

War and peace among the Australian Aborigines

Jürg HELBLING

Abstract: The Australian Aborigines do not constitute a uniform culture. Rather, the hunter-gatherers of the Western Desert and the sedentary fishermen of Arnhem Land (and elsewhere) form two quite distinct types of society. They differ not only in their mode of economy (the use of dispersed terrestrial resources by mobile hunter-gatherers versus the stationary use of concentrated aquatic resources by sedentary fishermen) but also in their social organisation (small mobile groups with bilateral and fluctuating composition versus larger groups with a stable core of patrilineal relatives). These two types of society also differ in terms of the relations between groups (blood vengeance and absence of war among mobile hunter-gatherers versus feud and war among sedentary fishermen). It is argued, that the term “hunter-gatherer”, which summararily refers to societies without agriculture and animal husbandry, should therefore be abandoned in favour of a differentiation between hunter-gatherers and sedentary fishermen, whereby the latter have far more in common with cultivators/pastoralists than with hunter-gatherers in terms of their basic structural characteristics.

Keywords: Australian Aborigines, hunter-gatherers, sedentary fishermen, mobility, sedentarity, revenge, blood, feud, warfare.

1. WAR AND HUNTER-GATHERERS

The existence of violence and war among hunter-gatherer societies has long been the subject of heated debate. While some authors believe that war is common among hunter-gatherers (Ember, 1978; Gat 1999, 2008 and 2015; Otterbein, 2004; Wrangham and Glowacki, 2012; Allen and Jones, 2014; Hames, 2019), others (Service, 1966; Carneiro, 1994; Kelly, 2000 and 2013; Haas, 2001; Fry, 2006; Haas and Piscitelli, 2013) argue that while there is certainly violence between individuals in hunter-gatherer societies, there is no (or almost no) war between groups. However, even the terms of this debate are controversial because both the concept of war and the definition of hunter-gatherers are contested.

The definition of war used here is a common one, according to which “war is an armed combat between political communities” (Ferguson, 1984, p. 5; Otterbein, 1989, p. 3). Wars are collectively decided, planned and organised (at least by the attacking side). A political unit is “a group of people whose membership is defined in terms of occupancy of a common territory” (Otterbein, 1989, p. 3; see also Murdock and Wilson, 1972, p. 255). Within a political unit, internal conflicts are resolved peacefully and collective decisions must be respected. Otherwise, the group would split up. A political unit is

also a relevant entity in terms of “foreign policy”. In stateless societies, political units are small mobile groups within hunter-gatherer societies or village communities in tribal societies.

Whereas war is an armed conflict between political units, feud is the legitimate right (*lex talionis*) to take revenge for a homicide. Feud is above all a family affair, even though a feud can degenerate into a war between political entities—but this is not always the case (Carneiro, 1994, p. 6; Spencer, 1996, pp. 300–301). C. R. Ember (1978, p. 447), R. W. Wrangham et L. Glowacki (2012, p. 8), A. Gat (2015, p. 115) et R. Hames (2019, pp. 159–160) do not distinguish war between groups, feud/blood revenge between families and violence between individuals. They deduce war from homicide without being able to explain how murder and blood revenge are related to war. However, C. Boehm (1987), R. M. Berndt et C. H. Berndt (1992), R. L. Carneiro (1994), R. C. Kelly (2000) and others have demonstrated that the distinction between war, feud/blood revenge and interpersonal violence is both, analytically productive and ethnographically pertinent.

As far as hunter-gatherers are concerned, they are, contrary to what S. Pinker (2011), D. Graeber and D. Wengrow (2021), P. Descola and many others think, not simply populations without agriculture and animal husbandry. According to the standard definition of

R. B. Lee and I. DeVore (1968, pp. 11–12), hunter-gatherers not only live by hunting and gathering, but are also organised in small, mobile groups. Hence, mobility is a decisive factor (Sahlins 1968). Sedentary fishermen, such as the Kwakiutl, Nootka and Tsimshian on the north-west coast of North America, are not hunter-gatherers. The same applies to the Gilyak and Chukchi on the north-east coast of Russia, the Aleut and Tariumiut of Alaska, the Calusa in Florida, groups along the Niger and Congo rivers, the Ainu of Hokkaido (Japan) and many others. Their way of life, their social and political organisation and their ideology are more like those of tribal societies of horticulturalists/pastoralists (Service, 1966, p. 3; Testart, 1981, p. 181; LeBlanc, 2003, pp. 138 and 204). This is also the case for proto-horticulturalists (incipient tillers), especially those who, in addition to marginal horticulture, are heavily dependent on aquatic resources and are largely sedentary, such as some groups in the lowlands of New Guinea. P. Roscoe (2002, pp. 156–157, and 2006, pp. 38–40) shows that the groups in the lowlands of New Guinea who use (cultivated or wild) sago and live mainly from (spatially concentrated) aquatic resources, such as the Asmat, Karawari and Waropen, are rather sedentary and organised as tribal farmers/pastoralists. In contrast, the groups that use sago and exploit mainly (spatially dispersed) terrestrial resources are mobile hunter-gatherers (Arafundi, Sanio-Hiowe, Bahinemo). While the difference here boils down to that between foragers and sedentary fishermen/hunters, the case of South American hunter-gatherers who practise marginal horticulture (such as the Nambikuara, Siriono and Piaroa) is different. In many cases, agriculture provides no more than 5% of food and is compatible with a mobile economy: maize and tuber patches are scattered and form areas among others, which groups use one after the other. It is only when horticulture decisively limits the mobility of groups that they can no longer be described as hunter-gatherers.

The same caveat applies to mounted hunters such as the Cheyenne, Sioux and Blackfoot of the US prairies and the Tehuelche of Patagonia. Sedentary fishermen (although they are sometimes called “complex hunter-gatherers”) as well as proto-horticulturalists and mounted hunters thus cannot be considered as hunter-gatherers (Murdock 1968, pp. 13–15).

According to C. R. Ember (1978), most hunter-gatherers were warlike. Her sample, however, includes sedentary fishermen and mounted hunters who, according to E. R. Service (1975) and G. P. Murdock (1968), are not hunter-gatherers. C. R. For Ember, war also includes executions (the judicial killing of an individual by a group) and feuds. Furthermore, C. R. Ember does not distinguish between passive warfare (flight and retreat), defensive warfare (defensive actions against stronger groups from a different type of society) and active warfare. But it is only active warfare between groups of hunter-gatherers that interests us here.

If we exclude all sedentary fishermen and mounted hunters as well as the cases of passive and defensive war-

fare in C. R. Ember’s sample, it can be demonstrated that there is no (or almost never) warfare between groups of hunter-gatherers (Kelly, 2013). Yet the data collected by C. Darmangeat (DBD¹) show that the Aborigines of Australia did indeed wage war against each other, contrary to D. P. Fry’s statement that the Australian Aborigines in pre-colonial times only practised feud between families but not war between groups (Fry, 2006, p. 159). A. Gat (2015) makes the case that Australia, as a continent exclusively inhabited by hunter-gatherers, is particularly suitable for refuting the thesis of peaceful hunter-gatherers. He argues that war was common among Australian Aborigines (see also Allen, 2014).

Map of the cultural areas of aboriginal Australia and location of the ethnic groups mentioned (AIATSIS, 2009; here fig. 1).

2. WAR AMONG THE AUSTRALIAN ABORIGINES

The view that Australian Aborigines form a more or less homogeneous culture, with only gradual variations and with more similarities than differences, is widely held (Pilling, 1968; Keen, 2004; Fry, 2006; Gat, 2015; Darmangeat, 2021). But, in reality, as I will try to show, Australian societies belong to two markedly different types: on the one hand, there are small mobile groups of hunter-gatherers and, on the other, local groups of (more or less) sedentary fishermen (misnamed as “complex hunter-gatherers”). A. Hamilton (1981 and 1982b), P. Sutton and B. Rigsby (1982), L. R. Hiatt (1985) and R. Tonkinson (1988) have already drawn attention to this point. The emphasis here is on sedentary life. However, there were not only sedentary fishermen, but also sedentary gatherers like the Yurok and Tolowa in California, who lived on acorns (Boehm, 1999), and sedentary hunters like the Natufians, who hunted gazelles (Bar-Yosef, 2002).

