

NATGEO NEWS WATCH

NEWS EDITOR DAVID BRAUN'S EYE ON THE WORLD

Biocultural diversity: The true web of life

Posted on June 29, 2010 | 0 Comments

By **Luisa Maffi**

Q.: Quick, what do a congress of the [International Society of Ethnobiology](#), a meeting of [International Funders for Indigenous Peoples](#), and an [international conference co-organized by the UN Convention on Biological Diversity and UNESCO](#) have in common?

A.: Other than the fact that all three events took place in Canada over the past two months, what they all have in common is that one of the most frequently mentioned words in each case was "biocultural diversity."

I participated in all three events--and, as the co-founder of [Terralingua](#), the first organization to be devoted to sustaining biocultural diversity, I was both pleased and amazed to see how rapidly "biocultural diversity" is now becoming a household name, at least in academic, advocacy, and policy circles.

It was a twenty-year-long journey for this idea to move from virtual obscurity to today's growing popularity. In 1988, the [Declaration of Belém](#), issued by the International Society of Ethnobiology, asserted the existence of an "inextricable link" between biodiversity and cultural diversity.

The mid-1990s saw the creation of Terralingua. With the current proliferation of research, policy, and on-the-ground initiatives with a biocultural focus, it is fair to say that the idea that the true web of life is diversity in both nature and culture is coming of age.

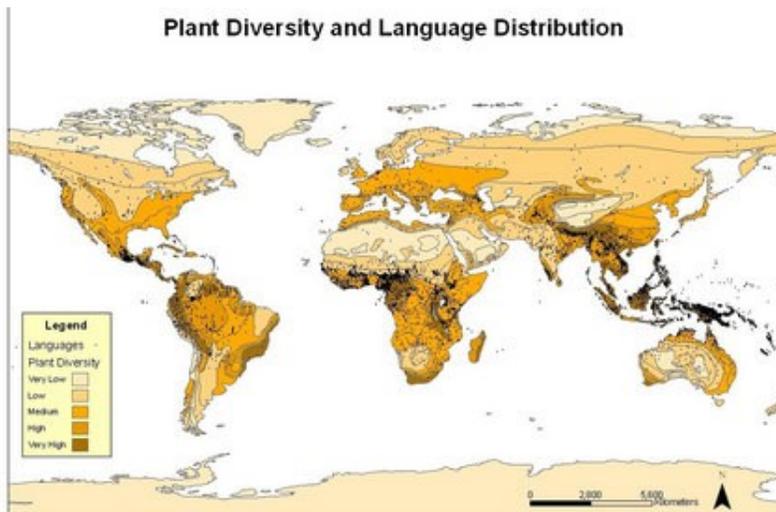


Photo courtesy of Terralingua

Research conducted by Terralingua and others over the past several years has shown that, at both global and regional scales, there is a strong overlap in the geographic distribution of biodiversity and linguistic diversity (the diversity of the world's languages, a key aspect of cultural diversity).

Maps now show that areas of high biodiversity, especially in tropical regions, also abound in linguistic diversity. Wherever one finds richness in biodiversity, it is possible to predict that one will also find a great

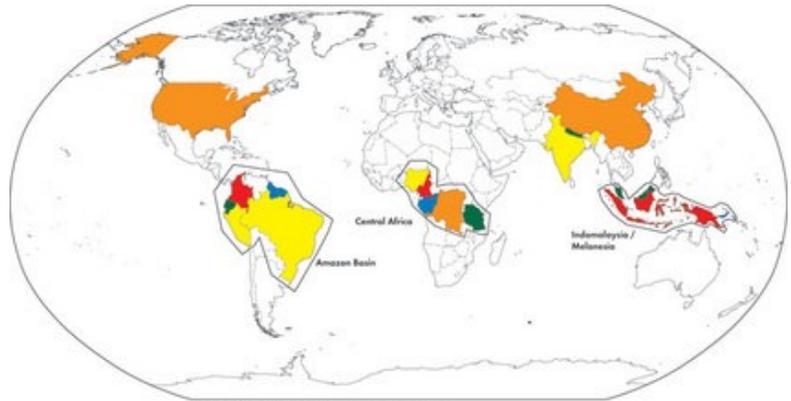
variety of distinct languages (and, by implication, a great variety of distinct cultures). Three core areas of biocultural diversity have been identified.



From: Stepp, J.R. et al. 2004.
Development of a GIS for Global
Biocultural Diversity. Policy Matters 13,
pp. 267-270.

