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The Influence of Overseas Trade on Housing Quality Among the Siassi of Papua New Guinea

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Summary

This paper presents a hypothesis explaining the low housing quality amongst the long distance overseas traders of the Siassi Archipelago. It appears that houses in Siassi are granted less importance than goods of traditional value. These goods — including dogs, canoes and wooden bowls — are an integral part of commercial exchange. They are highly valued at the socio-cultural level. Trade as an activity can thus be seen to have a major impact on the building and aesthetic quality of traditional houses. The article also discusses other issues contributing to the poor quality of housing.

Résumé

Cet article présente une hypothèse qui permettrait d'expliquer pourquoi, parmi les habitants de l'archipel du Siassi (Papouasie Nouvelle-Guinée) qui pratiquent le commerce outre-mer à longue distance, l'habitat est de basse qualité. Il semble qu'à Siassi on accorde moins d'importance au logement qu'aux biens traditionnels. Ces biens — y compris les chiens, canots et bols de bois — sont part intégrante des échanges commerciaux et sont acquis par ce biais. Ils ont une haute valeur socio-culturelle. On se rend donc compte que les activités commerciales ont un impact important sur les qualités concrètes et esthétiques des maisons traditionnelles. L'article traite également d'autres facteurs ayant contribué à la mauvaise qualité de l'habitat.

1. Introduction[1]

The topic of vernacular architecture in developing countries has rarely received much attention from research workers, and when it has, it has been treated in a derogatory manner (Gutkind, 1953; Groves, 1934). As Prussin (1974) suggests, this type of description points to the ignorance prevailing in Western cultures, while it reveals a conceptual fallacy and an ethnocentric bias in those conducting studies in developing countries.

These researchers have never attempted to find out why vernacular architecture manifests such diversity and complexity. Although two decades have passed since Rapoport's (1969) seminal work on house form and culture was published, little

[1] The author wishes to thank two anonymous referees for their invaluable comments on an earlier draft of this paper.

attempt has been made to relate socio-cultural requirements and housing form, shape and quality, or to evaluate the influence of the first on the second.

This neglect may be explained, in part, by a more general failure on the part of many scholars interested in vernacular architecture to try and explain the influence of a number of variables on housing and its quality. In effect, these authors persist in ignoring the fact that the quality of housing is a direct reflection of a complex interaction between many environmental forces, socio-cultural requirements being but one part of them (see, for example, Kaitilla, 1991). We use the term 'socio-cultural requirements' in a general sense in which they are what provides a means by which a given society shares ideas and meanings, organizes and fulfils social needs, and adapts to environmental conditions for the purpose of survival.

As Tognoli (1987, 655) reminds us, a home or a house has physical aspects beyond its more cognitive dimension. A growing segment of research has de-emphasized the physical aspects of housing, while showing an increasing interest in the social, cognitive, cultural and behavioural characteristics of inhabitants. These publications emphasize security, comfort, and the symbolic nature of houses (Tognoli 1987, 657-65). Our paper, however, will deal with the tangible aspects of houses, that is, those physical aspects that can be touched, felt, seen and experienced. Research in this area involves a cognitive evaluation of housing perception, preference, satisfaction and attachment (see, for example, Dovey, 1985, 43-44).

Scholars who have undertaken studies in the Siassi Archipelago have often been interested in the social, ritual and political aspects of overseas trading systems, while largely neglecting to explore the impact of such trading on housing (Harding 1967; Freedman 1967; Pomponio 1983). The present paper explores the influence and impact of overseas trade on the overall quality of housing amongst the Siassi — a people of Papua New Guinea. We shall describe housing in terms of construction quality and aesthetic appeal, these being the most visible aspects of any housing process. Our evaluation of housing quality is based, as suggested by Lawrence (1987, 149) on users' satisfaction or dissatisfaction with their current houses. This, in turn, is a function of users' expectations for the future.

Our main argument is that social and cultural requirements have fostered and enhanced trade links with other communities across the two Straits to the detriment of housing quality. Once the social and cultural requirements are grasped, and some insight is gained into their influence on overseas trading expeditions, the effects of trade on the quality of housing can be understood better. Specific socio-cultural characteristics of a society need to be thoroughly understood before housing quality is assessed.

In Siassi, that successful overseas traders enhance their social status in their home communities by giving feasts and distributing food stuff. This insures them being considered 'big-men', i.e., rich and powerful. It will further be shown that some of the items exchanged through this overseas trading system are regarded as goods of traditional value since they are very crucial when social payments are made, e.g., in connection with the brideprice.

