

THE ARCHITECTURAL CHARACTERISTICS LINKAGE OF BATANG KUANTAN'S *RUMAH GODANG* WITH TANAH DATAR'S *RUMAH GADANG*

Muhammar Khamdevi

Departement of Architecture, Universitas Matana, Tangerang- Banten
m.khamdevi@gmail.com

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Abstract

Riau and West Sumatra have shared history from the days of the Old Malay Kingdom, Sriwijaya, Dharmasraya, Malayupura (Minangkabau), Islamic Sultanates, etc. The traditional house of *Rumah Godang* in Batang Kuantan region somehow have some similarities to the *Rumah Gadang* in Tanah Datar. No researcher has tried to discuss the relationship among them. Therefore, this study tries to explore the linkage of their architectural characteristics. This study uses a qualitative method by comparing the architectural characteristics of the two buildings from the data obtained in the field. The results of the study indicates a linkage, even a liniage. Through cultural borrowings or continuation process, the spatial systems (genotype) have consistency. The form systems (phenotype) are almost consistent; only in material use. However, the stylistic systems have inconsistencies. Those systems experienced transformation through the local cultural innovations, the outside civilizations influence, or the change of the kingdom authority.

Keywords: characteristics, space syntax, traditional house, vernacular architecture, minangkabau

KETERKAITAN KARAKTERISTIK ARSITEKTUR RUMAH GODANG DI BATANG KUANTAN DENGAN RUMAH GADANG DI TANAH DATAR

Abstrak

Riau dan Sumatra Barat telah berbagi sejarah dari zaman Kerajaan Melayu Kuno, Sriwijaya, Dharmasraya, Malayupura (Minangkabau), Kesultanan Islam, dll. Rumah tradisional Rumah Godang di wilayah Batang Kuantan entah bagaimana memiliki kesamaan dengan Rumah Gadang di Tanah Datar. Tidak ada peneliti yang mencoba membahas hubungan di antara mereka. Oleh karena itu, penelitian ini mencoba mengeksplorasi keterkaitan karakteristik arsitektur mereka. Penelitian ini menggunakan metode kualitatif dengan membandingkan karakteristik arsitektur kedua bangunan dari data yang diperoleh di lapangan. Hasil penelitian menunjukkan adanya hubungan, bahkan hubungan linier. Melalui pinjaman budaya atau proses kelanjutan, sistem spasial (genotipe) memiliki konsistensi. Sistem bentuk (fenotip) hampir konsisten; hanya dalam penggunaan material. Namun, sistem stilistik memiliki ketidakkonsistenan. Sistem-sistem itu mengalami transformasi melalui inovasi budaya lokal, pengaruh peradaban luar, atau perubahan otoritas kerajaan.

Kata-kata Kunci: karakteristik, sintaks ruang, rumah tradisional, arsitektur vernacular, minangkabau

1. Introduction

The Central Sumatra region has association to the Old Malays, such as Akit People, Sakai People, Talang Bonai People, Petalangan People, Talang Mamak People, Orang Rimba (*Kubu* or *Anak Dalam*), Minangkabau People, Kerinci People, Batin People, Penghulu People, Kuantan People, and Kuantan People. They have a Matrilineal kinship system and a Leadership system (*Kedatuan (Panghulu)* and *Perbatinan*). In history, this region has experienced the rise and the fall of ancient kingdoms, such as Old Malay Kingdom, Srivijaya Kingdom, Dharmasraya Kingdom, Kandis Kingdom, Kampar Kingdom, Malayapura Kingdom, Pagaruyung Sultanate, Indragiri Sultanate, Inderapura Sultanate, Sungai Pagu Sultanate, Jambi Sultanate, Aceh Sultanate, Malacca Sultanate, Johor Sultanate, and Siak Sri Inderapura Sultanate.

