



The role of third parties in norm enforcement in customary courts among the Enga of Papua New Guinea

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Cultural norms are key to cooperation in human societies. How they are regulated, maintained, and adapted to the change remains a matter of debate. Humans have dispositions for both retributive and restorative justice; recent focus has been on third-party punishment, punitive sanctions by those not directly harmed, as key for norm enforcement. However, punishment does not engage the essential proficiencies and emotions critical to cooperation in small-scale societies with high dependence on collective action, sharing, and exchange. Third-party participation in norm enforcement is examined with data from a 10-y study among the Enga of Papua New Guinea. The Enga have a plural justice system with formal courts practicing retributive justice and customary courts applying restorative measures. Most cases are brought to customary courts. Drawing on observations from 333 village customary court cases concerning assault, marriage, land, and property violations, third-party engagement outside of and during customary court hearings is analyzed. Results show that all sides are heard, restoration is prioritized, and third-party punishment is rare; rather, third parties help with compensation to reintegrate wrongdoers and resolve conflicts. Repeated offenders and free riders receive ever less community support. Third parties contribute substantially both during and outside of customary court sessions to help kin, pursue economic agendas, or gain reputation. They also act generously to build a strong community. Emphasis is on amends to the victim for fairness, not punishment of the offender. Broad third-party participation is maintained throughout times of rapid change to adapt while supporting essential structures of society.

restorative justice | third-party norm regulation | customary courts | legal pluralism | Enga of Papua New Guinea

Culturally evolved norms as public goods are the social glue of human societies. They constrain individual interest, reduce the transactions costs of social and economic exchange, and facilitate collective action to overcome tragedies of the commons, as well as common tragedies (1). Since the early 1900s, ethnographic studies have documented a wide range of customary judicial institutions in small-scale societies to address norm violations from property rights to marriage disputes to heinous crimes (2–5). These include the double-edged sword of gossip, ritual healing, sanctions, mediation, and public forums for restorative justice. Judicial processes vary within different levels of society such that legal pluralism and polycentric justice systems are widely practiced (6). In addressing wrongdoing, the seriousness of the transgression, community impact, the history of relationships, and the value of the wrongdoer to the community all come into play. During colonization, indigenous systems were abolished or overlaid by formal courts based on Western retributive law, greatly reducing the range of human proficiencies called on to achieve harmony and cooperation.

Since the time of Durkheim (7), considerable focus has been on third-party altruistic punishment to account for the evolution and maintenance of norms in small-scale societies where group members, who are not directly affected by a violation, incur costs

to enforce norms by punishing violators (8–12). Research has included a plethora of experimental games indicating that punishment can promote conformity; however, there is little evidence that it galvanizes durable cooperation (13–16). The cross-cultural ethnographic studies of Boehm (17) have provided evidence that severe punishment serves to take out dangerous deviants but not that it converts sociopaths to cooperators. The research of Mathew and Boyd (18) indicates that recalcitrant warriors can be pressed into military action through punishment for the benefit of the group. Wiessner (19) has found that Ju/'hoansi Bushman gossip sessions brought limited behavior change, perhaps because some 30% of gossip was seeded by competition and jealousy.

Is third-party punishment the road to sustained cooperation? Unlikely. As the primary means of norm regulation, third-party punishment gives an impoverished view of human nature for regulating behaviors that are so central to sustained cooperation. It sidelines the many proficiencies developed in the human “cognitive niche” (20–22) that are essential for norm regulation. These include cultural institutions to define what is just, how to right a wrong, social learning to internalize norms, theory of mind to understand the other side, and shared intentionality. Language allows disputants to express different views; causal reasoning can be applied to understand the root of transgressions, predict future responses, and estimate their impact on a community. Cooperative breeding (23) fosters the community bonds and motivations to bring wrongdoers

Significance

Cultural norms are key to cooperation but are challenging to uphold. Humans have deep-seated predispositions for regulating norms through both retributive and restorative means. The Enga of Papua New Guinea, a small-scale horticultural society, navigate the national judicial system of legal plurality—formal Western-style courts with retributive justice and customary courts with restorative justice. An analysis of 333 customary court cases shows that Enga choose restorative options to compensate the victim for losses, reintegrate the wrongdoer, and restore cooperation because cooperation and collective action are essential to survival in small-scale societies. Today, in many industrialized societies, efforts are made to reintegrate elements of such age-old restorative systems by respectful listening to both sides, apologies, amends, and reconciliation.

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back into the fold. These skills are essential for cooperation in subsistence-based societies representative of our ancestral environment where people obtain most of their resources from collective activities, sharing, and exchange (24, 25).

Third-party punishment alone also presents a narrow view of the nature of norms and the dynamics of their regulation. Norms in small-scale societies are rarely rigid. Infractions often stem from competitive efforts to gain advantage; to relax sexual mores; and to alter values, beliefs, social obligations, or rules governing ownership. People evaluate the intentions of norm violators, what they gain, and harm done in order to decide whether they should be emulated, ignored, or sanctioned. Moreover, some norm violations can herald positive change. For example, Enga male commitment to clan defense was a central norm in the past, but as guns are adopted and destruction escalates, the refusal of many men to fight is now gradually being accepted.

Here, I will look into the role of third parties in norm enforcement by drawing on data from customary court cases among the Enga of Papua New Guinea (PNG) observed between 2008 and 2019. I will concentrate on norm violations regarding marriage and sexual exploits, property, and assault with physical injury, leaving more serious infractions such as murder and tribal fighting for a later discussion. Questions asked will include the following. In a system of legal plurality that offers retributive and restorative options, what options are chosen to address norm violations while maintaining cooperation? What is the role of third parties outside of and during customary court sessions for responding to norm infractions? What costs are borne by third parties who engage in norm regulation? Why do they bear these costs? What is the role of third parties in adapting norms to changes in practice generated by the forces of globalization: new technology, ideas, values, and economy? What essential features of cultural norms and values are preserved?

Retribution and Restoration

Petersen et al. (26) in their studies of “to punish or repair” provide evidence that the mind contains dedicated psychological mechanisms to punish, as well as those to restore social relationships following acts of exploitation. These tendencies appear to have deep evolutionary roots evidenced in phylogeny, ontogeny, and universality in human societies. A range of nonhuman primate societies employ both punitive and restorative strategies (27, 28). Children start internalizing norms around the age of 3 when they engage in third-party punishment (29, 30). This development comes simultaneously with perspective taking, empathy, a sense of fairness, and reconciliation skills (30). As individuals mature, they become increasingly aware of the complexities of cooperation with people in the outer layers of the onion of society and the need to exercise restorative measures.

How effective are the different means of norm regulation? Third-party punishment can efficiently promote conformity, coordinate activity, and take bad actors out of circulation. However, it is costly for punishers, particularly in small-scale societies where the status of leadership is won by attracting supporters. It generates grudges that accrue and are infinitely retrievable when all sides are not heard. It erases cooperative sentiments and may spark retribution, petty or pernicious, immediate or delayed, that so disrupts cooperation. Punishment does not necessarily uphold norms; often, it has a strong competitive function (16) that generates unbridled gossip and injustices. It diminishes the reputation of the offenders, alienates those who are punished, and may reduce their desires to cooperate. Punishment can also cause serious rifts in the community. Costs of punishment are diminished as societies grow in scale and the delivery of justice becomes institutionalized (31, 32).

