COLONIZATION AND FRONTIER VIOLENCE IN THE CENTRAL AMAZON

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Sidelines

Most anthropologists are best known for one or maybe two lines of research in which they invest a lifetime of work. At different points of their career, however, interesting sidelines may be explored that may be only marginally related to their main research interests. For one's colleagues these sidelines appear to be 'side tracks' or 'distractions' in the cumulative advance of expertise in one's area of speciality, and as such represent precious research time squandered. Even for the actual anthropologist involved, a new line of research may have no long-term purpose. In a moment of boredom with one's usual line of work, something different is undertaken, if only for variety's sake. Or maybe the sideline is seized upon opportunistically. In our profession we are expected to do research; the subject is there and no one has yet studied it, so we do so.

The present study on frontier violence in the Central Amazon is inspired by two such lesser-known facets of Peter Rivière's work: his research on cattle ranchers in what was once the forgotten frontier of Roraima (1972); and his archival research on the boundary settlement between Great Britain and Brazil along the

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Guyana border (1995). As an anthropologist who normally studies environment perception in north-east and south-east Brazil, I freely admit to Amazonian specialists that this study looks suspiciously like an opportunist sideline. And to make matters worse, my work is part of a larger Brazilian–French research project which is operating at the regional level—a scale of analysis usually thought of as 'background' by most anthropologists.

However, the present study actually builds on previous studies of honour, patronage, and violence among ranchers of the Sertão of north-east Brazil, in which I explored research methods which reached up from the local to the regional level and beyond (Hoefle 1983; Bicalho and Hoefle 1990, 1999). Based on this prior experience, I developed archival research methods for the Amazon which generate quantitative and qualitative information in police and judiciary registries, one of the most challenging areas from which to glean reliable information.

The quality and even availability of data from legal registries in Brazil often depend almost exclusively on the whims of the local official. Judges in the interior of the Amazon are young, inexperienced outsiders who are continually being shifted from place to place until they are eventually promoted to a coveted post in the state capital. The police keep records only from the last few years, and police chiefs are also transferred frequently. Serious crimes of the sort I am analysing here (murder, rape, and drug-trafficking) have to pass through the courts. On their way there, all cases receive a protocol in the legal registry first so that long-term information is available only from this source. The best information is obtained in the registry when an official has been in office for a number of decades, is well organised, and is willing to talk about the cases. Not all officials are so inclined, and even the most co-operative of them can be stymied by the disorganization of previous officials or the destruction of documents during moments of popular insurrection which have the express intention of 'burning the files', as occurred in Humaitá in 1991 and Novo Aripuanã in 1992.

However, with great patience, and on occasion resigning oneself to the lack of information for particular counties, regional patterns can be discerned. The registries and interviews with police and judicial officials in the Amazon revealed not only shocking levels of violence but also graphic details that cut to the bone. Photographs of mutilated and charred corpses of Amerindians, or coming across the name of an old Ye'cuana acquaintance and his son who were murdered by gold prospectors, put the issue of frontier violence on a personal basis. The statistical trends analysed here bleed.

The Beginning of the End?

We are bombarded daily by warnings that the Amazonian rainforest and Amerindian cultures will be completely destroyed by early in the twenty-first century, repeating the violent US frontier experience of near species extinctions, environmental degradation, violence, genocide, and social depravity (cf. Butzer 1994, Cronin 1983, Crosby 1986, F. Turner 1983, Whitney 1994). The Central Amazon lies at the heart of the remaining continuous block of rainforest and has thus become the principal battleground between developmental, environmental, and populist interest groups over the future of the region.

The Central Amazon is still largely intact, but the frontier is expanding at various points, northward from Rondônia and Mato Grosso across the Transamazonian Highway (the BR-232) between Apuí and Humaitá, westward from Pará along the same highway, and northward from Manaus and southward from Boa Vista along the BR-174, BR-170 and BR-210. Criss-crossing the Central Amazon, these expanding fronts have the potential to break up the region into separate fragments which could then be transformed more rapidly into agrarian and urban landscapes. These expansion fronts reflect a new emphasis in national planning with the creation of a north-south axis of regional development along road and river transport systems from southern Amazonas state to the Brazilian border with Guyana and Venezuela. This axis in its turn ties into existing and new road systems being built in the Guyanas, which will connect the East and Central Amazon to the Caribbean and permit the penetration of colonists and transnational lumber companies into the interior of these countries, as well as the Brazilian Amazon (Colchester 1997, Cole 1995). In Brazil, the new axis intersects the older east-west axis along the Transamazonian Highway at the city of Humaitá, so it would seem that the South American rainforest has its days numbered, or as Brazilians would say, we are already into overtime. Without the rainforest, Amerindian cultures would have about as much chance of survival as did the Plains Native North Americans without the prairie grass and the bison.