The Old Malay Kingdom became the subordinate of Srivijaya Kingdom in 682 AD. The Srivijaya Kingdom collapsed in 1,025 AD after the attack of the Chola Kingdom from South India. According to the Padang Roco Inscription at the base of the Amoghapasa statue, a new kingdom has arisen. *Maharaja Srimat Tribuanaraja Mauliwarmadewa (Sri Tribuana or Sang Sapurba or Iskandar Dzulkarnain)* - from Mauli Dynasty in Jambi - became a king in the Kingdom of Dharmasraya or Bhumi Melayu in Pulau Punjung, West Sumatra in 1,286 AD (Munoz, 2006; Brown, 1952; Hooker, 2009; Pelawi, 1993; Hill, 1960; Reid, 2014; and Marsden, 2016). The king was maybe *Aur Kuning* and the kingdom was maybe *Koto Alang*, based on Tambo Lubuk Jambi.

Dharmasraya then collapsed after the attack of Kandis Kingdom, based on *Tambo Lubuk Jambi*. *Aur Kuning* then moved to establish a new kingdom in Jambi (Downstream Batanghari). While his advisors (and also his nephew and grandchildren); *Akarendrawarman (Datuk Ketumanggungan)* and *Adityawarman (Datuk Perpatih Nan Sebatang)* moved to Saruaso (*Surawasa*) to establish a new kingdom called *Malayapura* in 1,316 AD. Akarendrawarman lead Surawasa as a ruler and Adityawarman lead the west Dharmasraya as a subordinate ruler (Kozok, 2006 and Zakaria, 1985).

Datuk Ketumanggungan and Datuk Perpatih Nan Sebatang have association to the story of victorious buffalo in Pariangan (*Parahyangan*) on the slope of Merapi Mountain (where is considered as the Mahameru Mountain of Indra), when the Gajah Mada forces from the Majapahit Kingdom in Java invaded Sumatra around 1,334 AD until 1,357 AD. This story has recorded in *Tambo Minangkabau*, *Hikayat Raja-Raja Pasai*, and stories in North Sumatra. Since that victory, the central location of the Malayapura Kingdom has been named as *Minangkabau* (Pelawi, 1993; Hill, 1960; Reid, 2014; and Marsden 2016).

In 1,347 AD, Adityawarman became a king of Malayapura. In 1,365 AD., Malayapura became fragmented after the further attack by Majapahit and became a subordinate (Saktiani, 2016). In the *Saruaso II* inscription, Adityawarman appointed Ananggawarman to be a new king in 1,375 AD (Kozok, 2006). In Chinese Records, when the Ananggawarman asked the Emperor of China a protection after the death of Adityawarman, Majapahit attacked Malayapura once again in 1,376 AD (Groeneveldt, 2018). This situation has caused the Malayapura Kingdom dimmed. In 1,405 AD, the Malacca Sultanate arisen and this indicated that Majapahit's influence in Sumatra, and Peninsular Malaysia was gradually diminishing.

In 1,459 AD, Rokan (Hilir), Siak, Kampar, Indragiri, Jambi were conquered by the Malacca Sultanate. After Portuguese defeated Malacca in 1,511 AD, those region latter became Johor Sultanate subordinates (Samad, 1985 and Ricklefs, 2001). Tome Pires's noted in 1,512 - 1,515 AD, that three kings ruled in Minangkabau, one of the regions also includes the hinterland of Jambi, and Indragiri was its main port (Cortesao, 2015). In 1,561 AD, Henrique Dias testified that Kampar River was the Minangkabau River, and some of its old regions (Indragiri and Siak) belonged to the Johor Sultanate (Reid, 2014). In the 17th century, the Minangkabau' west coast was dominated by the Aceh Sultanate, after that the VOC took control of this region, except for the areas of Pasaman, Inderapura, and Bengkulu which were the territories of British's EIC. (Amran, 1981 and Navis, 1984). In 1,771 -

1,779 AD, Marsden noted that the Ombilin-Indragiri River (Batang Kuantan), Siak River and Batanghari River were shipping routes to Minangkabau (Marsden, 2016).

