

Review Article

Violence and Warfare in Precontact Melanesia

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Levels of interpersonal violence and warfare for 30 Melanesian societies at the time of contact with Europeans are estimated based on ethnographic and historical records. While violence was common in indigenous Melanesia, it was not ubiquitous and some societies experienced extended periods of internal and external peace. Interpersonal violence and warfare were correlated—when one occurred there was a high probability of finding the other. Violence was not dependent on total population. It was, however, higher for population density greater than 50 persons per square kilometer. Violence in Melanesia may have been stimulated by the large number of relatively small polities, many of which competed with one another for prestige and, in some cases, land.

1. Introduction

Cross cultural studies of violence and warfare in indigenous cultures have revealed a number of general trends that appear to be independent of specific social contexts. Keeley [1] has examined a large number of small societies and has concluded that violence was more the rule than the exception in preindustrial societies. However, Loftin [2] found that the *nature* of violence changed with population, from a fight between individuals associated with distinct groups who knew one another to an impersonal collision of groups spurred into action by strong leaders. Ember et al. [3, 4] found that the degree of participation in governance was an important factor in the frequency of warfare among a wide range of societies. Indeed, leadership appears to have played a role in both interpersonal violence and warfare, occasionally suppressing the former to retain the social cohesion necessary to carry out the latter.

Precontact Oceania offers a unique laboratory for the study of human behaviors, including leadership, violence, and warfare. Island populations varied from a few hundred—just sufficient to maintain a sustainable gene pool—to many tens of thousands. Social structures ranged from egalitarian bands to hierarchical systems with many of the aspects of nation states. In previous studies I examined the influence of leadership upon violence and warfare in Polynesia [5] and Micronesia [6]. In this paper I extend the same type

of analysis to the third major cultural region in Oceania: Melanesia.

Violence and warfare in Melanesia have been the subject of a number of studies, including Camilla Wedgwood's [7] early paper "Some Aspects of Warfare in Melanesia." More recently, Knauff [8] has surveyed violence in the context of evolving sociological and anthropological theory, with particular attention given to Papua New Guinea. He writes that ([8]: 225) "the dominant sense one gets from available accounts, primary ones as well as contemporary reconstructions, is that warfare was indeed quite prominent if not endemic in most coastal and insular areas of Melanesia at the time these regions were first regularly contacted by Europeans." However, Douglas [9] questioned the view that Melanesians were "constantly at war" and Chowning [10] suggested that they may have been no more violent than other Oceanians.

This paper focuses on lethal physical violence (rather than sorcery, wife beating, fighting for sport, etc.) in 30 Melanesian societies prior to significant European contact. Most of the analysis is dedicated to islands, although four cultures from Papua New Guinea are described both to complement the island cultures and because of the excellent documentation available for these societies. The method used is one of controlled comparison [11], in which a similar analytical technique is applied to a set of cultures within a defined area.

I divide lethal violence into two categories: interpersonal violence and warfare. Interpersonal violence is defined as

occurring in a dyadic relationship between two or more individuals where the target of the violence is a specific person. Assassinations, revenge attacks, and murders committed in the act of theft fall into this category. I use Tefft and Reinhardt's ([12]: 154) definition of warfare as "an armed aggression between political communities or alliances of political communities." Such communities can be kin groups, clans, villages, or coalitions of regional polities.

Raiding was a common form of warfare in much of Melanesia. In most cases a raid would consist of a few individuals who would enter an opponent's territory by stealth with the intention of killing one or a few people. More substantial raids, such as when a group would infiltrate a village before dawn to attack its sleeping residents, were also common. Here the attacking party had to be careful not to stay too long in the enemy camp for fear of being overwhelmed. Raids were often associated with feuds in which one individual or a well-defined group was the target of a revenge attack. When the target was a specific person, raids had some aspects of interpersonal revenge. When a substitute victim would suffice, they resembled a form of intergroup warfare.

Malinowski ([13]: 10) described larger-scale warfare in the Trobriand Islands:

escaping between the two capital villages a place was selected and a circular arena cleared. . . . The opponents ranged themselves opposite each other, the warriors standing at a distance of some thirty to fifty meters apart and throwing their spears. Behind the warriors stood or sat the women, helping the men with water, coconuts, sugar-cane, as well as with verbal encouragement. . . . Fighting lasted as long as both parties could resist the onrush of their opponents. When one party had to flee, the road to its villages was open, and the enemy would rush on killing men, women, and children indiscriminately, burning the village and destroying the trees. The only remedy for the defeated party was to abandon their villages and to fly for life into another district. As a rule, practically everybody, especially the defenseless ones, would succeed in escaping.

Casualties in formal wars ranged from a few warriors in a single battle to a significant part of the population in a protracted conflict. Feil [14] tabulated deaths due to warfare in Papua New Guinea highland societies and found that, in some cases, 25% of all deaths and over 30% of male deaths were attributable to war.

However, war was not uniformly destructive. Among the Maring, "nothing fights" were conducted where relatively little effort was taken to inflict injury on the other side [15]. Rather, these conflicts appear to have been designed to demonstrate resolve, a willingness to fight and defend the group's interests. Conquest, or even humiliation or domination of the other side, was not a driving factor in these battles. Similar behavior occurred on Tanna, where battles occurred as part of a formalized exchange process in which the disputants were represented by allies and did not

themselves fight. Raids, which deviated from this formalism, were referred to as "stolen wars" [16].

Cross cultural studies of violence in indigenous societies (e.g. [17, 18]) found that interpersonal violence and warfare are correlated with the degree of social stratification and/or political hierarchy. Melanesia offers particular advantages for testing such theories in that its societies ranged from largely egalitarian to those involving competitive leadership and hereditary chieftainships.

Sahlins [19] cites the Big Man concept of competitive leadership as characteristic of many Melanesia societies, though later analyses [20, 21] suggest that chiefdoms existed in at least several parts of the region, notably New Caledonia. Within Big Man societies, care must be exercised in assessing the degree of actual "leadership" exercised by any single individual. First, many societies were fluid in their membership. If a person or family was dissatisfied with the actions of a Big Man, they could move to another group. Second, adherence to the wishes of the Big Man was sometimes optional even if one elected to remain in the group. Members of a group might decline to follow the suggestion of a leader. Third, the competition to be Big Man was not a level playing field in that sons of previous leaders had advantages, including wealth (which, however, was not always passed down to future generations), secret knowledge, familiarity with neighboring leaders. While nonhereditary leadership was common in Melanesia, its nature was complex and varied. I use the term Big Man for simplicity rather than to imply a common form of governance across different societies.

2. Data

This paper focuses on indigenous violence in societies in the area between Papua New Guinea and New Caledonia prior to significant contact with Europeans. Several criteria were used in the selection of cultures. First, data on population, interpersonal violence, and warfare had to be available. Second, I included societies ranging from small, relatively isolated islands such as Vokeo to groups in the large landmass of Papua New Guinea.

A particular complication in assessing violence and warfare in insular Melanesia compared to other parts of Oceania is the relatively large size of islands. Whereas the average area of inhabited islands in the Caroline Islands is 25 km², in the sample of Melanesian societies considered here it is 3100 km², exclusive of Papua New Guinea. The dense vegetation and mountainous topography of Melanesia, combined with a face-to-face leadership style in many of its societies, may have inhibited large-scale cultural and political unification on the larger islands. Sometimes there were significant cultural differences between groups living just a few kilometers from one another. For example, Hogbin [22] noted 18 languages spoken on Malaita. Ethnographic studies tend to focus on specific groups so that island-wide summaries can be challenging to construct.

Land areas are taken from the United Nations (n.d.) tables of islands. For Papua New Guinea societies, approximate domains are taken from ethnographic sources.

Population estimates are uncertain for several reasons. Populations varied with time, affected by available nutrition, natural disasters, and, in the case of the smallest societies, variations in birth rate and sex ratio.