Restorative justice offers very different options as it engages broad participation in the presence of the wider community. Stakeholders in the conflict tell their stories and are heard. The

history of relationships is rehearsed with an eye toward the future. Community members are encouraged to see the other side rather than take sides, correcting harm done to the victim and community through apology, acceptance of liability, and a negotiated settlement (33–35). Justice is seen to be done when reparations are made to the victim and community is satisfied, rather than when the wrongdoer is punished. Risks of false or incomplete information are reduced. The third parties who mediate gain status rather than incurring costs from punishing. Restorative justice generally involves some form of compensation to right a wrong, allowing the offenders to repair their reputations and reenter the community as productive members while deterring them from future wrongdoing. Moreover, community forums provide opportunities to discuss changes in current practice introduced from the outside and adjust norms and values accordingly while upholding the basic principles of society. Restorative justice also has drawbacks: it is challenging to scale up in the absence of formalized leadership, and it is not effective for removing dangerous actors.

Background

The Enga. The Enga of PNG are a highland horticultural society that numbers about 500,000 today (36–42) (*SI Appendix, section 1*). They are master gardeners with their staple crop, the sweet potato, used to feed large human and pig populations. Approximately 90% of the population lives in rural areas where women are occupied with gardens, children, and pig husbandry. Men perform the heavy agricultural work; in the past they were largely occupied with warfare, ritual, and ceremonial exchange. Today, both men and women engage in small, local businesses.

Institutions govern three areas of cooperative life in central Enga. The segmentary lineage system organizes Enga into exogamous patrilineal clans (ca. 300 to 1,000 members) whose members cooperate in many social and economic activities (37). All male clan members are initially considered to be equals and then compete to attain status of “big-man” through ceremonial exchange, mediation, oration, and organization. Women become full members of their husbands’ clans upon marriage. Land is passed on patrilineally in the extended family and to other sub-clan members according to need; it is defended by the clan and cannot be given or sold to people outside the clan (40). Exogamous marriages weave the social fabric outside the clan. Formerly, men went through a series of bachelors’ cults; sexual relations were strictly forbidden until the ages of 25 to 30 (36). Exogamous marriages were arranged by parents; bride wealth exchanges initiated lifelong assistance between affines. Adultery and divorce were infrequent (37). Polygamous marriage was permitted for wealthy leaders to increase household size and production but only with the consent of the first wife.

In the past, Enga clans frequently engaged in warfare with neighboring clans to reestablish the balance of power after infringement, insult, or injury. Wars were governed by rules to contain violence; it was not advantageous to inflict serious damage on neighbors who were closely connected through supportive marriage ties (43, 44). Children were socialized with harsh corporal punishment. Extended family and intra- and interclan disputes were mediated by leaders in public forums until settled with compensation payments (*SI Appendix, section 2*). Repeated, dangerous offenders were dealt with by the immediate family, sometimes hamstringed to restrict their movement.

Substantial changes were introduced by the Colonial Administration and missions from the 1950s until independence from Australia in 1975; however, many fundamental practices persisted. Starting in the late 1990s, mobile phones and the constant circulation of people on public motor vehicles greatly altered patterns of interaction and communication between people of different ages, genders, and social standings. Marriages customs broke down; currently, over half of marriages in the study area are de facto unions with no parental permission, bride wealth

exchanges, or ceremony. Men and women alike frequently exchange sex for money (42). A rapidly growing population is beginning to put pressure on land, threatening the solidarity of corporate groups. The adoption of guns in warfare has allowed youths to steer the course of wars, increasing deaths and destruction (43, 44). Large amounts of cash circulate in Enga from wage labor, cash crops, and the Porgera Gold Mine. “Money is life” is frequently heard to justify increasing individual interest. Downloads onto smartphones introduce the good, the bad, and the ugly, including pornography and ideas about sorcery (*sanguma*).

Justice in PNG. The PNG justice system is one of legal plurality composed of formal and customary courts. The formal courts were forged from Western laws imposed by colonial powers; the customary courts were crafted from traditional dispute management based on *kastom* (custom) (*SI Appendix, section 2*). The history is complex (45–48). In Enga, people have the option of four levels of courts: *wari* (worry) courts, local village courts (VCs), Operation Mekin Save (OMS) customary courts for intergroup conflicts, and formal district courts (DCs) and national courts (NCs). *Wari* (worry) courts are the first step in dispute management convened spontaneously to nip conflicts at the bud (*SI Appendix, section 3*). They are community action that draws on tradition and falls outside the state’s justice system. Both parties give leaders small and equal sums of money or gifts to mediate during a public gathering. When complaints are not resolved, they are usually referred to the VC or OMS (49).

VCs, the focus of this paper, were established in 1984 (45, 46, 50) to serve parochial judicial needs by harnessing the skills and knowledge of leaders and mobilizing the force of public opinion for mediating and correcting minor wrongdoing: theft, marriage disputes, bodily injury, property damage, and unpaid debts. Violations are viewed as acts against individuals and community. Limits are placed on jurisdiction, amounts of compensation ordered (1,000 Kina, ca. US \$330), fines, and jail sentences (up to 6 mo). VCs apply local “custom” to settle disputes and achieve justice that satisfies communities (45, 47, 49); justice must be seen to be done by community. Custom was imprecisely defined and kept flexible to accommodate the many cultures of PNG.

There are currently 153 VCs in Enga. Each serves one to four clans, 600 to 2,500 people who are usually from the same tribe; this grouping is what I will call “community.” Community members from different clans under one VC are densely linked through marriage ties and share church and government facilities. Despite their many common interests, tribal fighting occasionally takes place within communities, particularly around the time of national elections. VCs are presided over by panels of five or more magistrates, usually respected male leaders who hold open-air hearings at central points in Enga villages two afternoons a week. In recent years, female magistrates have also been appointed. Most magistrates are illiterate or semiliterate individuals who also serve as traditional local leaders. They work tirelessly to keep the peace for very minimal salaries but gain considerable status and respect for their work. VC hearings take place rain or shine, frequently interrupted by dogs, pigs, or drunks (photos in *SI Appendix, section 6*). Between 30 and 200+ people attend. Most, but not all magistrates, were trained years ago regarding their jurisdiction; their decisions are not monitored by the government. Cases take between 1 and 3 h while all sides are heard and opinions offered. Settlement decisions are handed down without follow-up except for rare noncompliance complaints. Dissatisfied parties may appeal to OMS or to the formal DC.

The higher level of customary courts is OMS, a branch of VCs established to prevent or settle tribal fights in the 1980s (49). In theory, OMS does not have the jurisdiction to handle serious crimes like murder, rape, and arson; however, if people will not bring such crimes to formal courts, the second mission of OMS kicks in: to keep the peace. The OMS panel of senior magistrates

from the district hears the complaints from all over the district or subdistrict (population ca. 30,000 to 70,000) in one or several open-air sessions, until both parties reach an agreement (49). There is no limit on the size of compensation payments that can be negotiated. Compensation agreements are recorded; usually considerably more is paid than the settlement order for the sake of peace, fairness, and clan honor.

