
1-1-2012

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YANCEY ORR

Coconuts and the emergence of violence in Sulu

Beyond resource competition paradigms

This article is about the role coconut farming plays in violence among the Tausug of the southern Philippines.¹ I argue that the link between coconut harvesting and violence cannot be adequately explained by resource acquisition theories common to studies of violence within human-environment paradigms. Rather, the connection between coconuts and violence among the Tausug can better be explained by 1. the minimal labour required for growing coconuts, 2. the absence of 'nurturing' (Hastorf 1998) in tending coconut trees because they are relatively slow-growing, and 3. the lack of creative skills gained from coconut cultivation to participate as a member of the community in ways other than through violence. By these means, coconut harvest has altered the relationship between labour and culture to create Tausug individuals and groups prone to violence.

The article will first review examples from the social science literature linking violence and the environment. Theories from human behavioural ecology, political ecology, sociology and anthropology will be examined to show that they typically privilege resource competition, whether between individuals or groups, to explain how violence and the environment can be linked. I will then give a short history of the Tausug people in the Sulu Archipelago highlighting the prominent role violence has played in their culture. Finally, I will describe how coconuts are grown in Sulu and analyse their role in fostering violence among the Tausug.

¹ A research project in Sulu would not have been possible without the support of many people. I would like to especially acknowledge the Loong family of Jolo, Sulu, and the Yale Council on Southeast Asia Studies for the logistical support that made this possible. Earlier drafts benefited from the thoughtful comments of Michael Dove, Carolina Andreoli, Thomas Kiefer, Nancy Peluso, Joscelyn Jurich, Steve Lansing and Gary Gartenberg. Any shortcomings are mine alone.

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Environment and violence literature

Though there has been a proliferation of definitions for the term 'violence' within anthropology over the last 30 years, this article will use the word, both in its literature review and ethnographic example, according to its common usage and how it has traditionally been employed within ecological anthropology as 'the exercise of physical force so as to inflict injury on, or cause damage to, persons or property'.² The relation of violence to the environment has been the subject of inquiry of several disciplines within the social sciences. Since Julian Steward in the mid twentieth century, most studies linking the environment with cultural phenomena, such as violence, have done so with resource acquisition underpinning their work.³ One of the earliest and most influential works on the subject was Andrew Vayda's *Expansion and warfare among the swidden agriculturalists* (1969) that demonstrated how warfare was necessitated by the Maori population growth of the eighteenth century and the subsequent need to compete for diminishing resources. Along a similar line of reasoning, Roy Rappaport (1968) found that pig husbandry and warfare worked together to balance population and resources as components of a self-regulating system in his classic study of Papuan communities.

Over the past 15 years, studies have re-emerged using resource competition as the basis for understanding violence. Thomas Homer-Dixon, in *Environmental scarcities and violent conflict: Evidence from cases*, suggested that 'irregular' conflicts in the developing world were rooted in population growth, a decrease in the quality and quantity of renewable resources and an unequal distribution of resources. These conditions caused 'increased environmental scarcity' creating conflict (Homer-Dixon 1993:11-2). The field of political ecology, which places human-environment interaction into a larger global context, has challenged Homer-Dixon's theory (Peet and Watts 1996). A cornerstone work in political ecology's approach to conflict is Nancy Peluso and Michael Watts's edited volume (2001), *Violent environments* which argues that resource scarcity, as framed by Homer-Dixon, ignores other causal aspects of what appear to be resource-based conflicts. Their major thesis is that social structures rather than environmental conditions, such as political power, governmental control or communal memory, create and frame such 'environmental conflicts'. Political ecologies critiques of simplistic resource scarcity models focus on 'what one might call the forms of access and control over resources and their implications for environmental health and sustainable livelihoods' (Watts 2000:257). Such a view still privileges competition, albeit competition with heterogeneous groups of actors and discourses, as the locus of human-environment interactions as they pertain to violence.

² From the *Oxford English dictionary*, 2011 edition.

³ For accounts of this transition, see Orlove 1980; Yengoyan 1966.

Starting in the 1970s as an offshoot of sociobiology, human behavioral ecology (HBE) began to investigate the interaction between violence and human and ecological systems (Winterhalder and Smith 2000). Violence is positioned largely as an adaptive strategy to gain or control resources and mates (Flinn and Low 1986). Humans, like other primates, follow an evolutionary logic when they engage in intergroup conflict to acquire resources and thereby increase the likelihood of producing more offspring through attracting more reproductive partners and through providing more resources for their children (Wilson and Wrangham 2003). Though political ecology and HBE differ regarding the unit of analysis and theoretical lineage, both view the association of violence with the environment as an interaction stemming from competition over resources.

