This earth, this island Borneo

Challenging the widespread view that globalization invariably signifies a "clash" of cultures, anthropologist Anna Tsing develops friction in its place as a metaphor for the diverse and conflicting social interactions that make up our contemporary world. In this excerpt from Friction: An Ethnography of Global Connection *(2005), Tsing shows how curious and creative cultural differences are in the grip of worldly encounter, and how much is overlooked in contemporary theories of the global.*

text by **Anna Tsing**

Knowledge grows through multiple layers of collaboration – as both empathy and betrayal. The process of layering is perhaps most striking in insignificant, vernacular collaborations – like the one I catalyzed in the village of Kalawan, at a moment when a much-cherished biodiversity was becoming an issue of anxious concern.

1994. It started with an innocent question about eels; I was thinking of dinner. "Are there any eels in the river?" I asked. Uma Adang, my Merantus Dayak friend, and mentor, leaned back, assuming her most serious oratorical bearing. "Facing the year 2000", she proclaimed, "we must make a list of all the contents of this earth, this island Borneo", Plants and animals, their names and uses, and local or foreign locations: all, she told me, should be listed. I was taken aback. I had not yet had the chance to explain much to her about my new research on global environmentalism. She was not in touch with global biodiversity experts, although surely some radio announcer or nature hiker had brought the rhetoric of environmentalism to her village. Yet she beautifully articulated the spirit of environmental prophecy: the looming, apocalyptic crisis of nature as revealed at the turn of the millenium, the chance to save the earth through proper naming, and the necessity, in doing so, of moving back and forth between "the island" and "the earth" – the minutely local and the whole globe.

Over the next ten days, Uma Adang sat with me and dictated over a thousand local life-forms. She wasn't feeling well, and she didn't want to go outside. Instead, she felt happier sitting with me on the floor of her home, telling me about plants and animals. Every now and again, someone else in the household, feeling the pleasure of our work, would come in with a plant sample picked outside: "You haven't listed this yet". We would add a new name to our list. [...] Uma Adang self-consciously limited herself to living things that were found in her local area, a karst-studded plain of small shifting fields and still-large but threatened forests at the foot of the Meratus Mountains. She excluded life-forms that she knew occurred at the coast, as that, she said, should be a different list. This was a self-conscious project of placing a local niche within a global imagining. The lists acknowledged and acclaimed global biodiversity by conserving a local space within it.

Because I had asked about eels, we began with *laba' di ai'ing*, beings of the water. Uma Adang listed the best fish to eat, and then some less significant fish, then the fish found in swamps, the reptiles, the amphibians, the mollusks, the crustaceans, and finally the water plants. Because I had watched people fish and admired their catch, the list easily evoked the everyday livelihood practices through which I, too, could call to mind these water creatures. Wading in deep river pools, young men threw hand-woven nets to catch the sweet-fleshed *iwak*. In the mountains, men bent bamboo poles, their ends craftily hooked underwater so that they sprung high over the river. When the iwak were big, people divided them up into small chunks, counting out equal shares for every household just as if they were game. In Uma Adang's network, boys swam underwater with home-made goggles and rubberband-powered spear-guns to bring us delicious *kambalang* and *lampan*. Woven bamboo traps caught smaller fish in fast-running streams. In muddy creek holes, we could build a tiny dam and scoop up *saluwang* minnows with our hands; we steamed and ate them, bones and all. I once brought home a great *panting* catfish; it had been killed by a bird, which flew away when I ran up, leaving its fresh prey. As for turtles, frogs, shrimp, and snails: We had enjoyed them all. And, of course, eels.

