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# Langscape

MAGAZINE



Voices of the Earth, Part 1

Langscape Magazine is an extension of the voice of Terralingua.

It supports our mission by educating the minds and hearts  
about the importance and value of biocultural diversity.

We aim to promote a paradigm shift by illustrating biocultural diversity  
through scientific and traditional knowledge, within an appealing  
sensory context of articles, stories and art.

#### ABOUT THE COVER PHOTOS

Front: Caleta Douglas, Navarino Island, Chile.

Cristina Calderón collecting *mapi* (rushes) for traditional basketry.

Photo: Oliver Vogel, 2015

Back: North Pindos, Greece

The return of the shepherds and their flocks.

Photo: Stamos Abatis, 2015

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## Table of Contents

**Contributors** ..... 4

**Editorial** ..... 6

### Special Feature: Biocultural Diversity at 20

**Biocultural Diversity:  
Reason, Ethics, and Emotion**  
*David Harmon* ..... 10

### Ideas

**When Grasshopper Means Lightning:  
How Ecological Knowledge Is Encoded  
in Endangered Languages**  
*David Stringer* ..... 14

**Naming the Dragonfly:  
Why Indigenous Languages Matter  
in the 21st Century**  
*James D. Nations* ..... 20

### Reflections

**Melquiades's Garden:  
Exploring the Cultivated Nature  
of Mexico's Chinantla Region**  
*Aran Shetterly* ..... 25

**Mother Tongues:  
Two Writers Explore the Words and Cultures  
that Shape their Connection to Place**  
*Dawn Wink and Susan J. Tweit* ..... 30

**Wild Speech:  
Listening Through the Portal of Imagination**  
*Geneen Marie Haugen* ..... 35

**Freeway Coyote**  
*Lee Beavington* ..... 40

### Dispatches

**De Prima:  
Stories of the Old Days in Umbria,  
the Green Heart of Italy**  
*Anna Maffi* ..... 42

**Cristina Calderón:  
Memories of My Yagan Grandmother  
in Tierra del Fuego, Chile**  
*Cristina Zárraga* ..... 48

**A Blossoming Time at  
ÁLENENEÇ (Homeland):  
Reclaiming WSÁNEĆ (Saanich) Place  
Names on the West Coast of Canada**  
*Alice Meyers in conversation with  
Earl Claxton Jr. (Thuh-thay-tun Kapilano)* ... 52

**Rough Waves and Remembered  
Names in Haida Gwaii**  
*Graham Richard* ..... 57

### Louder Than Words I

**Pintando La Raya:  
Indigenous Resistance and Biocultural  
Conservation Through Participatory Video**  
*Thor Edmundo Morales* ..... 63

### Action

**It Takes Millennia to Make  
Ciccimmetati:  
Cilento, Italy, as a Master of Biocultural Wisdom**  
*Dario Ciccirelli* ..... 67

### Louder Than Words II

**On the Move:  
Reawakening the Common Language of the  
Mediterranean's Mobile Pastoralists**  
*DiverseEarth: Liza Zogib, Divya Venkatesh,  
and Sandra Spissinger* ..... 74



# Naming the Dragonfly

## WHY INDIGENOUS LANGUAGES MATTER IN THE 21ST CENTURY

*Chiapas, Mexico, 2015*

I spent the morning learning the names of dozens of dragonflies and skippers, the translucent-winged insects that flit along the edges of the crystalline-blue lakes where the Lacandón Maya live in the rainforest of southeastern Mexico. Chan K'in José Valenzuela, my 80-year old Lacandón friend, has been teaching me about rainforest animals and plants since I first came here in 1974. He also taught me to speak northern Lacandón, and now decades later, he's helping me finalize a field guide to the language and environment.

Worn out from recording insect names, I said goodbye to Chan K'in at noon and walked down the dirt road toward the rest of the settlement with his 11-year-old grandson, Yuk—"Brocket Deer" in Lacandón. Yuk's long, black hair flowed to his waist over a white, cotton tunic that extended to his knees. Dressed as he was, walking in the shadow of the rainforest, he would have looked at home here on any day during the past several centuries.

