Agats:The Waterfront City of the Asmat

Basauli Umar Lubis Institut Teknologi Bandung, Indonesia basauli@ ar.itb.ac.id

ABSTRACT

he development along and within the Asewets River presents the most characteristic and memorable city form of the city of Agats, Papua, Indonesia. The river and the city's raised roads form an integrated circulation pattern and together played an important part in the development of the city. The city of Agats is unique in that all structures are built above wood or concrete pilings. The unique presence of the elevated bazaar street connects buildings likewise raised on piles. The structural elevation of the city above the ground keeps the settlement dry even during rainy season, when there is a 4 kilometer tidal change, transforming a waterfront city into an elevated city above the water. The bazaar street is the main element of structural formation of the more cosmopolitan city of Agats where the Asmat share their city with new migrants from other areas in Indonesia and all the major activities take place along the raised boardwalk road.

Keywords: Waterfront, Indigenous Settlement, Asmat, Agats

INTRODUCTION

The Asmat is probably the most well known tribe in Papua, formerly called Irian Jaya, Indonesia. They became famous not only through their headhunting practices in the past, but also because of their unique ideas and wonderful designs in woodcarving. The Asmat Wowipit (wood carver) has a truly spiritual approach to carving and each piece made is imbued with the spirit energy of their ancestors. An Asmat carving can therefore be regarded as a bridge between the material and spirit worlds. The Asmat believe that their creator - Fumerapitis - carved their ancestors from trees and gave them the blessing of life, so from the very beginning the relationship of carver to wood is totally sacred. The tribe's name most probably comes from the Asmat words As Akat, which according to Asmat people means 'the right man'. Each sculpture is the image of respect for their

ancestors and is filled with Asmat greatness. For the Asmat the time spent carving statues is one in which they communicate with their ancestors inhabiting a different nature. It is believed that before entering heaven spirits of dead people will bother the living. Spiritual interference could take the form of disease, disaster and even war. So, in order to save mankind and to redeem souls, the living make statues such as statue *Bis* (Bioskokombi), the most sacred statue to ward off calamitous events.

Natives of the Papua region are divided into two main groups; those living along the coasts, and those inland. They differ in dialect, way of life, social structure, and ceremonial practices. The Asmat tribe was untouched by civilization until recent times. Although the first Dutch colonial government post was not established in Asmat territory until 1938, and a Catholic mission began its work there only in

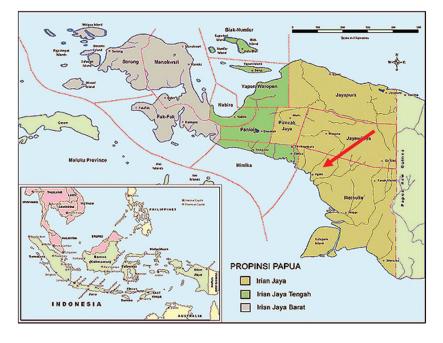


Figure 1: Papua Province (source: Watch Project baseline report, 1998-2000)



Figure 2: Yeus

1958, the pace of change in this once remote region greatly increased after the 1960s. Dutch outposts, missionary settlements, and foreign expeditions finally made inroads on this isolated culture during the 1950 and 60s. Formerly, the families of the entire tribe resided together in houses up to 28 meters long called Yeus. Yeus are still used, but only by men, as a clubhouse where bachelors sleep.

Visitors to the city of Agats have vividly described the splendor of the habitat elevated along the waterfront. The development of a raised city above and along the river presents the most characteristic

and memorable image of the city of Agats. Agats is the capital city of the Asmat district. Asmat territory is remote, not always easily accessible. A maze of rivers runs through the lowland swamp forests and the only way to travel is by motorized dug-out between the small villages that fringe the rivers. The rivers Utubuwe and Bandew played a very important role in the formation and development of the city. The city has evolved in total consonance with the river and extends about one and half kilometers along the river to the south. A network of elevated 'roads' connects the city structure inwards from the river, Agats, as the capital district of Asmat, experienced many challenges due to growing demands for modern services. Schools, banks, and stores have all grown, as have the number of visitors who come to work, trade and settle. These transformations make this city more livable. But the question of how these new facilities integrate with existing settlement patterns has recently emerged.