The differences between the two types of society are to be found not only in their mode of economy and social organisation, but also in their approaches to violence and war. We will illustrate this by comparing the hunter-gatherers of the Western Desert (such as the Pitjantjatjara, Ngaatjatjarra, Mardudjara and the Pintupi) with the sedentary fishermen of Arnhem Land (such as the Yolngu, Anbarra and the Gunwinggu). The case studies are dealt with in the ethnographic present tense; however, they refer as much as possible to “Aboriginal Australia at the threshold of colonization” (see Keen, 2004; Helbling, 2026 for further details).

2.1 Western Desert

Among the hunter-gatherers of the Western Desert, there are different forms of interpersonal violence. An individual who is said to have practiced witchcraft or who has committed a murder will be killed either by



Fig. 1 – Map of the regions of Australia's indigenous peoples and location of the ethnic groups mentioned (AIATSIS 2009):

1. Pitjantjatjara ; 2. Ngaatjatjarra ; 3. Mardudjara ; 4. Pintupi ; 5. Warlpiri ; 6. Arrernte ; 7. Alyawarre ; 8. Yolngu ; 9. Burrara (Gidjingali) ; 10. Anindilyakwa ; 11. Gunwingu ; 12. UutanInganu (Umpila) ; 13. Wathaurung ; 14. YortaYorta (Bangerang).

physical violence or by sorcery. Those who have broken a ritual taboo or betrayed totemic secrets are likewise killed (Meggitt, 1962, pp. 256–259; Berndt 1972, p. 203). Blood revenge and executions always target the guilty individual, and the victims of such sanctions are always the direct perpetrators of the crime.² Violence between individuals in the form of spontaneous brawls is also fairly frequent, especially when small mobile groups come together seasonally to form a regional group, which can also be considered a political unit (Meggitt 1962, p. 51). The primary political units, however, are the small mobile groups consisting of between 15 and 25 individuals. There are brawls, executions, murder and acts of blood revenge, but there is no war between the mobile groups. On rare occasions, a group is attacked on a trading expedition (e.g. en route to obtain red ochre), but this

is only the case if the travellers have no accepted totemic rights of access and did not ask for permission or if they have infringed a totemic taboo even without intention (Kimber, 1990).

Indulkana

N. B. Tindale (1972 and 1974), however, refers to a “massacre” among the Pitjantjatjara, which needs to be examined in more detail. In the 1880s, Pitjantjatjara groups moved south partly to escape the great drought that hit central Australia between 1883 and 1886,³ but also because of the occupation of reliable waterholes by commercial livestock farmers in the north. These Pitjantjatjara seem to have committed a “massacre” at Mount Chandler near Indulkana or Iwantja Creek which

was occupied by Yankunytjatjara groups. The conflict had arisen over totemic rights and access to water (Tindale, 1974, pp. 210–212; Hamiltonn, 1982a, pp. 89–90). We do not know how this “massacre” actually unfolded and how many people were killed. Even if the opponents belonged to different regional groups, these regional groups were not the protagonists in these conflicts, as the small mobile groups of a regional group could not possibly migrate together, especially not in a period of severe drought. Furthermore, available data seems to indicate, that these violent clashes took place within a large group during the dry season. The following scenario may explain the increased incidence of violence in regional groups.

At the height of the dry season, the mobile groups in a region normally aggregate near a permanent water hole to form a residential group of 100 to 200 individuals. Given the size of such a residential group, conflicts increase (because of deferred revenge actions and other grievances among individuals under growing nutritional stress), while the possibility of avoiding conflicts by moving away decreases because there is no water available elsewhere. (However, there are no disputes about the validity of totemic access rights.) Common rituals can certainly “freeze” conflicts for a time. Also, older men and women try to mediate in the event of conflict, and meetings are held to settle disputes peacefully (Berndt, 1972, p. 203; Tonkinson, 1978, pp. 119 and 125). Nevertheless, mobile groups leave the site at the end of ceremonies as quickly as possible, as conflicts between individuals risk degenerating into uncontrollable brawls (White, 1977, p. 103; Ellis and Dousset, 2016, pp. 5–6).

Such conflicts are considerably aggravated by migratory movements caused by a severe drought (or by colonial expansion), when mobile groups from another region add significantly to the number of people living by a permanent water hole. In times of drought, groups from another region seeking access to a permanent water hole are generally accepted (Myers, 1982, pp. 183–186), but conflicts inevitably multiply. They intensify especially when the drought is prolonged and the totemic access rights of extra-regional individuals are dubious and contested. It is, therefore, highly probable that the resulting violent conflicts are not wars between mobile groups or regional groups, but rather violent conflicts between individuals within a large regional group, individuals from different regional groups with rights of varying validity and with “scores to settle”.

Such massacres were, however, not inevitable. In 1914/15, during the great drought of 1911 to 1915, some Pitjantjatjara groups from the Tomkinson Ranges (of the Wirtjapakandja regional grouping) moved “eastwards into the Musgrave range [...] and removed the Jangkundjara [Yankunytjatjara] to the Everard Ranges” (Tindale, 1972, pp. 219–222, 228, and 1974, p. 212). There was no massacre in this case. Either the Yankunytjatjara left the place only to return later, or the immigrants had to be accepted “by reason of power of superior numbers” (Tindale, 1972, p. 219).

Tanami

There are other examples from the desert region of central Australia that seem to contradict the thesis that there were no wars between hunter-gatherer groups, notably the fighting between Warlpiri and Waringari at Tanami in 1905 (Meggitt, 1962; Darmangeat, DDB, #136⁴).

The Warlpiri consist of the four regional groups: the Yalpari and Ngalia in the more fertile south, the Walmalla and Waneiga in the drier north (Meggitt, 1962, pp. 47–48). The mobile groups of a regional grouping meet for a period of up to three months in periods of seasonal abundance, but not at all in years of scarcity. For the rest of the time, the Warlpiri live in small mobile groups on their territories (Meggitt, 1962, p. 50).

In 1905, during the great drought of 1902 to 1905 (Meggitt, 1962, p. 20; see also footnote 3) some groups of Waneiga-Warlpiri moved to the water holes near Tanami, which had hitherto been used exclusively by the Waringari (Meggitt, 1962, p. 42). Members of the Waneiga groups had some totemic rights, but probably no primary access rights. However, in times of drought, it is generally expected that all those in need who request permission to access water points will be accommodated (Meggitt, 1962, p. 52). We may assume that the new arrivals were accepted at first, but gradually conflicts between individuals proliferated and fighting broke out, probably because relations with the Waringari had already been strained in the past. However, there were hardly any “pitched battles”, as M. J. Meggitt (1962, p. 42) writes, even though members of two regional groups were involved, because such “battles” are indistinguishable from violence that takes place within a regional group (Meggitt, 1962, pp. 242 and 246), namely in the form of brawls and *mêlées* among individuals (Meggitt, 1962, p. 58). Conflicts over the permanent water points near Tanami multiplied; “old scores” were settled and people were killed in acts of violence which in turn had to be avenged (Meggitt, 1962, pp. 245 and 259). In all, around twenty people were killed on each side.⁵ But despite the violence between individuals and acts of revenge, Waringari and Waneiga-Warlpiri shortly afterwards organized joint ceremonies. Furthermore, they seem to have shared the water points at Tanami in common since then (Meggitt, 1962, p. 42).

