

The articulation of Gender relations in the vernacular architecture of matrilineal societies in eastern Indonesia

Indah Widiastuti

School of Architecture, Planning, and Policy Development, Institut Teknologi Bandung, Indonesia

Corresponding author

Email: indah@ar.itb.ac.id

Iwan Sudradjat

Department of Architecture, Universitas Katolik Parahyangan, Bandung, Indonesia

Christina Gantini

School of Architecture, Planning, and Policy Development, Institut Teknologi Bandung, Indonesia

Abstract

Matrilineal kinship practices are found in Indonesia, especially in the interior of Sumatra and Eastern Indonesia. Their architectural reflections have been widely discussed, especially the vernacular architecture of Minangkabau. Meanwhile, the architectural representation in the context of Eastern Indonesia has not been widely discussed. This paper is the result of field research and comparative study on the vernacular architecture of the four communities in Eastern Indonesia that adhere to a matrilineal kinship, namely the Bugis-Karampuang in South Sulawesi, the Ngadha on Flores Island, the Bunaq, and the Tetun on Timor Island. The main aim of this research is to understand how the matrilineal kinship system is articulated in vernacular architecture and settlements, including spatial layout, construction, and aesthetic expressions within their habitats. The paper was written based on field research and comparative studies of the four ethnic groups. Although each ethnic group has unique architectural characteristics, there are some aspects in common, such as the basic unit of matrilineal dwelling known as the matrikin.

In matrikin, the house functions as a residence for the mother, the mother's brothers, siblings, and other daughters. This house is called *rumah besar* and *bola* for the Bugis-Karampuang community, *sao* for the Ngadha community, *deu* for the Bunaq community, and *uma* for the Tetun community.

The distinct architectural characteristic is the dominance of the roof, which also functions as a storage area, as well as the important role of the women's room, which is always adjacent to or integrated with the kitchen. These houses have a lot of feminine-themed symbolism.

An interesting finding is that residential culture reflects the social order and ethos of gender balance, which is a means of consolidating human and natural resources for the common good.

Keywords: Matrilineal Kinship, Karampuang, Ngadha, Tetun, Bunaq, Eastern Indonesia

1. Introduction

Discussions regarding the architecture of societies that adhere to a matrilineal kinship system tend to be seen on a case-by-case basis. In fact, the concentration of this system on the islands of Southeast Asia and Oceania is a subject that deserves comprehensive research, including in terms of its built environment. In Indonesia, it is found in the interior of Sumatera Island, the lesser Sunda Archipelago in Eastern Indonesia. In Southeast Asia, they are the Rhade and Cham, Vietnam; the Khmer Leou, Cambodia; and The Lao Lum of Laos. In South Asia, they are found in India, such as the Nayar from Kerala, South India, and the Khasi, Northeast India. The existence of matrilineal kinship communities in Indonesia is, in fact, many. So far, the most well-studied and documented one is the Minangkabau architecture. Matrilineal communities are also reported there among the Acehnese tribe in Aceh (Siapno, 2002), the Luwu tribe, South Sulawesi (Schrauwer, 1997, Bullbeck, NY; Mattulada, 1982; Sirtjo, 2004), the indigenous inhabitants in the interior of Sumatera island (Suryo, 2018), the Ngada in Flores island, (Arndt, SVD 2009, M.B Susetyarto, 2013), the Wehali, Bunaq, Kemaq in Timor island (Therik, 1995). With the many numbers of society practicing matrilineal kinship, we should be able to build to a certain limit the wisdom and lessons learned from the phenomena. This paper will focus on the vernacular architecture of matrilineal society in Eastern Indonesia. The purpose of this research is: 1) to conceptualize the characters of the dwelling culture of the matrilineal society in the case of Eastern Indonesia, 2) to explore the spatial forms and constructions of the vernacular architecture of the society practicing matrilineal kinship in Indonesia, and 3) to conceptualize gender balance in the vernacular architecture of society practicing matrilineal society in Easter Indonesia. The location of research is the Ngadha ethnic community on Flores Island, the Bunaq and Tetun on Timor Island, and The Bugis-Karampuang community in South Sulawesi (see red dots in Fig 1)

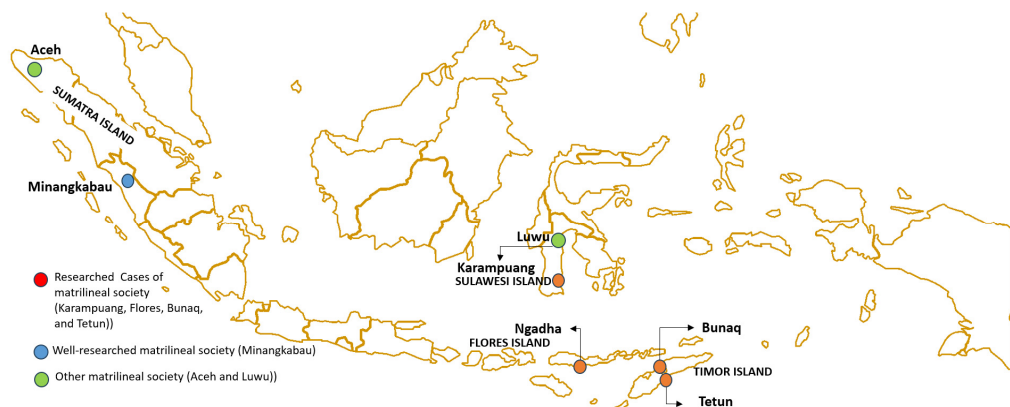


Figure 1: Map of Indonesia and position of cases studied

Source: author

2. Literature Review: Kinship, Matrilineal Kinship and Architecture

One of the challenges in discussing the relationship between architecture and kinship is the assumption that these studies focus specifically on the fields of anthropology and sociology, therefore not architecture. This perspective ignores the importance of kinship as the key variables of authority and agency in architectural design, adaptation, and construction processes (Memmot and Ting, 2020). The perspective also ignores the situation that houses and cities are analytical units of architecture, which is shared by academic fields such as anthropology, geography, sociology, and more. Narrowly followed Orientalism, which argued that studying ethnicity was irrelevant because of its racial implications, leading to such studies results in a lack of exploration of many aspects of architectural principles in indigenous communities. As a result, the architectural implication of kinship receives less attention (Humphrey in Carsten & Hugh-Jones, 1995; Egenter, 1992).

2.1. Kinship in Vernacular Architectural Studies

By definition, kinship" is a social relationship that governs rights, roles, and hierarchy and relates to various kinds of relationships, affiliations, and alliances among people. It yields various kinds of social groupings, such as domestic groups, descent groups, and corporate groups in settlements and landscapes. When the stability of the kinship operation is achieved, it becomes symbolic and becomes identity. Kinship operations vary in different ecological settings and resource contexts. In the end, the kinship system was also meant for survival (Schneider, 1984). The varying ecological constraints and mutual externalities yield unique, stable constitutions of a compromised kinship. Together, they establish the framework for the social-spatial organization, which in this case is architecture, settlement, and landscapes (Murdock 1949:66ff, in Schneider, 1984).

Architecturally, a house characterizes a social, cultural group where humans dwell and develop (Lévi-Strauss 1982, 1987, in Gillespie 2000). It institutionalizes the established social-cultural structure, custom, and practice with a specific purpose within society by which the materiality and meaning of the built environment can be explained. Several studies in the field of vernacular architecture have utilized kinship indicators to complement the understanding of dwelling culture. For example, Solikhah and Fatimah (2020) explored the attributes of matrilineal kinship in Uma architecture in Sumba. In research on the architecture of the Towani-Tolotang community in South Sulawesi, Mashuri, Djunaedi, and Nareswari (2022) also applied kinship elements. In addition, Tobing and Hutabarat (2019) use the concept of kinship as a reference framework to outline the hierarchy of the Batak settlement order. The consistency of kinship practices is also an important indicator in studying the sustainability of vernacular architecture, as shown by Widiastuti and Kurniati (2019) in research on Minangkabau vernacular architecture, where modernization modified kinship practices and had an influence on the production of Rumah Gadang architecture. A more constructive perspective on the importance of kinship for vernacular architecture, as proposed by Susan D. Gillespie (2000), is to treat it as a processual perspective rather than a classificatory approach. The focus is on understanding the real implications of a community's cultural practices rather than on judgment and testing based on abstract and ideal norms.