There have been a limited number of steps outside of the competition paradigm of environmental violence in the early and mid-twentieth century. The boldest comes from the economist Carleton Parker whose 'casual labourer theory' (1920) was developed while he was a deputized undercover United States federal agent investigating violence among migrant labourers in 1915. Parker showed that violence in these communities did not originate from emerging class consciousness or attempts to gain resources but from the social conditions of migrant communities whose seasonal work and isolation stifled humanizing social relations such as families or emotional releases provided by hobbies. His method that emphasized the psychological needs of individuals and communities, as well as his conclusions about why violence is common among migrant communities, deeply contrasted with his contemporaries who saw agricultural unrest as rooted in traction made by communist agitators. His approach is also a departure from current scholars who contend that violence in industrial agricultural communities is an indication of resource conflict or social justice.⁴

A half-step out of the competition paradigm was made within Marxian theory by Arthur Stinchcombe (1961) who used historical evidence and Marxist conjecture to categorize agricultural systems in terms of their revolutionary potential. Creating a scale encompassing agricultural production methods from plantations to small-holder farmers, Stinchcombe linked potential violence within agricultural systems to the degree to which workers would develop class consciousness and how violently they would participate in the Revolution. Stinchcombe's argument rested on the power that different agricultural systems would possibly have in engendering divergent forms of classes and consciousnesses. Though they would ultimately clash over access to resources, his study put environmental resources as a factor that shaped actors rather than as a passive entity competed over by actors.

⁴ For a contemporary and detailed critique of Parker, see Mitchell 1996.

These approaches to environmentally oriented studies of violence have been drawn from disparate branches of anthropology and the social sciences. Moreover, they also examine different forms of violence. Political ecology, Marxian agricultural studies and the environmental security literature all approach violent conflict over natural resources at the international or meta-historical level while HBE focuses on the scale of the individual or genetic group. Though they have different units of analysis (individual, community or world-system) and causal components of the interaction (evolutionary selection, class struggle or the logics of capital), they all, with the exception of Parker, frame environmental violence within some form of competition paradigm. This article does not claim that environmental violence is not associated with resource competition but seeks to give an example of other processes by which the environment and violence are coupled through shifting the analysis of environmental violence to how cultures of violence and violent acts emerge within groups and individuals by investigating the Tausug's relationship with coconuts, one of the most important cash crops in the island's economy.

Studies of Tausug violence

The Tausug live in the Sulu Archipelago whose islands dot the sea separating Mindanao in south Philippines from the Malaysian section of Borneo. The prevailing theory about the origins of the culturally and linguistically distinct Tausug in Sulu is that they were a group that migrated from the central Philippines and conquered the archipelago's indigenous ethnic groups⁵ in the twelfth century.⁶ An alternative theory postulates that the Samalan-speaking inhabitants of the island of Jolo traded frequently enough with more northern parts of the Philippines that they became the mercantile and military authority in Sulu. In addition, the influx of wives from these northern islands altered their language which eventually became distinct from the ethnic groups surrounding Jolo (Pallesen 1985). Contemporary Tausug subscribe to the view that they were martial invaders from the central Philippines, but all versions of their origins position the Tausug as the dominant ethnic group in the island chain for centuries. Aside from their longstanding hegemony within Sulu, the Tausug were prolific slave raiders for both external markets and internal agricultural labour in the eighteenth and nineteenth century (Tarling 1963:146-85; Warren 1985:238-51).

For centuries, the Tausug and others have extolled their fierceness as fighters and pirates (Jubair 1997; Oro 1923; Tanggol 1993; Warren 1975). Though

⁵ These include Samal, Bajao, Yakan and a small number of ethnic Chinese.

⁶ Warren 1975:2. The specifics of this process are still contested.

these accounts often took place within larger colonial and post-colonial discourses that may have affected their accuracy, over the centuries a persistent theme that emerges is one of violence concerning the Tausug. Their skills as pirates were dramatized in Joseph Conrad's first novel (1895), *Almayer's folly* in which the title character's aggressive wife was the daughter of a Tausug pirate captain and the narrative is peppered with other fierce characters from Sulu. The Tausug still boast that their ferociousness as fighters prompted the American Army to develop .45 calibre bullets because the existing .38 calibre would not stop a charging Tausug before he could reach and kill American officers (Jubair 1997). Currently there are three guerrilla or terrorist⁷ armies in Sulu: the Moro National Liberation Front, the Moro Independence Liberation Front and the Abu Sayyaf. In the past 15 years, the Abu Sayyaf – with Tausug members and supporters – has emerged as the most daring terrorist organization in Southeast Asia. They have conducted raids and bombings throughout insular Southeast Asia, bombed a Philippine Airlines flight and plotted to kill the Pope (BBC News, 30 December 2000; Frontline, June 2003). Their most recent attack was the kidnapping of Filipino television journalists in June 2008 who were later released (*The New York Times*, 6-8-2008). While other parts of the southern Philippines have become safer over the last 15 years, violence in Sulu has escalated. During my fieldwork in 2004, I was forced to leave Sulu because of bandits' kidnap attempts. Their violence is not only the result of their own willingness to commit such acts but it is also made possible by the constant banditry within Sulu that provides a 'white noise' in which to hide.

At the beginning of the twentieth century, the United States invaded Sulu shortly after it gained control over the Philippines at the end of the Spanish American War. This was followed by a period of peace when the United States imposed stricter control over feuding and took away the Tausug's guns (Kiefer 1969:14). During World War II, large numbers of guns entered the region and after the American military left, violence became more common in Sulu. Studies have suggested that this spike was caused by the unequal distribution of guns in the area rather than simply their presence because within a decade stability returned to Sulu (Kiefer 1969:16).

