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Survey of the Present Conditions of Prehistoric Architectural Reconstructions in Hokuriku and Tokai Regions in Japan

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Introduction

This article is a continuation of two previous surveys on prehistoric architectural reconstructions in Japan (Ertl 2021; Ertl and Yoshida 2022). The first survey identified 984 buildings at 340 sites throughout Japan that represent ancient buildings dating from the Paleolithic through Heian periods (Ertl 2021). The information presented included the site names and locations, designation as historical sites, numbers and types of buildings, historical period, the dates constructed, and the names of the designers or construction firms. The second publication added to the initial survey by (1) including a list of references with information the reconstruction process, and (2) providing images of these buildings at sites in Kansai, Chugoku, and Shikoku regions (Ertl and Yoshida 2022).

This article provides references and images for sites in the Hokuriku and Tokai regions, covering 111 structures at 42 sites in 6 prefectures (Table 1).[1)] Appendix 1 is a list of references found for 27 of these sites. These are publications with information on the reconstructed buildings and range from site development reports, academic journals,

1) Mie Prefecture is considered part of the Tokai region, but it is not included in this article. The information on the reconstructions in Mie may be found in the authors' earlier survey covering the Kansai region (Ertl and Yoshida 2022).

newspaper articles, and online materials. Appendix 2 contains 86 images of reconstructed buildings. Photographs were taken between 2012 and 2022 and include all currently standing structures as well as a few sites where buildings have been removed. The discussion section details the pit dwelling design at Toro site made by Sekino Masaru in 1951. This building is remarkable as it is one of the earliest designs and has been one of the most influential images of prehistoric architecture in Japan (Aoyagi 2019).

This survey provides a reservoir of comparable data on reconstructed architecture located at archaeological site parks in Japan. These buildings are generally the most visible features at these sites. They are also important monuments reflecting changes in the history of archaeological site preservation and development. Unfortunately, there is a dearth of information on these buildings, even basic facts about where they are located and when they were built. Even less documentation is available on the thoughts and processes that went into their construction. Documenting this knowledge allows for one to evaluate the accuracy and integrity of these prominent displays of Japan's historical origins (Ertl 2021; Ertl and Yoshida 2021, 2022).

Background Research and Literature

The data provided in this article are companions to the authors' earlier surveys (Ertl 2017, 2021). Previously we identified the names, numbers, and locations of reconstructed buildings, the dates of construction, site designation, names of designers, and the roofing materials utilized. Additional data were also collected on their shapes, dimensions, and building materials, and this information is available online (https://tateana.org). Previously, we compiled a list of publications (covering 33 of 75 sites) and images of reconstructions (158 of 180 buildings) for sites in Kansai, Chugoku, and Shikoku regions (Ertl and Yoshida 2022).

There is an abundance of information on prehistoric and ancient architecture documented in tens of thousands of site excavation reports.[2] Analyses of ancient

2) The Comprehensive Database of Archaeological Site Reports in Japan is a database of archaeological publications administered by the Nara National Research Institute for Cultural

buildings may be found in fields of architectural history (Miyamoto 1986, 1996) and archaeology (Asakawa ed., 1998; Fujimoto ed., 1997; Tatsumi 1990), although discussion is more commonly focused on settlement patterns than the form and materials of prehistoric buildings themselves (Kito 1985; Kosugi et al. ed., 2009). Using the term "reconstructionology" (*fukugen-gaku*), Unno Satoshi has outlined the processes by which archaeological remains are analyzed and ancient architecture is designed (Unno 2017; Unno ed., 2019; see also Ertl, Yoshida, and Ikari 2022: 16–17). In a couple of recent exhibitions on Japanese architectural history, there have been reviews on the reconstruction of pit dwellings and the work of prominent architects in designing them (Sato 2018a, 2018b).

Surveys of architectural reconstructions have been limited. They include a conference report (Dai-27-kai zenkoku iseki kankyō-seibi kaigi 2002), a museum catalogue (Mizukokaizuka Museum 2017), and two self-published books on pit dwellings (Yamamoto 2011, 2018). The only previous attempt to fully document archaeological sites with reconstructions was a 1978 survey by Nara National Research Institute for Cultural Properties (Nabunken 1978). The authors' previous research was intended as an update to this survey by Nabunken (Ertl 2021). As a whole, these surveys are important contribution to understanding the history of prehistoric reconstructions, even though each is limited in its scope. Together, they fill an important gap in the documentation of reconstructions, ranging from where these structures are built, how they were designed, their costs, and how they are utilized and maintained.

Methodology

For this article, the authors collected a list of publications and took photographs of reconstructed buildings located at archaeological sites and outdoor museums in the Hokuriku and Tokai regions of Japan (Table 1). The reference list (Appendix 1) contains openly accessible documents with information on reconstructed buildings, including

Properties contains records of over 125 thousand reports and documents. (https://sitereports.nabunken.go.jp/ja Last Accessed 11 November 2022)

online sources such as news articles, official site webpages, and blogs. The list does not include unpublished documents like architectural blueprints or information provided at museum displays or on-site signage. It also excludes many site-excavation reports, which may have information on the archaeological features reconstructed, but usually do not cover reconstructed buildings.

The reference list was compiled over a period of several years beginning in 2016. The easiest and most common resources are site development reports, which can be found through a simple search on library databases. Confirming the content of such reports is difficult, as many are available at only a few libraries. The 1978 Nabunken survey (see above) included references for eight of the sites in this list and these references are repeated here.[3] Furthermore, where no information was readily available, the boards of education and management authorities were contacted. This provided new references in some cases and in other cases confirmed the absence of any published documentation.

The images (Appendix 2) were taken by the authors during visits to 32 sites (out of 42 total) between 2012 and 2022. To gather these images four field trips were taken on 26–27 January 2021, 18–19 June 2021, 29 October 2022, and 26 November 2022.[4] The sites that were not visited were those where the reconstructions were known to have been removed.

Results

Table 1 is the list of sites with reconstructions located in Hokuriku and Tokai regions (Ertl 2021: 189–193). It contains information on 111 buildings (81 currently standing) at 42 sites. It records the name of the site and municipality where it is located, the date

3) In fact, only seven of those references are included, as the noted reference for Shikanotani-Hongo Site (Katsuyama city, Fukui) did not contain any information on the reconstructed buildings. A similar issue was presented with Iba site (Hamamatsu city, Shuzuoka), where it was not clear what publication was cited.

4) Where the images for our previous article (Ertl and Yoshida 2022) were mostly taken within a year of publication, the authors' visits to these sites took place over a much broader time period. The reason is that the authors previously worked in the Hokuriku and Tokai regions and visited many of these sites years before this article was planned.

constructed, the number of buildings (total constructed/currently standing), archaeological period, and type of buildings at the sites. It also denotes whether there are publications on the buildings (see Appendix 1), and it includes the number-ranges for the images reproduced in Appendix 2.

The references are listed in Appendix 1. Publications and online resources were identified for 27 of the 42 sites. Aichi (6 of 7) had publication for most of their sites and every other prefecture had documentation for half or more. The types of documents range from site development reports (*kankyō seibi jigyō hōkokusho*) to newspaper articles and online documentation. The references are written in the original Japanese script and citations and URL links are included when available.

Appendix 2 contains photographs of 86 reconstructed buildings at these sites. This includes all currently standing dwellings as well as images for three buildings previously located at Kaga City Central Park (Ishikawa), and a pit dwelling removed from Sakuramachi site (Toyama). Image captions include information on the type of building, its archaeological period, GPS location, and date photographed.

