Austronesian Vernacular Architecture and the Ise Shrine of Japan: Is There Any connection?

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Abstract

In spite of so many varieties of form and detail of construction found in Southeast Asian vernacular buildings, there are some recurring features and shared characteristics that bind them together. The vast territories in which this phenomenon exists, known as the "Austronesian world", does not include Japan. However, there is an intriguing resemblance between the architectural style of Japanese vernacular heritage of the earlier period with that of Austronesia. This paper is an attempt to explain the relation between the two using the findings of studies by archaeological, linguistic, sociological and anthropological experts based on the link between culture, language and vernacular architecture.

Introduction

In order to see the link between language and architecture this paper will necessarily be preceded with a brief discussion on the concept of culture. One of the earlier meanings was given by Tylor (1871), who defined culture as "that complex whole which includes knowledge, beliefs, art, morals, laws, customs and all other capabilities and habits acquired by man as a member of a society". Another definition given by Malinowski (1931) states that culture comprises inherited artifacts, goods, technical processes, ideas, habits and values. He further said that social organization is also included since it can not be understood except as a part of culture (in Firth ed.1960). Obviously, culture encompasses all systems that give a society its identity and distinguish it from the others.

Culture has also been analyzed by scholars in terms of its form and content. According to Honingmann (1954) and Koentjaraningat (1985), culture may be in the form of (i) ideas, (ii) activities and (iii) artifacts. The first is abstract in nature; it is not visible and exists only in the mind of those who subscribe to it. The second form is men's complex activities in their interaction with each other; they are concrete and observable. The third form of culture, which is the most concrete, is the result of human activities in their social intercourse that requires the creation and making of new tools, instruments, structures, buildings etc in order to fulfill their multi-various needs. It is also known as 'material culture' or 'physical culture'. Architectural products such as dwelling house or shrine obviously belong to the physical form of culture and at the same time they are the result of human activities, one of manifestations of culture.

In analyzing the content of culture, the anthropologists make use of the concept of 'cultural universals' which was first introduced by Malinowski, and later followed by Murdick and Kluckhohn (Koentjaraningrat in Alfian 1985). These cultural universals are found in every culture anywhere in the world, regardless of its level of development or location. Koentjaraningrat (1966) took the gist out of the various existing structure of cultural universals and presented seven fundamental contents of every culture, comprising: (i)

language, (ii) knowledge system, (iii) social organization, (iv) facility system and technology, (v) income generating system, (vi) religious system and (vii) arts. While architecture as a cultural artifact is a form of physical culture, language is a fundamental content of the culture that produces the artifact including vernacular architecture. To conclude this brief discussion on the link between language and culture it is opportune to quote eminent linguists' views that language reflects and perpetuates the basic assumptions and orientations of a given culture. It not only defines but to a large extent determines the way in which a culture views itself and the world (Whorf & Brown in Oliver 1975:9).

The Austronesian World

The vast number of languages spoken in the world has been grouped by linguists into several families, one of the largest of which is known as Austronesian, comprising 1268 languages or about one-fifth of the known languages in the world. It covers the languages spoken by the people of insular Southeast Asia, Micronesia, Melanesia and Polynesia in the Pacific, as well as some part of mainland Asia covering the territory shown in Map I (by Bellwood) and Map 2 (by Fox). Both maps delineate roughly the same areas, from which one can see that the Austronesian world stretches across more than half-way round the world's circumference, from Madagascar on the extreme west, through the Malay archipelagos to Easter Island on the easternmost point. The Malay Peninsular, some part of Vietnam, Taiwan, Philippine Islands and certain coastal parts of New Guinea are also within its territory.

The name Austronesia originates from 'auster' meaning 'south wind' in Latin, plus 'nesos' which is 'island' in Greek. The combination of the two words aptly describe the fact that the majority of the languages in the family are spoken on the islands, with the exception of Malay and Chamic

languages which are indigenous to continental Asia.

In both maps previously mentioned, Japan is not included within the Austronesian boundary. In fact in Bellwood's map that island country does not appear at all, while in Fox's map Japanese archipelago is fully shown making one realizes not only how close it is actually from Taiwan, but also the fact that it is almost surrounded by the Pacific Islanders that speak the Austronesian languages. In the vast domain of this language family, Taiwan has a special importance. According to linguistic experts (Blust 1999 and Comrie 2001) the Austronesian languages can be subdivided into two, namely the Malayo-Polynesian branch scattered all over the Pacific islands and the Formosan languages of Taiwan comprising 9 subgroups of Austronesian. This leads them to postulate that Taiwan is the home of the Austronesian languages. Bellwood (1997) suggests that around 8000 years ago the ancestors of the Austronesians came across from Southern China to Taiwan, from where they spread to the entire region that is now covered by the Austronesian languages. As Fox (2004:8) states:

> "Implied in... discussions of subgrouping (of Austronesian languages) is a broad consensus that the homeland of the Austronesian was in Taiwan. This homeland area may have also included the P'eng-hu (Pescadores) islands between Taiwan and China and possibly even sites on the coast of mainland China, especially if one were to view the early Austronesians a population of related dialect communities living in scattered coastal settlements."