The most detailed ethnographic account of the Tausug comes from Thomas M. Kiefer's fieldwork among them in the 1970s (Figure 1). The anthropologist Kiefer spent three years studying the Tausug and he has the most experience living with them. War and terrorism made subsequent studies difficult. He summarized his experience when he said the Tausug were so violent that they had no word for violence (Kiefer 1972:52). Though acts termed violent do exist in their society, the Tausug have no conceptual category linking domestic abuse, rebellion, murder and physical altercation as different

⁷ The United States considers the MNLF and MILF as irregular armies and the Abu Sayyaf as a terrorist organization.

aspects of a broader sphere of social interaction where one intends and carries out bodily or psychological harm on another because violence is viewed as normal or desired behaviour. Whether their perspective caused the extensive acts of violence about which Kiefer wrote or the ubiquity of violence was the genesis of such views cannot easily be determined, nor is it the direct object of this study. Because of the extreme level of violence in Sulu, the Tausug provide a vivid backdrop to view some of the effects of human-environment interaction on violence.⁸ Kiefer and Tausug informants describe violence, and particularly what might be called feuding, as the natural result of certain types of interactions. Kiefer (1969:16) gives this list of offences that necessitate killing: 'Homicide, stealing of cattle and other property, offenses to the honor of women, non-payment of debts, personal misunderstandings and offenses to honor'. The types of offences which prompt culturally justified killings are not unusual in their breadth, but the energy and attention given to following these norms in Tausug society are extraordinary.

During three months of fieldwork with the Tausug in 2004, the most visible evidence of violence in the region was the number of guns carried during daily activities. Guns ranging from small revolvers to M16s and M60s are carried by many Tausug men. Guns are vastly more prevalent in interior communities or among the *tao gimba* (country people) of the island. Informants say coastal communities called the *tao higad* (a term that also suggests a higher level of civility) by all non-police and non-military personnel. Guns may still exist in these communities but are kept at home or hidden and not part of daily life. Aside from prohibitory laws, seaweed farming and fishing, the two main economic activities of coastal communities, make carrying guns difficult because saltwater corrodes the weapon.

Even the most casual visitor can see an obvious difference between coast and interior communities based on the number of firearms carried (Figure 2). The frequency of carrying guns corresponds to other aspects of Tausug society. According to the Office of the Governor, approximately 90 per cent of murders are committed in non-coastal communities though these communities contain the minority of the population of Sulu.⁹ These communities are also 'hold-outs' for the Abu Sayyaf, a kidnap-for-ransom terrorist group in Sulu. The Abu Sayyaf have changed islands of operation in south Philippines throughout their history because of constant attacks from the Philippine Army. They have moved back and forth between Basilan and Jolo depending on which area was less accessible to the Philippine Army. The latest battle

⁸ This does not mean that the Tausug context is applicable to other systems, only that violence and agricultural interaction could possibly be more apparent because of the extent to which violence exists in Tausug communities.

⁹ Government officials do not keep written records of murders in Sulu for fear of retaliations by offenders.

took place on Basilan on August 13, 2009 where 23 Philippine Army soldiers were killed (*The New York Times*, 13-8-2009).

The geographic distribution of violence, the concentration of which is in the interior of the island, follows agricultural patterns in Sulu. The period shortly after WWII also saw the introduction and expansion of cash crop coconut cultivation in the interior parts of the region. Cash cropping might have appeared especially attractive to many who wished to purchase guns as they could more easily convert their labour into weapons than under a barter system. As well as cash and guns, coconut farming also brought an increase in land disputes. Land tenure systems were originally based upon usufruct, though as in other parts of Southeast Asia, a new crop brought different tenure systems (Doolittle 2005:82). With dry rice and other traditional Tausug crops, the laborer could only cultivate and by extension own a certain area of land. However minimal labour and initial capital required for coconut farming greatly increased the potential land use of a farmer and created greater land disputes and confusion over landownership (Kiefer 1972:20). Other tensions came from the fact that rice cannot be planted near coconut trees after they have matured. Though detailed information about this time period is largely absent, it seems plausible that tensions would have developed under a system where only coconut farmers had access to cash and thus ammunition and guns. Such a dynamic may be the logic behind the prevalence of coconut farming on the island today. At the very least, it may have been possible that a connection between the crop and violence was developed during this period just after World War II when one had to either defend access to land or take over another's. However, land disputes are now rare and the property rights of coconut stands are no longer contested as they once were in the middle of the twentieth century.

Historically, violence among the Tausug also has a geographic component. Early in their history, they were largely agriculturalists in the interior of the islands of Sulu or *tao gimba*. Because some were also active pirates, they were well aware of the dangers of living near the ocean and avoided, for the most part, the coastal areas for permanent settlement. Not until the eighteenth and nineteenth centuries did the Tausug begin to permanently live closer to the coast, a position previously taken by the Samal, and to participate in large-scale maritime activities and slave raiding (Warren 1975:3). Historically, the interior of the island was subject to less violence than the coastal areas as they were less vulnerable to slave raiding.¹⁰ This differentiation has reversed over the past decades; now the coastal areas are considered safer and the interior region is regarded as violent. In light of the historical context in which the *gimba* was traditionally the less violent area, the question is why the reversal in violence in this area as compared to the coast.