Comparisons with Kansai, Chugoku, and Shikoku regions

Our earlier study on reconstructions in Kansai, Chugoku, and Shikoku yielded three themes for analysis. These were (1) the reasons behind the lack of references, (2) the abandonment and dismantling of reconstructions, and (3) the bias toward Yayoi and Kofun period buildings (Ertl and Yoshida 2022: 5–10). As these issues overlap to a large extent, they will be readdressed in comparison to our new dataset.

Comparing the number of publications, we found publications for 64% of sites (27 of 42) in this article compared to 44% (33 of 75) in our study of Western Honshu and Shikoku. There are no obvious indicators for the discrepancy. One possibility is the thoroughness of the authors' research for this report. The authors contacted authorities at several sites where they were unsure if publications existed. For example, when we contacted Asahi site (Kiyosu city, Aichi), the managing authorities provided the authors a copy of their recently published site development report. The discrepancy does not seem related to the age of the sites. For example, in the 1978 Nabunken article, 8 of 19 sites in Hokuriku and

Tokai had references, which was similar to the 7 of 18 sites in Western Honshu and Shikoku.

One interesting trend is the quantity of site development reports (*seibi jigyō hōkokusho*). For Hokuriku and Tokai, we found that 9 of 42 (21%) sites had these reports compared to 10 of 75 sites (13%) in Western Honshu and Shikoku. Furthermore, there were more site-excavation reports (*hakkutsu chōsa hōkokusho*) that included the reconstructions (8 compared to 4). We previously noted that information on reconstruction was often seen in excavation reports in the 1950s (Ertl 2021: 12), but the excavation reports documented here date to the 1960s, 1970s, and one as recent as 1985 (Tanoya site in Shimada city, Shizuoka).

In our survey of Kansai, Chugoku, and Shikoku regions, we photographed 85% (158 of 186) of the buildings. This article covering the Hokuriku and Tokai regions is similar at 77.5%. In both cases, the authors took photographs of all structures that are still standing (with two buildings absent from the earlier publication), and the difference reflects a slightly larger proportion of structures still standing in Western Japan.

As we noted in regard to Western Honshu and Shikoku, the lack of upkeep of the structures means that many of buildings were largely abandoned and are unlikely to be repaired or rebuilt (Ertl and Yoshida 2022: 7–9). Similar conditions were found at several sites visited for the present survey. In fact, reconstructions at Koshiya-Yokoanagun (4 buildings), Amenomiya Kofun (1), Funaoka site (2 of 3), Tsukahara site (4 of 6), and Mineichigo site (2 of 5) had been removed only a few years before the authors' intended visites. Additionally, the buildings at Sakuramachi site (1 of 3) and Kaga Central Park (4) were removed soon after having been photographed.

Another similarity between the surveys was in the reasons for the removal or renewal of buildings. We proposed this sometimes occurs when new sites are found in a municipality, or new information about a site or its buildings become available. We previously described this phenomenon with the example of Fukuichi site (Yonago city, Shimane), where its pit dwelling was removed following the discovery and massive site development project at Mukibanda site (also in Yonago city). While unconfirmed, it is possible that the removal of buildings at Kasuga (built 1966) and Ushinameri sites (1963)

Figure 1: Model of the original site developments at Tsukahara site. The four pillar buildings with lean-to roofs have not been replicated at other Jomon sites. These pillar buildings were all removed from the site and the two remaining reconstructed buildings are quite different from the original versions (see Images 16.1-2 in Appendix 2 for comparison). (29 October 2022)

in Toyama city was related to the site development activities at Kitadai site in 1999. At the very least, one can see that the image of the Jomon pit dwelling at Kitadai with sod roofs was radically different than the high roof thatch structure at Ushinameri.[5)] It is likely that local site managers would not want to present such vastly different images to the public.

In a more concrete example, the on-site manager at Tsukahara site (Seki city, Gifu) explained there were two reasons for reducing the number of reconstructions (from 6 to 2). The first was the cost of rebuilding them, which he said cost the city 10 million yen each. The other reason for changing the buildings were the discoveries of Sannai-Maruyama, which caused them to rethink the design and function of the settlement. Originally, the site depicted two pit dwellings and four separate pillar buildings made with lean-to roofs (*katanagare-yane*). The site manager did not elaborate what specific discoveries at Sannai-Maruyama made them rethink the designs. The current pillar building at Tsukaraha is designed as a longhouse building with walls and a high roof, similar in some respects to the massive longhouse at Sannai-Maruyama. Notably, all of the lean-to roof pillar buildings were removed, indicating a perceived problem with this unique design (Figure 1).

5) There are many images of the sod covered buildings at Kitadai. The only known image of the reconstruction at Ushinameri may be seen at: https://www.city.toyama.toyama.jp/etc/maibun/kitadai/kitadai_katudou/kikaku/ushinameri-shiryou.pdf (Last accessed 14 November 2022)

As for the archaeological periods represented, reconstructions in Western Japan mostly dated to the Yayoi and Kofun periods, with only 13 of 75 sites having a Jomon period building (Ertl and Yoshida 2022: 9). Of the 42 sites identified in this survey, there were 27 with Jomon period buildings, 13 with Yayoi buildings, 8 Kofun, 1 Heian, and 2 Nara (6 sites had buildings from more than one period). This distribution closely reflects the national distribution, where there are 175 sites with Jomon period buildings, 113 Yayoi, 56 Kofun, 11 Heian, and 21 from the Nara period (Ertl 2021). This distribution is not altogether surprising, as the Hokuriku and Tokai regions run along the divide between Western Japan (with mostly Yayoi and Kofun period sites) and Eastern Japan (where Jomon period sites are dominant).

Discussion

Toro site and "one of the most important buildings in the history of modern architecture"

Toro (Shizuoka city, Shizuoka) is among the first sites in postwar Japan to reconstruct ancient architectural remains, with a pit dwelling and raised floor storehouse built in 1951. In particular, the pit dwelling at Toro is the most intensely documented of any prehistoric reconstruction, with an abundance of research articles, architectural plans, photographs, critical evaluations, and interviews that cover various aspects of its design. The influence of the Toro pit house on both the designs of subsequent pit houses and the practice of architectural reconstruction in general cannot be understated. With no hint of irony, architectural historian Aoyagi Norimasa (2019) has called Sekino's pit dwelling: "One of the most important buildings in the history of modern architecture" (139).

Toro is a remarkable Yayoi period site and is distinguished as a special historic site (*tokubetsu shiseki*). Its influence, however, extends far outside archaeological circles. Otsuka Hatsushige (1926–2022), emeritus professor at Meiji University, frequently mentioned Toro as providing "hope" for postwar Japanese. The excavation at Toro overlaps with Otsuka's personal history, especially his war experience and the major shift in his pre-war thoughts following his liberation from the imperialist view of history after

defeat. For Otsuka, a soldier of the emperor during the war, Toro's excavation was the starting point to make "our own" history by our own hands, free from the previous imperial ideology. In this regard, Toro was special not only to Otsuka or the other excavation team members, but also to postwar Japanese society as a whole (Edwards 1991).

Sekino Masaru and the Toro pit house

Architectural historian Sekino Masaru (1909–2001) designed the reconstructed buildings at Toro. Sekino's early research centered on the genealogy of the Japanese house (Sekino 1942) and focused on the prehistoric pit dwellings at Togariishi-Yosukeone (Jomon) and Toro (Yayoi) sites. Following his work at Toro in 1951, he went on to become a key figure in post-war cultural property administration (Fujimori 2001). As the pedigreed son of architectural historian Sekino Tadashi (Imperial University of Tokyo), Sekino Masaru also studied architectural design and history at the Imperial University of Tokyo and became a faculty member at the university until retirement in 1969. He also held senior positions at the Tokyo National Research Institute for Cultural Properties and supervised several major conservation projects. In 1979 he became the first director of Meiji-mura, an open-air museum of relocated and restored buildings dating to Japan's Meiji era (1868–1912). He was recognized for his conservation work with national and international awards, including the Piero Gazzola Prize by ICOMOS (International Council on Monuments and Sites) in 2001.