2.2. Matrilineal Kinship in Architectural Studies

Matrilineal kinship can be so sophisticated that Gough & Schneider (1961) prefer to describe it as a kinship system that does not contain patrilineal principles. Some perceive it as a complex version of bilateral kinship (Van Wouden, 1968; Schwimmer, 1982, Schneider, 1961). To clarify this complexity, we should understand that 1) coherent kinship relationships yield various interconnected aspects, including ecology and lifestyle; 2) kinship should not be viewed as a practice that stands alone and isolated from other cultural practices; 3) despite the varying of practices, matrilineal kinship consistently prioritizes inheritance following the mother's line; and 4) the existence of matrilineal kinship intersects with patrilineal in communities around the area. The nature of kinship, which is communal and elevates women, is significant in exploring vernacular architecture that reflects commonality.

2.3. Gender Relation, Kinship and Vernacular Architecture

Gender relations refer to social interactions between individuals of different genders in a community. In the context of this study, gender relations examine how society constructs their spatiality and domestic space, communicates the meaning of residence, and whether this results in gender equality or inequality. Its architectural articulation emphasizes the important role of women in the interpretation and use of the home environment, both functionally and symbolically. Gender relations go beyond the binary concept of male and female, encompassing a wide range of gender identities and expressions. Similarly, matrilineal kinship is a category of kinship and not the opposite of patrilineal. The idea of gender relations would not only delve into how women are functionally positioned but also how it influences architectural configurations, symbolic systems, and, ultimately, the functional placement of family members in space.

Diagram 1 demonstrates an associative relationship between matrilineal kinship and gender relations in architecture in a typical ecological environment. Matrilineal kinship is reflected in socio-spatial practices, including spatial distribution. These cultural practices become institutionalized as they continue. Ecological uniqueness, the constitution of and institutionalized practices result in compromised kinship with sociocultural practices specific to every community. The interconnection among aspects would produce variations of gender relations. From here, architectural articulation can be analyzed.

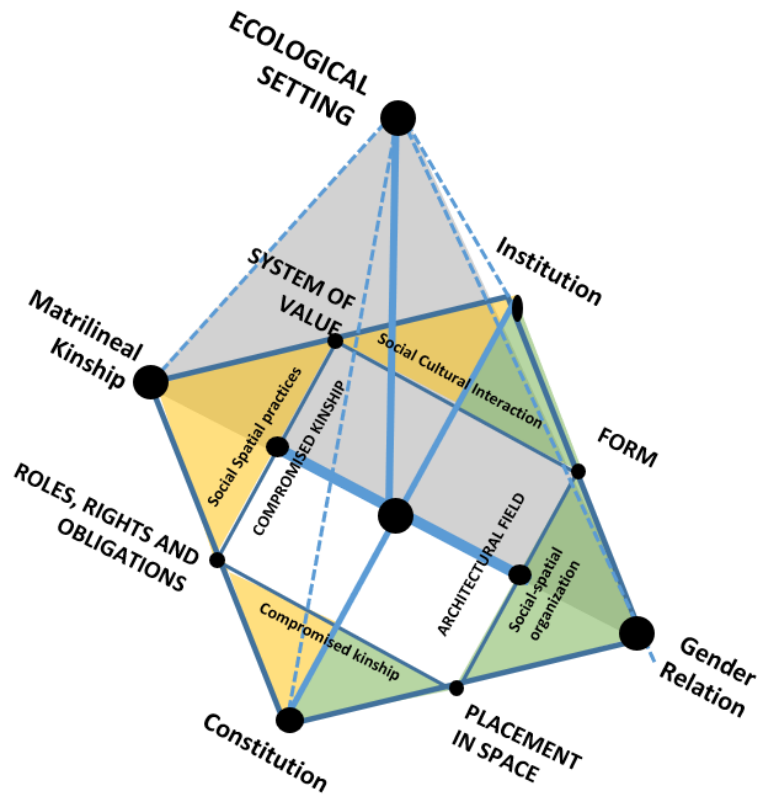


Diagram 1: The framework of gender relation and architectural articulation

3. Research Methods

This article is based on field research on the vernacular architecture of four matrilineal communities in Eastern Indonesia, namely the Bugis-Karampuang community in Sinjai, South Sulawesi, the Ngadha community on Flores Island, the Bunaq and Tetun communities on Timor Island (see Figure1). The research was carried out in 5 stages. First, field research included interactions with mothers from at least five matrikin in each surveyed village, making family genealogies, observations, and discussions with local experts and informants (P3MI, 2018, P3MI, 2019, P3MI, 2022). Second, an analysis of the culture of settling down in each place, relating to the compromised kinship and ecological setting. Third, comparative analysis, from which a formulation of the general characteristics of kinship and their institutional characteristics is derived. This convergence indicates a deep structure underlying the architectural character and its social, spatial organization, from which the gender relations can be inferred. The fifth stage is the conclusion of the architectural articulation and part of the issue of gender relations. These five stages can be depicted in Diagram 2.

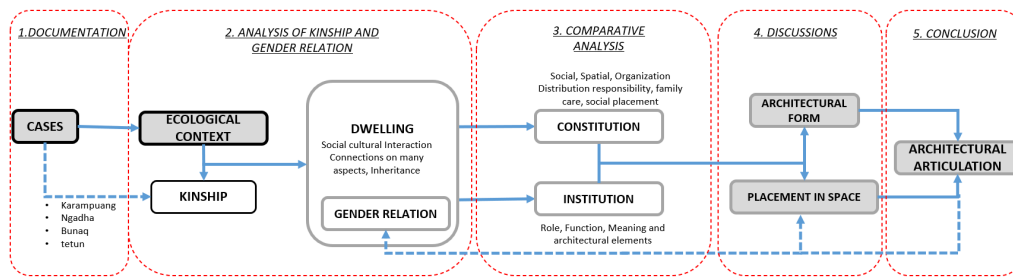


Diagram 2: Stages and Phases

4. Description of cases

The following are glimpses of matrilineal kinship practices and architectural and residential manifestations that reflect the stable state of local matrilineal kinship or compromised kinship.

4.1 The vernacular architecture and settlement of the Bugis-Karamapuang, South Sulawesi

The Karampuang hamlet is situated in Sinjai District, South Sulawesi Province, in the highland and interior of South Sulawesi. The tradition of the matrilineal kinship of the Bugis-Karampuang relates to the legend of a female ancestress - To Manurung- descended on earth on Mount Cimbolo hill and became the predecessor of Amatoa's lineages—the sacred and highest leader of the Bugis-Karampuang community. Legend says that Mount Cimbolo emerged from the sea, and its ripples extended to an extent, marking the outermost boundary of the Bugis-Karampuang customary land. To Manurung's male descendants spread abroad and established patrilineal communities, while the descendants of To Manurung and direct descendants lived in Karampuang village, remaining matrilineal. Till now, they are still bound together as an ethnic community by the legend.

