate offers the striking example of a now sleepy peripheral provincial city which once offered a unique strategic economic advantage, being one of the first three ports to open to foreigners in 1859, as well as being a node on the kitamae-bune route. The kitamae-bune route (or the “North-bound Ships”) is a national maritime trade route on the Western Sea of Japan, which first appeared during the Edo period.
2. Fushimi, an intermediate sized city conveniently positioned between the port of Osaka and the inland former capital city of Kyoto, is located on the edge of the Katsura river, and epitomizes the infrastructural canal construction projects of the Edo period.
3. Kyoto’s longevity as a seat of political power has captured growth, but has also relapsed from it. The city reflects an ambivalence between protecting and outgrowing the Edo period small scale network of merchant storehouses. Kura—thanks to their robustness—often provide interesting evidence of disruptions for the modern Japanese city, challenged by high density, the need for growth, and preservationist demands.

HAKODATE: THE EDO MARITIME TRADE CITY

Hakodate is a harbor town located on the kitamae-bune. The kitamae-bune is a maritime route which was established during the Edo period for collecting taxes as well as agricultural and sea goods. This trade route, which consists of over two dozen cities on the Western Sea of Japan, was meant to link Osaka (Kyoto’s port city) to the most remote regions of the Shogunate’s kingdom. (2) This maritime route originally served as an alternative to the road, as a way to deter Japanese explorations abroad, and intrusions into the capital from the land. The Shogunate had produced some constraining regulations on the sizes of boats, which consequently had to ‘hug’ the coastline and make many stops along it. The maritime route soon led every region to specialize and generate a unique good within the larger national commercial network. Every port on the kitamae-bune route was also incentivized to strengthen its commercial ties with its nearby rural area. During the time between the harvest and the tax collector or sea merchant’s visits (3), kura were thus used to store rice, (4)

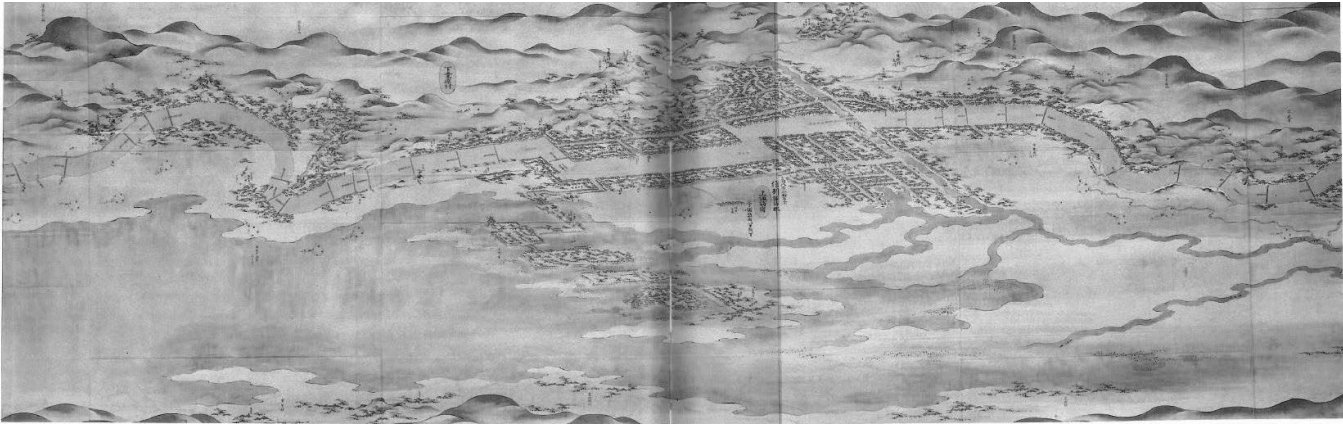


Figure 1: Proportional Linear Maps of the Major Turnpike', ca. 1800-1843.

(a tribute cash crop then) and other locally produced goods.