The final design plan (*jisshi-an*) for Sekino's pit dwelling at Toro was published in 1951 in the *Journal of architecture and building science* (the flagship journal for architecture studies in Japan). The result of many years of research, this was Sekino's final attempt to design a prehistoric pit house.[6] Early in his career, Sekino took up his father's research on ancient architecture. Sekino Tadashi had looked to shrine architecture and identified a

6) Sekino is also credited with the design of five Middle Jomon period pit dwellings in 1970 at Haraseuehara site in Nihonmatsu city, Fukushima (Ertl 2021). It is likely that his participation was limited to a supervisory role, with local archaeologist Meguro Yoshiaki working directly with the resident-led conservation group (*hozonkai*) that built them. See URL: https://kazenoshin.exblog.jp/6874790/ (Last accessed 23 November 2022)

subterranean two pillar a-frame building called *tenchi kongen miya zukuri* as central in the origins of Japanese architecture (Sekino 1940: 96). The only problem with this structure, according to Sekino Masaru, was that excavations did not uncover any prehistoric remains might correlate with it (Sekino, Choi, and Muramatsu 1988).

Sekino's design for the prehistoric pit dwelling took root in 1938, several years before the excavations at Toro, when he looked to the *tatara* iron furnace (a circular pit building with four pillars) as a historical building that appeared to have a layout similar to prehistoric remains (Sekino 1938). This was followed by three design drafts for Sekino's pit dwelling (Aoyagi 2019: 124–129). These included plans for the Jomon period Togariishi-Yosukeone site (Chino city, Nagano) in 1940, three models depicted in Sekino's *Short History of the Japanese House* (Sekino 1942), and plans presented in the 1949 publication of the Toro site report (Nihon kokogaku-kyokai 1949). In each of these iterations, the basic shape driven by the *tatara* iron furnace as well as a divided hip-and-gable (*shikoro-buki*)[7] roof structure remained consistent.

The critiques of Sekino's prehistoric pit house

The influence of Sekino's pit dwelling reconstruction has been enormous. Photographs were depicted in history school textbooks for years, making it the first, if not only, prehistoric house that most Japanese people saw. It is fair to say that subsequent designs of reconstructed pit buildings built in archaeological parks around Japan have been under Toro's influence in one way or another.

Despite the influence of Sekino's pit house, there was never a consensus among architects and archaeologists that his designs adequately reflect the actual the Yayoi period dwellings at Toro. Even before construction, Goto Shuichi (1888–1960), emeritus professor of archaeology at Meiji University and supervising archaeologist at Toro, noted his objection to the hip-and-gable roof design – which he thought was inappropriate for eastern Japan. In the same breath he also differed to Sekino, admitting that he was "unable to

7) *Shikoro-buki* is a hip-an-gable roof structure split into two halves with a gable roof on the top separated by a different pitched hip roof beneath it. This style of roof can be seen in shrines and temples as well as in some traditional homes.

argue that the assumed reconstruction (*sōtei-fukugen*) by this architectural historian is incorrect" (quoted in Aoyagi 2019: 140). The fact that Sekino was the only architectural historian who worked at Toro meant that his expertise was differed to in the end.

Among architectural historians, one early critique was presented by Inoue Mitsuo (Tokyo Institute of Technology). Inoue's critique was little concerned with the design itself, but rather on Sekino's approach. Sekino believed that "new technologies lead to new structural forms" (quoted in Aoyagi 2019: 129) and he wished to examine how changes in technology and economic production were reflected in architecture during the shift from the Jomon (stone tools and hunting and gathering) to the Yayoi period (bronze tools and rice agriculture). For Inoue (1948), the problem with Sekino's approach was his outright dismissal of the importance of "style history" (*yōshiki-shi*), the dominant approach to architectural history studies at the time.[8)]

The strongest critiques of Sekino's pit dwelling at Toro focused on his reliance on obscure historical documents and the use of thatch roofing. These critiques are pronounced in the same 1951 issue of *Journal of architecture and building science* where Sekino's seminal article on Toro was published.[9)] One of the reviewers, Murata Jiro (Kyoto University), took aim at the roof, arguing through ethnographic examples including the Ainu and Koryaks (Kamchatka Peninsula) and North American Indians (Inuit and Hidatsa) to show the prevalence of sod roofs on pit houses (Murata 1951: 8–10). Concurrently, Murata also looked at examples of thatch roofs in South American Indian architecture to show how the differences in the structural does not allow for comparison with the Japanese *tatara* iron furnace (11).

In an even sharper critique, Ishihara Kenji (Tokyo Metropolitan University) examined

8) Inoue particularly took offense to Sekino referring to "architectural style history" as the "graveyard of architecture" (Sekino 1947: 5). His concluding response was to write "The history of architecture begins with the history of style, although it must not end with the history of style" (Inoue 1948: 13).

9) This was a special issue that included articles on the Jomon period Togariishi-Yosukeone site (Chino city, Nagano) by Horiguchi Sutemi and the Kofun period Hiraide site (Shiojiri city, Nagano) by Fujishima Gaijiro. These three articles on the reconstruction process were paired with three review articles that provided critiques and alternative methodologies for reconstruction.

various documents that Sekino based his design upon to show the untenability of his proposal. Ishihara writes: "The basis and reason for the reconstruction is not clear, since the reconstruction is suddenly proposed without any comprehensive explanation between the report of the fact (the archaeological report of the pit house remains) and the reconstruction" (Ishihara 1951: 2). Ishihara dismisses the applicability of the *tatara* architecture drawn from the "*Tetsuzan hisho*" document. He questions Sekino's reliance on the Kofun period house-shaped haniwa as a basis for the design of the upper structure of the reconstructed building. He also questions the validity of introducing elements of traditional farmhouse architecture (*udatsu*, *kiri-sasu*, and *hafu*) into Sekino's design. Similar to Murata, Ishihara also examines the similarities between prehistoric pit buildings and those of the Sakhalin Ainu and northern indigenous peoples. Here Ishihara mentions: "the same earth-covered structure as seen in the Ainu's *toi-chise* structures of Hokkaido and Sakhalin may have been used in prehistoric pit dwellings of our country" (Ishihara 1951: 6).

Despite Murata and Ishihara's strong arguments for sod-roofing rather than thatch, no one took up their ideas for decades. It took almost half a century before pit buildings with earthen roofs became an acceptable "alternative" at Japanese archaeological parks. It was only after burnt sod roof remains were discovered at Goshono site (Ichinohe town, Iwate) and reconstruction experiments in the late 1990s proved the habitability of such buildings. Since Goshono, however, about half of all new Jomon sites have included at least one sod roof design (Ertl 2017). As for the Yayoi period, the influence of Goshono is far lower. Of the 252 Yayoi period pit dwellings built throughout Japan since 1951, only 11 (at 8 sites) have sod roofs (with the first built in 2000).

