



THE AUSTRALIAN NATIONAL UNIVERSITY

School of International, Political and Strategic Studies

State Society and Governance in Melanesia

DISCUSSION PAPER

Discussion
Paper 2010/3

YOUTHS, ELDERS, AND THE WAGES OF WAR IN ENGA PROVINCE, PAPUA NEW GUINEA

INTRODUCTION

Even in these times people still want to listen to leaders in a village before they go and fight. People still try to conform to the traditional pattern. But today the notable difference from the past is this: the few young men who possess guns make the decision whether to go and fight or not. Money, pigs, and the views of leaders are not required. We are all like passengers in a public bus and the driver is in control. If I happen to have a gun, then my people must listen to what I have to say. I am the driver. The power is in the gun. It is the gun that is speaking and not me.

(Anonymous interview, Wakumale, Enga 2005)

In 2005, the Lai Valley of Enga was devastated with houses burned to ash, trees chopped to ragged stumps, modern facilities destroyed as young men drove “the war bus”. The devastation of valleys of Enga in modern times appeared unprecedented, but when one looks back into Enga historical traditions

from around 1800–1850, long before the coming of white men and the gun, there was a period of equal destruction. Fluctuations in the intensity of warfare and the prevalence of peace over generations characterize Enga history. As the Enga say, “Our land is green and black, green during times of peace and black when war rages” (Young 2004). This runs contrary to stereotypic views that “tribes” in traditional societies are caught in a never-ending spiral of revenge and that primitive war is total war with limited means (Keeley 1996). Cycles of war give us an opportunity to explore the actors, dynamics, and contexts that generate chaos, as well as those that restore order.

Here I will consider cycles of Enga warfare within the 350-year span for which we have information on warfare from oral and written historical records. The first is a period of intensive warfare that occurred in the first half of the 19th century, redrawing the map

**POLLY
WIESSNER**

of Enga after the introduction of the sweet potato. These turbulent times were followed by a hundred-year period of successful initiatives to keep warfare in check and to promote prosperity. The Colonial Era then intervened with a ban on warfare. The second is a period of devastating “modern” warfare that began a few years before Independence in 1975 (Gordon and Kipilan 1982; Paney 1973) and accelerated in 1990 with the adoption of new technology in warfare, home-made shotguns and high-powered weapons, reversing the power hierarchy between older men and youths. Fieldwork and village court records allow us to trace the rise in violence, the formation of warring gangs of mercenaries, the impact on the population of Enga and the state of Papua New Guinea, and in the last few years, what may be a trend back towards moderation.

While reasons for any given war are contextual, longer term cycles in the intensity of war have much to do with intergenerational dynamics. For analysis I will borrow an approach from behavioral ecology: parent–offspring conflict theory (Trivers 1974). Parent–offspring conflict theory proposes that certain activities have different payoffs for parents and children. When applied to warfare, parent–offspring theory proposes that the “sons” generation will use warfare to pursue their individual interests in forming male alliances, gaining status, and increasing access to resources to attract women. The “fathers” generation will seek to contain warfare and use it strategically to create an environment conducive to the welfare of a broader population including their descendants and those of close relatives. Elders will strive to foster beneficial social and political relationships for themselves and for their group.

Parent–offspring conflict theory dovetails with other approaches from the social sciences. For example, Daly and Wilson’s (1985) “young male syndrome” proposes that coalitional violence is perpetuated by young men who stand to gain and have little to lose. The “youth bulge” or demographic armament theory (Fuller 1995; Heinsohn 2003) attributes increases in frequency and destructiveness of warfare to periods of demographic growth

when “sons” can find no prestigious positions (Mesquida and Wiener 1999).

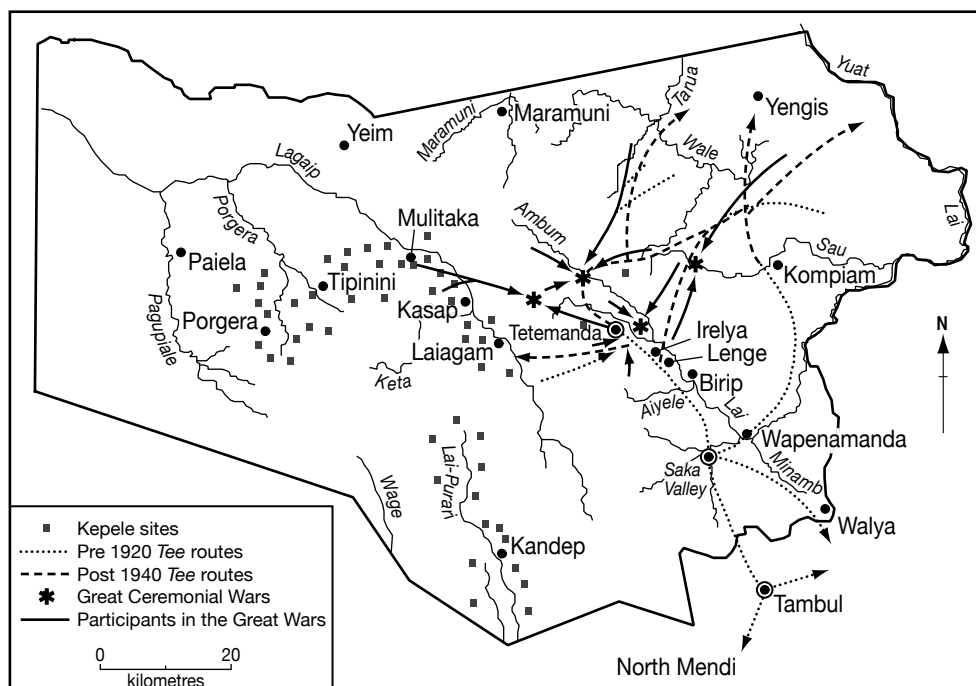
After a period of economic change, rapid population growth, and an increase in the proportion of young men to elders, it would be expected that coalitional violence would increase as youth and elders respond to new costs and benefits, including those introduced by the nation state. In some societies a cycle of runaway warfare results causing population decline as it has among the Waorani of Ecuador (Beckerman et al. 2009) or the Etoro of Papua New Guinea (Kelly 1977; 2000). However, in most cases, if a population is to flourish, it cannot be constantly at war. Elders understand this and work to realign the goals of youth with their own. Waves of war and peace will thus depend to some extent on which generation is driving the “war bus” and whether the driver can navigate the obstacles of modern life: beer, marijuana, mobility, and the perspective that “money is life”.

BACKGROUND

The Enga: Past and present

The Enga of Papua New Guinea are a Highland horticultural society well described in the anthropological literature (Brennan 1982; Feil 1984; Kyakas and Wiessner 1992; Lacey 1975, 1979; Meggitt 1965, 1972, 1977; Talyaga (1982); Waddell (1972); and Wohlt (1978), amongst many others). Today they number some 300,000 and make up the largest linguistic group in Papua New Guinea. Their staple crop is the sweet potato used to feed large human and pig populations. The Enga are divided into nine mutually intelligible dialect groups (Brennan 1982) that share a common language as well as important economic, social, political, and religious orientations. First contact with Australian patrols and gold prospectors occurred in the 1930s; the Colonial Administration was not established until after World War II.

The Enga are divided into tribes with 1,500 to 8,000 members, each having constituent exogamous patrilineal clans and sub-clans (Meggitt 1965). Clans of 350–



Map 1. The Tee cycle, the Great Ceremonial Wars and Kepele Cult networks.

1,000 are the units for most political actions, including war. Women devote themselves primarily to child-rearing, gardening, pig husbandry and more recently, cash crops. They maintain the private inter-group ties that are used to obtain wealth on credit from outside the clan to fuel their ceremonial distributions of wealth. Although men shoulder the heavy work of building houses, fencing and clearing forest, it is the politics of ritual, warfare, and ceremonial exchange of wealth that absorb much of their time and interest. Today men also devote time to cash enterprises and local, provincial and national politics. Both men and women participate in the activities of the many denominations of churches of Enga.

Traditionally Enga society was, and to some extent still is, governed by a “big-man” system. All men started as equals and strove to make a name through producing pigs, excelling in mediation, organizing ceremonial exchange, negotiating peace and assisting their followers. Potential equality within the sexes was of utmost importance for internal cooperation; for external cooperation big-men strove to maintain equal-

ity of their clan vis-à-vis others (Wiessner 2009). Ceremonial exchange networks crossed many clan boundaries and warfare was endemic as local groups jockeyed to maintain the matrix of equality necessary for long distance exchange to flow. Men formed coalitions of supporters to rise in status, but if they failed to deliver benefits to their followers, their demise was rapid. Today a new rung of modern leaders has been added: politicians, public servants and businessmen. All modern leaders participate in traditional clan activities and contribute generously to wealth distributions.