This paper is based on first-hand observations and investigations by the author during a visit to the islands in 1990. As described below, almost all of the islands are very small in size. Five minutes are quite sufficient to walk through the already overcrowded housing layouts on any one of the islands. A number of visits were made to Aromot, Tuam, Malai and Aronaimutu, while the author maintained residence on Mandok.

No structured questionnaire schedule was administered to any specific sample of population. However, a number of villagers were interviewed on a variety of issues including perception, values and attitudes towards their present and future housing. Further, village elders were asked to state their values towards goods of traditional value in relation to housing. The arguments developed here will be supported, wherever possible, by secondary historical data. But first, a brief description of the Siassi Archipelago is in order.

2. The Siassi Archipelago[2]

The Siassi Archipelago lies north-west of mainland Papua New Guinea, between the Vitiaz and the Damper Straits. These islands cluster off the southeast coast of Umboi Island. There are a total of 18 islands among a maze of reefs and sandbanks; however, only seven (Aromot, Mutumalau, Mandok, Pore, Tuam, Malai, and Aronaimutu) are inhabited. The largest islands are Malai and Tuam (80 hectares each) and they lie 9 and 14 km respectively from the Island of Umboi. The rest of the populated islands are less than a kilometre from the main island, with Mandok and Aromot merely five and one hectares in size respectively.

From the point of view of climate, the whole of the archipelago is dominated by the north-south migratory inter-tropical convergence zone, and seasonal shifts of wind direction from the north-west to the south-east. The north-west season lasts from January to April, when it may be accompanied by a brief period of calm. The southeasterlies begin in May/June and last until October/November, interrupted by windless periods.

The January-April season is the hottest, with temperatures ranging from 20 to 32 degrees Celsius. The period starting May/June is the coldest, with temperatures ranging from 19 to 30 degrees Celsius.

European exploration of the Siassi Archipelago began in the middle of the 16th century. However, it was not until the 19th century (1830s) that Europeans first made contact with the local people, and by 1848 a European settlement was established across the Island of Umboi by some French missionaries, albeit for a very short period of time. By May 1885, the whole of Siassi Archipelago was included in the German Protectorate (Lilley, 1986, 40-41).

During the mid-1920s, the population of the Siassi Islands was a little over 700 people. It had more than doubled (to almost 1700 people) by the early 1960s, but decreased again slightly to a little more than 1600 people by the early 1980s. This decrease can be attributed to the exodus of young men in search of paid jobs and a brighter future in towns. The population of the islands has now undoubtedly grown beyond the figures for the 1980s, with Aromot and Mandok already overcrowded.

Due to the remoteness and poor environmental conditions, the Siassi support themselves through trade, having been important middlemen who took goods across the two Straits. Canoe construction, wood carving and the decoration of artifacts supplement their subsistence income. On the other hand, fishing provides their daily fish diet and it is not uncommon for the men of the villages to take part in collective fishing expeditions.

2 Much of the following information is extracted from Lilley (1986).

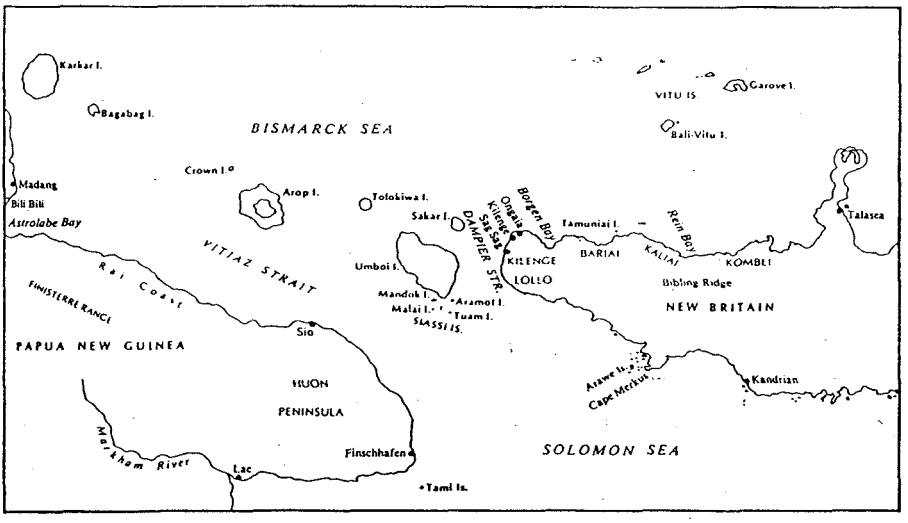

Fig. 1 The location and trading sphere of the Siassi people
La situation géographique et la sphère de commerce des Siassi