The Evolution of the Xxisting Spatial Structure

Almost the entire Asmat region is covered in water during the rainy season, when high tide reaches up to two km inland and low tide flows up to two km out to sea. This is the largest alluvial swamp in the world, a low-lying stoneless territory of bog forest and meandering rivers emptying into the Arafura Sea. The fluctuating river and the elevated roads

were thus an integral part of the circulation pattern and played an important part in the development of the city. There was a definite hierarchy in the circulation pattern. The river formed the primary artery of movement and thereby the highest order in the hierarchy. As the distances traveled were within three kilometers, and within walking distance, the movement was primarily pedestrian; the residents of Agats could use either the water transport or the road depending upon which was available in close proximity. The road was generally two to three meters wide and mostly ran parallel to the river behind the buildings. The secondary street was formed by the cross lanes. The wooden elevated structure has since been filled up to form a continuous frontage along the road. An interesting feature here is the row of buildings along the raised structure which formed an interesting walking experience across the 'road'.

The city of Agats has an architectural character and a settlement pattern that is quite distinct from other settlements in the Indonesian region. The architecture and the pattern that emerged were primarily due to the river that formed the main spine of the settlement and the land that provided the locally available building materials, combined with the cultural skills and craftsmanship of its indigenous people, which brought about a unique stylistic coherence in the architecture of the city. It may be said that the growth of this water related architecture forms the structural development of the city of Agats. The first modern settlement in this area is believed to have been founded in late 1930s when a Catholic mission began its work there. The missionaries built a school, a place for worship, and some houses. They lived in the southwest part and their settlement can be found today. As large timber and oil companies expanded their operations in the region, the environmental conditions of these fragile, lowlying mangrove forests were threatened by industrial waste and soil erosion. Although by the early 1990s, the Asmat appeared to be gaining some national and international recognition for their artwork, this fame had not resulted in any significant political input into Indonesian government decisions affecting the use of land in their traditional territory.

The evolution of the city of Agats can be divided into three phases. In the past the settlement concentrated along the waterfront in the northwest. This settlement gradually grew southwards along the river. In the second phase, the city developed inland to the southwest in the late 30s, and the first missionary school was also built about the same time. The physical remains of the earlier settlement are few. Only some important physical features, such as places of worship and dormitories, the street patterns and some items and sites can be identified as dating from the earlier period. However, elements from the Catholic mission onwards are identifiable and they have played an important role in the later development of the city. The third evolutionary phase was begun after Asmat became Kabupaten, a district



Figure 3: Aerial Photography of Agats 2004 (source: RTBL)

of Papua, in 2002. Many official buildings and new houses were built for the activites of government. To support this development, many migrants came to Agats, especially people from other areas of Indonesia. The migrants mostly come from Bugis and Maluku, and they lived in the northern part of the city. Cultural assimilation still has not happened; migrants who come from the Toraja region are generally more acceptable to local residents due to religious afinity. Muslim immigrants from Bugis Makasar and the island of Java are mostly merchants and are not involved in other aspects of traditional Asmat social life.

Spatial Structure and the City Form

The spatial structure of the city of Agats has evolved in consonance with the surrounding water bodies and the topography of the island. The main movement spine is formed by the river and parallel streets on banks, connected across by a series of bridges, most of these are of traditional wooden structures while other are made of reinforced concrete. In the traditional pattern, the river's edge is defined by the buildings standing on pilings rising out of the water, and the street parallel to the river runs behind the waterfront buildings, with narrow cross lanes perpendicular to the river, and descending in a series of steps to the level of the water. The new development upriver on the other hand reverses the traditional pattern and has a running road parallel to the river that is on a raised embankment along the river's edge. The traditional pattern evolved with the river as the main transport corridor with the streets being subservient to it. A very interesting clustering takes place along the waterfront. In the earlier settlements upstream river borne traffic alights at a



Figure 4: Spatial Structure of Agats (Source: RTBL)

wide flight of steps, which are regularly spaced along the banks. The steps rise up to the narrow lanes that are perpendicular to the river, giving access to the houses through private open courtyards. The places on the river's edge are major common open spaces where the daily activities take place such as bathing and washing. The small boats are parked along the river and are used for ferrying people across or to other points along the river's edge.





Figure 5: Houses along the Waterfront

There have been two traditions of concentrated settlement. In one the whole settlement has been considered as the setting for life and the dwelling merely as a more private, enclosed and sheltered part of the living realm. In the other the dwelling has essentially been regarded as a total setting for life (Rapoport, 1969).

