A Short Study of Melpa Prehistory

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Abstract

More than 40,000 years ago the Melpa speaking people made their way by land and sea from Asia to New Guinea and then into the Highlands. First as cave dwellers and gatherers, they adapted to the extreme cold and eventually became one of the first farming people of the world. Lacking native seeds and domesticated animals they built a culture on pigs as a source of protein and exchange. This short prehistory illustrates their success in building a unique culture in the face of isolation and extreme hardship.

The first settlers into New Guinea

Some forty thousand years ago, groups of people travelling in bands and extended family groupings wandered down the land bridge out of South East Asia. There was no haste; they had no goal in mind except to find the best food supplies that they could. They travelled back and forth, driven only by their needs of hunting, fishing and gathering available foods. Moving at a rate of only a few kilometres every year it took them thousands of years and many generations to reach the end of the bridge. There, they learned to build boats and rafts out of bamboo and the more adventurous took to the sea with their families and crossed over from island to island still in the same slow passage of time until they arrived in New Guinea or Australia (Diamond, 1998, p. 41).

Flora and fauna of South East Asia

Nature was much kinder to those who stayed in South East Asia than it was to the adventurers. The former had more in the way of animals, edible foods and fibres for their comfort and convenience. They had rice, sorghum, millet, peas, and a great variety of beans. Among the animals available to them were pigs, dogs, buffalos and chickens. And finally they had plants that provided fibres for nets and cloth (Diamond 1998, p. 116).

Over the years the people living in South East Asia moved from hunter-gatherers to more settled occupations such as farmers and the fishing. People developed more complex technology, societies and political organizations. They lived in permanent villages and tribal societies and had a social contract to control their relations with one another. Later when these same hunter-gatherers in South East Asia began to settle down, they were able to domesticate the wild plants and various animals and use them as food and beasts of burden. The large populations that developed in South East Asia were supported by rice, a large grain crop that can be harvested and stored for years

to provide a food supply for artisans, towns-people, a civil service and a civilisation of towns and cities.

Food supplies on the coastal areas of New Guinea

But Melanesians in New Guinea without any suitable crops or beasts of burden faced a much more difficult existence. They had no seed crops and no animals that they could domesticate to provide food, pull the plough or carry their burdens. Those living on the coast had a supply of fish and coconuts, both of which are rich in protein but inland the available varieties of food stuffs were few and protein deficient. The sago eaters living in lowland swamps are an example of the nomadic hunter-gatherer bands that existed for many thousands of years (Diamond, 1998, p.116).

First arrivals into the highlands

When people first arrived in the highlands, Mt Wilhelm had glaciers and the mountains were permanently covered with snow. Even within the last 3,500 years, there have been four ice ages which produced glaciers on Mt Wilhelm. The last of these commenced around or after 1,350 BP[1], and continued until the modern retreat began late in the nineteenth century (Brookfield, 1991, p.208). However, in spite of the bone chilling cold, evidence exists from cave sites that people arrived in the highlands as early as 25,000 years BP (Gorecki, 1986, p.160).

Difficulties of existence of the first highlanders

The intense cold was only the first of the problems for the new highlanders. They lived in small bands often numbering less than a hundred members. They were hunter-gatherers and lived a hand-to-mouth existence. Food supplies were few and wretched. Domestication of plants occurs, only when over a long period of time, humans select the best and most desirable qualities of a species. The food plants were still small and bitter in their undomesticated state. It would take thousands of years for the yams, swamp taros, bananas, sugar cane, various edible grass stems, roots, green vegetables, mushrooms and nuts to achieve their present day standards (Diamond, 1998, p.148).

The giant animals including giant kangaroos, rhino like marsupials called diprotodons soon disappeared, probably killed off by the hunters, and the remaining animals such as tree kangaroos and cuscus were of no value as domestic animals (Diamond, 1998, p.43).

The big-man rule and the social contract

Bands are the tiniest societies, consisting typically of less than one hundred people, most or all of them close relatives by birth or marriage. In effect, a

[1] Before Present (BP) years are the units of time counted backwards to the past.

band is an extended family or several related extended families. The next level of tribal organization has, as its basic constitution, the social contract. It forbids murder, adultery, stealing and lying and requires care for the young and old and exists for the security of all members of the tribe (not outsiders). The social contract did not extend the same rights and privileges to other tribes, most of whom were regarded as enemies.

