

Research Article

Migration of Water-based Residential Lanting in Banjarmasin

Daffa Muhammad Syafiq* and Didit Widiatmoko Soewardikoen

Postgraduate Design, School of Creative Industries, Telkom University, Bandung, Indonesia

Abstract.

Lanting is a floating house usually found on the banks of the Banjarmasin River in South Kalimantan. Banjarmasin is often called the city of a thousand rivers because, geographically, it is surrounded by many rivers. Banjarmasin has a river culture with various activities on the banks and rivers. Lanting is a cultural product that was born thanks to the river culture of the Banjar people. However, lanting is declining due to changes in the orientation pattern of the Banjar people's dwellings, which were initially water-based to land-based. If this continues to occur, it will cause the loss of the river culture of the Banjar people. This study aims to understand the causes of the migration of lanting house dwellers to the mainland. The method used in this study is qualitative, with a design thinking approach at the emphasize stage. Then the collected data were analyzed with a comparison matrix table. In this study, it can be concluded that the loss of river culture is threatened due to the decline of lanting cultural products. The result of this study is that the river culture of the Banjar people is threatened because the cultural products of Lanting have declined due to the changing orientation of the people's lifestyle, from water-based to land-based. Not to mention the maintenance of lanting, which is not easy, it costs money, and replacement materials are challenging to obtain, causing lanting residents to migrate when they have enough funds to build houses on the mainland.

Keywords: lanting, river culture, Banjar, emphasize

Corresponding Author: Daffa
Muhammad Syafiq; email:
daffasyafiq@student.
telkomuniversity.ac.id

Published: 8 January 2025**Publishing services provided by
Knowledge E**

© Syafiq, Soewardikoen. This
article is distributed under the
terms of the [Creative Commons
Attribution License](#), which
permits unrestricted use and
redistribution provided that the
original author and source are
credited.

Selection and Peer-review under
the responsibility of the BCM
2023: Sustainable Design
Conference Committee.

1. Introduction

Lanting is a traditional Banjar house. Floating houses on the water are often found on the banks of rivers in South Kalimantan. When viewed from a spatial perspective, culture has three slices, namely (the outer "tangible" layer), (mid "the behavioral" layer), and (the inner "intangible" layer) [1]. So Lanting in a tangible way is a banjar traditional house made of wood on the foundation using logs or drums and sometimes bamboo tied to keep the place afloat and tied to tree trunks or timber on the banks of the river so it does not get carried away by the river currents. Behaviorally, it is a mobile house floating on water. In an intangible way, it is a cultural product of the Banjar people and a symbol of river culture in which the life of its inhabitants depends on the river.



Banjarmasin is the capital city of South Kalimantan Province. Kalimantan Island means Kali, which means river, and Mantan, which means big. Many large rivers surround Banjarmasin, such as the Barito River, Martapura River, Andai River, Kuin River, Alalak River, Tatas River, Kalayan River, and Pakapuran River. Not to mention the countless tributaries that make Banjarmasin nicknamed the “City of a Thousand Rivers” [2].

River culture is very attached to the Banjar community as a life orientation and self-identity; this can be seen from the activities in the river settlements. Traditional ceremonies such as Batatamba or Malabuh rituals, worship at places of worship on the banks of the river, buying and selling transactions at riverside markets, and others, all carried out on Lanting on the banks of the river. The river is also considered a transportation route and economic center in Banjarmasin [3].



Figure 1: River Culture. Source: (Personal Archives).

But over time and the times. Lanting is starting to be considered a slum area, and the unavailability of logs which are the main foundation of the Lanting house, and there is also a change in the pattern of community orientation from the river to the land has made lanting houses begin to be abandoned. Around the 1980s, lanting houses passing by on the Banjarmasin River were very high, making the river path busy with the activities of Lanting residents. [4]. Lanting is a cultural product of Banjarmasin which grows and develops not by conquering rivers into land but in harmony with them [5]. Building civilization using cultural products with designs that respond to nature is now abandoned and forgotten by future generations.

With the threat of the existence of lanting, the river culture of the Banjar people is also threatened. Lanting is considered something problematic regardless of local wisdom.



Figure 2: Lanting Slum Area. Source: [6] & [7].

The Lanting House is considered an unsightly sight because it gives the impression of being dirty and rundown. The Lanting House is also considered an obstacle to the river's flow, and the residents are even accused of destroying the forest for Lanting maintenance [5].

Lanting is a cultural product of the Banjar people and a symbol of river culture in the city of a thousand rivers Banjarmasin which its inhabitants have abandoned. With the migration of lanting inhabitants to the mainland and changes in the orientation patterns of the inhabitants. So this will threaten the abandonment of the river culture of the Banjar people and the loss of cultural products that have existed for hundreds of years.