The taste of food was not, however, the only pleasure called up in this list. Uma Adang is alert to the colors, textures, and sounds of the beings around her. She described the *karantung* frog as "the music of the deep water" and mimicked its call. She knows plants and animals in relation to locations: She tried to remind me of the place I had just seen the water plant *tantamau*, on the rocks where we were gathering snails. Sometimes forest birds and animals become companions: I saw my first *kuntan* tortoise when I was introduced to Uma Adang's latest pet, whom she brought home from the forest to coax and protect and feed ripe bananas as it crawled around the house. As for riverside *lua'* trees, we talked as much about the animals attracted to the tree because of its fruit as about its human uses.

Meanwhile, the river was becoming a difficult place to find food. With the building of new roads, the practice of sending an electric current into the water with a car battery had been introduced to Uma Adang's area. All the fish, big and small, died. (At least one person died too, by accidentally slipping into the water while the electric current was still active.) The rivers were becoming barren. Uma Adang's worries about this situation provoked her attention to listing the river's denizens. Her list was a form of apology that soon enough we would not be eating and even encountering these fish and frogs and eels. A prospective, incipient nostalgia helped motivate the list: the same incipient nostalgia as that which motivates so much of the science of environmental conservation, particularly concerning the conservation of biodiversity.

[...]

My mother, the only Chinese American mother of an Ohio wildflower society, tells me: "Learning the names of plants is just like learning the names of people you meet; when you know their names, you can get to know them better".

The idea of biodiversity has proved charismatic because it combines the scientific legitimacy of biology with popular legacies of plant and animal identification. Victorian animal collectors, particularly in England and its diaspora, were fascinated by the variety of nature.[1] The theory of evolution interpolated species collecting into one of the most thrilling sciences of the times. Similarly, conservation biology energizes contemporary popular practices of nature appreciation in which learning the names of species creates a vitalizing intimacy with nature.[2] Species-oriented nature appreciation – from birdwatching to wildlife television – had a well-established place in late twentieth-century metropolitan cultures. Conservation biologists were able to draw on this popularity and build it, as they showed the importance of conserving the diversity of nature. Working together across lay and technical lines, conservation biologists and environmental activists have made attention to biodiversity – including the practice of making species lists – the first requirement of conservation itself.

The environmental activists of the Rainforest Action Network transmit the latest communiqué from the U'wa people of Columbia: "We U'Wa will not cede our cultural, historic, and ancient rights. We prefer genocide sponsored by the Colombian government rather than handing over our Mother Earth to the oil companies".[3]

The blossoming of the international campaign to save the Amazon forest in the late 1980s inspired a new political form: collaborations between indigenous leaders and environmentalists. Indigenous rights became entangled with conservation initiatives. Such collaborations were inspired in part by researchers who had found that indigenous people appreciated and managed the biodiversity with which they lived (e.g. Posey 1985).[4] It seemed possible that culturally sensitive alliances among scientists, activists, and indigenous peoples might make conservation possible in some rich, not-yet-simplified patches of nature.[5] In this spirit, conservationists have revitalized attention to the traditional knowledge of rural people. It seems hopeful that so many indigenous people are not only well-informed about biodiversity but also willing to share their knowledge with conservationists. Yet obstructions abound.

Political ecologist Søren Hvalkof learns why the Siona Indians of the Ecuadorian Amazon refuse resource extraction contracts: "In impassioned voices they told revolting stories about how [during the early twentieth-century rubber boom] the local rubber patrons and their contractors had murdered, tortured, and abused their folks"[6]

One obstruction is the terrifying history of past encounters through which indigenous knowledge has entered the metropolitan corpus of science and industry. Most of the economic products in use today for global agriculture and industry were introduced from the knowledges of rural people who knew and used these products; and this process of extraction continues.[7] This has not been a pretty history of mutual benefit. Infused with practices of enslavement, terror, theft, murder, and deceit, the expansion of European and "international" knowledge of economic products has been deeply entangled with subjugation. The current course of global capitalism suggests that such coercive and unequal collaborations will continue. Many of the most conspicuous models of conservationist collaboration (such as "rainforest marketing," in which local identification of economic plants is coupled with corporate production and distribution, and "biodiversity prospecting," in which rural people help scientists gather plants for corporate pharmaceutical development) have suffered from their refusal to repudiate this past history, instead of drawing from its legacy of exploitation.[8]

