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Pig and Man in Papuan Societies: Two Cases from the Seltaman of the Fringe Highlands and the Gidra of the Lowland

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Тотоуа Акімісні

1. Introduction

In New Guinea pigs have played important roles in the life of the people. Some societies hunt wild pigs while others raise domesticated pigs [QUARTERMAIN 1981]. The rest are either pigless societies or those that engage in both hunting and domestication.

Man's association with pigs ranges widely between pig hunters and pig-raisers. Hunting and domestication appear to represent two distinct systems of thinking, sentiments, and behavior towards pigs. For instance, pig hunters, equipped with bows and arrows, know the feeding habits of pigs and small paths in the bush used by pigs. Through successful hunting, the bulk of their meat is obtained. The lower jaws of the victim become a sign of social prestige.

On the other hand, for the pig-raisers, the growth of pigs, their diseases, and the amounts and kinds of food given to them are great concerns. The pig is often treated like a human baby, and becomes a source of fame and prestige for the raiser in the long run. How is such a difference of association crystallised in the conception and behavior of people towards animals?

In this paper I examine the role of pigs in two Papuan societies with special reference to man-pig relations from the ethnoecological view. By ethnoecology I mean a study of the conception and behavior of the people interacting with the surrounding environment.

Data are derived from my own fieldwork among the Seltaman (Fringe Highlands) and the Gidra (Lowland) of the Western Province, Papua New Guinea. In the former society, pigs are a group of animals associated with both hunting and husbandry. On the other hand, pig husbandry does not exist among the latter [Ohtsuka 1983], and pigs are big game for hunting. How such a different mode of subsistence may affect certain aspects of the cognition, and behavior of the people, is the focus of the present study.

Fieldwork was conducted among the Seltaman in 1987, and the Gidra in 1980–81, and 1990, respectively. First, I will describe the status of pigs in the folk taxonomic realm. Secondly, the treatment of pigs is described in the economic as well as social spheres. Third, the consumption of pork is examined in relation to

hunting records and slaughtering episodes. Lastly, relations between man and pig are discussed.

2. Pigs in New Guinea

2.1. Pig Husbandry

It has long been suggested that domestication of the pig (Sus scrofa) has a long history in the Old World. From mainland South East Asia into New Guinea, pigs are said to have been introduced about ten millennia ago [SWALDING 1981; GOLSON 1982]. East of the Wallace line, all the pigs appear to be of vittatus stock [SAUER 1952: 33] and specifically in New Guinea, wild and domestic pigs are genetically of a continuum, and are a stock of Sus scrofa papuensis [GROVES 1981: 64-66].

As has already been suggested, there exist two distinct systems of pig husbandry in New Guinea [Baldwin 1978, 1982]. One is intentional pig-breeding practices; most village male pigs are castrated except for a few selected stud boars which are for serving village sows. Pigs are controlled and supervised under the bigman of the group while women and children participate in the pig-rearing. This practice is found in the Central Highlands of Irian Jaya [Heider 1972; Pospisil 1963], the Highlands of Papua New Guinea [Held 1957; Feachem 1973; Clarke 1971; Leroy 1979; Sorenson 1972; Strathern 1971a], New Britain, New Ireland [Powdermaker 1933], and the Solomon Islands.

On the other hand, in the other pig-rearing system, all the male pigs are castrated at the age of a few months, while the village sows mate with wild boars in the bush and forests. Sows with a litter are carefully watched and new-borns are brought back to the village and fed by both men and women. Clearly, in this system pigs cannot be seen as the domesticated animals of the societies which breed them, but are of a semidomesticated nature. This practice occurs extensively in the lowlands, and hilly places of Papua New Guinea [Baldwin 1978:23; Hughes 1970; Kahn 1986; Laycock 1975; Dosterwal 1961; Morren 1977, 1979; Williams 1924, 1936].

Distribution of the two pig-husbandry systems does not usually overlap. Geographically speaking, altitudinal differences in the distribution of pig-breeding in the highlands and pig-rearing in the lowlands seem apparent as far as the mainland of Papua New Guinea is concerned [Baldwin 1982]. However, pigrearing is also practiced in the Highland Fringe areas, as shown in this paper and elsewhere.

As an explanation for this, it is hypothetically proposed that pig-breeding was established after the introduction of sweet potatoes (*Ipomoea batatas*) into the Highland areas some 400 years ago [Yen 1974]. The introduction of sweet potatoes has enabled the people to raise many more pigs by adopting a fodder-based pig husbandry, and eventually brought about population increase [Watson 1965, 1967, 1977], although doubts are expressed as to the ability of sweet potatoes to affect

population levels [Brookfield and White 1968]. On the other hand, the difference in number of pigs per capita is significant between the two areas; in the Highlands it is 1.0 or more while in the lowlands it is between 0.1 and 0.3 [Modjeska 1982; Kelly 1988].