Austronesian Vernacular Architecture

The indigenous architecture of this particular part of the world has attracted Waterson's (1997:xv) attention, who regards

its anonymous craftsmen as having produced some of the most spectacular and beautiful wooden buildings anywhere in the world. In all their diversity and subtle variation, the architectural styles of traditional buildings found in the Austronesian world, upon a closer look show certain shared similarities that seem to indicate their common origin in the distant past. Waterson (1997:1-11) noticed there are some recurring features worthy of special discussion. The most apparent physical characteristic is the raised floor supported by timber piles or stilts. In the house of the Dayaks in Borneo, these posts are extremely high, but generally they are of moderate height making the space below the floor suitable for human or animal use. Only in very few cases the raised floor is so low that the space underneath is rendered unusable except for ventilation. Another prominent feature of the style is the saddle-backed roof, of which the ridge-line extends beyond the gable walls. Furthermore, the gables are usually decorated with finials often but not always in the form of cross horns.

Because of the perishable nature of timber, the main material used by the Austronesians, it is not easy to resolve archaeologically how long they have been using pile foundation for their houses. There is very scanty evidence from pre-historic sites to establish with confidence the source of these dwellings. According to Dumarcay (1990:2) there are two cases worthy of attention. First, the excavation of pre-historic site in the Ratchaburi region to the west of Bangkok has unearthed the remains of a house that have been reduced to the positioning of its piles. From materials found in the vicinity of the dwelling archaeologists postulate it belongs to Neolithic Ban Keo civilization stretching from 1800 to 1300 BC. It is interesting to note that the arrangement of the piles is such that the dwelling could be reassembled, just like many present types of dwelling in Southeast Asia. From another site at Ban Chiang, in Northeast Thailand, the positions of piles have also been discovered. Again, they enable experts to

reconstitute the dwelling which was square in plan, probably covered with split woven bamboo walls and plastered with mud. Although present day Thai language does not belong to the Austronesian family, its proto-language which Benedict calls Austro-Thai has reconstructed terms that also include words such as platforms/ storey, house post, and ladder/steps leading up to the house (first quoted in Waterson 1997:15). From the result of their studies, the linguists are able to throw some lights on the early type of dwellings used by the speakers of a language.

A more concrete proof of the use of pile structure and saddle-roof during the early Metal Age may be obtained from engraved images shown on bronze drums of the Dong Son culture from North Vietnam (Lewcock & Brans 1975,Bellwood 1978) (Fig.). This Bronze Age civilization covering a large part of Southeast Asia from between 600 to 400 BC till the first century AD is characterized by the use of bronze drums. A number of these drums which have been found in places on the mainland as well as far away islands of Indonesia, are all decorated with designs in a variety of motifs, including fauna and geometry. Of particular interest is the fact that the decoration often incorporates architectural forms showing houses supported on piles (Fig.).

In some of the Javanese temples of the ninth to fourteenth century, there are friezes clearly depicting several types of pile-built houses with extended gable line indicating the people's practise of those periods, although most buildings on the island nowadays directly sit on the ground (Fig.). While Waterson (1997:1) attributes the adoption of ground-built structures to Indian influence many scholars believe it is caused by more practical constraint, that is the scarcity of timber as the result of rampant deforestation. It is widely known due to rapid increase of population, the island of Java for the last few centuries has become one of the most densely populated places on earth with very limited areas for the common people to access natural timber.

Blust (1976) reconstruction of the Malayo-Polynesian language subgroups include terms such as ridge-pole, rafter, thatch, house post, storage rack above the hearth, notched log ladder, public buildings etc. From these reconstructed terms Blust draws a conclusion that speakers of these languages already settled in villages which may have included both dwelling houses and some kind of public structure; that their houses were raised on posts, the floor being reached by means of a ladder; and that the roof must have been gabled because of the existence of a ridge pole. From such linguistic reconstruction experts can deduce a conclusion that raised floor construction might have developed both in mainland and insular Southeast Asia since the later Neolithic period (Waterson 1997:14).