EIC then has occupied all the VOC regions in the west coast of Minangkabau since 1,781 AD. In 1,815 AD, the war happened between custom leaders and religious leaders (Perang Paderi) that caused King Pagaruyung (Minangkabau) moved to Lubuk Jambi, Kuantan. After that, Raffles expedited to the hinterland of Minangkabau. He later found the Kuantan River was the Minangkabau trade routes that originated to Lake Singkarak. He also found that there are differences between the houses in the hinterland and the houses on the coast. It wasn't long before the West Coast region returned to being under the control of the VOC in 1,819 AD. In 1,824 AD, the VOC had managed to dominate Minangkabau territories entirely (Amran, 1981; Navis, 1984; and Reid, 2014). The VOC then had divided Central Sumatra. The Upstream Jambi was in "The West Coas of Sumatra Residency", meanwhile Kuantan, Indragiri, and Riau Islands were in "Riau territory and their subordinates". Siak, Rokan, Bengkalis, to Deli were in the east coast of Sumatra Residency". Japan succeeded in seizing Dutch control in Indonesia in 1,942 AD. Shortly thereafter, Indonesia gained independence in 1,945 AD. The Province of Central Sumatra was formed, including West Sumatra, Riau, Jambi and the Riau Islands in the present. Due to inequality of development an PRRI war, President Soekarno decide to divide the Central Sumatra province into West Sumatra, Riau, Bengkulu, and Jambi in 1,957 AD (Hadler, 2010).

As we see above, the Minangkabau and the Batang Kuantan regions have strong relation in history and culture. Batang Kuantan is adjacent to the Minangkabau's *Luhak Tanah Datar* area. Moreover, both traditional houses some how have some relation. At a glance, there shared some differences, but also similiarities. How is the linkage between the architectural character of the Rumah Godang in Batang Kuantan, and the Rumah Gadang in Tanah Datar?

2. Literature Review

Habraken (1988) stated that the characteristics of a building consisted of: spatial systems, physical systems and figural configurations, and style systems. A building (especially dwelling) is a 'cultural artifact' or 'social construction'. It is a collective product of a population that has a cultural, social, and lifestyle context from the period in which the building was built. Habraken added that the spatial systems are most closely related to human behavior. The role of socio-cultural systems influences the position of each space which follows the transition of space from public to private.

In the study of 'space syntax', genotype is an abstract principle of spatial arrangement, while the phenotype is the realization of genotypes in different physical environments; architectural artifacts (Guney, 2007). While style is the product of the common complex semantics in groups of phenotypes (Gero & Ding, 2001). Traditional and vernacular buildings have genotypes that tend to be consistent and become 'cultural traces' (Hanson in Bafna, 2012). The architectural characteristics of traditional can be seen in the following Table 1.

Table 1. Architectural Characteristics Indicators of Traditional House

Habraken, 1988	Gero & Ding, 2001	Guney, 2007	Architectural Characteristics Indicators
Spatial Systems:			
- Space Pattern	Genotype	Genotype	Space
- Orientation			
- Hierarchy			
Physik Systems & Figural:			
- Physical form	Phenotype	Phenotype	Shape & Form

- Materials		
- Space Barrier		
Stylistic Systems:		
- Roof		
- Column	Style	Style
- Openings		
- Stairs		
Source: Habraken, 1988; Gero & Ding, 2001; Guney, 2007		