3. Socio-cultural Needs and the Overseas Trade

The Siassi's overseas trading pattern has received considerable attention from a large number of scholars, among them Lilley (1986); Pomponio (1983); Allice (1976); Harding (1967, 1970); and Freedman (1967; 1970). Two factors may have contributed to this extraordinary interest: (i) easy accessibility and (ii) lack of malaria carrying mosquitoes on the islands, as opposed to the mainland.

As argued below, the trade is based on a barter system. This system was, and still is, vital both for social needs and, most importantly, for the fulfilment of socio-cultural requirements. It has thus withstood the effects of colonization and Christianity. For instance, it has been alleged that missionaries and colonists made a number of attempts to modify the native culture; but on Siassi they failed (Lilley, 1986). Various attempts to encourage off-shore agricultural activities on the Island of Umboi equally failed to a large extent. And since overseas trading has operated quite efficiently for many years, it has become part of the people's life.

Although several environmental factors have fostered this trade pattern, two of them stand in the foreground. First, most of the islands are characterized by unsuitable soil conditions, together with an acute shortage of land for general agriculture.

Second, and most significant, socio-cultural requirements in the region have, by and large, fostered a series of exchange of goods of traditional value (Harding, 1967, 1970). The chief motive of this exchange pattern has been a desire to acquire the goods of value required during feasts, ceremonies and self-glorification rituals. The process of bartering one kind of object of value for another upon a reciprocity basis has helped

intensify and add to the complexity of the social texture of the community and of the intercommunal life.

Through this form of trade, the Siassi crossed the Vitiaz Strait and went as far as Madang, Sio, Finschhafen, and down to the Island of Tami. Across the Damper Strait, they went as far as Arawe Island and up to Kilenge (see Fig. 1). Throughout all these expeditions traditionally accepted valuable goods changed hands, some only once, others twice, or even several times (see also Mead, 1975, 86, for the case of Manus). Many exchanges could take place before a specific good that was sought after was acquired. Mead (1975, 81) notes the complexity of this trading pattern:

> "To the Manus adult, trade is the most important thing in life; trade with far-away islands, trade with the land people, trade with the next village, trade with his relative-in-law, trade with his relatives. His house roof is stacked with pots, ... his boxes filled with dogs' teeth."

For example, the Siassi relied on the Tamis to buy wooden bowls (Fig. 2). The Tamis, whose island lies South-East of Finschhafen, were famous for carving wooden bowls, while the Siassi were famous for making canoes. Pomponio (1983, 59) presents a detailed discussion on how the two peoples exchanged the rights of trade marks. The Siassi carried with them to Tami Islands boars' tusks for the same purpose. Dogs that were bought by the Siassi from other places were exchanged for pigs. Most of the canoes made by the Siassi, similar to those in Fig. 3, were sold to outer islanders, or sometimes exchanged for pigs and other food items such as taro and yams.

Fig. 2 A wooden bowl from Siassi
Un bol de bois de Siassi

The importance of these traditional items has been underlined by several authors (Allice, 1976, among others). Pigs, pots and wooden bowls were, and still are, socially and culturally important during feasts, initiation rites and other traditional ceremonies. Other goods with a traditional value, for example arm shells shaped like

troches, were also traded. Most of the traditional valuables are still worn as personal adornment during special ceremonies, festivals and singsings. Feasts still play an important role and one informant reiterated that no family would dare initiate a male child if they could not afford to offer a large feast. More importantly, however, some of the goods played an essential role in social functions such as the payment of the brideprice required to *bai meri* (lit. 'to buy a woman').