In his duty, Amatoa is accompanied by three other traditional leaders and referred to as "Puang." Together, the four characterize governance and govern social groupings and rights and roles under the symbol of the four essential forces of nature: Puang Amatoa represents fire, Sanro represents wind, Puang Guru represents water, and Gela represents earth. These four essential agencies form the governance system *adde eppa* – the role of four (Muhannis, 2013). Each of the four leaders developed a kin community called *Jiji*. *Jiji* is a unit of the Sibs community associated with one of the four communal leaders. These four *jiji* or sibs-communities were regrouped into two major groupings, each associated with an ancestral house—*rumah besar*. *Jiji* Puang Amatoa, Puang Sanro, and Puang Guru are affiliated with *Rumah Tomatoa* (see Figure 2), while *jiji* Gela is affiliated with *rumah penggela*. Symbolically, *rumah besar* is the house of the people. Although the twin houses are similarly significant, the *rumah besar tomatoa* is higher in value.



Figure. 2: Rumah Tomatoa, Dusun Karampuang, Kab Sinjai, South Sulawesi
Source: P3MI 2018.

In practice, residence after marriage is uxorilocal. The married couple lives in the bride's mother's house (*bola*). However, normatively, we see traces of avunculocal, namely living with the maternal's uncle in *rumah besar*. Here is the explanation. Marriages are permitted among the *jiji* members within the *rumah besar* but prohibited with members of *jiji* of different *rumah besar*. *Jiji* members of Tomatoa, Sanro, and Guru can marry each other. *Jiji* members of Gela can only marry among members of *rumah besar panggela*. Therefore, avunculocal here refers to Uncle of the *jiji* - Tomatoa in *rumah besar tomatoa* and *Penggela* in *rumah besa panggela*. The ancestral house becomes a symbol of twin communities, reflecting the existence of two different communities that complement each other.

According to *Lontara'* Karampuang- the codex of the Karampuang people - the ancestral house was initially one communal house, whose archaic form was a conical building with a central pole called the "lao pole", before it splitted into twin ancestress house- the twin *rumah besar* (Muhannis, 2013). The *rumah besar* is considered female, as is the earth (*paratiwi*). The building and decoration elements also symbolize female organs.

But now, people no longer live in *rumah besar* except the dignitaries of the *jiji*, comprising three representative of maternal uncles of *jiji* Tomatoa, Guru and Gela, and *jiji* Sanro which is the eldest lady of her community. Today, the Bugis-Karampuang live in small houses called *bola*. *Bola* is a type of Buginese individual house (Figure 3). Like *rumah besar*, *bola* is also considered female and would be inherited by female descendants. Inheritance from a male descendant is possible when there is no female descendant. The hamlet is accidentally arranged of in four clusters of *bola* blocks, which reflect the four *Jiji* groupings.



Figure 3: A *bola* in Dusun Karampuang, Kab Sinjai, South Sulawesi
Source: P3MI 2018.

4.2. The vernacular architecture and settlement of the Ngadha, West Nusa Tenggara

Ngadha society inhabits a valley ecotope of Jerebu'u village on the Southern coast of South Sulawesi, leading to Savu estuaries on the feet of Mount Inerie, along with other communities. For the Ngadha, the social life is traditionally consolidated in matrilineal clans, which are each called a *voe*. *Voe* is a matriclan comprising several matrikin (*dii sao*). A *dii sao* coordinated more than one residential house. A house is called *sao*. The main one is called *sao sipo pali*. The oldest *sao sipali* of a *voe* is *sao saka* (*matrikin's house*). The next is the sub-matrikin house, *sao meze*, *sao kaka*, and *sao dhadi* or *sao* (see Figure 4). The intensity of decorations marks the hierarchical difference. With these organizations, practically members of *dii sao* are distributed in dispersed *sao*, each representing a matrilineage (lineages under a matrikin) or in a compound (*illi bhou*).

A *voe* is usually associated with a pair of the oldest matrikin - female ancestral houses (*sao saka pu'u*) and male ancestral house (*sao saka lobo*). In front of *illi bhou* and is *dii sao*, there is a yard containing stone installations (*vatu leva*), ancestral markers, tombs, and places for gathering. *Dii sao* is led by a male leader called *mosalaki*. They congregate in *illi Bhou* yard. *Voe* is represented by a pair of totems - *ngadhu* (male), *bhaga* (female), and a tethering stone (*peyo*). The *voe* principle has an important role in regulating land ownership, marriage, and the order of social roles and behavior in Ngadha society.



Figure 4: Dii Shao sekaligus Sao di Nua Bena, , Kab Bajawa, NTT
Source: P3MI 2019.

Members of several *voe* and *sao* can agree to live together and form a residential rule called *nua*. In this case, all the *Illi bhou* and *dii sao* united their totems in a common settlement open yard - the *ture kisanata*. The governance of the Ngadha community lay in the hands of a group of leaders called *mosalaki*. They were tasked under the sanction of the ladies in *illi bhou* and *dii Sao*. Not all of *Illi bhou* congregate in *nua*. Residential areas after marriage are matrilocal or uxorilocal, where the new couple lives with the woman's family. *Sao* has a sacred inner room or female chamber called *one*. It makes *sao* both a social and spatial unit of analysis. The findings show that most settlements appear as scattered *illi bhou* around Jerebu'u valleys.

4.3. Vernacular The architecture and settlement of the Tetun, East Nusa Tenggara

Observations on Tetun vernacular settlement were conducted in Laran, Kamanasa, and Laekekun Villages in Malaka District. The Tetun society is organized in matrikin's house, which is called *uma* (see Figure 5). Each member belongs to a certain matriline. Every matrikin has both the status of husband-taker and giver under the idiom of *alin maung-fetto sawa*. A house is *uma mane* when they have a son marrying a woman of a certain matrikin. The bride's house is then *uma fetto* in the event of marriage. The status of *uma mane* and *uma fetto* reflects the kinship roles within the house as husband and giver-taker. The status of *uma mane* is always higher position than *uma fetto* in the social hierarchy. Each house is associated with a matrikin, led by a male leader (*katuas*), while the respected mother is called *uma ferik*. A village, or *knuu*, is associated with four matriline, each led by a male chief, the *fukun*. In the case of Laran Village, the main matriline are Fatisun, Leklaran, Liura,

and Maulima. If an *uma fetto* does not have a daughter, the father has the right to ask the child to return to be part of the family. This custom is called *mata musan*. On the other hand, a daughter of *uma mane* can also be asked to become part of her husband's *uma* by paying a dowry called *belis*.

The stress of *uma mane* and *uma fetto* is based on the legend of a female ancestress named "Maromak Hoan," who, according to Therik (1995), was the descendant of a local female, Bera'i, who later married a migrant from Malacca called Sina Mutin. Maromak Hoan (Therik, 1995) is a descendant of the mythical female and male figures from the sky "rai bot." The local female is respected over the migrant male.

The Tetun people of Wehali-Wewiku managed to develop village confederations that occupied a large area and claimed up to Kupang. The sovereign is officiated by a king with the title of *liurai*, representing the queen, with Loro as his official. The *uma mane*, which belongs to the queen of the village, is called *Tafatik*. These houses have a division into a female space (*labis uma laran*) inside the house and a men's room (*labis molin*) or veranda (*labis*).



Figure 5: Uma Ai As, Desa Kamanasa, Kab Malaka, NTT

Source: P3MI 2022.

4.4 The vernacular architecture and settlement of the Bunaq, East Nusa Tenggara

The Bunaq settlements we visited were Dirun village, Kewar village, and Nualain village in Belu district. They stand on a mountain ridge near a vast ritual field called "Fulan-Fehan" (the field of the moon) at the feet of Lakaan Mountain, Belu District. The village is called *leo*. The typical matrikin's house is called *deu* or *reu* (see Figure 6). The kinship system of the

Bunaq community is rooted in the principle of pairing the sub-community of husband-taker and husband-giver, idiomized as "woman" and her "brothers," known as *malu-ai baqa*.