The vernacular buildings are reproductions of existing forms which are transmissions of a community's social knowledge; cultural reduplication or social reproduction of a form. Vernacular buildings can turn into new designs in the evolutionary process, when there is freedom of innovation and exploration using thinking, where old designs become knowledge in the 'embryonic form'. This new design can be a vernacular building of a generation (Hiller, 1993). The evolution of the old design into a new design was carried out through the 'Genetic Engineering' manipulation process. An evolving style became the result (Gero & Ding, 2001). This change can occur if the socio-cultural system changes. According to Soekanto (2002), changes in the system occur because of internal factors and external factors. Internal factors are factors that originate from the community, such as: population dynamics, new discoveries, conflicts, and rebellions (revolutions). While external factors are factors that come from outside the community, such as changes in the physical environment of nature, war, and the influence of other people's culture. Fox (2006) argued that there are similarities and differences in cultural traditions on Austronesian houses. The similarities are a result in cultural borrowings among and near neighboring communities that have the same linguistic derivation. The architectural characteristics consistencies of the traditional house can be seen in the following Table 2.

Table 2. Architectural Characteristics Consistencies of The Traditional House

	Habraken, 1988	Hiller, 1993	Gero & Ding, 2001	Hanson (In Bafna, 2012)	
Space	human behavior (space hierarchy)	theoretical intent	common genes	cultural imprint	more related / strong / consistent
Shape & Form	cultural artifacts / social construction	embriyonic form	genetic engineering		can be consistent and change
Style			new style		tend to change and vary

Source: Habraken, 1988; Hiller, 1993; Gero & Ding, 200; Bafna, 2012

From the discussion above, it can be concluded that spatial systems tend to be more consistent, physical systems and figural configurations tend to be consistent or change, while system styles tend to change or vary more. Meanwhile, the socio-cultural system can be inherited by the previous generation, influenced by other people at that time, created by the community itself, or appropriated. So in the study of comparative architectural characteristics in one community with other communities, spatial systems tend to show stronger linkages, physical systems and figural configurations tend to show strong or weak linkages, while the subsystem system tends to show weaker linkages, see Figure 1.

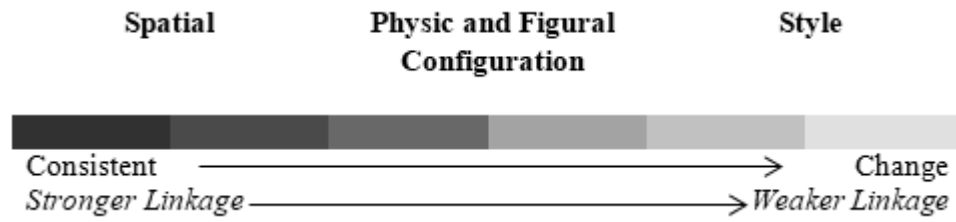


Figure 1. The Linkage Levels on Architectural Characteristics Comparison
Source: Khamdevi, 2019

3. Method

The research uses a qualitative method and collects data from observation and interviews. The research locations are in Batang Kuantan region, from Kuantan Hulu to Kuantan Hilir, see Figure 2. But for now, the location of Koto Gunung, Toar, Lubuk Terantang, and Koto Sentajo will be discussed.

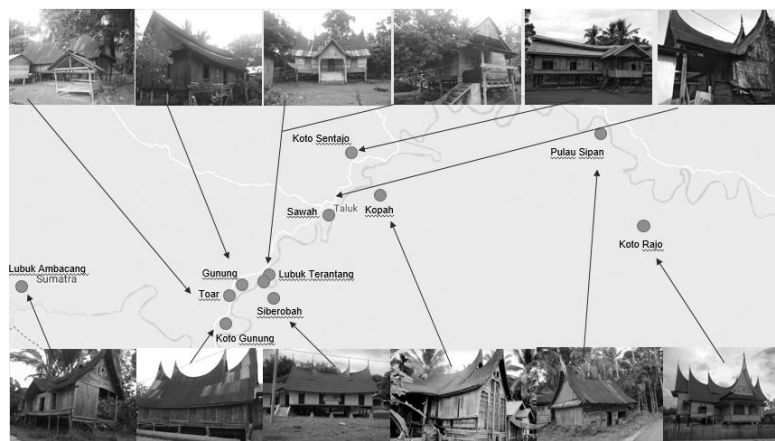
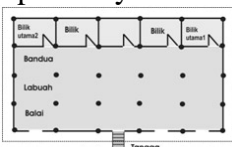