Good relationships and unity were essential to any such small group for its security against enemy tribes. Leaders enforced the social contract, not because of its moral values, but because divisions in the community caused weaknesses and laid the community open to enemy attacks. All the members of the tribe from the oldest to the youngest had a network of relationships with all the other members of the tribe which was maintained by reciprocal gift giving of food and services. This practice is universal in all small tribal groups.[2]

Tribal existence is exemplified by New Guinea highlanders, whose political unit before the arrival of colonial government was a close-knit cluster of scattered settlements. They shared the same language and land. They were ruled by a big-man who was not a chief (Diamond, 1998, p.269). A chief has coercive powers but a big-man is one who rules with the consent of his followers, who, if they were dissatisfied could desert him or apply other sanctions to force him to meet their needs. Prowess as a warrior may have been the way of some big-men, but normally the big-man was a charismatic figure, able to attract followers by his superior ability to satisfy the needs of his people and control them by his personality and power. All big-men had common features in their approach to government but each group developed its own style and customs to suit its own culture. Many were aggressive and male dominant; all had skills as negotiators, entrepreneurs, arbiters of conflicts and networkers with other tribes and clans.

First agriculture in the world

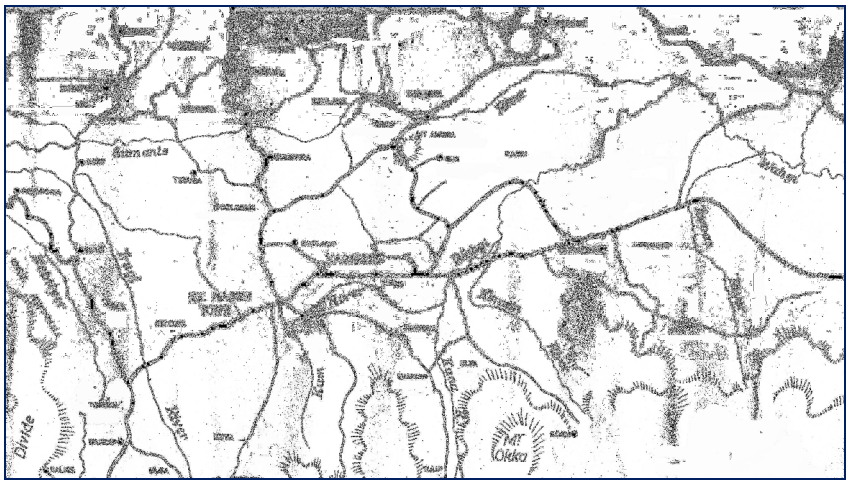
The first organised agriculture in the world developed independently at around the same time, in the Fertile Crescent, China, America and the Indus valley during the years when the last major ice age was declining about 12,000 years BP.

The Melpa speaking people - agriculture at Kuk swamp

2 All these studies contain the idea that exchange, as a system of meanings, is involved in the shaping or construction of particular cultural realities. They do this by focusing on the act of presentation as a rhetorical gesture in social communication, stressing the symbolism of the objects exchanged and viewing transactions as expressive statements or movements in the management of meaning. Through the management of meaning exchange becomes a vehicle of social obligation and political manoeuvre....and in a larger sense social reciprocity may be analysed to reveal its embeddedness in their structure of cultural thought, and how it symbolically contributes to the social construction of reality (Schieffelin, 1980, p.503).

About 9,000 years BP the Melpa speakers, who are the focus of this study, began gardening in the 180m^2 of swamp land at Kuk on the upper Wahgi valley floor (Golson & Gardner, 1990, p.397). The Kuk settlement based on bananas and taro was unique. In all other early agricultural settlements in the world, the base crop was grain – wheat, barley, corn – but in Kuk, it was bananas (known as australimusa bananas), taro, rubus, coleus, pouzolzia, wahlenbergia, grass stems, roots, pitpit (Saccharurnedule), green vegetables and the nut tree canarium indicum (Bulmer, 1964, p.45). New Guinea has no large native grass grains so the most likely reason for the failure of cereal agriculture to arise in New Guinea is a glaring deficiency of the wild starting material. Not one of the world's 56 largest-seeded wild grasses is native here (Diamond, 1998, p.148).

Figure 1. Map showing location of Mount Hagen



Williams, the Papuan government anthropologist, wrote:

> There may be, according to Fr Ross' rough estimate, 25,000 natives speaking various dialects of the Mt Hagen language. They are divided into some 20 tribes, Mogei, Kobei, Jika, Yauka, etc.; and these again into many more numerous local groups. All of their members share an origin myth providing them with a dogma of common ancestry and with a single divination-substance. In the northern part of the Melpa area, we are able to identify the clan territory-holding, alliance-making group, important in past warfare and present ceremonial exchanges (Williams, 1937, p.90).

The groups had importance in that they could identify a person as a friend or an enemy for there was an unspoken law that tribal fighting did not occur within the group.

Domesticated animals: pigs, dogs, chickens

The people still had no domesticated animals and it was not until about 5,000 years BP that the pig was imported (Golson & Gardner, 1990, p.406) and later chickens and dogs arrived from South East Asia by way of Indonesia and the Austronesian people who settled in New Guinea about 3,500 BP (Diamond 1998:304). Alongside the Kuk gardeners, the people still continued their hunting for protein and gathering as they did in the rest of the highlands, but at Kuk there was a genuine settlement which required a change in relationships that the villagers had with one another. It provided a model of what was to come.