There has been a change in settlement patterns from the city as a collective tribal house to one where public and private life is more segregated. This is because many migrants do not follow the local culture, and they need modern facilities that are outside the house. Most of the activities are carried out outside the house, and mainly occur around the bazaar street. The city becomes a cosmopolitan place and a methaphor for social realtions and obligation (Feld and Basso, 1996).

Activity Spaces along the Waterfront

The Asmat region is swampy and cut by hundreds of rivers and cutoffs. It is hard to build roads and paths in such an area. There is no land access that connects one district to another district. Previously, the only way to trade and communicate between villages was done through the rivers using a canoe called 'perahu'. Vehicles commonly used by the public are a longboat with a speedboat or motorcycle engine. There are still local people who steer Kole Kole — a wooden boat with long oars - to go from

one village to another or to go into the forest to look for sago or aloes. The land use along the waterfront is mixed but dominated by residences. The other important land uses are public facilities such as schools, government buildings, hospitals and the market, located inland, along the bazaar street parallel to the river but running behind the houses. There is no significant activity generated along the waterfront. It was used by the residents for washing, bathing and formed the community meeting place. The main street is generally two to two and one half meters wide and runs parallel to the river behind the waterfront buildings. It was known as the bazaar street. There is a dense pattern of built fabric enriched by the mixing of activities and functions. Houses, government offices, churches, shops and even schools are accommodated along the street.

The type of shops depends upon the hierarchy of the street. The main street has shops selling textiles, sophisticated household items, handicrafts, spices, fruits, vegetables and daily goods for the residents of the city. The secondary streets are formed by the cross lanes. A group of shops can be seen along the street. The shops cater to the day-to-day needs of the residents of the cluster. There is the tailor's shop, the barber and the grocery store. These shops cater to the needs of the residents within a five minutes walk from their houses. The facade along the main street depicts an endless variation reflecting the heterogeneity of its inhabitants, varying from the rich traders to small shop owners.

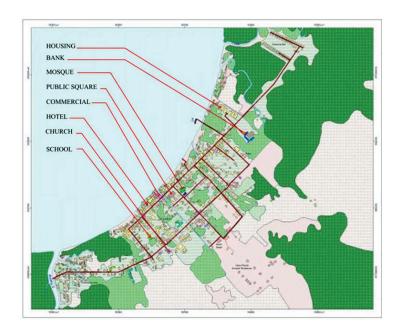


Figure 6: Land Use (source: RTBL)



Figure 7: Bazaar Street



Houses in Asmat coastal areas in the twentieth century were generally built on pilings two or more meters high, to protect residents from daily flooding by the surging tides of the brackish rivers. The spatial structure of the city has evolved in consonance with the dynamic water bodies. The main movement spine is formed by the river and parallel roads, using traditional wooden structures while the new ones are made of reinforced concrete. There is not a significant difference in the spatial plan of the old settlement extending from the church to the west and the newer development for the newcomers in the east. In the traditional pattern, the river's edge is defined by the buildings standing on retaining walls rising out of the water, and the road which is parallel to the river runs behind the buildings, with narrow cross lanes perpendicular to the river.

The houses along the edge of the waterfront generally had a simple square plan. The terrace had steps leading to the river form one side. It is important to re-examine the traditional habitat and understand the rationale behind the wooden walls. and the ilalang roofs with their colorful array. What we build today has the 'spirit and the aesthetics' of the traditional forms, even though we may rely on a developed technological base. The waterfront, however, has lost its grandeur and magnificence. The great resource of traditional craftsmanship is now sadly disappearing quite rapidly. The traditional architecture that had emerged was a response to the climate, the topography and the traditional lifestyles of the Agats people. The traditions are as relevant today as they were in the past. The past is unique and overpowering and it cannot be ignored. The climate for a return to the traditional appears to have



Figure 8: Traditional House

set in, as the society is at the crossroads and there is an urge to look back into one's roots, searching for an identity.

The Bazaar at the Junction of the Streets

The shift from hunting and gathering to horticulture substantially increased the permanence of human settlements, enabling people to accumulate more possessions than ever before (Lenski and Lenski, 1978). Dwelling also became more substantial, as houses were made of materials capable lasting for as long as two generations. The city becomes a metaphor for social relations and obligation (Feld and Basso, 1996). The bazaars at the junction of the street and the bridge in Agats form the hub of commercial activity in the city. There are a series of bazaars along the riverfront at the junction of the bridges which form the hub of commercial activity. Thus the city can be linearly sub-divided into series of clusters with the bridges forming the centre of each, or the pivot around which the community evolved.

