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Reducing Deforestation in the Brazilian Amazon: Paradoxes of Environmentalism

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REDUCING DEFORESTATION IN THE BRAZILIAN AMAZON: PARADOXES OF ENVIRONMENTALISM

By Sylvia N. Tesh*

Abstract

Deforestation in the Brazilian Amazon is likely to continue for a long time, despite the efforts of the Brazilian government and of Brazilian and foreign non-governmental organizations to halt it. This paper argues that among the reasons for this unhappy state of affairs is the framing of deforestation as an environmental issue. It discusses three kinds of environmental framing that, while promoting respect for nature, distort policy options. One frame simplifies an extraordinarily complex situation, thus disregarding critical policy questions. A second frame endorses weak but politically acceptable solutions to the deforestation problem. A third plays into the hands of a politically conservative Brazilian agenda that identifies forest protect with threats to national sovereignty.

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Introduction Almost twenty percent of the Brazilian Amazon forest is now gone and although the Brazilian government and some non-governmental organizations have projects that rein in people who cut down trees, deforestation in the Amazon is likely to continue for a long time. While the reasons for this unhappy state of affairs are many, I propose in this essay that a fundamental reason is the framing of deforestation as an environmental issue. My contention is that environmentalism disseminates ideas about the Amazon and about deforestation that, while promoting respect for nature, distort deforestation policy options

The ideas fall into three categories. First, because environmentalism is about protecting nature, along with peoples thought to be close to nature, it has portrayed the Brazilian Amazon as primarily endangered trees and Indians. In doing so, it has largely ignored the physical and demographic diversity of the area, thereby simplifying an extraordinarily complex situation and disregarding critical policy questions. Second, because environmentalism is mainly about things that might happen rather than about things that have happened, it has focused too much attention on the consequences of deforestation and not enough on the causes. So it has endorsed weak (but politically acceptable) solutions to the deforestation problem. And third, because environmentalism is about global conditions, it has promoted a concept of universal environmental responsibility that is indifferent to national sovereignty. As a result, it plays into the hands of a politically conservative Brazilian agenda that links forest protection with foreign interference. The paradoxes in this situation are many, however – a principal one being that without environmentalism, deforestation might not even be on the public agenda.

This critique of environmentalism contrasts with the excitement generated in environmental movement circles by the best-known framing of deforestation as an environmental issue. In the late 1980s a Brazilian rubber tappers' labor union led by Chico Mendes reframed a long-standing dispute with cattle ranchers, transforming the issue from one about land rights to one about environmental protection. The reframing brought international attention to deforestation in Brazil, especially after Chico Mendes was murdered, and led the Brazilian federal government to establish extractive reserves in the areas where rubber tappers lived (Keck 1995).

Since the rubber tappers' campaign, other protests in Latin America that were first construed as social justice or land rights issues also finally reached – or nearly reached -- their goals when they began to call on environmentalist principles. For example, anti-dam activists in southern Brazil won their struggle after they reframed their opposition from one about peasants' right to land to one about environmental protection (Rothman and Oliver 1999); residents of Vieques island in Puerto Rico protesting the US Navy's use of their island for bombing practice, finally got the Navy to leave Vieques after they switched from a focus on military expansion to a focus on environmental health (McCaffrey and Baver 2006); and labor union members at a steel mill near Rio de Janeiro got cleaner working conditions when they redefined their fight from workers' rights to environmental protection (Leite-Lopes 2004). Environmental framing has also enhanced other social movements. In the United States the civil rights movement was revitalized when activists reframed some instances of racial discrimination as environmental injustice; feminists compared the exploitation of women to the exploitation of nature, thus adding fresh analysis to the women's movement; and long-time opponents of nuclear weapons employed environmental pollution concepts, drawing more adherents to the peace movement. But while environmentalizing protest can benefit social movements, the environmental framing of deforestation in the Amazon may be benefiting environmentalism at the expense of effective forest protection policies.

The basic situation In ecological terms the Amazon forest consists of all the land in the Amazon River basin.[1] In Brazil, though, when people talk about the Amazon, they usually mean the *Amazonia Legal*, or the Legal Amazon. The term refers to a nine-state area covering the northern sixty-one percent of the country, so designated by the federal government in 1966.[2] All the official data on deforestation construe the Brazilian Amazon as the *Amazonia Legal*, even though the area does not correspond exactly to the Brazilian Amazon river basin. These official

[1] The entire Amazon forest includes portions of Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, Surinam, and French Guiana, as well as Brazil.

[2] The nine states are Amapá, Pará, Roraima, Amazonas, Acre, Rondónia, Tocantins, Mato Grosso, and the western part of Maranhão. By their designation as part of the *Amazonia Legal*, these states can benefit from the federal government's Amazon development programs.

data, drawn from Brazil's remote-sensing satellite, show a steep rise in deforestation beginning in the mid-1980s, an irregular record of relatively higher and lower levels for twenty years, and a decline after 2005.[3] Some academics and environmentalists (both Brazilian and foreign) challenge these data and their policy implications on the basis that cloud cover frequently blocks the satellite's view (Asner 2001), that "deforestation" is poorly defined[4], and most importantly that low rates after 2005 reflect market conditions more than a permanent change in behavior (Barreto et al 2009:4, DeFries 2010; Morton et al 2006). There is, however, general agreement that of the area counted as deforested, seventy to eighty percent is cattle pasture, about ten percent is industrial agriculture (mainly soy), and another ten percent or so is small farms. (Mines, roads, and urban development make up the remainder.) Even less controversial is the information that the vast majority of land without forest lies in the southern and eastern portions of the *Amazonia Legal.* The area, clearly visible in satellite photos, has been dubbed the "arc of deforestation." Besides this large swath, the majority of trees are gone from both sides of the Amazon's highways as well as from both sides of the smaller (mainly illegal) roads branching out from the highways (Souza et al 2005; Fearnside 2007:608).

Environmentalism Despite the way we have come to think of it, deforestation is not inherently an environmental problem. It is not even an inherent problem. What we now call deforestation was, from the viewpoint of the European settlers who first came to the New World, the admirable act of taming and civilizing a wild land. Today, even in the face of universal environmentalism, cutting down trees in the Amazon could conceivably be construed as a human rights or social justice issue, just as the history of environmental protests suggests. But the most effective frame is environmentalist for two reasons. One is the relative weakness, vis-à-vis environmentalism, of the human rights and social justice movements. The other reason is the power of environmentalism's principles.

[3] See "taxas anuais" in www.obt.inpe.br/prodes

[4] There are disagreements about how many trees must be cut down for an area to be classified as deforested, when reforested areas can be removed from the deforested list, whether land now planted in non-native trees should be considered reforested, and how to classify land in the *Amazonia Legal* that wasn't forested in the first place (Andersen et al 2002)

These principles were first proposed in the United States where environmentalism was born. By all accounts, Rachel Carson started it in 1962 with the publication of *Silent Spring* where she developed the then-stunning argument that all of nature -- not only some scenic places -- is endangered and must be saved. During the next six years a handful of other scientists published books echoing and expanding on Carson's message.[5] Together with Carson they argued that nature possesses intrinsic worth, so treating it instrumentally, as though it has only use-value, is unethical. They insisted that all of nature exists of an intricate web of interdependence. They warned that human interference in nature's web is likely to be harmful. And they declared that unless we make major changes, life as we know it is in peril (Tesh 2000:42-49**).** Today, these basic environmental principles have been so thoroughly disseminated in the world, and in so many subtle ways, that they now express, for many people, simple common sense, --- even though not everyone agrees about the actual meaning of the principles or what public policies they should engender, and even though the concepts are abstract enough to shelter a great variety of political ideologies (Adger et al 2001; Dryzek 1997; Hajer 1995).