The earliest attempt to draw conclusions from similarities of architectural styles in Southeast Asia, Melanesia and Oceania including their links with Japan and Madagascar was first made by Vroklage (Waterson 1997:20). He assembled sketches of fifteen indigenous houses from the region, most of which have pile foundation, saddled back roof and gable horns. Based on those examples he hypothesized the frequent appearance of curved roofs with pointed ends as symbolizing the boats used by the ancestors of these seafaring peoples when they spread throughout the islands. Using Vroklage's theory as a starting point Lewcock and Brans (1975) further studied the role of boat as an architectural symbol and made some interesting observations how the features of the boat have been incorporated into the structure and symbolism of the house types. According to them, the influence on the design of buildings is reflected at least in nine different ways. Firstly, the form of the stored boat resembles the spirit houses and communal rice stores of the Toraja people in the island of Celebes. Secondly, the frequent appearance of curved roof that reminds one of a boat with upcurving stem and prow as mentioned above. The house of the Batak, Minangkabau and Pasemah people on the island of Sumatra belong to this category. Thirdly, the overall form of the building looks like a boat in full sail, as in the case of the Lio district houses in Flores, in the East Indonesian archipelago. Fourthly, in some eastern Indonesian islands the house is built on a platform that appears to be carried on two boats reminiscent of ceremonial boat which is made up of two boats joined together by a platform. Fifthly, the Nage people on the island of Flores build a woven representation of a boat and fixed it to the ridge of their house. Sixthly, in Tanimbar and Ende district of Flores the vernacular houses have a large-ridge piece representing a boat. This type of expression of the dominant symbol of the boat is widespread not only throughout Southeast Asia and East Asia but as far north as China and Japan (p.112). Seventhly, the Manggarai people of West Flores build their house with a roof in the form of a boat upside down. Eightly, also in Flores a village called Tondo has its houses arranged in such a way that the overall plan looks like that of a boat. Lastly, in Ambon as well as some other eastern Indonesian islands, the meeting place is often shaped like a boat.

Beside physical resemblances, Vroklage supported his argument by citing some boat vocabulary used by numerous ethnic groups in Indonesia in naming parts of their houses with 'mast', 'sail', 'rudder' etc, and calling their village heads and other important persons the equivalent of 'ship's captain', 'steersman', etc. This aspect of Vroklage's argument has also been supported by Lewcock and Brans by bringing much linguistic evidence to show the multitude of boat symbolism in nomenclature and use. Vroklage further theorized that straight ridge-line evolved as degenerated version of the originally curved ones due to people's laziness. However, interesting as they are, a number of scholars feel the arguments are weak, while Waterson describes it as 'dubious'.

The Japanese Language & Culture

The majority of Western scholars believe that the Japanese language belongs to the Altaic family, together with Turkish the most westerly member, Azeri in Azerbaijan, Turkmen in Turkmenia, Kazakh in Khazakhstan, Kirghiz in Kirghystan, Uzbec in Uzbekistan, Uigur in Western China, Mongolian in Mongolia and Korean in Korea. However, for many years there have been ongoing debates among linguists about its real status and many hypotheses have been proposed that link Japanese with other languages.

One school of thought theorizes that the Japanese is a Southeast Asian language related to Vietnamese, Tibetan, Burmese or the Tamil languages of Southern India and Sri Lanka. Yet another dissenting group of experts of which Labberton (1925) was one of the earliest proponents, are of the opinion that there is a link between the Japanese with the Austronesian family of languages such as Tagalog, Malay, Javanese, Maori, Tongan, etc (Ishizawa 2007). Even more extreme, Benedict (1986) proposed a new theory in which he reclassified it as a member of the Austronesian family, but most scholars disagreed with this view due to the absence of strong evidence. Nowadays, many linguists including Japanese are beginning to accept there are indications that in the very early days the Japanese language was influenced by Austronesian substratum. Considering the close proximity and slight similarity in physical appearance between the people of Taiwan and the south-western areas of Japan such as the Ryukyu Islands and Kyushu, the latter view seems to be quite plausible. Although as yet there is no conclusive archaeological evidence, it is postulated that some prehistoric cultural exchange had taken place between speakers of proto-Austronesian and Proto-Japonic languages without significant ethnic intermixture (Bellwood 1978).

Since the 1970's a theory that has been gaining momentum in Japan is that the Japanese languages are actually a mixture between Altaic and Austronesian languages. This theory which was first proposed by Polianov (1918) is now supported by notable Japanese linguists Murayama, Sakiyama and Itabashi (Ishizawa 2007). The "hybrid" theory that accepts the relationship to the Altaic family, but also hypothesizes influence from Austronesian languages is now getting increasingly stronger support (Miyagawa 2007). Briefly, they believe Japanese is a mixture between Altaic & Austronesian.

Many Japanese scientists and archaeologists now agree that the Japanese culture is related to the Yayoi immigrant people who came to Japan in 400 BC from mainland Asia, some say from Korea, but others speculate from Southern China via Taiwan. The name Yayoi is given after an archaeological site in southwest Honshu from where the remains of this culture were first known. It was these people who introduced rice cultivation and raised floor construction which was first intended for rice granaries in order to protect grains from rats and dampness (Waterson 1997:17).