2.2. Pig Hunting

Contrary to pig husbandry, pig hunting has not been well examined nor has it actually received much attention. Literature dealing with pig hunting is far less than that dealing with pig-husbandry [Cooper et al. 1981]. This is partly due to the fact that pig domestication is far more important in the Highlands than hunting, which is a minor activity. Indeed, in terms of animal distribution, wild pigs are not generally abundant at altitudes above 1,000 meters and are sparse or even absent, especially above 1,500 metres [Dwyer 1983: 161]. In the lowland areas, however, wild pigs are abundant and hunting plays a much more important role than in the Highlands [Bulmer 1968; Ohtsuka 1983]. In particular, the contribution of hunting to the local diet is far more important in these areas than in the Highlands. Encounters with pigs are sudden or abrupt, and eventually brings about either the animal's death or flight. Emphasis is then placed upon capture, rather than upon taming.

The tools and techniques employed for pig hunting are bows and arrows, pitfalls, spears, snares, and dogs, among which bows and arrows appear to be the most common, and exhibit a wide distribution. No significant differences of distribution of techniques and tools for pig killing can be found in New Guinea.

While the relations of pig hunting to head hunting need careful consideration, as wild pigs may have metaphorical associations with men in head hunting practices, this will only be discussed in the final version of this paper.

3. Land and People

3.1. Seltaman

The Seltaman, or more precisely the Seltamanmin, is a small group that inhabits the mountain ridge of the Yii river valley, one of the uppermost tributaries of the Fly River (Figure 1).

Geographically, the area of study is located around the upper Murray River region, the uppermost part of the Fly and Strickland watersheds. Hence, the habitat is mountainous, rugged and remote, skirting around central ridges. The altitude ranges between 600 and 1600 meters above sea level. The climate is generally humid and rainy, and annual rainfall reaches over 8,000 mm [MCALPINE et al. 1983].

Due to its geographical isolation, the less comfortable climate of heavy rainfall and thick cloud cover, and the sparse distribution of people, the Highland Fringes have been little visited in comparison with the densely populated and well-studied

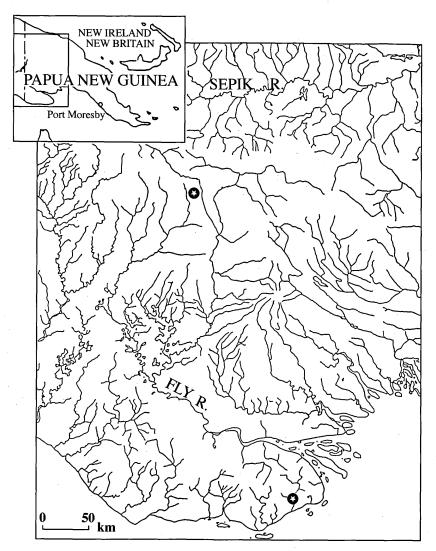


Figure 1 Locations of the Study Areas

Highlands and coastal areas [Weiner 1988]. In some of these regions first contact was not made until the early 1960s under the Australian administration. Post-contact changes were at first gradual, but since independence in 1975 drastic changes have occurred; the Ok Tedi project which started in the late 1970s and its influences have had a serious socio-economic impact upon these groups [Ohtsuka 1987: 207–219].

Even under such circumstances, however, the general conditions of village life have remained the same as before, and the local people have suffered from being underprivileged. The absence of airstrips has also isolated villagers from the

outside world. The nearest village facilitated with a small airstrip is located about eight hours' walking distance from the Seltaman village.

The language spoken by the people belongs to the Mountain Ok subfamily, a member of the Central-Southern New Guinea Stock of the Trans-New Guinea Phylum [Wurm 1982]. Some 210 Seltaman-speaking people live in two villages: Mwomogabip and Woktembip which are one hour walking distance apart, the former being the major village. The present location of Momogabip is about 1200 meters above sea level.

Nearby groups that used to be hostile or maintained friendly relationships as trading partners include the Baktaman and Fakobip to the west, the Awonkalmin to the north, and the Selbang to the northwest. Farther areas are occupied by several Min-speaking people such as Bimin, Kusukusumin, Tiflamin, and so on.