Deu or *reu* organized themselves into a village with the main matrikin (*deu* or *reu*) of a particular matriclan standing in an important spot facing a banyan tree under a yard called *ksadan*. The matriclan of the main matrikin in Dirun Village is "Lo'os", "Monewalu Puik," "Sirigatal," and "Leo Rawah" communities. In Nualain village are Monewalu Balok and Manisobo. In Kewar are Monewalu and Sirigaatal. The main *deu/ reu* of a village is called *uma metan* – the house of the leader's mother. The respected mother of the house is called *ina ferik*, and the headman is called *reu gomo matas*. Every matriclan traditionally shares a common role and set of skills.

Legends circulating among the Bunaq community consider their origin to be the result of the Marae community's conquest of the native Melus community. They have a role in establishing a sacred place, the "Benteng Tujuh Lapis" (seven-layered fortress) at Fulan Fehan and becoming the general orientation of the Bunaq community. In this fort, there are traces of the oldest matriclan as of the origin of the Bunaq community. From these matriclans, matrikin emerged, organized, and led by houses called *deu* or *reu*. Villages of the Bunaq orient to an open yard where ancestral installations are put, called *ksadan*. The Dirun village maintained its affiliation with a fortress site as its ritual center (Benteng Tujuh lapis). They claim that the fortress was their *ksadan*.



Figure 6: Reu Loos Ni, Desa Dirun, Kab Belu, NTT
Source: P3MI 2022.

Rumah besar, sao, deu, or reu, and uma have a common characteristic, which is an overwhelming roof, so big that the roof is the living space itself. A residential structure is always considered female, although the leader is male. Unlike Tetun, the Bunaq' architecture has fewer openings. It may be due to the highlands situation. Either as a concept or as an object, the existence of matrikin always refers to two possibly status of houses, as *uma mane* or husband taker and *uma fetto* or husband giver.

5. Results and Discussion

5.1. The social-spatial organization of matrilineal society in Eastern Indonesia

The matrilineal kinship system in Eastern Indonesia places women as land owners, recruiters of prospective matriclan, and matrikin members. Meanwhile, men are managers of assets, resources, and public order, which is different from Minangkabau. Residence after marriage is uxori-local, but viri-local is possible based on certain needs, like prevention of matriclan extinction. The Karampuang case indicates traces of avunculocal. Instead of inheritance, it emphasizes the important roles of maternal uncles as caretakers of the coming generations of the communities.

Levels of domestic unit: matrikin, material lineages, matriclans, and moieties

The matrilineal system in eastern Indonesia relies on the extended family organizational unit, which is centered on the household unit that Levi-Strauss calls avuncular. The avuncular was built by collaboration between women member, his maternal uncle, and his brother's daughter. In a matrilineal system, more attention is paid to the relationship between the mother, the mother's brothers, and the daughter. The avuncular is specifically referred to as "matrikin." The residential structure has meaning as a representation of the matrikin and the building itself (*rumah besar, bola, sao, deu, and uma*). Matrikin are functionally organized based on norms, roles in land ownership, procreation, and ethical-spiritual roles, which apply to ladies of the house, female's brother, and daughter, which is mapped as follows (table 1).

Table 1: The role of matrikin's family

	function	Asset	Procreation role	Spiritual duties
Ladies of the house	taking care of the family and recruiting matriclan members	Landholders	Mother, a respected figure	Keepers of the social value and well-being of the community
Female's brother	Responsibility for keeping safe of families and assets	managing assets and rearing future generations	uncles	Leaders and custodian
daughter	Future inheritance and caregivers to the community	Future inheritors	successor of matriclan	Generation's bearer

A matrikin consists of more than one kin unit, whether it is matrilineage or sibs. Architectural structures like *sao*, *bola*, *deu*, and *uma* usually represent matrilineages. A matrikin of several matrilineages can consist of more residential structures in clusters or compounds. The matrikin of the Ngada community is called *illi bhou*, established by several houses of the matrilineage, each residing in a *dii sao*. The highest social stratum of a house is the matrikin of matrilineage's leader or *sao meze*. The matrilineage's house is *sao kaka*. And the lowest strata matrilineage house is addressed as *sao* without any attribute. Matrilineages maintain their unique rituals, ceremonies, and traditions, which are at the level of *voe* among the Ngadha community and *fukun* community among the Tetun community.

However, not all matrikin were organized into lineages; instead, they were grouped in generational layers within communities under the custodian of uncles, considered as the eldest or respected brother of the ladies of the community. This collective grouping is more accurately described as "sibs" rather than matrilineage. Among the Bugis-Karampuang community, sibs are associated with *Jiji*. *Jiji* is, therefore, a unit of the sisterhood community led by a respected or eldest uncle. Conceptually, married nieces and nephews normally live with uncles as mother's relatives (avunculocal residential after marriage) in *rumah besar*, although currently in practice, uxorilocal, in the house of the bride's mother.

The interaction between uncles and nephews determines the matrilineal nature. In these four places, the uncle's role is more focused on being an advisor, caregiver, and educator of his nephew rather than as an executor of authority. The combination of communal leadership and caregiving by the mother's brothers produces feminine leadership. As a result, the general socio-spatial organization of matrilineal kinship settlements embodies a continuum of spatial and practical order from house to settlement. Even though the managerial sphere is in the community and settlement, the sovereignty unit is in the hands of the women in each house, which can be mapped as shown in Table 2.

Unlike the modern understanding that settlement is a sum of houses, in matrilineal kinship, the welfare of settlement and control rest in female agents in their domain, which is the matrikin (*sao*, *deu*, *uma*, *rumah besar*, *bola*), especially the female chamber. The built environment of a matrilineal society can remain well consolidated, even though it is organic and dispersed.

Table 2: Traditional terms of space, buildings, settlements, and landscapes

Level of social organization	Level of spatial organization	South Sulawesi	Flores Island	Timor Island	
		Bugis - Karampuang	Ngadha	Bunaq	Tetun
Female chamber	BUILDING ELEMENTS				
	King Posts	Column with carved ornaments <i>poto nabi rekeang</i>	x	A pair of <i>nulal pana</i> and <i>nulal mone</i>	A pair of <i>kakaluk feto</i> and <i>kakaluk mane</i>
	Roof, seeds, and heirloom keeper Hearth/ kitchen	<i>dapur</i>	<i>One</i> hearth inside <i>one</i>	<i>Toren hoto Alam</i> <i>Hoto ala nola/</i>	<i>Kahak</i> <i>lalikan</i>
Matrilineage	SPATIAL ELEMENTS				
	attic	<i>rekeang</i>	<i>One</i>	<i>Toren hoto alan – toren lor</i>	<i>Kaladak Laki laki - kanaha di tafatik</i>
	grannary	<i>rekeang</i>	<i>One</i>	<i>Lor (male), hoto (female)</i>	<i>Kahak Leten</i>
	Inner room	<i>Sonrong</i>	<i>gepi</i>	<i>Lor (male), hoto (female)</i>	<i>Labis laran</i>
	public living space	<i>Lego-lego</i>	<i>Teda one</i>	<i>Lor nola dibatasi otan</i>	<i>Labis Uma laran</i>
	veranda	<i>Lego-lego</i> attached to <i>bola</i> or <i>rumah besar</i>	Teda Lewa	lakok	Labis letek Labis Kraik
	Common ceremonial space	Sonrong/ and a space between the four pillars	Teda one Teda lewa	Lakok Lor Golin Letek	Labis laran Labis letek Labis Kraik
	Space of men	Underneath house	Teda lewa	Lor (male)	Labis Laran
Matrikin/ Sibs	BUILDING				
	Residential House	<i>bola</i>	<i>Sao</i>	<i>Deu</i>	<i>Uma</i>