But Yuk and his grandfather live in a community in the midst of a wrenching transition, with older Lacandones gripping the



old ways with determined tenacity, and some of the young ones rushing bewildered into the confusion of the 21st century. The tension comes in the form of roads, electricity, missionaries, and a dominant society that communicates in Spanish. Meanwhile, the forest grows in the background as it has for a thousand years.

On a bush by the side of the road, I spotted a diaphanous dragonfly with dazzling, turquoise-blue wing tips. I turned to Yuk and asked, *Ba'ax u k'aaba lati?* "What's the name of that one?"

Above Left: Chan K'in José Valenzuela uses a machete to carve a bird bolt arrow. Photo: James D. Nations, 1975

Above Right: Atenacio and his wife, Nuk, pause during a trip to buy kerosene in the years before roads and electricity reached their Lacandón community. Photo: James D. Nations, 1977

Without hesitating he said, *Chan mejen avión*, “Little bitty airplane,” using the Spanish word for airplane, *avión*.

His grandfather Chan K'in can name 281 plants, 185 birds, and 114 insects on sight, but he doesn't have a word for airplane. He calls them *ku tal ka'anan*, “they come from up high.”

But his grandson Yuk is growing up in a world punctuated by Spanish classes in a government-built school and afternoons on the floor of the community president's house, watching the Disney channel on Spanish-language TV.

“Little bitty airplane,” he said. And I'm thinking, this is how native languages slip away.

Lacandonese are skilled at creating new words as their environment changes around them. *Kulubi*, which means “it comes down,” became the word for helicopter the first time that one landed in a Lacandón settlement. Even as the children learn these new words, though, some of them are not learning the old ones. This is hardly their fault—more an indication that the world around them is changing. Less nature, more television, fewer dragonflies, more airplanes.

What does it matter that an 11-year-old Maya boy is failing to learn the words of his grandfather? What good is an indigenous language in a world of national economies, cell phones, and airplanes?

The answers to those questions are many. The real question is: where to begin?

### *Practicality*

Begin with the people and what they know. When Classic Maya civilization disintegrated 1,200 years ago, the Maya left behind hundreds of stone cities to be slowly absorbed by the forest. The millions of people who died during the collapse were joined centuries later by millions more who fell victim to pandemics introduced by European invaders.

But the Maya held on. When Spanish missionaries and soldiers probed Maya territory for slaves and converts during the 16th, 17th, and 18th centuries, remnant groups retreated farther into the forest, blending into wilderness to remain unconquered and alive. The Spaniards called one of these groups “Lacandonese.” But the people called themselves *Jach Winik*, “Real People,” and they still live today in the rainforest that carries their adopted name, the Lacandón Rainforest of southeastern Mexico.



The Lacandonese are heirs to a wealth of traditional knowledge gleaned by their ancestors from a thousand years of daily life in a humid, hostile world. Most of their forest is gone now, transformed into cattle pastures and re-growth by invading ranchers and farmers, but they've preserved a language rich in oral history and awareness of nature.

Numbering 1,100 women, men, and children, the Lacandón Maya live in dispersed communities—Mensäbäk, Naja, and Lakanja' Chan Sayab/Betél—inside three protected patches of tropical forest. Although their population is growing, the Lacandonese's native language

Above: Pepe Castillo and Chan K'in José Valenzuela sculpt a canoe from a mahogany tree using axes, an adze, and machetes. Photo: James D. Nations, 1976

is endangered by the arrival of television, intermarriage with Tzeltal Maya and Spanish-speaking women and men from neighboring migrant communities, and the education of Lacandón children, in Spanish, in primary schools built by the Mexican government.

Basic point: The families live within the forest, rather than replacing the forest in order to live. Among other things, they are consummate tropical forest farmers. Many farmers in the tropics practice destructive slash-and-burn agriculture that eradicates forest, produces meager yields, and leaves devastation in its wake. By



contrast, the Lacandón Maya produce abundant crops while still conserving the ecosystems that surround their fields and sustain their lives. A sophisticated form of agroforestry, Lacandón farming produces large harvests of maize, beans, squash, and tree crops—simultaneously—on the same plot of land.