*From: Harmon, D. and J. Loh 2004.
Terralingua's Index of Biocultural
Diversity.*

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Three Core Areas of Biocultural Diversity

- ranked top 10 in all three measures (Columbia, Cameroon, Indonesia, Papua New Guinea)
- ranked top 10 in two of the three measures (Peru, Brazil, Nigeria, India, Burma)
- ranked top 10 in IBCD-RICH only (USA, Democratic Republic of Congo, China)
- ranked top 10 in IBCD-AREA only (Sri Lanka, Tanzania, Nepal, Myanmar)
- ranked top 10 in IBCD-POP only (Japan, Suriname, French Guiana, Guyana, Congo, Solomon Islands)

Striking overlap

How did this striking overlap between cultures and biodiversity come to be?

What we see at global and regional scales is the outcome of the myriad close interactions that "place-based" people have had with their local environment over hundreds, sometimes thousands of years.

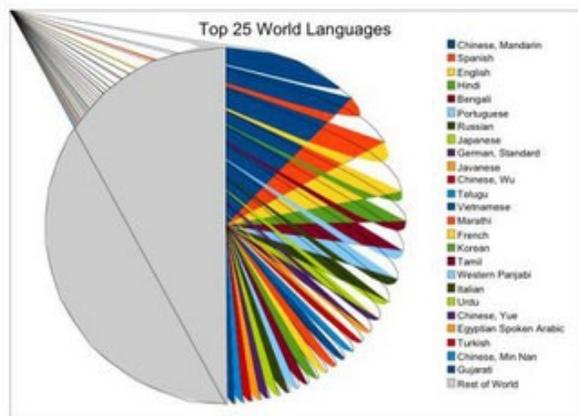
Local societies--whether indigenous peoples or rural communities and other small-scale societies--co-developed, indeed co-evolved, with the ecosystems in which they lived, and from which they derived sustenance.

By nurturing the environments that nurtured them, they forged a profound interdependence with the natural world.

This is still often apparent in the ways of life of the many thousands of indigenous peoples and local communities that comprise most of the world's cultural diversity--and who, as the maps show, are the stewards of most of the world's biodiversity.

There are over 7,000 languages spoken on the planet today, 80-85 percent of these being spoken by indigenous peoples. Most of these languages are spoken by very small communities, which are constantly at risk of being "swallowed up" by larger and more powerful societies, their languages replaced by majority languages.

Distribution of Speakers among Languages



From: Harmon, D. and J. Loh 2010. The Index of Linguistic Diversity: A New Quantitative Measure of Trends in the Status of the World's Languages. To appear in *Language Documentation and Conservation*. All ILD figures and graphs © Terralingua 2010

This often forced assimilation has obvious negative consequences for the cultural identity, self-determination, and well-being of indigenous peoples and local communities worldwide.

It also has far-reaching consequences for the natural world.

As rapid cultural and linguistic change takes place--which frequently happens well beyond the control of the people affected by it--the "inextricable link" between people and the environment begins to break down. If people are displaced, or if their "place" and their way of life are radically transformed, people's place-based values, knowledge, and behaviors begin to lose their significance.

Language of Place

The "language of place," too, begins to lose its meaning. How can one hold on to precious knowledge of plant and animal species, landscapes, and ecosystems, and to the unique words, songs, and narratives that speak of them, when one is no longer immersed in the environment that generated both the knowledge and the ways to communicate it? Or when that environment and the way of life that went with it have been wiped out?

This may be difficult for members of majority societies and speakers of majority languages to understand--it is not what has happened to them. That is why, perhaps, one can read lapidary statements such as this, from a [recent article in *The Economist*](#) online, by Robert Lane Greene (May 4, 2010), which questioned the link between language and the environment: "Contrary to a common belief, most things are perfectly translatable."

I beg to differ. I'm immediately reminded of my experience twenty years ago, when I was gathering data about traditional Mayan medicine in the Highlands of Chiapas, Mexico.

NGS stock photo of local market, Tuxtla Gutierrez, Chiapas, Mexico, by Richard Hewitt Stewart



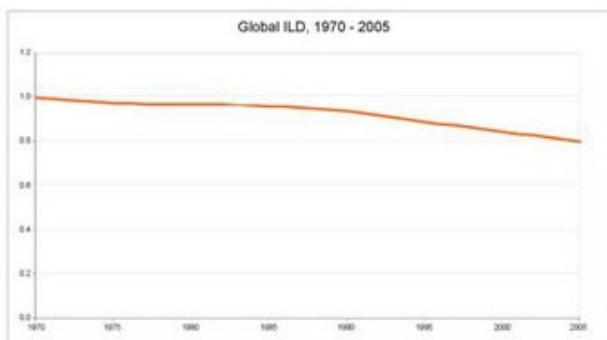
My Mayan field collaborator, who was translating my data from Tzeltal Maya to Spanish, was often frustrated. He couldn't think of how to give Spanish names to several of the time-tested plants and animals used in his people's traditional medical system. He thought his knowledge of Spanish was poor. Instead, it turns out that Spanish had no names for those plants and animals--the Spaniards had never learned the knowledge about those species and therefore hadn't had the need or interest to invent Spanish names for them.