The market serves the day to day needs of the clusters. The river physically divided the settlement into two but the bridges integrated the development so perfectly that this division was never felt and it appeared as one homogenous settlement. People can traverse long distances on foot. The terrain, the climate, and the slow pace of life encourage people to walk. The farthest distance that one has to travel to work, or to the temple, to the bazaar, to the school, or to shop was barely three kms away. The interesting streetscapes, the changing visual experiences, the play of light and shade and the





Figure 9: The Shops at Bazaar Street

landmarks punctuating the zig zag of the streets creates an exciting experience for the pedestrian. Thus walking is not a tiring experience but a rich and exhilarating one.

Perspectives in Restoration

Today, the waterfront city of Agats is in a state of dilapidation, the old settlements which preserved the unique tradition and character, lying plundered and deserted. The rebuilding that takes place is arbitrary and oblivious of the existing city form and character of which it is a part. If this is allowed to continue, the character of the place will be transformed and the traditions and the cultural identity will be lost forever. A once unique city pattern and traditional architecture will be replaced by brick, concrete and steel which not only would be climatically unsuitable

but aesthetically appalling. This is our architectural heritage and it must be conserved and restored to its original glory.

Restoration is an immense task that requires a great deal of sensitivity so that the new that is built harmonizes with the old and the distinct identity is retained. The following steps would go a long way in realizing this:

- a. Preparation of a spatial plan in the present context.
- b. Restoring the houses to their original owners and involving the people in the rebuilding process.
- c. Curbing the use all materials that are not energy efficient and climatically suitable.

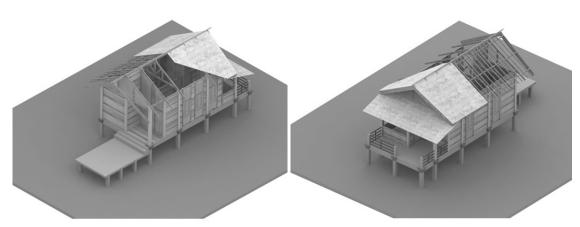


Figure 10: New Building Proposal

- d. Specifying the facade treatment so that the original character is retained.
- e. Reviving the Bazaar Street as a prime channel of movement with the buildings along the waterfront restored of their original glory.
- f. Design the waterfront as an interesting settlement whereby tourists can gain insight into the traditional lifestyles of the people.
- g. Laying down specific guidelines for all building within the heritage zone.

Considering the built environment as the result of a process of choice among alternatives, (Rapoport, 1976), the distinction between planned and unplanned environment was not very useful. The city is not one of cultural determinism, but rather the result of the interplay many variables. On the waterfront city of Agats, the pressure to provide public facilities, government buildings, as well as the desire to conserve the architecture of the city, and the separation between the settlers and natives, are the main aspects forming the morphology of the city.

Wang H, 2009, Space Configuration and Movemens Pattern of Chinese Traditional Settlement, paper in 7th International Space Syntax Symposium, Stockholm.

Walker Malcolm, 1974, Asmat Papers part I and II, Universitas Cenderawasih: Jayapura

Widodo J, 2008, *Morphogenesis and Layering of Southesat Asia Coastal Cities*, paper in International conference 'Asian Environments Shaping The World: Conceptions of Nature and Environmental Pratices, Asia Research Institute, Singapore

www.papuaweb.org/goi/pp/peta-hr.gif

REFERENCES

BP3D Kabupaten Asmat, 2005 Asmat Dalam Angka, BP3D Kabupaten Asmat dan Badan Pusat Statistik Kabupaten Merauke

Doxiadis C.A, 1970, Ekistics The Science of Human Settlement in Science vol. 170 no 2956 pp. 393-404

Indo-Pacific Conservation Alliance (2008), Newsletter January 2008

Kahn Miriam, 1996, Your Place and Mine in Sense of Place, Feld S and Keith H. Basso (Ed), School of American Research Press: Santa Fe

Lenski G and J. Lenski, 1978, *Human Societies*, McGraw-Hill: Tokyo

Rapoport Amos, 1969, House Form and Culture, Prentice-Hall Inc: Englewood Cliffs

Rapoport Amos, 1976, *The Mutual Interaction of People and Their Built Environment*, Mouton Publishers: The Hague

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