The Seltaman are a horticultural people in the Fringe Highlands of Papua New Guinea. Seltaman subsistence is characterized by cultivation of taro and sweet potato, and pig husbandry. Sweet potato is a major crop. Sweet potato gardens are scattered on hill sides and cleared terraces nearby, and shifting occurs every four or five years.

Besides sweet potato, two kinds of taro are also cultivated. One is Chinese taro (tim: Xanthosoma sp.) which was introduced to this area during the 1970s. This taro is cultivated favourably in wet soils of terraces near small creeks. On the other hand, Colocasia esculenta taro or imen used to be a traditional subsistence crop before the introduction of sweet potato to this area and still remains important for the villagers.

During the months of December through March and April, all the villagers move to the taro gardens at a higher altitude (ca. 1,600 meters) for cultivation. This shift coincides with the growing season for sweet potatoes. At the higher altitude Selbang village (1,600 meters), taro is a dominant crop whereas in such villages as Woktembip and Fakobip at lower altitudes (1,100 meters and below) the importance of taro is minor.

The seasonal and vertical migration of the Seltaman villagers seem adapted for sustaining food on a year-round basis. It should be remembered here that people divide *Colocasia* taro into two categories; hot place taro (ngiip imen) and cold place taro (ilen imen). The former is cultivated at the lower altitude village territory at 1,200 meters, and the latter at the higher altitude of 1,600 meters above sea level. The hot-cold dichotomy is also based on the people's division of their habitat into lower (hot: ngiip) and higher (cold: ilen) places. Pig husbandry is another focus of village subsistence. Individual families usually own pigs. The number of pigs raised varies according to the family, but is between two and four on average. The practice of pig-husbandry will be described in detail in the following section.

Hunting is a subsidiary but important activity for men. Bows and arrows are a major tool for hunting. Game animals include wild pigs, cassowary, cuscus, birds, lizards, snakes and fish, for larger animals are not abundant in the area. Spring snares and pitfalls are sometimes made, but these methods appear to be

ineffective. The bird-watching hide is a unique technique to ambush bush-fowl. The hide is built either on the ground or on a tree.

3.2. Gidra

Some 1,800 Gidra-speaking people live in the lowlands of the Oriomo Plateau (Figure 2). The language spoken belongs to the Eastern Trans-Fly family of the Papuan languages [Wurm 1971]. The habitat of the people is characterised by monsoon forest and savannah in which numerous creeks and small rivers flow. Of the thirteen villages of the Gidra, four are riverine, one is coastal, and the rest are inland in location. Ume, the village studied, is one of the riverine villages and is located midway along the Binaturi river, which runs down to the Torres Strait. The population of Ume village was about 260 in 1990.

The climate is tropical and humid. Annual rainfall reaches 2,000 mm, which is less than in the highland fringe areas. Seasonality exists and a fairly dry season (June to November) and a wet season (December to May) can be observed [Ohtsuka 1983]. Due to the low altitude, as low as 40 to 50 meters above sea level,

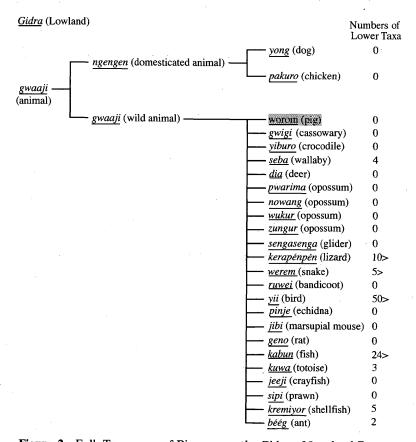


Figure 2 Folk Taxonomy of Pigs among the Gidra of Lowland Papua

long-term rains often cause flooding during the wet season.

The Gidra territory is sparsely populated, with a population density of only 0.6 per sq km. However, access to the outside world is fairly easy. From Ume it is a six hour trip to Daru, the capital of the Western Province via Binaturi river and along the Papuan coastal waters by dinghy, a canoe equipped with an outboard engine. Public sea transport has recently become available between Daru and the nearest point on the mainland. People must walk in the swamps for a few hours to reach the coastal point. The people can easily obtain imported goods such as rice, flour and tinned meat from markets in Daru. A pumping station is operating near Ume village for the supply of water to Daru, and frequent visits of the government boat for supplying petroleum to the station often bring goods and information from Daru.

Gidra subsistence is mixed, but it can be roughly divided into three: sagomaking, gardening, and hunting. In inland villages the emphasis is on wild game hunting, whereas in riverine (Ume, for instance), and coastal villages fishing is also important. Sago (*Metroxylon* spp.) is a staple food of the people, and every sago swamp is claimed for ownership by particular individuals. For making sago, families often take trips to the sago swamps that last for between one and fourteen days. In Ume, sago swamps are located within a radius of about ten kilometers to the east and north.