The example of Tennant Creek in 1925 shows that violent conflict is not inevitable in times of shortage. Tennant Creek is situated in territory owned by the Warramungu, with whom Warlpiri relations were also rather hostile, even though joint ceremonies and trade had always been organised (Meggitt 1962, pp. 37–38). In this case, the Warlpiri groups who took refuge there during a long drought from 1924 to 1929 were welcomed without violent conflict breaking out. The Warlpiri and Warramungu groups shared the water hole, an arrangement having been made whereby Warramungu men could marry Warlpiri women, although Warlpiri men could not marry Warramungu women (Meggitt 1962, p. 39).

The brawls and *mêlées* among individuals in seasonal aggregations amongst the Warlpiri are very likely of the same type as those described for the Pitjantjatjara.

Irbmangkara

There is not enough space to discuss another interesting but highly complex case: the massacre at Irbmangkara (running waters) that took place in 1875 among the Southern Arrernte (Strehlow, 2015, pp. 45–65; Darmangeat, DDB, #120). Despite the 140 to 170 deaths, this violent conflict, which lasted over a period of around 15 years, appears to have consisted of a series of acts of blood revenge and executions (judicial killing), but did not take the form of a war between groups. It all began with an (alleged) ritual outrage committed by a group from the duck clan in Irbmangkara, an outrage for which only the death penalty was conceivable. Fifty to sixty men from the Matuntara clans, who also had totemic affiliations with Irbmangkara, volunteered to carry out the punishment. In an attack they killed all 80 to 100 members of the duck clan near Irbmangkara, who were clearly held collectively responsible for the ritual offence: uninitiated and initiated men as well as women (and even children), similar to the cases of Hermannsburg in 1949 (Darmangeat, DDB, #215) and the Western Desert in 1909 and 1959 (Darmangeat, DDB, #207). Over the next three years, a group of ten or so men belonging to different groups of the duck totem took revenge on all those who had killed their relatives, because in their eyes this was homicide and not a legitimate punishment for a ritual sacrilege. Only one Matuntara was spared—and this is quite telling—because he could prove that he had not taken part in the massacre. This indicates that there is no clan liability. After more than ten years, in 1890, the Matuntara finally took revenge on the avengers, but only by killing the man who had survived the Irbmangkara massacre and who was at the head of the group of avengers.

B. Spencer et S. Gillen (1899, pp. 489–496; Darmangeat, DDB, #129) report another case of the absence of clan liability from the central Desert Region: A revenge group (*atninga*) of the Northern Arrernte approaches an Iliaura (Alyawarre) camp where three culprits are living, two of whom have married in a prohibited manner and one of whom has committed a murder. Once there, there is an intense verbal exchange. A woman is offered to the *Atninga* men to appease them. They refuse and persist in seeking revenge. Negotiations continue for two more days and an agreement is finally reached: the three guilty men can be killed, notably, with the consent of their people, who are spared in exchange. An elderly man says: “Our people do not wish to quarrel with your people. There are three bad men in our camp who we Alyawarre do not like, they must be killed. [...] Kill these men, but do not injure any others in our camp, and we will help you” (B. Spencer and S. Gillen, 1899, p. 491). One of the criminals manages to escape, while the other two are killed with spears. Afterwards, the avengers dance around

the bodies. Throughout, the people of Alyawarre’s camp watched the scene without intervening.

The mortality rate due to violence among hunter-gatherers of the Desert region is between 6% and 7%, including “massacres” (Kimber, 1990) and thus within the range common among other hunter-gatherers (Helbling, 2026). There were, however, no wars between mobile groups or regional groups in the Desert Region. I now will set out the contrasting profile of the Yolngu in Arnhem Land.

2.2 Arnhem Land

Among the Yolngu, feuds between families and wars between local groups, which number around 100 individuals at the end of the dry season and during the rainy season, are frequent (Thomson, 1949). The main causes of violent conflict are revenge for murder (by physical violence or sorcery), disputes over women (broken marriage promises, adultery, abduction of women) and the violation of ritual taboos (Warner, 1937, pp. 144 and 148). In 20 years, out of a total of 72 violent conflicts, 50 were due to the death of a relative, 10 to the abduction of women, 5 to witchcraft and 5 to the violation of totemic taboos (Warner, 1937, p. 148). According to Warner, the abduction of women was the cause of war in 17% of cases. But if the resulting feuds are taken into account, the figure is probably around 50% (Rose, 1985, p. 160).

According to W. L. Warner (1937) the Yolngu distinguish between different forms of violence. Narrup (Djawardlt) and Miringu are particularly deadly and quite frequent. In Narrup, a member of the victim’s family, accompanied by a few men from his own clan, his mother’s clan and his wife’s clan (Warner, 1937, p. 157; Thomson, 1949, p. 12), but without the (official and open) permission of the clan elders, slips into the enemy camp at night and kills the culprit who has killed a close relative. Although in theory only the perpetrator should be killed, this was the opinion “[...] of the old men only at those times when they were most philosophical and there had been no recent slaying, for during their more emotional states they felt that the whole clan should be destroyed” (Warner, 1937, p. 171). W. L. Warner writes: “Although the Narrup may be an individual affair, the entire clan is held responsible for the killing” (Warner, 1937, p. 157). Taking revenge is therefore not only an obligation for the victim’s clan, but - because revenge can affect any of its members— also a collective matter for the perpetrator’s clan. Narrup was one of the most destructive forms of collective violence between groups (Warner, 1937, p. 157; Chaseling, 1957, p. 79).

Miringu is also a surprise night attack, but approved by the clan elders. Rituals are held before the young men of a patriclan together with allies from other clans set out against the enemy. The attackers surround the enemy camp to avenge the death of a relative (Warner, 1937, p. 158). The perpetrator is killed, and—as W. L. Warner adds—“possibly several of his relations are also slain” (Warner, 1937, p. 159). Typically, a Miringu ends with the death of all the enemies: “They killed all men and left

them” (Warner, 1937, p. 161 and 171; Chaseling, 1957, pp. 78–79). Narrup and Miringu were surprise attacks carried out by the men from one local group against another. The motive is often declared to be revenge, but it is not a question of feud between families. Rather, the revenge is directed against the perpetrator’s entire group and aimed at destroying the enemy group. This is undoubtedly war (Warner, 1937, pp. 145 and 157).

Wars can also take the form of battles (*Ganygarr*) between coalitions of local clans. If the number of reciprocal revenge attacks increases, the two parties may agree to settle their conflict by battle (Warner, 1937, p. 162). Two lines of opposing warriors face each other at a distance of about 15 meters. Short spears are used, which are practically impossible to avoid. Various tactics and tricks of war are used on the battlefield (Warner, 1937, p. 163). Such battles were very costly, but they were rare (Warner, 1937, p. 161). In the 20 years between 1906 and 1926, two *Ganygarr* wars took place, one of which did cost the lives of 15 men and the other of 14: a confrontation between the people of Caledon Bay and those of Buckingham Bay, and a second between the people of the West Goyder River and those of the East Goyder River (Warner, 1937, pp. 161–163).

It is possible to end a violent conflict peacefully while it is still going on. The aggressor gives the victim’s closest relative Cycadian palm bread and tobacco to end the conflict. If the victim accepts these gifts, he will not seek revenge. However, the perpetrator must also offer these gifts to other members of the victim’s clan and to his next of kin from other clans. Only if the latter also accept the ‘wergild’ can the perpetrator be sure that the violent conflict has been resolved. But most of the time, this gambit does not succeed because of strong clan solidarity—and liability (Warner, 1937, p. 166).