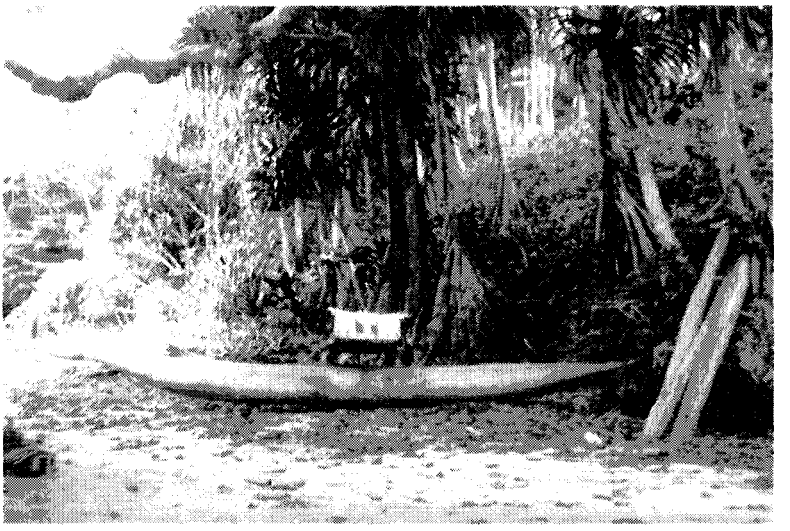

Fig. 3 Canoes made from timber trunks, Tuam, Siassi
Canots faits de troncs d'arbres, Tuam, Siassi

Further, the Siassi also made extensive trading expeditions for political reasons. For instance, as Harding (1967, 155-158) notes, one of the main wishes was to amass large quantities of pigs for political status. It was not uncommun, for example, for many people to enhance their position in their own community through the distribution of food, through the large-scale display of traditional items considered as signs of wealth, or through competitive feast-giving. This indicates further that the overseas trade played a significant role in the political lifestyles of the people.

In every community in Siassi, discussions about overseas expeditions and the allocation of the trade profits usually took place in the men's house (see Harding, 1967, 5-6). The men's houses thus fulfilled an important function and, as was expected (Dark, 1979, 138), they were the most elaborately and colourfully decorated buildings — as is the case elsewhere in Papua New Guinea (see, for example, McDowell, 1991, 39). However, our study showed that among the Siassi the men's house has either completely lost its importance (Tuam and Aronaimutu) or is now playing a minor role (Malai, Aromot and even Mandok; see Freedman 1970, 160). On the other hand, the men's area – an area where men's toilets are located and bathing activities take place – has kept its importance.

4. The Impact of Trade on the Quality of Housing

The preceding section has elaborated at length on the importance of trade to the people of Siassi. We have shown that, besides the social and cultural requirements, the overseas trading system was, to some extent, fostered by ecological factors such as the lack of suitable land for general food and vegetable gardening. For instance, the people of Mandok consider that the work required to maintain vegetable gardens would interfere with the time that would otherwise be allocated to overseas trading (see, for example, Allice, 1976).

In order to thoroughly understand the impact of the trade, we need to consider it first as a form of activity. Any society's activity system can be seen as an important link between the group and the built environment. Rapoport (1976) shows that any activity mediates the relation between the quality of the built environment and the socio-cultural requirements.

In more than one way, housing is a reflection of one's achievements, values, and aspirations, all embedded in social and cultural aspects. At a socio-cultural level, a house acts as a link between people and their society. But as an artifact it has, as noted above, a physical or tangible aspect that also links people with their environment (Kaitilla 1990, 153).

The housing process, like all works of art, is a goal oriented activity. All cultures design and build houses and this activity requires special skills, but also a creativity to which strong feelings can be attached. Another very significant factor is that, like all artifacts, houses manifest two qualitative aspects: a constructional and an aesthetic one. The first element refers to how a building is designed and built; this requires a certain level of formal and informal technical ability, i.e., creativity. The second refers to an aesthetic dimension that is often based on external appearance. Throughout history man has always taken great care in decorating his utilitarian objects with symbolic elements. Symbolic decorations have always been essential to human civilization as a means of achieving expression of the collective subconscious emotion — be it fear, respect, pride or joy. Ancient tribes and rural communities produced carvings and sculptures to symbolize the unknown and the mysterious (see Gutkind, 1953, among others).

In housing, the qualitative appeal must be experienced as houses are designed and built to create and sustain an impression. For instance, exterior decorations, front gardens and landscaping are often used to serve this purpose. The Siassi allocate a substantial portion of their time to the skillful and elaborate carving of wooden bowls, canoes and other artifacts, yet they do nothing to give their housing an aesthetic appeal. The decoration of objects is connected to symbolic, decorative and ritual reasons, but it is also to do with ancient trade marks (Fig. 4). Both elements are essential for maintaining the competitive nature of the trade.