In some societies, violence was a significant factor in mortality. Knauff [23] estimates that nearly one third of all deaths among the Gebusi of lowland Papua New Guinea were attributable to homicide. In the Solomon Islands, some smaller islands were nearly depopulated by headhunting raids. The accuracy of population estimates is given below via a letter grade, with (A) corresponding to a detailed census count or other reliable method, (B) to a less precise but still generally reliable estimate, and (C) to a guess based on cursory observations or estimates of carrying capacity.

A numerical scale was used to represent the level of interpersonal violence per thousand people:

- (0) none: no recorded instances or very few per century;
- (1) rare: violence very rare, perhaps one death per decade;
- (2) occasional: one or a few deaths per year;
- (3) frequent: several deaths per year, but lethal violence socially disdained;
- (4) chronic: violence being a major part of the culture.

A similar scale, analogous to that of C. R. Ember and M. Ember [18] and Ember et al. [4], was used for warfare:

- (0) none: no recorded instances or only a few over several centuries;
- (1) rare: war very rare, perhaps several times per century;
- (2) occasional: wars every few years;
- (3) frequent: wars every year but not continuous;
- (4) chronic: warfare essentially continuous.

Lacking quantitative data over long periods of time, absolute measures of nearly any social quantity are difficult or impossible to assess. With regard to violence, Knauff ([8]: 255) writes:

the area can be difficult to distinguish among (a) areas where warfare might have been infrequent, formalized, or nonintensive, (b) areas in which warfare was largely a product of European presence, or (c) areas where there has been little anthropological research at all or in which post-pacification research simply does not adequately address the topic of warfare. Conversely, given that warfare tends to be sporadic, it is difficult to know if early accounts based on quite short experience are a reliable guide to more general patterns in the area.

Recognizing these challenges, a letter grade—A, B, or C—assessed the quality of the information on interpersonal violence and warfare.

Table 1 provides data on thirty societies in Melanesia.

Ross [24] used data assembled in the Human Relations Area Files to estimate violence in 90 societies, including two

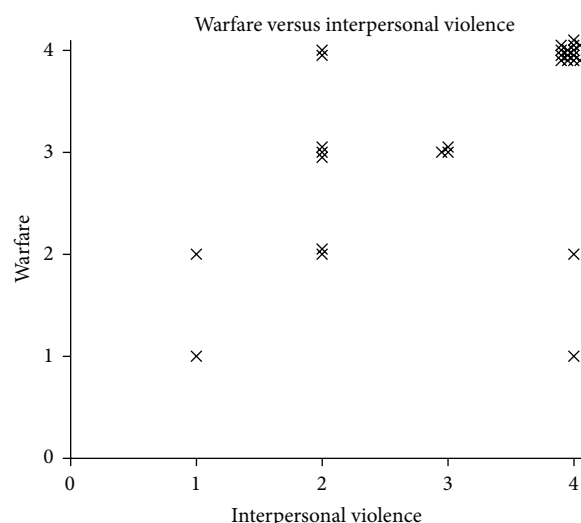


FIGURE 1: Warfare versus Interpersonal Violence. The correlation coefficient between the two forms of violence is 0.58.

in Melanesia. While his coding scheme was different than mine, a translation to my scale yields levels of interpersonal violence and warfare of 2 for the Trobriands, compared to my value of 2 for Kiriwina. However, for Manus he gives values of 2 for both interpersonal violence and warfare, whereas I estimated a much higher level of 4 for each, based on the later analysis of Bonnemaïson [16].

Several trends are apparent in the data and can be compared with observations of other cultures. C. R. Ember and M. Ember [18] found that interpersonal violence and warfare are correlated in a broad range of societies. Studies of a sample of Polynesian islands [5] and the Caroline Islands [6] show a similar correlation. Figure 1 shows that this correlation also applies to my sample of Melanesian societies. However, as Figure 1 shows, the largest cluster of points is at the maximum value of *both* interpersonal violence and warfare.

It is not possible to establish a casual direction in the data, that is, whether war stimulates interpersonal violence (as proposed in [25]) or whether interpersonal violence leads to war. Rather, one can only surmise that internally violent societies are prone to war, and warlike societies are prone to high levels of internal violence.

Previous studies of violence and warfare in a selection of Polynesian islands [5] and the Caroline Islands [6] indicate that both interpersonal violence and warfare are likely to increase with total population, consistent with the broader cross-cultural studies of Ember [26], Leavitt [27], and Rosenfeld and Messner [28]. Figure 2 shows that this is not the case with the Melanesian societies sampled here. The degree of interpersonal violence and warfare ranged from rare to chronic across a wide range of population sizes, although higher levels of violence were more common for larger populations. Part of the reason for this may be the high degree of factionalism in Melanesia compared to Polynesia and Micronesia. The hierarchical leadership common in the latter two cultures permitted larger polities to be under the control of central leadership. Fewer individuals had

TABLE 1: Leadership, violence, and warfare for selected societies in Melanesia.

Island (group)	Area (km ²)	Population	Population density (per km ²)	Government	Interpersonal violence	Warfare
Aoba [64, 65] New Hebrides	402	10,000 (C)	25	Big Men	4 (B)	4 (B)
Boang [66–70] Bismarcks	27	2000 (C)	74	Big Men	3 (B)	3 (B)
Bougainville [7, 61, 71] Solomons	9318	45,000 (C)	4.8	Big Men	4 (A)	4 (C)
Choiseul [55, 72, 73] Solomons	2971	9,000 (C)	3.0	Big Men	2 (C)	4 (B)
Dani [60, 61, 74–83] Papua New Guinea	315	50,000 (B)	160	Big Men	2 (B)	4 (A)
Dobu [84–86] D'Entrecasteaux	15	2,000 (C)	130	Big Men	4 (A)	4 (A)
Erromango [87, 88] New Hebrides	888	9000 (C)	10	Chiefs	2 (C)	3 (B)
Gebusi [23] Papua New Guinea	173	450 (A)	2.6	Egalitarian	4 (A)	2 (B)
Goodenough [62, 89, 90] D'Entrecasteaux	687	10,000 (C)	15	Big Men	2 (C)	3 (B)
Guadalcanal [33, 53, 91] Solomons	5353	15,000 (C)	2.8	Big Men	1 (C)	2 (C)
Kiriwina [13, 56, 57, 92, 93] Trobriands	267	8,000 (B)	30	Chiefs	2 (C)	2 (B)
Lifou [94–97] Loyalty Islands	1146	5,700 (B)	5.0	Chiefs	2 (C)	3 (A)
Mae Enga [42, 52, 60, 61] Papua New Guinea	520	30,000 (B)	58	Big Men	4 (A)	4 (A)
Malaita [7, 43–47, 54, 98–101] Solomons	3836	65,000 (C)	17	Big Men	4 (A)	4 (B)
Malakula [7, 58, 102–104] New Hebrides	2041	9,000 (C)	4.4	Ranked	4 (C)	4 (B)
Manus [105–109] Admiralty Islands	1940	15,000 (C)	7.7	Big Men	4 (C)	4 (B)
Mare [94–96] Loyalty Islands	657	4,300 (B)	6.5	Chiefs	4 (C)	4 (B)
Maring [15, 40, 41, 59, 61, 63, 110–112] Papua New Guinea	490	7,000 (B)	14	Big Men	2 (C)	2 (B)
Nendo [113–115] Santa Cruz	506	3,600 (C)	7.1	Big Men	3 (C)	3 (C)
New Britain [116–120] Bismarcks	35,145	100,000 (C)	2.8	Big Men	4 (B)	4 (C)
New Caledonia [7, 9, 20, 48–51, 121, 122] New Georgia [7, 123–127] Solomons	16,648	70,000 (C)	4.2	Chiefs	3 (C)	3 (B)
Ouvea [94–96] Loyalty Islands	2037	7,200 (C)	3.5	Big Men	4 (B)	4 (B)
San Cristobal [46, 128, 129] Solomons	134	2,500 (B)	19	Chiefs	4 (C)	4 (B)
Santa Isabel [125, 130–132] Solomons	3191	10,000 (C)	3.1	Big Men	4 (B)	4 (A)
Simbo [124, 127, 133–135] Solomons	3665	5,500 (C)	1.5	Big Men	4 (C)	4 (C)
	3	400 (B)	130	Big Men	4 (C)	4 (A)