In a study entitled Preservation of lanting houses based on the river culture of the people of the city of Banjarmasin, M. Aulia Rachman stated that the lanting houses are rare, and those that have survived to this day have suffered a lot of damage and action is needed for the physical preservation of the lanting houses which are based on the river culture of the Banjar people so that not lost. This research explores why the Lanting house was abandoned by its residents, who preferred to migrate to the mainland.

2. Research methods

This study uses qualitative methods with a design thinking approach at the empathize stage. The data collection technique uses in-depth interview techniques; because interviews are flowing and flexible, it is expected to bring up events that have been experienced and special events that were not recorded by anyone other than the source person [8]. The results of the interviews will be used as primary data in this study. Then supported by literature studies in the form of books and journals, which will be used as secondary data in this study. Research subjects are sources that can provide information about a fact or opinion [9]. The subject of this research is Mrs. Arbainah and Mr. M. Rizani, a lanting resident who has migrated. The research object is a scientific

goal to obtain data with a specific purpose or interest in something objective, valid, and reliable (certain variables) [9]. The object of this study is the form of migration carried out by the inhabitants of the water-dwelling (Lanting). Data validation was carried out by triangulating the data used to obtain the same data [8]. Interviews were conducted with two lanting residents who had migrated. The matrix can make comparisons of data sets to identify similarities and differences in research data to make summaries of several analyzes that can lead to conclusions [8]. Data analysis was carried out by attaching data to matrix tables in the form of analysis conclusions that had been carried out to conclude the research.

3. Results and discussion

Data was collected through in-depth interview techniques on 28 February 2023 with two (2) resource persons who had lived in Lanting. The list of questions given to the resource person. Full name, date of birth and age, location of Lanting, length of inhabited, Lanting foundation used, why did you choose to live in Lanting, profession when you lived in Lanting, daily activities while in Lanting, size of Lanting, rooms in Lanting, accident on Lanting, the reason for leaving lanting. The first resource person was Hj. Arbainah was born on June 10, 1949 (73 years). Arbainah once inhabited Lanting from 1976 to 1983, located along the banks of the Barito River in the Basirih area.



Figure 3: Lanting Location. Source: (Personal Archives).

Lanting was inhabited using log floating foundations. Living in Lanting at that time was due to economic constraints. Profession while living in Lanting is a fisherman who daily

catches fish in the river for the primary source of income. Daily activities in Lanting are the same as in general, from toilets, cooking, chatting with family and relatives to sleep. The inhabited Lanting has an area of 5.7m x 4m in length. It consists of a single room without a partition used multi-functionally, a kitchen, and a lavatory. The Lanting that was inhabited had experienced the process of replacing the floating foundation due to negligence in extending the ropes to tie the trees so that Lanting was stranded on land, which eventually damaged the floating foundation so that the logs were replaced with bunches of bamboo tied using used inner tube ropes. The choice of bamboo material is due to the economic limitations of buying new logs. They migrated from Lanting because they already had sufficient funds to build a house on the mainland and migrated to Jl. Trikesuma RT.003 RW.001 Barabai Darat Hulu Sungai Tengah, South Kalimantan (current occupancy).

The second interviewee is M. Rizani, born on May 9, 1993 (29 years). M. Rizani once lived in Lanting from 1993 to 2001, located on the Martapura River's banks.

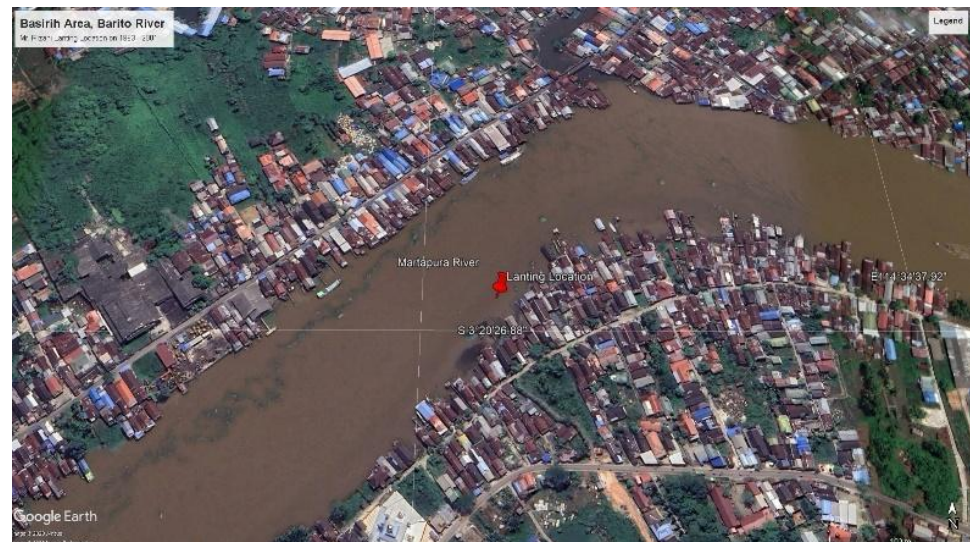


Figure 4: Lanting Location. Source: (Personal Archives).