Agriculture in the dry lands

The importance of Kuk was that it was the first experiment in agriculture in New Guinea and among the first in the world. But Kuk was not the only farming experiment in the upper Wahgi. The Melpa were growing taro on the dry lands in the upper Wahgi 2,500 years ago (Golson & Gardner, 1990, p.399). Recent experiments by Bayliss Smith show that taro crops grown in wetland swamp are more productive than on the grasslands but not remarkably so [3]. However, they are still sufficient to serve a good sized farming population (Golson & Gardner, 1990, p.400). In other words gardening taro was providing for a well established population.

Protein deficiency

None the less, until better foods were imported, the New Guinea highland populations suffered from severe protein deficiency. The staple food, taro, consists of only 1% protein, much worse even than white rice, and far below the levels of the wheat and pulses grown in the Fertile Crescent which had 8-14% and 20-25% protein, respectively (Diamond, 1998, p.149). Children with swollen bellies were characteristic of the high-bulk protein-deficient diet and the whole population, old and young routinely ate mice, spiders, frogs and other small animals that people elsewhere with access to domestic mammals or large wild game species do not bother to eat (Diamond, 1998, p.149).

Pig farming at Kuk

As the hunters killed off the local animals, they had to move further afield to do their hunting. Thus pigs were domesticated to replace wild animals as a source of protein. This began a gradual change as the domesticated pig became a source of wealth in barter, ceremonies, local exchange networks and regional trade in a wide variety of goods, which included plumes, salt, tree oils, stone axes and shells (Golson & Gardner, 1990, p.398).

[3] Bayliss Smith reported annual taro yields of 12-25 gross tonnes per hectare for four sites of wetland cultivation between 1500m and 1640m and of 8-10 tonnes per hectare for taro grown under swidden in three societies of the Highlands fringe between 1200m and 1900m.

Developing cultural changes

Already the Melpa of the upper Wahgi had begun to develop political and social structures that later became the trademark of highland politics, custom and culture (Golson and Gardner, 1990, p.398). However, considering the unreliable nature of taro farming in both the grasslands and the swamps there were insufficient regular food supplies to support the social and political structures that developed later.

Introduction of the sweet potato (Ipomoea batatas)

The sweet potato (Ipomoea batatas) is a native of South America. It was introduced to New Guinea about 300 years ago, probably by Indonesian sailors, who at that time were making regular expeditions to the north coast of New Guinea to purchase bird of paradise plumes, beche de mer and trochus shells.[4] The first evidence of the presence of sweet potato in New Guinea is some charred fragments at Kuk swamp dated 250 BP (Fiel, 1986, p.630).

Superiority of the sweet potato

In the swamps of Kuk, sweet potato did not produce spectacular results when compared with the taro which was the previous dominant crop, but in the dry lands, forest soils and agriculturally depleted and poorer soils in the grasslands, it grows more quickly and gives much higher yields per hour of labour. It grows well at high altitudes and so made new agricultural areas available to people in the higher mountains and is by far the most important crop at all altitudes between 1600m and 2800m (Brookfield, 1991, p.206). Its greatest importance was that as a staple crop, the sweet potato crop allowed for political and cultural processes that had existed in an underdeveloped state before this period.

Changes resulting from the sweet potato in the upper Wahgi

The most obvious outward result of the arrival of the sweet potato is seen today in the upper Wahgi 250 years after it was introduced. When Europeans first flew over the highlands in the 1930s, they were astonished to see below them a landscape similar to Holland. Broad valleys were completely deforested and dotted with villages, and drained and fenced fields for intensive food production covered entire valley floors. That landscape testifies to the population densities achieved in the highlands by farmers with stone tools (Diamond, 1998, p.304).

[4] Others suggest that it may have been introduced from the Philippines by Spanish explorers.

The importance of the pig

Changes which had begun during the years of taro farming in the forest and grasslands, were now given an impetus because the sweet potato is a matchless food for pigs (Golson & Gardner 1990:398). Pigs are not fond of uncooked taro. They enjoyed the worms available in the moist soils of Kuk (Golson & Gardner, 1990, p.406) but this was not enough to develop large herds of pigs. The arrival of the sweet potato changed this to an unexpected degree. Pigs ate the sweet potato raw and thrived on it.

Even though the sweet potato like the taro is low in protein (Diamond, 1998, p.149), it became a major source of protein in the form of pork. As a pig food, the sweet potato is superior to the existing crops, and so was irresistible to pig-centered societies. All the people now had a prime pig fodder that could also be grown over a wide range of soils and environments. Thus the sweet potato theoretically enabled everybody to enter exchange systems (moka) previously inaccessible to anyone outside centres of high productivity for taro (Golson & Gardner, 1990, p.408).