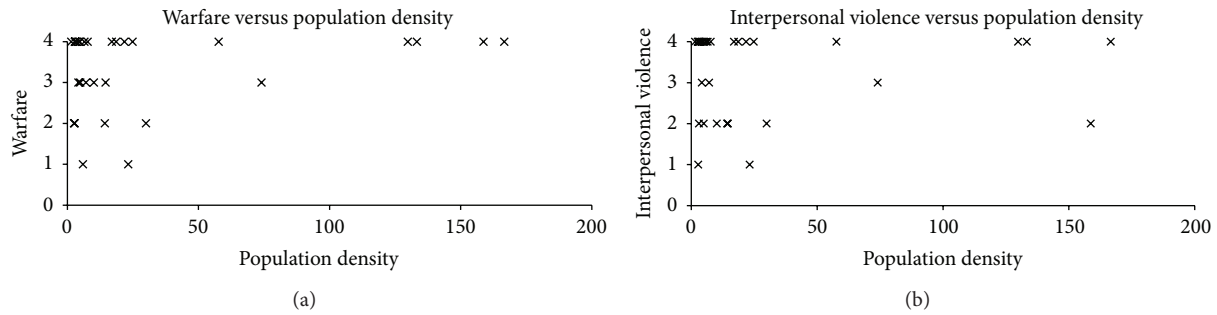


FIGURE 3: Interpersonal violence and warfare as a function of population density (people/km²).

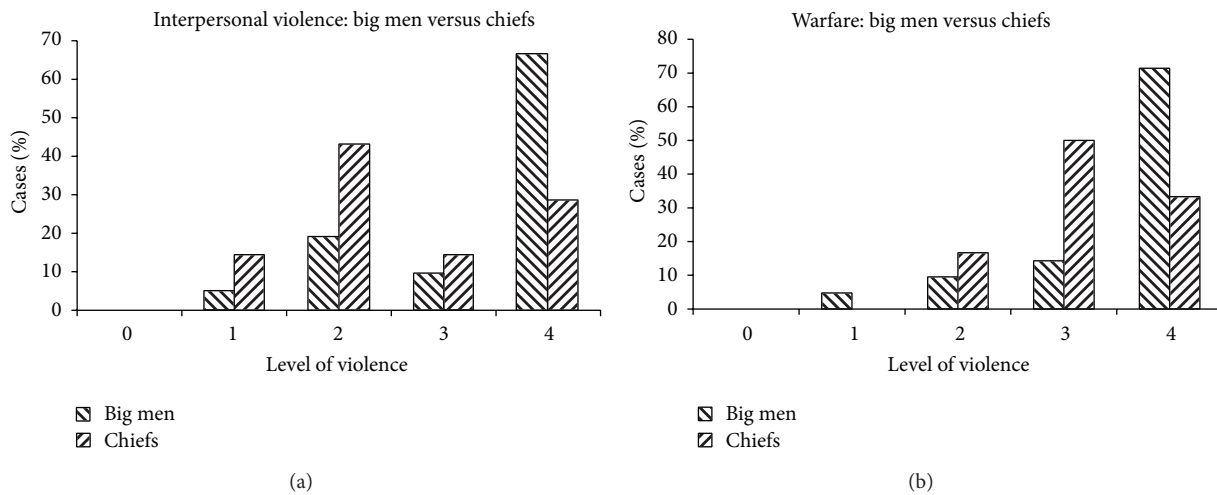


FIGURE 4: Interpersonal violence and warfare for Big Man and chiefly societies.

3.1. Vokeo. Vokeo, with a population of 930, is a small volcanic island located about 50 kilometers off the northern coast of New Guinea near the mouth of the Sepik River. Despite the high population density (146/km²) of Vokeo, the natives believe that there is plenty of land for everyone.

Although contact with Europeans occurred during Dutch explorations in 1616, significant interactions did not occur until the late nineteenth century. Many aspects of Vokeo culture were studied by Hogbin [32–37] during his visits in the period 1934–1948 and more recently by Anderson [38, 39].

The island is divided into five districts, each of which contains a number of villages with populations ranging between 75 and 100. Houses are arranged in two or three clusters within a village, a cluster representing an exogamous patrilineal clan. Each clan-unit within the village is controlled by a *kokwal*, a position described by Hogbin ([32]: 318) as “more than a headman, though he is less than a chief for he has absolute control over only the members of his clan—50 or 60 individuals at a maximum.” The *kokwal* is chosen from among the eldest sons of the previous *kokwal*’s wives, leading to not infrequent competition for the position. Vokeos feared being without a *kokwal*—he coordinated group activities and resolved disputes.

A complex set of social relationships linked all of the residents of Vokeo. People viewed themselves as part of a nested series of groups, starting with the family and extending outward to village clan unit, village, and district. Cooperation was considered essential to survival and every effort was made to avoid conflict. Sharing was routine, with baskets of small food items carried on routine journeys should another person be encountered. More formal exchanges occurred, including huge transfers of food initiated by the *kokwal* that were intended to demonstrate his prestige.

Hogbin ([37]: 179) estimates a relatively low rate of homicide on Vokeo, citing a murder rate of about one per three years during the period 1933–1949: “Petty raiding occurred from time to time, but the massing of hosts of armed warriors and wholesale carnage are unknown.”

Ordinary rules of behavior were suspended at the start of a major feast. Individuals insulted and physically attacked one another (without the use of weapons) to resolve past grudges. These brief altercations—which might last only ten minutes or so—reset the social relationships and prevented more serious conflicts from developing.

While the rates of interpersonal violence and warfare on Vokeo were quite low, this prohibition did not extend to other societies.

violated has a small population and is isolated and self contained. Each resident is acquainted with all the rest, and if they carried on warfare against one another the effects would be devastating. In no time everyone would be dead. But on the mainland some groups are always outside the limits of regular peaceful relations, with the members regarded as foreigners. What does it matter if such people are wiped out? No kinship link is severed, no moral precept violated ([37]: 57).

Thus, even when geographical separation is small (Koil Island is only 19 km away), social isolation can still exist.

3.2. Maring. The 7,000 or so Maring, divided into twenty-one territorial clan groups of 100–2000 people each, occupied the Simbai and Jimi Valleys of the western highlands of Papua New Guinea. Principal pursuits of the Maring included swidden agriculture and pig raising. The overall population density appears to have been well below the carrying capacity of the land [15].

The Maring are of particular interest to the anthropologist since significant contact with western culture did not occur until 1954. Hence Rappaport [15] and Vayda [40, 41], among others, had the opportunity to study a nearly pristine indigenous culture.

Maring society was strongly egalitarian. The clan cluster was the largest political unit and there were no formally recognized offices, ascribed or achieved. Rappaport [15] has questioned even the use of the term “Big Man” to describe a leadership style, citing the fact that the Maring did not engage in competitive feasting. All men could participate equally in discussions and decisions affecting the group. Nevertheless, there were certain men who, having proven themselves in the past, were respected more than others. They were typically outgoing personalities able to articulate a path of action, often by recognizing an emerging consensus within the group. Rappaport ([15]: 31) notes the tenuous hold that an individual had on power: “it frequently happens that he who attempts to instigate group action has misjudged the consensus and he is not followed.”

In contrast to other Papua New Guinea peoples, such as the Mae Enga [42], the Maring were not constantly at war. Conflict was discouraged within the clan. Disputes were often resolved by compensation rather than by violence to avoid upsetting the complex web of mutual obligation that bound individuals within the social group. The frequency of external wars, which sometimes involved shifting alliances of clans, was about one or two per generation [41] and may have been tied to a ritual cycle involving the breeding and exchange of pigs. Long periods of peace separated most conflicts.