Pre-colonial history

The social, economic and political situation in Enga at the time of first contact with Europeans in the 1930s was not a long-established one (Wiessner and Tumu 1998). Some 300 years earlier, the sweet potato had been introduced to the island of New Guinea from Indonesia via local routes, releasing constraints on production (Watson 1965; Ballard et al. 2005). Historical traditions from all areas report subsistence and residential shifts, surplus pig production, population

growth (ca.1.1% per annum), and the expansion of exchange and ritual in response to mounting social and political complexities (Wiessner and Tumu 1999; Wiessner and Tumu 1998; Wiessner 2002).

During this time, three large exchange networks arose (Map 1): the Kepele cult network, the Great Ceremonial Wars, and the Tee Cycle. The Kepele cult network of western Enga drew together the tribes of the region for feasting, initiating boys, and communicating with the ancestors. The Great Ceremonial Wars of central Enga pulled allied tribes from four valley systems into staged tournament wars fought recurrently to demonstrate strength and brew exchanges of enormous proportions. The Tee Ceremonial Exchange Cycle of eastern Enga was a three-phase cycle of exchange festivals that tied together clans of eastern and central Enga along major trade routes.

Around the fourth to fifth generation before present, the Great Ceremonial Wars expanded under the forces of dramatic inter-group competition. Leaders tapped into the wealth of the Tee Cycle to finance their wars and to reinvest the great quantities of wealth flowing from the Great War exchanges. In the 1930s the Great Ceremonial Wars and Tee Cycle merged into a three phase exchange cycle that involved more than 350 clans and 40,000 people (Map 1) (Wiessner and Tumu 1998; Wiessner 2002). At the heart of the Tee Cycle was the quest to assemble as much wealth as possible in one place at one time and distribute it in public, bringing fame to both prominent individuals and their respective clans.

The data

Different data sets will be used for the three periods of Enga history: the pre-colonial, the colonial and the post-independence periods. Enga oral historical traditions, *atome pii*, were collected from the 110 “tribes” of Enga between 1985 and 2005 (Wiessner and Tumu 1998). They are said to have originated in eyewitness accounts and contain information on many aspects of Enga life in the past, including settlement patterns, wars, migrations, songs, poetry and developments in agriculture, ritual and exchange (Lacey

1975, 1979; Wiessner and Tumu 1998). They cover a period of some 350 years; accompanying genealogies allow events to be placed in a chronological framework. Historical traditions yielded passing mention of over 200 wars and 84 more detailed accounts of Enga wars of the past. Enga do not revise historical traditions to fit current needs. Rather, they turn to a convenient chapter in their history to justify current actions.

Data for the colonial period comes from the work of ethnographers, notably Mervyn Meggitt (1977), Gordon and Meggitt (1985), Gordon and Kipilan 1982, Roderic Lacey (1975, 1979) and William Wormsley and Michael Toke (1985). Data on “modern warfare” was collected with the assistance of village court magistrates between 1990 and 2010 (Wiessner et al. 2007). This data set includes over 300 interviews with warriors, mercenaries, traditional leaders, village court magistrates, church leaders, women, and children. Village court records and interviews yield information on the clans involved, causes of conflict, deaths and outcomes for 573 wars fought during this period.

Enga warfare

No Enga historical traditions claim there was a “time before warfare”. The vast majority of Enga wars were, and are still, fought between neighboring clans over conflicts that begin with a brawl and escalate. Many wars have deep historical roots and most are the result of culminating tensions. People who socialize and celebrate together on one day can turn into enemies overnight, dehumanize members of the offending clan, and be at war the next day. The Enga deplore war and do not recount historical traditions glorifying war heroes, nor did they develop more sophisticated weaponry over the 350-year period, perhaps because the intent of most wars was to re-establish balance so that exchange could flow (Wiessner and Tumu 1998).

When war breaks out, women gather their possessions, pigs and children and flee to take refuge in clans of relatives. Allies come to join the fighters on the understanding that they will be compensated for allied deaths. In the past, wars began by day as lines of

fighters exchanged volleys of arrows in open areas in a somewhat sportive atmosphere. When a man was killed, anger flared and more deadly battle tactics were deployed such as ambushes and night raids. War magic was and still is practiced throughout Enga. Most pre-colonial wars ended after one to four deaths and within two to fourteen days. Some wars raged into runaway aggression and resulted in more casualties (Meggitt 1977; Wiessner and Tumu 1998). Today with the introduction of modern weapons, the characteristics of war have been radically altered (Wiessner 2006; Wiessner et al 2007).

Costs and benefits of wars differed for different age groups and continue to do so today. Some men went to war over the triggering incident, others to fight out old grudges. Youth fought for excitement, camaraderie and a chance to show off, while older men hoped to gain reputation and exchange partners through compensation payments. Warfare provided a way for young men to call attention to themselves, their prowess, and their willingness to sacrifice for the group. However, if they were to move on to become big-men, they had to go on to gain influence through ceremonial exchange.

At the clan level, warfare split clans who had grown too large to cooperate into independent units which then renewed ties. Though some wars were fought over land and others to keep control of trade routes, most were fought to restore reputation and inter-clan balance of power. This was essential because clans received a good part of the wealth for ceremonial exchange on loan from their neighbors; a reputation for being able to defend clan members and assets attracted more wealth. Enga wars were rarely fought with the intent of taking land.¹ When land was taken during war, it was usually no more than a few acres (Meggitt 1977) to humiliate the losers (Wiessner 2006) and if families were dispossessed, they could get land from fellow clansmen if necessary or move to their wives' clans permanently. Land lost in war was often regained in subsequent wars. In the past, the cost of destruction of property in war was relatively low, but loss of human life was considerable; between

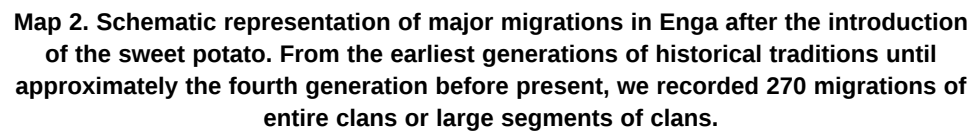
15–25% of men died in warfare (Meggitt 1977; Wiessner and Kelai, in preparation). Many of these were young unmarried men; their deaths made more women available for polygynous marriages of big-men. Warfare cut off the flow of wealth from other clans and both allied and enemy deaths had to be compensated, giving strong incentives to limit the length of wars. Severed ties and compensation for deaths incurred greater costs for elders than for youths.

PRE-COLONIAL WARFARE

Around the time of the arrival of the sweet potato some eight to twelve generations ago, Enga traditions describe agriculture as precarious, the population as sparse, life as lonely, spouses hard to find, trade networks vast, and group loyalties strong (Wiessner and Tumu 1998). We have estimated on the basis of genealogies and settlement locations that the population of Enga in the 1600s was between 10,000–20,000. Nonetheless, life was punctuated by conflicts over hunting rights, sharing of game meat, or insult or injury. Warfare served to break up groups that had become too large to cooperate or to displace quarrelsome neighbors.

Shortly after the arrival of the sweet potato, there were many voluntary migrations to take advantage of the new crop. Immigrants were welcomed by kin in horticultural groups with whom they had marriage ties. Unfortunately those who were so eagerly recruited by relatives did not provide the supportive neighbors their hosts had hoped for. Within one or two generations of their arrival, the immigrants were often at war with their hosts (Wiessner 2006). Many of these wars appear to have originated from exploits of young men.

The most vicious wars in Enga history were fought after this period of rapid population growth, adoption of new subsistence strategies, and residential shifts. These wars greatly altered the social landscape of the broader region. Vast tracts of up to 160 sq km of good agricultural land were vacated, for example, the entire Ambum valley. Historical traditions describe years of battle, devasta-



Responses to the wars of the sixth to seventh generation

ing compensation exchanges for allies killed. However, they also suggest that the net effects were more detrimental than beneficial to the strategies of elders. Regrets were expressed over the departure of a former neighbor, trade ties were severed and it was hard to find supportive allies to fill the land.

The first response of elders to the chaos was the institution of *Sangai* bachelors' cults, which placed young men firmly under their control for education and discipline, gave them a prescribed course to success, and aligned the goals of younger and older men. The *Sangai* involved five days of elaborate ritual for the growth of body and mind (Wiessner and Tumu 1998). By day, the bachelors cared for their bodies and sacred cult objects that would transform them. In the evening, they recited long praise poems that presented renowned local leaders as role models in many arenas, except warfare. At night, the young men were given a political education; sleep was interrupted to interpret

dreams in the context of clan position with respect to warfare and exchange. Elders and youth thus became partners in political strategies. Political revelations from dreams were put into song and presented to the public during a formal emergence ceremony for the bachelors. Around the age of 25–30, young men completed their transformation into mature marriageable adults with potential for success equal to that of all other men.