Feminist theorist Noel Sturgeon offers a generous reading of the quirks and promises of U.S. ecofeminism, yet she worries that ecofeminist attention to indigenous knowledge, despite good intentions, reconstitutes white privilege: "One way this occurs is through the racial essentialism of the idea of the indigenous, which erases all difference between and within the categories 'Native American' and 'Third World' and constitutes them as racialized Others to a white Self that is Western, modern, and industrialized" [9]

Another obstruction is the metropolitan romance that produces the categories with which we know "indigenous" people and "wild" nature. These are modernist categories in negation; they index people and places not included in "modern" landscapes, that is, landscapes in which planners have worked hard to subjugate variety for the cause of regularity, hygiene, property, efficiency, and profit. Because indigenous people and wild nature only exist in opposition to these modernist programs, any generalizations we make about them are likely to be wrong. We quickly ascend to a world of fantasy every time we imagine tribal survival or spirituality, or wild nature's competitive struggle or harmonious stability. These categories have a limited usefulness in helping us understand the idiosyncratic histories of particular social and natural landscapes. Yet it seems to me that we cannot give up these fantastical categories. It is only because of the protest embedded in them that some conservationists even

imagine collaboration across cultures to preserve the variety of nature. The alternative fantasy – a falsely uniform modernism – is much worse.

[...]

[...] The crux of the argument about indigenous people and conservation is that the regularizing modern imagination has had such a destructive effect on species diversity that almost any other human lifeway is likely to be better at maintaining it.[10] Farmers invade tropical forests when they are incorporated into modern political economies.[11] This attention to the historical and cultural specificity of modernist destruction is an important – and promising – divergence from more popular conservationist models, which posit all humanity in conflict with nature. It is worth attending to indigenous-conservationist collaborations just to give them some breathing room.

[...]

Scholars have consolidated their critical perspectives on conservation by looking for *contests* in which parties with different stakes – European hunters and African herders, resident farmers and urban nature lovers, foreign activists, and native tribes – struggle over the definition and use of nature.[12] This work usefully brings culture and politics together in understanding environmental conflicts; but there are other ways, too, to look at politics and culture. Much less attention has been paid to *collaborative* relationships through which environmental campaigns have been mounted. Collaboration is not necessarily good for all parties; to study it is not to pretend that easy solutions abound. Collaboration does, however, draw attention to the formation of new cultural and political configurations that change the arena of conflict, rather than just repeating old contests.

"Turtles and Teamsters": The unlikely – and tentative – alliance between labor and environmentalism successfully closed down the World Trade Organization's meeting in Seattle in 1999.[13]

In this spirit, I stride cautiously but with determination into the arena of conservationist-indigenous alliances. Even as seemingly innocent an activity as making species lists can find itself enmired in condescension and theft: Does the list stereotype indigenous knowledge, limiting future economic and political strategies for the group? Does it erase nascent intellectual property rights or make information available for corporate exploitation? To care about these questions does not turn me away from multicultural environmentalism. Instead, such questions sharpen my attention to the process of collaboration.

In drawing attention to our collaborative process, my first two steps are an acknowledgment of *eclectic knowledges* and *overlapping pleasures*. List-making is eclectic to the extent that it draws on multiple, fragmentary sources. Furthermore, any list made by two or more people is a negotiated, eclectic product. To acknowledge this eclecticism allows us to admire its creative use of limited materials, rather than to grasp only for scope. It allows us to imagine the list within historically changing conversations, rather than as transcendent knowledge. My input in the species list I made with Uma Adang blended a variety of historically particular genre conventions and forms of curiosity, ranging from scholarly fashions (writing with informants) to activist strategies, from childhood passions (nature appreciation) to fragmented biological observation in Kalimantan and elsewhere. Similarly, Uma Adang brought her own mixture of historically particular goals and resources to the task. The discussion between us sparked new items on the list by juxtaposing and blending our combined intellectual stock within the limited confines of an enthusiastic oral performance, held indoors and in that sometimes awkward mixture of regional dialects with which Uma

Adang always directed conversations even without my added blundering.