This widespread embrace of environmental principles makes it easy to construe – or frame -- situations and conditions as "environmental." Indeed print and electronic media today readily apply an environmental frame to any human actions that can be seen as reducing the quality of the air, soil, or water or meddling with the web of ecological interdependence. The framing gives these once-disparate actions similar meaning and makes them part of a larger phenomenon: impending environmental crisis. Framing, though, does more than subtly promote a way of seeing the world. Like a frame in the literal sense, it also obscures some things and emphasizes others. Consider what happens if you look at a landscape or a living room or a basket ball game through an empty picture frame. Peering only through the frame, you cannot see whatever falls outside its boundaries. At the same time, while the frame restricts your view, it draws your attention to phenomena you might not otherwise even notice. Environmentalist framing of Amazonian deforestation displays these features. – whether the deforestation is

[5] Rene Dubois, Murray Bookchin, Barry Commoner and Aldo Leopold published such books between 1963 and 1968.

condemned on the websites of environmental organizations, reported in newspaper and television stories, included on blogs, discussed by policy makers or taught in schools.

In this essay I am particularly interested in the phenomena that environmental frames commonly emphasize, what they leave out, and what effects on public policy these emphases and omissions have. In doing so I am assigning agency to "environmentalism," assuming that its now-familiar principles prompt action by all sorts of people who might not even consider themselves environmentalists. But I also see formal environmental organizations as self-conscious promoters of environmentalism, often caught between their desire to expand the movement's principles and their need to employ them just as they are in order to attract supporters.

Environmentalist Framing I: Trees and Indians

Three iconic images of the Brazilian Amazon forest appear over and over in the environmentalist frame. One image is of pristine beauty – rivers winding through seemingly endless luxuriant forests, brightly colored birds, mist rising from the trees. One image shows deforestation -- a forest on fire or a forest transformed into acres of soy fields or cattle ranches. A third image is of Indians --- men and women paddling canoes along serene rivers, cooking over open fires, cuddling children in hammocks, or performing exotic dances in paint and feathers. Like all social movement framing however, while each of these pictures represents an aspect of the Amazon – the forest can be stunningly beautiful, deforestation is a sad reality, many Indians do live differently from city folks – the images only tell a part of the story, for the Brazilian Amazon forest is far more diverse physically and demographically than environmentalism implies.

Not all forest In the first place, the Brazilian Amazon never was an endless lush tropical rainforest. Only a little over fifty-six percent of the *Amazonia Legal* was ever what ecologists consider "dense forest." The rest has for thousands of years been bush vegetation, low-density forest, riverbank, mangrove and swamp forest; seasonal forest, and savannah land. All of these areas, forested and non-forested, are found throughout the *Amazonia Legal*, merging and

intermingling without sharp boundaries (Andersen et al 2002: 38-40). This variety springs partly from the region's assortment of soil types – from moist, nearly black and very fertile in some places, to parched and sandy in others. It springs partly from the Amazon's wide range of rainfall patterns – up to ten feet annually in some areas, far less in others. And it springs partly, as we will see, from the millennia of eco-manipulation by indigenous people (Hecht and Cockburn 1990; Smith 1999).

The bottom line is that the environmentalist depiction of the Amazon as either densely forested or deforested is misleading. With such an image in mind, you would never know that the majority of the land clearing in the last fifty years occurred where the vegetation was relatively open (Andersen et al 2002). More than that, the either-dense- forest-or-deforested image has policy consequences. It suggests that only forested land needs protection, when in reality forested land is seldom clearly distinct from non-forested land, and other parts of the Amazon are also at risk. Savannah land, for example, which covers at least fifteen percent of the *Amazonia Legal (*mainly in the arc of deforestation) is by some accounts even more endangered than the forest (Ratner et al 2006). And scrublands can be as ancient as forests, with as much ecological value (Putz and Redford 2010).

To put this in terms of environmental framing, when "save the Amazon" campaigns depict only the lush parts of the forest, as most campaign images do, they ignore the reality of ecological diversity. Environmentalist framing of the Amazon blocks out the sections with poor soil or little rainfall. It does not show that only a small portion of the area can be used for agriculture without the addition of expensive fertilizers (Fearnside 2006). It hides the fact that some parts of the Amazon are too rainy to support either agriculture or cattle ranching (Chomitz and Thomas 2003). In simplifying the issue like this, environmentalism brushes aside fundamental political questions about how the region should be used beyond programs that keep the forest intact.

The environmentalist framing of the Amazon forest as either devastated or untouched obscures another reality and avoids other questions. Despite its frequent depiction as pristine, the Amazon forest has been home to human beings for some twelve thousand years. When

Europeans arrived, as many as seven million people lived there. For generations they had cleared vegetation, cut down trees, irrigated fields, moved plants from one area to another, and improved the soil. They had built roads and towns, dug new channels in rivers, dismantled waterfalls and constructed dams (Cleary 2001; Heckenberger et al 2003; Raffles 2003) Environmental framing conceals this history. It simply depicts Indians as living in harmony with nature, but now the victims of deforestation and the people for whom the Amazon must be saved. In a much-cited article Beth Conklin and Laura Graham trace this idea to ethnobiological research showing that many indigenous groups have a sophisticated knowledge of ecological interactions. Environmentalists working to preserve biodiversity "became attached to the idea of preserving indigenous knowledge and, by extension, preserving indigenous peoples. Indians suddenly were hailed as guardians of the forest: saving the forest's people was seen as a way to save the rainforest…" (Conklin and Graham 1995:698).

But if there is no evidence that Indians are intuitive environmentalists, calls to save the Amazon for them can backfire. It is true that deforestation threatens Indian communities, and indeed Amazonian Indians have been protesting against dams, mines and oil exploration for over twenty years (Turner and Fajans-Turner 2006; Schmink and Wood 1992). Moreover, in doing so, they have presented themselves as the forest's true protectors. But as Conklin and Graham argue, the presentation is largely a political strategy, useful to Indians because it draws support for their campaigns. Most Amazonian Indians care more about land rights and self-determination than about environmental preservation *per se*.[6] And environmentalism is undermined when, as happened in the 1990s, Indian leaders grant concessions to lumber companies or demand the right to deforest sections of their land (Conklin and Graham 1995; see also Redford and Stearman 1993; Terborgh 2000).

Not all Indians Beyond the risk of backfiring, framing deforestation as a story about Indians leaves out everybody else. Six million people live in the Brazilian Amazon forest. Of these, only about 167,000 are Indians. Another 253,000 are non-Indian "extractivists" – such as rubber

[6] This is not to imply that Indians cannot embrace environmentalist principles. Cultural change occurs all over the world and Indians are as amenable as anyone else to new ideas about nature. (Holt 2005; Wilshunsen 2002)

tappers, harvesters of nuts and fruit, and fishers.[7] When environmentalism pays attention to extractivists, they are usually subsumed along with Indians in a category called "forest peoples," or sometimes "traditional communities," whose in-harmony-with-nature way of life must be preserved from the deforesters. Here too, environmentalist framing hides a reality. Few extractivists, can actually make a living from forest products. Prices are too unstable and growing seasons are too short. So in order to scrape by they "also clear forest and plant food crops, raise livestock, pan for gold, hunt wild game, cut commercial timber, and engage in most of the activities of other rural Amazonian inhabitants" (Browder 1992:175; see also Coomes and Barham 1997, Hall 2004). These activities make extractivists not always clearly distinguishable from cattle ranchers, loggers, and miners -- the very foes of forest protectors.

The "off-forest" activities also give extractivists something in common with the three million small farmers who make their living in the Amazon forest. Small farmers constitute the largest single category of rural Amazonians but rarely appear within the environmentalist frame. They occupy a space somewhere beyond the frame together with the bad guys: loggers, ranchers and soy cultivators. Yet small farmers are as varied a group as any other collection of three million people, and all of them are legally allowed to cut down twenty percent of the trees on their land. Most of them are poor but some are relatively more endowed with money, experience, wit, far-sightedness, health, land with good soil, sturdy sons to help with the work, and easy access to market. Some farmers have only a few of these things; some have almost none. Their landholdings range from just a few hectares to over a hundred. The varied decisions they make about what to plant, how much to plant, how many cattle to raise, whether to abide by logging laws, whether to work off-farm – all these activities and many more need to be included in any accurate picture of deforestation in the Amazon (Browder 2002; Coomes and Barham 1997; Merry et al 2008; Wood 2002). Moreover, from their own point of view, small farmers are as much victims in the deforestation narrative as are "traditional communities." Their storied enemies are the illegal loggers who invade their farms and the *grilheiros* or land grabbers who

[7] Neptad et al (2009) give 420,000 as the total number of indigenous and "traditional" people in the forest. The 167,000 figure for rural indigenous people comes from Table 3 in IBGE 2005.

come with false papers claiming ownership of the farmers' land and who then turn the farms into cattle ranches (Britto and Barreto 2009; Fernandes and Welch 2008; Greenpeace Brasil 2005; Hochsteter and Keck 2007:150-154). Small farmers also feel threatened by what remains of the often-violent Rural Democratic Union, a powerful organization of large landowners, now officially disbanded (Payne 2000:101-161).