Gardening is a second important activity for procuring starchy food. Taro (voor: Colocasia esculenta), yams (kucur: Dioscorea alata, and sura: D.esculenta), sweet potato (nger: Ipomoea batatas), and banana (sela: Musa spp.) are the major crops cultivated. Other than these, cassava, elephant-foot yam (gweb: Amorphophallus spp.), corns, pumpkins, pineapples, aibika (Abelmoschus sp.), and beans are planted for subsistence use. Coconut is also important as a source of ingredients for cooking, and coconut water for drinking. Wild nuts and fruits such as Pandanus, Canarium, and Gnetum are served as a subsidiary diet.

Due to floods, gardens are sometimes spoiled during and around the rainy season. Also, wild pigs, deer, and birds damage the gardens. The villagers make their gardens in dry places, and temporarily shift their settlements to another place during flooding.

Hunting is a task for men. Bows and arrows are the major weapons utilized. A few men have guns, which are used for big game hunting. In the lowland areas of the Oriomo Plateau, monsoon forests and savannah allow a rich fauna. These provide a good source of food for the Lowland dwellers. The variety of wild animals taken include wild pig, cassowary, wallaby, deer, opposums, snakes, monitor lizards, and birds. Dogs are often used for chasing big game. Pitfalls and spring snares are used either in sago swamps or gardens, often with success.

In Ume, fishing and shell-collecting are important. Line, fish poison (*Derris* spp.) and spears are major techniques employed. Barramundi, catfish, mullet, prawns, crayfish, tortoise and other small freshwater fishes are taken. Crocodile is hunted and the skin is sold to Chinese merchants in Daru.

Animal husbandry is lacking in Gidra [Ohtsuka 1983], but duck, chicken and dogs are raised as a small-scale activity. Clearly, this may not be an indigenous type of subsistence activity.

4. Pig and Culture

4.1. Folk-Taxonomy of the Pig

In this section, the classification of pigs in the folk-taxonomy of the Seltaman and Gidra societies is described (cf. Table 1).

4.1.1. Pigs among the Gidra

Among the Gidra, animals (gwaaji) are classified into domestic (ngengen) and wild (gwaaji). Ngengen includes dogs (yong) and chicken (pakuro), while gwaaji includes a large spectrum of animal species such as ants, freshwater invertebrates, amphibians, reptiles, birds, and mammals.

It should be noted that gwaaji is polysemic in its use; it denotes animals which, together with edible vegetables, constitute edible food (ngina). Thus, gwaaji has three meanings; animals in general, wild animals and edible animals. It can be recognized that wild animals included in the folk-classification are those used for food, and that inedible ones are not included (Figure 3). Other than these points, it should be noted that the original term for hunting is gwajap; i.e. "wild animals in the bush (yaap)".

At the lower level of animals (gwaaji), there are generic taxa which include wild pigs (worom), cassowary (gwigi), snakes (werem), wallaby (seba), crocodile

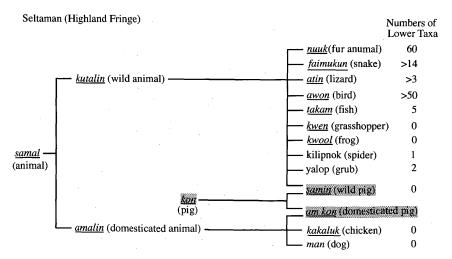


Figure 3 Folk Taxonomy of Pigs among the Seltaman of Fringe Highlands of Papua New Guinea

Stage of Growth	Gidra	Seltaman konmen		
New-born Infant	worom wegra ngarungei-ngarungei			
Juvenile Adolescent	sobujog worom guzongotkeeb	kon katik		
	woira—	kon wasel		
Mature	 wipãor (♂) wugogam (♀)			
Full mature	wororu worom mongãt worom	kon wasel amusun		
Male 3	rivi	kon kimok		
Female ♀	mongãt	kon igis		
Castrated ϕ	. 	kon bukulop		

Table 1 Vernacular Names of Pigs by Growth Stage

(yiburo), lizards (kerapénpén), opossum (pwarima), birds (yii), fish (kabun), bandicoot (ruwei), marsupial mouse (geno and jibi), prawn (sipi), tortoise (kuwa), crayfish (jeeji), bivalve shell (kremiyor), and ant (béég). At the lower level of these generic categories, are included, in some cases, specific categories. For instance, seba or wallaby includes three lower taxa; seba (grass wallaby), giwir (bush wallaby), and cuxa (small bush wallaby). Similarly, yii or birds include more than fifty lower taxa. Pigs, cassowary, crocodile, bandicoot, shrimp and crayfish do not, however, have lower taxa.