The eclecticism we produced is perhaps obvious – and I've tried to make it visible in the translations I offer by including Latin names only occasionally and by identifying organisms through an irregular mixture of Uma Adang's and my own commentary. I ignore questions of classification, offering only the negotiated list. I am more interested in introducing my readers to plants and animals than in adding them to a biological or cultural master list. To speak to a heterogeneous readership, I mention, for example, that *lalamas* (#45) is an aroid, like taro, for those who care; for those who don't, I hope that the image of heart-shaped leaves by the side of the stream beckons at least a little. This is, then, a motivated set of translations and not a simple addition to either universal or local cultural knowledge.

In other collaborative species lists, the Linnaean Latin name of an organism is paired dichotomously with a 'local' name; the Latin name offers international information, while the local name grounds it in a particular place and discovery process. Conservationist-indigenous collaborations have sometimes used these lists to argue that local names on the list represent a codified traditional knowledge, which can match at least in form its scientific counterpart. There are lots of good reasons to codify knowledge. Sometimes such codifications are a tool for historically marginalized people to gain a place in negotiations of their resource rights. Anthropological investigations of the breadth and detail of indigenous knowledge can play an important role in facilitating this process, and I am full of appreciation for such work. However, for the specific task of understanding collaboration, it is necessary to draw attention to the context in which communication and codification occur. This requires acknowledgment of the inevitable eclecticism and serendipity of the knowledge-making process. The systematic study of "Meratus ethnobiology" is another task.

A concern with collaboration also draws my attention to the overlapping pleasures of list-making. If lists have anything to do with conservation, it is because they exude a certain charisma: They make people exclaim in wonder at the diversity of nature; they can inspire us to preserve that diversity. Yet for urbanites outside of the practices of nature appreciation and conservation biology, such lists often seem dead bureaucratic forms. Who cares whether there are ten species of snails or ten thousand? To ask how list-making works as a form of collaboration in nature appreciation is to make that appreciation palpable. What pleasures motivate each side of the collaboration to participate?

For Uma Adang, the pleasures have been many. Consider the pleasure of storytelling: It is impossible to tell or listen to stories of Kalimantan without saying the names of plants and animals. People encounter a large variety of plants and animals every day. It is hard to talk about what people are doing or where they have been without talking about plants and animals. One of the pleasures of Uma Adang's list was its incitement to remember and tell stories.

[...]

The stories we exchanged about snakes focused on the unusual and the unexpected. But the pleasures of the everyday and the ordinary are also told in stories and even lists of diversity. Plants and animals figure everywhere in Meratus Dayak livelihood practices and the stories through which they are savored and shared. Discussion of cultivation and gathering, for example, is all about the diversity of plants and animals and tastes and habitats. Foods are diverse in both forests and fields: the range of food plants gathered from the forest is matched by the range of crop varieties nurtured in swidden fields. Swidden plant variety is mulled over and discussed every time something is to be planted; every time a neighbor comes to ask for one of those ripe squash; every time a young couple borrows not just one but many kinds of rice seed to extend their social networks; every time a child demands *that* variety of banana and not that other one.

[...]

But we were speaking of pleasures, and particularly the pleasures of listing species, and I have not yet mentioned the most obvious: the making of the list itself. Uma Adang loved the idea that I was writing down the list and enumerating each item. For ease of taking notes, I started my numeration with "one" every time we switched to a new life-form. But Uma Adang always wanted to know the total, and I added and added again each time we took a break. Making it past one thousand items became a goal. The list took on all the pleasures of writing, counting, and classifying: Uma Adang and I were pretending to be bureaucrats with the authority of state and international codification. We were ordering the world by naming it. As Uma Adang explained to me, "Everyone knows these names; but not everyone knows how to organize them properly."