A second development to put order to chaos was the creation of the Great Ceremonial Wars—formal tournament battles held in central Enga. The goal of the Great Wars was to reweave exchange networks between the victors in past wars and those who had been displaced to the outer reaches of Enga territory.

The Great Ceremonial wars were planned and planted like a garden for the exchange that would follow. They were arranged when goods and valuables were plentiful and when there were so many pigs that women complained about their workloads. Everybody knew what they were in for, how reparations were paid for deaths, and what the results would be. They were designed to open up new areas, further existing exchange relations, foster tribal unity, and provide a competitive, but structured environment in which young men could strive for leadership. These qualities of the Great Wars made them differ from conventional wars, which disrupted relationships of trade and exchange, causing havoc and sometimes irreparable damage. The distributions of wealth that took place after the Great Wars brought trade goods from outlying areas into the Wabag area on the trade paths initially established by the salt trade. (Ambone Mati, Itapuni Nemani clan, Kopena, Wabag, 1988)

These ritualized battles involved pairs of tribes and their allies. After opening ceremonies, hundreds of warriors in full ceremonial dress exchanged volleys of arrows while spectators from far and wide gathered to watch. Women danced and sang along the

sidelines. Men fought by day and courted women by night. These “battles without anger” went on for weeks or months with pauses to refuel. Deaths were not avenged and no land was won or lost. When a formal end to battle was called after weeks or even months of fighting, massive exchanges took place over a two–three-year period in which thousands of pigs changed hands. Through these exchanges, displaced groups were able to put themselves back on the map of trade and exchange that linked four valley systems (Map 1). Everybody stood to gain in the Great Ceremonial Wars. Youths had an opportunity to meet potential marriage partners and display their fighting skills in front of the hundreds of spectators. Individual exchange partnerships forged between the opponents, hosting group, and allies allowed elders to achieve their political designs.

In between the Great Wars, smaller conventional wars continued to be fought. Around 1850, when the turmoil of preceding generations had settled, formal peace processes were instituted that involved paying compensation for enemy deaths. Peacemaking allowed groups to fight and restore relations so that both parties could stay put and resume relations after warfare. During compensation each family gave wealth to and received returns from the relatives of the deceased and other families of their choice in the enemy clan during a series of public ceremonial exchanges that unfolded over the next two to three years. Peace was restored through forging a multiplicity of ties while time healed animosities (Wiessner and Tumu 1998). Big-men coordinated the event and contributed more than others; young men were under strong pressure not to disrupt the plans of their clans as a whole. Pressures to pay compensation to the enemy were two-fold: (1) there was less empty land for dispersal and (2) victors did not want to expel neighboring “brother” clans who supplied them with wealth in enchain exchange.

Paying reparations to both enemies and allies provided a major incentive to end wars before too many deaths were incurred. Accordingly, rules were laid down to manage emotions and contain warfare. For example,

Table 1. Number and Average Distance of Clan Migrations after Tribal Warfare for Eastern and Central Enga

	Generation		
	7th–6th	4th–5th	3rd–2nd
Number of migrant clans after warfare	71	29	5*
Average distance of migration	26km	17km	15km

Note *Numerous single families or lineages joined relatives living elsewhere after warfare

before going to war (Sackschewsky et al. 1970) and during the course of wars, clansmen met to discuss plans and restrictions:

- Do not kill a person on the land of another clan.
- Do not deface corpses.
- Do not kill women and children.
- Do not pursue and kill a wounded man.
- Avoid killing leaders, for they have the wealth and skills to make peace.
- Fight wars on one front.

Rules were backed by proverbs, such as:

- The blood of a man does not wash off easily.
- You live long if you plan the death of a pig, but not if you plan the death of a person.

Under these new rules, warfare continued from ca. 1850 until 1950–60. With compensation to enemy clans, migrations after warfare decreased significantly (Table 1).

There were still cases of runaway violence; however, most warfare was restricted and designed to restore balance of power so that exchange could flow. Elders used warfare for political strategies; young men used warfare as an initial step to build reputation by showing willingness to sacrifice for their clans, and the ability to do so effectively.

DEVELOPMENTS IN THE COLONIAL ERA

The first encounters with Europeans in Enga occurred in the early 1930s, but owing to WWII, it wasn't until the 1950s and 1960s that the Colonial Administration, followed by missions, was established throughout Enga. In the 1940s an epidemic of porcine pneumonia wiped out 20–30% of the pig population and dysentery affected humans. This does not seem to have caused many human deaths according to historical traditions (see also Meggitt 1973). Missions and government introduced cash crops, health care, education, wage labor, and a western justice system. The population increased rapidly with the establishment of health services in the 1960s and 1970s, new crops, and store bought foods such as tinned fish and oil. The population of Enga was 164,532 in 1980, 235,561 in 1990 and 295,031 in 2000 (National Census). The population growth rate was estimated to be 2.4% per annum between 1971 and 1980 (Lea and Gray 1982), 3.6% per annum between 1980 and 1989, and 2.2% per annum between 1990 and 1999. This is very high compared to our estimates of 1.1% per annum prior to contact with Europeans.²

During the 1950s and 1960s, the Australian Administration enforced a ban on warfare known as *Pax Australiana*. Initial resistance to the ban was squelched by brutal means; thereafter, leaders realized that if they did not squander their resources in war that ceremonial exchange would flourish. They also enjoyed “fighting in court” to achieve some goals, including usurping a few acres of land from neighbors (Gordon and Meggitt 1980; interview with Kambetane of Tetemanda Village 2004). Young men were offered education, new employment opportunities, and cash crop cultivation without losing the possibility to follow their fathers in ceremonial exchange. With elders and youth occupied by productive enterprises, warfare declined dramatically (Meggitt 1977).

Around the time of independence in 1975, Papua New Guinea was a state in the mak-

ing. In Enga the pot of wealth provided by the national and provincial governments (Carrad 1982) rapidly eclipsed the great Tee Ceremonial Exchange Cycle. The last Tee Cycle was held in 1978–79. Around this time, men's houses where youth had received crucial education from male elders were replaced by family houses; bachelors' cults, cults for the ancestors and many other traditional activities ceased to be practiced. The goals of election politics were similar to those of the former Tee Cycle: to divert as much wealth as possible into one's own area (Dinnen 2001; Gordon and Meggitt 1985; Jameson and Wiessner 2008; Strathern and Stewart 2000a). The question at hand was not what should be developed, but whose clan or tribe should reap the benefits of development. Once elected, representatives were under great pressure to deliver to those who had voted for them (see Strathern and Stewart 2000); likewise, public servants were expected to divert as much wealth as possible to their clans. Supporters called this good leadership and loyalty; opponents called this corruption.

The resurgence of warfare

Warfare began to resurge in the years just before independence, largely owing to growing inequalities, accompanying jealousies, and anxiety for a future when the Australian Administration would withdraw and leave public offices open to competition. Moreover, Enga felt that the western justice system was inadequate; it required evidence that was extremely difficult to collect, it was non-political, unconcerned with future relations, and failed to restore relations between groups via mediation and material compensation. They saw tribal warfare as a way to resolve problems that could not be solved by other means. The benefits of peace experienced in the Colonial Period were not sufficient to deter warfare.

By the late 1970s, warfare was once again prevalent in Enga and throughout the Highlands. As in the past, wars escalated out of inter-clan disputes and were fought with the intent of reestablishing balance of power after insult or injury. New issues arose that had no precedence for handling via custom-

ary law: deaths in car accidents, road blocks, destruction of government property on clan land, and violence related to alcohol and elections (Table 3).

Police intervention in the 1980s was ineffective and often made the situation worse (Wormsley and Toke 1985). Though everybody agreed that there was nothing to gain from warfare except for revenge and upholding reputation, wars raged.³

The newly formed Papua New Guinea government was at a loss when confronted with the resurgence of warfare. The brutal force used to curb tribal warfare in the initial years of contact with Europeans could not be used by a democratic government against its own people. In 1975 the National Government passed the Village Court Act as a recognized means of solving disputes via "customary law" and principles of restorative justice. In 1980, the Intergroup Fighting Act was introduced, enabling magistrates to impose penalties on what was judged to be the responsible clan. Subsequently charges against entire clans were ruled as unconstitutional by the Supreme Court.

The Village Court system provides an alternative to the formal courts and today handles the majority of legal disputes in Papua New Guinea (Goddard 2009). Magistrates are men knowledgeable in customary law and skilled in mediation who are chosen by the community. Even though serious issues such as murder, rape and land claims are outside the jurisdiction of Village Courts, these cases are regularly "heard" in village courts until the two parties reach their own informal settlement. In 1982, Operation Mekim Save, a branch of the Village Courts, was designed to deal specifically with tribal warfare. It still operates in Enga today and favours judicial arbitration backed by punitive power over traditional mediation. Strong elements of mediation nevertheless remain and Operation Mekim Save magistrates are chosen for their connections, knowledge, respect and competence. Successful settlements were negotiated by Operation Mekim Save which set fixed amounts of pigs and cash to be given in compensation on a specific date.