The remaining judicial options are DCs and NCs with written laws based on Western legal systems, procedures, courtrooms, strict rules of evidence, police, fines, and prisons. They can handle the full range of complaints from business and marriage disputes to murder. Magistrates are patient and thorough in explaining rights and decisions. Still, formal courts are not widely used outside of towns because compensation and community forums are desired, strict rules of evidence cannot be met, witnesses are afraid to testify, and lawyers are expensive.

Complaints

Table 1 gives the topics of complaints brought to the two levels of customary courts. OMS mediates the full range of disputes that might incite interclan conflicts that people will not bring to the DC. The VC only handles less serious cases. Here, I will concentrate on complaints brought to three local VCs in the Ambum valley as these are the best venues for documenting third-party participation because the size of hearings is relatively small (30 to 200 participants). Enga are not afraid to participate in these local meetings to restore community cohesion. Marriage, property, assault, and land disputes made up 311 of the cases that will be analyzed here. Twenty-four cases were excluded: 2 for unpaid court orders, 15 for defamation (*SI Appendix, section 4*), and 5 sensitive cases involving minors. Complaints were lodged by men in 199 of 333 cases (60%); however, 71 of 132 marriage complaints (54%) were lodged by women.

Results

Marriage. In small-scale societies, third parties are deeply concerned with norms governing marriage because successful marriages weave the fabric of social and political support, promote child welfare, and stabilize households. Nonetheless, conflicts are frequent because of sexual attractions, incompatibility, and conflicts over household economics. As modern institutions and

Table 1. Complaints brought to the three local VCs in the study and the Wabag OMS customary court for intergroup conflict

Complaint	VC	OMS
Marriage problems*	132 (40)	138 (26)
Property: theft/debt/damage/arson	86 (26)	50 (9)
Land disputes	58 (17)	68 (13)
Assault/injury	35 (10)	38 (7)
Threats/defamation	13 (4)	14 (3)
Rape/child sexual abuse [†]	7* (2)	7 (1)
Tribal conflicts/war	0 (0)	50 (9)
Murder	0 (0)	48 (9)
Accidental death/third-degree murder	0 (0)	36 (7)
Brawls/ransacking/holdups	0 (0)	13 (2)
Distribution of compensation	0 (0)	32 (6)
Witchcraft/HIV/AIDS accusations	0 (0)	9 (2)
Compensation for traffic deaths	0 (0)	20 (4)
Unfulfilled court order	2 (1)	10 (2)
Total	333 (100)	533 (100)

Data are presented as *n* (%).

*OMS takes marriage cases for people who live in towns, women who feel they will not be treated fairly in their husbands’ clans, and marital disputes that risk sparking interclan conflicts.

[†]These cases of rape/child sexual abuse will be referred to OMS or the DC if substantiated.

technology break down former patterns of communication and cultural conventions, marital problems increase. In Enga, there has been a true sexual revolution (42). Of 106 married couples who registered complaints, 55 (52%) were formally married (as opposed to ca. 95% in the past), 40 (38%) were in de facto relationships, and 11 (10%) were in de facto polygynous unions. Fifty-seven of the 132 complaints (43%) were adultery accusations, with equal numbers of males and females accused. Most adulterous men claimed that they were “just marrying a second wife.” Most women who engaged in adultery were wives who fled because of domestic abuse and sought new partners or women who married rich older men in polygynous marriages for their money or out of parental pressure and then desired younger men. Domestic violence is of epidemic proportions in Enga, as in the rest of PNG, and entered into 73 of 132 (55%) marital complaints. It was initiated by men in 78% of cases and could be excruciatingly brutal. Another 15 (11%) marital complaints involved failure to support the family.

Third-party willingness to give evidence and make suggestions is crucial for norm regulation. Knowing that wrongdoings are hard to conceal in a small community and that honesty is rewarded, for 47 (36%) of the 132 cases (Table 2), the defendant or both parties admitted to the details of the complaint. Witnesses gave evidence in 31 (23%) of cases in public forums. For 25 (19%) of the cases, the event occurred in public or was widely known, and in 8 (6%) of the cases, supporting documents were available. This leaves only 21 (16%) of the cases where witness claims are conflicting or inconclusive, leading to extensive debates and sometimes adjournment for more evidence. Third parties were most willing to contribute evidence in the cases of adultery or domestic violence, with a surprising number of adulterers caught in the act. The public participated willingly knowing that settlements would be restorative and their testimonies unlikely to draw retribution.

Settlements were reached in VC after 1- to 3-h-long hearings that allowed magistrates to hear many voices and structure decisions to satisfy the community. Their explanations often review values held by the community and then discuss individual circumstances. Both the VC magistrates and community members go to great lengths to keep marriages with children intact. For de facto marriages, they sometimes cite ways in which the families have helped each other in order to encourage the payment of bride wealth. Of the 132 complaints, 74 (56%) were resolved with compensation that was gauged to atone for social, emotional, and physical harm done, and 13 (10%) included directives to change behavior. Thirty-six marriage disputes (27%) ended in divorce upon mutual incompatibility, because the woman’s life was in danger, or for fear that domestic violence would spark intergroup conflict. Nine cases (7%) had miscellaneous outcomes. Half of the divorces were for de facto relationships where the public hoped for more promising future unions.

Third parties attending the hearing had input throughout as summarized in Table 3. In the majority of cases, the response of the attending crowd involved quiet listening. In only 25 of 132 (19%) marriage cases did the crowd get rowdy and ridicule, curse, or mock the conflicting parties. Ridicule is generally

suppressed since domestic peace is desired; nonetheless, most wrongdoers probably feel guilt or shame for their actions when they are discussed in public. Seventeen of 21 instances of ridicule (81%) occurred during outrageous adultery cases: for example, when a young woman married, or was forced marry, a rich older man and then used his money to entice younger men into sexual liaisons. All three parties were ridiculed. Extreme domestic violence also brought third-party derision.

Members of the crowd sometimes donated cash to the settlement during the hearing by offering compensation assistance on the spot to help solve the problem. One such case concerned a young man who was a drunkard and marijuana smoker to the neglect of his family; his wife sought divorce. A leader in the crowd told the young man that he realized that his father had died early and that he lacked direction in life. He explained that he too had lost his father at an early age and understood the burden but that it is possible to go on and succeed in life. The leader put down 160 Kina in cash to compensate the wife and give the young man a second chance. In a second case, a boy in his early teens watched child porn on a mobile phone and decided to try it out what he had learned on a 6-y-old girl. There was no clear evidence about what had actually happened. He was severely warned; numerous people in the crowd contributed cash to stop the problem there and then.