In response to this point of view, I would say yes and no. The expansion and consolidation of frontiers is not the linear temporal and spatial process that biocentric environmentalists would have it be (cf. Merchant 1992, Pepper 1996). Many forested areas in Africa, Asia, and Latin America which are thought to be 'natural environments' in a process of degradation have been used sustainably by humans over the centuries, and some were actually created artificially by mankind (cf. Fairhead and Leach 1996, Headland 1997, Posey 1984). Deforestation can be reversed, and woodland regeneration is common in post-industrial countries. By 1920 nearly all the native forests of the United States had been eliminated, but today approximately 31 per cent of the country is covered by planted and regenerated forests (Cole 1995, US Geological Survey 1993, Williams 1994). Even environmentally devastated European Russia has large tracts of land which have reverted back to forest (Milanova 1998). Mather and Needle (1998) go so far as to

TABLE 1. Degree of Deforestation of the Brazilian Amazon in 1991

State	%	State	%
Maranhão	68.8	Acre	7.0
Tocantins	39.7	Roraima	2.6
Mato Grosso	16.4	Amazonas	1.6
Rondônia	16.1	Amapá	1.5
Pará	13.0	Total Amazon	10.5

Source: Fearnside, cited in Cole 1995.

postulate a general theory of forest regeneration according to stage of development.

However, before we get carried away with these trends, it should be pointed out that native fauna returns much more slowly and irregularly than forest cover, and that native cultures, our stock in trade, do not return at all. By the time that native peoples start to recover demographically, they constitute only small ethnic groups representing one or two per cent of their respective national populations and are usually confined to arctic zones, deserts, mountain regions, swamps, or other such marginal areas (Butzer 1994, Fuguitt *et al.* 1989, Livi-Bacci 1994).

Although as a recently industrialised country Brazil is in the worst phase of environmental devastation and ethnic marginalization, the process is highly irregular nationwide. The deforestation of the Atlantic Forest is an older process in the industrial heartland of Brazil and only 8 per cent of the original forest cover remains today, but as post-industrial landscapes start to emerge there new agricultural systems are bringing about forest regeneration in highland areas (Bicalho 1998, Hoefle 1998). In the last fifteen years, about one half of the area of the Cerrado has been converted into farm land for soybean export cropping, with extreme soil erosion creating the dust bowl conditions typical of the initial consolidation of frontiers (cf. Simmons 1989). Similarly, since the 1970s an arc around the eastern and southern flanks of the Amazon has experienced large-scale colonization and deforestation, where the risk of forest fires is high, and violent social confrontation takes place between a host of different social actors (Becker 1990, Cole 1995, Gohn 1997, Leroy 1991, Medeiros 1989; cf. Table 1).

However, political and economic circumstances in Brazil have changed radically since the 1970s and 1980s, when the arc around the eastern and southern flanks of the Amazon suffered large-scale state-orchestrated colonization. Perhaps a better analogy for the Amazon in the 1990s might be two steps forward in the process of frontier consolidation accompanied by one step backward, or alternative.

tively, by the analogy that we are into the second half, which may still prove to be less disastrous than the first half was.

After the end of the military regime in 1985, and during the prolonged economic recession and political turmoil which followed, state-planned colonization schemes and large subsidized projects diminished substantially, as did spontaneous migration (Martine 1990). While Rondônia and Pará were the object of numerous 'agrarian reform' colonization projects undertaken by INCRA (Instituto Nacional de Colonização e de Reforma Agrária), most of these really only legalized squatting after the fact and were not like the integrated development projects of the 1970s (Becker 1985, Ianni 1979, Moran 1981).