The pig - money on the hoof

In countries with a grain economy, the stored grain had a financial value. Among the Melpa the same result was achieved through surplus pigs, using the available sweet potato supply as fodder for a sort of 'storage on-the-hoof' (Fiel, 1986, p.631). Pigs became the currency for making alliances, exchange, sealing agreements, making peace, or bride wealth and funeral payments (Golson & Gardner, 1990, p.396). Pigs became the 'essential coin' for proliferating transactions of all kinds and in which politics and competition increased (Fiel, 1986, p.631). The Melpa, a naturally competitive group, now had the means to join the race of outclassing each other. They now had a secure and abundant source of protein and, as its value increased as an object of exchange, it became too expensive for regular consumption. Even today, most Melpa still view pigs in this way – 'nice to eat, better and more valuable to exchange'.

Big-man, control of ancestor spirits

Melpa big-men traditionally played an important part in all ritual activities involving the co-operation of clansmen. They could call on their dead kinsfolk and their more remote ancestors to grant clansmen fertility, health and wealth, or on the contrary bring sterility, sickness and poverty on them by withdrawing support. Sickness in particular was often attributed to a moral misdemeanor. Payment of a pig might be sufficient to pay for the damage done (Strathern, 1970, p.573).

Big-man, control of cults

Cults among the Melpa were initiated, planned by prominent big-men in politics and in entrepreneurial ventures. The cult which took place in stages over the years required the sacrifice of large numbers of pigs. The holding of a

cult is, in fact, one way in which a big-man demonstrates his successful entrepreneurship (Strathern, 1970, p.572).

Big-man, control of shells

Marine shells worked as ornaments have been reported back to 9000 BP in excavated rock-shelters in the Papua New Guinea Highlands (Golson & Gardner, 1990, p.408). Twelve species of shell were common but it was the gold lip pearl shell which had by far the greatest value for barter. The supply was unreliable and subject to long term interruptions. As already mentioned, it was the prerogative of the big-men to control the supplies of shells, axes, plumes and other goods, and they made every effort to protect their privileges. Shells were by far the most important as they were the essential token in making moka.

Big-man, control of moka

With the coming of the sweet potato anyone could grow sweet potato and raise pigs and so theoretically anyone could be a big-man. Thus it was necessary for the powerful leaders who managed the politics of the clan to find means to demonstrate their superiority (Strathern, 1979, p.533).

The moka had its origins in the reciprocal gift-giving process mentioned as a part of the social contract. Any gift required a return of a gift of equal or greater value. Gifts of food could be repaid much later in services such as house building or support in some other venture. This fitted neatly into the exciting ceremonies and exchanges of the moka.

'Making moka' entails repaying a gift-debt, not just with an equivalent return, but with a value culturally defined as more than what the initial gift was worth. Melpa construe moka exchanges to balance in the long term; they are in what Strathern terms an 'alternating disequilibrium' (Ledeman, 1990, p.8). The moka, like 'the Tee (in Enga), flowed on a path no bigger than a single strand of a spider's web; all care must be taken not to break it' (Wisner, 1998, p.163).

The 'moka' was an artificial and symbolic exchange of shells and other valuables which depended on an exchange for other valuables, especially pigs, and in the final analysis on pig production and the ability of men to bargain in their own favour. In actual shell-moka the starting mechanism was always a solicitory gift which included a pig, as well as two shells, in return for which eight or ten shells would be expected in moka. Pigs had to be reared at home, and the major input of work here came from women (Strathern, 1975, p.535-536).

Ordinary people became involved by working directly for the big-men in the hope of returns of wealth in the form of pearl shells for assistance in bride price. The big-men did not necessarily 'own the wealth' so much as 'control' it. This was the essential skill of the Melpa big-man. It was a competition between partners and groups to give back more than one has received. To put it in its

most crude form, it was a process to exploit others, to control more completely the means of producing vital exchange items, and to create a system of rank that was justified by the argument that only men of wealth and ability were capable to lead the clan and provide for its security.

Melpa terms for valuing people

As a result of the fierce competition for status among the Melpa there developed a whole vocabulary of terms to designate people according to their status, power, usefulness in the moka and their relation to the community and the hopes of the leaders. Strauss, Ross and Vicedom, (all European pioneers in Hagen) reported on the variety of terms to describe the various members of the community. With a cultural Western bias they first thought that these were titles of nobility, but later they found that they served an entirely different purpose.