Wars were divided into two types: “nothing” fights that were highly formalized and “true” fights that were more lethal. Nothing fights, which involved the exchange of inaccurate arrows across the battle zone, produced few casualties. Rappaport [15] suggested that the Maring purposefully kept the killing efficiency low to avoid needless deaths. Fights were terminated to care for wounded or tend garden plots, or even on account of rain. If a rout were to occur,

the land of the vanquished party was not immediately occupied since it was thought to be under the control of the ancestral spirits of the previous occupants. Still, casualties in a rout could be large, sometimes amounting to several percent of the defeated population [40]. In contrast to “nothing” fights, “true” fights involved more deadly weapons such as axes or spears. Wars ended when the opposing sides agreed that enough men had been killed or when one side was decisively routed by the other. The Maring also conducted informal raids, a particularly lethal form of conflict since they focused on killing.

Prolonged periods of peace occurred, broken by the *kaiko* feast ceremony at which all truces were nullified and the accumulated grievances of the years might lead to violence. Murder was a significant cause of intergroup fighting [41], leading at times to revenge homicide, raids, or even war. However, escalation was not inevitable and compensation could be offered in apology for an offense. Honor and reputation were important to the Maring, and fighting was one way to demonstrate ability and to attract one or more wives. Population pressure does not appear to have been a significant cause of war [41].

3.3. Malaita. Malaita is a large volcanic island in the Solomons with a contact-era population estimated at 65,000. Mountain ridges divide the island into numerous small habitable areas, some containing less than 100 people. Agriculture, particularly taro farming, and pig raising were the principal economic activities.

Maliata follows a classic Big Man style of social organization and leadership. As Hogbin ([43]: 62) observed:

qualifications is no recognized supreme ruler over even a small territorial group, and the individuals who command the respect of their fellows have not permanent legal claims to obedience but rather obtain by the distribution of their wealth the co-operation necessary for the enterprises they initiate. No one ever holds sway over more than at a maximum 200 followers, and although the heir to an old leader has an initial advantage over possible rivals, any ambitious young man can supplant him if he works hard, distributes sufficient wealth, and wins the respect and approval of his relatives through superior personal qualifications.

Sharing of food between the Big Man and the people was expected, as was sharing among his followers. Through his conspicuous generosity, the Big Man dominated the flow of gifts within the group and hence the network of mutual obligation [44].

Violence was a major part of the culture of Maliata and pacification was not complete until 1927. Hopkins ([45]: 168) found that “peace, except for short, uncertain intervals, was practically unknown. Everywhere any individual or tribe might be attacked anywhere at any time.” Boys were trained for war in mock battles and joined raiding expeditions as soon as they were old enough to wield a club. They were told that no woman would marry them until they had shed blood. Still, there was a recognized need for cooperation

at the local level and residents within the same district lived relatively peaceably. Compensation could be offered for some offenses. Feasts provided a venue to release pent-up grievances and a Big Man might intervene to prevent a fight among his followers, although certain crimes within the group, including murder and adultery, were considered sufficiently serious to warrant the death of the perpetrator. A Big Man's authority was limited to his local group and he had little ability to adjudicate quarrels involving people from another group. Retribution might be carried out by a hired killer or by offering a reward for the death of an individual [43]. Murders were a common occurrence: Coombe [46] reports 14 homicides in a period of 6 weeks in the relatively small area that she studied.

Raids involving 200–300 men were a common form of warfare on Malaita and could occasionally result in the total elimination of the target group [46]. If there were survivors, the attack might trigger a chain of revenge killings that could last for years. Kessing ([47]: 69) notes that “In a society where blood-feuding was endemic and there was no institutional political structure for imposing law and order or maintaining the peace, one may well wonder how some sort of stable life was possible at all.”

3.4. New Caledonia. New Caledonia is a large island of over 16,000 km² in the southeasternmost portion of Melanesia. Estimates made during the mid-19th century suggest a population of about 70,000.

The primary social unit was the localized clan, headed by a hereditary patrilineal chief. There appears to have been a strong sense of “senior” and “junior” in relationships, one that extended to a hierarchical system of chiefs. Toward the end of the nineteenth century the island may have been headed toward greater centralization of authority [48].

If for no other reason, “the demands of subsistence provided a compelling incentive to limit and contain fighting ([49]: 57).” Wedgwood [7] estimated that wars occurred about every five years between two large groups in the north of the island. Douglas [9, 50] assessed that while fighting was common, it was not continuous. Twenty-four fights were recorded between 1845 and 1853 within less than one quarter of the land area of the island, but it is not clear whether these were of sufficient scale to be called wars. Escalation from personal redress to group involvement could occur as obligations were called in from kin and friends [9, 50]. Grievances could be nurtured for generations and could involve complex alliances that crossed clan boundaries. Withdrawal was a common form of conflict avoidance for individuals and groups and compensation was an alternative to violence. Internal fights were more numerous, but less lethal, than external fights. While exact figures are unavailable, less than 8% of the deaths but more than 85% of recorded injuries were due to internal (intragroup) violence. This implies normative limits on the types of violence within the group, limits that did not extend to external fights. Most intergroup fighting was in the form of raids and the Melanesian principle of equivalence, a form of reciprocity, demanded equal numbers of casualties on each

side [9, 50], although the complete elimination of a group sometimes occurred in a particularly destructive raid.

Bensa and Goromido [51] note that many wars occurred after the death of a chief as contenders sought to prove their leadership and fighting abilities. Concern for the destructiveness of chiefly succession sometimes led to the appointment of an outsider, a neutral party acceptable to all sides. After assuming power, violence served to validate a chief's power while reducing that of his rivals. Cannibalism occurred, but more from a political than an economic need. Eating the bodies of one's enemies was a way to prevent the deceased's spirits providing future support for the enemy camp.

4. Discussion

The motivating factors leading to violence and warfare may be divided into proximate causes, those that drive immediate decisions, and ultimate causes, those that create the context for those decisions. Among proximate causes, economic factors were among the most important in that they affected the survival of both individuals and groups.

Land rights were a cause of war in Melanesia, but fights were not always for the purpose of acquisition. Land was sometimes considered as under the oversight of spiritual forces aligned to the original owners, so taking land without the consent of, or worse, with the antagonism, of its spiritual protectors, was considered unprofitable. Also, the small size of most Melanesian polities meant that additional land, once acquired, would lead to a population increase in the conquering group to the point where it could no longer be controlled by a single individual. Group fission would then occur, with a return to independent polities [52] and the potential for renewed conflict.

Women were frequently cited as a cause of interpersonal violence and of raids that could, in some cases, lead to large-scale warfare. Adultery was more than an insult to the honor of the husband since women contributed to the economic well-being of groups by tending gardens, raising children, and performing other domestic tasks.

Intangibles, most especially individual and group prestige, were potent motivators of violence. This is evident in the very destructive headhunting practices conducted in the Solomon Islands, where the value of the objects sought (human heads) lay in prestige and ceremony rather than physical utility. However, there was also an economic impact in that the collection of heads demonstrated the power of the individual and hence enhanced his control of vital resources.

To begin to understand ultimate causes, violence must be viewed in a broader social context. Melanesians saw their identity in terms of the groups in which they lived. From a practical perspective, Hogbin ([37]: 47) observed on Vokeo that “No one can exist in isolation; he needs help not merely for major undertakings but also in lesser tasks. For him to fall out with his kinsmen or affines is therefore tantamount to doing himself a personal injury.” On Malaita, Hopkins ([45]: 32) found that membership in the tribe, “is the only way of securing any measure of protection of life, of property, or home. A tribe defends, shelters, feeds its members, and

avenges for their death or any damage done to them or the tribe concerned." More starkly, Hogbin ([53]: 51) found that on Guadalcanal "nobody can afford to forego the help of his fellows." Survival outside of the group might have been possible, but it was tenuous and highly undesirable.

Individuals depended on group membership for more than physical needs. To an extent, individual and group identities were intermingled. As Ross ([54]: 191) writes of the Baegu of Maliata, "prestige and power are group attributes rather than individual ones. Men acquire renown through the demonstrated power and wealth of their groups..." Identification with the group transferred ambition from the individual to the group. Conversely, the focus on the group may have, in some cases, reduced individual ambition. Hopkins ([45]: 31) writes: "it is rather against a man's interests to make the most of the piece of land he works. It belongs to the tribe really, and if he gets a surplus off it they will enjoy it." Thus, "ambition is... tribal." The notion of collective identity, in which an individual saw his or her personal identity as intrinsically related to membership in a group, made the defense of the group and its reputation a priority. A threat to the group was a *de facto* threat to the individual.