¹⁰ Personal conversation with Thomas Kiefer, 2005.

The coconut 'life-process' in Sulu

I will now discuss coconuts, the major crop of the interior of the Sulu Archipelago, and the accompanying labour practices and the violence associated with its harvesters. Other than relative isolation from other hamlets, coconut farming has a number of distinctions from other agricultural and aquacultural farming methods on the island of Jolo. Coconut farming, unlike coffee (on a cooperative or plantation), cassava, and seaweed, does not require daily labour inputs in the form of pruning, picking or weeding.¹¹ A coconut farmer's annual labour required for picking and processing coconuts is under 700 hours while many coffee cooperative and rice farmers work 2,500 hours per year.¹² Most of the island is covered with mature coconut trees and because of the limited land on the island, coconut farmers do not plant additional trees and relatively few nurseries exist in the region. Coconuts are grown for *copra*, the inner part of the coconut that is converted into oil and used as an industrial additive. The shell of the coconut is turned into charcoal to be used for cooking and as coarse soap for bathing. The oil is exported and the charcoal is used locally.

Coconuts and leisure

Besides less stringent labour requirements compared to rice farming and fishing, coconut farmers also have a distinct praxis, or labour mode, compared to other activities in Sulu. This distinction partially falls under Friedrich Engels's division of labor. Engels (1934:308) categorized two main forms of labour activity: collection and production. Collection was a mode of labour where the individual did not plan but only 'collected' what nature provided; for Engels, it was a mode of labour shared with animals. When an individual planned and shaped what would not have been provided by nature without human hands, it was 'production'. The distinction made by Engels is more theoretical than actually applicable to situations because almost all collection systems incorporate some elements of production though they vary along a spectrum. Although no clear line can be made between production and collection systems, coconut farming in this instance, might better be described as 'harvesting' rather than farming and resembles a collection system more than other farming systems in Sulu.

Tim Ingold has taken up this subtle distinction between types of labour in several of his works. Ingold suggests that the process whereby crops are 'produced', according to Engels, is better described as 'grown', that is, the con-

¹¹ According to informants, coffee is the most labour intensive of the major crops grown in Sulu.

¹² From conversations with the Office of the Governor's economic staff, agricultural extension agents and farmers.

ditions allowing cultivation are created by the cultivator (Ingold 2000:78). The conditions required for the 'growth' of coconuts are so labour de-intensified compared to coffee or other crops that it might better be described as a collection rather than a production scheme even though both are grown. While it is not an absolute difference, it is a significant one, especially considering that growing coffee requires eight hours of labour six times a week in Sulu, while coconuts require two weeks of work every two months for harvesting. Neither coconuts nor coffee 'require', in absolute terms, these forms of labor, as the cultural and ecological context alters labour. The actual crop does not necessarily determine the actual size of the farm independent of cultural characteristics. For instance, a family's size can greatly affect the potential area of cultivation.

The human requirements for types of 'growth' create conditions that are, according to Ingold, 'not just ways of producing food [or income]; they are forms of life'.¹³ The 'form of life' present in coconut harvesting systems allows for acts of violence to a greater degree than other forms of agriculture in Sulu because at the most basic level, coconut harvesting leaves more time for non-economic activity. In this sense, it could be described as 'sustainable unemployment'. The greater the 'free time', the more time can be used to engage in various forms of Tausug social interaction. Feuding as described by Kiefer, pirating as chronicled by Warren and Conrad, and kidnapping as reported by *The New York Times* and *The Manila Times* are allowed by leisure time that Tausug men have. The key question is why Tausug men choose this behaviour during their free time rather than other behavior valued by the Tausug, such as parenting and craft production. As I will discuss later, coconut harvesting does not give a Tausug man the skills necessary for other forms of socially valued contribution.

Tausug men highly value courage, daring and acts of violence.¹⁴ Raids on outsiders such as the Samal or Chinese Filipinos are opportunities to show bravery. Moreover, if any slight against one's honour is perceived, violence is an expected response. Violence escalates as more men are involved in retribution killings and petty disputes 'snowball' into feuds and small wars. In this regard, the Tausug fit into what have been termed 'honour societies' (Nisbett 1996; Peristiany 1966). Given that the coconut harvester, who inherits such a system that values violence, has a greater freedom in determining his behaviour because he has less exacting labour requirements, it seems reasonable to conclude that he would choose the most culturally prestigious behaviour available. Such a perspective takes Julian Steward's possibilism (1941) from the cultural level to the individual unit of analysis in which the actor now has greater possibilities to seek different forms of behaviour or intensify pre-existing ones.

¹³ Ingold (1996:24) cited in Hastorf 1998:778. The significance between food and income cannot be addressed in this article due to space constraints.