Lanting is inhabited using floating bamboo foundations. Living in Lanting at that time was due to economic constraints. The parents' profession while living in Lanting was making woven mats, the primary source of income. Daily activities in Lanting are the same as in Lanting houses: toilets, cooking, chatting with family and relatives, and sleeping. The inhabited Lanting has an area of 6m x 4m in length. It consists of a single room without a partition used multi-functionally, a kitchen room, and a lavatory. The inhabited lanting has been maintained by replacing the floating material with new bamboo. The choice of bamboo material is because it is easy to obtain. The reason for

migrating from Lanting was because M. Rizani's parents already had sufficient funds to build a house on the mainland and migrated to Jl. Ar-Raudah Housing 8 Baroqah Tanah Bumbu South Kalimantan (current residence). In 2021, he visited the riverbank where his Lanting residence used to lean; how surprised M. Rizani was when he did not find a new Lanting residence, but only several Lanting residences that had survived from ancient times when he still lived there.

Currently, riverside architecture in the City of Banjarmasin is experiencing an identity crisis due to the pattern of community settlements that have changed from water-based to land-based settlements. This identity crisis can be seen from Lanting, the condition and existence of Lanting houses, whose number is decreasing daily, simultaneously without any new Lanting being built. The lanting house is part of Banjar's riverside architecture and the riverside people's living culture [10].

The rapid development of technology today can bring up various innovations, including realizing a place to live on the water, a floating residence, or a floating house. The innovation of building houses on the water is currently considered the right solution considering the unbalanced quality of life and availability of land. This phenomenon causes several countries to implement shelter on the water. This fact contradicts Banjarmasin, namely, the cultural symbol of the river is starting to be abandoned, and the tradition of living above the river water is increasingly disappearing. Banjarmasin, as part of Indonesia, where most of its territory is water, has the potential to develop the use of water as a place to live. The traditional houses floating on the water or Lanting should be maintained [5].

The development of the land route and the flow of globalization has impacted the abandonment of the Lanting house as a locality of the river cultural tradition of the city of Banjarmasin. Moreover, the logs used as the foundation of the raft house are very expensive and difficult to obtain. This condition causes the lower class to consider building a Lanting house. The scarcity and cost of wood are related to maintenance when the Lanting house is damaged, and this is not affordable for the average occupant, including low-income people [4].

Only low-income people can survive in the Lanting houses, considered slums. The makeshift building materials show this shabby impression with a construction far different from the concrete buildings that stand majestically around it, not to mention the habits of its inhabitants who pay little attention to environmental cleanliness because the river has a dual function as a toilet and primary water source [5].

Judging from the typology of housing conditions for low-income people in Banjarmasin, there are three housing types: self-help housing, old housing (houses on stilts and lanting houses), and illegal settlements. [11]. In old housing, there are several problems: the quality of the housing is not standard with one another, and the layout of the house itself often influences the quality of housing that is not standard with each other. Generally, a dwelling today is on land and away from waters such as seas or rivers. Nevertheless, because a person's income is not evenly distributed, whether he likes it or not, a person has to live in dwellings on the banks of the river, some of which do not meet the standards, and become in contact with dwellings that are far from the banks of the river. In addition to the income factor, limited land on the mainland forces the community to look for new land to live in, one of which is on the banks of the river.