Reconstructing reconstructions and the obduracy of the Toro pit house

In 1999, Toro underwent new excavations in preparation for the renewal of the Toro Archaeological Park (Shizuoka City Board of Education 2012). The results from new excavations at Toro, combined with information from other Yayoi period sites over the intervening years, were incorporated into new designs for the reconstructed buildings. These redesigns were led by Miyamoto Nagajiro, an architectural historian long affiliated

Figure 2: The pit dwelling and raised floor storehouse designed by Sekino Masaru and rebuilt off the site grounds during the redevelopment of Toro site from 2006 to 2011. (23 August 2020)

Figure 3: The new pit dwelling and raised floor storehouse at Toro designed by Miyamoto Nagajiro and built in 2007. (23 August 2020)

with Nabunken who has consulted on the design of buildings at some 23 prehistoric sites in Japan (Ertl 2021: 9). The designs of the raised floor storehouses were largely unchanged. The additional excavations at Toro informed a new raised floor structure that was designed as a shrine (*saiden*).[10] As for the pit houses, these underwent a structural redesign, where the former *shikoro-buki* (divided hip-and-gable) roof structure was replaced with a simpler (hip-and gable) roof and the location of the entry was moved to the center position (Figures 2 and 3). Today, Sekino's designs remain at Toro but have been moved off the archaeology site to a neighboring area marked "memorial plaza" (*memoriaru hiroba*).

10) Similar to the storehouses, it was slightly larger and contained roof ridge support posts (*munamochi-bashira*) on both ends of the building, a feature commonly associated with Japanese shrine architecture (*shinmei-zukuri*). The inclusion of this seemingly religious structure reflects a philosophical shift from the initial design by Sekino, who had wanted to represent Japan's prehistoric architecture free from the emperor centered history (*kōkoku-shikan*). With Miyamoto's design, connecting the architectural structure to religious architecture may be viewed as reintroducing these ideological elements. Notably, there was no direct justification to label this building a "shrine" (*saiden*) except for the structural similarities to ancient religious architecture. Here, we have to understand that Miyamoto has been seemingly eager to interpret large-sized pillar buildings as shrines, even going as far as to incorporate ridge-roof support beams (*munamochi-bashira*) into his designs even when the archaeological evidence points otherwise (see Inoue 2007).

Figure 4: The Jomon period pit dwelling designed by Fujimori Terunobu at the Edo Tokyo Open Air Architectural Museum (Koganei city, Tokyo) and built in 2021. The structure of the building was taken directly from Sekino Masaru's plans for prehistoric pit dwellings. Covered in sod and with wattle and daub walls, the appearance is considerably different from Sekino's Toro pit dwelling. (12 December 2021)

Even though Toro site managers may have recognized Sekino's biases and the limitations in his data and methodology, his hold over pit dwelling designs elsewhere in Japan remains. For example, Fujimori Terunobu, one of the most influential contemporary architects in Japan, recently built a Jomon pit dwelling on the ground of Edo-Tokyo Open Air Architectural Museum in 2021 (Fujimori 2021). Fujimori endorses Sekino's design process and does not question his plans for the structure of prehistoric pit dwellings. Fujimori mentions:

> While Sekino's theory is correct for the structure of the house, there is a question about the finish. It would have been impossible to have such a beautiful thatch roof in the Yayoi period without iron shears for trimming it. (Fujimori 2021: 112)

In Fujimori's reconstruction project, the structure based Sekino's theory was first covered with bark from cypress trees. Dirt was placed on top of the bark and grass was planted to prevent soil erosion (Figure 4).

Planting this grass on the roof was an extension of Fujimori's interest in *shibamune*, which is a traditional method of planting grass and flowers on the ridge of thatch roof farmhouses. Fujimori's interest in *shibamune* can also be seen in several contemporary

buildings he has designed with planted rooftops. In the end, Fujimori's pit dwelling was an amalgamation, with an internal structure based on Sekino's proposal and an exterior based on recent archaeological research and ethnographic examples based in his personal interests.

Another example of Sekino's influence can be seen at Asahi site (Kiyosu city, Aichi) which was renovated in 2020.[11] When it was initially designed as a historical park, a reconstructed house was built, modelled on a middle Yayoi period pit dwelling at the nearby Daichi site (Iwakura city, Aichi). In 2015, a plan was launched to build a new museum and renovate the park, and in 2020 the Aichi Asahi Site Museum opened. In the park, the previously reconstructed house was renewed unchanged from before. One new reconstructed pit house was built on the model of a dwelling found at Asahi site, and a reconstructed storage house was built based on a row of columns also found at Asahi site. Interestingly, despite seventy years of additional research, both buildings can be seen as under the influence of Sekino's design. Even though a detailed report on the development project was published, the rationale for the structure and design of the reconstructed houses was not explicitly mentioned (Aichi Prefecture 2021) (Figure 5).

The reconstructions at Asahi site reflect the difficulties with reconstruction. When there is a lack of new or contradictory evidence, it is difficult for site archaeologists to suggest designs that widely diverge from previous examples. This does not reflect an explicit recognition that Sekino was correct, but rather his design forms the baseline from which any new design needs to justify its differences. Without an expertise in architectural history, or novel results from excavations, or the time and willingness to experiment, archaeological site managers are left with little recourse than to replicate the image of pit dwellings that came before them.[12]

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11) The site was first named Kaigarayama Shell Mound Park and is located in Kiyosu city, Aichi. The site was known as Kaigarayama Kaizuka from the 1920s, and it became a national historic site in 1971 and a museum and park opened in 1975. The area around Kaigarayama Shell Mound was the site of highway construction projects during which a Yayoi period settlement was discovered. The rescue excavation site was named Asahi site, of which the Kaigarayama Shell Mound is a constituent part.

12) There is perhaps yet another way that Toro has influenced reconstruction practices in the region. In this survey we found documentation for reconstructed buildings at 27 of 42 sites,

Figure 5: An image of the Yayoi period reconstructed raised floor storehouse and pit dwelling at Asahi site. Built in 2021 and based on extensive data, these reconstructions appear to be strongly influenced by Sekino Masaru's designs at Toro site. (19 December 2021)

Conclusion

Glancing at the images of Yayoi period pit dwellings at the sites provided in both this and in our previous survey (Ertl and Yoshida 2022), the similarities to Sekino's designs at Toro are unmistakable. If nothing else, the neatly shaped thick thatch roofs have remained dominant – even the Miyamoto redesign at Toro made them even more thick and nicely trimmed than Sekino's original. This is despite many critiques, notably by Murata and Ishihara in 1951, who provided ethnographic and historical examples of sod-covered roofs for pit dwellings built in Japan and elsewhere. The dominance of Sekino's imagined reconstruction, we explained, stems in part from his authoritative position in architectural history and conservation. It may relate to the difficulties and challenges that make it difficult to present alternative designs.

At the end, however, it may be that people (both specialists and the general public) simply prefer the look of thatch roofs that are reminiscent of traditional farmhouses. Ando

reflecting a stronger propensity to record reconstruction activities in comparison to the Kansai, Chugoku, and Shikoku regions. Notably, within Shizuoka (and neighboring Aichi prefectures) most of the reconstruction projects administered by official agencies (as opposed to resident-based projects) have some associated report. One wonders if the vast documentation on Sekino's design may have set some kind of expectation for officials in the region. It would require further research to fully understand it, but the correlation is nonetheless intriguing.