As explained above, no specific categories exist at the lower level of the pig taxon. The pig is, however, further divided into certain categories by age and sex; new-born (worom wegra), infant (ngarungei-ngarungei), juvenile (sobujog worom) and adolescent (guzongotkeeb), these subcategories are not sexually distinguished. On the other hand, mature pigs are termed generally woira and these are further divided into boar (wipãor) and sow (wugogam). Fully-grown pigs are termed either wororu worom (male) or mongãt worom (female). Boars are generally called rivi whereas sows are mongãt.

4.1.2. Pigs among the Seltaman

In the folk zoology of the Seltaman, a general category for animal is *samal*. *Samal* is clearly divided into wild animals (*kutalin*) and domesticated animals (*amalin*). Here, it is to be noted that the distinction between *kut* and *am* is applied to both wild and domesticated animals. *Kut* denotes "forest" while *am* denotes "house". Among the wild animals, a variety are included. These form taxa at the generic level; wild pig (*samin*), cassowary (*as*), birds (*awon*), snakes (*faimukun*),

lizards (atin), fish (takam), frog (kwool), grasshopper (kwen), spider (kilipnok), grub (yalop), and furry animals (nuuk). The last contains more than fifty lower taxa which correspond to species of gliders, possum, marsupial mouse, and echidna. Nuuk occupy a unique position in the folk classification as they are related to rituals and taboos [Barth 1975].

On the other hand, domesticated animals include dog (man), chickens (kakaluk) and pigs (am kon).

Here, we can see the unique position of pigs in the folk-taxonomy. Kon is a general term for pigs, and it is further divided into domesticated pigs (am kon) and wild pigs (samin). Referring to the division of animals into wild and domesticated sectors, the pig itself occupies an intermediate position in the taxonomy. This does not indicate ambiguity in the Seltaman folk-taxonomy [Leach 1965], but a continuity of the two.

Unlike the case of the Gidra, wild pigs are not further classified into categories by sex and age. On the contrary, domesticated pigs are distinguished according to stage of growth: piglet (kon men), juvenile pig (kon katik), mature pig (kon wasel), and fully-grown pig (kon wasel amusun), and sex is not included in the categorization. However, more generally the sex of pigs can be indicated; boar as kon imok and sow as kon yangos or kon ingis. Boars are usually castrated at the juvenile stage, by village elders using a bamboo knife. A gelded pig is called kon bukulop, which denotes literally testicles. Escaped pigs are called am kon sakabese.

4.2. Hunting versus Domestication

4.2.1 Hunting

For the Gidra, pig hunting is the focus of men's activity. Success in hunting not only brings meat but also enhances a man's fame. Indeed, famous hunters used to preserve the lower jaws of wild pigs as trophies and hang them round their shoulders whenever they wished to demonstrate their success. Other than pigs' lower jaws, cassowary pegs or sticks of wild black palm trees were used for keeping tab of the number of kills. In the Morehead region which is 200 km westwards from the Gidra territory, wild pig jaws were also hung on a pole where the animal was killed [Williams 1936].

Thus in the lowland areas the emphasis is on the hunt, and not on the raising of pigs in the village. According to the villagers pigs get fat during the wet season. But this does not mean hunters devote much more time in the wet season than in the dry in order to obtain fattier meat. The opportunity to hunt is less due to flooding in the wet season (See the discussion on the difference of hunting intensity between the wet and dry seasons mentioned in Ohtsuka [1983].) For the Seltaman, wild pig hunting is also regarded as the most important task for the men. However, due to the scarcity of the wild pig in the area, it is not common to see hunters bringing back a kill to the village.

4.2.2. Domestication

In the Gidra, pig-rearing is not practiced, while pigs are raised by nearby groups such as the Kiwai and Bine-speaking people. What is the reason for the absence of pig domestication? During my stay in 1980, a juvenile pig brought from the bush was being raised in a cage by one widow and her family. But the villagers complained of the bad smell and noise of the pig. Also, some of the villagers told me that in the forests young piglets tend to be attacked by hunting dogs and that it is rare to be able to bring back piglets alive. If hunters happen to find piglets in the bush, they never kill them. This is a means to preserve the immature pigs until they grow large enough to be hunted in the future.