¹⁴ Kiefer 1968, 1972; personal conversation with Thomas Kiefer, 2005.

In addition to the general increase in leisure time, coconuts affect Tausug men's possible behavior in a way quite specific to their culture. The Tausug male rite of passage called the *pangusual-usal*¹⁵ has been greatly affected by coconut production. Men in their late teenage years travel with their peers on a *pangusual-usal* which is a combination of adventure, romancing and fighting throughout the Sulu Archipelago. These roving bands of young men are known for their rowdy behaviour. Such adventures are encouraged by the Tausug because they view it as a critical method for building friendships and enemies, showing bravery and gaining wealth and knowledge. Traditionally the *pangusual-usal* ends when the young man married, or impregnated a woman which is typically followed by marriage, and if not, a feud. At this point, the man must take over the family rice or cassava fields so as to provide for his new family. According to the Tausug, the young man begins a life of responsibility when he uses his labour in the field. The importance of his role in feuding and acts of bravery is lessened and his participation in banditry outside of his direct community ends. Coconut harvesting has allowed the *pangusual-usal* to continue for decades in a man's life. Now a man can provide for his family with only a week a month of labour harvesting coconuts. Coconut harvesters who have families continue to adventure as members of armed bands. The use of motorboats provides these bands connections and access to other islands throughout the archipelago. Not only does a man extend his time in a *pangusual-usal* group, but the group now has time to become more complex and political. Informants have told me that the terrorist group, the Abu Sayyaf, emerged from a extended *pangusual-usal* network in the 1980s that came into contact with ideology and training from Afghan mujahidin when the CIA introduced one of its members to the anti-Soviet coalition.¹⁶ In this sense, Islamic terrorism in the region has grafted onto *pangusual-usal* groups that began operating as complex gangs after the controlling mechanisms of parenthood and labour scheduling were negated by coconut production systems.

Causality between coconut harvesting and the propensity for violence may appear unclear. Indeed, there is no absolute method or natural experiment in the context of Sulu for discerning whether coconut harvesting allows for or encourages violence among the Tausug or whether Tausug men choose coconut harvesting so that they can be more violent. However, by examining how men ultimately become one type of farmer or another, it is clear that an individual's choice of occupation, critical to the view that violent individuals choose coconut farming because it will allow them to continue to engage in violence, is of little importance to how many acquire their occupations in

¹⁵ Personal conversation with Thomas Kiefer, 2005.

¹⁶ There are conflicting stories about the origins of the Abu Sayyaf. Charles Frake and others have found evidence that it arose out of refugee communities.

Sulu. The men whom I interviewed about their life histories explained that they came into their present occupation not by their own choice and rarely by direct inheritance from their father. Almost no farmer explained that he had chosen his occupation. Instead access to land, tools, crops and networks that decide if someone were to become a farmer of coffee, abaca, seaweed or coconuts was the result of chance inheritance. Such inheritance did not always come directly through one's father but could be the product of affines or the random opening of land in the area with the death of a distant cousin or community member. Though it is not absolute proof that individuals especially committed to violence cannot choose to become coconut harvesters, the lack of individual agency in determining how one makes a living in Sulu and the accidents governing most inheritance – both processes that shape who has access to certain means of production – strongly contradict such a view.

Human-plant nurturing

I have so far given ways in which coconuts have *allowed* Tausug violence to intensify. I will now make my case for a way in which coconut production goes beyond allowing for cultural phenomena but actually inclines actors toward a certain form of individual and social disposition. Laura Rival and Christine Hastorf's analysis of the social effects of human-plant interaction might provide some insight into one perspective regarding the effects of labour on social phenomena. In her article 'The cultural life of early domestic plant use' in *Antiquity* (1998:773-82), Hastorf theorizes that relationships with certain plants heighten a cultural characteristic termed 'nurturing'. Nurturing is developed to a greater extent with plants that have a short life cycle because people can relate to their growth cycles.¹⁷ In this theory, longer life-cycle plants, such as coconut trees, can be tied to societies in which importance is given to territorial systems, and not systems of nurturing (Hastorf 1998:779). The difference between short and long life-cycle plants can be seen through two rubrics: 1. short life-cycle plants create a stronger connection between the individual and community, while a lesser relationship is developed with relatively 'carefree' long life-cycle plants, and 2. humans' interactions with short life-cycle plants can be characterized as nurturing, while long long-cycle plants facilitate territorialism. Nurturing plants is one way in which people learn how to nurture others and themselves.

Hastorf associates nurturing with women in society. She claims that the early stages of plant domestication were most likely conducted by women.¹⁸ Women learn to nurture plants as they had nurtured children. As part of their work, women would bring their children into the fields. Short life-cycle or fast-growing plants require intensive care that builds social relationships in

¹⁷ Rival (1993) cited in Hastorf 1998:777.