Individual and group identification could go in the other direction, wherein an individual represented the group. On Malaita, eating a single enemy body absorbed the *mana* of the entire tribe, making it unsustainable. Its members dispersed to other groups.

Group identification does not equate to group rigidity. Competitive leadership in Melanesia recognized that a perceived abuse of power could cause people to leave one group and join another. Presumably, they would then be willing to defend their new group with the same vigor as they did their original one. It was the need to be part of a group, rather than a *particular* group, that was most important. However, the very notion of belonging to one group implies that one is *not* a member of another group. This negative component of group identity is an important factor in competition between groups.

The strong association of individual and group suggests that an ultimate cause of conflict in Melanesia was associated with the concept of *identity*, the need to show that the group of which one was a member was important enough to risk injury or death in a fight. As Scheffler ([55]: 399) found for Choiseul Island, "Intergroup conflict was an essential element in the maintenance of the individual identities of those groups and, consequently, of the continuation of the larger system..." Fighting was a form of costly signaling in which the identity and continuity of a group was maintained. There was a distinct economic component of violence in that it validated the individual's and group's rights to land and other resources essential to survival.

The absence of territorial ambition in much of Melanesia, combined with the inability of a single individual to exert authority over a wide area, suggests that a second ultimate cause of conflict was the notion of *stability*, the desire to maintain the status quo or, if it was disturbed, to return things to their previous state. On Kiriwina, Irwin ([56]: 52) writes "one might wonder whether the normal outcome of war was the eventual reestablishment of the former political

situation." Powell ([57]: 142) came to the same conclusion regarding conflict on Kiriwina, namely that the aim of war "was not to obtain a decisive conclusion... but rather to restore the balance of power." Writing of the small islands off the coast of Malekula, Layard ([58]: 588) noted that wars were fought "almost entirely on questions involving the prestige of one group against another, in order to maintain the existing order of society by wreaking vengeance on any who seek to disturb it." Here, as in other places, the number of dead needed to be the same on both sides to prevent a resurgence of violence. Among the Maring, Rappaport ([15]: 113) found that "a principle of absolute reciprocity is supposedly in force; every death at the hands of an enemy group requires the killing of one of that group's members, and peace should not be made until both antagonists have revenged all of their losses." A truce might last ten years or more before fighting resumed to even the score.

The concept of stability can be applied to other elements of violence. A revenge attack was more than emotionally motivated vengeance. From an economic perspective, it reduced the recipient of revenge by the same measure of productivity as was suffered in the original offense. Revenge could be nonviolent; compensation was often offered as an alternative to killing. It reduced the economic state of the compensating party relative to the aggrieved party. Compensation had an element of justice and as such "never centers on misdeeds, rather on the transfer of pigs, money, and women needed to return the victim to its previous levels of reproductive power ([59]: 73)."

Revenge had a deterrent value. Sillitoe [60, 61] suggests that the need to compensate the other side for losses suffered in battle discouraged groups from fighting. It was not worth the cost. Douglas ([50]: 27) writes "the basic premise of Melanesian political interaction and fighting [is] that maintenance of relative equivalences demanded revenge for insults and injuring, that kinspeople, friends and allies might be held responsible for the actions of individuals."

There were limits to violence. While leaders sometimes encouraged violence to increase their influence and prestige, they suppressed it when it threatened their interests or the interests of the group. Incessant internal violence reduced social solidarity and hence the ability of a group to withstand external attack or conduct attacks itself. Hogbin ([43]: 75) writes that on Maliata, "the ramifications of mutual dependence... are so complex that people cannot afford to pursue their quarrels very far." Conversely, the lack of kinship or other connections with people in different groups led to a greater acceptance of violence against them, as in the case of Vokeo cited above.

The relationships existing between individuals and groups, while dynamic, need not be violent. The pacification of Melanesian societies following the arrival of western authorities shifted competition from violent to peaceful processes. Feasts and other competitions served to establish and maintain status differentials. Such events were a type of costly signal, demonstrating that reputation was important enough to justify the expenditure of significant economic resources. Jennes and Balantyne ([62]: 256) suggest that the end of fighting not only encouraged but "necessitated" the

TABLE 2: Comparison of levels of violence in Oceania.

	Polynesia	Caroline Islands	Melanesia
Average area (km ²)	390	25	3,100
Average population	5800	1800	17,000
Population density	95	360	30
Interpersonal violence	2.1	1.4	3.2
Warfare	2.1	2.4	3.3

elaboration of food exchanges. (Note that gift exchange was a vital part of Melanesian society even during violent times.) Gift exchange served to create a network of mutual obligation between the members of a society or set of societies. Such obligations could extend to reluctance to use violence against one to whom one is indebted. Peoples ([63]: 300) proposed that “natural selection between the groups favors the survival of groups with many reciprocators.” In practice, Melanesian society employed both gifts and violence, often with one closely following the other, as mechanisms of social interaction.

It is of interest to compare the level of violence in Melanesia with that of other Pacific culture areas. Table 2 gives the average values of interpersonal violence and warfare for Melanesia compared to a sample of societies from Polynesia [5] and the Caroline Islands [6].

Chowning [10] argues that violence in Melanesia was probably no greater than in other parts of Oceania, but Table 2 suggests that Melanesia had substantially larger rates of both forms of violence than did the other culture samples. However, while the averages dispute Chowning’s broad conclusion, it is certainly true that high levels of violence—as well as some cases of relatively peaceful societies—occurred in each of the three culture areas. For example, the Polynesian island of Niue (population 5,000) and the Micronesian island of Chuuk (population 11,000) each had fragmented societies similar to those of the larger islands in Melanesia. In each case the degree of political integration was low and a constantly shifting set of alliances engaged in nearly continuous warfare.

It is significant that Niue and Chuuk had traditions of ascribed leadership, although the acceptance of inherited authority was weak in both cases. This suggests that the size and number of autonomous polities may have been as important or more important in determining the frequency and severity of warfare than the style of leadership. This is the situation found in many parts of Melanesia. In terms of the concepts of identity and stability, many small groups competed for their right to exist, for prestige and, in some cases, for land.

Ascribed leadership in Polynesia, Micronesia, and parts of Melanesia assisted the development of multilevel distributed governance that could span large areas and populations, although complete unification of a large island or island group was seldom achieved. In parts of Melanesia where the span of control of a Big Man was limited to the range of his personal interactions, integration was limited to alliances rather than hierarchies and, as on Chuuk and Niue, violent competition was frequent. Without defined roles and

responsibilities for leaders, anyone could attempt to take a group to war, increasing the risk of intergroup conflict.

Thus Chowning [10] is correct in saying that the nature of violence in Melanesia may not have been different from that in other parts of the Pacific. However, the combination of competitive achieved leadership and the larger land areas of Melanesia may have exacerbated the frequency and severity of violence compared to Polynesia and Micronesia.

Conflict of Interests

The author declares that there is no conflict of interests regarding the publication of this paper.