I also observed baby wallabies and pigeons that were brought back from the bush and fed by the villagers. But these are for pets, rather than domestication.

Among the Seltaman, feeding pigs is not a careless business for the villagers but an important and often troublesome routine. First, the food given to pigs is chosen according to their growth stage. Piglets and immature pigs (kon men and kon katik) are fed both in the village and in the forests. The food given in the village quarters consists of the left-overs of vegetable meals (skins of sweet potato, taro, and cassava), the meat of small birds, frogs, lizards, snakes, cuscus and so on. Feeding in the village occurs usually in the morning and the evening during or after the villagers' own meals.

During the daytime, a care-taker takes a piglet to the bush near the village or the garden. Pigs forage for small worms (*kasim*) underground or for any other food available. The reason for this bush-foraging practice is explained as a means of preventing a fatal sickness of the piglet. This sickness, caused by eating only scraps in the village is called *kibi*.

As pigs grow to the *kon wasel* stage, vegetable food such as taro, sweet potato, and cassava is preferentially given and animal food is banned as a rule. In the daytime pigs wander about in the village and nearby areas. It should be noted that mature pigs are basically vegetarian while piglets have an omnivorous diet.

Domesticated pigs are not genetically independent of wild pig populations, but both form a continuum. Mating naturally occurs between domesticated sows and wild boars. The offspring of wild boars and tamed sows are termed samin avel while those of domesticated boars and wild sows are am kon avel (avel; lit., produced). Am kon avel are not common.

As pregnant sows deliver in the bush, the owner of the sow must look for the place. Once he or she finds it, mother and piglets are brought back to the village.

4.3. Pigs and Taboos

As pigs are important as food, property and game, there are various types of social and religious taboos and restrictions that people must follow. In particular, taboos concerned with pork eating highlight the nature and essence of people's perception of pigs.

While in the Gidra as well as the Seltaman societies, the age-grade system is a key to understanding men's social and religious life. As is shown in Table 3, men are classified into several named categories according to physical growth and marital and religious status. During the initiation period young boys must follow certain restrictions to become true men.

4.3.1. Gidra

Among the Gidra, young boys must spend a few years in the men's house (yuut), being secluded from the ordinary life of the village. They have to learn from the village elders various kinds of knowledge and techniques that are believed to have been handed down from the ancestors. They also have to adhere to several taboos and restrictions.

Certain kinds of animals (gwaaji) are appointed as kaak gwaaji, in which kaak denotes "core", or "bone", related to ancestor worship. Kaak gwaaji were created by the first founders of the group, the Wipitungam, another name for the Gidra, and thus have spirits. These include most of the important game animals. Kaak gwaaji are only allowed to be eaten in a certain order according to the condition and stage of the initiation cycle. For instance, new initiates of a few days are able to eat firstly ants (kasakasabug), and then grasshoppers (tupur). After one month of seclusion, they are allowed to eat small fish. Two or three months later, they may eat bandicoot. In this way, birds, wild pigs, cassowary, pythons, and opossums are appointed in order as men grow older. Wild pigs are important as they can be eaten only by men old enough to marry. However, the fetus in the pregnant sow (worom prong) is allowed for nanyuruga who have reached the senile stage. In the men's house, esoteric knowledge is transmitted from the elders to the young. Men in the yuut must use secret names for certain kinds of animals and special parts of the body. For instance, the ordinary name for wild pigs is worom, but it must be called sok negram (blunt nose) in the men's house. Similarly, cassowary is called konapenkoma (lit., long neck) instead of gwigi whereas bandicoot is called duni (ant tower) instead of ruwei.

Violation of these rules, or the eating of restricted food is believed to cause sickness in the offender. In the case of wild pigs, the men are said to suffer from ulcers of the backside, sevu vaai. This is based on the idea of contagious magic; the destructive nature of wild pigs affects the skin of the human body. On the other hand, in the daily life of the people, there are no special food taboos related to pigs.

4.3.2. Seltaman

Among the Seltaman, taboos about pork eating are different between wild and domesticated pigs. In the case of wild pigs, all the men who have passed their initiation may eat it, with the exception that new initiates or *ten* are allowed to eat only certain parts. The prohibited parts of pigs for the initiates are the upper and lower jaws and internal organs. Violation of this restriction is believed to cause physical inability in the young men; drying and aging of the skin (*fasel kamin kaal*

dikin), short wind (mem), and dullness (bain). These make the young men unable to climb trees or run in hunting. Only the bigman of the village may eat the head of a pig. The pig's skull is then preserved beside the ancestors' skulls in the secret house.