A conflict can also be resolved within the framework of a Makarata. Makarata is ‘a general duel and partial ordeal’ (Warner, 1937, p. 163), a regulated confrontation used to punish an aggressor in a legitimate manner, i.e. accepted by both parties, with the aim of avoiding a war between two groups.⁶ Makarata usually take place between opposing clans of exogamous moieties, as their conflicts are often not deep because they are not competing for women (Warner, 1937, p. 144). Once the anger aroused by the murder of a relative has dissipated somewhat, the clan of the guilty party and other clans are invited to a Makarata (Warner, 1937, p. 163). After a few ceremonies and dances, the men from the victim’s group line up and shoot at the culprit with spears whose stone points have been removed. After a while, the elders on the victim’s side intervene and stop the shooting (Warner, 1937, pp. 164–165). The culprit must then allow a spear to pierce his thigh. If a lot of blood is flowing, the matter is considered settled; but if the culprit is only slightly wounded and there is little or no blood, the victim’s side signals that it will take revenge later. However, these confrontations could also degenerate into war if the men of the victim’s side did not allow themselves to be moderated by the old men, but continued

to throw spears against the perpetrator (Warner, 1937, p. 165, for more examples pp. 168–169, 178–179).

Violence-related mortality among the Yolngu is around 21% and is thus within the margin of violence-related mortality in (other) tribal societies.⁸ Of the 100 known deaths (out of a total of 200) in twenty years, 29 occurred in *Ganygarr*, 35 in Miringu, 27 in Narrup, 3 in Milwerangel and 2 in violent conflicts between individuals in a camp (Nirimaoi yolno; Warner, 1937, pp. 147, 155–156).

The Yolngu are no exception in pre-colonial Australia. There were a large number of semi-sedentary fishermen who fought wars among themselves: the Wathaurung in Southeast (Morgan 1980; Flannery, 2002; Darmangeat, DDB, #3 to #23), the Bangerang (or YortaYorta) in Riverina (Pardoe 2014, Curr 1883), the Uutaalnganu or Pama Malngkana (Sandbeach People) in East Cape (Merlan, 2002; Keen, 2004; Darmangeat, DDB, #102 to #113) and the Kurnai and Kamilaroi in Riverina (Fison and Howitt, 1880; Darmangeat, DDB, #27, #60 and #61), to name but a few. On the extent of sedentarity of the local groups in these regions see H. Lourandos (1997, pp. 44–69).

The absence of war in the Desert Region and the frequent wars in Arnhem Land and elsewhere corroborate C. Darmangeat’s proposition: “The presence of feud in all Aboriginal societies is hardly in doubt. The same is not true for war, however, which is clearly non-existent in some areas, because personal conflicts never, or almost never, coalesced into genuine collective action – this is the case in a large part of the Western Desert” (Darmangeat, 2020, p. 139; see also Berndt and Berndt, 1992, p. 362).

How then can we explain the absence of war in the Desert Region and the frequent wars in Arnhem Land? As we have already mentioned, social organisation plays an important role in explaining war and feuds (Otterbein, 2009, Fry 2006).

3. SOCIAL ORGANISATION

According to F. Otterbein (2009), war is correlated with a patrilocal group structure. As the strong internal solidarity of these ‘fraternal interest groups’ contrasts with weak and potentially hostile relations with other groups, F. Otterbein believes that this also explains the escalation of conflict to war. According to E. Service (1966), such societies with patrilocal groups are also characterised by marked territoriality and male dominance.

R. C. Kelly (2000) distinguishes between “segmented societies” (composed of patrilocal groups), where feud (in the strict sense of the term) is common, and “unsegmented societies” (composed of bilateral groups) where blood vengeance is practiced.⁷ In “non-segmented societies” there are no “fraternal interest groups” (neither lineages nor local clans). The groups are made up of bilateral and affinal relatives, and members often

change groups. Revenge is only taken against the guilty person because there is no collective responsibility of a clan or lineage. If an act of vengeance is considered illegitimate, there may be a counter-vengeance, but this again is directed only against the culprit personally. As a consequence, conflicts between individuals do not degenerate into war between groups. There is only violent self-redress (blood revenge), executions (judicial killing) and violence between individuals, but no war between political communities.

In “segmented societies”, on the other hand, there is collective liability. The groups are fraternal interest groups, often patrilineal and patrilocal (sub-)clans or lineages. This is why, in these societies, revenge is directed either any member of the perpetrator’s fraternal interest group (social substitution). Because a local lineage or clan is collectively responsible for its members, conflicts between individuals (feuds) easily degenerate into a war between groups, although this is not automatically the case.⁹ In segmented societies, we can observe two scenarios which depend largely on the respective power relationships between two local groups: A local kinship group (lineage or local clan) wants to avoid a war after a homicide, because it feels weaker than the perpetrator’s group. It therefore limits the conflict to the two families directly involved and urges the victim family to give up revenge and accept compensation in its place (Spencer, 1996, pp. 300–301). Alternatively, the local kinship group, being stronger than the perpetrator’s group, is ready for a war and therefore shows solidarity with the victim family; it then starts a legitimate war against the perpetrator family’s group “for revenge”(cf. Greuel, 1971 on the Nuer).

According to G. P. Murdock and J. W. M. Whiting (1968), the patrilocal group structure and patrilineal descent groups (lineage or local clan) only exist among the Australian Aborigines, and not among other hunter-gatherers. But can this proposition be confirmed for all groups of Australian Aborigines?

3.1 Arnhem Land

Among the Yolngu, the local groups are local patrilclans and number around 100 individuals. The local patrilclans have exclusive property rights over their territories. Territoriality is pronounced. “The clan, or in practice its occupational group, the horde [patrilocal patrilclan], is the most important unit of social life in Arnhem Land. The clan is the territorial or land-owning group, but the horde was the war-making group, and each horde was independent and self-governing [...] with its own internal order and authority system” (Thomson, 1949, pp. 11– 12). However, some members of wife-taker patrilclans also live in a local group, because older men of a local patrilclan can—depending on their political importance—keep not only their sons but also their sons-in-law in their local group (Hiatt, 1986, p. 10; Keen, 2004, p. 316).

In Arnhem Land, the proposition of E. R. Service and G. P. Murdock, as well as that of K. F. Otterbein and

R. C. Kelly, fits well: “segmented societies”, patrilocal groups, clan liability, feud and war. It is not only the solidarity of the victim’s clan, but also - through the principle of substitution - the collective liability of the perpetrator’s clan that turns a blood feud into a war between groups. As W. L. Warner clearly points out: “An isolated killing, due to the strength of the kinship structures, usually results in the whole northeastern Arnhem Land becoming a battle-ground at fairly frequent intervals” (Warner, 1937, pp. 145, also 157 and 171).

But in the case of the hunter-gatherers of the Western Desert, things are quite different.

3.2 Western Desert

Among the hunter-gatherers of the Western Desert, each mobile group comprise between 15 and 25 individuals and occupies a vast territory. These mobile groups have a heterogeneous composition in terms of kinship, comprising both bilateral and affinal relatives. At the same time, each member of a mobile group has numerous and extensive kinship links with individuals in other mobile groups. Furthermore, the composition of these groups is constantly changing as a result of disputes, visits and marriages. The group structure is therefore neither patrilocal, nor are there any patrilclans (Tonkinson, 1978, pp. 48, 51–53; Myers, 1982, pp. 177, 181, 183 and 189; Dousset, 2013, p. 345).

There are totemic places, where the wandering Dreamtime beings have left their traces. The totemic places in a territory form a domain, a spatial network of sacred places and the routes that link them. Individuals with a primary affiliation and a right of access to a totemic place perform rituals there every year. It is important to note that all water sources are also totemic places. Water is the most limited resource in the Western Desert. Without access to water, the other resources of a territory cannot be used. Therefore, a totemic right of access is not only important from a religious and ritual point of view, but also in economic terms. Men and women have primary rights to a totemic domain/territory through birth or conception; they also have secondary rights to other domains/territories through their fathers and mothers, uncles and aunts as well as wives or husbands. If a person wants to join another group, the holders of primary rights must give their agreement (social boundary defence).