Property and Land Disputes. Free riding pushes norms of cooperation to the limits and beyond. In Enga, free riding is largely addressed dyadically: people help the ones who help them, often very generously, and withhold help for those who do not reciprocate, the less costly option (13, 49). Nonetheless, there are complaints that cannot be easily resolved by dyadic action. Of 86 property disputes in the sample, 26 (31%) involved theft, 25 (29%) involved debt or unpaid labor, 33 (38%) involved destruction of property, and 2 (2%) involved miscellaneous. Property destruction was largely due to pigs destroying gardens when lazy gardeners did not fence properly or owners did not tie their pigs, hoping that they would get a free lunch next door. In 41 (48%) of 86 property disputes, one or both parties accepted liability; in 24 (28%), witnesses did not hesitate to step forward to give evidence: for example, to say that they saw the thief in somebody’s garden or a stolen pig being sold at the market (Table 2). Damage was evaluated very carefully by magistrates who sometimes visited the site. Compensation is carefully calculated to be fair and cover losses without adding additional punitive charges for theft or negligence that might lead to accusations of bias. Such decisions also have deep roots in traditional leadership where leaders try to attract and keep as many supporters as possible by mediating but not taking sides. Those who had no direct knowledge of the incident kept quiet; others supported settlements (Table 3). Property disputes were usually mundane complaints that only drew ridicule when they were indeed ridiculous: for example, when marijuana smokers worked up an appetite, stole somebody’s dog, and roasted it.

Table 2. Evidence given in VCs for marriage, property, assault, and land cases

Complaint	Accepts responsibility	Witnesses step forward	Widely known	Documents/ elders	Conflicting evidence	Total
Marriage	47 (36)	31 (23)	25 (19)	8 (6)	21 (16)	132 (100)
Property	41 (48)	24 (28)	11 (13)	6 (7)	4 (4)	86 (100)
Assault	12 (34)	9 (26)	9 (26)	2 (6)	3 (8)	35 (100)
Land	12 (21)	11 (19)	6 (10)	20 (34)	9 (16)	58 (100)
Total	112 (36)	75 (24)	51 (16)	36 (12)	37 (12)	311 (100)

Data are presented as *n* (%).

Table 3. Crowd response in VC cases by complaint

Crowd response	None noted/ quiet*	Supportive	Ridicule/ swearing	Contributes immediately	Poor decision	Total
Marriage	48 (36)	50 (38)	25 (19)	6 (5)	3 (2)	132 (100)
Property	42 (49)	27 (31)	6 (7)	7 (8)	4 (5)	86 (100)
Assault	18 (51)	11(31)	1 (3)	3 (9)	2 (6)	35 (100)
Land	31 (53)	23 (40)	3 (5)	1 (2)	0 (0)	58 (100)
Total	139 (44)	111 (36)	35 (11)	17 (6)	9 (3)	311 (100)

Data are presented as *n* (%). Crowds are composed of some 30 to 200+ observers, many of whom are not direct stakeholders.

*Only disruptive responses were systematically recorded for many hearings in 2008 to 2010, so “none noted/quiet” during these years may have failed to capture supportive responses.

Assault. Enga are irascible and rapidly resort to violence; assaults draw serious community concern for fear of escalation. Triggers for assault ranged from fights caused by sexual jealousy between women, drunken assaults, insults, suspected thefts, and provocative rumors (*SI Appendix, section 4*). Of the 35 assault cases in the sample, 17 (49%) were serious enough for the victim to seek medical care: severed appendages, concussion, or bush knife wounds. The majority of assaults took place in public places or under circumstances where the details of the assault were known and one or both parties agreed to pay compensation (Table 2). Payments were geared to the severity of injury. Crowds refrained from inflammatory remarks so as not to renew the conflict (Table 3); occasionally, third parties spontaneously offered cash to settle the matter.

Land. Land disputes are increasing within extended families or subclans as the population grows; however, they are infrequent between clans. Traditionally, land was passed on from fathers to sons, with surplus land given to relatives in need. Many families are now seeking to reclaim land formerly given or loaned to relatives because of increasing individualism and realization of the potential monetary value of the land. Families who have settled on land for years but are not direct descendants are being asked to vacate parcels of land. Of 58 land disputes, 9 (16%) involved vacating land, and another 14 (24%) involved vacating with payment for improvements made. For 6 cases (10%), the defendant paid to stay; for 10 (17%), preventive orders were issued while waiting for more evidence; and for 19 (33%), one or both parties had to compensate for assault or arson in the dispute before a settlement would be considered. Many land disputes can be still settled by knowledgeable elders (Table 2), but as the older generation passes away, more disputes have been put on hold for the reestablishment of land courts, which were discontinued after the murder of land court magistrates in the 1980s. The only cases of crowd pushback in land disputes occurred when one party was clearly lying or breaking traditional rules by selling land outside the clan (Table 3).

Satisfaction and Third-Party Participation in Implementing Court Decisions. After a settlement is reached in the VC, the decision is returned to the wrongdoer and the community to implement, unless it was appealed to OMS or the DC (9 cases of 333 [3%]). VCs do not follow up on court orders unless a nonpayment complaint is filed (two cases only). Responses on satisfaction of the complainant and defendant indicated that in approximately a third of the cases, one party was disgruntled (Table 4), with the complainant wanting more and the defendant wanting to pay less. How are court decisions effective if such discontent exists? Here again, third-party community members play an essential role. Since settlements are usually too high for one person to afford or are thought to be too low because of the limits of the VC’s jurisdiction, they are recalibrated following a number of criteria by supporters to mitigate dissatisfaction and promote

fairness: history of the relationship, physical or emotional damage inflicted, status of both parties, implications for honor, peace and cooperation in the community, ability of the wrongdoer to pay, record of repeated offenses, and relation between the parties. Intent is usually not considered; harm inflicted, deliberate or not, must be rectified. Emotional harm, particularly disrespect of sorrow likely to generate enduring tensions, may be treated more seriously than physical harm.

To date, we have followed up 42 cases for major contributors. More than the settlement order was paid for 27 (64%) cases, and for another 3 (7%), people decided to settle out of court and pay far more than the VC could order so as to prevent further trouble (Table 5). Amounts that significantly exceeded VC settlements occurred in marriage and assault cases because of the potential disruptive impact of the wrongdoing within or between communities. Of the six cases of domestic violence in the follow-up study, for five compensation paid was greater than ordered.

For 10 cases (24%), less than the court order was paid, and in two cases (5%), the exact amount was paid (Table 5). When less was paid for marriage, it was usually because the community did not want to support divorce or polygamy. Assault risked dangerous escalation and in no case was less paid. If the liable person could not meet the settlement for a minor transgression because of poverty or lack of social support, community members sometimes pressured the complainant to accept the lower amount offered for the sake of peace and praised them as responsible citizens if they did. Thus, through third-party contributions, settlements that restore relations materialize.

Who helps with compensation payments? For most payments, the responsible party receives some financial assistance from others. Community members are often generous with young people so their future prospects will not be damaged. Financial help for compensation has long been entwined in the overarching Enga system of exchanges involving mutual assistance for economic enterprises such as compensation, bride wealth, child growth payments, funerary payments, and war reparations. Table 6 gives the number of major helpers for different categories of complaints. Payments for property and land, issues with fewer stakeholders, drew fewer contributors that did marriage and assault. One exception was a settlement for senseless destruction in an interclan clash to which many contributed to make peace. For serious interclan conflicts involving one or more deaths that were brought to OMS, much higher amounts were paid (*SI Appendix, section 5*).