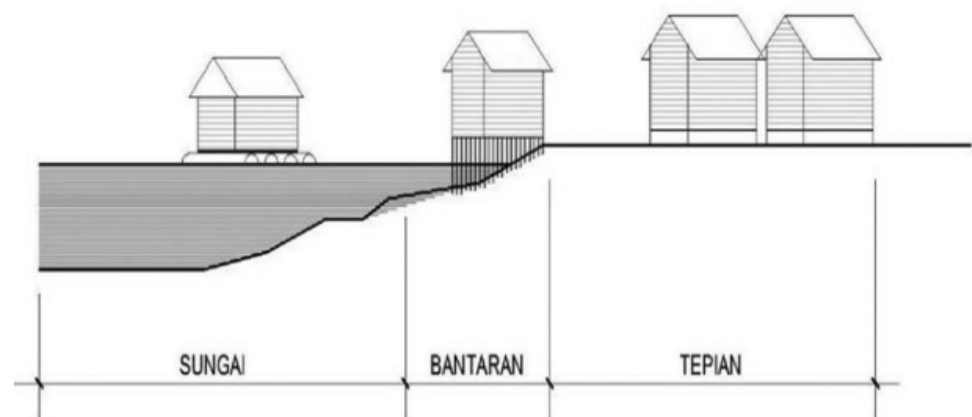


Figure 5: Residential location. Source: [11].

Furthermore, the problem of poor housing quality, this poor housing quality arises when the condition of the river's environmental quality problem decreases due to garbage and domestic waste, the emergence of various disasters such as floods or river overflows, and failure to achieve decent quality housing due to the large area of the riverbank that allows it to be built [11]

Judging from the anatomy of Lanting, commonly found in Banjarmasin, the choice of structural material used is not arbitrary. From the anatomical structure of the building, there are three parts, namely the foundation/*batang-lanting*: the construction is made of bamboo/*paring* or logs, the walls/*tawing*: the construction is made of planks of wood arranged in a horizontal formation and the roof/*hatap*: the construction is made of wood covered with a tin roof [10].

Bamboo is the foundation material that plays a vital role in maintaining the stability of Lanting's buoyancy; unfortunately, at this time, the price of bamboo is getting more

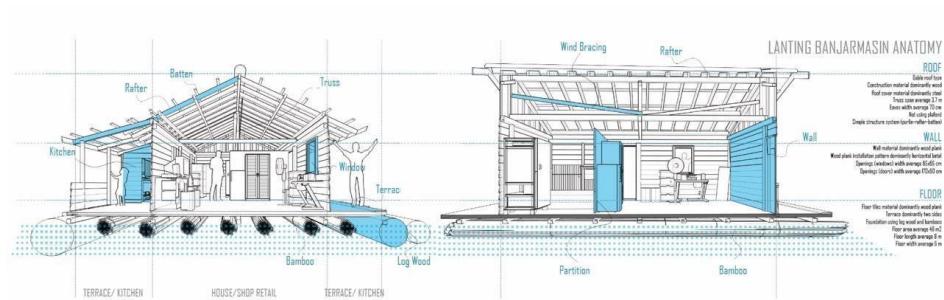


Figure 6: Lanting anatomy. Source: [10].

expensive, and bamboo is getting harder to find. There is a cheap bamboo alternative around the Martapura River, but the bamboo has to be replaced every two years to maintain Lanting’s buoyancy stability [12].

The data that has been presented will be analyzed using a matrix table in order to obtain a comparison in this study as follows:

TABLE 1: Matrix comparison.

Data Sources	Key Point
<p>Deep Interview (Hj. Arbainah)</p>	<ul style="list-style-type: none"> • Lived in Lanting for seven years (Age when living in Lanting 27 – 34 years) • The location of lanting is on the outskirts of the Barito River (Basirih) • Profession in Lanting was a fisherman • In the category of low-income people • Lanting maintenance using expensive materials had to reduce the quality of the logs to become bamboo • Migrate to the mainland because they already have sufficient funds to build a house.
<p>Deep Interview (M. Rizani)</p>	<ul style="list-style-type: none"> • Lived in Lanting for eight years (Age when living in Lanting 0 – 8 years) • The location is on the outskirts of the Martapura River • The profession of M. Rizani’s parents, when he was cast, was a woven mat maker • In the category of low-income people Lanting maintenance was carried out by replacing the old bamboo floating foundation with new bamboo • Migrate to the mainland because they already have sufficient funds to build a house • Conducted a visit to the previous Lanting residence and found that there were no new Lanting buildings but only a few surviving old Lanting.
<p>Book (Menggami Rumah Adat Banjar)</p>	<ul style="list-style-type: none"> • The cultural symbols of the river are starting to be abandoned, and the tradition of living above the river water is increasingly disappearing • Only low-income people want to live in Lanting • Lanting seems to be run down and ignores environmental cleanliness
<p>Journal (Anatomy of Lanting house architecture in Banjarmasin)</p>	<ul style="list-style-type: none"> • The Banjar cultural product in the form of Lanting is experiencing an identity crisis seen from the declining presence of Lanting houses • Changing the settlement pattern from water-based to land-based • Bamboo or logs are considered the most suitable floating foundation for Lanting houses

TABLE 1: Continued.