There was a term indicating a 'good at' ability – having a certain skill or ability with no indication of moral value. To balance that there was another term which could be translated as 'bad at', an indication of a lack of effective ability. Another term referred to those who assisted the big-men in economic ventures and organisations and yet another referred to the man who did not amass wealth but gained status by passing it through his hands. *Wo wagen* (childless) was a pejorative term applied to one who was incapable, debilitated and lacking in power while *wo waglom* is a term of appreciation for an appreciated kinsman. Strathern believed that these classes were developed not as an aristocracy but as categories which the big-men could utilise to increase their own power by manipulation and extraction of labour and support. There is little doubt that the label could be used as a tag to indicate suitability for exploitation (Strathern, 1985, p.251).

Melpa display of status and wealth

Sacred stones*:* Another gaming chip in the status competition was the ownership of sacred stones. Vicedom noted that the leading men in clans were those who possessed sacred stones in the Female Spirit cult celebrations.

> 'Each member of *wu nuim* class, including women and children, owns a stone, and in one tribe with a total population of 1500 persons there are 206 stone-owners and approximately 50 adult male members of the ... cult group' (Strathern, 1985, p.255).

The Omak: Among the Melpa there was the constant competition among men to maintain their high profile in the community. For some it was a simple matter of pretension, for others it was much more subtle. Chinnery in 1934 described the 'Omak' as a row of short parallel bamboo sticks about four inches long and a quarter of an inch in diameter, fastened together horizontally like a miniature blind. It was worn on the breast and represented ownership of gold lip pearl shell, one shell for each stick (Chinnery, 1934, p.120). This was a

simple display of wealth and self importance, visible to all. A row of fifty sticks reaching to the waist would indicate the ownership of 50 gold lip pearl shells.

Melpa gender relationships

Discrimination and violence against women have always been a part of the human condition. In all countries, societies and cultures, it is practised to a greater or lesser degree. Even religions and churches which give lip service to human rights and equality, continue to discriminate against women both covertly and overtly. It is with this background that we consider the gender relationships among the Melpa.

The development of pig herds had become a necessity for the big-man culture and the management of the herds was an institutionalised exploitation of women. Women raised the pigs and so in a sense 'owned' them, but it was the men who carried on the exchange and gained the kudos by claiming their own superiority in ownership of the means of production.

The Melpa were an egalitarian society but in the game of pretension, where men, who were competing against other men, allowed each other a certain amount of inequality among themselves. But where women were concerned they quickly closed ranks to declare collective superiority over women (Strathern, 1970, p.533). Some of the justification for the discrimination is to be found in the belief that women endanger men by pollution. Wives bear children and thus bring life, but also can destroy men by infecting them with their menstrual blood (Strathern, 1970, p.583).

Big-men staged a goddess cult ostensibly to promote the health of the clan and the fertility of women and pigs. It would seem that the cult was introduced to overcome the problems of male-female relations which were corrupted by the supposed contradiction between the life-giving and death-giving powers that women possess (child-bearing against menstrual pollution) (Strathern, 1970, p.547). Possibly its real purpose was to strengthen male superiority and male domination as was finally demonstrated by the hundreds of pigs slaughtered by the men during the final feast (Brunton, 1965, p.125).

The discrimination was most obvious in the control of the product. This was something that the men could not give up because it was at the very centre of their claim to status. It has been suggested the ritual cults did not imply antagonism between men and women but that they produced a kind of separation particularly in the tasks suited to the divisions of labour. As a balance to the discrimination, it is likely that women carried on a similar competition among themselves by glorying in the prestige of their husbands. Status in the reflected glory of a powerful and successful husband is a psychological factor in any community.

In the final analysis the culture which defines discrimination and exploitation and what may appear exploitative to the outsider may be more of a mutual agreement among the members of the clan.

Was the Melpa big-man system despotic?

Some observers may view the manipulations of the big-men as despotic and exploitative or at least extractive. Certainly their particular skill was their ability to insert their authority into every phase of the life of the tribe. They settled land rights and land use; they were able to speak convincingly and with good sense on any matter relating to the welfare of the tribe or clan, especially in making alliances, marriage settlements and going to war (Brandewe, 1971, p.208). However Brandewe after making a study of the Hagen big-man system in 1971 wrote:

> The traditional system of leadership and administration in the Hagen area has been very effective, given the values and the goals the people have set for themselves. Their rule was by consent and in this sense was as democratic as that in most countries with universal suffrage. His [big-man's] influence was limited to his own group or clan and the allies he must bring together as a unit. Consequently, the big-man thinks first and foremost of his own lineage group and most others outside that group were generally considered as unfriendly (Brandewe, 1971, p.209).

The more important question which still has no answer is in regard to the suitability of big-man leadership to economic progress and the welfare of the people.