It is predictable that close kin would give the greatest support in times of trouble, as they did (Fig. 1). However, Enga networks for assistance are broad such that distant relatives and nonkin made up 39% of helpers (Fig. 1). The primary reasons given for assisting with payments include individual and group-oriented motives (Fig. 2). Beyond helping kin, some contribute because they have history of mutual assistance with the wrongdoer, because leaders build their reputations by problem solving, or to prevent arrest of a community member. Many contribute to put

Table 4. Satisfaction of complainant and defendant with decision

Satisfaction	Complainant satisfied, defendant not	Defendant satisfied, complainant not	Both satisfied	Both unsatisfied	Postponed/no show/unknown	Total
Marriage	17 (13)	26 (20)	78 (59)	3 (2)	8 (6)	132 (100)
Property	12 (14)	15 (17)	50 (58)	0 (0)	9 (10)	86 (100)
Assault	5 (14)	8 (23)	17 (49)	0 (0)	5 (11)	35 (100)
Land	11(19)	10 (17)	28 (48)	1 (2)	8 (14)	58 (100)
Total	45 (14)	59 (19)	173 (56)	4 (1)	30 (10)	311 (100)

Data are presented as *n* (%). Lack of satisfaction was usually because the complainant wanted more and the defendant wanted to pay less.

an end to the trouble, knowing that they will benefit from living in a cooperative community. Those who receive help feel gratitude and are aware that if they do not reform, their supporters will dwindle in number.

Repeated offenders are not usually punished beyond having to assemble compensation for damage done; however, they are offered little help, and their reputations decline. In 3 of our 42 follow-up cases (7%), nobody helped because the liable party was stingy, uncooperative, or was a repeated offender. In two cases only did the liable party alone pay the exact amount ordered, one a man desperate to marry a second wife. Those who are cooperative and generous in community affairs but who are known for substance abuse or hot-headed responses continue to receive ample support.

Discussion

Most Enga became familiar with formal punitive justice systems during colonization (1950 to 1975). Since independence, they have had several judicial options, both retributive and restorative. Nevertheless, restorative options that permit very active third-party participation in regulating norms and relationships are preferred and have persisted until the present. Third parties take part both within and outside of the government-sanctioned customary court system with the goal of maintaining relationships that are the foundation of community. Initially, many infractions set off direct retaliation: 153 of 333 (46%) cases involved some form of violent “self-help.” Community members then persuaded the disputants to mediate the dispute in wari courts (*SI Appendix, section 3*). If disputes were unsettled, they were taken to the VC where third parties continued to contribute widely. What is most interesting is that after settlements were handed down by the VC magistrates, it was up to community members to determine the final outcome by adding to the compensation or persuading the complainant to accept less.

The Enga have a saying “You need a person,” meaning that everybody has something of value to give. Community members realize that they risk incurring a double loss by punishing a wrongdoer—no restitution for the victim and alienation of a potentially valuable cooperator. Thus, they choose restorative rather than punitive measures to address norm violations; of course, having to make up for harm inflicted also deters repeated violations. In the 333 cases in our sample, there was no instance of magistrates summoning the police or recommending a jail sentence. The logic of such restorative justice differs from that of punishment in that the focus is on fairness by compensating for harm done and resolving tensions in community (14). It also allows the wrongdoer and kin to regain respect and trust for righting a wrong. People know that punishment cannot convert cheaters to cooperators in this society with strong egalitarian ethics.

Third parties who contribute to restorative measures enjoy the benefits of social selection by helping kin, becoming preferred partners, and enhancing reputation, as well as gleaning the advantages from living in a strong, harmonious group. Enga do not waste their time on cheaters and troublemakers who may migrate to cities or eventually be turned over to the formal justice system (51). Can such cooperation within restorative institutions contribute to selection at the group level (18)? Certainly, groups that successfully implement restorative measures thrive. However, neither the Enga as whole nor individual dialect groups compete with surrounding groups. All nine Enga dialect groups and surrounding ethnic groups had somewhat similar traditional restorative practices because of the constant circulation of institutions in western areas of the highlands: bachelors cults, spirit cults, and protocols for peacemaking (*SI Appendix, section 2*) (40, 52, 53). The success of Enga customary courts depends on wise leadership and community cooperation within clans, factors that wax and wane over time.

Table 5. Amount of compensation paid

Complaint	More*				Less				Settle alone	
	<i>n</i>	Mean	% More	Range	<i>n</i>	Mean	% Less	Range	<i>n</i>	Mean
Marriage	9	K1,844	93	K70–6,600	6	K633	32	K200–1,120	2	K4,782
Property	5	K319	26	K60–1,040	3	K683	22	K100–1,800	1	K13,000
Assault	9	K3,145	93	K125–18,000	0	0		0	0	0
Land	4	K455	49	K200–700	1	K190	24	0	0	0
Total	27		27 (64%)		10		10 (24%)		3	(7%)

Total number of cases = 42. In two cases (5%), the exact amount of the court order was paid. K, Papua New Guinea Kina.

*The headings % More and % Less are percentages of more and less paid than court order, respectively.

Table 6. No. of major contributors by complaint

Complaint	No. of cases	No. of helpers	\bar{x}	SD
Marriage	18	51	3.5	3.06
Property	10	28	2.7	1.41
Assault	9	29	3.8	2.04
Land	5	8	1.6	0.89
Total	42	116	3.3	2.92

Note: There are usually more small contributions than can be tracked.

Institutions are only as effective as their actors play them; group benefits exist at the local level but are ephemeral.

What is or was the nature of norm regulation via third-party restorative action in other small-scale societies. As Black (54) has pointed out, third-party punishment is more likely when the aggrieved party is socially superior, relationally and culturally more distant, and when institutionalized hierarchies exist. Accordingly, third-party punishment is infrequent in foraging societies aside from action to take out the very few individuals who are true dangers to society (17). Gossip provides the spice of life and is inevitable; however, if too strident, arguments ensue, and people pack up and leave, voting with their feet (13, 55, 56). When anger subsides, people come together and restore relations through contracting marriages, festivities, or sharing events (57–59). The Mardu of the Western Australian Desert have/had a wide range of restorative conventions as described by Tonkinson (60, p. 156): “The seeming disinclination of the Mardu to bear grudges or harbor smoldering resentments rests in the large part on their many conflict-management conventions that limit damage. These operate to bring about ‘a good feeling’ in the stomachs of the principals, a sense of satisfaction, vindication or finality that endures long past the immediate aftermath and survives the test of later calm reflection.”

Some hunter-gatherer societies combined formalized sanctions organized by third parties with subsequent acts of atonement and reconciliation, a common practice among Australian aboriginal hunter-gatherers (60–62). The offender and the offended parties appeared in the presence of a substantial crowd of observers to vent their feelings in harangues. The wrongdoer faced opponents who hurled spears at his thighs until, after some dodging, he permitted one to hit him to bring an end to the duel. Duels were ended by singing, dancing, penis holding, exchange of sacred objects, or sexual exchanges.