References

- [1] L. H. Keeley, *War Before Civilization*, Oxford University Press, Oxford, UK, 1996.
- [2] C. K. Loftin, *Warfare and societal complexity: a cross cultural study of organized fighting in preindustrial societies [Ph.D. thesis]*, University of North Carolina, Chapel Hill, NC, USA, 1971.
- [3] C. R. Ember, M. Ember, and B. Russett, “Peace between participatory polities: a cross-cultural test of the “democracies rarely fight each other” hypothesis,” *World Politics*, vol. 44, no. 4, pp. 573–599, 1992.
- [4] C. R. Ember, B. Russett, and M. Ember, “Political participation and peace: cross cultural codes,” *Behavior Science Research*, vol. 27, no. 1-2, pp. 97–145, 1993.
- [5] S. M. Younger, “Conditions and mechanisms for peace in precontact polynesia,” *Current Anthropology*, vol. 49, no. 5, pp. 927–934, 2008.
- [6] S. M. Younger, “Violence and warfare in the pre-contact caroline Islands,” *Journal of the Polynesian Society*, vol. 118, no. 2, pp. 135–164, 2009.
- [7] C. H. Wedgwood, “Some aspects of warfare in Melanesia,” *Oceania*, vol. 1, pp. 5–33, 1930.
- [8] B. M. Knauft, “Melanesian warfare: a theoretical history,” *Oceania*, vol. 60, pp. 250–311, 1990.
- [9] B. Douglas, “Almost constantly at war”? An ethnographic perspective on fighting in New Caledonia,” *Journal of Pacific History*, vol. 25, no. 1, pp. 22–46, 1990.
- [10] A. Chowning, *An Introduction to the Peoples and Cultures of Melanesia*, Cummings, Menlo Part, Calif, USA, 2nd edition, 1977.
- [11] F. Egan, “Social anthropology and the method of controlled comparison,” *American Anthropologist*, vol. 56, no. 5, pp. 743–763, 1954.
- [12] S. K. Tefft and D. Reinhardt, “Warfare regulation: a cross cultural test among tribal peoples,” *Behavior Science Research*, vol. 2, pp. 151–172, 1974.
- [13] B. Malinowski, “War and weapons among the natives of the Trobriand Islands,” *Man*, vol. 20, pp. 10–12, 1920.
- [14] D. K. Feil, *The Evolution of Highland Papua New Guinea Societies*, Cambridge University Press, Cambridge, UK, 1987.
- [15] R. A. Rappaport, *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*, Yale University Press, New Haven, Conn, USA, 1968.
- [16] J. Bonnemaïson, *The Tree and the Canoe: History and Ethnography of Tanna*, University of Hawaii Press, Honolulu, Hawaii, USA, 1994.

- [17] H. M. Ross, "Internal and external conflict and violence: cross cultural evidence and a new analysis," *Journal of Conflict Resolution*, vol. 29, pp. 547–579, 1985.
- [18] C. R. Ember and M. Ember, "Resource unpredictability, mistrust, and war: a cross cultural study," *Journal of Conflict Resolution*, vol. 36, pp. 242–262, 1992.
- [19] M. D. Sahlins, "Poor man, rich man, big man, chief: political types in Melanesia and Polynesia," *Comparative Studies in Society and History*, vol. 5, no. 3, pp. 285–303, 1963.
- [20] B. Douglas, "Rank, power, authority: a reassessment of traditional leadership in South Pacific societies," *Journal of Pacific History*, vol. 14, no. 1, pp. 2–27, 1979.
- [21] M. R. Allen, "Elders, chiefs, and big men: authority legitimation and political evolution in Melanesia," *American Ethnologist*, vol. 11, no. 1, pp. 20–41, 1984.
- [22] H. I. Hogbin, "Culture change in the Solomon Islands," *Oceania*, vol. 4, pp. 233–267, 1934.
- [23] B. M. Knauff, "Reconsidering violence in simple human societies: homicide among the Gebusi of New Guinea," *Current Anthropology*, vol. 28, no. 4, pp. 457–500, 1987.
- [24] M. H. Ross, "Political decision making and conflict: additional cross-cultural codes and scales," *Ethnology*, vol. 22, no. 2, pp. 169–192, 1983.
- [25] C. R. Ember and M. Ember, "War, socialization, and interpersonal violence," *Journal of Conflict Resolution*, vol. 38, pp. 620–646, 1994.
- [26] C. R. Ember, "An evaluation of alternative theories of matrilineal versus patrilineal residence," *Behavior Science Research*, vol. 2, pp. 135–149, 1974.
- [27] G. C. Leavitt, "The frequency of warfare: an evolutionary perspective," *Sociological Inquiry*, vol. 47, pp. 49–58, 1977.
- [28] R. Rosenfeld and S. F. Messner, "The social sources of homicide in different types of societies," *Sociological Forum*, vol. 6, no. 1, pp. 51–70, 1991.
- [29] S. M. Younger, *Calculating Chiefs: Simulating Leadership, Violence, and Warfare in Oceania*, Lambert Academic Press, Saarbrücken, Germany, 2012.
- [30] K. F. Otterbein, "Internal war: a cross cultural study," *American Anthropologist*, vol. 70, no. 2, pp. 277–289, 1968.
- [31] K. F. Otterbein and C. S. Otterbein, "An eye for an eye, a tooth for a tooth: a cross cultural study of feuding," *American Anthropologist*, vol. 67, no. 6, pp. 1470–1482, 1965.
- [32] H. I. Hogbin, "Native culture of Wogeo: report of field work in New Guinea," *Oceania*, vol. 5, pp. 308–337, 1935.
- [33] H. I. Hogbin, "Social advancement in Guadalcanal, Solomon Islands," *Oceania*, vol. 8, pp. 289–305, 1938.
- [34] H. I. Hogbin, "The father chooses his heir: a family dispute over succession in Wogeo, New Guinea," *Oceania*, vol. 11, pp. 1–39, 1940.
- [35] H. I. Hogbin, "Sorcery and succession in Wogeo," *Oceania*, vol. 23, pp. 133–136, 1952.
- [36] H. I. Hogbin, "Food festivals and politics in Wogeo," *Oceania*, vol. 40, pp. 304–328, 1970.
- [37] H. I. Hogbin, *The Leaders and the Led: Social Control in Wogeo, Papua New Guinea*, Melbourne University Press, Carlton, Australia, 1978.
- [38] A. Anderson, "Landscapes of sociality: paths, places and belonging on Wogeo Island, New Guinea," in *Oceanic Socialities and Cultural Forms*, I. Hoem and S. Roalkvam, Eds., pp. 51–70, Berghahn Books, New York, NY, USA, 2003.
- [39] A. Anderson, "An introduction to the cultural context of the texts," in *Wogeo Texts: Myths, Songs and Spells From Wogeo Island, Papua New Guinea*, A. Anderson and M. Exter, Eds., Occasional Papers of the Kon-Tiki Museum, Oslo, Norway, 2005.
- [40] A. P. Vayda, "Phases of the process of war and peace among the Maring of New Guinea," *Oceania*, vol. 42, pp. 1–24, 1971.
- [41] A. P. Vayda, "Why marings fought," *Journal of Anthropological Research*, vol. 45, pp. 159–177, 1989.
- [42] M. J. Meggitt, *Blood Is Their Argument: Warfare Among the Mae Enga of the New Guinea Highlands*, Mayfield, Palo Alto, Calif, USA, 1977.
- [43] H. I. Hogbin, *Experiments in Civilization: The Effects of European Culture on A Native Community of the Solomon Islands*, Schoken Books, New York, NY, USA, 1969.
- [44] B. Burt, *Tradition And Christianity: The Colonial Transformation of a Solomons Islands Society*, Harwood Academic Publishers, Chur, Switzerland, 1994.
- [45] A. I. Hopkins, *In the Isles of King Solomon: An Account of Twenty-Five Years Spent amongst the Primitive Solomon Islanders*, Seeley, Service & Co., London, UK, 1928.
- [46] F. Coombe, *Islands of Enchantment: Many-Sided Melanesia*, Macmillan, London, UK, 1911.
- [47] R. M. Kessing, Ed., *Elota's Story: The Life and Times of a Solomon Islands Big Man*, St. Martin's Press, New York, NY, USA, 1983.
- [48] B. Douglas, "Conflict and alliance in a colonial context: case studies in New Caledonia 1853–1870," *Journal of Pacific History*, vol. 15, no. 1, pp. 21–51, 1980.
- [49] B. Douglas, "Fighting as savagery and romance: new Caledonia past and present," in *Reflections on Violence in Melanesia*, S. Dinnen and A. Ley, Eds., pp. 53–64, Hawkins Press and Asia Pacific Press, Annandale, Australia, 2000.
- [50] B. Douglas, "Almost constantly at war"? Ethnographic perspectives on indigenous fighting in New Caledonia," in *Across the Great Divide: Journeys in History and Anthropology*, B. Douglas, Ed., pp. 123–158, Harwood Academic Publishers, Sydney, Australia, 1998.
- [51] A. Bensa and A. Goromido, "The political order and corporal coercion in Kanak societies of the past (New Caledonia)," *Oceania*, vol. 68, no. 2, pp. 84–106, 1997.
- [52] M. J. Meggitt, "The pattern of leadership among the Mae-Enga of New Guinea," *Anthropological Forum*, vol. 2, no. 1, pp. 20–35, 1967.
- [53] H. I. Hogbin, *A Guadalcanal Society: The Kaoka Speakers*, Holt, Rinehart and Winston, New York, NY, USA, 1964.
- [54] M. H. Ross, *Baegu: Social and Ecological Organizations in Malaita, Solomon Islands*, University of Illinois Press, Urbana, Ill, USA, 1973.
- [55] H. W. Scheffler, "The social consequences of peace on Choiseul Island," *Ethnology*, vol. 3, no. 4, pp. 398–403, 1964.
- [56] G. J. Irwin, "Chieftainship, kula and trade in Massim prehistory," in *The Kula: New Perspectives on Massim Exchange*, J. W. Leach and E. Leach, Eds., pp. 29–72, Cambridge University Press, Cambridge, UK, 1983.
- [57] H. A. Powell, "Competitive leadership in Trobriand political organization," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 90, no. 1, pp. 118–145, 1960.
- [58] J. Layard, *Stone Men of Malekula*, Chatto & Windus, London, UK, 1941.