Furthermore, those who consume pork can not work in newly-made garden for several days of the year. Violation of this taboo leads to the infertility of taro (imen banim). Women and children, on the other hand, may not eat wild pigs. Violation of this taboo is also considered to bring about a lack of taro harvest.

On the other hand, domesticated pigs are generally allowed to be eaten by any villager, man or woman regardless of age. However, those who have eaten pork cannot work in a new garden for a few days. These people may work in old gardens made one or more years before. If anyone violates this restriction, the taros are believed to wither. The reason for this is related to the fact that white pork fat has been touched (tukul). When any such person then touches the shoots or leaves of taro it affects it seriously, causing bleaching.

It is interesting to note that taboos on pork eating are associated either with the fertility of garden crops or sickness of men. The conceptual difference between wild and domesticated pigs is also apparent in terms of ancestor worship and initiation.

4.4. Pig Hunting and Consumption

When and in what situations are pigs consumed? Wild pigs are hunted, and domesticated pigs are slaughtered on various occasions. Table 2 and 3 show records of the consumption of pigs after hunting and slaughtering among the Seltaman (Mwomogabip) and the Gidra (Ume).

In case of the Gidra, all the procurement of pig meat is from hunting. Bows and arrows, guns, and dogs are used for hunting. In comparison with other kinds of big game such as deer, cassowary, and wallaby, wild pigs are the greatest in number. During the 111 days between September and December, 1980, thirty-six pigs were hunted (Table 2). Most of these were consumed in the village as daily food, as well as for ceremonial occasions held in the village. These included the Independence Ceremony (period I), the death of a baby and an old man (period 4 and period 5). There is a decline in catch as time goes by, but it was not clear if this was due to a seasonal trend or not.

Among the Seltaman, only two wild pigs were hunted and three domesticated pigs were slaughtered. Evidently, the availability of pig meat to the Seltaman is less frequent than that to the Gidra (Table 2). Despite the strenuous daily trials of the village men, wild pig hunting brings only a poor return. This is said to be due to the absence of wild pigs in the highland fringe areas, unlike the lowland areas. Other game hunted included only four megapods, and two opossums, caught by bow and arrow. The lack of a source of animal protein has caused small children to depend on small lizards, grasshoppers, and even tedopods.

Two instances of slaughtering were recorded for the purpose of celebrating a

Table 2 Number of Catches and Slaughters of Animals by the Gidra and the Seltaman

1) Seltaman (1988 Sep.-Dec.)

Period	I 9.27–10.17	II 10.18–11. 7	III 11. 8-11.28	IV 11.29–12.15	V Total
Wild Pig	0	1	1	0	
Domesticated Pig	0	2	0	1	3
Bush Fowl	0	3	1	0	4
Possums	. 0	0	2	0	2
Fish	1	0	0	0	1
Lizard/Insects	+	+	+	+	_

^{+:} Numerous

2) Gidra (1980 Sep.-Dec.)

,	I 9. 2–9.24	II 9.25–10.16	III 10.17–11. 7	IV 11. 8–11.29	V 11.30–12.21	Total
Wild Pig	20	7 .	5	3	1	36
Deer	5	3	1	2	2	13
Cassowary	0	1	2	0	. 0	3
Wallaby	8	6	1	3	0	18
Lizard/Snake	4	4	2	. ?	< 10	
Birds	14	10	2	<4	0	
Small Animals	+	8	· +	+	+	
Fish/Aquatic Animals	+	+	+	+	+	
Allillais						

Table 3 Input of Pork of the Seltaman

Period	I 9.27–10.17	II 10.18–11. 7	III 11. 8-11.28	IV 11.29–12.15	Total
Hunting	0	1	1	0	2
Slaughter	0	2	0	1	3
Kill	11)	0	12)	0	2
Death	13)	0 .	0	0	1
Gift	0	s ⁴⁾	s ⁵⁾	0	S

s: An amount less than one pig, regardless of size

¹⁾ As the piglet had eaten a chicken, the owner of the chicken became upset and shot the pig with a bow and arrow.

²⁾ The piglet was foud dead in the sweet potato garden.

³⁾ One piglet died due to unknown sickness.

⁴⁾ As a gift at a mortuary rite for a big-man in Baktaman, pork meat was brought back to the Seltaman.

⁵⁾ As a gift at a mortuary rite held for a man in Woktembip, pork meat was brought back to the Seltaman.

happy event. One young man, who had been working in Ok Tedi mine, came back to the village after an absence of some years. He presented some of his cash income (about 100 Kinas) to his relatives as a gift. The gift-receivers decided to kill their own pigs as a return gift. Similarly, whenever a happy event occurs, pigs are slaughtered in order to celebrate it, *ilak*.