Figure 2. Locations of Field Study in Batang Kuantan
Source: Khamdevi, 2019

The characteristics of Rumah Gadang in Tanah Datar acted as the main comparison data, see Table 3. Data analysis will describe into three categories, namely: spatial systems, physical systems and structural quality, and stylistic systems. Couto (2008) stated that the Rumah Gadang in Minangkabau has three styles; *Gajah Maharam* in Tanah Datar area, *Rajo Babandiang* in Limapuluh Koto area, and *Rumah Bapaserek* or *Surambi Papek* and *Gajah Manyusu* in Agam area.

Table 3. The Architectural Characteristics of *Rumah Gadang* in Tanah Datar

Architectural Characteristics		
Spatial System	Space Pattern	(Surambi>) Balai > Labuah (+ Anjuang) > Bandua > Bilik
	Orientation	Compass Points or Qibla
	Hierarchy	Publik > Semi Publik > Semi Privat > Privat
Physical System & Figural Quality	Physical form	Boat
	Materials	Woods, Bamboes, Palm Fibers
	Space Barrier	Woods and Bamboes

		
Stylistic System	Roof	Lanchara Boat and Buffalo Horn
	Column	1 Main Post (Tonggak Tuo)
	Openings	Woods
	Stairs	Odd Number of Steps (7-11 steps)

Source: Couto, 2008

4. Result and Discussion

Koto Gunung and Lubuk Terantang

The *Rumah Godang* in Koto Gunung and Lubuk Terantang are similar to the *Rumah Gadang* in West Sumatra, especially the one in Tanah Datar. Both houses have a transversal rectangular plan. The entrance of *Rumah Godang* in Koto Gunung is on the right side, meanwhile in Toar is on the middle. After opening the door, we will enter the *Depan* as a guest room (public space). Then, in the middle of the house, there is *Tongah*; a space for family members (semi-public space). At the back, there are bedrooms (*Bilik*) for female family members (private space). On the back of the house, there is additional space for the kitchen and bathroom (see Figure 3).

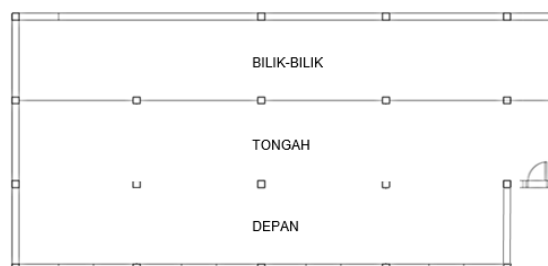


Figure 3. *Rumah Godang* in Koto Gunung and Lubuk Terantang

Source: Khamdevi, 2019

The use of wood material is very dominant, especially the structure, walls, and floors. The columns stand on the stone pedestal foundations. The form of the building and the roof have similarity to *Rumah*

Gadang. Some houses have *Gonjong*; decorations at the end of the roof. Palm fiber roof was the actual roof cover, but now the roof cover is a zinc roof.

Toar and Koto Sentajo

The *Rumah Godang* in Toar and Koto Sentajo are different from the house in Koto Gunung and Lubuk Terantang, especially their building and the forms. However, their spatial systems have a similar genotype. Both houses have a transversal rectangular plan. Their building entrance is always on the right front. The front space (*Depan*) has a function as a guest room (public space). The middle space (*Tongah*) has a function as a family room (semi-public space). At the back, there are additional bedrooms (*Bilik*) for female family members (private space). Additional space is on the right back of the house as a kitchen, see Figure 4.