International Seminar on Vernacular Settlements - ISVS # 12

	matrikin's house	<i>Jiji/ rumah besar</i>	<i>Dii Sao/ Sao Sipali</i>	<i>Deu/ Reu Matas</i>	<i>Uma hun</i>
	House compound of the matrikin	x	<i>Illi-bhou</i>	<i>Deu</i> [name of matrikin]	<i>Uma</i> [name of matrikin]
	Pair of ancestral house	<i>Rumah besar: Rumah tomatoa-rumah penggela</i>	<i>Sao Meze: Sao saka pu'u and Sao saka lobo</i>	<i>Reu Gomo Matas</i> (house of the matriclan leader): <i>Mone Matas-Mone Pana</i>	Queen's house: <i>Tafatik : tafataik bot/ tafatik leko - tafatik alakaran</i>
	Chief house	<i>tomatoa</i>	<i>Sao meze</i>	<i>Reu Bulok</i>	<i>Uma katuas/ Uma Na'in</i>
Matrilineal clan	hamlet	<i>Dusun</i>	<i>Nua</i>	<i>leo</i>	<i>knuu</i>
	Descent groups	<i>Jiji/ Siajina</i>	<i>Voe/ Sao</i>	<i>Deu matas</i>	<i>Uma hun</i>
SETTLEMENT					
	Hamlet	<i>Dusun</i>	<i>Nua</i>	<i>Leo</i>	<i>Knuu</i>
	Center of the village	<i>Batu Gong and Bruga</i>	<i>kisa nata</i>	<i>Tas/ sadang</i>	<i>Ksadan</i>
	Common Open Space and ritual yard	<i>Batu gong, trace of baruga jekeang</i>	<i>Ture kisa nata/ loka nata</i>	<i>Tas/ ksadan</i>	Balai adat/ a yard in front of <i>tafatik/ Pana Getel Mone Goron</i>
SETTLEMENT CONFEDERATION					
	Village	x	<i>nua</i>		
	Communal Assembly House	<i>Bruga/ rumah besar</i>	Relevant <i>Sao Saka/ sao ; balai desa; modern common shop</i>	<i>Deu Matas</i>	<i>Uma Metan/ Tafatik</i>
	Education Centre	<i>Rumah Besar and rumah Puang Guru</i>	<i>Chapel</i>	<i>Uma</i> of the matriclan on duty	<i>Uma</i> of the matriclan on duty
	Ancestral centers	<i>Gunung-Emba Posi</i>	Mount Inerie	<i>Tas/ ksadan</i>	<i>Bui laran, village</i>
CUSTOMARY LAND					

Ritual common yards	<i>Baruga</i>	<i>Loka nata</i>	tas	Balai adat/ lapangan depan <i>tafatik/ Pana Getel Mone Goron Bui Laran</i>
Ritual centres	<i>Emba Posi</i>	<i>Village of origin</i>	“Benteng tujuh lais” (Seven Tiers Fortress)	
Sacred foci	Mount Kareeng	Mount Inerie and Jerebuu	Fulan fehan, Lakaan Mountain and Benteng 7 lapis	Bui laran
Ethnic landscape	<i>Tana</i>	<i>Tana</i>	<i>foho</i>	<i>fehan</i>
The land	<i>Tana/ paratiwi</i>	<i>Tana</i>	muk	V

5.2 The pairing of the principle of female and male house

The Eastern Indonesian acknowledges things and concepts in pairs. The role of marriage has special characteristics that Wouden (1968) called asymmetric *connubium*. In the marital norm, two communities mutually agree to pair their community members. Asymmetric Connubium: the permitted relationships between communities do not have to be reciprocal. Examples are seen in pairing principles of husband givers and husband takers, such as *malin-ai baqa* for the Bunaq community and *alin maung-fettosawa* for the Tetun community. It signifies a pair of statuses of a husband-giver and a husband-taker. A *voe* in the Ngadha community always has a pair of female and male matriclans, represented by the pair of Sao *Saka Pu'u* and *Sao Saka Lobo*. The alliance of these two descent groups forms moieties. This pairing might be read as an association with the tradition that the husband remains part of his parent's house, even though they will live together. Gender affinity in female households is considered more significant. An exception occurs in Karampuang hamlet. The prohibition of marriage between members of *rumah besar tomatooa* and *rumah penggela* indicates that the marriage rules are not always related to the pairing principles of marriageable families. Therefore, rather than paired houses like *sao saka pu'u-sao saka lobo*, we consider as twin houses.

Architecturally, this pairing and twin concept is reflected in a configuration that reflects an archetypical pair of structures with common space in between. It can be a house or structural elements with open or living space in between (table 3). Together, the components of the spatial social organization of a matrilineal society would trigger cohesiveness, communal values, and the ability to adapt to change. This adaptive power is more important than authoritative norms. Institutional power rests with women in women's rooms. It is different from the concept of settlement, which is considered part of a sum settlement.

The sustenance of kinship is confirmed through their cohesive corporateness (Schneider, 1984). Corporate practices have an impact on the way they organize their environment to manage natural resources. Kinship is a strong foundation for socio-economic cohesiveness, combined with the spirit of cooperation. Genealogy is the reference to consolidating and distributing the roles, rights, and obligations of the kin-members for managing the kin-corporate. The institution of marriage is, therefore, important. A house is not just a place to live but also the headquarters of this familial corporation and a venue for traditional ceremonies. Power is continuously maintained through local religious morality, legends, history, and high community ethos. Evolution and adaptation continue to offer interpretations for the survival of communities and the environment. While women's roles dominate more in their hometowns, men's roles are overseas or in migrant land. Settlements are often located on ridges or plains that slope gently towards the sea. Mountains host strategic ancient sites used for surveillance, social gatherings, and shared water sources.

Table 3: Konsep Pasangan rumah

Architectural Components	Ethnic	Pairing or Twin Houses		Space in between
		♀	♂	
Rumah	Karampuang	Rumah Penggela	Rumah Tomatoa	Bruga and open space near to batu gong
	Ngadha	Sao Saka Pu'u	Sao Saka Lobo	<i>Ture kisa nata</i>
	Tetun	Tafatik Bot	Tafatik Laklaran	Open space
	Bunaq	Deu mone pana	Deu mone matas,	ksadan
Kolom	Tetun	Kakaluk fetto	Kakaluk mone	Uma laran
	Bunaq	Nulal feto	nulal pana	ottan
Ornamen	Ngadha	Ana lye	Atta	x
Totem	Ngadha	Bhaga	Ngadhu	x

Exogamy is an important principle in this society, although they may remain within the same matrikin group. Matrilineal systems are often not pure, and patrilineal elements are also presented in matriclan. For example, the relationship between the Tetun and Dawan communities, the Ngadha and So'a communities, as well as the Karampuang community and the descendants of the patrilineal villages around Karampuang Hamlet. In some cases, this grouping can become complex, including in the context of politics and government, resulting in the concept of a "kingdom," such as the Wehali-Wewiku-Hatimuk Kingdom, led by a senior and elected brother of a female native. The uncle was called Raja or Liurai. These political

alliances influence a community's geopolitical orientation and interactions with groups outside their region.

5.3 Gender roles in the function and meaning of architectural elements

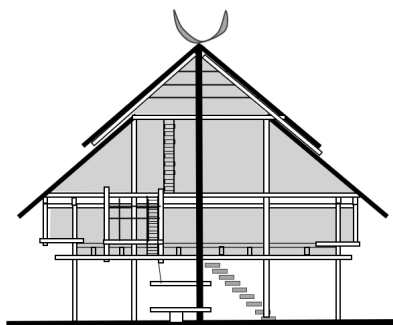
To explore the architectural meaning of this house, we utilize the principle of Gottfried Semper's "Four Architectural Elements," which sees architecture as a social and spatial entity formed by four main elements: fireplace, roof, cover, and mound.