As Harding (1970) notes, some of the transactions entailed multiple overseas voyages and their fruitful completion would require months and often years. This means that, unlike agricultural communities, the Siassi have to labour long and hard to accumulate small amounts of food supplies and, most significantly, objects of traditional value. This may explain why they have allocated little time, energy, resources and patience to the construction and decoration of their own houses. According to informants, the Siassi consider that the construction of houses is less challenging than is carving snake, lizard and crocodile motifs on wooden bowls, canoes, drums and

Fig. 4 Such colourful decorations on objects of art are common on Siassi
Les objets d'art décorés d'ornements multicolores se trouvent souvent à Siassi

Fig. 5 Most houses in Siassi do not show the artistic skills of the people
La plupart des maisons de Siassi ne témoignent aucunement des dons artistiques des habitants

other implements of hunting or fishing. Undoubtedly, such attitudes and the time required to acquire these goods have contributed to the neglect of aesthetic dimensions in housing. Almost all houses are neither as elaborately decorated as most canoes and wooden bowls, nor skillfully constructed. They are devoid of both the artistic skills and the symbolic values of the people (Fig. 5).

Rapoport (1969) argues that the lack of aesthetic pretension is one of the characteristics of vernacular architecture. This is also true of the houses on Siassi. However, in Malai the act of drying cooking utensils out-of-doors has strong symbolic significance, as it allows families to display their social status. On the other hand, there is evidence of the application of artistic decorations on dwellings and cult houses among other Papua New Guinean societies (Craig, 1988, 31-44).

The evidence from Siassi indicates that the Siassi people have not used their decorative skills for housing. It is obvious that other socio-cultural requirements have taken precedence over housing construction standard in general and aesthetic appeal in particular. Similar traits have also been observed in other cultures, e.g., among the Masai of East Africa. The Masai spend most of their time grazing huge herds of cattle, in themselves a status symbol reflecting one's social, economic and political standing; the task of providing houses is left to women.

The second factor contributing to the low quality of housing in Siassi is related to the commodity value attached to the houses. Unlike other goods of traditional value, houses cannot be sold, bought or exchanged for other traditional items, nor can houses be used in special payments, for instance, brideprice. What emerges from this line of argument is that houses cannot be as highly valued as canoes, wooden bowls, pigs, dog's teeth or even as food stuffs. It might also be suggested that any item that belongs to women — houses being one of these — is granted less value (personal communication from C. Barron, 1990). Further, the issue of land ownership is closely related to the commodity value of the houses. Selling one's house would automatically mean selling one's rights over the customary landholding on which it stands; this is rarely done.

A third factor further contributes to both the low quality of and the lesser importance attached to houses: people's perception of their dwellings. Many informants referred to the traditional houses as *temporary*, whereas those built by using 'modern' building materials such as timber, plywood, fibro and metal sheeting are considered *permanent*. Austin (1990) mentions a similar phenomenon in other Pacific countries. What it means is that, given financial constraints and the remoteness of Siassi from major urban centres, the Siassi, like many others, use local building materials as a short-term solution, always hoping to replace them (Kaitilla, 1991).

As a result, young couples are often forced to reside in one of the parents' house for quite some time. On the other hand, in many Papua New Guinean societies unmarried men are not expected to own a house. This is simply because socially and culturally, unmarried and uninitiated men sleep and spend most of their time in the men's house. Furthermore, the housing process is greatly exacerbated by the general scarcity of basic building materials on the islands. And, with the exception of Tuam and Malai, the remaining islands are characterized by a shortage of land for housing. Attempts to persuade young people to migrate to the larger island of Umboi have met little success. The prevalence of mosquitoes on Umboi and a lifestyle that differs from that of a small island, deter many of them from leaving the archipelago.

On Siassi, most of the building materials have to be collected and stored from outside the islands. For instance, sago leaves that are essential for roofing are usually fetched from Umboi. Most of the other materials, for instance those used for the construction of walls and floors, are normally collected from drift wood on the sea, or wooden planks of old or broken canoes are used. Harding offers a succinct description of the materials used in walling:

> "... placed together from small irregular planks cut from drift wood and waste lumber, ... while old canoes ... provide large planking" (Harding 1967. 121).