Not all rural One of the great surprises to people who only see the Amazon through an environmentalist frame is that almost seventy percent of the Amazon population – some 14 million people -- live in urban areas.[8] As early as 1991 eight Amazonian cities had populations of more than 100,000 (Browder and Godfrey 1997).Today the two largest cities, Belem at the Amazon River's mouth (population 1.4 million) and Manaus, 900 miles upstream (population 1.7 million) look like other large Brazilian metropolitan areas with tall commercial and condominium buildings downtown, fancy shopping malls, shaded city parks, some elegant residential areas, many middle-class homes, and a peri-urban ring of very poor neighborhoods. Each city is home to a federal university and a modern international airport. And each one has several environmental NGOs, the largest of which are so prestigious that the federal government not infrequently quotes their research findings.[9] Although the poverty rate in these cities is very high, hovering around 40%, most people – just as in the rest of urban Brazil – are middle class. Smaller Amazon cities have similar characteristics and are linked economically and politically to one another and to the largest cities (Guedes et al 2009). Moreover, in these cities and towns deforestation is not the big environmental concern. Amazonia's newspapers only occasionally cover the topic and when they do, they fail to contextualize it (Luft 2005). To most people in the Amazon's cities the environmental problem is urban pollution: high levels of contaminated water and soil from poorly-controlled residential and industrial waste (Becker 1995; Browder and Godfrey 1997; Perz 2000).

[8] Urban areas are defined as cities and towns with a population of at least 5,000. In Brazil as a whole, over 80 percent of the population is urban.

[9] The best known are IMAZON (Amazon Institute of People and the Environment) in Belém , IPAM (Amazon Environmental Research Institute) in Belém, Greenpeace-Brasil in Manaus, WWF-Brasil.in Manaus, and ISA (Socioenvironmental Institute) in Manaus.

Even more at odds with environmentalist framing is the fact that over 46,000 Indians live in these urban areas.[10] It is probably safe to assume that urban Indians' relation to the deforestation issue is different from that of Indians who live in the forest. Besides Indians, many farmers also reside in cities and towns, leaving the day-to-day farm work to relatives or tenants. Very little research has been done on these urban-resident farmers but a 1990 study found that they were the ones making most of the decisions about cutting down trees, and that compared to farm owners who live on their land, farm owners who live in cities were more likely to deforest and to practice exclusively cattle ranching (Browder and Godfrey 1997: 314-316).

In light of all this ecological and social diversity, it is clear that environmental framing of the Brazilian Amazon, with its lovely images of trees and Indians misrepresents the area. The framing blocks out the great ecological and social diversity of the Amazon. So it fails to acknowledge that "deforestation" is not what happened to many areas now turned over to agriculture and cattle ranching, and it ignores the vast majority of people who live in the Amazon as well as their variety of experiences with deforestation and their attitudes toward it. More importantly, environmental framing completely obscures the policy question: for whom should the Amazon be saved? Indigenous people do have a legitimate claim to special consideration but environmental framing suggests that if they stop living "close to nature" they no longer deserve that consideration. Indians who exploit their main resource -- the forest -- to climb out of poverty forfeit the attention they receive as exotic forest dwellers. In other words, environmentalism suggests that the Amazon should be saved for Indians only under circumstances unfavorable to Indians. The same goes for the less glamorous but still intriguing extractivists. As a group they are nearly as poor as Indians, but environmental framing makes them similarly unworthy of the forest unless they depend only on the meager living that extractivism allows. The rest of the men, women, and children who live in the Amazon forest – the majority of its residents – would have no claim to the forest at all if we were to see it only through an environmentalist frame.

[10] This figure is from Table 3, IBGE 2005.

Paradox The great paradox, however, is that a more accurate and complex depiction would miss the romance of environmentalism that drew people to the deforestation problem in the first place. To most of us who try to live at least somewhat in accordance with the environmental teaching that nature is precious, interdependent and at risk, it is inspirational to think that a magnificent pristine forest still exists somewhere in the world and that gentle people live there and care for it. Seen through an environmentalist frame, the Brazilian Amazon is a kind of paradise, or at least it was until recently and will be in the future if people stop cutting down trees. Were environmentalism's promoters to blow the cover on this simple view - were they to highlight small farmers instead of Indians, to acknowledge that Indians are not necessarily guardians of the forest, to show the large areas of the Amazon that have never been dense forest, to reveal that most people who live in the Amazon are middle class urban folks -- they would risk losing support for their campaigns against deforestation. In other words, to recruit people to the fight against deforestation they have to misrepresent the Amazon.

Environmentalist Framing II: Climate Change

Using environmental principles to frame the Brazilian Amazon does more than hide much of its ecological and social complexity. The frame also blocks from view the complex causes of deforestation. Environmentalism, in fact, has always called less attention to the causes of environmental degradation than to the consequences, for most of the terrible conditions that are the *raison d'être* of environmentalism are only happening in far-away places (desertification and melting ice caps) or cannot be conclusively linked to environmental degradation (cancer clusters and unusual weather patterns) or have no obvious affect on daily life (species extinction). So a major task of environmental activists has been to convince people that bad things will happen if they continue to mistreat nature.

For deforestation in the Amazon, this consequentialist reasoning first prompted attention to the forest's rich biodiversity – not biodiversity for its own sake, but because cutting down the forest would mean losing forever an untold number of plants with as-yet-to-be-discovered medicinal qualities. (As mentioned above, this was the thinking that made protection of Indians

an environmentalist concern.). Viewing deforestation this way, though, has never sparked really vigorous protection campaigns. Moreover, the biodiversity rationale angers many Brazilians who see it as a justification for bio-piracy. So little by little, biodiversity logic has taken second place to another consequentialist reason to oppose deforestation, one that underscores the environmentalist principle that interfering in nature's web of interdependence is likely to be harmful.

As climate scientists raised the alarm about the danger from greenhouse gas emissions, mainstream environmental activists responded by concentrating more and more on climate change so that today, while environmentalism is not exactly synonymous with the fight against climate change, the greenhouse gas issue lurks somewhere within nearly every environmental frame. And the campaign to environmentalize deforestation in the Amazon highlights it. Conservationists, environmental activists, and policy makers now assign tropical forests a major role in slowing the build-up of carbon dioxide. Today, deforestation in the Amazon is increasingly construed as a climate change issue: save the Amazon to prevent climate change.

The climate change rationale for opposing deforestation differs from the biodiversity rationale in that "climate change" comes with a ready-made prevention policy. The policy reflects the economic reasoning -- now common in mainstream environmentalism -- that market mechanisms are the path to environmental protection (Andersen et al 2002; Schoenbrod et al 2010). More specifically, the climate change frame draws on the notion that people who conserve forests provide an "environmental service." The term is a twist on the utilitarian concept that *forests* provide "environmental services" because they store carbon, protect watersheds, recycle water, control flooding, and maintain biodiversity. In the twist, "providing environmental services" is what *farmers* are doing when they leave trees standing on their property, or what *governments* are doing when they create programs that aim to leave trees standing. Following on this concept it becomes logical to argue that these service providers should be paid (Fearnside 2007; Grieg-Gran et al 2005; Hall 2008 and 2008a; Nepstad 2009).