- [59] E. Lipuma, *The Gift of Kinship: Structure and Practice in Maring Social Organization*, Cambridge University Press, Cambridge, UK, 1988.
- [60] P. Sillitoe, "Land shortage and war in New Guinea," *Ethnology*, vol. 16, no. 1, pp. 71–81, 1977.
- [61] P. Sillitoe, "Big men and war in New Guinea," *Man*, vol. 13, no. 2, pp. 252–271, 1978.
- [62] D. Jennes and A. Balantyne, *The Northern D'Entrecasteau*, Clarendon Press, Oxford, UK, 1920.
- [63] J. G. Peoples, "Individual or group advantage? A reinterpretation of the Maring ritual cycle," *Current Anthropology*, vol. 23, no. 3, pp. 291–310, 1982.
- [64] M. R. Allen, *The Nduindui: A Study in the Social Structure of a New Hebridean Community [Ph.D. thesis]*, Australian National University, Canberra, Australia, 1964.
- [65] M. Rodman, "Following peace: indigenous pacification of a northern New Hebridean society," in *The Pacification of Melanesia*, M. Rodman and M. Cooper, Eds., pp. 141–160, University Press of America, Lanham, Md, USA, 1983.
- [66] F. L. S. Bell, "Report on field work in Tanga," *Oceania*, vol. 4, pp. 290–309, 1934.
- [67] F. L. S. Bell, "Warfare among the Tanga," *Oceania*, vol. 5, pp. 253–279, 1935.
- [68] F. L. S. Bell, "Travel and communication in Tanga," *Oceania*, vol. 21, pp. 81–106, 1950.
- [69] F. L. S. Bell, "Land tenure in Tanga," *Oceania*, vol. 24, pp. 28–57, 1953.
- [70] R. J. Foster, *Social Reproduction and History in Melanesia: Mortuary Ritual, Gift Exchange, and Custom in the Tanga Islands*, Cambridge University Press, Cambridge, UK, 1995.
- [71] D. Oliver, *A Solomon Island Society: Kinship and Leadership Among the Siuai of Bougainville*, Harvard University Press, Cambridge, UK, 1955.
- [72] H. W. Scheffler, "The genesis and repression of conflict: Choiseul Island," *American Anthropologist*, vol. 66, no. 4, pp. 789–804, 1964.
- [73] H. W. Scheffler, *Choiseul Island Social Structure*, University of California Press, Berkeley, Calif, USA, 1965.
- [74] M. Bromley, "Leadership in Grand Valley Dani society," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [75] M. Bromley, "The function of fighting in Grand Valley Dani society," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [76] L. F. B. Dubbeldam, "Some thoughts about fighting," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [77] K. G. Heider, "Leadership," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [78] K. G. Heider, "Fighting," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [79] K. G. Heider, *The Dugum Dani: A Papuan Culture in the Highlands of West New Guinea*, Werner-Gren Foundation for Anthropological Research, New York, NY, USA, 1970.
- [80] K. G. Heider, *Grand Valley Dani: Peaceful Warriors*, Holt Reinhart and Winston, New York, NY, USA, 1979.
- [81] B. M. Knauff, "Not just for fun: formalized conflict and games of war in relation to unrestrained violence in indigenous Melanesia and other decentralized societies," in *War and Games*, T. J. Cornell and T. B. Allen, Eds., pp. 137–170, The Boydell Press, Woodbridge, UK, 2002.
- [82] L. L. Langness, "Violence in the New Guinea Highlands," in *Collective Violence*, J. F. Short Jr. and M. E. Wolfgang, Eds., pp. 171–185, Aldine-Atherton, Chicago, Ill, USA, 1972.
- [83] G. F. Larson, "Warfare and feuding in the Ilaga Valley," United Nations Temporary Executive Authority in West New Guinea-West Irian Bureau of Native Affairs Working Papers in Dani Ethnology 1, Hamilton Library of the University of Hawai'i, Hilo, Hawai, USA, 1962.
- [84] W. E. Bromilow, "Some manners and customs of the Dobuans of S.E. Papua," in *Proceedings of the Australian Association for the Advancement of Science, Report of the 12th Meeting*, pp. 470–484, Government Printer, Brisbane, Australia, 1910.
- [85] R. F. Fortune, *Sorcerers of Dobu: The Social Anthropology of the Dobu Islanders of the Western Pacific*, Waveland Press, Prospect Heights, Ill, USA, 1989.
- [86] M. W. Young, "Dobu," in *Encyclopedia of World Cultures*, D. Levinson, Ed., pp. 160–163, G.K. Hall, Boston, Mass, USA, 1991.
- [87] P. A. Buxton, "The depolution of the new hebrides and other parts of Melanesia," *Transactions of the Royal Society of Tropical Medicine and Hygiene*, vol. 19, no. 8, pp. 420–458, 1926.
- [88] C. B. Humphreys, *The Southern New Hebrides: An Ethnological Record*, Cambridge University Press, Cambridge, UK, 1926.
- [89] M. W. Young, *Fighting with Food*, Cambridge University Press, Cambridge, UK, 1971.
- [90] M. W. Young, "Doctor Bromilow and the Bwaidoka Wars," *Journal of Pacific History*, vol. 12, no. 3, pp. 130–153, 1977.
- [91] H. I. Hogbin, "The hill people of North-Eastern Guadalcanal," *Oceania*, vol. 8, pp. 62–89, 1937.
- [92] L. Austen, "Cultural changes in Kiriwina," *Oceania*, vol. 16, pp. 15–61, 1945.
- [93] A. B. Weiner, "Trobriand Islands," in *Encyclopedia of World Cultures*, D. Levinson, Ed., pp. 37–40, G.K. Hall, Boston, Mass, USA, 1991.
- [94] E. Hadfield, *Among the Natives of the Loyalty Group*, Macmillan, London, UK, 1920.
- [95] K. R. Howe, "Firearms and indigenous warfare: a case study," *Journal of Pacific History*, vol. 9, pp. 21–58, 1974.
- [96] K. R. Howe, *The Loyalty Islands: A History of Culture Contacts 1840–1900*, University Press of Hawaii, Honolulu, Hawai, USA, 1977.
- [97] S. H. Ray, "The people and language of Lifu, Loyalty Islands," *Royal Anthropological Institute of Great Britain and Ireland*, vol. 47, pp. 239–322, 1917.
- [98] H. I. Hogbin, "Native councils and native courts in the Solomon Islands," *Oceania*, vol. 14, pp. 257–283, 1944.
- [99] W. G. Ivens, *The Island Builders of the Pacific: How the People of Mala Construct Their Artificial Islands, The Antiquity & Doubtful Origin of the Practice, with a Description of the Social Organization, Magic & Religion of Their Inhabitants*, Seeley, Service & Co., London, UK, 1930.