Figure 6: The pit dwellings at Otsuka-Saikachido site are thatched similarly to those at Toro site. This is despite the direct suggestion during the planning phase that it may be more archaeologically accurate to cover them in sod. (10 April 2018)

Hiromichi, archaeologist at Keio University, described his experiences advising reconstructions at Otsuka-Saikachido site (Figure 6):

> I thought about sod roofing for the pit dwellings. In fact, burnt dwellings from the Yayoi period include many remains of charred dirt near the floors, which are likely the result of dirt that collapsed in from the roof. If the "replicas" (*saigen mono*) had been built according to this original plan, the site park and exhibits would have looked very different from how they do today. However, my proposal was not approved by the supervisors (*kanshū no sensei-gata*), and we settled for a typical thatched roof. (Ando 2017: 112)

While Ando does not name "the supervisors" for the Otsuka-Saikachido site development project, the individual credited with the design is Miyamoto Nagajiro (Ertl 2021: 188), the same architectural historian in charge of the redesigns at Toro site. What exactly inspired "the supervisors" to disregard Ando's advice and his evidence remains undocumented.[13)]

13) Here this line of thought comes to an impasse, where Miyamoto's preference for using thatch roofing is unclear. What is known, however, is that none of Miyamoto's Yayoi period pit dwelling reconstructions have used sod roofing. As a counter, almost all sod roofed Yayoi period pit dwellings are credited to Asakawa Shigeo, who followed Miyamoto at Nabunken where both worked for many years advising reconstruction projects around Japan (Ertl 2021).

Much is the same at most sites throughout Japan. In the absence of direct evidence that a pit dwelling was covered in dirt, the default roofing material is thatch. This is despite the accepted fact that Yayoi (and Jomon) period people did not have the tools that would allow them to process and properly thatch roofs as they are commonly reconstructed. These thatch roofs were described by Sekino as containing a "little lie" (Fujimori 2013) used to garner public acceptance. This little lie, unfortunately, has become commonly accepted and remains standard practice some seventy years later.

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Table 1: List of sites and prehistoric reconstructed buildings in Hokuriku and Tokai

Site name	Date	#	Period		Type	Pub	Image
Toyama Prefecture ｜富山県							
Kitadai Site, Toyama City ｜北代遺跡	1999	6	M Jomon	5	Pit	○	1.1-6
				1	Raised		
Kasuga Site, Toyama City ｜春日遺跡	1966	1/0	M Jomon	1	Pit		
Ushinameri Site, Toyama City ｜牛滑遺跡	1963	1/0	M Jomon	1	Pit	○	
Mizukakarazu Site, Namerikawa ｜不水掛遺跡	1981	3/0	M Jomon	3	Pit		
Sakuramachi Site, Oyabe ｜桜町遺跡	1999･03	3/2	M Jomon	1	Pit	○	2.1-3
				1	Raised		
			F Jomon	1	W. Circle		
Fudodo Site, Asahi ｜不動堂遺跡	1981	3	M Jomon	3	Pit	○	3.1-3
Ishikawa Prefecture ｜石川県							
Ishikawa Archaeological Foundation, Kanazawa ｜石川県埋蔵文化財センター	2001	3	M Jomon	1	Pit	○	4.1-3
			M Yayoi	1	Flat		
			Nara	1	Pit		
Kaga Central Park ｜加賀市中央公園	1983	4/0	Jomon	1	Pit		5.1-4
			Yayoi	1	Raised		
			E Kofun	1	Pit		
			F Kofun	1	Pit		
Yoshizaki-Suba Site, Hakui ｜吉崎・次場遺跡	1999	3	M Yayoi	2	Flat	○	6.1-3
				1	Raised		
Oominishiyama Site, Kahoku ｜大海西山遺跡	1992	1	L Yayoi	1	Pit		7.1
Funaokayama Site, Hakusan ｜舟岡山遺跡	1959	3/1	M Jomon	3	Pit		8.1-2
Okyozuka Site, Nonoichi ｜御経塚遺跡	1982	1	L Jomon	1	Pit	○	9.1
Amenomiya Kofun, Nakanoto ｜雨の宮古墳群	1993	1/0	Kofun	1	Pit		
Mawaki Site, Noto ｜真脇遺跡	2011･17	2	F Jomon	1	Pit	○	10.1-2
				1	W. Circle		
Fukui Prefecture ｜福井県							
Shikanotani-Hongo Site, Katsuyama ｜鹿谷本郷遺跡	1977	1/0	M Jomon	1	Pit		
Nishitani Site, Sakai ｜西谷遺跡	1995	1/0	Int Kofun	1	Pit	○	
Torihama Shell Midden, Wakasa ｜鳥浜貝塚	2000	3	M Jomon	3	Pit	○	11.1-3
Gifu Prefecture ｜岐阜県							
Donosora Site, Takayama ｜堂之上遺跡	1982	3	E Jomon	3	Pit	○	12.1-3
Akahogii Stone Age Hearth, Takayama ｜赤保木石器時代火炉	1970･93	5	M Jomon	2	Pit		13.1-5
			M Yayoi	1	Pit		
				1	Raised		
			M Kofun	1	Pit		
Kadohashi Jomon Dwelling Ruins, Takayama ｜門端縄文住居跡	1971	1	E Jomon	1	Pit		14.1
Kitamachinishi Site, Tajimi ｜喜多町西遺跡	1999	2	L Yayoi	1	Pit	○	15.1-2
			Int Kofun	1	Raised		
Tsukahara Site, Seki ｜塚原遺跡	1992	6/2	M Jomon	1	Pit	○	16.1-2
				1	Pillar		
				4	Raised		
Robata Site, Kakamigahara ｜炉畑遺跡	1972･06	7	M Jomon	6	Pit	○	17.1-7
				1	Raised		
Mineichigo Site, Gero ｜峰一合遺跡	1972	5/3	E Jomon	4	Pit		18.1-3
			L Yayoi	1	Pit		
Nakano Site, Sekigahara ｜中野遺跡	1965	1/0	M Jomon	1	Pit		

Shizuoka Prefecture | 静岡県

Toro Site, Shizuoka City | 登呂遺跡	1951	9	L Yayoi	5 4	Pit Raised	○	19.1-9
Shijimizuka Site, Hamamatsu | 蜆塚遺跡	1957	5	L Jomon	5	Flat	○	20.1-5
Iba Site, Hamamatsu | 伊場遺跡	1976	6/4	M Kofun Nara	2 2 2	Pit Flat Raised	○	21.1-4
Hirashiro Site, Hamamatsu | ヒラシロ遺跡	1993	1	M Jomon	1	Pit	○	22.1
Yuzuriha Site, Atami | ゆずり葉遺跡	1975	1/0	Jomon	1	Pit		
Tanoya Site, Shimada | 田ノ谷遺跡	1984	2/1	L Yayoi	1 1	Pit Raised	○	23.1
Higashidaira Site, Fuji | 東平遺跡	1985･87	2	Heian	1 1	Pit Raised	○	24.1-2
Kamishiraiwa Site, Izu | 上白岩遺跡	1987	1	M Jomon	1	Pit		25.1
Midaka-Danma Site, Kawazu | 見高段間遺跡	1970	1/0	M Jomon	1	Pit	○	
Kashiya Yokoanagun, Kannami | 柏谷横穴群	1993	4/0	L Kofun	3 1	Pit Raised		

Aichi Prefecture | 愛知県

Urigo Site, Toyohashi | 瓜郷遺跡	1955	1	M Yayoi	1	Pit	○	26.1
Sone Site, Toyota | 曽根遺跡	1976	1	M Jomon	1	Pit		27.1
Inba-Otsuka Kofun, Owariasahi | 印場大塚古墳	1975	1	M Kofun	1	Pit	○	28.1
Daichi Site, Iwakura | 大地遺跡	1996	1	M Yayoi	1	Pit	○	29.1
Asahi Site, Kaigarayama Shell Midden, Kiyosu | 朝日遺跡・貝殻山貝塚	1965･20	3	M Yayoi	1	Pit	○	30.1-3
Kurafune Site, Shitara | 鞍船遺跡	1957	1	E Jomon	1	Pit	○	31.1
Hongo-Sakuradai Site, Toei | 本郷桜平遺跡	2015	1	Jomon	1	Pit	○	32.1