Some traditional leaders claim that Operation Mekim Save undermined the fundamental principles of Enga compensation: that the amount given should be voluntary, that there should be compensation exchanges not one-time payments, and that the process should take place over time so that multiple ties can be restored. However, the real problems came from police action. Police action that backed Operation Mekim Save orders rarely resulted in the arrest of offenders and frequently involved punitive raids unjustly targeting one side. In the police raids of the 1980s, houses were burned, pigs roasted, and women raped. This generated further tension between clans and mistrust of the police.

MODERN ENGA WARFARE

Old man, your time has come and gone.

The 1980s and 1990s saw many efforts towards economic development, the promotion of sports, awareness programs, and concerted efforts on the part of churches to curb tribal warfare (Young 2004; Gibbs 2004). However, all efforts were disrupted by the adoption of homemade shotguns and high-powered rifles into tribal fighting. This did not happen by popular choice. Enga had avoided using guns in war for decades but once a warring party had guns, the opponents had little choice but to match them. The first high-powered weapons used in warfare were brought to Enga by two brothers who deserted the Papua New Guinea Defense Force in the late 1980s. Around the same time, homemade shotguns began coming in from Western Highlands Province. Numerous clans resisted adopting guns until they had little choice but to join the arms race if they were to defend their people, property, and land. By the early 1990s, firearms were used in most Enga wars. With firearms came new motivations, tactics, leadership, and outcomes of war. Unlike in the past, conflicts without a history of tension could escalate because of multiple deaths in the first few days of fighting.

The frequency of tribal warfare increased rapidly in Enga after the introduction of fire-

arms, with the rate of warfare almost doubling each five-year period from 1991–2005 (Table 2). Why? Since Enga can solve problems either by paying compensation or by warfare, an increase in warfare is a matter of choice. There are three central reasons for choosing violent solutions: (1) jealousy over growing social inequalities, (2) new issues that have few precedents on customary law, and (3) discontented youths and the reversal of the age-based power hierarchy.

Competition and jealousy have always been forces behind conflict in Enga society where all men and all clans are defined as equal at the starting point and then challenged to excel. Engans feel that many of the wars of today are the result of jealousies aroused by different opportunities for education, jobs, and access to cash and the resources of politicians. This is evidenced in the increase in murders, often of businessmen on the rise, as triggering incidents for war (Table 3). Unlike in the past, the economy of Enga does not offer equal opportunities for youth. Many cannot afford the school fees for secondary education; they remain at home feeling they have little to lose in war. Women like men with money; young men without money say they have difficulties finding spouses. For those who graduate from high school, only 10–12% have the chance to go on to tertiary education or to get jobs. Those who gain access to office and public service channel government funds to their immediate supporters, creating further inequalities. Politics has much to do with creating *nenge*, “those who eat” money and jobs and *nanenge*, “those who do not eat” because their candidates do not get into office (see also Lakane and Gibbs 2003). Many new issues have emerged in the past three decades that do not have precedents in “customary” law and are infrequently brought to formal courts. These include: crime committed under the influence of alcohol or marijuana, road blocks and vehicle accidents, disputes over land with royalties attached (mostly in Porgera), AIDS and witchcraft accusations, and disputes ensuing from the breakdown of traditional marriage and sexual mores. Village courts struggle to find solutions to these new issues with

Table 2. Number of Tribal Wars by District in Enga Province since 1991

District	1991–1995	1996–2000	2001–2005	2006–2009	Total
Kandep	9	19	17	80	125
Kompiam	9	18	41	30	98
Laiagam/Lagaip	17	36	29	26	108
Porgera	1	8	36	59	104
Wabag/Ambum*	3	4	26	54	87
Wapenamanda*	6	9	31	5	51
Total	45	94	180	254	573

Note

*Wars between 1991–2000 in the Wabag and Wapenamanda districts were few but large and devastating.

reference to “custom”. Finally, with the adoption of firearms,⁴ younger men landed in the driver’s seat of modern warfare as elders lost control of the course of battle. Wars of today usually start with a brawl involving clansmen armed with bows and arrows, bush knives and homemade shotguns. Before long, the hardcore warriors with firearms move into upper reaches of clan territory to fight, remaining beyond the control of elders for weeks or months. Traditional leaders who try to intervene are threatened by young men with guns and are told, “Old man, your day has come and gone” (Kambao Lambu, personal communication, Lenge, 2005). And so wars rage on.

Rambos

A few years after the adoption of guns, a new class of fighter emerged: the “hireman” or “Rambo”. Rambos are experts in wielding high-powered weapons, and are hired by clans in exchange for money, pigs and sexual access to women. A party of fifteen to twenty-five supporters with homemade guns who seek to kill the enemy and destroy all resources on their land accompanies each Rambo. Who are the Rambos? We held extensive discussions with thirteen Rambos,

twelve men and one woman, who fought in the wars of other clans for material compensation. Two had high school educations, another four had completed grades 6–8, and the remaining seven had less than six years of education. All of them began their careers by fighting for their own clans with bows and arrows or shotguns to avenge injustices to clan members. Some were influenced by Hollywood “Rambo” films and felt invincible; others were cool, calculating fighters who knew the risks of the game all too well. All practiced war magic for both prediction and protection.

Most Rambos said that they became caught up in the excitement of fighting in their initial year, reveling in the praise they received from kin: “Fighting is like eating pork, sweet for its rewards like material compensation, praise and attention from women”. From there, they sought other wars, whether as allied kin or local mercenaries. All Rambos interviewed describe turning into “half-halves”—half human-half animal, when engaged in fighting, driven only by the urge to kill and avenge. Once they had succeeded, they returned home, slept for a couple days, practiced cleansing rituals, and walked out into everyday life until they had

Table 3. Triggering Incidents for Enga Tribal Wars: 1885–2009

Triggering Incident	1885–1915		1981–1990		1991–2009	
	n	%	n	%	n	%
Hunting/Sharing	6	19%	0	0%	0	0%
Theft/Property	8	25%	12	14%	115	20%
Land Dispute	7	21%	26	31%	122	21%
Murder/Revenge	3	11%	22	26%	150	26%
Women/Adultery/Rape	4	13%	6	7%	66	12%
Tee Exchange	4	11%	0	0%	0	0%
Compensation	0	0%	6	7%	18	3%
Election Politics	0	0%	2	2%	31	5%
Gambling/Money	0	0%	1	1%	12	2%
Car Accident/Road Block	0	0%	3	4%	26	5%
Drunken Brawl/Murder	0	0%	2	2%	22	4%
Miscellaneous*	0	0%	5	6%	10	2%
Total	32	100%	85	100%	572	100%

Notes

Data for 1980–85 provided by William Wormsley; *Includes insult, domestic problems, poison/sorcery

another chance to fight. They used most of their earnings to help clan members with school fees, hospital bills and other needs. Some fighters saw themselves as upholding justice in a state that has failed to control violence. A famous Rambo, Pyalup, once held up the police at the market place and took their guns saying:

You are representatives of the government. When the war was on you did not show up to stop the fighting. As a result you see all the land devastated and how many lives were lost from Lakamanda to here. You are responsible for it. For this reason I am taking your guns. Go in peace.

Anonymous testimony, Par, 2005

Tribal leaders, elders, women, and many others despise mercenaries but are nonetheless forced to hire them for their clan's survival. When high-powered weapons are few, the presence of one or two good mercenaries determines the outcome of the war.

Some women are attracted to Rambos, but most say they have sex with them to seduce them into staying and protecting their clans. Clanspeople praise such women and even the husbands of married women encourage their wives to do what is necessary in the interest of retaining Rambos. Businessmen and politicians living in cities provide money for arms and ammunition, or the goods themselves, to maintain a “big name” at home. Without this source of arms, fighting with modern weapons would be limited.

The Gangs of Enga

When traditional leaders lost control of the fighting, young men also lost their “fathers” who would eventually protect them by restoring peace. In studies of western gangs it has been noted that young men without fathers form gangs of peers for security (Wrangham and Wilson 2004). So it was in Enga. In the late 1990s, Rambos formed “teams” of mercenaries that crossed clan boundaries. For example, the Pailao team, “Pillage”, and the

Nakau team, “Stinging Nettles”, of the Lai Valley were made up of men from four clans in 2005. By September 2007, the Pailao had men from fourteen clans or sub-clans and the Nakau team had men from nine. Each clan contributed two to four major Rambos to the team plus the men who accompanied them with shotguns. Some clans were split with men from one sub-clan on one team, and those from another sub-clan on the other team. The complexity of team composition generates complex conflicts that are difficult to settle by traditional means.