¹⁸ Hugh-Jones (1979), Kahn (1986) cited in Hastorf 1998:777.

the community. These 'feminine' qualities of caring for plants and children are absent among coconut harvesters in Sulu. In the following quote, Hastorf (1998:777) links how women care for plants to how they care for other people for the purpose of demonstrating how the process of caring for plants alters social relations:

[...] it is the constant involvement with children that brings children into the cultural world of kinship relations and society. It is this constant and recurring interactive social dynamic as much as the need for food that encouraged women to monitor, pick, weed, water, watch, trim, tend and replant plants. These regularly performed nurturing actions were culturally constituted as well as culturally constructive.

Apart from teaching long-term care, certain forms of agricultural practice strengthen social bonds. Groups of workers – not necessarily women only – carry out daily labor together on plantation and cooperative systems in Sulu. Cassava farmers and seaweed farmers also have work teams, or work within 'earshot' of one another. In contrast, coconut harvesters work in relative isolation and the work, though sporadic, is rigorous and does not lend itself to participation by women and children.

At the individual level, some plants provide a constant context in which one develops the ability to care about the world and oneself. Though this connection between nurturing and diminished violent tendencies might seem purely speculative, it is the premise of a number of prison programmes allowing inmates to take care of baby birds, train 'helper dogs', breed wasps and other pets as a form of rehabilitation.¹⁹ Gardening – programmes in which prisoners learn to nurture themselves and those around them by caring for plants – are becoming highly successful parts of rehabilitation programmes (Jiler 2006). Gardening programs are also used to teaching nurturing in substance abuse clinics. If Hastorf's claim that plants can create nurturing people and communities is accurate, then coconut farmers are at a disadvantage in learning nurturing through their labour and this might be one of the roots of the greater levels of violence in these areas. Not all human-environment interactions equally imbue nurturing. The social effects of such differences in labour can be seen when observing seaweed farmers who use the same artful hands and thoughtful minds to groom their children's hair at twilight that they use to clean their cultigen during the day. These gentle acts are contrasted with coarse body movements, developed while cleaving husks, that are now used by coconut harvesters to act out their stories of old feuds under the same dwindling sunlight.

¹⁹ Furst 2006. There are dozens of rehabilitations programmes that can be found at <http://www.coyotecomunications.com/dogs/prisondogs.html> which is one of many websites.

Skill and behaviour

Though Rival and Hastorf do not make the following claim, I believe that faster growing plants, more so than long life-cycle plants, encourage a level of embodied skill. Another possible concept that might be applicable to the effect of material labour on behaviour is E.P. Thompson's notion (1967) of 'work-discipline'. Though Thompson positions such discipline within the history of capitalist development, certain forms of nature could be seen as disciplining individuals and communities regardless of their connection to larger economic patterns. Though work-discipline has a different emphasis than nurturing as a mode of existence, it can possibly have a similar effect on society through individual behaviour. I will instead use 'skill' to describe the effect of ordered labour as it is less politically charged and does not carry the connotations of a capitalist-oriented theory.

I contend that plants that require more care also demand greater skill from the cultivator. More fragile plants, such as coffee trees as compared to coconut trees, require more delicate movements with one's hands and a more careful eye in determining potential problems and needs of the plant. The tasks of pruning, weeding and other necessary tasks are skills embedded in muscle memory and other cognitive and sensory-perceptual functions sometimes described as *metis* (Scott 1998:309-41) or *techniques* (Mauss 1936). Coconut harvesting requires considerably less nuanced labour and embedded skill.

The differences in skills that are developed through divergent forms of cultivation became evident during my research experience in Jolo, the largest island in Sulu. During three months in Sulu in 2004, I was present at a number of preparations for festivals which could provide anecdotal evidence of how coconut harvesting might be linked to certain forms of behaviour. In the small town near Parang, Sulu, groups of coconut farmers and coffee growers would spend a leisure-filled afternoon in remarkably different ways. The setting was a public area near a coffee cooperative inhabited by both coffee farmers and coconut harvesters who utilized extra housing from a government building project.

Typically there were around 30 men in the vicinity of the village centre, who comprised two groups. The social space was dominated by the process of building a grass-roofed rectangular hut (Figure 3). It was said that the hut was being built for a small festival which would require more covered space than the village could currently provide. However, the local *datu* (chief), a young man 25 years of age, who lived in the village and was the vice-mayor of the neighbouring large town of Parang, explained that the extra room was not needed but it was an activity the farmers enjoyed and so whenever the opportunity presented itself, they would build a hut. The landscape of the town, marked with dozens of unused huts of different shapes, gave further evidence to this assertion.