Appendix 1：Reference Materials on Prehistoric Reconstructed Buildings in Tokai and Hokuriku Regions

Kitadai Site ｜北代遺跡

富山市教育委員会 編（1999）史跡北代遺跡ふるさと歴史の広場整備事業報告書．富山市：富山市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA47960383

富山市教育委員会埋蔵文化財センター 編（2017）富山市北代縄文広場復原建物等再整備事業報告書：北代遺跡歴史活き活き！史跡等総合活用整備事業報告書．富山市：富山市教育委員会．Available at：https://sitereports.nabunken.go.jp/en/21960

Ushinameri Site ｜牛滑遺跡

富山市教育委員会埋蔵文化財センター 編（2012）婦中地域の縄文遺跡（２）牛滑遺跡．富山市：富山市教育委員会．Available at：https://www.city.toyama.toyama.jp/etc/maibun/kitadai/kitadai_katudou/kikaku/ushinameri-shiryou.pdf

Sakuramachi Site ｜桜町遺跡

桜町遺跡発掘調査団（2005）考古資料から建築材・建築技術を考える：桜町遺跡シンポジウム：記録集．小矢都市：桜町遺跡発掘調査団．Available at：https://sitereports.nabunken.go.jp/en/13718

渡邉　晶（2000）縄文時代の建築技術：桜町遺跡大型高床建築の復元について（建てる、築く）．建築雑誌 1461、56–57．Citation link：https://ci.nii.ac.jp/naid/110003809731

木造建築技術研究フォラム 編（2000）第37回公開フォラム 先史時代の木造建築技術．Citation link：https://ci.nii.ac.jp/naid/10005327757

小矢部市教育委員会文化課（2003）環状木柱列の復元．さくらまち NEWS 2003.3、1．小矢部市：桜町遺跡発掘調査団.

Fudodo Site ｜不動堂遺跡

朝日町（1982）国指定史跡不動堂遺跡：その概要と整備のあらまし．富山県朝日町．Citation link：http://ci.nii.ac.jp/ncid/BA43483271

細見啓三（1982）不動堂遺跡の建物復原．奈良文化財研究所年報 1982，15．Available at：http://repository.nabunken.go.jp/dspace/handle/11177/3076

Ishikawa Archaeological Center ｜石川県埋蔵文化財センター

財団法人 石川県埋蔵文化財センター 編（2002）．古代の人々の生活や技術を楽しく体験、先人の暮らしを再発見しよう！古代体験ひろばの概要．いしかわの遺跡 10：１–３．Available at：https://www.ishikawa-maibun.jp/wp-content/uploads/2018/03/iseki_10.pdf

Yoshizaki-Suba Site ｜吉崎・次場遺跡

羽咋市教育委員会 編（1999）史跡吉崎・次場遺跡整備事業報告書：能登の復元弥生ムラ．羽咋市：羽咋市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA44272012

Okyozuka Site ｜御経塚遺跡

野々市町教育委員会・史跡御経塚遺跡環境整備委員会 編（1983）史跡御経塚遺跡：保存整備報告書．野々市町：野々市町教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BB12072418

Mawaki Site ｜真脇遺跡

能登町教育委員会（2012）石川県能登町真脇遺跡：第 1 期史跡整備事業報告書．能登町：能登町教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BB09074018

雨宮国広（2020）ぼくは縄文大工：石斧でつくる丸木舟と小屋．東京：平凡社．Citation link：https://ci.nii.ac.jp/ncid/BC0261581X

Nishitani Site ｜西谷遺跡

福井新聞（1995）竪穴式住居が完成：三国・出世山公園．12月 3 日．

福井新聞（1996）三国町「出世山古墳公園」完成． 3 月29日．

Torihama Shell Midden ｜鳥浜貝塚

三方町縄文博物館（2001）三方町縄文博物館 DOKIDOKI 館年報 第 1 号．三方町：三方町縄文博物館．Citation link：https://ci.nii.ac.jp/ncid/AA11991558

Donosora Site ｜堂之上遺跡

久々野町教育委員会 編（1983）史跡堂之上遺跡：保存環境整備事業報告書．久々野町：久々野町教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA59857202

岐阜県大野郡久々野町教育委員会 編（1997）堂之上遺跡：縄文時代集落跡の調査記録．久々野町：久々野町教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA33606397

岐阜女子大学 地域資源デジタルアーカイブによる知の拠点形成のための基盤整備事業（2020）史跡堂之上遺跡 Available at：https://digitalarchiveproject.jp/information/ 史跡 %E3%80%80堂之上遺跡 /

Kitamachinishi Site ｜喜多町西遺跡

多治見市文化財保護センター 編（2005）喜多町西遺跡発掘調査報告書．多治見市：多治見市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA75305750

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Tsukahara Site ｜塚原遺跡

宮本長二郎（2001）日本の美術420 原始・古代住居の復元．東京：至文堂．Citation link：https://ci.nii.ac.jp/ncid/BA51464862

Robata Site ｜炉畑遺跡

各務原市教育委員会 編（1973）炉畑遺跡発掘報告書．各務原市：各務原市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BA30106004

Toro Site ｜登呂遺跡

静岡市教育委員会 編（2012）特別史跡登呂遺跡：再整備事業報告書．静岡市：静岡市教育委員会編．Citation link：https://ci.nii.ac.jp/ncid/BB12757278

日本考古学協会 編（1978）登呂 本編．東京：東京堂出版．Citation link：https://ci.nii.ac.jp/ncid/BN04117468

関野　克（1951）登呂の住居址による原始住家の想像復原．建築雑誌 66（774）、7–11．Citation link：https://cir.nii.ac.jp/crid/1520009408038101376

Shijimizuka Site ｜蜆塚遺跡

浜松市教育委員会 編（1962）蜆塚遺跡：総括篇．浜松市：浜松市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BB03409044

中日新聞（2021）蜆塚公園、大改修へ 遺跡と博物館を同時に．1月3日．Citation link：https://www.chunichi.co.jp/article/179774

Iba Site ｜伊場遺跡

浜松市教育委員会 編（1975）伊場遺跡第6・7次発掘調査概報．浜松市：浜松市遺跡調査会．Citation link：https://cir.nii.ac.jp/crid/1130282272107049216

Hirashiro Site ｜ヒラシロ遺跡

浜松市教育委員会（2016）ヒラシロ遺跡：発掘調査と保存整備事業のあらまし．浜松市：浜松市教育委員会．Available at：https://sitereports.nabunken.go.jp/en/21294

Tanoya Site ｜田ノ谷遺跡

島田市教育委員会社会教育課 編（1985）田ノ谷遺跡発掘調査報告書．島田市：島田市教育委員会

Higashidaira Site ｜東平遺跡

富士市教育委員会 編（1985）東平遺跡高床倉庫復原工事報告書．富士市：富士市教育委員会．Citation link．https://ci.nii.ac.jp/ncid/BA67966699

富士市教育委員会 編（1987）東平遺跡竪穴住居復原竣工概要．富士市：富士市教育委員会．

Midaka-Danma Site ｜見高段間遺跡

段間遺跡第二次調査団 編（1973）河津町見高段間遺跡：第二次調査報告書．河津町：河津町教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BN03438502

Urigo Site ｜瓜郷遺跡

豊橋市教育委員会（1963）瓜郷．豊橋市：豊橋市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BN08976625