Roof house structure

In general, the building figure of the residence shows an overwhelming roof design. The walls and stiffening columns appear to be a recent development, assuming a primordial structure that took a pyramidal or conical shape. The roof not only functions as a granary but also as a keeper of ritual objects, family valuables, and heirlooms, a symbol of the matrilineal status (see Table 4). It also functions as a storage place for agricultural products. There is an indication that the roof keeps memories of the ethnic's past. The four ethnic groups have a common belief that their ancestors were related to the Minangkabau ethnic group. The term *rekeang* for attic granaries and grain stores calls to mind the term *rangkiang* in Minangkabau. The traveling ancestor of the Tetun and Bunaq is believed to come from Malaka and Minangkabau, therefore called *sina mutin* (chinamen with white complexion). The fossil of taro and yam kept in *one* of the *sao* is a reminder of the Austronesian staple. The roof is decorated with symbolic ornaments such as finials, *atta* (ridge crown of *Sao Saka Lobo*), *ana iye* (ridge crown of *Saoi Saka Pu'u*), or *timpa laja* (ornamented latticed gable board of the *Rumah Besar*).

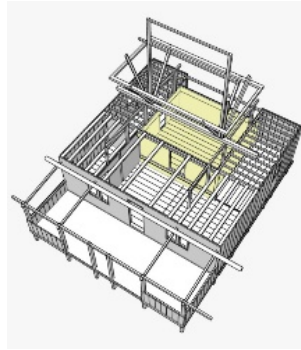
Table 4: Analysis of Residential Structure

Pictures

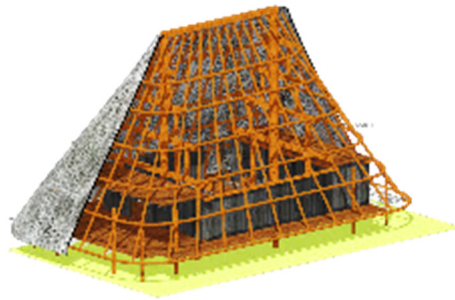


Social-spatial description

Rumah Besar is a residential hall with a gable roof standing on stilts. The house is centered in the hearth and kitchen (*dapur*), as well as the inner rooms (*sonrong*) and two kingposts flanking the ridge pole standing next to the kitchen. Ornaments with fluid characters (portraits of the prophet) are carved on it, marking its importance as a ceremonial site. Above the kitchen is an attic (*rekeang*), where sacred relics and seeds are kept. Every architectural element contains the symbolism of the female body. The door represents what is considered to be the "vagina" - the inner space womb rafter's ornaments as earrings (Radja and Wikantari, 2016).



An important part of a *sao* (house) is a wooden box structure called *one* inside the house. It appears to be a wooden box structure with a heart inside (Estika et al. , 2021). The ridge has ornament decorations, namely, *ana* is – a female symbol for *sao saka pu'u*, and *atta*, the male symbol for *sao saka lobo*. The space next to *one* is a sleeping space, *gepi*. Behind the wall in front of *one*, there is a living space called *Teda One*. Outside the wall and veranda is called *teda lewa*.



The house appeared as a common hall. It has two pairs of male-female main supporting pillars, namely the *nulal pana* or *nulal mone* flanking, which run across the hall. The interior of the house is associated with the womb. At the rear of the house, there is a *lok* (male room) and *hoto* (female room) next to the fireplace or kitchen/ *hojol*). The female room is always more important than the male. The hall is divided into two parts - the men's room and the women's space, separated by a divider called *ottan*.



The house appears in the form of a hall for communal living called *uma laran*. The structure is supported by a pair of female-male main pillars (*kakaluk fetto* and *kakaluk mone*). Inside *uma laran* structure, the hearth / kitchen (*lalikan*) is located near the female kingpost (*kakaluk fetto*). Conceptually, *uma laran* is divided into two spaces: *foho hun* and *ai tasin*. Men live in the veranda or *labis*. The *uma* of the queen is called *tafatik*.

Considering the scale, it seems correct to assume that the roof is the body of the architecture itself, divided into a vertical hierarchy of importance: the roof structure where important goods to the matrilineal and matrilineal are kept; the space under the roof as living space; and a space left by the elevated floor for public activities. The gendered kingposts are associated with the roles of brothers and sisters, women and men. The wall seems to be an additional construction that fills the gap between the roof and the floor. The underfloor room acts as an intermediary that connects the land that is stepped on with the house that is respected. The height of a roof reflects the level of cultural wisdom, with more ancient buildings having higher roofs, while more modern houses usually have lower roofs.

Settlements are placed in areas between mountains and rivers, such as mountain slopes, seashores, mountain ridges, or valleys through which rivers pass. Mountains have a central role in traditional ceremonies.

The sacred hearth- kitchen and female chamber.

In a matrikin house, a house is a feminine space and is specialized for females, especially married women. They are allocated for a space that functions as a hearth and storage place for family heirlooms. The space can be made of a wooden box-shaped female chamber. A house is centered around a hearth or kitchen, which is mostly near the kitchen, like *dapur* in *rumah besar*, *lalikan* inside *uma*, and *hojol*, inside *deu*. There is also a hearth inside female chambers, like *one*. Description of the houses. These chambers have various names, such as *one* of the *sao*, and *one* of the *uma*. In one, the hearth is situated inside the chamber. It can be a space marked by massive wooden walls that separate the hearth or kitchen area from the living area. In *uma*, *rumah besar*, and *deu*, a hearth or kitchen stands outside the chamber but is attached to or situated near the female king post (see Figure 7). The room and space function for females to gather or stay for the storage of relics and seeds. It makes the female chamber or kitchen the centerpiece of the house and an important symbol for the communities.

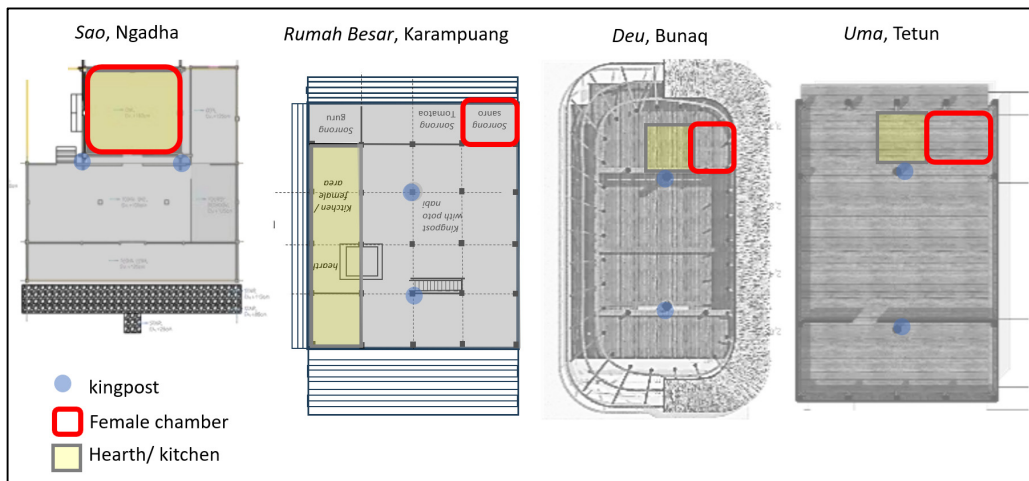


Figure 7: Plan of the Living Space

Source: P3MI 2022.

The findings show that the idea of a "female chamber" could be extended to a "feminine space or hall," considering that males could still be accommodated inside the house. Still, under feminine idiomization, The description of *sonrong* is poetically articulated in Bugis-Karampuang's book of customs (lontarak): "*Paruhung-lontan rio lo- elle ritengga, elle ri monri, sonrong ni monri*", which mean: "in a living hall, there lay the hearth, behind which is the chamber, wherein sonrong is the heart.