This kind of territorial organisation allows each group to remain in one territory, while at the same time giving the members of these groups flexible access to other territories, an access that is almost never refused. But everything depends on the degree of totemic affiliation, the quality of relations with the holders of primary access rights and the situation of scarcity in which the actors find themselves. Contrary to the thesis of G. P. Murdock and J. W. M. Whiting (1968), there are no patrilclans in the Western Desert, and even fewer patrilocal groups. This also contributes in explaining why there is no collective responsibility and no war.

4. ECONOMY

The existence of clan liability, however, is not enough to explain why the local groups in Arnhem Land wage war against each other. Ultimately, it would be advantageous—in view of the high number of victims of violence—to avoid armed conflict. Why do local groups wage war? In this context, whether groups are mobile or sedentary is decisive (Kelly, 2013, p. 205).

The sedentary nature of local groups—together with the absence of a central power—may explain the occurrence of wars (Helbling, 2006a). There are various classifications of sedentarity and mobility (Kelly, 2013; Murdock, 1981; Keeley, 1988 and 1995; Kelly, 2000). L. H. Keeley (1995) emphasises that it is not only the number of changes of area (macro-moves) of a group that must be taken into account, but also the maximum length of stay in an area (maximum stay). In the final analysis, sedentarity is a measure of a group's dependence on spatially concentrated resources. It implies a (largely) continuous relationship between groups and their resources (Cohen, 1978). This is not the case with mobile groups, where there is a discontinuous relationship between groups and dispersed resources, as each group must move from one area to another within its territory.

L. H. Keeley (1988, pp. 393–394 and 405) found that groups whose maximum stay was 5 months or more can be considered sedentary. They also had a social hierarchy of hereditary elites, commoners and slaves, practised gift exchange and fought wars. The reference model is that of the groups on the Pacific coast of North America. However, there are also “egalitarian” sedentary fishermen such as the Tolowa and the Yurok (Boehm 1999: 142) and—according to our proposition—the Yolngu and other sedentary fishermen in Australia and elsewhere.

4.1 Western Desert

In the Western Desert, small groups (numbering 15 to 25 individuals) live off widely dispersed terrestrial resources (kangaroo, emu, small marsupials, reptiles, insects and various wild plants). These resources are distributed unpredictably according to season and space, and in low densities. The population density is also low (0.5 P per 100 km²) and the territories are vast (2,500 km²).

No work is invested in the land for future returns: it is an “immediate return economy” (Woodburn, 1988 and 2005; Meillassoux, 1967 and 1975). Nor is there any storage of food, which would restrict the group's mobility: this is a “hand-to-mouth” economy.

Groups in the Western Desert are highly mobile: around 30 changes of area per year, a maximum stay of only 0.5 months and an annual macro-move distance of 1,600 km (Gould, 1969, p. 267; Kelly, 2013, p. 82). Under these circumstances, territoriality (in the sense of territorial defence) is neither possible nor advantageous.

4.2 Arnhem Land

In Arnhem Land, groups of 100 people depend mainly on aquatic resources: marine mammals, fish, reptiles, shellfish, birds and eggs as well as a large variety of aquatic plants. These resources are found on coasts, in lakes, rivers and swamps in spatially concentrated form. This is why population density is high (25 to 50 P per 100 km²) and territories are small (50 to 100 km²). Investments are made in fishing infrastructure: dams and fixed traps, retention basins and long nets ensure greater productivity (delayed return economy).

In Arnhem Land, there is no food preservation or storage (with the exception of Cycad palm bread for ceremonial occasions), because reliable resources are available in sufficient quantities throughout the year. Some of these resources are stored in the water (fishponds and shellfish gardens) or in the soil (replanted yams and other tubers).¹⁰

In Arnhem Land, the groups are largely sedentary: only 3 to 5 changes of area per year, a maximum stay of about 5 months and an annual distance between areas of 14 km per year (Peterson, 1973; Kelly, 2013, p. 83). The contrast with the Western Desert is striking. The territoriality of local groups (local patrilines) is pronounced: it is both possible and advantageous.

In the case of Arnhem Land, (quasi-)sedentarity exists because of the groups' dependence on fisheries and fishing infrastructure, in short: because of a generally high density and spatial concentration of (aquatic) resources. Local groups would lose these concentrated, predictable and productive resources if they moved to avoid armed conflict with a neighbouring group. Therefore, each group must always be prepared for violent clashes. In addition, distances between local groups are short due to high population density, so the potential for conflict is high. As long as no central authority such as a state can enforce agreements between village communities to resolve conflicts peacefully, each local group must mistrust its neighbours and be prepared for armed confrontation. Indeed, if one village were to unilaterally commit to a peaceful strategy, it would be seen as a sign of weakness and a signal for the other villages to attack, with the prospect of an easy victory. In these conditions of widespread mistrust and mutual threat, each village tries to pre-empt the violence of the others and be the first to use force (Helbling, 2006a, 2006b and 2019).

While the political autonomy of local groups (due to the absence of a central political body) is a political factor, the prohibitively high opportunity cost of relocation (the benefits local groups would lose by moving) is an economic factor. However, war is not the result of competition between groups for scarce resources or a means to appropriate or defend them. Rather, it is due to the local groups' fears of being dispelled after a defeat, which would mean losing their locally concentrated and highly productive resources. Spatially concentrated resources can result from a natural concentration with or without additional investments in land, with or without storage; in any case, they enable sedentarity. The sedentary nature of

groups in tribal societies in turn explains why groups in societies without central power ultimately have to settle their conflicts by war, because the alternative—displacement—would entail prohibitively high opportunity costs.

CONCLUSION

In the light of the above, we may draw the following conclusion. Hunter-gatherers in the Desert Region 1) practise blood revenge, but do not (or almost never) wage war, 2) they have a mobile economic mode (due to spatially dispersed terrestrial resources) and an “economy of immediate returns”, and 3) they consist of small, mobile groups with a bilateral and fluctuating composition. In contrast, sedentary fishermen in Arnhem Land (and elsewhere) exhibit 1) feud and frequent warfare between local groups, 2) a largely stationary economic mode (due to locally concentrated aquatic resources) and a “delayed return economy”, and 3) semi-sedentary (largely) patrilineal groups with a stable core of patrilineal relatives. The concordance with the basic structural elements of tribal cultivators/pastoralists cannot be ignored. This conclusion coincides with Testart’s statement (1981, p. 181) that “the classic opposition between hunter-gatherers and farmers may seem less relevant—in terms of the form of the economy, demography and social structure—than that between nomadic hunter-gatherers on the one hand and sedentary hunter-gatherers and farmers on the other” (see also Service, 1966, p. 3; LeBlanc, 2003, pp. 138 and 204).

Clearly, the answer to the question of whether war also existed among hunter-gatherers in Australia and elsewhere depends on what we mean by hunter-gatherers. If they are simply conceived as societies without agriculture and animal husbandry (including groups of sedentary fishermen), warfare exists (according to Allen, 2014 and Gat, 2015). But if they are societies made up of small mobile groups who live by hunting and gathering, there is no (or very little) war.

NOTES

1. We refer to the online database created by C. Darmangeat (see references).
2. See N. Peterson (1991, p. 375) on the Warlpiri, R. Berndt and C. Berndt (1945, pp. 260-266) on the Pitjantjatjara, R. Tonkinson (1978, p. 118) on the Mardudjara, B. Spencer and F. Gillen (1927, p. 9446) on the Arrernte.
3. See also Wikipedia entry *Droughts in Australia*, s. d., https://en.wikipedia.org/wiki/Drought_in_Australia
4. See footnote 1.
6. Similar violent conflicts, albeit with far fewer casualties, broke out among the Warlpiri of Yuendumu in 1948 (Darmangeat, DDB, #163) and 1951 (Darmangeat, DDB, #164).
7. The same applies to Milwerangel, where certain clans meet to fight. “After some minutes of fighting, the combat resembles a brawl” (Warner, 1937, p. 161). Spears and clubs

were used, but mainly spears that were easy to dodge (Warner, 1937, p. 161), resulting in only few deaths (Warner, 1937, p. 156).