As the gangs of Enga formed, the goals of warfare were altered. In traditional warfare, everybody knew who came out on top, but winning and losing were not touted. In contrast, teams of Rambos seek status and adopt the language of sports into their battles, particularly rugby. The goal of warfare has become “winning” by wreaking absolute destruction on the other side: burning houses, chopping trees, destroying gardens, burning schools, medical aid posts, radio transmitters, missions and all assets of the modern world. Even assets precious to the entire district such as the Laiagam, Saka and Highland Lutheran International High Schools have gone up in flames. With modern materials available in these facilities, obtaining spoils of war has become a goal of warfare for the first time:

... The Pailao team, the name by which our team was known, shot and killed three people ... this name was given to our team because we killed the enemy in one raid, giving them no chance to escape. The name means literally “to pillage”. Everything became ours from cars to snooker tables to cattle to houses. All the while we had been fighting, this area had not been invaded before ... Almost all of the land was totally devastated. This was done by only six of us. We took away everything we found and stayed here for about four months. This was a very big sensation. Many from the news media came and took pictures of the scene. The dead bodies were photographed. They gave us money for taking pictures. The policemen were

there too. It was a lot of fun. From then on we were the winners and six months passed without fighting.

Anonymous testimony, 2005

When one war was over, the Nakau and Pailao teams sought to colonize the problems of other clans in order to fight out their own vendettas on somebody else's land, sending warfare in eastern Enga into a vicious cycle. In the 2002 elections, Rambos also began to be recruited to support candidates for National Government seats.

The demise of the Rambos: “There is nowhere to go Rambo, but to the grave”

After several years of warfare, most hardcore fighters had realized that if they stayed in the business of war, they would soon be dead. Some tried to get out of fighting but found it difficult because of the number of enemies who wanted to kill them and because they had become addicted to war. One man who had married and joined the church to give up warfare said, “The desire for revenge is engraved in my heart like the Ten Commandments are engraved in stone”.

One by one the leaders of the Nakau and Pailao teams were killed, as were other leading warriors. Few, if any Rambos were killed in battle for they were too good for that; most were assassinated when their defenses were down. Their involvement in national government politics put them in further danger. In 2007 the last of the great Rambos, Bokone of the Nakau team, was assassinated at a political rally. His followers chanted, “The teacher is dead, long live the students”. But the students did not live long and by 2009 the Nakau team was defeated. The trend of gang formation that led to a spiral of warfare may have seen its rise and fall and be but a small blip in Enga history. It is too early to tell.

The impact of modern war

In pre-contact wars, women and children living near the war zone fled to the clans of relatives with their pigs and possessions where they resided for days or weeks. All men remained to fight except for those who were too old. After approximately 1885, it

Table 4. Number of Deaths in Tribal Wars Reported in Enga Province 1991–2009

	Deaths	War	Avg No. Deaths per Tribal Fight
1991–1995	843	45	19
1996–2000	1399	94	15
2001–2005	1467	180	8
2006–2009	1204	254	5
Total	4913	573	9

Source: Village Court Records

was unusual for entire clans to be driven off their land, though the defeated might lose a few acres (Meggitt 1977). With both clans remaining on their land and seeing each other regularly, there was more opportunity to restore peace. When high-powered weapons come into play, people flee their homes at the very onset of war and live as refugees for months or even years. There is a saying in Enga: “If you destroy a nest, the birds will just fly around, because there is nowhere to settle”. Likewise, one of the intents of modern warfare is to destroy land and property so that the original occupants will become nobodies, wander like nomads, and become slaves on somebody else’s land.

One of the greatest problems of modern warfare cited in interviews was the refugee problem. As long-term guests in the houses of kin, men, women and children suffer. Men must endure loss of status—as one leading clan leader and magistrate put it: “If somebody rapes my wife or daughter, I must just turn away and pretend that I did not know”. Mothers find it hard to provide for their families when living on the land of hosts; young women are asked to provide sexual favors for their hosts as payment. Children cannot attend school and are brutally teased for being homeless beggars (*yandapae*). Many refugees who have witnessed atrocities during the war or lost loved ones complain of sleeplessness, a meaningless life, and

depression. Clans near Wabag and other towns who host many refugees feel the strain on resources, general disruption of their communities, and an increase in theft, rape and drunkenness. Finally, tribal leaders who are dispersed are not on the spot to negotiate settlement.

Compensation

Tribal leaders and magistrates from Operation Mekim Save work tirelessly with minimal pay to bring peace from the onset of a war until the exhaustion phase. They are the modern heroes of Enga. Though preventative orders issued

by Operation Mekim Save are supposed to be backed by police support, this rarely happens except in the Porgera mining area. The police are under the control of the National Government and do not respond in time. Their “allowances” to go into fighting zones rarely arrive before the conflict is out of hand. Moreover, the police are no match for warriors in terms of weapons and fighting experience. People have great mistrust of the police who regularly extract bribes and thus villagers do not make them party to any information that would help in stopping wars.

When both sides have tired of war or there is little left to destroy, warriors step aside and let Operation Mekim Save together with clan leaders issue preventative orders, balance deaths with deaths, and stipulate compensation to be paid. Average compensation ordered for the death of a person between 1991 and 2006 was Kina 1,239 and 26 pigs, and for the average war, 198 pigs and 9,542 kina, although the clan of the killer often tried to pay more to gain status (Wiessner et al. 2007). Enga say that there is so much compensation to be paid that the next generation will still be covering the debts of the present one.

Compensation has become a forum for wealthy businessmen to gain repute and for politicians to win votes by contributing large sums to settlements. Most Enga interviewed criticized the wealthy and powerful for turning warfare into an arena for status competition to promote their own popularity,

Table 5. Number of Deaths Before Tribal War Was Ended: 1991–2009

No. Deaths by War End	1991–1995		1996–2000		2001–2005		2001–2005	
	n	%	n	%	n	%	n	%
1–5	10	22%	42	45%	116	64%	192	75%
6–10	18	40%	24	26%	27	15%	36	14%
11–50	13	29%	20	21%	34	19%	25	10%
51–300	4	9%	8	9%	3	2%	1	1%
Total Wars	45	100%	94	100%	180	100%	254	100%

first by supplying guns and ammunition and then by fueling the compensation payments. They say that these “new big-men” are the very ones who permit fighting with modern weapons to escalate and then help cover the damage done by troublemakers by contributing to compensation.

Once the fighting ceases, people gradually move back to their land with apprehension. There they begin the laborious job of rebuilding their lives; costs are high in areas where timber and thatch are scarce and must be purchased. Time and money spent on rebuilding diverts families from engaging in more productive activities including paying school fees. Finally, warfare discourages development, capital investment, and business initiatives, threatening to leave Enga far behind the rest of Papua New Guinea. Successful, educated business people move to the cities where they do not act as role models for young people.

The response of clan leaders

Since Rambos took over the driver’s seat of the “war bus”, clan leaders are by no means asleep in the back seat. They are acutely aware of the need to realign their goals with those of youths and have begun work on a number of fronts. First, elders make efforts to get parents to pay school fees and place more emphasis on education. Church leaders work tirelessly to combat tribal warfare. On the front lines, church leaders

take considerable risks to intervene and to stop the conflict (Young 2004). In some areas, “prayer warriors” meet several times a week to combat conflict with prayer. Indigenous Christian movements opposing war are exciting, drawing in people with exuberant singing and trance (Gibbs 2004). Youth groups tied to churches divert attention from fighting to sports and give young men a sense of brotherhood similar to that which they experience in war. Women’s groups oppose war but have not been as successful in intervening as they have in other parts of Papua New Guinea. Preachers try to alter values from payback to forgiveness; though this shift is on people’s lips, in practice it will be a long time coming.

Since the introduction of the mobile phone in 2007, tribal leaders have developed rapid response units to inform each other of conflicts, rush to the trouble spots, and nip trouble in the bud. Some tribes have formed legally registered community governments who plan community projects and lay down community rules. In one such community government, the Yakani Tambukini, rules include no gambling in the market place, no drinking and marijuana smoking, and no “animal houses” during election (houses where sex is exchanged for votes). When elders go around admonishing those who break the rules, many youths listen, for young people also fear the recent chaos.⁵ In some clans elder men spend time with young men on Saturday afternoons, often

Table 6. Outcome of Inter-Clan Conflicts Brought to Operation Mekim Save in Enga Province 2006–2009

Type of Incident	Resorted to War		Solved by Mediation		Totals	
	n	%	n	%	n	%
Land Dispute	48	50%	48	50%	96	100%
Murder/Revenge	45	71%	18	29%	63	100%
Theft/Property	59	46%	70	54%	129	100%
Gambling/Money	3	23%	10	77%	13	100%
Drunken Brawl/Murder/Beer	16	26%	46	74%	62	100%
Car Accident/Roadblock	18	38%	29	62%	47	100%
Rape	11	55%	9	45%	20	100%
Women/Adultery	32	43%	42	57%	74	100%
Domestic Problems	3	33%	6	67%	9	100%
Poison/Sorcery	1	6%	17	94%	18	100%
Politics	17	85%	3	15%	20	100%
Marijuana	0	0%	3	100%	3	100%
Compensation	1	100%	0	0%	1	100%

Land disputes, murder and rape are outside the jurisdiction of Operation Mekim Save and can only be heard until disputants reach their own decision.

with political motives but nonetheless aligning the goals of the two generations as was done traditionally in men's houses and during bachelors' cults.