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Above Left: Koj, Northern Lacandón woman, spins cotton thread for a bracelet she will give to a new mother and baby as a gesture of good will. Photo: James D. Nations, 1977

Above Centre: Mari Gutiérrez López, Tzeltal Maya, toasting cacao beans, married a Lacandón Maya man. They speak to their children in Tzeltal and Spanish. Photo: James D. Nations, 2014

Facing Page: Armando Valenzuela, Lacandón Maya, earned an associate's degree in forestry with the aid of Amado Seis, right, who teaches him rainforest ecology. Photo: James D. Nations, 2015

The secrets to their success are preserved in their native language. Even the term for a garden plot at the point of being “abandoned”—*pak che' kol*, “planted tree garden”—conveys the recipe for its continuing bounty. Rather than leave behind a garden plot after five to seven years of food crops, the family plants it in trees—cacao, rubber, fruit, avocados, and balsa—and continues to harvest food and fiber for another five to 15 years, while the area regrows in forest. Meanwhile, they clear a previous *pak che' kol* to grow their beans and corn. When that plot begins to sprout weeds, the family returns to the first site—now overtaken by forest—and begins the cycle anew. Using this patterned rotation, a Lacandón family can grow the food they need on 10 hectares of land during an entire agricultural career.

Agronomists worried about population growth and deforestation have begun to transmit Lacandón ecological knowledge to farmers in other regions of the tropics—with the Lacandones' permission. The first investigation of Lacandón agriculture prompted a flurry of new research that analyzes Lacandón ecological knowledge to advance developments in agroforestry, restoration ecology, and ethnobiology. One promising study focused on the planting of fast-growing balsa trees (*Ochroma pyramidale*) to subvert the growth of invasive species that are plaguing other farmers trying to grow crops in rainforest environments.

Among the reasons native languages matter is this: Native languages crystallize the lessons of centuries of daily trial and error. Lose the language, lose the knowledge. Forget the past, forego a better future.

### *Conservation*

In 2012, research on the overlap of endangered languages and endangered environments revealed that the biologically richest and most threatened locations on the planet are also the most diverse and most seriously

threatened for native languages. In the 35 global biodiversity hotspots—the Lacandón Rainforest among them—researchers counted 3,202 languages, almost half the languages still spoken on Earth. They concluded that “Losing these languages can lead to the loss of environmental information that becomes inaccessible as the words, culture, and language disappear. In many cases, it appears that the conditions that wipe out species also wipe out languages.”



The Lacandones live surrounded by ecosystems vibrant with plants, animals, and the interactions between them. Not surprisingly, this is reflected in their language. The Lacandón language was born from the environment—the words come from the sounds that animals make, from the colors of the forest at a distance, from the murmur of the wind on a tropical lake. To learn Lacandón is to immerse yourself in ecology. Language captures the environment that it lives in, and we see the environment through the words the land gave birth to.

The Lacandón language also transmits the moral rules for human life in the forest—how to avoid cruelty when hunting animals and be aware that trees have souls and suffer when they’re felled. Corn is alive and, as a gift from

the gods, must not be wasted. There are areas in the forest and on the cliffs around the lakes that are the homes of gods, and woe be the person who violates them.

I worked for several years with a Lacandón farmer named José Camino Viejo, who had been farming the same three-hectare plot of land for 12 years. Off the edge of his weedless garden, his wife, Koj, washed their cotton tunics in a small lake they shared with a single crocodile. “*Otsi ayim*,” he said to me once. “Poor crocodile. I would never kill it.”

When I pressed him, he said: “Outsiders come into the forest, and they cut the mahogany and kill the birds and burn everything. Then they bring in cattle, and the cattle eat the forest. I think they don’t listen to the forest. I just plant my crops and weed them and watch the birds, and I watch the forest to know when to plant my corn. When the mahogany tree flowers in the spring, I seed the corn and wait for the rains to come. As for me, I guard the forest.”