North American groups like the Comanche practiced the punishment of miscreant boys by killing their horses, breaking their guns, and whipping them (3, 63). Such sanctions occurred in the context of events that required disciplined, coordinated action such as buffalo hunts. If the young men showed remorse, they were immediately rehabilitated and received replacement horses and weapons by those who had exerted the sanctions. Banishment was practiced by the Cheyenne and Sioux for serious crimes such as in-group murder followed by reintegration when deemed appropriate (63, 64). Interestingly, many youth initiations in small-scale societies juxtapose disciplinary harsh physical and emotional trials and tribulations followed by a hero’s welcome to adulthood.

In small-scale horticultural or agricultural societies where dispersal was not optimal, norm violations were resolved by public compensation payments or other forms of reconciliation. Examples can be found among the Ifugao of the Philippines (3) and throughout Oceania (52, 53, 65, 66). Rituals of reconciliation and reparations were practiced in a wide range of small-scale African societies (67–71). As Bohannan (68, p. 100) noted, the wrongdoer incurred a cost to make a correction for harm inflicted: that is, to equalize rather than penalize. Gibbs (72) has shown that more complex societies like the Kpelle of Liberia have informal

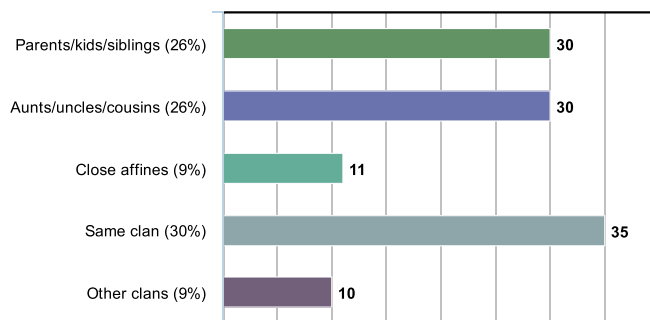


Fig. 1. Relation of helpers to wrongdoers ($n = 116$).

restorative procedures to resolve disputes with a therapeutic effect that supplement formal ones. In many African societies, beliefs about supernatural sanctioning with the ancestors or spirits as third parties played a role in norm regulation (73–75). Restoration does not necessarily involve forgiveness but social action to atone: as the Enga say, “to let go, go on and see how it goes.” Although restorative measures abound within circles of closely related groups, they are difficult to scale up in the absence of well-developed leadership. Consequently, intergroup norm violations regularly incite violent self-redress, feuds, and warfare. Societies that can juxtapose aggression and restoration through peacemaking have powerful strategic packages for developing more complex institutions (76–78).

Change

Restorative justice in Enga customary courts is oriented toward the future without forgetting the past: history still matters. Enga must continually update tradition to respond to changes in practice generated by new introductions: cell phones, porn, cash, modern transport, schools, and guns, as well as shifts toward individualism. Gradual updating of customary norms, a topic for a separate contribution, occurs as new practices are hashed and rehashed in public court hearings. These are conversations that have no space in formal courts.

One of the most compelling questions regarding change is what is retained? Among the Enga, it is largely social processes rather than specific traditions that are preserved. The first is the process of hearing all sides, apology, compensating the victim to correct for harm done, reintegrating the wrongdoer, and formulating settlements to satisfy community. The second is the engagement of community for gathering evidence, giving advice, and contributing to settlement costs, as well as to keep compensation under the broader umbrella of exchanges from birth to the grave that tie communities together. What do third parties seek to preserve through such social processes? At the center of concern is maintaining the role of marriage in weaving the social

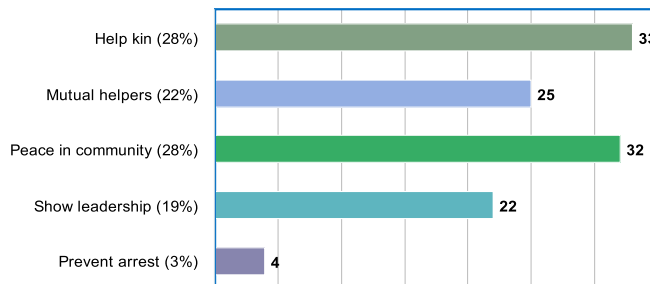


Fig. 2. Primary reasons for helping with compensation ($n = 116$).

fabric between groups despite the challenges of radically increasing sexual freedom and multiple forms of de facto marriages. Simultaneously concerted efforts are made to uphold clan cohesion and cooperation, which is being slowly eroded by political conflicts, land disputes, and individualism. Preserving these aspects of Enga culture, so essential to well-being, is something that cannot be achieved by punitive measures or government programs.

As one senior magistrate, Anton Yongapen, explained, “We have no law books. We must just listen to the different sides and use our heads and hearts to apply custom in appropriate ways to bring about justice today. Justice must not only be done but be seen to be done by community, else our goal of bringing about peace and harmony will not be achieved.” With increased scale of societies, decline in dependence on community, and a far more complex world, such systems of restorative justice, which have deep roots in our cognitive dispositions and evolutionary past, have been largely replaced by more formal punitive systems. Still, there seems to be a yearning for reincorporating aspects of the age-old processes of restoration and a more forgiving law (79) that includes having one’s story told and listened to by people who can assist, talking issues through, apology, amends, and some brand of reconciliation that draws wrongdoers back into community. Evidence for this yearning appears today in truth and reconciliation commissions (80, 81), youth courts (82, 83), mediation, alternate dispute resolution, and efforts of indigenous groups to revive past restorative systems (84–86) in order reclaim the skills of community members who have gone astray (87). There is much to learn from small-scale societies about the benefits of balancing retribution and restitution.

Materials and Methods

Observational data were collected for 1) 533 court hearings in the Wabag OMS, the provincial capital, by Nitze Pupu with assistance from Anton

Yongapen and P.W. (44, 49) and 2) 333 VC cases in three communities in the adjacent Ambum valley by Larsen Kyalae with assistance from P.W. between 2008 and 2020. Points recorded include name of complainant and defendant, clans, demographic details and relationship of contesting parties, complaint, request of complainant, response of the defendant, witnesses and evidence presented, agreement, settlement, amount of settlement, reasons for settlement, crowd response, satisfaction, and police involvement (*SI Appendix, section 4*). All OMS and VC hearings held on observation days were observed without prioritizing particular complaints. In 2016, we began the time-consuming job of following up settlements to see how much compensation was actually paid, who helped with payments, relation between the two parties, reasons for helping (or not helping), and satisfaction with the settlement (*SI Appendix, section 4*). Texts from case descriptions have been entered into a database in Filemaker Pro and coded by P.W.; the data used in this paper are available in *Dataset S1*. In 2012, we conducted a brief study of Wabag DC cases and began research in Wabag DC again in 2019. The research was approved by the University of Utah Institutional Review Board (00012979). Because most participants were illiterate or semiliterate, they were consented with discussion of the research and verbal consent on audio recordings.