As Tzeltal Maya society was undergoing rapid change, and younger people went to school instead of learning from their elders, all this cultural and linguistic knowledge was fading--and the people were losing a vital resource. From what I was able to witness, they couldn't quite count on the government's medical services to step in as an adequate alternative for their health and well-being.

That is why we need to worry that the diversity of the world's languages and cultures is in decline--as well it is, and at a pace that closely mirrors the global decline in biodiversity. We are losing our global biocultural heritage, and our inextricable and indispensable link with the natural world.

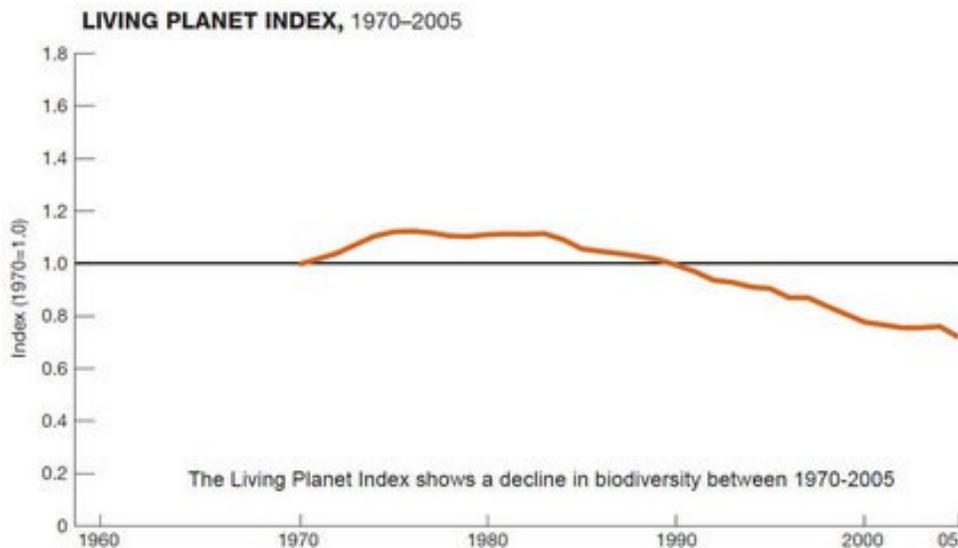
The consequences affect everyone everywhere, whether in the country or in today's megacities. Whether we're aware of it or not, nobody, anywhere, can do without nature--and without centuries and millennia of knowledge about how to live sustainably in it.

Terralingua's Index of Linguistic Diversity, 2010



From: Harmon, D. and J. Loh 2010. The Index of Linguistic Diversity: A New Quantitative Measure of Trends in the Status of the World's Languages. To appear in *Language Documentation and Conservation*. See <http://nflrc.hawaii.edu/ldc/>

All ILD figures and graphs © Terralingua 2010



Living Planet Index courtesy of WWF

Throughout the world, a growing number of on-the-ground initiatives to sustain and restore biocultural diversity is underway. Terralingua has gathered information about several of them in the volume *Biocultural Diversity Conservation: A Global Sourcebook* (Earthscan, 2010) (Related posts: [Restoring human cultures to the web of life](#) and [Talking to the clouds and listening to the trees](#)), in order to increase the visibility of these efforts and stress their importance for human futures.

We are also launching a [companion portal to the book](#) on our website, which expands the reach of the ideas and the solutions. An official launch event will take place on the portal's discussion forum on June 30. The [public can freely log on to it](#), in order to learn more about biocultural diversity from the experts that will be on tap. We want for "biocultural diversity" to become a household name in every household, and for everyone to reconnect with, and care for, the true web of life--in nature and culture.



*Luisa Maffi, PhD, is co-founder and Director of Terralingua, an international NGO devoted to sustaining the biocultural diversity of life through research, education, policy, and on-the-ground work. She is a linguist, anthropologist and ethnobiologist who has conducted fieldwork in Somalia, Mexico, China and Japan. Among her main publications are the edited books *On Biocultural Diversity: Linking Language, Knowledge, and the Environment* (Smithsonian Institution Press, 2001) and *Ethnobotany and Conservation of Biocultural Diversity* (New York Botanical Garden Press, 2004), and the co-authored volume *Biocultural Diversity Conservation: A Global Sourcebook* (Earthscan, 2010). Luisa is an International Fellow of the Explorers Club.*