Inba-Otsuka Kofun ｜印場大塚古墳

尾張旭市教育委員会（1977）印場大塚古墳．尾張旭市：尾張旭市教育委員会．Citation link：https://ci.nii.ac.jp/ncid/BN03639887

Daichi Site ｜大地遺跡

城戸　久（1954）尾張の古農家と大地遺跡の竪穴住居：古農家の構架報に基ずく竪穴住居復原への一提示．日本建築學會研究報告 27、357–358．Citation link：https://ci.nii.ac.jp/naid/110003833892

Asahi Site, Kaigarayama Shell Midden ｜朝日遺跡・貝殻山貝塚

愛知県県民文化局文化部 文化芸術課文化財室（2021）史跡貝殻山貝塚整備事業報告書．名古屋

市：愛知県県民文化局文化部 文化芸術課文化財室. Citation link：https://ci.nii.ac.jp/ncid/BC07469817

Kurafune Site ｜鞍船遺跡

津具村 編（1997）津具村誌 資料編１. 愛知県津具村：津具村. Citation link：https://ci.nii.ac.jp/ncid/BA37180683

Hongo-Sakuradai Site ｜本郷桜平遺跡

松永佳伸（2014）復元するぞ、竪穴式住居 20日完成見込み. 朝日新聞（名古屋版）12月13日朝刊.

Appendix 2：Images of Prehistoric Reconstructed Buildings

Image 1.1: Middle Jomon period pit dwelling at Kitadai Site 北代遺跡 (36.717469, 137.186531). (19 June 2021)

Image 1.2: Middle Jomon period pit dwelling at Kitadai Site 北代遺跡 (36.717586, 137.186204). (19 June 2021)

Image 1.3: Middle Jomon period pit dwelling at Kitadai Site 北代遺跡 (36.717599, 137.186098). (19 June 2021)

Image 1.4: Middle Jomon period pit dwelling at Kitadai Site 北代遺跡 (36.717177, 137.185979). (19 June 2021)

Image 1.5: Middle Jomon period pit dwelling at Kitadai Site 北代遺跡 (36.717271, 137.185906). (19 June 2021)

Image 1.6: Middle Jomon period raised floor building at Kitadai Site 北代遺跡 (36.717459, 137.186179). (19 June 2021)

Image 2.1: Middle Jomon period pit dwelling at Sakuramachi Site桜町遺跡 (36.687462, 136.872701). (16 May 2012)

Image 2.2: Middle Jomon period raised floor building at Sakuramachi Site桜町遺跡 (36.687430, 136.873105). (16 May 2012)

Image 2.3: Final Jomon period wooden circle at Sakuramachi Site桜町遺跡 (36.687413, 136.872922). (16 May 2012)

Image 3.1: Middle Jomon period pit dwelling at Fudodo Site不動堂遺跡 (36.920694, 137.553827). (19 June 2021)

Image 3.2: Middle Jomon period pit dwelling at Fudodo Site不動堂遺跡 (36.920714, 137.554009). (19 June 2021)

Image 3.3: Middle Jomon period pit dwelling at Fudodo Site不動堂遺跡 (36.920528, 137.553722). (19 June 2021)

Image 4.1: Middle Jomon period pit dwelling at Ishikawa Prefecture Archaeological Center石川県埋蔵文化財センター (36.508908, 136.688641). (17 August 2016)

Image 4.2: Middle Yayoi period flat land building at Ishikawa Prefecture Archaeological Center石川県埋蔵文化財センター (36.509070, 136.688441). (17 August 2016)

Image 4.3: Nara period pit dwelling at Ishikawa Prefecture Archaeological Center石川県埋蔵文化財センター (36.509153, 136.688531). (17 August 2016)

Image 5.1: Jomon period pit dwelling at Kaga Central Park加賀市中央公園 (36.322073, 136.329066). (21 January 2017)

Image 5.2: Remains of removed Yayoi period raised floor building at Kaga Central Park加賀市中央公園 (36.322121, 136.328781). (21 January 2017)

Image 5.3: Early Kofun period pit dwelling at Kaga Central Park加賀市中央公園 (36.322245, 136.328903). (21 January 2017)

Image 5.4: Final Kofun period pit dwelling at Kaga Central Park加賀市中央公園 (36.322377, 136.329005). (21 January 2017)

Image 6.1: Middle Yayoi period flat land building at Yoshizaki-Suba Site吉崎・次場遺跡 (36.905486, 136.789321). (19 June 2021)

Image 6.2: Middle Yayoi period flat land building at Yoshizaki-Suba Site吉崎・次場遺跡 (36.905670, 136.789498). (19 June 2021)

Image 6.3: Middle Yayoi period raised floor building at Yoshizaki-Suba Site吉崎・次場遺跡 (36.905723, 136.789793). (19 June 2021)

Image 7.1: Late Yayoi period pit dwelling at Oominishiyama Site 大海西山遺跡 (36.775534, 136.755617). (27 December 2017)

Image 8.1: Middle Jomon period pit dwelling at Funaokayama Site 舟岡山遺跡 (36.443362, 136.632136). (3 December 2016)

Image 8.2: Remains of two removed Middle Jomon period pit dwellings at Funaokayama Site 舟岡山遺跡 (36.442837, 136.631985). (3 December 2016)

Image 9.1: Middle Jomon period pit dwelling at Okyozuka Site 御経塚遺跡 (36.546550, 136.599390). (4 November 2016)

Image 10.1: Final Jomon period pit dwelling at Mawaki Site 真脇遺跡 (37.305227, 137.208381). (23 February 2021)

Image 10.2: Final Jomon period wooden circle at Mawaki Site 真脇遺跡 (37.305659, 137.206943). (23 May 2012)

Image 11.1: Middle Jomon period pit dwelling at Torihama Shell Midden 鳥浜貝塚 (35.560653, 135.895481). (29 October 2022)

Image 11.2: Middle Jomon period pit dwelling at Torihama Shell Midden 鳥浜貝塚 (35.560894, 135.895593). (29 October 2022)

Image 11.3: Middle Jomon period pit dwelling at Torihama Shell Midden鳥浜貝塚 (35.560891, 135.895785). (29 October 2022)

Image 12.1: Early Jomon period pit dwelling at Donosora Site 堂之上遺跡 (36.053682, 137.279736). (18 June 2021)

Image 12.2: Early Jomon period pit dwelling at Donosora Site 堂之上遺跡 (36.053389, 137.279738). (18 June 2021)

Image 12.3: Early Jomon period pit dwelling at Donosora Site 堂之上遺跡 (36.053287, 137.279682). (18 June 2021)

Image 13.1: Middle Jomon period pit dwelling at Akahogi Stone Age Hearth, Fudoki no Oka Ancient Village 赤保木遺跡・風土記の丘史跡公園古代集落の里 (36.159894, 137.221822). (18 June 2021)

Image 13.2: Remains of removed Middle Jomon period pit dwelling at Akahogi Stone Age Hearth, Fudoki no Oka Ancient Village 赤保木遺跡・風土記の丘史跡公園古代集落の里 (36.159771, 137.221853). (18 June 2021)

Image 13.3: Middle Yayoi period pit dwelling at Akahogi Stone Age Hearth, Fudoki no Oka Ancient Village 赤保木遺跡・風土記の丘史跡公園古代集落の里 (36.159653, 137.221661). (18 June 2021)

Image 13.4: Middle Kofun period pit dwelling at Akahogi Stone Age Hearth, Fudoki no Oka Ancient Village 赤保木遺跡・風土記の丘史跡公園古代集落の里 (36.159811, 137.221627). (18 June 2021)