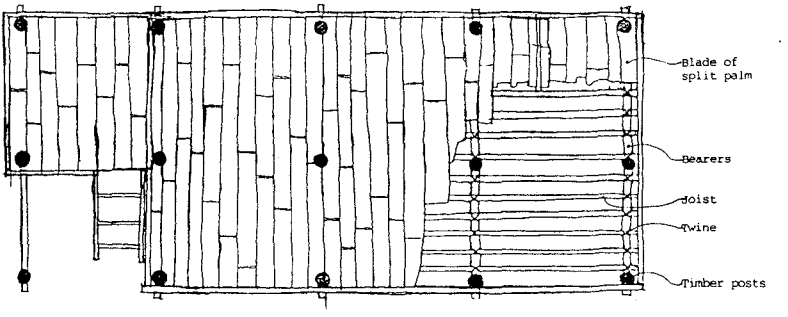

Fig. 6 Typical Floor Construction
Construction de sol typique

Figure 6 gives detail of a typical floor construction. Once sufficient building materials have been collected, several holes are dug in the ground; in those wooden stumps footing are erected at a convenient distance from one another, usually not more than three normal walking steps of an adult male. Bearers and floor joists are then put in place by tying them with cane, twine or nails. The use of cane has the added advantage that it can be re-used if the need arises.

Once the floor joists are in place, the floor is constructed. It is kept at a convenient level off the ground, so as to allow domestic activities and/or storage under the house. In most traditional dwellings flooring is done by using blades of split bush palm. These are usually straight; they are laid with the outer smooth surface facing the inside of the house. Only mature palms are suitable for flooring.

On Siassi almost all dwellings are basically identical in shape, space, function and utilization of materials. For instance, descriptions about the type, size and quality of houses built some three decades ago still apply today. According to Freedman, the houses:

> "[Vary] ... in sizes ... [But] most houses are small (4.5 x 4.5m) single family dwellings, often divided into two rooms, split into two apartments accessible from a front veranda" (Freedman, 1967, 134).

As has been suggested by Rapoport (1969) and Gutkind (1953), this is typical of many primitive societies where the form and construction of houses lack differentiation. However, in-depth analysis shows that this is a socio-cultural phenomenon, whereby the size, form and space organization of houses are greatly influenced by environmental factors.

On Siassi, these houses are essentially reserved for sleeping and storage. Adolescent male children sleep in *haus boi* (lit. boys' houses), while girls still sleep in their parents' house. Much of the daily domestic activities take place under the house or in the shade of a tree. On the whole, these houses provide little privacy and they are endowed with few symbolic or psychological attributes.

5. Discussion

It may be argued that the low quality of housing on Siassi is largely due to the lack of the tradition in building houses on stilts, these having been imposed on the population, as elsewhere, by various colonial administrations (Clay, 1986, 100-119; 264). However, as Austin (1990, 148) suggests, in an attempt to assimilate and build the Western housing type, slippages have occurred. This is true of many traditional societies (see also Hinshaw, 1989), where the final product is neither Western nor traditional. It is also possible that the methods of construction used for these houses do not allow for easy adaptation to traditional building techniques and skills.

We may also argue that strict observance of a *trade mark,* still persistent amongst the Papua New Guinean societies, undermines housing quality. These societies are not keen on reproducing an object of art, be it a snake or a crocodile motif on a wooden bowl, if that object traditionally belonged to another tribe. In other words, no tribe would get involved in producing an artistic object that is not part of its culture, since this would constitute a grave offence and may start a bloody feud (Reichard, 1969). In a way, this was confirmed by one informant whose house shape was completely different from others on Mandok. This man is married to a Mandok woman but he comes originally from the far away island of Arop, North-West of the Siassi Archipelago. He alleged that his house design was typical of his island. When asked what he would do if someone were to build a house similar to his without seeking his permission, he said that he would pull it down since this would be a gross negligence of trade marks.

As mentioned earlier, the craft of wooden bowls carving did not, originally, belong to the Siassi: they learned it *in toto* from the Tamis. Today, the Siassi are excellent carvers, just as good as the Tamis themselves. This is an example of a trade mark having been taken over. Thus, if we remember that the same materials and tools are used for making canoes and bowls and for making floor and wall planks, we may wonder why the Siassi are not constructing houses whose overall quality is commensurate to their artistic skills.

6. Conclusion

The premise adopted in this paper is that the quality of housing is largely defined by socio-cultural requirements. The Siassi constantly focus on maintaining the overseas trade, while seeking to acquire traditional objects of value that may enhance their social status. Their social organization thus allows little time, patience, energy and resources to be allocated to the construction of their houses.

Further, due to the symbolic importance given to goods of traditional value, houses have no commodity value similar to that accorded to pigs, dog's teeth, arm shells. Our reflection on the Siassi seems to confirm that, in analyzing a society's housing quality, it is of foremost importance to have a close look at that society's activities within their socio-cultural context.

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