- [100] R. M. Keesing, "Killers, big men, and priests on Malaita: reflections on a Melanesian troika system," *Ethnology*, vol. 24, no. 4, pp. 237–252, 1985.
- [101] I. Macneill, *Sweet Horizons: A History of the Solomon Islands*, Acland Press, St. Kilda West, Australia, 2000.
- [102] A. B. Deacon, [1934]. *Malekula: A Vanishing People in the New Hebrides*. (W. Edgwood, C.H., Ed.), Anthropological Publications, Oosterhout, The Netherlands, 1970.
- [103] N. H. Hardy and E. W. Elkington, *The Savage South Seas*, A.&C. Black, London, 1907.
- [104] T. Harrison, *Savage Civilization*, Victor Gollancz, London, UK, 1937.
- [105] J. G. Carrier and A. H. Carrier, *Wage, Trade, and Exchange in Melanesia: A Manus Society in the Modern State*, University of California Press, Berkeley, Calif, USA, 1989.
- [106] M. Mead, "The manus of the admiralty Islands," in *Cooperation and Competition Among Primitive Peoples*, M. Mead, Ed., pp. 210–239, Beacon Press, Boston, Mass, USA, 1961.
- [107] M. Mead, *Growing Up in New Guinea: A Comparative Study of Education*, William Morrow, New York, NY, USA, 1968.
- [108] K. L. Ray, *The Manus of the admiralty Islands: a study in social change [M.S. thesis]*, University of Washington, Seattle, Wash, USA, 1964.
- [109] T. Schwartz, "Systems of areal integration: some considerations based on the Admiralty Islands of northern Melanesia," *Anthropological Forum*, vol. 1, no. 1, pp. 56–97, 1963.
- [110] N. E. Gratton, "Maring," in *EncyclopEdia of World Cultures*, D. Levinson, Ed., pp. 185–188, G.K. Hall, Boston, Mass, USA, 1991.
- [111] C. Lowman, *Environment, society, and health: ecological bases of community growth and decline in the maring region of Papua New Guinea [Ph.D. thesis]*, Columbia University, New York, NY, USA, 1980.
- [112] C. Lowman-Vayda, "Marring big men," in *Politics in New Guinea: Traditional and in the Context of Change Some Anthropological Perspectives*, R. M. Berndt and P. Lawrence, Eds., pp. 317–361, University of Western Australia Press, Nedland, Australia, 1968.
- [113] W. H. Davenport, "Social structure of Santa Cruz Island," in *Explorations in Cultural Anthropology: Essays in Honor of George Peter Murdock*, W. H. Goodenough, Ed., McGraw Hill, New York, NY, USA, 1964.
- [114] W. H. Davenport, "Santa Cruz," in *Encyclopedia of World Cultures*, D. Levinson, Ed., pp. 290–292, G.K. Hall, Boston, Mass, USA, 1991.
- [115] W. O'Ferrall, *Melanesia: Santa Cruz and the Reef Islands*, Church House, London, UK, 1908.
- [116] A. Chowning and W. H. Goodenough, "Lakalai political organization," in *Politics in New Guinea: Traditional and in the Context of Change Some Anthropological Perspectives*, R. M. Berndt and P. Lawrence, Eds., pp. 113–174, University of Washington Press, Seattle, Wash, USA, 1971.
- [117] R. W. Robson, *The Pacific Islands Handbook*, MacMillan, New York, NY, USA, 1944.
- [118] P. G. Sack, "Dukduk and law enforcement," *Oceania*, vol. 43, pp. 96–103, 1972.
- [119] J. A. Todd, "Redress of wrongs in south-west New Britain," *Oceania*, vol. 6, pp. 401–442, 1936.
- [120] C. Weir, "The gospel came... fighting is ceasing amongst us": methodist representations of violence in Fiji and New Britain, 1830–1930," in *Reflections on Violence in Melanesia*, S. D. Dinnen and A. Ley, Eds., pp. 33–49, Hawkins Press and Canberra, ACT: Asia Pacific Press, Annandale, Australia, 2000.
- [121] B. Douglas, "Doing ethnographic history: the case of fighting in New Caledonia," in *History and Tradition in Melanesian Anthropology*, J. G. Carrier, Ed., pp. 86–115, University of California Press, Berkeley, Calif, USA, 1992.
- [122] C. Sand, "Reconstructing "traditional" Kanak society in New Caledonia: the role of archaeology in the study of European contact," in *The Archaeology of Difference: Negotiating Cross-Cultural Engagements in Oceania*, R. Torrence and A. Clarke, Eds., pp. 51–78, Routledge, London, UK, 2000.
- [123] S. Aswani, "Changing identities: the ethnohistory of Roviana predatory head-hunting," *Oceania*, vol. 109, pp. 39–70, 2000.
- [124] J. Boutillier, "The suppression of head-hunting in the western Solomon Islands," in *Proceedings of the Annual Meeting of the Association for Social Anthropology in Oceania*, March 1973.
- [125] A. P. Elkin, *Social Anthropology in Melanesia: A Review of Research*, Oxford University Press, London, UK, 1953.
- [126] B. T. Sommerville, "Ethnographical notes in New Georgia, Solomon Islands," *Journal of the Anthropological Institute of Great Britain and Ireland*, vol. 26, pp. 357–412, 1897.
- [127] M. Zelenietz, "The end of headhunting in New Georgia," in *The Pacification of Melanesia ASAO Monograph No. 7*, M. Rodman and M. Cooper, Eds., pp. 91–108, University Press of America, Lanham, Md, USA, 1983.
- [128] C. E. Fox, *The Threshold of the Pacific: An Account of the Social Organization, Magin and Religion of the People of San Cristoval in the Solomon Islands*, Alfred A. Knopf, New York, NY, USA, 1925.
- [129] H. B. Guppy, *The Solomon Islands and Their Natives*, Swan Sonnenschein, Lowrey & Co, London, UK, 1887.
- [130] G. Bogesi, "Santa Isabel, Solomon Islands," *Oceania*, vol. 18, pp. 327–357, 1947.
- [131] G. Bogesi, "Santa Isabel, Solomon Islands," *Oceania*, vol. 18, pp. 208–232, 1948.
- [132] G. White, "War, peace, and piety in Santa Isabel, Solomon Islands," in *The Pacification of Melanesia ASAO Monograph No. 7*, M. Rodman and M. Cooper, Eds., pp. 109–139, University Press of America, Lanham, Md, USA, 1983.
- [133] C. Dureau, "Skulls, mana, and causality," *Oceania*, vol. 109, pp. 71–97, 2000.
- [134] A. M. Hocart, "The cult of the dead in Eddystone of the Solomons," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 52, pp. 71–112, 1922.
- [135] A. M. Hocart, "Warfare in Eddystone of the Solomon Islands," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 61, pp. 301–324, 1931.
- [136] R. Adams, *In the Land of Strangers: A Century of European Contact with Tanna, 1774–1874*, Australian National University, Canberra, Australia, 1984.
- [137] A. C. P. Watt, *Twenty-Five Years' Mission Life on Tanna, New Hebrides*, Parlange, Paisley, Edinburgh, Germany, 1896.
- [138] M. Macintyre, "Warfare and the changing context of "kune" on Tubetube," *Journal of Pacific History*, vol. 18, pp. 11–34, 1983.
- [139] M. Macintyre, *Changing paths: an historical ethnography of the traders of tubetube [Ph.D. thesis]*, Australian National University, Acton, Australia, 1983.
- [140] C. G. Seligmann and W. M. Strong, "Anthropogeographical investigations in British New Guinea," *The Geographical Journal*, vol. 27, no. 3, pp. 225–242, 1906.

- [141] H. I. Hogbin, "Social reaction to crime: law and morals in the Schouten Islands, New Guinea," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 60, pp. 223–262, 1938.
- [142] W. E. Armstrong, *Rossel Island*, Cambridge University Press, Cambridge, UK, 1928.
- [143] J. Liep, "'This civilizing influence': the colonial transformation of Rossel Island society," *Journal of Pacific History*, vol. 18, pp. 113–133, 1983.