Data Availability. Anonymized study data are included in the article, *SI Appendix*, and *Dataset S1*.

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1. E. Ostrom, Collective action and the evolution of social norms. *J. Nat. Resour. Policy Res.* **6**, 235–252 (2014).
2. M. Gluckman, *Politics, Law and Ritual in Tribal Society* (Aldine Transaction, 2006).
3. E. A. Hoebel, *The Law of Primitive Man: A Study in Comparative Legal Dynamics* (Harvard University Press, 1954).
4. B. Malinowski, *Crime and Custom in Savage Society* (Kegan Paul, Trench and Trubner, 1926).
5. L. J. Pospisil, *Kapauku Papuans and Their Law* (Yale University Publications in Anthropology No. 54, Yale University Press, 1958).
6. L. J. Pospisil, *The Kapauku Papuans of West New Guinea* (Holt, Rinehart and Winston, 1963).
7. E. Durkheim, *The Division of Labor in Society* (New York Free Press, 1964).
8. R. Boyd, H. Gintis, S. Bowles, P. J. Richerson, The evolution of altruistic punishment. *Proc. Natl. Acad. Sci. U.S.A.* **100**, 3531–3535 (2003).
9. J. Ensminger, J. Henrich, *Experimenting with Social Norms: Fairness and Punishment in Cross-Cultural Perspective* (Russell Sage Foundation, 2014).
10. E. Fehr, S. Gächter, Altruistic punishment in humans. *Nature* **415**, 137–140 (2002).
11. E. Fehr, U. Fischbacher, S. Gächter, Strong reciprocity, human cooperation, and the enforcement of social norms. *Hum. Nat.* **13**, 1–25 (2002).
12. T. Yamagishi, The provision of a sanctioning system as a public good. *J. Pers. Soc. Psychol.* **51**, 110–116 (1986).
13. N. Baumard, Has punishment played a role in the evolution of cooperation? A critical review. *Mind Soc.* **9**, 171–192 (2010).
14. N. Baumard, J. B. André, D. Sperber, A mutualistic approach to morality: The evolution of fairness by partner choice. *Behav. Brain Sci.* **36**, 59–78 (2013).
15. F. Guala, Reciprocity: Weak or strong? What punishment experiments do (and do not) demonstrate. *Behav. Brain Sci.* **35**, 1–15 (2012).
16. N. Raihani, R. Bshary, Punishment: One tool, many uses. *Evol. Hum. Sci.* **1**, 1–26 (2020).
17. C. Boehm, *Moral Origins: The Evolution of Virtue, Altruism, and Shame* (Soft Skull Press, 2012).
18. S. Mathew, R. Boyd, Punishment sustains large-scale cooperation in prestate warfare. *Proc. Natl. Acad. Sci. U.S.A.* **108**, 11375–11380 (2011).
19. P. Wiessner, Norm enforcement among the Ju’hoansi Bushmen: A case of strong reciprocity? *Hum. Nat.* **16**, 115–145 (2005).
20. S. Pinker, Colloquium paper: The cognitive niche: Coevolution of intelligence, sociality, and language. *Proc. Natl. Acad. Sci. U.S.A.* **107** (suppl. 2), 8993–8999 (2010).
21. J. Tooby, I. DeVore, “The reconstruction of hominid evolution through strategic modeling” in *Evolution of Human Behavior: Primate Models*, W. G. Kinzey, Ed. (SUNY Press, 1987), pp. 183–237.
22. A. Whiten, D. Erdal, The human socio-cognitive niche and its evolutionary origins. *Philos. Trans. R. Soc. Lond. B Biol. Sci.* **367**, 2119–2129 (2012).
23. S. B. Hrdy, *Mothers and Others: The Evolutionary Origins of Mutual Understanding* (Harvard University Press, 2011).
24. M. Gurven, To give and to give not: The behavioral ecology of human food transfers. *Behav. Brain Sci.* **27**, 543–559 (2004).
25. K. Hill, H. Kaplan, Life history traits in humans: Theory and empirical studies. *Annu. Rev. Anthropol.* **28**, 397–430 (1999).
26. M. B. Petersen, A. Sell, J. Tooby, L. Cosmides, To punish or repair? Evolutionary psychology and lay intuitions about modern criminal justice. *Evol. Hum. Behav.* **33**, 682–695 (2012).
27. F. B. de Waal, *Peacemaking among Primates* (Harvard University Press, 1989).
28. J. B. Silk, Why do primates reconcile? Evolutionary anthropology: Issues, news, and reviews: Issues. *News Rev. (Melb.)* **5**, 39–42 (1996).
29. B. R. House et al., Social norms and cultural diversity in the development of third-party punishment. *Proc. Biol. Sci.* **287**, 20192794 (2020).
30. M. Tomasello, *Becoming Human: A Theory of Ontogeny* (Belknap Press, 2019).
31. K. Coe, C. T. Palmer, The words of our ancestors: Kinship, tradition, and moral codes. *World Cult.* **16**, 1–31 (2008).
32. E. G. M. Weitekamp, “The history of restorative justice” in *Restoring Juvenile Justice: Repairing the Harm of Youth Crime*, G. Bazemore, L. Walgave, Eds. (Criminal Justice Press, Monsey, NY, 1998), pp. 75–102.
33. J. Braithwaite, “The fundamentals of restorative justice” in *A Kind of Mending: Restorative Justice in the Pacific Islands*, S. Dinnen, Ed. (Pandanus Books, Canberra, Australia, 2003), pp. 35–44.
34. S. Dinnen, “Restorative justice in the Pacific Islands: An introduction” in *A Kind of Mending: Restorative Justice in the Pacific Islands*, S. Dinnen, Ed. (Pandanus Books, Canberra, Australia, 2003), pp. 1–34.
35. D. Sullivan, L. Tiff, Eds., *Handbook of Restorative Justice: A Global Perspective* (Routledge, 2007).
36. A. Kyakas, P. Wiessner, *From Inside the Women’s House: Enga Women’s Lives and Traditions* (Robert Brown, Brisbane, Australia, 1992).
37. M. Meggitt, *The Lineage System of the Mae Enga of New Guinea* (Barnes and Noble, New York, NY, 1965).
38. M. Meggitt, *Blood Is Their Argument: Warfare among the Mae Enga of the New Guinea Highlands* (Mayfield, Palo Alto, CA, 1977).
39. E. Waddell, *The Mound Builders: Agricultural Practices, Environment and Society in the Central Highlands of New Guinea* (University of Washington Press, 1972).
40. P. Wiessner, A. Tumu, *Historical Vines: Enga Networks of Exchange, Ritual and Warfare* (Smithsonian Institution Press, 1998).