This policy has continued on a more limited scale into the Central Amazon in an attempt to consolidate failed small farmer and agribusiness projects between Apuí and Humaitá and around the Greater Manuas area. As many of the large projects in the latter area were often merely façades for enriching politicians and important businessmen, many today have been forfeited or only consist of dilapidated official signs from a long-gone era of overly generous subsidies and are in the process of being overrun by regenerating forests. INCRA has been more assertive along the BR-174 and BR-230 between Manaus and Boa Vista, but projects involve fewer families and less financial assistance than in the heyday of statedirected colonization. Only 440 families were settled around the Caracaraí area in Roraima during the 1990s, and financial support consisted only of about US\$2000 per family over a two-year period. Other than opening unpaved feeder roads cofunded by county governments, little else has been provided in the way of infrastructure.

When modest economic growth returned after 1994, the power relations between local, regional, and international players in Amazonian geopolitics had changed substantially. If previously the Amazon was seen as a source of cheap food produced by frontier peasants (Oliveira 1975, Sá 1975), as an escape valve for agrarian problems in regions of old-settlement (Barx 1988, Forman 1975, Foweraker 1981, Velho 1972), or as a source of speculative profits (Graziano da Silva 1981, Ianni 1979), by the 1990s it was increasingly being perceived as a reservoir of bio-technological raw materials and knowledge (Albagli 1998, Becker 1997, Plotkin 1993). Following a world-wide pattern (cf. Friedmann 1992, Günes-Ayata 1994, Tegegn 1997), alongside the older, top-down, centre-periphery political hierarchy, local actors who were formerly powerless, such as Amerindians, rubber-tappers and frontier peasants, have entered into political alliances and patronage networks with national and transnational environmental, labour, and religious NGOs, which have pressured the Brazilian state to redraw the regional and local political map of the Amazon (Bebbington and Thiele 1993, Figueiredo 1998, Pace 1998).

We may have reservations about the boundaries of the ecological and Amerindian reserves, but they are often the only thing between the forest and scorchedearth farming and mining practices. Similarly, environmental legislation is starting to be enforced, particularly with regard to deforestation. Forest Rangers of IBAMA (Instituto Brasileiro do Meio Ambiente) in the Central Amazon are not all as corrupt as they are in the East Amazon, where graft permitted large-scale deforestation. Logging now involves increased administrative expense, and conservation plans must be drawn up by forestry engineers, which has reduced small-scale logging. Large operators based in Itacoatiara, like the transnational Carolina, are being forced to shift progressively from buying logs from others to thirty-year sustainable forestry projects. Large mining firms such as Vale do Rio Doce also execute forest recovery projects today when they abandon an area.

The neo-liberal turn of the Brazilian state has also contributed to the steps backward in the process of frontier expansion. The military governments mobilized enormous funds to build and modernize roads in Brazil, giving particular attention to the Amazon for geopolitical reasons of national security. Since 1985, civilian governments have built few new roads and have not been preserving those that do exist. This is particularly true for the Amazon, where even paved roads have fallen into disuse because of a lack of repair. The BR-319, which used to connect Porto Velho (Rondônia) with Manaus (Amazonas) along the Rio da Madeira valley, is a case in point. By 1988 the asphalt had become so damaged and so many wooden bridges had collapsed that the road was closed to traffic from Humaitá north, thus breaking a key link in the north—south axis. Traffic was diverted to barges along the Madeira River, and the Manuas industrial zone was negatively affected. Colonization along the highway was reversed, with about 30 per cent of settlers abandoning their farms.

Long stretches of the Transamazonian Highway have also been interrupted, and many parts of what still exists can be used only during the dry season. The controversial Perimetral Norte West (the BR-210) from Caracaraí into the Yanomamo Reserve is a shadow of what I saw in 1975 when it was new. The only new road system to be built consists of the BR-174 North, the BR-170 North, and the BR-210 East, which connect Manaus to Venezuela via Boa Vista. The system was given priority in national road-building because it links Brazil to its northern neighbours and the Caribbean. There has been the usual surge of colonization and deforestation along these highways, and recently the BR-174 and BR-210 have been completely asphalted, their wooden bridges being replaced by permanent concrete ones. However, it remains to be seen if these roads will be maintained in the light of neo-liberal road policy and the current financial crisis of the Brazilian state.