Initiation

Hagen Melpa did not practice any official initiation for their children. In this they were quite different from many other highland tribes. They believed that children are made of a mixture of male semen and maternal blood in the mother's womb. This being the case no ritual was needed to rid children of maternal blood, and there was no necessity for boys to be 'broken' from their mother's blood as in other tribes with initiation practices. However it was still necessary to make payment to maternal kin to ensure a child's health (Strathern, 1970, p.375).

From well before puberty boys began to sleep in the men's house rather than the women's house in their settlement and were attracted there with offers of pork and other dainties by their male kin. Girls went with their mothers to the gardens; boys hunted and played in peer groups.

In the highlands there was a strong emphasis on clan-hood. Especially among the grassland villages where villages were more exposed to enemy raids, initiation stressed warfare and an emphasis on clan exclusiveness and male-

female opposition. Even among the Melpa there was the awareness that loyalty to the clan was a matter of survival. Loyalty to the clan was a matter of survival due to the principle of collective responsibility that marked all extended family members as possible victims of payback or compensation. War required a strong united force which was developed by training and practice. In the final confrontation with an enemy it was numbers and unity that counted. This feature of highland society differs noticeably from the tribes in the lowlands and coastal regions where fertility cults are the norm and manhood is emphasised.

In the place of initiation, children learned the values, customs and rituals of the clan. This learning generally took place at puberty and included matters of male growth, sexuality, sexual attributes, the dangers of pollution, the symbolic links between land and the food grown on it, and the symbolic connections between blood, food, meat, semen, flutes and yams. They had also to learn about the wider world, the rules of mutual reciprocity, brother-sister relations, marriage links/relations and the legitimacy of offspring (Strathern, 1984, p.51)

Tribal fighting

Making war has been said to be 'the most universal and probably the oldest of the tribe's functions'. No central authority is needed for this purpose as is the case with making and keeping peace. War has been claimed to be universal and present in all parts of the world wherever there have been men (Davitt, 1968, p.44).

Fighting within one's own tribe and clan was forbidden by the social contract but killing of enemies was an honourable activity. Normal causes of warfare in the highlands were blood-revenge, women, pigs, insults, sorcery accusations, and disputes about ownership of land or food resources. Much of the fighting was of a ritual nature to maintain the boundaries, to gain prestige and gain a reputation. Some did it for recreation and an opportunity to boast before their community friends. Warfare was also a counter in politics where men with political ambitions or other motivations used the fight to strengthen their own positions in the moka or the female cult.

Usually the fighting men arrived for the fight decorated with paint and feathers as though for a celebration. In any tribal fight there would be a good turn out for young men who wanted plenty of excitement and little real danger (Berndt, 1964, p.184). The enemy were accepted as opponents in a very dangerous athletic game. However if the enemy faltered, they paid for it with physical hurt and emotional humiliation and also with destruction, loss of movable property, and even loss of land, with all that this entailed.

Warfare in traditional highlands societies has been regarded as chronic, incessant, or endemic, and is said to have been accepted as a part of social living in most areas. When Chinnery visited Hagen in 1933, he remarked that 'intertribal fighting constantly takes place, the weapons being the spear,

jimbun, and the battleaxe' (Chinnery, 1934, p.122). Even during times of peace the fighting was carried on covertly.

The removal of warfare did not mean the removal of animosities, or the pre-emption of future hostilities; rather, it provided a basis for their elaboration with permutations of scale, and setting up new conditions for fears of sorcery and witchcraft to operate within. Peace ceremonies were regarded as a temporary truce in a struggle to be taken up again later (Strathern, 1999, p.647).

Alliances with other clans or groups were sometimes arranged when the fighting had a more serious purpose that mere recreation, however the alliances were tenuous and designed to achieve short term ends. When allies were killed it was necessary to compensate the tribe for their death but there was no compensation for enemy dead (Berndt, 1964, p.195).

By the time that the Australian government patrol arrived in Hagen in 1934, the tribes were caught in a war trap which of themselves they could not break. Obsession with revenge for upholding clan honour could result in what van der Dennen (1995) has called the 'war trap': aggression to demonstrate strength, in the hope of assuring future security, in itself led to a cycle of war. This was exacerbated by the fact that under the cover of restoring clan honour, individual strategies were played out. A man might join a war in the heat of the original quarrel, to gain repute as a valiant warrior, to win a plot of land, to make a name during the process of peacemaking, to forge exchange ties via war reparations, or fight out old grudges in the war of an ally, or merely for the feelings of excitement and brotherhood that came with fighting (Weisner, 1998, p.148).