Image 13.5: Middle Yayoi period raised floor building at Akahogi Stone Age Hearth, Fudoki no Oka Ancient Village 赤保木遺跡・風土記の丘史跡公園古代集落の里 (36.159664, 137.221766). (18 June 2021)

Image 14.1: Early Jomon period pit dwelling at Kadohashi Jomon Dwelling Ruins 門端縄文住居跡 (36.122334, 137.077300). (18 June 2021)

Image 15.1: Initial Kofun period pit dwelling at Kitamachinishi Site 喜多町西遺跡 (35.340419, 137.101089). (11 December 2016)

Image 15.2: Late Yayoi period raised floor building at Kitamachinishi Site 喜多町西遺跡 (35.340419, 137.101089). (11 December 2016)

Image 16.1: Middle Jomon period pit dwelling at Tsukahara Site 塚原遺跡 (35.496184, 136.865223). (29 October 2022)

Image 16.2: Middle Jomon period pillar building at Tsukahara Site 塚原遺跡 (35.496022, 136.865167). (29 October 2022)

Image 17.1: Middle Jomon period pit dwelling (No. 1) at Robata Site 炉畑遺跡 (35.394508, 136.894540). (11 December 2016)

Image 17.2: Middle Jomon period pit dwelling (No. 2) at Robata Site 炉畑遺跡 (35.394519, 136.895089). (11 December 2016)

Image 17.3: Middle Jomon period pit dwelling (No. 3) at Robata Site 炉畑遺跡 (35.394614, 136.895053). (11 December 2016)

Image 17.4: Middle Jomon period pit dwelling (No. 5) at Robata Site 炉畑遺跡 (35.394605, 136.895191). (11 December 2016)

Image 17.5: Middle Jomon period pit dwelling (No. 6) at Robata Site 炉畑遺跡 (35.394548, 136.894842). (11 December 2016)

Image 17.6: Middle Jomon period pit dwelling (No. 8) at Robata Site 炉畑遺跡 (35.394461, 136.894792). (11 December 2016)

Image 17.7: Middle Jomon period raised floor building at Robata Site 炉畑遺跡 (35.395028, 136.895140). (11 December 2016)

Image 18.1: Early Jomon period pit dwelling at Mineichigo Site 峰一合遺跡 (35.802632, 137.254049). (18 June 2021)

Image 18.2: Early Jomon period pit dwelling at Mineichigo Site 峰一合遺跡 (35.802632, 137.254049). (18 June 2021)

Image 18.3: Late Yayoi period pit dwelling at Mineichigo Site 峰一合遺跡 (35.802632, 137.254049). (18 June 2021)

Image 19.1: Late Yayoi period pit dwelling at Toro Site 登呂遺跡 (34.956473, 138.408011). (23 August 2020)

Image 19.2: Late Yayoi period pit dwelling at Toro Site 登呂遺跡 (34.956662, 138.408038). (23 August 2020)

Image 19.3: Late Yayoi period pit dwelling at Toro Site 登呂遺跡 (34.956558, 138.407905). (23 August 2020)

Image 19.4: Late Yayoi period pit dwelling at Toro Site 登呂遺跡 (34.956616, 138.407751). (23 August 2020)

Image 19.5: Late Yayoi period raised floor building at Toro Site 登呂遺跡 (34.956616, 138.407751). (23 August 2020)

Image 19.6: Late Yayoi period raised floor building at Toro Site 登呂遺跡 (34.956441, 138.407880). (23 August 2020)

Image 19.7: Late Yayoi period raised floor building at Toro Site 登呂遺跡 (34.956720, 138.408346). (23 August 2020)

Image 19.8: Late Yayoi period pit dwelling (Memorial Plaza メモリアル広場) at Toro Site 登呂遺跡 (34.955574, 138.407667). (23 August 2020)

Image 19.9: Late Yayoi period raised floor building (Memorial Plaza メモリアル広場) at Toro Site 登呂遺跡 (34.955594, 138.407771). (23 August 2020)

Image 20.1: Late Jomon period pit dwelling at Shijimizuka Site 蜆塚遺跡 (34.713667, 137.703175). (27 January 2021)

Image 20.2: Late Jomon period pit dwelling at Shijimizuka Site 蜆塚遺跡 (34.713581, 137.703032). (27 January 2021)

Image 20.3: Late Jomon period pit dwelling at Shijimizuka Site 蜆塚遺跡 (34.713240, 137.702839). (27 January 2021)

Image 20.4: Late Jomon period pit dwelling at Shijimizuka Site 蜆塚遺跡 (34.713279, 137.702919). (27 January 2021)

Image 20.5: Late Jomon period pit dwelling at Shijimizuka Site 蜆塚遺跡 (34.713464, 137.703243). (27 January 2021)

Image 21.1: Nara period flat land building at Iba Site 伊場遺跡 (34.694352, 137.709930). (27 January 2021)

Image 21.2: Nara period flat land building at Iba Site 伊場遺跡 (34.694097, 137.709591). (27 January 2021)

Image 21.3: Nara period raised floor building at Iba Site 伊場遺跡 (34.694225, 137.709967). (27 January 2021)

Image 21.4: Nara period raised floor building at Iba Site 伊場遺跡 (34.694154, 137.709763). (27 January 2021)

Image 22.1: Middle Jomon period pit dwelling at Hirashiro Site ヒラシロ遺跡 (34.973371, 137.760154). (27 January 2021)

Image 23.1 Late Yayoi period pit dwelling at Tanoya Site 田ノ谷遺跡 (34.849186, 138.176053). (26 November 2022)

Image 24.1: Heian period pit dwelling at Higashidaira Site 東平遺跡 (35.185747, 138.678810). (26 January 2021)

Image 24.2: Heian period raised floor building at Higashidaira Site 東平遺跡 (35.185574, 138.678791). (26 January 2021)

Image 25.1: Late Yayoi period pit dwelling at Kamishiraiwa Site 上白岩遺跡 (34.963247, 138.984001). (26 January 2021)

Image 26.1: Late Yayoi period pit dwelling at Urigo Site 瓜郷遺跡 (34.963247, 138.984001). (18 July 2022)

Image 27.1: Middle Jomon period pit dwelling at Sone Site 曽根遺跡 (35.081969, 137.171841). (16 December 2018)

Image 28.1: Middle Kofun period pit dwelling at Inbaotsuka Kofun 印場大塚古墳 (35.200346, 137.020377). (5 March 2017)

Image 29.1: Middle Kofun period pit dwelling at Daichi Site, Iwakura Shiseki Park 大地遺跡・岩倉市史跡公園 (35.274284, 136.863217). (10 July 2016)

Image 30.1: Middle Yayoi period pit dwelling at Asahi Site, Kaigarayama Shell Midden 朝日遺跡・貝殻山貝塚 (35.218559, 136.851786). (19 December 2021)

Image 30.2: Middle Yayoi period pit dwelling at Asahi Site, Kaigarayama Shell Midden 朝日遺跡・貝殻山貝塚 (35.218000, 136.851265). (19 December 2021)

Image 30.3: Middle Yayoi period raised floor building at Asahi Site, Kaigarayama Shell Midden 朝日遺跡・貝殻山貝塚 (35.217993, 136.851125). (19 December 2021)

Image 31.1: Early Jomon period pit dwelling at Kurafune Site 鞍船遺跡 (35.172264, 137.622718). (27 January 2021)

Image 32.1: Jomon period pit dwelling at Hongo-Sakuradai Site 本郷桜平遺跡 (35.072520, 137.705352). (27 January 2021)