The efforts of tribal leaders fall on fertile soil. The population of Enga is weary of futile modern war and the destruction it brings. Many in the upcoming generation have spent miserable years as refugees and want the benefits of the modern world, not war. In 2006 we interviewed fifty children about their views on warfare. Children expressed their desire for revenge against those who treated them badly as war refugees. Nonetheless, destruction of their homes, loss of relatives, and experiences as refugees made most children reject war. Older boys stated that they would only fight to defend their own clans. Children admire Rambos and like to talk about their exploits but recognize that the lives of Rambos are short and lead nowhere.

A return to moderation?

Court records and interviews from 1991 to 2009 present some interesting trends.

The number of wars has steadily increased owing to ever-new conflicts caused by growing social inequalities and jealousies, road blocks, beer, marijuana, election politics and breakdown in traditional marriages, amongst other things. Although only 5% of recent fights have been caused by election politics, tensions generated during elections contribute significantly to the increase in fighting. However, as the number of wars had been increasing, the average number of deaths per war has decreased steadily from nineteen in 1991–95 just after the adoption of guns in warfare to five in 2006–09 (Table 4). The percentage of wars settled early after 1–5 deaths, has risen from a mere 22% in 1991–95 to 75% in 2006–09 (Table 5). The number of wars with 11–300 deaths has declined significantly during the same period. This trend can be attributed to the efforts by elders and village court magistrates, the unwillingness of 90% of the population to support war, and the demise of the Nakau and Pailao teams. Nobody interviewed felt that the government had played a significant

Table 7. Average Number of Tribal Wars and Deaths Per War: 2001–2009

	2001–2003		2004–2006		2007–2009	
	Total Wars	Avg Deaths	Total Wars	Avg Deaths	Total Wars	Avg Deaths
Wapenamanda	17	6	14	2	5	2
Wabag	21	26	17	7	42	3
Lagaip/Laiagam	18	10	19	6	18	4
Kandep	13	13	27	6	57	5
Kompam	31	6	17	5	23	7
Porgera	21	3	41	3	33	4

role in reducing violence; my observations support these views.

Operation Mekim Save records and testimonies by magistrates also suggest that some inter-klan conflicts are increasingly being taken for mediation without an initial violent response: murders during drunken brawls, fights over gambling and money, domestic problems, car accidents and poison/sorcery (Table 6). Half or more of the incidents involving disputes over land, theft and property, and women are solved by mediation; however, murder, revenge and election politics continue to draw violent responses. As pressure on land increases, village courts hear many land cases but these are largely between neighbors in one clan.

Trends toward a reduction in violence are first occurring in central areas where there is more development and thus people have more to lose. Warfare has virtually ceased in Wapenamanda, the easternmost district of Enga and the gateway to Enga owing to business development, active church groups and the rejection of mercenaries (Table 7). In the Wabag district where the seat of Provincial Government is located, the number of wars did not decrease in 2006–09 owing to tensions generated by complex election politics and activities of the Pailao and Nakau teams, but the average number of deaths per war decreased from twenty-six in 2001–03 to three in 2006–09 (Table 7), indicating that people are settling wars earlier. In the Lagaip District west of Wabag, an area

known to have some of the most vicious warfare in the Province, warfare has leveled off and the number of deaths decreased. This has happened despite ever-new tensions and jealousies generated by wealth from the Porgera mine filtering down the valley. Magistrates and elders of these districts feel very encouraged by both the statistics and real changes in the attitudes of people.

Change in the outlying districts is slower. The Kompam district experienced severe warfare from 2006–09 for no easily discernable reason except for frustrations with lack of development and roads too poor to market crops and effectively participate in the cash economy. Nevertheless, Kompam magistrates felt that since 2008 their area was taking a turn towards peace. Kandep magistrates attributed the great increase in tribal fighting to the 2009 Kandep bi-elections that were fraught with high-powered weapons, threat and violence, the withdrawal of the Operation Mekim Save vehicle by the MP for political reasons, and inequalities from differential participation in the modern economy. Finally, in the Porgera area fighting increased to the point where a state of emergency was declared and a massive police operation carried out in 2009 quelling tribal warfare, amongst other things. However, magistrates do not feel that the underlying disputes over land with mine royalties have been solved. They fear that warfare will resume unless the Government works with Operation Mekim

Save magistrates to renegotiate land claims so that Barrick Gold can accommodate the demands of the many second third generation landowners born into complex polygynous “marriages” of original landowners.

While preliminary data indicate that people are beginning to be successful in containing warfare, they also indicate high levels of violent individual crime (Tables 3 and 6). The decline in traditional activities, involvement in the cash economy, and modern politics has eroded clan loyalties. Youths no longer have to carefully consider the impact of their actions on their corporate groups and act on their own whims. Consequently records from 2008–09 indicate a rise in robbery, rape and unprecedented murder of innocent women and children as individuals act on their own whims and interests, often under the influence of drugs and alcohol. In a few isolated cases, clan members have responded by executing the offender, but in most cases, criminals are still harbored by their kin. Random violence may be as destructive to development as rampant warfare. Finally, while sorcery was only practiced by groups in the periphery of Enga in the past, sorcery accusations and witch killing have moved into the Kandep region for the first time (Table 6), and village court magistrates are at a loss for dealing with them. This corresponds to the resurgence in witch killing in Papua New Guinea in recent years (Amnesty International 2006; Gibbs 2010; Zoo ca et al.), an issue reported frequently in *The National* and *Post Courier* newspapers in recent years.

Though it may be too early to say, it appears that the trend seen in the 19th century may have begun to repeat itself: runaway violence coinciding with rapid demographic growth, followed by social engineering on the part of elders to restore stability. Recent reasons for the decline in warfare appear to be: (1) the successful efforts of tribal leaders to contain violence, (2) initiatives by church leaders to instill new norms and values, (3) a population weary of war and refugee life, (4) an attempt by elders to realign the political goals of youths and to set a prescribed path for the future through education, (5) the deaths of prominent Rambos, (6) a new generation of youths who have felt the

costs of warfare and don't want to go there, and (7) desire to spend household money on expenses other than war compensation payments, particularly on school fees. In the past, parallel developments were achieved through bachelors' cults, the Great Ceremonial Wars, the extension of compensation to the enemy to make peace, and laying down a prescribed course of success through ceremonial exchange. No doubt at that time people were also tired of war. Both periods saw a shift in the age-related power structure, resulting chaos and the reestablishment of order as elders took control.

What next?

Elders are well aware that if they are in the driver's seat of the “war bus” that today they must drive on roads build by the government, not on the paths of Enga trodden by their own feet in clay soil. In discussions about the decline in warfare since 2006, nobody interviewed felt that the Government had played a significant role in containing warfare. Papua New Guinea might be termed a “detached state” from the Enga perspective and ranks 154 out of 180 on the Transparency International Perceived Corruption Index. Basic government services such as health, education, police and road maintenance have declined significantly in Enga since independence; the government does not have a monopoly on the use of force. Police under the control of the National Government are slow to respond to trouble in Enga, if they respond at all. The province is caught in a downward spiral as politicians and public servants misappropriate funds to “buy” votes rather than providing services. When services are not delivered for lack of funds, discontented voters demand ever more money for their votes to make sure that the election yields something for them.

The fact that warfare is beginning to be taken in hand by grassroots efforts with little input from the government may be positive. Since warfare has significantly derailed the power and projects of the state in the last two decades, it is possible that stability coming from within tribes will pave the way for better government services.

Though encouraged by trends towards peace, clan leaders, women and Operation Mekim Save magistrates are concerned for a number of reasons. Leaders are managing to align goals of elders and youths to set new directions; however, if these directions do not yield real opportunities for youths in a population growing at a mighty rate of 2–3% per annum, stability will not endure. Equal opportunity is of utmost importance to Enga, has deep historical roots and forms the basis for cooperation. Much depends on government initiatives to develop economic opportunities, infrastructure, and to curb population growth. However, this can only happen with a decrease in the tribal warfare that destroys infrastructure and makes government workers fearful of travel into clan territories. Models and values coming from the top at the moment are ones of “taking one’s share of the government cake”, not sharing the cake to fuel development. Only if the government is able to take advantage of current trends towards peace and develop roads that lead to a better future, will elders and the youths have a chance bring about change as they did once before, some 160 years ago.