The men divided into two groups: one group building the hut and the other not. Though the partition was not exact, and there would be moments when individuals crossed over to another group, it was mostly coffee farmers who built the hut and coconut harvesters who did not participate in this activity but played cards, cleaned weapons, or listened to music (Figure 4). There could be a number of reasons for this division and I asked the *datu* about this. At first, I thought that perhaps the materials were provided by the coconut harvesters and the labour was to be carried out by the coffee farmers. He said that this was not the case. Neither did social class play a role in who participated and who did not. The participants or observers did not see the labour as degrading, but rather it was festive in spirit. On average, the coconut farmers present were a few years younger than the coffee farmers, perhaps by five years, but there were no truly significant generational distinctions between the groups whose ages ranged from approximately 30 to 40. The main determining factor about who participated and who did not came down to who had the skills to help and who lacked them. After having participated in building a hut myself, it was clear that it took a tremendous amount of planning, foresight, and embodied skill to put together a complicated hut, especially considering that there were no nails, hammers, or saws. Each bamboo piece had to be placed in a notch made in another piece. These notches ranged in shape and size and were made by carefully carving out a hole in bamboo with a small knife and often a stick to strike the hilt. The hand movements of the coffee farmers used to carry out the project were similar to those used in the field in pruning, cutting, weeding, or nurturing their cultigens. It was extremely detailed work only possible to be carried out by trained and dexterous hands. The mental and physical discipline developed through participation in the complex regimens of fast-growing coffee cultivation was used to build this hut. Additionally the lifting, carrying, placing, and manipulating of bamboo had to be done by an impromptu and reflexive organization of labour. A tacit communication existed between participants, one that presumably grew from communication in the fields whether task-oriented or not, as described by Hastorf.

I suggest the following reasons keeping the coconut farmer from participating in the building of the hut.²⁰ It would be difficult, even impossible, for the coconut farmer to constructively participate as he lacks many of the skills necessary to build such a hut (I could help because I had shoes and thus could apply more force in a strike with my foot than those wearing sandals). 'Productive' activity itself is antithetical to the nature and ethos of the coconut harvester because he has not been trained to 'grow' or shape the outside world to the extent that cultivators involved with faster growing cultivars have.

²⁰ There were no ritual or ceremonial rules about who could build huts or other prescriptions for who could participate and how.

With a glass ceiling for his ability to creatively engage the environment and society, he may embrace an 'oppositional culture' antithetical to the culture he cannot join (Ogbu 1978). This condition might possibly be related to violence. Productivity and creativity have long been linked to a 'stable' psyche.²¹

During numerous hut construction involving an average of 20 active participants or individuals in the vicinity, coconut harvesters typically sat about 10 yards away. They spent the day playing card games, cleaning their weapons, and talking. Though I only understood some of the Tausug I heard, the conversation was about guns as the frequent use of terms 'Colt 45', 'M-16', 'Armolite', 'M-60', and 'Magnum' evidenced. An informant told me jokingly that 'once every six nights, my friends will give the conversation about guns a rest to spend the evening talking about women'.²² 'Gun play' became more exaggerated during these times. Guns were even carried to use the restroom, a trip of a few yards not fraught with danger. Cleaning, examination, and comparison became even more intense than the typical evening gatherings. Movements displaying excitement, disappointment, or other actions and vocalizations associated with card playing also became louder and more extreme as the day went on. Games of chance such as card or dice games and exaggerated movements involving hand waving, spitting, belching, waving guns in the air, and scratching of body parts took place at great frequency. In these ways, they shared pastimes similar to what are believed to be more violent subgroups of other societies, such as the American cowboy/gunfighter or the inner-city gang member. In the context of the farmers' creative acts, the coconut harvesters' embrace of violence or allusions to violence – the gun does not create but destroys – is suggestive of a negative identity of a group alienated from skill and the power to create.

The most visually demonstrative aspect of this differentiation is seen in comportment fetishes. Coffee cultivators and other fast growth cultivators carry *bolo* (long knives) and small knives used for cutting brush, pruning plants or building huts. These were also once used in warfare among the Tausug and are still seen as signs of virility and masculinity. The coconut farmer carries a gun, typically a machine gun. This is a weapon used for violence and has no direct value in economic production; hunting is not common in Sulu because birds are not eaten and game can no longer be found on the island of Jolo. The gun can be used to protect one's self, family, or property. It is quite possible that the coconut harvester carries a gun because he is in more danger than other farmers due to his participation in a subculture of violence in which he has more enemies from feuding. Regardless, the coconut farmer does not visually manifest a strong relationship to his economic activity (or

²¹ Contemporary anthropology might term such a process as 'disciplining' (Foucault).

²² This is an obvious exaggeration, but points to the fact that many Tausug know that they are obsessed by guns.

non-activity). He does not carry a knife as a fisherman would or a machete as a farmer does. There also seems to be a disconnection between his signalling to others through his gun and his economic activity because there is no relationship between the two unless he actively kidnaps for ransom. Nor does he carry a reference to his 'skill' as the fast growth cultivator does with his *bolo*; 'skills' before the arrival of coconuts and guns, were once combined in one type of tool, a knife or longer blade, used for violence against people and the cultivation of rice. Not only is the tool the same but warriors and cultivators are the same people.

Skill itself is a problematic concept and a full definition is beyond the scope of this article. It has long been debated from Socrates to Mauss²³ and remains a topic of inquiry and debate among anthropologists. However the following example will be given with the hope of operationally defining skill to suit the current usage.²⁴ One might suggest that coconut farmers have skill. Certainly they do, but the degree to which they are skilled or disciplined is different from fast growth cultivators. As far as a knowledge base is concerned, coconut farmers have to be able to knock coconuts from trees when necessary, and have the coconuts transported to the refinery on the island. Little processing is done on site, though some still make their own charcoal out of coconuts. The embedded skills are not at the same level of intricacy of other farmers. Few skilled motions are made with the hand and perceptual nuances are not as important in caring for coconut trees. Evidence for this is the pride they have in their guns and not in their economic activity or skill.