Data Sources	Key Point
Journal (Pelestarian Rumah Lanting Berlandaskan Budaya Masyarakat Kota Banjarmasin)	<ul style="list-style-type: none"> • The development of the land route and the flow of globalization has impacted the abandonment of the Lanting house as a locality of the river cultural tradition of the city of Banjarmasin. • Lanting foundation materials are expensive and difficult to obtain • Low-income communities are not able to do Lanting house maintenance
Journal (Kajian Tipologi Perumahan Masyarakat Berpenghasilan Rendah)	<ul style="list-style-type: none"> • Lanting is included in the low-income residential category. • The quality of Lanting's occupancy is inadequate • Living in Lanting is not an option but a compulsion due to the inadequate economy
Journal (Keeping the Floating House Afloat)	<ul style="list-style-type: none"> • Lanting floating foundations when using bamboo must be replaced at least once every two years • The price of bamboo is getting more expensive • Bamboo is hard to find
Conclusion	The change in the orientation pattern of life based on water to land has made the river culture of the Banjar people increasingly abandoned, and the cultural products of Lanting have decreased. The two informants were in the low-income community category when they lived in Lanting and migrated when they were considered capable of building land-based residential houses. Maintenance of Lanting house materials costs a lot and is hard to find.

4. Conclusion

The river culture of the Banjar people is threatened because the cultural products of Lanting have declined due to the changing orientation of the people's lifestyle, from water-based to land-based. There is a view that Lanting is a slum and does not pay attention to environmental cleanliness. From the two informants, it was found that living in lanting was not an option but a limited economic condition because they were included in the category of low-income people. Not to mention the maintenance of Lanting, which is not easy; it costs money, and replacement materials are challenging to obtain, causing Lanting residents to migrate when they have enough funds to build houses on the mainland. In this research, the Emphasize stage has been carried out, so in the following stages; further research is needed to formulate problems in the Define stage in the subsequent design thinking stage.

References

- [1] Benny. Ding Leong and H. Clark, "Culture-Based Knowledge New Design Thinking Towards and Practice-A Dialogue in conversation Leong with Hazel,," Des Issues.

- 2012;19(3):48–58.
- [2] T. Riwut, *Kalimantan Membangun: Alam dan Kebudayaan*. Yogyakarta: NR Publishing, 2007.
- [3] Sibiyakto B. “Arti Penting Perairan Bagi Transportasi Masyarakat Banjar,” *Dalam Kandil Edisi 9. Tahun III*, vol. 9, no. 3, 2005.
- [4] Rachman UA. Pelestarian Rumah Lanting Berlandaskan Budaya Sungai Masyarakat Kota Banjarmasin. *E-Jurnal Graduate Unpart D-Architecture*; 2014.
- [5] Wasita., Bambang. Sugiyanto, and Nasrullah, *Menggamit Rumah Adat Banjar*. Yogyakarta: Penerbit Ombak, 2017.
- [6] Ditwb, “Arsitektur Rumah Lanting,” kebudayaan kemdikbud. [Online]. Available: <http://kebudayaan.kemdikbud.go.id/ditwdb/arsitektur-rumah-lanting/>
- [7] Muslim D. “Nasib Genteng Rumah Lanting,” banjarhits. [Online]. Available: <https://kumparan.com/banjarhits/nasib-genteng-rumah-lanting-1551017238254621041>
- [8] D. Widiatmoko. Soewardikoen, *Metodologi Penelitian Desain Komunikasi Visual*, Edisi Revi. Yogyakarta: Penerbit PT Kanisius, 2021.
- [9] Sugiyono, *Metode Penelitian kuantitatif, kualitatif dan R & D / Sugiyono*. Bandung: Alfabeta; 2014.
- [10] Mentayani I, Hadinata IY. Anatomy of Lanting house architecture in Banjarmasin. *IOP Conf Ser Earth Environ Sci*. 2021;780(1):012046.
- [11] F. Rahman, R. Rahmatullah, S. Hadi, A. R. Nugroho, and S. Riadi, “Kajian Tipologi Perumahan Masyarakat Berpenghasilan Rendah (MBR),” *Jurnal Geografika (Geografi Lingkungan Lahan Basah)*, vol. 3, no. 1, 2022. <https://doi.org/10.20527/jgp.v3i1.5334>.
- [12] Prihatmaji YP, Nugraha DH. “Keeping the Floating House Afloat in Banjarmasin: Implementation Potential of EPS Floating Technology for Foundation Engineering,” *MATEC Web of Conferences*, vol. 280, p. 02001, 2019, <https://doi.org/10.1051/matecconf/201928002001>.