AUTHOR NOTES

Polly Wiessner has a PhD in Anthropology and Archaeology from the University of Michigan and is currently is a Professor of Anthropology at the University of Utah. Over the past 35 years she has conducted research among the !Kung (Ju/'hoansi) Bushmen of the Kalahari Desert on subsistence, reciprocity, social security systems to reduce risk, and style and social information in material culture. For the past 25 years she has also carried out ethnohistorical studies among the Enga of highland New Guinea, tracing developments in warfare, ritual, and exchange that occurred from the time from the introduction of the sweet potato some three hundred years ago until present. She has published numerous books and articles including *Food and the Status Quest* (with W. Schiefenhoevel), *Historical Vines: Enga Networks of Exchange, Ritual and Warfare in Papua New Guinea* (with Akii Tumu).

REFERENCES

- Allen, B. and R. Giddings, 1982. “Land Disputes and Violence in Enga,” in B. Carrad, D. Lea and K. Talyaga (eds), *Enga: Foundations for Development*. Enga Yaaka Lasemana, vol. 3. Armidale: Univ. of New England, pp.179–97.
- Amnesty International. 2006. *Papua New Guinea: Violence against Women: Not Inevitable, Never Acceptable*. <<http://www.amnesty.org/en/library/info/ASA34/002/2006>>, accessed August 2010.
- Alpers, P. 2005. *Gun-Running in Papua New Guinea: From arrows to assault weapons in the Southern Highlands*. Small Arms Survey. Geneva, Graduate Institute of International Studies.
- Ballard, C., P. Brown, M. Bourke and T. Harwood. 2005. *The Sweet Potato in Oceania: A Reappraisal*. Sydney: Ethnology Monographs 19; Oceania Monograph 56, The University of Sydney.
- Beckerman, S. et al. 2009. “Life histories, blood revenge, and reproductive success among the Waorani of Ecuador,” *PNAS* 106 (20): 8134–39.
- Brennan, P. 1982. “Communication,” in *Enga*, pp.198–216.
- Carrad, B. 1982. “The Economy,” in *Enga*, pp.1–22.
- Daly, M. and M. Wilson. 1985. Competitiveness, risk taking, and violence: The young male syndrome. *Ethology and Sociobiology*, 6:59–73.
- Dinnen, S. 2001. *Law and Order in a Weak State: Crime and Politics in Papua New Guinea*. Pacific Islands Monograph Series 17. Honolulu: University of Hawai'i Press.
- Feil, D. 1984. *Ways of Exchange: The Enga Tee of Papua New Guinea*. St. Lucia: University of Queensland Press.
- Fuller, G. 1995. “The Demographic Backdrop to Ethnic Conflict: A Geographic Overview,” in: *The Challenge of Ethnic Conflict to National and International Order in the 1990s*. Geographic Perspectives RTT-10039.

- Washington D.C.: Central Intelligence Agency, pp.151–54.
- Gibbs, P. 2004. "The God Triwan Movement: Inculturation Enga Style." *Catalyst* 34:3–23.
- Gibbs, P. 2010. "Witchkilling and Engendered Violence in Simbu." *Catalyst* 40(1): 24–64.
- Goddard, M. 2009. *Substantial Justice: An Anthropology of Village Courts in Papua New Guinea*. New York: Berghahn Books.
- Gordon, R. and A. Kipalan, 1982. "Law and Order," in *Enga*, pp. 310–34.
- Gordon, R. and M. Meggitt. 1985. *Law and Order in the New Guinea Highlands*. Hanover: University of New England Press.
- Heinsohn, G. 2006. *Söhne und Weltmacht* [Sons and World Power]. Zurich: Orell Füssli.
- Jameson, K., and P. Wiessner. 2008. "Violent and Nonviolent Response to State Failure: Papua New Guinea and Ecuador," in *Values and Violence: Intangible Aspects of Terrorism*, I. Karawan, W. McCormack and S. Reynolds (eds). New York: Springer.
- Kyakas, A. and P. Wiessner. 1992. *From Inside the Women's House: Enga Women's Lives and Traditions*. Robert Brown: Brisbane.
- Kelly, R.C. 1977. *Etoro Social Structure*. Ann Arbor: University of Michigan Press.
- Kelly, R.C. 2000. *Warless Societies and the Origin of War*. Ann Arbor, University of Michigan Press.
- Keeley, L.H. 1996. *War Before Civilization: The Myth of the Peaceful Savage*. Oxford: Oxford University Press.
- Lacey, R. 1975. "Oral Traditions as History: An Exploration of Oral Sources among the Enga of the New Guinea Highlands." Unpublished PhD thesis, University of Wisconsin.
- Lacey, R. 1979. "Holders of the Way: A Study of Pre-Colonial Socio-Economic History in Papua New Guinea," *Journal of the Polynesian Society* 88:277–236.
- Lakane, J. and P. Gibbs. 2003. "Haves and Have-Nots: The 2002 Elections in the Enga Province of Papua New Guinea," *Catalyst* 33 (2):96–116.
- Lea, D. and N. Gray. 1982. *Enga Demography*, in *Enga*, pp.59–75.
- Meggitt, M. 1965. *The Lineage System of the Mae Enga of New Guinea*. New York: Barnes and Noble.
- Meggitt, M. 1972. "System and Sub-System: The "Te" Exchange Cycle Among the Mae Enga," *Human Ecology* 1: 111–23.
- Meggitt, M. 1973. "The sun and the shakers: a millenarian cult and its transformations in the New Guinea Highlands," *Oceania* 44: 1–37, 109–126.
- Meggitt, M. 1977. *Blood is Their Argument: Warfare Among the Mae Enga of the New Guinea Highlands*. Mayfield: Palo Alto.
- Mesquida, C and N. Weiner. 1999. "Male age composition and severity of conflicts," *Politics and Life Sciences* 18 (2) 181–89.
- Paney, P. 1973. *Report of the Committee Investigating Tribal Fighting in the Highlands*. Report to PNG Governemnt, Port Moresby.
- Sackschewsky, M., D. Gruenahgen and J. Ingebritson. 1970. "The Clan Meeting in Enga Society," in Paul Brennan (ed.): *Exploring Enga Culture: Studies in Missionary Anthropology*. Wapenamanda: Kristen Press, pp.51–101.
- Strathern, A. and P.J. Stewart. 2000a. *Arrow Talk: Transaction, Transition and Contradiction in New Guinea /Highlands History*. Kent Ohio: The Kent State University Press.
- Strathern, A. and P.J. Stewart. 2000b. *Collaborations and Conflicts: a Leader through Time*. New York: Harcourt College Publishers.
- Talyaga, K. 1982. "The Enga Yesterday and Today: A Personal Account," in *Enga*, pp.59–75.
- Trivers, R. 1974. "Parent-offspring conflict," *American Zoology* 14:249–64.
- Waddell, E. 1972. *The Mound Builders: Agricultural Practices, environment and Society in the Central Highlands of New Guinea*. Seattle: University of Washington Press.
- Watson, J., 1965. "The Significance of Recent Ecological Change in the Central Highlands

of New Guinea," *Journal of the Polynesian Society*, 74:438–50.

Wiessner, P. 2002. "The Vines of Complexity: Egalitarian Structures and the Institutionalization on Inequality among the Enga," *Current Anthropology* 43(2): 233–69.

Wiessner, P. 2006. "From Spears to M-16s: Testing the Imbalance of Power Hypothesis Among the Enga," *Journal of Anthropological Research* 62:165–91.

Wiessner, P. "Sex and Six Pocket Pants: The Sexual Revolution in Central Enga," in press.

Wiessner, P. 2009. "The Power of One? Big Men Revisited," in K. Vaughn, J. Eerkens and J. Kantner (eds), *The Evolution of Leadership*. Santa Fe: SAR Press, pp.195–222.

Wiessner, P. and A. Tumu. 1998. *Historical Vines: Enga Networks of Exchange, Ritual and Warfare in Papua New Guinea*. Washington D.C.: Smithsonian Institution Press.

Wiessner, P., and A. Tumu. 1999. "A Collage of Cults," in *Blurred Boundaries and Transformed Identities*. Canberra Anthropology 22(1):34–65.

Wiessner, P. A. Tumu, W. Tumu and N. Pupu. 2007. "Warfare in Enga Province: From Prehistory until Modern Times." Unpublished report prepared for the Enga Provincial Government, Wabasg, Enga Province.

Wohlt, P. 1978. *Ecology, Agriculture and Social Organization: The Dynamics of Group Composition in the Highlands of New Guinea*. Ann Arbor: University Microfilms.