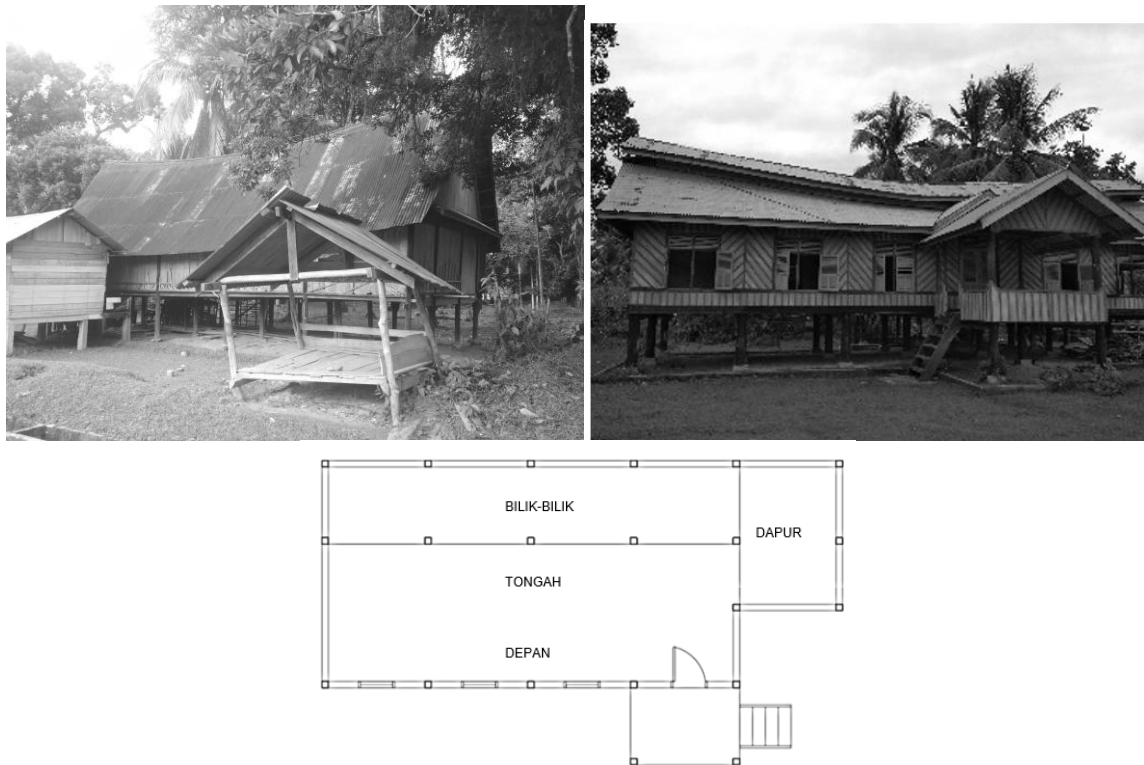


Figure 4. *Rumah Godang* in Toar and Koto Sentajo
Source: Khamdevi, 2019

The wood material is dominant, especially for structure, walls, and floors. The columns stand on the stone pedestal. The roof form of the house adopted the form of curved Kajang roof of the traditional canoes. However, the roof in Toar has only one level, meanwhile, the roof in Koto Sentajo has two levels. In the past, the use of palm leaves or pal fibers were common, but now the roof cover is a zinc roof. Interestingly, some houses have granary that the form is literally like the *Rangkiang* in *Rumah Gadang* in West Sumatera, see Figure 5.



Figure 5. *Rumah Godang* with Rangkiang on the front, Koto Sentajo
Source: Khamdevi, 2019

Comparison of Architectural Characteristics between Batang Kuantan's Rumah Godang and Tanah Datar's Rumah Gadang

The comparison between Rumah Godang and Rumah Gadang can be seen in Table 4. The table shows similarities and differences. These indicate that both houses has consistencies and inconsistencies.