8. War-related mortality among the Anindilyakwa of Groote Eylandt is as high as among the Yolngu (Rose, 1985, p. 160).
9. “Feud may be said to exist where the principle of blood-debt between groups is the expected response to homicide. It tends to be associated with societies in which local agnatic descent forms the basis of corporate groupings. Ideally, a feud is strictly limited by the convention that hostilities should be discriminating and that ultimately there should be a negotiated settlement with compensation” (Spencer, 1996, p. 300).
10. B. Boulestin (2020) distinguishes between “interpersonal violence” and “inter-group armed violence”. “Interpersonal violence” includes not only brawls (*querelles*) and murder (*meurtres*), but also “executions or judicial sanctions” (Boulestin, 2020, pp. 265–266). He also distinguishes between “two forms of inter-group armed violence: war and feud” (Boulestin, 2020, p. 267). Since, according to B. Boulestin (and C. Darmangeat), political units can hardly be conceptualised in stateless societies and, hence, the concept of political unit does not exist, war and feud can only be defined on the basis of the modalities of violence and objectives: ie, unrestrained military violence in wars and equalising legal violence in feuds. However, it remains unclear between which “groups wars and feuds are fought”. And without specifying these “groups”, it is not possible to study adequately the transitions between wars between political units and feuds between families. Moreover, “judicial sanctions”, subsumed under “interpersonal violence”, are precisely what feud/blood revenge is actually all about. Feud/blood revenge is the legitimate right (*lex talionis*) to take revenge for homicide. However, as B. Boulestin (2020, p. 267) rightly notes, the notion of feud is ambivalent: “The reason is that the term feud is actually applied to two different forms of vengeance, a limited form that falls within the framework of a vindicatory system, which is a system of law, and an unrestricted form that escapes such a system and can be likened to war.” But this is not so much a conceptual ambiguity as an ambivalence in real conflict situations.
11. A. Testart (2012, p. 357–358) also attests to the presence of sedentary fishermen without storage. However, he only mentions the Asmat, Warao and Calusa. However, this implies that sedentary life is more important than storage.

Jürg HELBLING
 Université de Lucerne, Lucerne, Switzerland
juerg.helbling@unilu.ch
j.helbling@bluewin.ch

REFERENCES

- ALLEN M. (2014) – Hunter-gatherer violence and warfare in Australia, in M. Allen and T. Jones (ed.), *Re-examining a pacified past: Violence and warfare among hunter-gatherers*, Walnut Creek, Left Coast Press, pp. 97–111.
- ALLEN M., JONES T. (2014) – *Re-examining a pacified past: Violence and warfare among hunter-gatherers*, Walnut Creek, Left Coast Press.
- BAR-YOSEF O. (2002) – Natufian, in B. Fitzhugh and J. Habu (ed.), *Beyond foraging and collecting: Evolutionary change in hunter-gatherer settlement systems*, New York, Kluwer Academic, Plenum Publishers, pp. 91–149.
- BERNDT R. (1972) – The Walmdjeri and Gugadja, in M. Bicchieri (ed.), *Hunters and gatherers today*, New York, Holt, Rinehart and Winston, pp. 177–216.
- BERNDT R., BERNDT C. (1945) – A preliminary report on field work in the Ooldea region, Western South Australia, *Oceania*, 15, pp. 239–266.
- BERNDT R., BERNDT C. (1992) – *The world of the First Australians: Aboriginal traditional life past and present*, Sydney, Ure Smith [15th revised edition].
- BOEHM C. (1987) – *Blood revenge: The anthropology of feuding in Montenegro and other tribal societies*, Philadelphia, University of Pennsylvania Press [2nd edition].
- BOEHM C. (1999) – *Hierarchy in the forest*, Cambridge, Harvard University Press.
- BOULESTIN B. (2020) – Mésolithique et société : des sociétés mésolithiques fraternelles et pacifiques ? *Bulletin de la Société archéologique champenoise*, 113, p. 257-274.
- CARNEIRO R. (1994) – War and peace: Alternating realities in human history, in S. Reyna and R. Downs (ed.), *Studying war: anthropological perspectives*, Langhorn, Gordon and Breaches, pp. 3–27.
- CHASELING W. (1957) – *Yulengor: nomads of Arnhem Land*, London, Epworth.
- COHEN R. (1978) – State origins: A reappraisal, in H. Claessen and P. Skalnik (ed.), *The Early state*, La Hague, Paris, Mouton Publications, pp. 31–75.
- CURR E. (1883) [2021] – *Recollections of squatting in Victoria then called the Port Phillip District from 1841 to 1851*, New Delhi, True World of Books.
- DARMANGEAT C. (2020) – Justice and warfare in Aboriginal Australia, Lanham, Lexington Books, 290 p.
- DARMANGEAT C. (2021) – *Justice et guerre en Australie aborigène*, Toulouse, Smolny.
- DARMANGEAT C. (s.d.) – *The aboriginal collective conflicts database*, <https://cdarmangeat.ghes.univ-paris-diderot.fr/australia/index.php>
- DESCOLA P. (2023) – *Avec les chasseurs-cueilleurs*, Paris, Bayard.
- DOUSSET L. (2011) – *Australian aboriginal kinship: An introductory handbook with particular emphasis on the Western Desert*, Marseille, Pacific-credo Publications.
- DOUSSET L. (2013) – Inclusion-exclusion: Recasting the issue of boundaries for the Western Desert, *Anthropological Forum: A journal of social anthropology and comparative sociology*, 23, pp. 342–354.
- ELLIS E. M., DOUSSET L. (2016) – *Pictures from my memory: My story as a Ngaatjatjarra woman*, Canberra, Aboriginal Studies Press.
- EMBER C. (1978) – Myths about hunter-gatherers, *Ethnology*, 17, pp. 439–448.
- FERGUSON R. B. (1984) – Introduction: Studying war, in B. Ferguson (ed.), *Warfare, culture and environment*, Orlando, Academic Press, pp. 1–81.
- FISON L., HOWITT A. (1880) – *Kamilaroi and Kurnai*, Sydney, George Robertson.
- FLANNERY T. (2002) – Introduction, in J. Morgan (ed.), *The life and adventures of William Buckley*, Melbourne, Text Publishing Company, pp. 4–56.
- FRY D. (2006) – *The human potential for peace: An anthropological challenge to assumptions about war and violence*, New York, Oxford University Press.
- GAT A. (1999) – The pattern of fighting in simple, small-scale, prestate societies, *Journal of anthropological research*, 55, pp. 563–583.
- GAT A. (2008) – *War in human civilization*, Oxford, Oxford University Press.
- GAT A. (2015) – Proving communal warfare among hunter-gatherers: The quasi-rousseauan error, *Evolutionary anthropology*, 24, pp. 111–126.
- GOULD R. (1969) – Subsistence behavior among the Western Desert Aborigines of Australia, *Oceania*, 39, pp. 253–274.
- GRAEBER D., WENGROW D. (2021) – *The dawn of everything: A new history of humanity*, London, Penguin.
- GREUEL P. (1971) – The Leopard skin chief, *American Anthropologist*, 73, pp. 313–318.
- HAAS J. (2001) – Warfare and the evolution of culture, in G. Feinman and D. Price (ed.), *Archaeology at the millennium*, New York, Kluwer Academic, p. 329–350.
- HAAS J., PISCITELLI M. (2013) – The prehistory of warfare: Misled by ethnography, in D. Fry (ed.), *War, Peace, and Human Nature*, Oxford, Oxford University Press, pp. 168–190.
- HAMES R. (2019) – Pacifying hunter-gatherers, *Human Nature*, 30, pp. 155–175.
- HAMILTON A. (1981) – A complex strategical situation: Gender and power in Aboriginal Australia, in N. Grieve and P. Grimshaw (ed.), *Australian Women: Feminist Perspectives*, Melbourne, Oxford University Press.
- HAMILTON A. (1982a) – Descended from father, belonging to country: Problems in the constitution of rights to land in the Western Desert, in E. Leacock and R. Lee (ed.), *Politics and history in band societies*, London, Cambridge University Press, pp. 85–108.