Wrangham, R. and M. Wilson. 2004. "Collective Violence: Comparisons Between Youths and Chimpanzees," *Annals New York Academy of Sciences*, vol. 1036, pp.233–56.

Wormsley, W. and M. Toke. 1985. *The Enga Law and Order Project*. Report to the Enga Provincial Government, Wabag, Papua New Guinea.

Young, D.W. 2004. *Our Land is Green and Black: Conflict Resolution in Enga Goroka*, Melanesian Institute Press, Goroka: The Melanesian Institute.

Zocca, F. and J. Urame. 2008. *Sorcery, Witchcraft and Christianity in Melanesia*, Melanesian Mission Studies Series No. 5, Melanesian Institute.

ENDNOTES

1. Meggitt's (1977) thesis was that the Enga fought over land, though he himself named his book *Blood is their Argument not Land is their Argument*. In his last chapter he admits that the Enga had no shortage of land but fought over "perceived" land shortage. The high frequency of conflict over land seems in part to have been generated by the Land Titles Commission in the Colonial Period. Additionally, many elders interviewed said that they told the administration and other foreigners that they fought over land because this is the only reason foreigners, who did not understand the complexity of Enga politics, accepted as a rational reason to fight. This is reflected in the fact that land disputes made up 73% of the reasons given warfare in the colonial era (1950–70), 38% of the wars recorded in provincial files just before and after independence in 1975, and 26% of the triggering incidents for disputes between 1980 and 2006 (Allen and Giddings 1982; Gordon and Kipilan 1982; Meggitt 1977; Paney 1973; Wiessner 2006).
2. Our study of 1,000 marriages in the Wabag area in 2005–06 (Wiessner, in preparation) indicates that the growth rate for 2000–2009 might further decline because the breakdown of traditional marriages, widespread promiscuity, and the spread of STDs.
3. From the Colonial era on, it was unusual that land was gained during warfare.
4. Factory made weapons reported to us by tribal fighters include M-16, SLR, AK47, SKS, Point 22, 3.88, and American-made five-round pump action shotguns. Grenades are not widely used because

fighters try to target certain persons, not to kill large numbers. Each weapon has its own history, and most appear to have been originally stolen from the Defense Force or police or made their way to Enga through local networks (see also Alpers 2005). Others are obtained from politicians who own security firms and have weapons licenses. In one clan of the Lagaip, a machinist has been able

to construct a home made M-16; the gun is named “Yaka Maitane” after the legendary tribal founder of the Sakate and Yambanima tribes.

5. With my assistance, the Tambukinis launched a community project to “go to war” against HIV/AIDS by encouraging all members to be tested and retested when changing partners.

SSGM Discussion Paper Series (2004/1–2010/2)

- 2004/1: Phillip Gibbs, Nicole Haley and Abby McLeod, Politicking and Voting in the Highlands: The 2002 Papua New Guinea National Elections
- 2004/2: David Hegarty, Ron May, Anthony Regan, Sinclair Dinnen, Hank Nelson and Ron Duncan, Rebuilding State and Nation in Solomon Islands: Policy Options for the Regional Assistance Mission
- 2004/3: Michael Goddard, Women in Papua New Guinea's Village Courts
- 2004/4: Sarah Garap, Kup Women for Peace: Women Taking Action to Build Peace and Influence Community Decision-Making
- 2004/5: Sinclair Dinnen, Lending a Fist? Australia's New Interventionism in the Southwest Pacific
- 2004/6: Colin Filer, Horses for Courses: Special Purpose Authorities and Local-Level Governance in Papua New Guinea
- 2004/7: Robert Muggah, Diagnosing Demand: Assessing the Motivations and Means for Firearms Acquisition in the Solomon Islands and Papua New Guinea
- 2004/8: Sinclair Dinnen and Edwina Thompson, Gender and Small Arms Violence in Papua New Guinea
- 2005/1: Nic Maclellan, Conflict and Reconciliation in New Caledonia: Building the Mwâ Kâ
- 2005/2: Michael Morgan, Cultures of Dominance: Institutional and Cultural Influences on Parliamentary Politics in Melanesia
- 2005/3: Hank Nelson, Fighting for her Gates and Waterways: Changing Perceptions of New Guinea in Australian Defence
- 2005/4: Allan Patience, The ECP and Australia's Middle Power Ambitions
- 2005/5: Jerry Singirok, The Use of Illegal Guns: Security Implications for Papua New Guinea
- 2005/6: Jaap Timmer, Decentralisation and Elite Politics in Papua
- 2005/7: Donovan Storey, Urban Governance in Pacific Island Countries: Advancing an Overdue Agenda
- 2005/8: Jon Fraenkel, Political Consequences of Pacific Island Electoral Laws
- 2006/1: Hank Nelson, Governments, States and Labels
- 2007/1: Peter Larmour, Evaluating International Action Against Corruption in the Pacific Islands
- 2007/2: Brij V. Lal, 'This Process of Political Readjustment': Aftermath of the 2006 Fiji Coup
- 2007/3: Hank Nelson, The Chinese in Papua New Guinea
- 2007/4: Paul D'Arcy, China in the Pacific: Some Policy Considerations for Australia and New Zealand
- 2007/5: Geoffrey White, Indigenous Governance in Melanesia
- 2008/1: Brij V. Lal, One Hand Clapping: Reflections on the First Anniversary of Fiji's December 2006 Coup
- 2008/2: Paulson Panapa and Jon Fraenkel, The Loneliness of the Pro-Government Backbencher and the Precariousness of Simple Majority Rule in Tuvalu
- 2008/3: Kate Higgins, Outside-In: A Volunteer's Reflections on a Solomon Islands Community Development Program
- 2008/4: Sarah Kernot & Lai Sakita, The Role of Chiefs in Peacebuilding in Port Vila
- 2008/5: Debra McDougall, Religious Institutions as Alternative Structures in Post-Conflict Solomon Islands? Cases from Western Province
- 2008/6: Abby McLeod, Leadership Models in the Pacific
- 2008/7: Nicole Haley, Strengthening Civil Society to Build Demand for Better Governance in the Pacific. Literature Review and Analysis of Good Practice and Lessons Learned
- 2008/8: Richard Eves, Cultivating Christian Civil Society: Fundamentalist Christianity, Politics and Governance in Papua New Guinea
- 2008/9: Into A. Goudsmit, Nation Building in Papua New Guinea: A Local Alternative
- 2008/10: George Williams, Graham Leung, Anthony J. Regan and Jon Fraenkel: Courts and Coups in Fiji: The 2008 High Court Judgement in *Qarase v Bainimarama*
- 2008/11: Keith Joseph & Charles Browne Beu, Church and State in the Solomon Islands
- 2009/1: Elizabeth Reid, Interrogating a Statistic: HIV Prevalence Rates in PNG
- 2009/2: Michael Green, Fiji's Short-lived Experiment in Executive Power-sharing, May-December 2006
- 2009/3: Peter Coventry, The Hidden Mechanics of Solomon Islands Budget Processes - Understanding Context to Inform Reforms
- 2009/4: Hank Nelson, Mobs and Masses: Defining the Dynamic Groups in Papua New Guinea
- 2009/5: Nick Bainton & John Cox: Parallel States, Parallel Economies: Legitimacy and Prosperity in Papua New Guinea
- 2009/6: Robert Norton, The Historical Trajectory of Fijian Power
- 2009/7: Alan Rumsey, War and Peace in Highland PNG: Some Recent Developments in the Nebilyer Valley, Western Highlands Province
- 2010/1: Asenati Liki, Women Leaders in Solomon Islands Public Service: A Personal and Scholarly Reflection
- 2010/2: Nic Maclellan, War and Peace in Highland PNG: Some Recent Developments in the Nebilyer Valley, Western Highlands Province

**For details of the SSGM Discussion Papers published from 1996, see the SSGM website:
<http://ips.anu.edu.au/melanesia/discussion.php>**

ISSN: 1328-7854



State, Society and Governance in Melanesia (SSGM) is a program of the School of International, Political & Strategic Studies, ANU College of Asia and the Pacific, The Australian National University.

SSGM's key objectives are to encourage scholarship on governance and state-society relations; generate dialogue throughout Melanesia and the Pacific Islands on these issues; assist in bridging policy and research. The Program's research and outreach focuses on:

- Island Melanesia—Papua New Guinea, Solomon Islands, Vanuatu, New Caledonia and Fiji
- The culturally-related region to the west including Papua/Irian Jaya and Timor

State, Society and Governance in Melanesia Program
School of International, Political & Strategic Studies
ANU College of Asia and the Pacific
The Australian National University
Canberra ACT 0200
AUSTRALIA

Executive Officer: Sue Rider
Telephone: +61 2 6125 8394
Fax: +61 2 6125 9604
Email: ssgm@anu.edu.au