Refugees

As a result of the tribal fighting there was an ongoing problem of refugees. Often they were unable to reassemble in their traditional grounds because of ongoing attacks from tribes and clans which were also short of land. The lot of the refuges especially after years of roaming and hiding, was a difficult one; with no houses they suffered from the elements and the fierce cold and violent rain showers of the highlands; with no settlements and no safe gardens they suffered starvation; and with insufficient fighting men they were at the mercy of hit and run raiders. Women and children captured in fighting were sometimes absorbed into the enemy tribe. Peace settlements were often no more than temporary ceasefires and a brief respite in their hostile relations with their neighbours (Watson, 1964, p.194-201). The Mogei Kwipi and the Mogei Komunka both suffered severe losses in tribal fights and were so reduced in numbers that they eventually joined together as the KomKui and reclaimed their traditional lands (Roach interview December 2007).

Melpa village settlements

One of the features of the settlements of the Melpa and indeed of most of the Western Highlands both north and south was the absence of villages. People lived close to their gardens and in this manner formed a settlement rather than a village, sometimes scattered over half a square mile. Most of the dwellings were sited on the crest of a wooded ridge and tucked away among the trees so that each house seemed isolated from its neighbours. In fact, however, this was often not the case, since the dwellings were no more than twenty yards apart, though in many instances they were separated by greater distances. The scattered homesteads were not arranged according to any formal plan but formed a neighbourhood quite unlike the normal village (Read, 1954, p.24).

Williams, the anthropologist who visited Hagen in 1937, described it thus: 'each house having its fenced garden and grove of banana trees, is to some extent grouped together in settlements. Instead of villages one finds something like primitive garden cities'.

Dancing grounds

Williams also noted the social life of the Melpa. One of the most remarkable features of the district is the dancing ground. There are many of these, and from the air it may be seen that they all roughly conform to the same pattern, viz., that of an oblong enclosure lined with ornamental trees and shrubs and with a round house built in a sort of recess at the end. The recess in which stood the round men's house at the end had been excavated to the level of the dancing ground, or else the earth at either side had been banked up around it. These embankments were thickly planted with various bushes. The far end of the enclosure, which reached a length of 150 yards, was open. The whole dancing ground was an astonishing example of good construction and good gardening (Williams, 1937, p.95).

Figure 2. Plan of Mount Hagen dancing ground

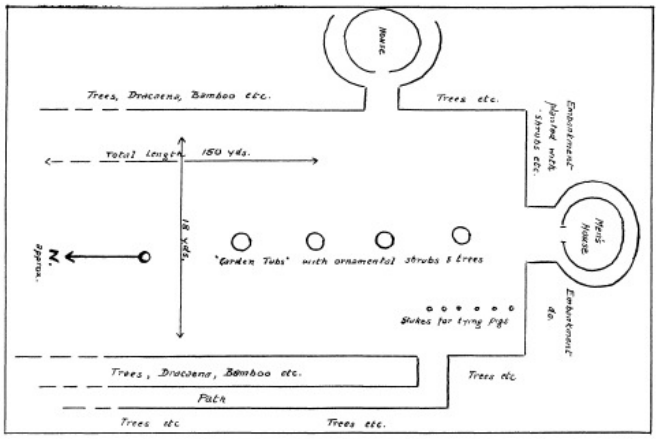


FIG. 4. PLAN OF MOUNT HAGEN DANCING GROUND.

Housing

The common type of house is oblong with rounded ends and divided into a general room and an interior compartment for women. There are also little alcoves provided for the pigs, which live by night under the family roof. Some of them are tethered by the leg, others are free and as well-behaved as a dog in a kennel (Williams, 1937, p.94).

Jared Diamond's question

The story to date considers the prehistory and the development of the Melpa people, their cultural and civilisation, but a comparison with the development of other mountain tribes in the rest of the world brings attention to the unique nature of the New Guinea highlander.

Jared Diamond asked the rhetorical question: *Why did New Guineans fail to organize themselves into chiefdoms and states?*

In highland situations in other parts of the world, notably the Andes and the Himalayas, leaders moved from big-man style government to chiefdoms and states. The Melpa did not move in this direction. There were a number of reasons for this.

First, although indigenous food production did arise in the New Guinea highlands it yielded little protein. Likewise the animal species (pigs and chickens) was too low to contribute much to people's protein budgets. Since neither pigs nor chickens can be harnessed to pull carts, highlanders remained without sources of power other than human muscle power.

A second restriction on the size of highland populations was the limitation of available area. The New Guinea highlands have only a few broad valleys, notably the Wahgi and Baliem valleys, that are capable of supporting dense populations (Diamond 1998:306).

Thirdly they had no suitable grain foods available to support a non-farming body of artisans and public servants and so they did not develop towns and cities.

Fourthly there was no easy access to the coast, so there were no large scale exchanges of food between communities specialising in different types of food production, which not only increase population densities, by providing people at all altitudes with a more balanced diet, but also promote regional economic and political integration (Diamond 1998:178).