- HAMILTON A. (1982b) – The unity of hunting-gathering societies: Reflections on economic forms and resource management, in N. Williams and E. Hunn (ed.), *Resource Managers: North American and Australian hunter-gatherers*, Canberra, Australian Institute of Aboriginal Studies, pp. 229–247.
- HELBLING J. (2006a) – *Tribale Kriege: Konflikte in Gesellschaften ohne Zentralgewalt*, Frankfurt, Campus Verlag.
- HELBLING J. (2006b) – War in societies without central power: the state of the art, in T. Otto, H. Thrane and H. Vandkilde (ed.), *Warfare and society: Archaeological and social anthropological perspectives*, Aarhus, Aarhus Universitetsforlag, pp. 113–140.
- HELBLING J. (2019) – Kriege und Allianzen zwischen Dörfern, in F. Sutterlüty, M. Jung and A. Reymann (ed.), *Narrative der Gewalt: Interdisziplinäre Studien*, Frankfurt, Campus, pp. 167–195.
- HELBLING J. (2026) – War Australien ein Kontinent von Jäger-und-Sammlern? (Was Australia a continent of hunter-gatherers?), *Jahresschrift mitteldeutsche Vorgeschichte*.
- HIATT L. (1985) – Maidens, males and Marx: Some contrasts in the work of Frederick Rose and Claude Meillassoux, *Oceania*, 56, pp. 34–46.
- HIATT L. (1985) – *Aboriginal political life*, Canberra, Australian Institute of Aboriginal Studies.
- KEELEY L. (1988) – Hunter-gatherer economic complexity and population pressure: A cross-cultural analysis, *Journal of anthropological archaeology*, 7, pp. 373–411.
- KEELEY L. (1995) – Protoagricultural practices among hunter-gatherers: A cross-cultural survey, in D. Price, and A. Gebauer (ed.), *Last hunters, first farmers: New perspectives on the prehistoric transition to agriculture*, Santa Fe, School of American research press, pp. 243–272.
- KEELEY L. (1996) – *War before civilization*, Oxford, Oxford University Press.
- KEEN I. (2004) – *Aboriginal economy and society: Australia at the threshold of Colonisation*, Oxford, Oxford University Press.
- KELLY R. (2000) – *Warless societies and the origin of war*, Ann Arbor, University of Michigan Press.
- KELLY R. (2013) – *The lifeways of hunter-gatherers: The foraging spectrum*, Cambridge, Cambridge University Press.
- KIMBER R. (1990) – Hunter-gatherer demography: The recent past in Central Australia, in B. Meehan and N. White (ed.), *Hunter-gatherer demography*, Sydney, University of Sydney Press, pp. 160–170.
- LEBLANC S. (2003) – *Constant battles: The myth of the peaceful noble savage*, New York, St. Martin's Press.
- LEE T., DEVORE I. (1968) – The Problems in the study of hunters and gatherers, in R. Lee and I. DeVore (ed.), *Man the hunter*, Chicago, Aldine, pp. 3–12.
- LOURANDOS H. (1997) – *Continent of hunter-gatherers: New perspective in Australian prehistory*, Cambridge, Cambridge University Press.
- MEGGITT M. (1962) – *Desert people: A study of the Walbiri Aborigines of Central Australia*, Sydney, Angus and Robertson.
- MEILLASSOUX C. (1967) – Recherche d'un niveau de détermination dans la société cynégétique, *L'Homme et la Société*, 6, pp. 95–106.
- MEILLASSOUX C. (1975) – *Femmes, greniers et capitaux*, Paris, Maspero.
- MERLAN C. (2002) – *Chez les sauvages : dix-sept ans de la vie d'un mousse vendéen dans une tribu cannibale (1858-1875)*, La Roche-sur-Yon, Cosmopole.
- MORGAN J. (1980) – *The life and adventures of William Buckley*, Canberra, Australian National University Press.
- MURDOCK G. (1968) – The current status of the world's hunting and gathering peoples, in R. Lee and I. DeVore (ed.), *Man the hunter*, Chicago, Aldine, pp. 13–20.
- MURDOCK G. (1981) – *Atlas of world cultures*, Pittsburgh, University of Pittsburgh Press.
- MURDOCK G., WHITING B. (1968) – Are the hunter-gatherers a cultural type?, in R. Lee and I. DeVore (ed.), *Man the hunter*, Chicago, Aldine, pp. 335–339.
- MURDOCK G., WILSON S. (1972) – Settlement patterns and community organization, *Ethnology*, 11, pp. 254–295.
- MYERS F. (1982) – Always ask: Resource use and land ownership among Pintupi of Central Australia, in N. Williams and E. Hunn (ed.), *Resource managers: North american and australian hunter-gatherers*, Canberra, Australian Institute of Aboriginal Studies, pp. 173–196.
- OTTERBEIN K. (1989) – *The evolution of war*, New Haven, HRAF Press (Third edition).
- OTTERBEIN K. (2004) – *How war began*, College Station, Texas A&M University Press.
- OTTERBEIN K. (2009) – *The anthropology of war*, Long Grove, Waveland Press.
- PARDOE C. (2014) – Conflict and territoriality in Aboriginal Australia: Evidence from biology and ethnography, in M. Allen and T. Jones (ed.), *Violence and warfare among hunter-gatherers*, Walnut Creek, Left Coast Press, pp. 112–132.
- PETERSON N. (1973) – Camp site location amongst australian hunter-gatherers: Archaeological and ethnographic evidence for a key determinant, *Archaeology & physical anthropology in Oceania*, 8, pp. 173–193.
- PETERSON N. (1991) – Warlpiri, in D. Levinson (ed.), *Encyclopedia of world cultures*, vol. 3, Boston, G. K. Hall, pp. 373–376.
- PILLING A. (1968) – Southeastern Australia: Level of social organization, in R. Lee and I. DeVore (ed.), *Man the hunter*, New York, Aldine, pp. 138–145.
- PINKER S. (2011) – *The better angels of our nature: Why violence has declined*, Penguin.
- ROSCOE J. (2002) – The hunters and gatherers of New Guinea, *Current Anthropology*, 43, pp. 153–162.