Other than the above cases, it should be noted that three more domesticated pigs were killed and several small portions of pork meat were brought back to the village from the outside. As is shown in Table 3, three instances of pig killing are noted. One was for the purpose of revenge by a man whose chicken had been killed by a juvenile pig of another villager. This man used a bow and arrow to kill the pig.

In the second case one piglet was found dead in the sweet potato garden. It was apparent that someone had killed it. Judging from the statement of the owner of the piglet, the cause of the kill was probably related to jealousy and complaint over bride wealth transactions between the two clans. One clan had not paid back a bride wealth for a long time. The third case was a natural death due to sickness. This piglet was not eaten but buried underground in the garden. During October and November, two men died in Woktembip and in Baktaman. A few of the relatives and the bigman of the village visited in mourning, and they brought back pork meat that had been raised by the dead people.

Pig-killing for the purpose of feasting is common not only in the Highlands of New Guinea, but also in many societies in the lowlands and insular the Pacific world.

As is suggested above, the free ranging of domesticated pigs is always accompanied by certain types of risk; theft, injury, or attack by a ghost [Hide 1986: 329]. In Etoro, when a pregnant village sow happens to be trapped in a trap for wild pigs and dies, the hunter should pay a certain amount of compensation money to the owner of the sow [Dwyer 1983: 36].

5. Discussion

The relations between pig and man in New Guinea societies have been so far examined in a discussion of (1) domestication theory [Watson 1977; Baldwin 1982], and (2) ecological and ritual importance of pig kills [Rappaport 1968; Strathern 1971b; Brown 1972; Meggitt 1974].

As we have seen in the Gidra and the Seltaman cases, wild pigs and domesticated pigs are cognitively distinguished. For the Gidra, wild pigs are animals with spirits and with destructive powers. Men's association with pigs is attained through hunting. Wild pigs are tabooed food for the adolescent until they become old enough to be acknowledged physically able to marry. Thus, wild pigs are symbols of adulthood in Gidra society.

For the Seltaman, the status of pigs, wild and domesticated, is ambivalent in relation to pig raising practices and genetic continuity, rather than on a conceptual

basis. Wild pigs are in a sense sacred as they are related to ancestor worship and wars [Barth 1975; Jones 1980; Brumbaugh 1980] while domesticated pigs are regarded and treated as pseudo-humans [Bulmer 1967]. Taboo related to eating pork are also related to the fertility of taro.

In terms of the relationships between pig and man, interesting instances have been reported in ethnographic descriptions from other parts of New Guinea. Kwoma hunters never eat hunted animals, as the blood of the hunter enters the meat [Whiting 1978]. Among the Asmat of Irian Jaya, wild boars are considered to have destructive powers. Head hunters are transformed into dreadful wild pigs by wearing nose piercing ornaments (bi pane). Here, the attached tusk is not a mere ornament for a warrior to exaggerate his dreadfulness to the enemy but it transforms the man into an actual wild boar. Nose ornaments of boar tusks are widely found in New Guinea [Aufenanger 1961; Brian 1975; Kaberry 1941]. The attributes of wild pigs, i.e., aggressiveness and strength, evoke the desire of the people to be like wild pigs. Boar tusks are indeed a fetish. Similarly, among the Kiwai Papuans, the tribal fighting men would like to become wild pigs [Landtman 1927]. These cases show that the transformation of men into wild pigs is considered an ideal for the warrior.

In the domestication sphere, the status of the pig is quite different from that of the wild pig. In the Highlands, pigs are a source of exchange; they are used as bride wealth, meat for consumption during a feast, trading commodities and compensation [HIDE 1986: 327–338; BROWN 1972; REAY 1959]. No aggressiveness is associated with domesticated pigs, and human beings do not wish to be domesticated pigs, but domesticated pigs come to resemble human beings. Sometimes pig kills are related to pregnancy in the house [Volkman 1985].

As the taming of animals and child-growing are similar to each other, so hunting and fighting have an identical nature.

These two extreme ideas of pig and man can be totally expressed as a transformation; men wish to be wild pigs whereas domesticated pigs are transformed into pseudo-humans. Depending on the ecological and social conditions, every variety of pig hunting and/or domestication, can be found in New Guinea. Varieties of pig cultures have been created regionally. The status of pigs in New Guinea can therefore be broadly understood by the application of the transformation theory.

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