Carnage

The steps forward and backward in frontier consolidation directly interfere with rates of violence. Violence is worst where urban growth, colonization along the highways, and the introduction of new economic activities are greatest. When colonization decreases, so does per capita violence.

The largest cities present high rates of violence. During the 1990s, Manaus had on average 35 homicides per 100,000 inhabitants annually, Boa Vista 32 and Itacoatiara 17. The Manaus rate is well below the rate of 56 per 100,000 for Rio de Janeiro and 72 per 100,000 for São Paulo, the two most violent metropolitan areas in Brazil. However, the homicide rates in the urban areas of the Central Amazon are still quite high in comparison with other large cities of the world that are noted for being violent, such as New York and Los Angeles, which have rates of 7 and 11 homicides per 100,000 inhabitants respectively.

The presence of important highways can make counties with small frontier cities, such as Humaitá (urban population of 23,944 in 2000), Presidente Figueiredo (6,333), and Caracaraí (8,215) proportionately more violent. Violence started to rise in these counties during the road-building phase, peaked at over 50, 104, and 101 homicides per 100,000 respectively when the highways were asphalted, and in the case of Humaitá dropped again when the BR-319 fell into disuse.

At the other extreme are the sleepy riverine communities of Borba, Manicoré, and Nova Aripuanã, located in the Madeira Valley. These counties have not yet suffered intense colonization of the type which creates violence over land-title disputes and envy in commercial farming. Consequently, homicide rates rarely pass 10 per year along the Madeira, and when a murder does occur, it is due to drunken brawls in bars or ambushes calculated to kill someone for a previous affront. Violence was once worse in Manicoré county. When the BR-319 was still in service before 1988, the murder rate was twice as high, and 35 per cent of murders involved outsiders killing outsiders or attacking settlers along the highway. In one case a whole family of settlers was murdered during a robbery on their farm.

The presence of gold prospectors also causes a surge in violence in certain years, when they are particularly more active in one area than in others. Humaitá suffered a surge in violence between 1981 and 1988, when prospectors were active locally, as did Borba and Manicoré from 1981 to 1985. Similarly, in Caracaraí prospectors were active between 1984 and 1987 and again in the early 1990s. About half the homicides reported during the 1980s involved conflicts with Amerindians. As MacMillan argues (1995: 48), there were probably many more murders than those reported because they occurred in remote areas and because of Yanomamö name taboos.

Prospectors are usually either single men or married men who have left their wives behind at home. They end up drinking too much and conspicuously consuming luxury goods when they manage to find gold. This latter habit causes the envy of the unlucky prospectors and non-prospectors, which can result in bar-room

brawls, ambushes, or even murder relating to theft of their gold. One assemblyman from Apuí entered into a process of capital accumulation and upward social mobility based on the original murder and theft of gold from a prospector who was in his bar bragging about having hit it rich. The habit of ostentatiousness can even interfere with keeping all the gold from a strike for oneself. When a prospector finds gold along a river bank, his celebrating the fact attracts the attention of other barges, so that soon there are dozens of barges working the vein of gold that has been discovered. Finally, if the lucky prospector lives to spend his windfall, he goes to town and squanders his money in a couple of weeks, returning to do more prospecting when he has nothing left.

In the Central Amazon, drug-trafficking is not a major cause of violence, and prospectors are rarely arrested for involvement in this trade, which is the opposite of what occurs in border states like Rondônia and Acre (cf. Araujo 1998, Geffray 1998). Much like the soybean shipments in the Madeira grain barges, cocaine passes by directly without affecting the local population. Drug arrests are rare. In Borba and Manicoré, arrests occurred only during the sixth and fourth years of a twenty-year period respectively. Consequently, in the years when drug arrests took place, they only constituted an arrest rate of from 3 to 11 per 100,000 inhabitants in the Madeira River counties that were examined. Of the murders committed in the latter, only one was related to trafficking, and it involved a stranger who was travelling along the BR-319.

In Roraima, drug-trafficking involves cannabis coming in from Guyana, where it is grown in the Kanuku Mountains. Of the volume of drugs apprehended in the state in 1997, 86 per cent was cannabis and the rest cocaine. The trade is basically for the Boa Vista and the Manuas markets, so that volume is low and there are few arrests in the border counties of Roraima. Only four arrests were made in Pacaraima and two in Bonfim between 1993 and 1997, with no acts of violence being reported. The cannabis trade is so open in Guyana and the border so porous that Brazilians who cross over to Letham to buy duty-free goods are routinely offered cannabis for sale. This occurred with our research group, and even the police chief of Bonfim was offered cannabis when he was in Letham.