Such is the reasoning behind REDD + (Reducing Emissions from Deforestation and Degradation) [11], the only actual (albeit nonbinding) commitment to emerge from the UN's 2009 fractious Copenhagen conference on climate change.[12] No one knows yet what a REDD+ mechanism would actually look like. So far only a few pilot programs exist to serve as models. In essence, though, REDD+ paves the way for developed nations to provide governments in developing nations with funds to reduce carbon dioxide emissions from forests, and/or to increase carbon sequestration.. Each country can decide how to use the funds, but most proponents of REDD argue that some portion of the money must be used to compensate rural folk for not cutting down trees (Nepstad el al 2007:8). After all, in the end, tree cutters are the people whose behavior has to change. To this way of thinking, a crucial part of any REDD program is assigning a price to standing forests greater than the price of cut-down forests (e.g. Dickson et al 2009). In the words of the United Nations Collaborative Programme on REDD: "Reducing Emissions from Deforestation and Degradation is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development." [13]

This commodification of nature piques the ire of people who believe that forests should be valued for their own sake (McCauley 2006); ignores long-term economic, societal and political costs (Ghazoul et al 2010), fails to incorporate the social value of forests (Pereira 2010, Hall 2008); and puts a large burden of responsibility for climate change on "rainforest nations" even though no "rainforest nation" emits anywhere nearly as much carbon dioxide as do the major industrial nations.[14] But another critique of REDD is that in calling deforestation a

[11] The plus sign after REDD indicates an obligation not just to reduce emissions but also to conserve existing forests via sustainable management projects.

[12] A second, but similar, non-binding agreement on forest emissions was reached at the UN Framework Convention on Climate Change in Cancun a year later. See section C of the Cancun Agreements, available at http://cancun.unfccc.int

[13] See the second paragraph in "About REDD+" at www.UN-REDD.org.

[14] The most recent data show that among the world's countries, Brazil ranks fourth for emissions of greenhouse gasses, including those from deforestation and other land use changes. But there is a big gap between Brazil and the three highest emitters. China is first with 16.36% of the world's greenhouse gasses, the US is second with 15.74%, and the UK is third with 12.08%. .Brazil, number four, emits 6.47% of the world's greenhouse gasses. See "Total

problem because of its consequences, the proposal ignores the multiple and complex causes of deforestation (e.g. DeFries et al 2010). Or more accurately, while the United Nations' official rhetoric about deforestation does say that the causes are multiple and complex, at base REDD assumes that the cause is a lack of economic motivation.(UNDP 2008:2-5). On this view, if governments had adequate financial incentives, they would bring a halt to deforestation, and if the people who cut down trees had adequate financial incentives, they would let the trees stand.

Applied to Brazil, this framing of the deforestation problem ignores the great diversity of Amazon residents who cut down trees, assuming that a single policy could affect the decisions not only of the millions of small farmers (who are classically thought to be the initial deforesters) but also the decisions by illegal loggers (who do much of the tree-cutting) cattle ranchers (who occupy the majority of the deforested land) and soy cultivators (who make the most money).[15] Most importantly, framing deforestation as a climate change problem obscures all the broad causes of deforestation to which politically-minded scholars pay attention. (See for example the political ecology analyses of deforestation by Hecht and Cockburn 1990, Hurrell 1991, Humphreys 2006; and Wood and Porro 2002.). Among these broader causes, I will briefly discuss four: government incapacity, cultural traditions that weaken the implementation of laws; Brazil's economic development policies, and the international market for agricultural products

Government incapacity Brazil's federal government does have in place an impressive array of policies and institutions aimed at reducing deforestation. Among them are a series of rulings that have now set aside 43.75 percent of the Legal Amazon as protected areas, a Forest Code that prohibits private land owners from cutting down more than 20 percent of the trees on their property, an environmental crimes law that makes it possible to prosecute people who degrade or pollute the environment, the establishment of several hundred extractive reserves; the *Proambiente* and *Bolsa Floresta* projects that pay small farmers if their actions promote

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Greenhouse Gasses in 2005" from the World Resource Institute, Climate Analysis Indicator Tool (http://cait.wri.org).

[15] Drawing on James Scott's critic of the ways states "see" problems, one could say that construing forests only as producers or sequesters of carbon dioxide misses "nearly everything that touches on human interaction with the forest" (Scott 1998: 13)

conservation (Hall 2008; Pereira 2010), the Amazon Fund set up to provide grants for sustainable development projects (Tollefson 2009), and perhaps most importantly the prestigious National Institute of Amazonian Research (INPA) that supports over 200 scientists, and the renowned National Institute for Space Research (INPE) that monitors deforestation via its CBERS satellites. In addition, government bureaucrats in some environmental agencies have worked exhaustively to strengthen environmental policies (Lemos 1998; Sills and Saha 2010).

Despite all this, virtually every analysis of the deforestation problem lists government incapacity as a critical problem, including the federal government's own extensive "Action Plan for the Prevention and Control of Deforestation in the Legal Amazon" *("Plano de Ação Para a Prevenção e Controle do Desmatamento na Amaonia Legal"*) (Grupo Permanente de Trabalho 2003:9-16). In the last few years, the government's environmental agencies have undoubtedly become somewhat stronger. They have boasted about the current fall in deforestation rates, and even some of their critics give them at least partial credit for the reduction (Barreto and Silva 2010). But no one knows how effective government programs will be when the current world-wide recession ends and demand for agricultural products picks up. For most analysts, Andrew Hurrell's two-decades-old observation still holds true: "Effective environmental management of the Amazon will…depend on the existence of a… sufficiently effective administrative apparatus to ensure compliance with whatever international norms and agreements may be entered into" (Hurrell 1991:202-203). Hochstetler and Keck echo this warning." Environmental protection, they say

> really seems to require building a credible and responsive state capable of mediating among divers needs and interests, enforcing laws, and protecting the lives of those who protest the continued predation of the region's forests and its people alive. Nothing else will serve. That such a scenario remains a utopian imagining for much of the region helps to explain why deforestation continues apace (Hochstetler and Keck 2007: 185)

State incapacity is reflected in a scarcity of environmental inspectors on the ground. In 2005 Brazil's federal environmental agency, IBAMA, had only 850 employees in the entire Amazon region, "one staff member for every 2300 square miles on average" (Hall 2008: 1926).

The dearth of field personnel means that it's easy to get away with breaking the law. Discussing illegal deforestation, the government's Action Plan admits "The great majority of the deforestation in the Amazon has occurred without authorization by the proper agencies. For example, the total deforested area with IBAMA authorization corresponded to just 14.2% and 8.7% of the total deforestation in the Legal Amazon in 1999 and 2000 respectively" (Grupo Permanente 2003:14). Research by environmental groups show that the majority of the land that is now in cattle pastures (70% to 80% of deforested land) was probably deforested illegally (Barreto and Silva 2009:1) and as much as 80% of logging is illegal (Greenpeace Brasil 2008:30).[16] Environmental crimes of this sort are even committed with impunity in protected areas, and as Paulo Barreto and his colleagues have found, even when illegal loggers *are* caught they are seldom punished. Between 2001 and 2005 federal agencies failed to collect nearly 95 percent of fines (Barreto et al 2009). A lack of coordination among government agencies makes matters worse. The various federal agencies with environmental responsibilities have overlapping responsibilities and fail to communicate well with one another. The coordination problem is particularly severe among environmental agencies on the municipal, state and federal levels, exacerbated by the usually more lax standards in local level agencies compared to federal (Campari 2005:210-213; Fearnside 2003; Hall 2008; Hochstetler and Keck 2007:147-154).

And then there is the problem of corruption. While many dedicated men and women work for Brazil's environmental agencies, they can face shady colleagues and powerful but dishonest local government officials. For instance, INCRA employees were implicated in a 2008 investigation of illegal logging[17] and some IBAMA officials are known to work hand in glove with *grilheiros*, the infamous land grabbers who, with forged property titles, threaten small farmers and seize their land (Hochsteter and Keck 2007:150-154; Britto and Barreto 2009; Fernandes and Welch 2008). Exacerbating everything is the environmental agencies' lack of first-hand knowledge about the Amazon. "Very few public officials in any sector, or at any level

[16] For a rant about illegal deforestation see an interview with John Carter, a cattle rancher in Mato Grosso at www.mongabay.com/2007/carter

[17] INCRA, the National Institute of Colonization and Agrarian Reform, is a sister agency of IBAMA. The corruption information can be found on www.globoamazonia.com for September 3, 2008

of government" say Hochstetler and Keck, "want to be posted outside the state or national capital: the Amazon seems more manageable from a distance" (2007: 149).