Between 1800 and 1843, the Shogunate government commissioned a new map: The “Proportional Linear Maps of the Major Turnpike.” This map reveals the Shogunate’s curiosity for a territory that sought expansion and unification under one leadership and one mercantile system. The map was the first graphic record which showed the relationship between Japan’s coastline and the following programmatic overlays: bridges, mileage markers, post stations, inns, topography, shrines, and temples. (5) Kura were not recorded on the document. Such omission reveals how little interest the kura raised at the time, although they were the underlying buildings at the cornerstone of the commercial maritime trade infrastructure. This practice of erasure on old official city documents displays the dichotomy between the invisible infrastructure and the government perceived city. By judging and characterizing the reality on the ground in this manner, one wonders what would stop the city officials at the time from treating their infrastructure as just another temporary investment.

Kura not only reveal how one perceives infrastructure’s relationship to time, but the kura help us explore how resilience has evolved as a concept since the Edo period. As a striking example of utilitarian architecture, the kura were originally designed to adequately respond to an urban logic which favored and magnified redundancy. In that sense, the kura’s urban granularity reflected some of the historical legacies of the Edo period time: Pax Tokugawa offered the Samurai class the opportunity to live in cities and do business rather than war. (6) The pre-modern Japanese city epitomized the paradigm of parametric design: kura in some sense behaved like a replicable yet customizable model disseminated around every city. Resilience could then be defined as a spoke and hub system, woven together by the unified kura typology. Redundancy, proximity, dispersion, split ownership, adaptability and the small-scale character of the kura were some of the featured characteristics which have maintained the kura at the heart of the Hakodate city fabric.

Despite their invisibility on the Shogunate’s commissioned maps, and their lack of use since the beginning of the twentieth century, kura still dominate the landscape. Their sheer number heightens society’s cultural ambivalence towards the structure. The kura has long acted as a display of wealth by the local merchant class and as a symbol for the established power structure. As a relic of the cultural and economic hegemony of an older time, the kura are hard to erase completely, particularly in regions where no other economic order has replaced them.

FUSHIMI: THE EDO CANAL INFRASTRUCTURE CITY

Fushimi’s relevance and growth as a city originate from its ideal location as one of the intermediary ports on the Uji river between Osaka and Kyoto. Kyoto’s distinguished status as a capital relied on its geographical aloofness. By being an inland city, Kyoto was less vulnerable to foreign water invasions during the Edo period.

Mercantile transactions were generally established through maritime routes then and Kyoto’s position at the confluence of three rivers allowed the filtering and delaying of undesired flows of people and goods alike, while still securing economic prosperity. Transportation upstream from Osaka (at the time a fishing village) to Kyoto provided the city with goods such as rice, sake, lumber, and coal. All these goods were transported to Osaka via the kitamae-bune Western Sea route.

Today, Fushimi’s individual identity has been largely erased and swallowed by the Kyoto – Osaka metropolis. Future transit routes (high speed rail and road) would later be added in parallel to the Katsura river.

The city of Fushimi not only reflects the Edo government’s infrastructural canal constructions, but also the incentives made to extend irrigation networks during “Pax Tokugawa”. The construction of waterways consequently increased agricultural land which allowed farmers to use the excess production for proto-industry. These industries in turn relied



Figure 2: Google map image of Hakodate, Japan, ca 2018. Each yellow dot represents a kura

canals in Kyoto established and reinforced the urban grid, presumably by disregarding topography or natural species.

The proto-industry not only changed the landscape and waterscape of cities, but also the typology of the traditional dozo-kura and the city block. The temperature and humidity performances accomplished by the wood frame and plaster construction of the kura were ideal to some manufacturing industries, such as the sake breweries in the case of Fushimi (6). These industries soon adopted and modified the dozo-kura. The kura was elongated, which thus disregarded the original square footprint which guaranteed stability during an earthquake. These formal mutations established a programmatic shift from a strictly storage use to a fabrication one. The formal mutation of the proto-industry kura also carried unsuspected consequences at the scale of the block, as the mutation of the kura established a new block morphology. Rather than relying on a classic relationship with the store at the front of the lot, the proto-industry kura formed compound formations where transportation, production, and retail were all part of the same complex. For the first time in Japan, multiple chains of production were integrated.