Unlike the industrial cities of Brazil, rape is rare in the Central Amazon. When rape occurs it is roundly condemned, but what perplexes people is why it should occur at all. Indeed, sexually related violence is nearly absent, and people of all classes attribute this to the lax code of honour in the region. This is curious because a large proportion of past and present immigrants are from the north-east, where sexual mores emphasizing female virginity are still practised (Bicalho and Hoefle 1999; Hoefle 1983). Immigrants remember how it was in the north-east, or their parents tell them stories of how it was, and this code of sexual behaviour is sharply contrasted with local mores. When I enquired into the possible connection between sexual honour and violence, the usual response was that the exact oppo-

site occurs: poor parents are said to encourage their daughters to sell themselves in order to make money for the family.

Immigrants from southern Brazil, collectively called Gauchos, on the other hand, are considered to be hot-blooded and violently contest affronts in this area of conduct, as well as any other scratch to their pride. One court officer half jokingly attributed this difference to diet: Gauchos eat relatively large quantities of meat, while local people eat mainly fish. This alimentary determinism apart, class position has a good deal to do with these different attitudes. Gauchos are commercial farmers and ranchers who arrive with capital, while northeasterners and riverine local people are poor fishers and subsistence farmers. Within the latter, northeasterners who are recent immigrants from Maranhão are thought to be more violent than local people, as they have previous experience of land conflicts in their native state and in Pará. This difference in behaviour according to origin was used by the police chief responsible for eastern Roraima to explain the different rates of violence in Bonfim and Cantá counties. Bonfim is located in a ranching zone of old settlement, while the new BR-170 cuts through Cantá country, and many Maranhense squatters have settled there.

The weapons used in violence also reflect origin and class. Revolvers are used by wealthy ranchers and their hired guns in zones of colonization, where landownership is contested, as well as by professional thieves attacking lorries, commercial establishments, and settlers' farms along the highways. Poorer people use a knife, a machete, or whatever is opportunely at hand. These weapons can be quite lethal. Twisting a knife stuck into the lower abdomen produces a wound that cannot be treated medically. A machete was used in one case to ambush and decapitate the victim as he was walking by. A loose boat-pin or fence-post can serve as a club, and striking someone's head with such hardwood objects is the equivalent of using a metal bar.

Conclusion

The main object of this study has been to quantify and qualify violence in the Central Amazon. If we are going to argue with empiricist- and rationalist-minded social scientists and economic planners about questions of social sustainability in the Amazon, we must do so in a way that cannot be dismissed as 'impressionistic' or 'journalistic'. The main stimulus to researching violence in the Amazon using archival methods was in response to a paper presented by a French statistician in which he argued that, when measured in absolute number of cases, rural violence in the Amazon is actually quite low with respect to the industrial cities of Brazil (Waniez 1997). I have argued here that, on a per capita basis, and proportionately to the population present in the Amazon, violence on the expanding frontier can be two to three times higher than in Brazilian metropolitan zones.

However, the French statistician had a point. The more normal attitude of foreigners toward environmental devastation, violence, and social degradation on the Amazonian frontier is one of shocked indignation, which might bias judgement in the same way it did with upper-class European travellers in nineteenth-century North America (Cosgrove 1984, F. Turner 1983). Much like these travellers, we too come from a domesticated landscape and a more 'orderly' society, so that we may be seeing the New World wilderness distorted by a bucolic ideal. By mapping violence in the Central Amazon, my intention has not been to exaggerate the image of frontier barbarism, but rather to place the violence in a historical perspective of ecological, political, and ideological imperialism (cf. Cronin 1983, Crosby 1986, Steele 1995, F. Turner 1983). The Brazilian frontier is no more violent or socially unjust than other frontiers of the past, so that our political actions meant to curb the worst frontier practices must go beyond imitating the experience of a US frontier which only existed in the evolutionary imagination of Fredrick Jackson Turner [1966 (1893)] and in the political propaganda of the Cold War (cf. Bicalho and Hoefle 1995, Post 1995, Vogeler 1981).

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