Cultural traditions Environmentalist framing of deforestation as a climate change issue hides another cause: the cultural tradition of treating some laws rather like informal agreements that may or may not have anything to do with you. There is, for example, the expectation that certain laws will inevitably not really work. *Elas não pegam* (they don't stick), say Brazilians with a collective shrug. Not sticking is just a fact of life and nothing much can be done about it. Far more important is the *jeitinho* – a word hard to translate but meaning something like a special deal or a way to get around the rules or an unorthodox method of solving problems, from broken motors to ridged bureaucracies to pesky environmental regulations. Drawing on deeply held notions of reciprocity and affinity among people, *jeitinhos* are so firmly embedded in every aspect of Brazilian society that a future without them is hard to imagine (Barbosa 1992; DaMotta 1997; Duarte 2006). Finally, there is clientelism, a tradition extending back to the colonial period and still exerting an influence on all manner of personal relations including, importantly, who gets jobs in government agencies. Like the rest of Latin America, Brazil is a place where who you know makes a big difference, and where mutual obligations are more highly honored than they are in the United States. Brazilians regard clientelism far less positively than they regard the jeitinho -- although both traditions draw on personal relations -- for clientelism eases demands for economic equality and is partly responsible not just for the vast landholdings of a small percent of the population, but for these landowners' ability to ward off the implementation of politically progressive laws and regulations (Garcia and Palmeira 2009; Manzetti and Wilson 2007; Sobrado 2002).

Economic development policies Most importantly, framing deforestation with climate change rhetoric obscures Brazil's development policies. These policies call into question the government's desire to institute the forest protection programs that REDD + advocates. Brazil has a long history of explicitly or implicitly encouraging deforestation. Much has been written about the disastrous environmental results of the military government's Amazon road-building program and their colonization policies that encouraged small farmers to cut down the forest, as

well as about subsequent governments' policies that followed the military's footsteps (Hecht and Cockburn 1990; Hurrell 1991). More recently, two huge economic development programs have justified even more deforestation. One, launched in 1999, was *Avança Brasil* (Forward Brazil) a USD$40 billion development project to pave Amazon roads, open rivers to navigation, construct dams, extend power lines, increase the exploration of gas and oil, and grant more logging concessions. In a withering critique of *Avança Brasil* in 2001, a group of US and Brazilian scientists warned that "under status quo conditions, current efforts to promote conservation planning in the Brazilian Amazon will be overwhelmed by prevailing destructive trends"(Laurence et al 2001:439).

In 2007, another development program replaced Avança Brasil. Named PAC- *Programa de Aceleração do Crescimento* (Accelerated Growth Program), it calls for an investment of USD $800 billion in infrastructure projects throughout the country. About USD $25 billion of that money is slated for projects in Amazonia (Ribeiro and Zimmerman 2007). Mainly large infrastructure projects like hydroelectric dams, roads and railways, PAC requires (legal) deforestation and is certain to exacerbate illegal deforestation (Lemos and Roberts 2008; Fearnside 2007). In other words, while the Brazilian government is committed to environmental protection, it is also committed to economic development. Brazil's diverse economy, its rising GNP, its ability to weather the current world economic downturn, and its starring role in international politics attest to the success of its economic development policies {de Onis 2008). But the uneven resolution of the conflict between environmental and development priorities led Marina Silva, President Lula's Minister of Environment, to resign in 2008.

Brazil's environmental groups are similarly frustrated. They have battled against environmentally destructive policies and government laxity for many years. Yet as Lemos and Roberts report, even with substantial international help and fiscal resources, "in the end they are nearly always outweighed by Brazilian actors in the development policy network" (Lemos and Roberts*:* 2008: 1901). Expressing anger over this situation, twenty major Brazilian environmental organizations issued a formal statement in May 2010, listing seven ways that "the project of economic growth promoted by the federal government runs counter to sustainable

development." The statement explicitly criticizes the *Programa de Aceleração do Crescimento* for failing to include a commitment to environmental protection[18].

International demand for agricultural products On another level of analysis altogether, deforestation can have less to do with the characteristics of Brazilian institutions than with the global economy. There is, in fact, a high correlation between deforestation and the price of soy and beef cattle. When world prices for these commodities fall, so does the rate of deforestation. When prices rise, deforestation worsens. The numbers demonstrating these relationships are always debatable because of 1) the time gap between economic trends and the behavior of loggers, cattle ranchers and soy cultivators, 2) intervening variables such as government policies, and 3) the differences in deforestation rates from one area in the Amazon to another. Nevertheless, the general correspondence between deforestation and the market is clear. The correspondence suggests that deforestation prevention policy should concentrate on export-oriented agriculture, not – as REDD does – on local farmers, who, after all, do not produce for the global market. In the .words of Ruth DeFries and her colleagues, "Urban growth and agricultural exports are positively and significantly correlated with forest loss, and tropical forests will continue to face large pressures as urban-based and international demands for agricultural products continue to increase. These patterns underscore the challenges that policy instruments such as REDD face in reducing deforestation" (DeFries et al 2010:180. See also Margulis 2004, Morton et al 2006).

None of these four deeper causes of deforestation means that Brazil is incapable of tackling the problem. President Rousseff's government, like previous governments, is clearly committed to environmental protection and even one of the government's most vigilant watch dogs gives it credit for reducing deforestation (Barreto et al 2009). The public is worried about forest loss, telling pollsters that deforestation is the most pressing environmental problem and that all environmental issues are worth combating, even if they themselves would lose money in

[18] "Polítical Ambiental no Brasil á Beira do Abismo" is available on multiple websites. One is www.ipam.org.br

the process. [19] And Brazil's environmental organizations are committed to continuing the pressure they put on policymakers. What these deep causes do mean is that framing deforestation with climate change rhetoric individualizes a problem which cannot be adequately addressed without looking beyond people's own economic incentives to cut down trees. As Michael Painter warns, "solutions to environmental degradation do not necessarily lie in the area where the degradation is occurring" (Painter 1995:13)

Paradox The paradox of environmental framing that makes Amazon deforestation a climate change issue is similar to the paradox of an environmental frame that shows only trees and Indians. Both frames constrict the view but at the same time support environmentalism. The dilemma faced by transnational environmental organizations illustrates the paradox particularly well. Although these groups recognize government incapacity, cultural traditions, development policies, and the global economy as causes of deforestation, they can seldom address them in a straightforward manner. This is partly because environmentalism is so young that groups still needs to concentrate on convincing the public of the dire consequences of mistreating nature. But they are constrained for two other reasons also. One is that the mission of formal environmental organizations is to protect endangered landscapes, plants and wildlife, and to protect people from environmental pollution and degradation. Each organization has specific projects directed at all or some of these issues. The staff solicits funds from individuals and foundations to address the issues and they have to release periodic reports on how well the projects are doing. In other words, environmental groups work on the environment. They are not good-government organizations, or culture critics, or development policy analysts -- at least this is neither how they advertise themselves nor how their supporters know them. The broader issues stretch the scope of the organizations and of the movement as a whole. As Paul Wapner says in an essay about the pursuit of sustainable development, environmentalists know that environmental degradation is linked to broader issues like "poverty, social justice and economic well being…But it makes sense to ask ourselves whether [such a broad agenda] is something that environmentalism can

[19] "Consumidor se dispõe a pagar mais por produto anti-poluente" in IBOPE Opinião Pública, May 1, 1998; See also Tesh and Paes-Machado 2004

afford to be strapped with." He warns against an environmentalism that "has too much on its plate." Such environmentalism "may be unable to respond dramatically (or even incrementally) because it is stuck with the challenge of not being able to do *anything* unless it does *everything*" (Wapner 2003:8 emphasis in original).