Vernacular Architecture of Japan

In the course of discussing the boat as an architectural symbol in Southeast Asia that has been summarized above, Lewcock and Brans (1975: 112-5) made some reference to China and Japan where according to them its provenance has been forgotten. However, they are quite emphatic that in the case of the Japanese there is a strong link with the Dong Son culture discussed earlier. From the early bronze bells and the clay tomb models, both from circa 1st and 2nd century AD, it is evident that building representation of the periods closely related to the Austronesian vernacular (Fig.)

Domenig (1980) proposes a theory that the origins of the Austronesian style of architecture developed in Southern China during the Neolithic period when it was not yet culturally "Chinese", because northern Chinese influences only came to the south from the Han period (206 BC-AD 220)

onward. The cultures of Southern China during that time were closer in character to that of the Southeast Asian world and it was these cultures that became the source of influence on the Bronze Age culture of Dong Son with its centre in North Vietnam as well as the developments in Japan. Domenig's theory, which is based on reconstructions of Neolithic pit dwellings, postulates that pile building and saddle roof evolved from 'a progression from a primitive tepee-shaped structure of poles set on the ground and overlapping on the top' (Waterson 1997:15) (Fig.).

In Japan, the evolution of pit dwellings to becoming structures on piles with simple saddle roof and later with gable roof is associated with the Yayoi people of Honshu mentioned above during the late Neolithic and early Metal Age period.

Domenig's theory opens up a new horizon for studies on the link between vernacular architecture of Austronesia and Japan. In her book 'The Living House', Waterson (1997:15) highlights her observation that some features of traditional Japanese architecture are so strongly Southeast Asian and speculate there must have been some kind of historical link between them. For comparative purposes the Ise Shrine complex has been chosen to represent an interesting example of how the Japanese indigenous architecture looked like before the advent of foreign religious and cultural influences from China..

The Grand Shrine of Ise

The Grand Shrine of Ise, commonly referred as the Ise Shrine, is probably the best known Japanese vernacular buildings in the world (Fig.).Located in the city of Ise, in southern Honshu amid a dense forest of giant cryptomeria trees, this oldest temple in Japan is actually a shrine complex consisting of over one hundred individual shrines. They may be divided into two groups of buildings: the Inner Shrine dedicated to the Sun Goddess and the Outer Shrine dedicated to the Goddess of Abundant Food. Each group comprises a number of buildings, including ancillary shrines, workshops, storehouses, etc. These shrines are the holiest and most important Shinto shrines in Japan which according to official chronology were first constructed in the year 4 BC. However, most historians believe it was several hundred years later, probably 690 in AD, when the shrines were first built in their present form. This means the design dates back to the time prior to the introduction of Chinese and Buddhist influences on architecture which have now completely overshadowed the indigenous architecture of the Japanese archipelago.

Traditionally, every twenty years the shrine is renewed by demolishing and rebuilding it with exactly the same specifications and construction details (Witcombe 2007, Waterson 1997). The tradition that was started in seventh century AD during the reign of Emperor Temmu, the first emperor to rule over a united Japan, has been faithfully practised and until now the temple has been renewed sixty times. The current buildings, restored in 1993, are the 61st repetition to date which will be rebuilt in 2013 (Wikipedia).

About the shrines which are all constructed of natural wood, Witcombe (2007:2) draws our attention to the existence of a special post known as *shin-no-mihashira* which literally means 'the august column of the heart,' or more freely translated as 'sacred central post', over and around which the new shrine will be erected. The remnant of this primitive symbolism is still widely practised in many indigenous houses in Southeast Asia. Witcombe further says the chambers of the shrines are raised on timber piles while the roof is not supported by the walls even though the rafters do rest on purlins. The ridge beam is carried by two free-standing columns at either end, reminding us of the Toraja indigenous house in Sulawesi and men's ceremonial house from Kamari, Papua New Guinea. Furthermore, just like in many Austronesian houses, the poles are buried directly into the ground without any foundation. Another

interesting feature is the distinctive roof beams which project like horns over the ridge of the roof resembling one of the most recurring motifs of decorative gable-end finials on many houses in Southeast Asia. As observed by Lewcock and Brans earlier, the detail treatment of the ridge itself represents a boat just like in many eastern Indonesian houses, even though in Japan its origin has been forgotten.

From the above images and deliberations, it is obvious that overall the architectural style of Ise Shrine buildings looks strongly reminiscent of the Austronesian vernacular architecture. This is most probably due to the historical and cultural links in the early days between the people of Taiwan the original home of the Austronesian and southern Japan, before Northern Chinese influence profoundly permeates various aspects of the Japanese culture.

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