- ROSCOE J. (2006) – Fish, game, and the foundations of complexity in forager society: The evidence from New Guinea, *Cross-Cultural Research*, 40, pp. 29–46.
- ROSE F. (1985) – Dominanz oder Anführertum der Alten bei den australischen Ureinwohnern, *Jahrbuch des Museums für Völkerkunde zu Leipzig*, 36, pp. 158–163.
- SAHLINS M. (1968) – The original affluent society, in M. Sahlins (ed.), *Stone Age economics*, London, Tavistock, pp. 1–39.
- SERVICE E. (1966) – *The Hunters*, Englewood Cliffs, Prentice Hall.
- SERVICE E. (1975) – *Origins of the state: The process of cultural evolution*, New York, W. W. Norton and Co.
- SPENCER R. (1996) – Feud, in A. Kuper et J. Kuper (dir.), *The social science encyclopedia*, London, Routledge.
- SPENCER B., GILLEN F. (1899) – *The native tribes of Central Australia*, London, Macmillan and Co.
- SPENCER B., GILLEN F. (1927) – *Arunta: A study of a Stone Age people*, London, Macmillan and Co.
- STREHLOW T. (2015) – *Journey to Horseshoe Bend*, Artarmon, Giramondo.
- SUTTON P., RIGSBY B. (1982) – People with “Politicks”: Management of land and personnel on Australia’s Cape York Peninsula, in N. Williams and E. Hunn (ed.), *Resource managers: North American and Australian hunter-gatherers*, Canberra, Australian Institute of Aboriginal Studies, pp. 155–171.
- TESTART A. (1981) – La conservation des produits végétaux chez les chasseurs-cueilleurs, in M. Gast and F. Sigaut (ed.), *Les techniques de conservation des grains à long terme*, Paris, éditions du CNRS, vol. 2, pp. 181–193.
- TESTART A. (2012) – *Avant l’histoire : l’évolution des sociétés, de Lascaux à Carnac*, Paris, Gallimard.
- THOMSON D. (1949) – *Economic structure and the ceremonial exchange cycle in Arnhem Land*, Melbourne, Macmillan.
- TINDALE N. (1972) – The Pitjantjatjara, in M. Bicchieri (ed.), *Hunters and gatherers today*, New York, Holt, Rinehart and Winston, pp. 217–268.
- TINDALE N. (1974) – *Aboriginal tribes of Australia*, Canberra, Australian National University Press.
- TONKINSON R. (1978) – *The Mardujara Aborigines*, New York, Holt, Rinehart and Winston.
- TONKINSON R. (1988) – Egalitarianism and inequality in a Western Desert culture, *Anthropological Forum*, 5, 4, pp. 545–558.
- WARNER L. (1937) – *A black civilization: A social study of an Australian tribe*, New York, Harper & Row.
- WHITE I. (1977) – From camp to village, in R. Berndt (dir.), *Aborigines and change: Australia in the 70s*, Canberra, Australian Institute of Aboriginal Studies, pp. 100–105.
- WOODBURN J. (1988) – African hunter-gatherer social organization, in T. Ingold, D. Riches and J. Woodburn (ed.), *Hunters and gatherers*, tome 1 *History, evolution and social change*, Oxford, Berg, pp. 31–72.
- WOODBURN J. (2005) – Egalitarian societies revisited, in T. Widlok and W. G. Tadesse (ed.), *Property and equality*, tome 1 *Ritualisation, sharing, egalitarianism*, Oxford, Berghahn, pp. 18–31.
- WRANGHAM R., GLOWACKI L. (2012) – Intergroup aggression in chimpanzees and war in nomadic hunter-gatherers: evaluating the chimpanzee model, *Human Nature*, 23, pp. 5–29.

DISCUSSION

Christian Jeunesse: In everything you say, what interests us most are the archaeological implications. Essentially, what we are trying to do is find indicators that archaeologists can use to identify, for example, forms of social organization. I imagine there is information about settlements, sedentary or semi-sedentary? I know that there are fishing installations in the rivers. I noticed another very important aspect in one of your articles: these are the necropolises—I believe they are located in the Murray River basin. There are enormous necropolises there that were excavated a long time ago, very quickly and haphazardly. But they are there, they undeniably exist: the skeletons are stored in museum collections. The presence of these large burial grounds indicates a certain type of relationship with the land and with ancestors. These are things that go hand in hand in societies that are, as you point out, organized around descent groups, with populations that also have deep genealogical roots. But what interests us is to know what the material consequences are, in other words, what archaeological indicators it may have left. And I think there is more to explore in this area.

Jürg Helbling: As an anthropologist, it is not easy to answer these archaeological questions, but I think the dwellings you mentioned are a very important point. There are more or less permanent dwellings; there are also the shell middens. I don't believe there are any cemeteries in the north of Arnhem Land, but there are extremely sophisticated and lengthy funeral rituals. In the Western Desert, the dead are placed in their graves, and that's it. It's not very ceremonial. I don't know to what extent these elements are found in archaeology. I have chosen cases that may not be very useful for archaeologists! The cases you mentioned, in the Murray River basin, are undoubtedly more informative from an archaeological perspective.

Christophe Darmangeat: To come back to what Christian [Jeunesse] said: indeed, in Australia, necropolises really only exist in the Southeast. They have been studied in particular by C. Pardoe, regarding the types of trauma. However, I believe that this region is poorly understood from an ethnographic point of view, and that the documentation lack detail. Furthermore, I have never come across anything resembling an ancestor cult in Australia. I therefore don't know if this correlation works well elsewhere—it would be great, because we are always looking for correlations, and we are pleased when we find one. But in this region, as far as I know, it doesn't really work: I don't believe there is any evidence of ancestor cult in this area. To come back to Jürg [Helbling]'s presentation, we have been discussing it for a long time, both verbally and in writing, and on some points, we still struggle to resolve our differences! There are certainly many things in his presentation I agree with, starting with the fact that there were variations in Australian societies and that, in many respects, the societies of the Desert can be contrasted with those of Arnhem Land. That is quite clear. Nevertheless, I have the impression, Jürg [Helbling], that

you are drawing the line a little too strongly. Of course, this is an oral presentation, and we don't always have time to go into all the details. But I think you're forcing reality into categories where it doesn't quite fit. For example, you say that the hunter-gatherers of Arnhem Land are "complex". Personally, it's not really a category I use. But you say that it is characterized by a medium to high level of stockpiling— even though you admit that they don't actually stockpile; by a hierarchical group structure—I have trouble seeing how they are more hierarchical than those in the Desert; and by competition through gift exchange—I can't see where this competition through gift exchange occurs in Arnhem Land. Moreover, in the Desert, when you say that there are no structured, formalized kinship groups, which would cause revenge to escalate directly to the collective level, I believe that this is both true and false. I just looked at my map of collective confrontations in Australia. There are no less than four cases of very serious conflicts in the Western Desert, including perhaps the deadliest ever recorded. At the end of the 19th century, a leader is said to have committed an offense during a major religious ceremony, and this offense was so serious that, as punishment, a group massacred all his people at once, between 80 and 100 people, in an ambush. And that's not counting the revenge that followed. Personally, I was very skeptical at first, but this event seems well documented. So there were circumstances in which they fought collectively and caused a lot of damage—these figures exceed everything Warner found in Arnhem Land. So, it's a little more complicated than that, even if, like you, I am convinced that they are not similar societies.

J. H.: I totally agree with you when you say that everything is complicated! There are several issues here. To begin with, the Yolngu really do have an ancestor cult. It is clearly in their burial rituals, where they even try to influence the ancestors to give men strength so they can win wars. There are also many gifts exchanged: from young men to elders, and among the elders themselves. Gifts are also exchanged between groups connected by marriage ties. You don't really find this in W. L. Warner's work, but rather in D. Thomson's, who wrote a remarkable ethnography; and also in I. Keen's, more recent field research, which confirms this point. D. Thomson emphasizes that it is a question of material gifts and not just services. As far as hierarchies are concerned, I don't necessarily mean the presence of chiefs, leaders, "Big Men" or any kind of elite, but rather the existence of an asymmetry or inequality between individuals based on age and gender. Both I. Keen and W. L. Warner say that it is a polygynous gerontocracy. Men over 40 monopolize all the young women as wives, and young men have to wait until they're 30-35 just to have a chance of marrying a widow. It's very different from what happens in the Western Desert. Personally, at first, I was skeptical about the elders, the rituals and all that. But it's true: the parents,

uncles and aunts, discuss and choose a wife for a young man. They look for a maternal uncle who is genetically and geographically distant, who will both act as a circumciser and a father-in-law/stepfather. And at the same time, they look for a paternal aunt who will be given the same responsibilities and who is not necessarily married to the paternal uncle. This means that there are two potential wives. The young man can choose between the two, but

most of the time he chooses a third one, with whom he is in love—and vice versa, of course. But the other potential wives do not disappear. these relationships are very useful economically because they maintain ties with very distant relatives, with whom they could go to live in case of hardship. So, it is very useful, but it means that, in the end, people can choose their own spouses. And it is not the elders who say, “You will marry this one or that one.”