Enclosure and furniture

Enclosure and furnishings divide a house spatially into 1) sacred space, 2) communal space, and 3) public space. The female chamber is a massive wood structure in box construction. Building enclosures, or walls, is rather a free-standing construction. Hierarchically, the layout of the rooms in the house can be described in Table 5. It reflects the importance of each room in daily life and ceremonies. There is an indication that, in the case of *Sao* of the Ngadha, the female chamber is a separate construction inside the house. But in *Rumah, besar* of Bugis-Karampuang, *uma of the Tetun, deu/ reu* of the Bunaq, the whole building is the female chamber itself. The ritual of entry into the chamber confirms this definition. In *Sao*, it is conducted in front of *one*. In *uma* and *deu*, in front of the male main pillar attached to the front entrance wall. In *rumah besar* Karampuang, it is conducted a distance outside the house on a *limbus*, marked by a stone gate and a natural spring under a banyan tree. Not only the twin houses but the land where they stand is also considered female and is called *paratiwi* (Sanskritized earth goddess).

Table 5: Hierarki House Interior

Ethnic	House	Veranda	Sacred Living Space	Sacred Space
Ngadha	Sao	Teda Lewa	Teda One	One
Karampuang	Rumah Besar	Lego-lego / Anjung	Inner room – ale kawa	Sonrong dan possi bola dan rekeang
Bunaq	Deu	Labis kraik	Uma lolon	V dan nualal
Wehali	Uma	V	V	V dan kakaluk

Ornaments reflect female representations. Construction, furniture, and architectural elements convey symbolic meanings, such as:

- Ornaments indicate the female gender, such as breasts or female figures; the door is vaginal, female; the wooden tips and ends' direction, which involves the concept of gender balance in construction,
- Column as a totem, which represents the descent group and represents the pairing of women and men in the house.
- The roof has a role as a storage area, reflecting respect for natural resources and materials.

The Role of House

A house reflects an ethnic group's cultural institutions, containing social significance, symbolism, and architectural significance, all of which are closely related to gender roles in that society. For matrilineal societies, the house contains many layers of roles. The role, articulated with symbolic representation and function, can be divided into three kinds of functions:

In the context of the *rumah besar* in Karampuang, the house functions as a residence for the Bugis-Karampuang sibs as a whole. Meanwhile, in *Sao*, *Uma*, and *Deu*, the house is where the extended family, who are members of the matrikin, live. It is important to keep in mind that womanhood in this context does not necessarily mean that central authority rests with women. For example, in Timor, there is the concept of a "female king" in a kingdom, but the *Liurai* or king is still a man, such as *tafatik Bot* in Tetun and *uma metan* in Bunaq. Furthermore, women's roles can be present in various functions, symbolism, and gender roles. There are similarities among these four ethnic groups of houses, which can be explained as shown in Table 6.

Table 6: Function, symbolism, and gender role

Idiomization Context of Home	Function of the House	Symbolism	Gender Role
<i>Rumah Besar</i>	Communal place of living	The female body's metaphor for architectural elements	House, objectified as female body Women are dominant in the household
<i>Sao, Uma, Deu</i> All houses (<i>Rumah Besar</i> . <i>Sao, Uma, Deu</i>)	Extended family residence	Interior or living space as the uterus King posts are the center of the ceremony	Deep symbolism

6. Conclusion and Reflections

Each vernacular architecture observed, along with its kinship practices, has a unique character. However, several similarities in principles, architecture, or kinship show that artistic bearing has the potential for deep structure.

House and matrikin as analytical units for dwelling culture of matrilineal society

The basic family unit in matrilineal kinship in the vernacular architecture of the Ngadha, Bunaq, Tetun, and Bugis-Sinjai communities is an avuncular unit called matrikin. A matrikin is a domestic unit composed of at least one woman as heir, her brother, and her children. The gendered relationship between women and men is not procreative as that between a wife and husband but a collaboration between a woman and her brother. Its kinship practices are so flexible that it accepts virilocal practices if the situation requires it, with a focus on mutual interests as the main thing. Maternal brothers assume various responsibilities, especially in the management of property, implementation of customary law, as well as the role of advisor, caretaker, and educator for their nephews. A house is to shelter them and considered female, therefore adored by female symbolism and ornamentation.

House as the architectural representation of matrikin

Although owned by female members, functionally, a house is a communal place of living, extended family residence, and venue of ceremony. Therefore, architecturally, the house demonstrates a building with a spacious hall. Typically, they showed an overwhelming roof dimension that can accommodate huge numbers of people and keepers of family relics, valuables, and agricultural products. The roof is so big that wall construction is as if merely filling the gap between the roof and base. The concept of communal space is dominant in the interior. The enclosure and furniture typically divide a house spatially and sequentially into 1) sacred feminine space, 2) communal space, and 3) public space. Differences in architecture occur due to variations in the organization of matriclan and matrikin.

- *Paired structure and communal house.* The four communities acknowledge the paired female-male architectural concepts, articulated by paired houses, posts, totems, and ornaments, typically flank a communal space in between. The Ngadha acknowledge the concept of a female-male house in the pairing of *sao saka pu'u* and *sao saka lobo*. The Tetun and the Bunaq adhere to the same without particular idiomization. But they acknowledge the concept of male and female posts (*nulal* and *kakaluk*). The Karampuang acknowledged the pairing concept of *rumah besar tomatoa* and *rumah besar penggela* but did not articulate gender relations. The concept of conceptual pairs for a building's architectural elements, complementing or differentiating each other, is usually united by communal space, which is the open yard in between the building or on which the totem is situated, and living space between the paired column.
- *Modes of female symbolism.* Gender role is articulated in several modes concluded as 1) house, objectified as female body in *rumah besar*, *so*, *deu*, and *uma*, 2) domination of female activities, 3) deep symbolism articulated in rituals controlled by females in all houses, and 4) ornaments indicating female gender, such as breasts or female figures; the door is vaginal, female; the wooden tips and ends' direction in construction.
- *Female chamber and uterine hall.* A "female chamber" is a domestic space allocated for each female member, especially married women, generally situated at the rear of the house. The female chamber of the Ngadha (*one*) combines the living space and kitchen or hearth. The female chamber of *deu* and *uma* stand next to the hearth and kitchen. In *rumah besar* of Karampuang, the female chambers are the common hall, where the living space itself is feminine. Even for *deu* and *uma*, the feminine chamber is extendable to the whole living space, and the living space is symbolically considered "a womb." What marks the boundary of feminine space is the what marks the boundary of feminine space is where the ritual of entry is conducted. Inside this female chamber, at minimum, there is at least a hearth, traditional earthen cooking utensils (and occasionally modern ones), and, at the largest, a kitchen. It *rumah besar* a large female chamber sacred, idiomized as the "spatial uterine."
- *Sequential move from the outer world of the male to the inner world of the female.* The spatial hierarchy is traced by progress from the outside veranda, sacred living space, and female chambers or inner sacred space. The verandah is usually a separate construction to the house (*labis*, *lego-lego*, and *teda lewa*), coincidentally articulating symbolically a separate world of outer and inner, but connected.
- *Ancestral symbolism for the common good.* The idea of ancestry reflects a non-egocentric worldview in which individuals uphold collective values and the common

good. This principle is in line with the understanding of femininity, which emphasizes collective ethos. Common good and communality are guarded by the idea that the habitat is an ancestral inheritance to maintain. The articulation is the open yard and its stone installations, matriclan totems, cemetery, and ancestral relic kept in the female chamber.

Reflections

Matrilineal is not a simple kinship, and we realize that this research requires more facts to explain the many gaps that have emerged throughout the research. Although this paper focuses more on vernacular architecture, it also invokes awareness about the importance of the paradigm of femininity in the discussion of vernacular architecture beyond kinship, functionally, symbolically, and historically. Studies relating to settlements should complement this. Nevertheless, it is admitted that exploring vernacular architecture based on kinship has limitations. Although efforts to remain aware of diversity continue to be made, its pretensions in generalizations must, to some extent, contain the risk of simplifications. Therefore, more detailed research will be needed to confirm or complement the conclusions. The more we delve into aspects of matrilineal kinship, the more complexity we encounter, so that we realize that matrilineal kinship, as well as its architectural form, is not the goal of the practice itself. It should be seen as part of the logic of cultural and ecological production of space, collective survival, resource management, and common good.