41. D. Young, *Our Land Is Green and Black: Conflict Resolution in Enga* (Melanesian Institute Press, Goroka, Papua New Guinea, 2004).
42. P. Wiessner, "Alienating the inalienable: Marriage and money in a big-man society" in *The Scope of Anthropology: Maurice Godelier's Work in Context*, L. Dousset, S. Tcherkézoff, Eds. (Berghahn Books, 2012), pp. 67–86.
43. P. Wiessner, "Youths, elders and the wages of war in Enga Province, Papua New Guinea. State, society and governance in Melanesia," Discussion paper, Australian National University, Canberra, Australia (2010).
44. P. Wiessner, N. Pupu, Toward peace: Foreign arms and indigenous institutions in a Papua New Guinea society. *Science* **337**, 1651–1654 (2012).
45. M. Goddard, *Substantial Justice: An Anthropology of Village Courts in Papua New Guinea* (Berghahn Books, 2009).
46. R. J. Gordon, M. J. Meggitt, *Law and Order in the New Guinea Highlands: Encounters with Enga* (University Press of New England, 1985).
47. S. Larcom, *Legal Dissonance: The Interaction of Law and Customary Law in Papua New Guinea* (Berghahn Books, 2015).
48. B. Narakobi, Adoption of Western law in Papua New Guinea. *Melanesian Law J.* **5**, 52–69 (1977).
49. N. Pupu, P. Wiessner, "The challenges of village courts and Operation Mekim Save among the Enga of Papua New Guinea today: A view from the inside," Department of Pacific Affairs Discussion Paper, Australian National University, Canberra, AU (2018).
50. R. Scaglione, *Customary Law in Papua New Guinea: A Melanesian View, Monograph No. 2* (Law Reform Commission of Papua New Guinea, Port Moresby, Papua New Guinea, 1983).
51. L. Balafoutas, N. Nikiforakis, B. Rockenbach, Direct and indirect punishment among strangers in the field. *Proc. Natl. Acad. Sci. U.S.A.* **111**, 15924–15927 (2014).
52. P. Lemonnier, *Guerres et Festins: Paix, Echanges et Compétition dans les Highlands de Nouvelle-Guinée* (Les Editions de la MSH, 1990).
53. A. Strathern, P. Stewart, *Peace-Making and the Imagination: Papua New Guinea Perspectives* (University of Queensland Press, 2012).
54. D. Black, *The Social Structure of Right and Wrong* (Academic Press, 2014).
55. R. B. Lee, *The! Kung San: Men, Women and Work in a Foraging Society* (University Press Cambridge, 1979).
56. C. Turnbull, *The Mbuti Pygmies: An Ethnographic Survey* (American Museum of Natural History, 1965).
57. E. S. Burch, "Kotzebue Sound Eskimo" in *Handbook of North American Indians*, D. Damas Ed. (Smithsonian Institution Press, 1984), pp. 303–319.
58. D. P. Fry, *The Human Potential for Peace: An Anthropological Challenge to Assumptions about War and Violence* (Oxford University Press, 2006).
59. A. R. Radcliffe-Brown, *The Andaman Islanders* (New York Free Press of Glencoe, 1964).
60. R. Tonkinson, *Mardu Aborigines: Living the Dream in Australia's Desert* (Holt, Rinehart and Winston, 1991).
61. R. M. Berndt, C. H. Berndt, *The World of the First Australians* (Angus and Robertson, 1964).
62. A. R. Pilling, C. W. Hart, *The Tiwi of North Australia* (Holt, Rinehart and Winston, 1960).
63. K. N. Llewellyn, W. T. Ross, E. A. Hoebel, *The Cheyenne Way: Conflict and Case Law in Primitive Jurisprudence* (University of Oklahoma Press, 1941).
64. C. E. Lyon, Alternative methods for sentencing youthful offenders: Using traditional tribal methods as a model. *Ave Maria L. Rev.* **4**, 215–247 (2006).
65. K. F. Koch, *War and Peace in Jalemo: The Management of Conflict in Highland New Guinea* (Harvard University Press, 1974).
66. A. Ploeg, *Government in Wanggulam* (Martinus Nijhoff, 1969).
67. I. Amadiume, *Male Daughters, Female Husbands: Gender and Sex in an African Society* (Zed Books Ltd., 2015).
68. P. Bohannan, *Justice and Judgment among the Tiv* (Waveland Press, 1989).
69. E. Colson, Social control and vengeance in Plateau Tonga society. *Africa (Lond.)* **23**, 199–212 (1953).
70. T. Murithi, Practical peacemaking wisdom from Africa: Reflections on Ubuntu. *J. Pan Afr. Stud.* **1**, 25–34 (2006).
71. J. Osamba, Peace building and transformation from below: Indigenous approaches to conflict resolution and reconciliation among the pastoral societies in the borderlands of eastern Africa. *Afr. J. Conflict Resolut.* **2**, 22–28 (2006).
72. J. L. Gibbs Jr., The Kpelle moot: A therapeutic model for the informal settlement of disputes. *Africa (Lond.)* **33**, 1–11 (1963).
73. K. Coe, C. T. Palmer, K. El Shabazz, The resolution of conflict: Traditional African ancestors, kinship, and rituals of reconciliation. *Afr. Confl. Peacebuild. Rev.* **3**, 110–128 (2013).
74. A. Norenzayan, A. F. Shariff, The origin and evolution of religious prosociality. *Science* **322**, 58–62 (2008).
75. J. Van Baal, *Man's Quest for Partnership: The Anthropological Foundations of Ethics and Religion* (Van Gorcum Limited, 1981).
76. D. P. Fry, Life without war. *Science* **336**, 879–884 (2012).
77. R. Hames, Pacifying hunter-gatherers. *Hum. Nat.* **30**, 155–175 (2019).
78. P. Wiessner, Collective action for war and for peace a case study among the Enga of Papua New Guinea. *Curr. Anthropol.* **60**, 224–244 (2019).
79. M. Minow, *When Should Law Forgive?* (W. W. Norton & Company, 2019).
80. E. Daly, Between punitive and reconstructive justice: The gacaca courts in Rwanda. *N.Y.U.J. Int. Law Pol.* **34**, 355–396 (2001).
81. J. L. Gibson, The contributions of truth to reconciliation: Lessons from South Africa. *J. Conflict Resolut.* **50**, 409–432 (2006).
82. E. Cahn, C. Robbins, An offer they can't refuse: Racial disparity in juvenile justice and deliberate indifference meet alternatives that work. *UDC/D CSL Law Rev.* **13**, 71–113 (2010).
83. G. Maxwell, A. Morris, Youth justice in New Zealand: Restorative justice in practice? *J. Soc. Issues* **62**, 239–258 (2006).
84. J. J. Gabagambi, A Comparative Analysis of Restorative Justice Practices in Africa (2018). https://www.nyulawglobal.org/globalex/Restorative_Justice_Africa.html. Accessed 15 October 2018.
85. C. Rautenbach, Legal reform of traditional courts in South Africa: Exploring the links between Ubuntu, restorative justice and therapeutic jurisprudence. *J. Int. Comp. Law* **2**, 275–304 (2015).
86. D. Coker, Restorative justice, Navajo peacemaking and domestic violence. *Theor. Criminol.*, **10**, 67–85 (2006).
87. A. P. Melton, Indigenous justice systems and tribal society. *Judicature* **79**, 126–133 (1995).