One might also suggest that though coconut harvesters do not have the same association with their tools, as do other farmers, they still have skill in handling their weapons or other refined skills. Though they do not grow crops with guns, they might have skills and thus a potential for a creative capacity to engage with their surroundings. I found this not necessarily to be the case. Guns require ammunition with which to practise. Ammunition is expensive and thus practice is rare.²⁵ On one 'idle' day, a number of people had a coconut shooting contest, a rare event because of the cost of ammunition. Each of the 10 or so contestants shot five rounds equalling a total number of around 50 bullets used. Though not a demanding task, most could not come close to hitting coconuts with any consistency.²⁶

²³ Mauss's classic essay, 'The techniques of the body', has been a starting point for many regarding embodiment.

²⁴ For a thorough history of skill and current studies, see Ingold 2000.

²⁵ The cost of ammunition depends on the calibre. The lowest price is for a 20 mm handgun for which each bullet costs roughly US\$0.50. Other munitions can be as high as one US\$1.50. Some carry explosive shells that can be shot out of the bottom of their guns. These shells cost approximately US\$10.00.

²⁶ Kiefer also found that the Tausug were poor marksmen (personal conversation with Thomas Kiefer, 2005).

Conclusion

In this article I have tried to show that certain agricultural changes have affected violence among the Tausug of Sulu. The connection between coconuts and violence is not derived from increased competition as current threads of political ecology, HBE and other anthropologies suggest, but rather through the interaction of labour and culture largely independent of competition. I have argued that coconut harvesting has expanded the amount of time a Tausug can spend engaged in violence, that coconut harvesting has failed to imbue him with a propensity for nurturing and has given him few constructive methods for participating in society. This link between violence and agriculture is not simply more nuanced than what is assumed by resource competition paradigms but is outside of the paradigm itself. At this point, I would also like to clearly delineate my work from a rote, material, deterministic perspective. This article does not argue that there is a universal one-to-one relationship between the cultivation of coconuts and violence. Rather, Tausug culture and the specific production methods used to collect coconuts in Sulu have interacted through a combination of existing values, the development of individual embodied skills and the absence of training in nurturing, to produce certain Tausug communities that are more violent than others.

At its most localized level, I hope this article sheds light on the violence in Sulu that has existed for several decades. Though the confines of this article do not permit a thorough examination of an outsider's view of violence in Sulu and Southeast Asia in general, I would like to address how this study might be germane to this topic. Research into violence in Sulu has focused on the surface levels of insurgency or terrorism. Such a view can be found on the US Pacific Command's website which gives a history and rationale behind the Abu Sayyaf as a group grounded in what could be called a 'rational choice' economic logic in which banditry and kidnap pay better than other activities.²⁷ Other studies of terrorism in Sulu, such as Abuza's 'Tentacles of terror: Al Qaeda's Southeast Asian network' (2002), map personnel and ideological connections between violence in the southern Philippines and global terrorist organizations. Certainly these connections and violent ideologies are part of the story but the social and labour landscapes upon which such phenomena exist are often overlooked. Along such ideological lines is Charles Frake's penetrating article 'Abu Sayyaf: Displays of violence and the proliferation of contested identities among Philippine Muslims', published in *American Anthropologist* (1998) which investigates the 'identity' classifications that are part of the Abu Sayyaf and Sulu culture by focusing largely on epiphenomenal cultural levels of the conflict. Such studies do not attend to the everyday material life through which identity is constructed and behaviours are chosen by individuals.

²⁷ See: <http://www.pacom.mil/piupdates/abusayyafhist.html>

At its broadest, this article attempts to demonstrate that environmental conditions affect violence, individuals, communities and cultures beyond the competition for resources. I have tried to sketch another paradigm based on the transformative ability of labour to change a subject; how certain characteristics of the environment (slow vs. fast growing plants) alter the cultivator; the importance of scheduling and leisure time in allowing for cultural phenomena; and the efficacy of culture for how resources can shape communities. This approach is an attempt to partially realize a human ecology beyond political ecology and HBE and towards what Andrew Vayda and Bradley Walters (1999, 2009) term 'event ecology'. Event ecology privileges the idiosyncrasies of human-environmental interactions over the ideological commitments in much of social ecology.²⁸ Approaching events in human ecology without theoretical preferences, which Vayda and Walters hold as ideal, seems implausible as 'intuitions without concepts are blind' (Kant 1929:93) and building upon pre-existing research is how fields advance. Rather than arguing against theory per se, this study asks for a broadening of theory at the researcher's disposal when examining environmental violence and it tries to show how such a study might proceed.

²⁸ Vayda and Walters were concerned about the ubiquity of Marxist and post-Marxist analysis in political ecology to the detriment of the role the environment actually played in the human-environment interaction. Their particular view does not need to be shared to appreciate the need for a more diverse human ecology.

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