The other reason environmental groups cannot do much about the deeper causes of deforestation is that for many supporters, addressing the causes would be too political. It is one thing to rally around the idea that deforestation can be significantly reduced by paying people not to cut down trees. Such a program seems politically neutral. But it is another thing to embrace campaigns to strengthen a government (especially if the government is foreign), to modify cultural practices (particularly if the cultural issues seem removed from deforestation), or to change development policies (especially when the development policies fit with mainstream definitions of progress). Environmental groups differ on this, of course, depending on whether they are Brazilian or foreign, leftist or centrist. Brazilians can more legitimately criticize – and work to change – the Brazilian government and Brazilian cultural traditions than can foreigners. Leftists are more likely to find fault with Brazil's development policies than are centrists; or, which amounts to the same thing, organizations with funding from government agencies and major banks are less likely to be critical than are more independent organizations. But all groups working to reduce deforestation face a common problem. If they frame deforestation in ways that challenge mainstream thinking too much, or that demand change in basic economic and political institutions, they risk being dismissed as unrealistic. To put it the other way around, environmental groups get the most public support when their rhetoric matches neoliberal ideology (Humphreys 2004, 2006). But in that case, they have the least effect on deforestation.

Environmentalist Framing III: Ownership

While one environmental frame for Amazonian deforestation blocks out most of the natural and social environment, and another allows only a restricted view of deforestation's causes, a third environmental frame poses yet another problem: it internationalizes the Amazon. Crafted from the tenet that environmental principles require all good people to help protect

nature, this frame gives non-Brazilians a right, indeed a duty, to interfere in Brazil's internal affairs. The environmental principle at play here was first articulated in 1949 by naturalist Aldo Leopold who called it a "land ethic" In an enormously influential chapter in *The Sand County Almanac (*the book was republished in 1968) he wrote, "There is as yet no ethic dealing with man's relation to the land and to the plants and animals which grow upon it" (Leopold 1949:201). Rejecting the utilitarian assumption that nature exists to support humans, he offered a new way of thinking that "enlarges the boundaries of the [human] community to include soils, waters, plants and animals…" Such an enlargement, he wrote, "changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it" (p 204). From the principle that plants and animals are part of the community we all live in, it follows that we have a moral obligation to protect them from harm no matter where they are, in the same way that we have an obligation to protect humans around the world from cruel labor practices no matter what country they work in, or to protect women everywhere from the tradition of female circumcision. But just as defending human rights principles turns out to be unexpectedly complex (e.g. Gruenbaum1996) so does defending environmentalist principles. What some conservationists call biodiversity's "protection paradigm"[20] often runs smack into strongly held concepts of national sovereignty. As Wilshusen and his colleagues point out, while many conservationists believe "that the international community can and should act on behalf of nature in different parts of the planet as 'global citizens' [this] typically translates into a justification for foreign involvement in the management of a country's biodiversity" (Wilshusen et al 2002:24-25). In Brazil, the translation results in a wide-spread fear that foreigners are trying to take possession of the Amazon, as well-evidenced by a 2005 public opinion poll where seventy-five percent of respondents agreed that "Brazil runs the risk of being invaded by other countries for its natural resources."[21]

[20] See Wilshusen et al 2002, footnote #1

[21] The poll's objective was to gather opinions "related to the traffic in wild animals and the environment in general." See public opinion poll dated May 6th in www.IBOPE.com.br . **"**Brasileiro acredita que país pode ser invadido em função de suas riquezas naturais"

Hoaxes Some of the fear can be traced to hoaxes posted on the Internet. Probably the best-known -- circulating periodically since at least 2000 -- shows a page purportedly from an American middle school textbook with a map of Brazil where the Amazon basin is marked off from surrounding countries and labeled "Former International Reserve of Amazon Forest." The text in the supposed book explains to readers that South American countries were too poor to protect the forest, and their people were "unintelligent and primitive," so in the 1980s the area "was passed to the responsibility of the United States and the United Nations." The English is replete with errors that only a non-native speaker would make, although the page layout with its accompanying photos looks genuine.[22] A less fantastic, more believable message appears in a brief You Tube video by the "Arkhos Biotech" company, where an apparent Arkhos spokesman says (in English with Portuguese subtitles) that since "countries that should be taking care of the Amazon's precious resources are not up to the task" there should be a "gradual transformation of the Amazon into a sanctuary under private control." The video ends with the words -- somewhat contradictory given the privatization language -- "Remember, the Amazon belongs to no country; it belongs to the world." Both hoaxes fooled so many Brazilians for so long, including at least two members of the Brazilian Congress, that the Internet is now full of information unmasking them. (These include a website by the US State Department's Bureau of International Information Programs and a long debunking article from the popular Brazilian newsweekly, *Veja*.) Nevertheless the hoaxes are still up there to bamboozle the unwary.

And the unwary can hardly be blamed. Brazil was a Portuguese colony for 300 years during which time the Amazon region became a storehouse of treasure to be shipped abroad. After independence, foreigners continued to treat the Amazon forest as their own resource, in the most notorious case smuggling out rubber plants to Indonesia and thus destroying the Amazon's lucrative rubber industry (Hecht and Cockburn 1990; Schmink and Wood 1992). Americans in particular have acted as though the Amazon should belong to them. For example, in the 1840s the head of the US Naval Observatory advocated purchasing the Amazon as a way to expand the

[22] See bigthink.com/ideas/21268

US cotton industry, and during the Second World War the Office of Inter-American Affairs proposed turning the Amazon into a network of canals so the US would have easy access to markets in South America (Grandin 2009 34-35).

Reports of such thinking now abound on the Internet. Innumerable Brazilian websites quote Al Gore saying, "Contrary to what the Brazilians think, the Amazon is not their property, it belongs to all of us." He may really have said this, sometime in 1989. Gore has never denied it and the Brazilian blogosphere has been alive with fury over the statement since May 2008 when a New *York Times* article quoted it (Barrionuevo 2008). But this is a second round of fury. The first began around the 1992 UN Conference on Environment and Development in Rio, when Brazil was getting an international drubbing for Amazon deforestation. At that time Brazilians were angry at Gore but also at other political figures who reportedly made statements like Gore's. The reports include British Prime Minister John Major saying he thought of the Amazon as "common to everybody;" French President François Mitterrand announcing that "Brazil should accept relative sovereignty over the Amazon" (Bitencourt 2002:71), Russian President Mikhal Gorbachov arguing that Brazil "ought to delegate part of its rights over the Amazon to competent international organizations," and the Italian deputy to the European Parliament remarking that, "When we talk about international protection in the Amazon, we are talking about taking away Brazilian sovereignty over the area" (Benatti 2007:25). Whether these quotes are genuine or not, some conservation biologists agree with the sentiments. The most outspoken is John Terborgh. In *Requium for Nature*, he argued that governments in tropical countries are too-frequently ineffective or corrupt. "In my opinion," he wrote, "the best – perhaps the only – hope lies in the internationalization of nature protection" (Terborgh 1999: 198). He envisioned "internationally financed elite forces within countries, counterparts of the rangers who protect national parks in the United States and are legally authorized to carry arms and make arrests" (p.199).

Response Brazilian public figures have responded with a clear message: the Amazon belongs to us. After the *New York Times* published the Gore statement in 2008, President Lula retorted, "The Amazon has an owner, and it's the Brazilians." (*A Amazónia tem dono, e são os*

brasileiros.) The editorial director of *Istoé*, a major weekly magazine, urged all Brazilians to "repeat loudly, as a resounding cry: 'The Amazon is Brazil's'" (Marques 2008). Soon after Carlos Minc became Environment Minister in 2008 he said in an interview with *O Globo*, "We have to take care of the Amazon and guarantee its sovereignty."[23] Earlier, in 2005, the Brazilian Senate Foreign Relations Committee had a public hearing on internationalization of the Amazon. The following year, state deputies from around the nation held their tenth annual meeting in Manaus where the announced tropic was the risks posed by internationalizing the Amazon. A few months later, Brazil's most prestigious newspaper published an open letter by then-Environmental Minister Marina Silva and Foreign Minister Celso Amorim, condemning all proposals to internationalize the Amazon (*Folha de Sao Paulo* 2006).