Table 4. The Comparison of The Traditional Houses in Luhak Tanah Datar and in Batang Kuantan

Architectural Characteristics		Koto Gunung	Lubuk Terantang	Toar	Koto Sentajo
Spatial System	Space Pattern	✓	✓	✓	✓
	Orientation	✓	✓	✓	✓
	Hierarchy	✓	✓	✓	✓
Physical System & Figural Quality	Physical form	✓	✓	✓	✓
	Materials	✓*	✓*	✓*	✓*
	Space Barrier	✓	✓	✓	✓
Stylistic System	Roof	✓	✓	✓**	✓**
	Column	✓	✓	✓*	✓*
	Openings	✓	✓	✓	✓

Source: Analysis, 2019

Through cultural borrowings or the continuation process, the spatial systems (genotype) have consistency. The form systems (phenotype) are almost consistent, only in material use. The stylistic systems have inconsistencies, especially in Toar and Koto Sentajo. Those systems experienced transformation through the local cultural innovations, the outside civilizations' influence, or the change of the kingdom authority, see Figure 6.

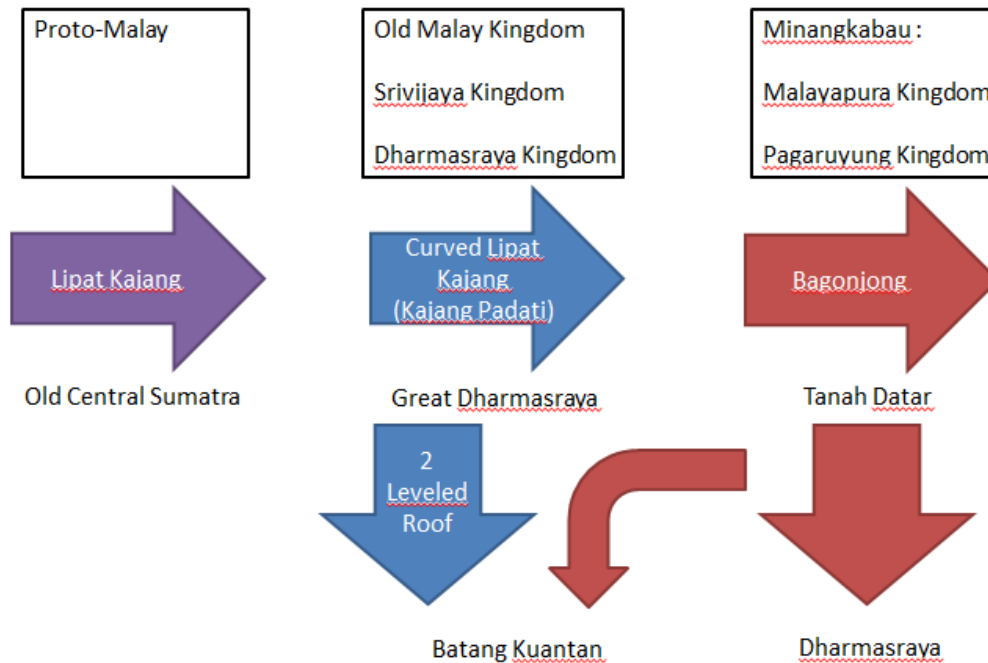


Figure 6. The Lineage of Traditional Houses in Tanah Datar-Batang Kuantan
Source: Khamdevi, 2019

5. Conclusion

This research shows a strong linkage between the traditional houses in Batang Kuantan and in Tanah Datar. Their architectural characteristics have similarities and differences. The spatial systems (genotype) are consistently similar, the form systems (phenotype) are almost consistently similar, and the stylistic systems are variously different. The similarities are a result of cultural borrowings through the local cultural innovations, the outside civilizations' influence, or the change of the kingdom authority. The similarities in their genotype and phenotype show a strong linkage between *Rumah Godang* and *Rumah Gadang*.

6. Acknowledgement

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