Finally there was the conflict ridden nature of the big-man leadership itself. The Melpa big-men had built up an elite network of exchanges based on labour, pigs, credit and pearl shells. Warfare, sicknesses and ill luck led to dependency of the population on the big-men, who seized upon these situations

to increase their own domains of power, converting it into prestige for themselves.

Cities never developed in the New Guinea highlands. The big-man government with its alliances and networks never hardened into hereditary chiefdoms, aristocratic lineages or any rigid social stratification. No capitalist class in land ownership, or noble class appeared in terms of absolute power appeared.

These were the conditions that helped to develop a political situation with a relentless rise and fall of leaders, and a continual change in power structures and alliances. The political aspects of war made it impossible for any big-man to gain sufficient permanent control to form a dynasty (Sillitoe, 1978, p.269).

References

Berndt, Ronald M. 1964, *Excess and Restraint; Social Control Among New Guinea Mountain Peo*ple, University of Chicago Press.

Brandewie, Ernest 1971, 'The place of the big man in traditional Hagen society in the central highlands of New Guinea', *Ethnology,* Vol. 10, No. 2, pp. 194-210.

Brookfield, H. C., White, P.J. 1968, 'Revolution or evolution in the prehistory of the New Guinea highlands: a seminar report, *Ethnology,* Vol. 7, No. 1. pp. 43-52.

Brunton, Ron 1980, 'Misconstrued order in Melanesian religion', *Man*, Vol. 15, No. 1, pp. 112-128.

Bulmer, R.N.H. 1964, 'Edible seeds and prehistoric stone mortars in the highlands of east New Guinea, *Man*, Vol. 64 (Sep. - Oct., 1964), pp. 147-150.

Chinnery, W.P. 1934, 'Mountain tribes of the mandated territory of New Guinea from Mt Chapman to Mt Hagen, *Man*, Vol. 34, pp. 113-121.

Davitt, Thomas 1968, 'The basic values in law: a study of the ethico-legal implications of psychology and anthropology', *Transactions of the American Philosophical Society,* Vol. 58, No. 5 (1968), pp. 1-144.

Diamond, Jared 1998, *Guns, Germs and Steel, A Short History of Everybody for the last 13,000 Years;* Random House Pty Ltd, Australia.

Feil, Daryl K.1982, 'From pigs to pearl shells: the transformation of a New Guinea highlands exchange economy', *American Ethnologist,* Vol. 9, No. 2, pp. 291-306.

Golson, J. & Gardner, D.S. 1990, 'Agriculture and socio-political organization in New Guinea highlands prehistory', *Annual Review of Anthropology*, Vol. 19, pp. 395-417.

Gorecki, Pawel P. 198, 'Human occupation and agricultural development in the Papua New Guinea highlands', *Mountain Research and Development,* Vol. 6, No. 2, pp. 159-166.

Lederman, Rena 1990, 'Big men, large and small? Towards a comparative perspective', *Ethnology,* Vol. 29, No. 1, pp. 3-15.

Read, K.E. 1954, 'Cultures of the central highlands, New Guinea', *Southwestern Journal of Anthropology,* Vol. 10, No. 1, pp. 1-43.

Schieffelin, Edward L. 1980, 'Reciprocity and the construction of reality', *Man,* Vol. 15, No. 3, pp. 502-517.

Sillitoe, Paul 1978, 'Big men and war in New Guinea', *Man,* Vol. 13, No. 2, pp. 252-271.

Stewart, Pamela J. & Strathern, Andrew 1999, 'Feasting on my enemy: images of violence and change in the New Guinea highlands, *Ethnohistory,* Vol. 46, No. 4, pp. 645-669.

Strathern, Andrew 1970, *'The* female and male spirit cults in Mount Hagen'*, Man,* Vol. 5, No. 4, pp. 571-585.

Strathern, Andrew 1987, 'Social classes in Mount Hagen? The early evidence, *Ethnology,* Vol. 26, No. 4, pp. 245-260.

Strathern, Marilyn 1985, 'Kinship and economy: constitutive orders of a provisional kind', *American Ethnologist,* Vol. 12, No. 2, pp. 191-209.

Strathern, Andrew & Stewart, Pamela J. 2000, 'Creating difference: a contemporary affiliation drama in the highlands of New Guinea, *The Journal of the Royal Anthropological Institute,* Vol. 6, No. 1, pp. 1-15.

Watson, James B. 1964. *Introduction: Anthropology in the New Guinea Highlands,* American Anthropologist, New Series, Vol. 66, No. 4, Part 2: New Guinea: The Central Highlands, pp. 1-19.

Williams, F.E. 1937, 'The natives of Mount Hagen, Papua New Guinea', *Man*, Vol. 37, pp. 90-96.

Weissner, Polly & Tumu, Akii 1998, *Historical Vines, Enga Networks of Exchange, Ritual and Warfare in Papua New Guinea,* Crawford House Publishing, Australia.

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