Today, Google searches for "*a Amazonia é nossa*" ("the Amazon is ours") and "*soberania Amazônica*" (Amazon sovereignty) turn up thousands of websites. The most-repeated is a short essay written in 2000 by Cristovam Buarque, progressive political figure, former Minister of Education, and currently both a senator in the Brazilian National Congress and a University of Brasilia professor of economics. During a speaking tour of the US, Buarque was asked about his position on internationalizing the Amazon. He said that as a humanist he would support internationalizing the Amazon "in order to give it the protection it deserves." But at the same time he would advocate internationalizing lots of other things that should belong to the whole world, including the oil reserves, Manhattan, the Louvre, the nuclear stockpiles in the United States, and all the world's children so that they could be guaranteed adequate "care and attention." That, he said, is his reasoning as a humanist. However, he concluded, in two short sentences, "As long as the world treats me as a Brazilian I will fight so that the Amazon will be ours. Only ours." [24]

Despite what one might assume from this kind of attention to internationalizing the Amazon, not all Brazilians believe in an internationalization conspiracy, and Brazilian environmental groups generally ignore the issue, at least in public. . "Internationalization" has an

[23] Minc interview with Dennis Barbosa on October 7, 2008
[24] The essay is available on many websites and was first published in *O Globo* newspaper on October 23, 2000

ideological meaning anathema to a large segment of the population. It is connected in many people's minds to the brutal, twenty-year military dictatorship that began in 1964. During that time the government employed the slogan "*integrar para não entregar*" to promote its program of colonization, road building, and agriculture development in the Amazon. The slogan means integrate (i.e. send settlers) in order not to "hand over" or "deliver" the area to non-Brazilians (Bitencourt 2002; Hurrell 1991; Kolk 1998; Zhori 2002). Today internationalization rhetoric is still primarily associated with nationalist, right-wing ideology (notwithstanding the tongue-in-cheek contribution of an opponent of the military like Buarque). And anyone with center-left politics is likely to dismiss the notion of an internationalization conspiracy as absurd.

Beyond that, some observers see "internationalization" as a discursive strategy that not only justifies a strong role for the Brazilian military in the Amazon but invalidates the voices of those who call for protection of the forest. Sociologist Andréa Zhouri, for example, argues that the internationalization discourse makes enemies of Brazilian environmentalists along with foreign ones -- if they oppose Brazil's model of development, they must be against the interests of the Brazilian people. At the same time, she says, talk of internationalization removes from the public agenda any discussion about development options in the Amazon. It reduces "the complex themes that involve the debate about sustainability in the Amazon to problems of *international conspiracy*, *national security and sovereignty*." (Zhouri 2002: 5 italics in original). Other social scientists make similar observations. José Heder Benatti, says the specter of an external enemy clamoring to appropriate the Amazon's riches serves to keep people from talking about the causes of deforestation, and thus from wrestling seriously with solutions. (Benatti 2007). And Ariovaldo Umbelino de Oliveira points out that as long as the problem is defined as foreign intervention, no one has to come to terms with the fact that it is Brazilian consumers who buy most of the meat and wood produced in illegally-deforested areas. [25]

Foreign environmentalists While these debunkers of an international conspiracy seek to remove the spotlight from foreigners, they miss the reality that many non-Brazilians do talk as

[25] See "Maior ameaça a Amazonia são os brasileiros" 1 June 2009 in http://noticias.agenciaamazonia.com.br

though the Amazon belongs to the world. I refer not to the political figures who reputedly have urged the internationalization of the Amazon, but to individual environmentalists, members of transnational environmental organizations, and environmental journalists whose language reflects the environmentalist principle that ethical people should expand their concept of community to include the world's plants and animals. One of the individual environmentalists is American film director James Cameron. In April 2010, after the release of "Avatar," he flew to the Amazon and inserted himself into the hot controversy over a proposed hydroelectric dam on the Xingu, a main tributary to the Amazon River. Brazilian environmental groups and indigenous peoples' organizations have fought against the dam for three decades because of the environmental destruction it will cause (including much deforestation) and the threat it poses to dozens of communities in the area (Cleary 2010; Carvalho 2006). Apparently not knowing how long the anti-dam protest had been going on or how sophisticated the mobilization has been, Cameron boasted, "These people really are looking for me to do something about their situation. We have to try to stop this dam." (Quoted in Barrionuevo 2010). This statement, especially coming from a celebrity, is exactly the kind of thing likely to enrage supporters of the dam and to turn public attention to simplistic sovereignty issues and away from difficult questions about how – and whether -- to develop the Amazon. Along the way it could jeopardize the Brazilian campaign against the dam. As David Cleary writes, sensitivity to foreign intervention in Brazilian affairs is so high that Cameron's opposition to the dam is "the one thing that can be guaranteed to unite all shades of uncommitted opinion in Brazil behind" it (Cleary 2010).

Other non-Brazilians who talk as though the Amazon belongs to the world are the members of transnational environmental organizations that either maintain offices in Brazil or have partnerships with Brazilian environmental organizations. The relationships such arrangements foster, along with the foreigners' embrace of environmentalist principles, encourage inclusionary language. So the transnational groups' websites typically blur the distinction between themselves and Brazilian environmentalists, using "we" and "us" as though the terms were unproblematic. The Nature Conservancy says "Probably no other place is more critical for human survival than the Amazon …Our goal is to conserve 140 million acres of the

Amazon by 2015." [26] The World Wildlife Fund says "we want to stop an avalanche of destruction along this frontier..." It concludes: "WWF has a critical role to play in saving the places we care about…The world needs our leadership." The Rainforest Action Network says, "RAN is working to curb the global warming crisis. By taking action now, we can reduce emissions by more than 85 percent by mid-century…" And in a video called "Celebrating Ten Years in the Amazon Rainforest" Greenpeace International says, "This is a fight for our own future…If we want to protect the climate, we must save the forest."[27]

Environmental journalists also use this kind of ownership language. For example: "What Ever Happened to the Amazon Rain Forest? Did we save it or what?" asks a headline in *Slate Magazine*.[28] An essay on a website devoted to explaining how things work is similarly titled: "How Can We Save the Amazon Rainforest?" [29] So is an article in the on-line technology magazine ZDNet: "Can We Save the Amazon Rainforest?"[30] (The ZDNet piece is especially interesting as an example of the twist journalists can put on scientific articles. Just as one might suppose from the title, the piece begins, "There are plenty of alarming reports on the future of our planet …Still, there are things we can do to improve the situation." It continues: "For example, by simply respecting existing laws, it should be possible to save a million square kilometers of rainforest by 2050…" The author then reports on a letter to the editors of *Nature*, a letter that never implies that "we" non-Brazilians are the ones who must start "respecting existing laws.")

The trouble with the "we" language is not just that it plays into the hands of Brazilians who want to skirt around the divisive issue of forest policy and focus instead on sovereignty. It also obscures the politics behind deforestation. If we foreigners are the ones to save the Amazon, deforestation appears to have no explanation other than Brazilian helplessness. Brazil becomes a

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[26] The language on websites is ephemeral. This, and the quote from WWF and RAN were found on December 8, 2010..

[27] It is important to point out that this is the Greenpeace Internationa*l* website. Greenpeace Brasil is a national organization.

[28] Brendan Borrel November 3, 2009 www.slate.com

[29] William Jackson. September 11, 2009 www.ehow.com

[30] Roland Piquepaille. March 24, 2006 www.zdnet.com

child needing parental aid, not a vigorous nation whose government is trying to curb deforestation in the midst of economic constraints, development controversies, complex historical legacies and ideological battles. In addition, the "we" language fails to ask who "we" are. It pretends that everyone around the world – including large soybean conglomerates, importers of Brazilian beef, and foreign investors in Amazon dams -- has the same attitude about tropical deforestation. This way of talking, say Taylor and Buttel, "emphasize[s] people's common interests in remedial environmental efforts while, at the same time, steering attention away from the difficult politics that result from differentiated social groups and nations having different interests in causing and alleviating environmental problems" (Taylor and Buttel 1992:406). And finally, the "we" language blurs the crucial difference between forest policies that would be good for Brazil and those that would be good for everybody else – along with ignoring the monumental problem of figuring out what the policies should be and who in Brazil they would be good for. A World Bank report asks provocatively, "Would deforestation be acceptable if it were socially desirable for the local populations but not for the whole Brazilian population? Or would deforestation be defensible if it were in Brazil's best interest but not that of the rest of the world?" (Margulis 2004).