Cultural re-interpretation of the Fushimi district has “manufactured” tasting promenades and canal tours which attest to the effort made to give legitimacy to the remnant Edo period architecture’s charm. Fushimi demonstrates a prototypical case whereby conservation interests and the tourism industry have aligned, and play off nostalgia to leverage the shortcomings of the kura.

In hindsight, one can question the advances procured by

these re-interpretations. Today, though industries have declined and some of the old canals have been abandoned (from lack of use and maintenance), the associated ecological and financial costs of this short-termed infrastructure still prevail. Secondly, as economies of scale have dictated larger complexes on lands further away from the city centers, the optimized Edo model of production, retail and distribution, and its associated block morphology, seems to have been largely outdated.

KYOTO: THE EDO GRANULAR MERCHANT CITY FABRIC

Kyoto offers a striking distinguishable urban typology of kura. A little bit of context on the city’s early densification and its urban tax system offer explanation for the city’s distinguishable urban layout, and how these in turn have contributed to a unique typology of kura. During the Edo period, Kyoto had a population of 400,000, which contributed to its early densification (9). The tax code also played a predominant role in shaping the city. Properties were taxed based on the width of the street front, thus lots tended to be narrow and deep. The width was rarely wider than three ken (5.4 m) while the lot could be four or five times as deep. The lot’s dimensional constraints consequently produced a hierarchy of programs: the prime real estate along the street was used for retail while the kura occupied the rear of the lot. The space in between the kura and the machiya were ‘filled with gardens of often minuscule size that nonetheless contribute light and ventilation’. (6) The typology of the domestic kura in Kyoto (which often belonged to a merchant) was thus primarily an infill in the city block. Ornamentation was kept to a minimum, and was only visible on the facade of the kura directly opposite the house.

In the Edo period, the linear relationship between kura, machiya, and street were well established. Since the 1980’s, a land use provision has allowed many residents to keep ownership of their lot by splitting and reselling a portion of it. Today, there lies a whole series of interconnected buildings and retail spaces in the center of the block, some of which have no evident physical or visual relation to the street front. In this city within the city, one finds an unintentional labyrinth of alleys, chaotic programmatic adjacencies, and unintentional provocations which offer a rich re-interpretation of the spatial nesting that is a paradigm of Japanese urban space making. The kura, because of its traditional location in the center of the city block, is at the core of this urban system. The 1980’s land use law, and its effects on the urban fabric, calls our attention on the legacy of “splitting” as an urban strategy. The cho (or city block) has undergone much parceling and splitting over several centuries, leading up to the radical splintered urbanism that we know today: a myriad of small, disconnected, disenfranchised lots.

The economic and political forces at play in the Edo period had critical consequences on the kura, which in turn had vast



Figure 3: Proto-industry kura on the canals in Fushimi, Japan, c.2015. Photography credit: Zachary Tyler Newton



Figure 4: Dozo-kura separated from the machiya by a garden at the back of lot in Kyoto, Japan, c.2015. Photography credit: Zachary Tyler Newton

influences on the urban fabric and development of Japanese cities. The case studies of Hakodate, Fushimi, and Kyoto bring to light three different ways the Edo period infrastructural projects impacted the urbanism of cities in Japan. They also give us a window into how these old infrastructural projects bisected more recent developments. These intersections of old and new go beyond the urban grids, urban fabrics and block dimensions which the kura helped to establish. Instead, these intersections produce a rich map which allows to establish how we speak about issues like resilience, invisibility, erasure, power structures, re-appropriation, and redundancy. Ultimately, they help us make sense of underlying ideologies and productive and un-productive ways of imagining and living in a city.

ENDNOTES

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Figure 5: Infill condition in Kyoto, Japan. Photography credit: Zachary Tyler Newton