[...]

Laba di ai'ing Beings of the water

1. iwak: the great white fish just called "fish"
2. anakan: another white fish
3. masapi: a big eel, as big around as a person's arm, it hides in holes but can be lured out at night with chicken guts
4. usei: another freshwater eel, also delicious
5. kambalang: a tasty fish
6. tilan: a thin, scaly fish, like an eel
7. manki: a green fish with red tail and fins
8. puyao: another green fish
9. lampam: a white fish with a red mouth and tail
10. bidugung: a yellow fish, 3 fingers wide
11. badaris: a small white fish
12. saluwang: a minnow
13. kanduri: a catfish
14. kihung: a long black fish

These are found in seasonal creeks and swamps:

15. alirao: a catfish
16. la'is [*Belodontichthys dinema*]: a catfish
17. sambunit: a small catfish
18. tamparisay: a fish, 4 fingers wide
19. panting: a catfish
20. puntur: a long fish
21. sanggiringan: the size of a person's thumb, it swims in schools
22. lampuk: a catfish similar to la'is
23. walut [*Monopterus albus*]: a small swamp eel

These have legs:

24. bidawang: a large turtle
25. biyanan: a small turtle
26. kuntan: a tortoise
27. kuduk: a common frog
28. kungkung: a toad
29. ambulahang: a green toad
30. i'rak: another toad
31. karantung: a frog; "the music of the deep water"
32. tangkaricak: a tiny frog that calls day and night

Endnotes

[1] Thomas Dunlap, *Nature and the English Diaspora* (Cambridge: Cambridge University Press, 1999).
[2] Edward O. Wilson, *The Diversity of Life* (Cambridge, Mass.: Harvard University Press, 1992).
[3] Cabildo Mayor U'wa, Communique to the national and international public: Oxy invades U'wa territory. Rainforest Action Network, January 20, 2000. http://www.ran.org_campaigns/beyond_oil/oxy/communique_000120.html.
[4] Darrell Posey, "Indigenous management of tropical forest ecosystems," *Agroforestry Systems* 3 (1985): 139-58.
[5] Kent Redford and Jane Mansour, eds., *Traditional Peoples and Biodiversity Conservation in Large Tropical Landscapes* (Arlington, VA: The Nature Conservancy, 1996).
[6] Søren Hvalkof, "Outrage in rubber and oil: Extractivism, indigenous peoples, and justice in the upper Amazon," in *People, Plants, and Justice*, ed. Charles Zerner (New York: Columbia University Press, 2000), 87.
[7] Calestous Juma, *The Gene Hunters: Biotechnology and the Scramble for Seeds* (Princeton, NJ: Princeton University Press, 1989).
[8] Michael Dove, "A revisionist view of tropical deforestation and development," *Environmental Conservation* 20, no. 1 (1993): 17-56; Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge* (Boston: South End Books, 1997).
[9] Noel Sturgeon, *Ecofeminist Natures: Race, Gender, Feminist Theory and Political Action* (New York: Routledge, 1997), 113.
[10] Tariq Banuri and Frederique Marglin, eds., *Who Will Save the Forests? Knowledge, Power and Environmental Destruction* (London: Zed Books, 1993).
[11] Larry Lohmann, "Against the Myths," in *The Struggle for Land and the Fate of the Forests*, eds., Marcus Colchester and Larry Lohmann (London: Zed Books, 1993): 16-34.
[12] Peter J. Brosius, "Analyses and interventions: Anthropological engagements with environmentalism," *Current Anthropology* 40, no. 3 (1999), 277-309.
[13] Joe Berry, "Sea turtles and teamsters together at last," *Labornet Newsline*, December 19, 1999. http://www.labornet.org/news/123199/08.html.

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