Ironically, Brazilian ownership rhetoric poses the same problems. If the Amazon belongs to Brazil, as indeed it does, which Brazilians does it belong to most? Forest policies that satisfy small farmers, for example, are likely to be different from those that satisfy cattle ranchers, soy cultivators, indigenous people, urban dwellers, or people living in the rest of Brazil – to say nothing of the different policy preferences among the various men and women in each of these categories. Treating this huge variety of people as one undifferentiated "us" to whom the Amazon belongs diverts attention from the uneven power Brazilians have to make – and to benefit from – forest policies. In the process of contrasting "us" the Brazilians against "them" the foreigners, says Andréa Zhouri, there is a "silencing of *us* as a multiethnic and multicultural society, at the same time in which *they* also are presented as an opposite and homogenous category that embodies, indiscriminately, diverse social actors, such as governments,

corporations, environmentalists and defenders of human rights. Thus, in a distorted logic, environmentalists are taken as voices of capitalism (Zhouri 2002:5 Italics in original).

Paradox The paradox in all of this is that environmentalism's "us" and "we" language is the movement's great strength. While it is certainly possible to assign responsibility for the great majority of environmental problems to industrial and agricultural practices that damage the earth's air, water and soil, or to governments that allow the practices, defining the problem that way gives citizens little to do beyond lobbying and demonstrating. If, on the other hand, "we" are responsible for environmental degradation, "we" can act to make things better all by ourselves. The litany of possible actions appears everywhere: recycle your trash, buy different light bubs, bicycle instead of drive, use less water, eat foods grown close to home, plant a tree, and dozens of similar small ways to Save the Earth -- specifically including, in some messages, the Amazon forest. Other social movements do not offer such an array of concrete, well-promoted, simple, personal actions that supporters can take. People who worry about environmental degradation hear over and over that their individual actions are the way to solve the problem. Whether or not these small deeds can make a significant difference, and whether or not they get big industry and agriculture off the hook, by consciously doing them people commit them selves to environmentalism. They become part of the movement. In a feed-back loop their actions tell them what political candidates to vote for and what legislative bills to support. At the same time, the personal acts add to environmentalism's visibility. Done in public – even to a very tiny public – they subtly call attention to the environmental principles about nature's intrinsic value, its interdependence and its fragility. Most importantly, these acts reinforce environmentalism's revolutionary claim that ethical human beings have an obligation to protect not just vulnerable people but vulnerable plants and animals as well.

Conclusion

Each of the three deforestation frames presented here deceptively reduces a complex problem thereby limiting policy options. Yet at the same time each one helps to promote the environmentalist teaching that current notions of progress endanger the planet. The trees and

Indians frame for deforestation misrepresents the Brazilian Amazon, pretending that it all was once lush topical forest, that the entire area is at high risk of being burned down for farms, cattle ranches or industrial agriculture, and that the only people living in the Amazon are simple indigenous folk, all of whom have a deep desire to protect nature.. (Their enemies, the deforesters are implied, but exist somewhere outside the frame.). This presentation of the deforestation problem ignores the multiplicity of ecosystems, the vast majority of the population, the differing attitudes and experiences people in the Amazon have with deforestation, and their varying abilities and desires to change the situation. It reveals only a trace of the great variety of people whose actions and interests constitute the deforestation policymaking process in the Brazilian Amazon. And it blocks out questions about whom the Amazon is for, leaving the impression that the only legitimate residents are indigenous communities whose simple way of life will preserve the land around them. In this way the trees and Indians frame restricts policy options to laws and regulations that will keep everyone except Indians out of the Amazon forest and will ensure that Indian communities do not "develop." Yet while the uncomplicated trees-and-Indians frame disregards Amazonia's reality and condones continued poverty among indigenous people, it keeps the romance in environmentalism. The idea that the world still contains an environmentalist paradise where peaceful men and women live in harmony with nature is inspirational at a time where most people mainly experience the cacophony and hurry of urban life.

The climate change frame for deforestation calls attention to the people who cut down trees. It presents deforestation more as a threat to the entire world's people than just to Brazil's indigenous communities and it proposes that financial incentives will convince potential cutters to leave trees standing. The frame barely acknowledges the different kinds of people who cut down trees and their varied reasons for doing so, pretending that small farmers, illegal loggers, cattle ranchers and soy cultivators will all respond more or less equally to the same policy . More importantly, it leaves out entirely the social causes of deforestation such as weak administrative agencies, cultural traditions wherein flouting the law is expected, the imperative of industrial development, and the ups and downs of the global economy. Omitting all these things, the

climate change frame concentrates policy options on schemes that would give people money if they protect forests. Yet despite the unlikelihood that economic incentives will make much of a dent in deforestation rates, this framing of the problem serves environmentalism. A more accurate frame, one broad enough to encompass the fundamental problems, could stretch the agendas of environmental groups beyond their organizational capacity, making them spread their resources too thinly. And it could reduce the appeal of environmentalism, turning the movement from what is it now -- a campaign comfortably in step with mainstream politics -- to a far less popular crusade demanding political change.

Environmentalism's ownership frame for deforestation endorses the powerful environmental ethic that the human community includes all living things. So it presents the Amazon's flora and fauna as common property belonging to all humankind. But in doing so it ignores the inconvenient fact that the Amazon actually belongs to Brazil. And it fails to recognize the long history of foreigners' use, and attempted use, of the Amazon for their personal gain, as well as recent reports that outsiders (including heads of state) believe Brazil does not deserve its tropical forests. So environmentalism's ownership frame uses "we" language uncritically, advancing the happy fiction that all human beings are equal citizens of the planet, equally receiving its bounty and enjoying its wonders. Yet as insensitive and false as the "we" language is, the concept that everyone is responsible for the fate of the earth enriches environmentalism by giving supporters a personal role to play. Instead of being overwhelmed by the enormity of the environmental predicament and by the complexity of deforestation's causes, they can take comfort in the message that their individual efforts will go a long way toward protecting the Amazon. And by telling or showing other people that they're taking these small acts, they promote environmentalist principles.

It is possible to imagine non-environmentalist frames for deforestation. Instead of trees and Indians, activists could frame deforestation as an example of social injustice. Small farmers would be in the frame along with Indians and other "forest peoples," so would city folk of all stripes, and so would men and women hoping to make a living raising cattle, mining for minerals, logging the forest, and growing soy beans. The frame would show the varied

aspirations of this disparate group of Amazon residents and direct attention to the ways of using forests – along with other natural resources – that promote fairness and equality among people. Or instead of climate change, deforestation could be framed as a good government issue. It could be part of a campaign demanding more resources for administrative agencies, including the Ministry of the Environment, better coordination among the various levels of government, higher expectations for the implementation of laws, a stronger and more independent judicial branch, and a new crackdown on corruption. Or instead of ownership, deforestation could be framed as a globalization issue. It could highlight questions about what it means to be a citizen in a globalizing world, about the ethics of becoming involved in another country's policies, about the ways that innovation can flow from south to north instead of only the other way around, and about the whole complex notion of sovereignty in the 21st century.

Many academics have, in fact, examined deforestation in these ways. So have some social movement organizations and some journalists. However it is unlikely that any of these other frames would be as powerful as the environmentalist frame in calling attention to the deforestation problem and in proposing solutions. For all its faults, the environmental movement currently takes up more political space and recruits more adherents than social justice crusades, good government campaigns, and challenges to globalization. Of course one of the reasons for environmentalism's strength is its propensity to romanticize nature, to simplify "the environment," to individualize solutions. Paradoxically, though, for all its regrettable tendencies, environmentalism has had an incalculable, positive impact on the world in the last fifty years. It has not lived up to its radical potential, but it has introduced an entirely new standard for ethical behavior and challenged the conventional definition of what it means to be a developed country. It has transformed many heretofore acceptable practices into serious social problems. One of these practices is cutting down forests.

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