The traditional Lacandón god, *K’anank’ax*, “the Guardian of the Forest,” speaks to Lacandones of the 21st century through a battery-powered walkie-talkie. In 2001, Mexico established a new policy that allows indigenous groups with communal territory to protect their land as Flora and Fauna Protection Areas. Communities are required to determine their goals, agree on the rules, and hire an attorney to file

*“Like the people themselves, indigenous languages have an inherent right to exist.”*

official documents. Working with Mexican and U.S. conservationists, the northern Lacandones completed these steps to create today’s *Área de Protección de Flora y Fauna Mensábäk* and *Área de Protección de Flora y Fauna Naja*. The third Lacandón community, Lacaña’ Chan Sayab/Betel, already was protected in the federally-created Montes Azules Biosphere Reserve.

Together, the two northern Lacandón communities, Mensábäk and Naja, are responsible for 72 square kilometers of Mexico’s last remaining tropical rainforest. Add in Montes Azules Biosphere Reserve and protection extends to 3,384 square kilometers.

As a result, the Lacandones have legal and moral authority to patrol their forest lands, evict squatters and poachers, and confiscate resources such as floral palms and timber that are illegally harvested. Every morning in the community of Mensäbäk, nine Lacandón forest rangers spread out through the forest, talking with each other via walkie-talkie in their native language. They carry no weapons, but if they run into trouble, they call radio community-based state police—also Lacandones—who rush to the scene with rifles and pistols that they are well-trained to use.

The result: Wildlife populations are higher today on Lacandón lands than at any time since I first went there 40 years ago. The Lacandones have even reintroduced one species, the white-tailed deer, which had been wiped out in the area.



A corollary benefit of the Lacandones' conservation ethic comes in the form of cash-bearing ecotourists, the vast majority of them Mexican, who visit their communities to row across shimmering blue lakes in a dugout canoe with the original inhabitants of the rainforest who, as they row, call across the waves to one another in their native tongue.

### *Inherent Right*

One more reason why indigenous languages matter: Like the people themselves, indigenous languages have an inherent right to exist. They grace the world with diversity, with spiritual meaning, with views of the universe that extend beyond our world of buildings and finance and have the power to teach us how to be better people in a

better world. Who among us, of rational mind, would willingly give that up? Or sit by and watch it die?

We already know some ways to help indigenous people keep their languages alive. They know additional ways, if we're willing to help put them into effect.

The planet's indigenous families are reaching out to us in their many native voices. What they're saying speaks of survival, resilience, respect for the natural world, and respect for one another.

It is not enough to simply listen. We should be standing beside them letting them lead us forward.

### *Further Reading*

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Above: Chan K'in stands on the hilltop used by Lacandón forest guards to prevent wildlife poaching and land encroachments in his family's community. Photo: James D. Nations, 2008

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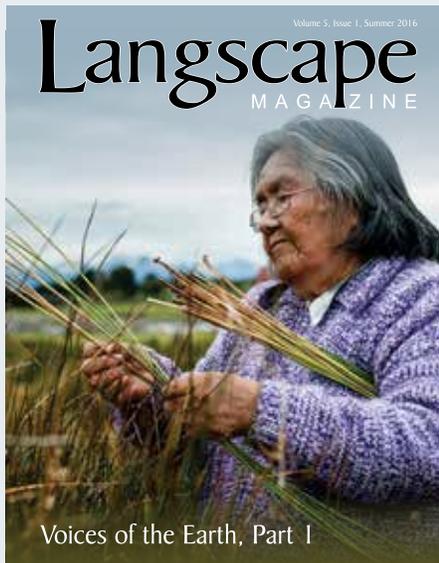
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**Terralingua n 1:** the languages of the Earth, the many voices of the world's diverse peoples. **2:** the language of the Earth, the voice of Mother Nature. **3:** an international non-governmental organization (NGO) that works to sustain the **biocultural diversity of life** – a precious heritage to be cherished, protected, and nurtured for generations to come. ¶ From Italian *terra* 'earth' and *lingua* 'language'

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*--James D. Nations*