Acknowledgment

We are grateful for the research grant awarded by Institut Teknologi Bandung under the P3MI (2017-2021) program of KK STKA 2019 through the School of Architecture, Planning and Policy Development (SAPPD). We want to thank our research fellows, Mr. Achmad Zuhdi Alam, Nita Dwi Estika, Achmad Syaiful Lathif, Nurhijrah (late), Drs. Muhannis (late), Yunita Dwi Adisaputri Saiful Anwar, the People of Dusun Karampuang, Dirun, Kewar, Nualain, Kamanasa, and Laran Village.

References:

Books

- Arndt, SVD, Paul. (2009). Masyarakat Ngadha: Keluarga, Tatanan Sosial, Pekerjaan dan Hukum Adat. Ende: Penerbit Nusa Indah.
- Bullbeck, David. (NY). "Chapter 12: Sacred Places in Ussu and Cerekang: South Sulawesi, Indonesia: Their History, Ecology and Pre-Islamic Relations with Bugis Kingdom in Luwu." In O'Connor, S., Brockwell, S., & Byrne, D. (Eds.), *Transcending the Culture-Nature Divide in Cultural Heritage: Views from the Asia-Pacific Region*. The Australian National University, pp. 171-190.
- Carsten, Jannet., & Jones, Hugh-Stephens. (1995). *About the House: Lévi-Strauss and Beyond*: Cambridge University Press.
- Egenter. (1992). *Architectural Anthropology: The Present Relevance of the Primitive in Architecture*. Lausanne: Structura Mundi.

- Gillespie, Susan.D. (2000). "Beyond Kinship, An Introduction." In Joyce, R.A. & Gillespie, S.D. (Eds.), *Beyond Kinship - Social and Material Reproduction in House Societies*. Philadelphia: University of Pennsylvania Press.
- Koolhof, Sirtjo. (2004). "The Sleeping Giant: Dynamics of a Bugis Epic (South Sulawesi, Indonesia)." In Jansen, J. & Maier, H.M.J. (Eds.), *Epic Adventure – Heroic Narrative in the Oral Performance Traditions of Four Continents*. Lit Verlag Munster, Transaction Publisher, London.
- Levi- Strauss, Claude. (1963). *Structural Anthropology*, Claire Jacobson et al., (eds) New York: Basic Books Inc. Press.
- Mattulada. (1982). "South-Sulawesi, Its Ethnicity and Way of Life." *Southeast Asian Studies*, 20(1).
- Muhannis. (2013). *Karampuang dan Bunga Rampai Sinjai*. Yogyakarta: Ombak.
- Schneider, David M. (1961). *Matrilineal Kinship*, David M Schneider and Kathleen Gough(ed), University of California Press, location Schenk-Sandbergen, Loes (2012).
- Schneider, David M. (1984). *A Critique of the Study of Kinship*, Michigan: The University of Michigan Press.
- Schwimmer, Erik. (1982). "Structural and Symbolic Anthropology in the Netherland Today." In *Symbolic Anthropology in the Netherlands*. P.E, De Josselin Jong (eds.). The Hague: Koninklijk Instituut voor Taal-, Land- en Volkenkunde (KITLV).
- Siapno, Jacqueline Aquino. (2002). *Gender, Islam, Nationalism and the State in Aceh: The Paradox of Power, Co-Optation and Resistance*. Routledge Curzon Taylor Francis, New York.
- Susetyarto, M.B. (2013). *Arsitektur Vernakular: Keberlanjutan Budaya di Kampung Bena Flores*. Unpublished doctoral dissertation, Universitas Diponegoro, Semarang.
- Therik, Gerzon Tom. (1995) "Wehali: The Four Corner Land- The Cosmology and Traditions of A Timorese Ritual Centre." Unpublished Doctoral Dissertation at The Australian National University.
- Wouden, F. A. E. (1968) *Types of Social Structure in Eastern Indonesia*. The Hague: Koninklijk Instituut voor Taal-, Land- en Volkenkunde (KITLV).

Research Monographs

- P3MI-ITB. (2018). *The Influence of Modernization on the Construction of Gender Relations in the Architecture of Dusun Karampuang, South Sulawesi*. Unpublished.
- P3MI-ITB. (2019). *The Influence of Modernization on the Construction of Gender Relations in the Architecture of The Ngadha in Nusa Tenggara Timor Provinces Flores Island*, Unpublished.
- P3MI-ITB. (2022). *The Influence of Modernization on the Construction of Gender Relations in the Architecture of the Bunaq and Tetun in Nusa Tenggara Timor Provinces Timor Island, South Sulawesi*. Unpublished.

Journals

- Estika, Nita Dwi., Widiastuti, Indah. & Alam, Achmad Zuhdi. (2021). "From House Society to Homestay: Re-domestication in the settlement and architecture of the Ngadha traditional village in East Nusa Tenggara, Indonesia." *ISVS e-journal*, Available from ISVS e-journal, Vol. 8, no. 4, (isvshome.com) [accessed Sep 10, 2023].

- Mashuri, Djunaedi, Achmad. Sarwadi, Ahmad. & Nareswari, Ardhyah. (2022). "The influence of Religion and Kinship on the Dwellings of the Towani-Tolotang Community in South Sulawesi," ISVS e-journal, Available from http://isvshome.com/pdf/ISVS_9-2/ISVS9.2.1Mashuri.pdf, (isvshome.com) [accessed Sep 10, 2023]. ISVS e-journal, Vol. 9, no.2, April, 2022,
- Memmott, Paul. & Ting, John (2020). "Vernacular Transformations", Fabrications 30, 1, page 1–10-. The Journal of the Society of Architectural Historians, Australia and New Zealand.
- Solikhah, Nafiah, Fatimah, Titin (2020). "Lessons Learned from Vernacular Architecture Toward Sustainable Human Settlements: Insights from Praigoli Village, West Sumba, Indonesia," ISVS e-journal, Available from https://www.isvshome.com/pdf/ISVS_7-4/ISVS_ej_7.4.4_Nafia.pdf, (isvshome.com) [accessed Sep 10, 2023]. ISVS e-journal, Vol. 7, no 4 October, 2020
- Tobing, Rumiati Rosaline. & Hutabarat, Grace Mananda. (2019). "The Traditional Settlement Architecture of the Bataknese Toba Tribe and Clan Kinship in the Village of Hutaginjang, North Sumatra, Indonesia," ISVS e-journal, Available from https://www.isvshome.com/pdf/ISVS_6-2/ISVS-ej-6.2.2-Rumaiti-Final-Published.pdf, (isvshome.com) [accessed Sep 10, 2023]. ISVS e-journal, Vol. 6, no.2, March, 2019",
- Widiastuti, Indah & Nurhijrah. (2021). " Transformations and Re-domestications of Karampuang Vernacular Architecture from lekeang, rumah besar to bola Architecture, Indonesia." ISVS e-journal, Available from ISVS e-journal, Vol. 8, no. 3, (isvshome.com) [accessed Sep 10, 2023].
- Suryo, P.R. (2018), "5 Suku di Indonesia yang Menganut Paham Matrilineal, media article Friday, 04 Mei 2018 11:57 Available from 5 Suku di Indonesia yang Menganut Paham Matrilineal - Merah Putih (merahputih.com) [accessed Sep 10, 2023].

Proceeding

- Radja, Abdul Mufti & Wikantari, Ria. (2016). Simbolisme dalam Arsitektur Vernakular Karampuang-Sinjai Sulawesi Selatan. Proceeding Temu Ilmiah IPLBI 2016, 139-143.