FELIPE CASTELBLANCO, AYÊNAN JOHN QUINCHOA JUAJIBIOY, NATALIA URIBE MACÍAS

Jajañe—Chagra—Garden

The Amazonian *chagra*, or *jajañe*, is a food and medicinal garden that reveals human-plant collaboration and promotes biocultural sovereignty. Part 1, *La Chagra de la Vida—Plant Intelligence as Becomings*, is an essay by Felipe Castelblanco, based on fieldwork in Upper Putumayo, Colombia, exploring the *chagra* as a space where plants and humans co-create and communicate. Part 2, *Sëntyöyiÿna Betiyëngaca. Walking with Plants*, continues the exploration through a dialogue between Natalia Uribe Macías, a biologist and illustrator, and Ayênan John Quinchoa Juajibioy, a Kamëntšá media creator and cultivator. Their conversation highlights Indigenous perspectives that view plants as conscious beings, emphasizing sensory and emotional ways of knowing. It advocates integrating Indigenous knowledge and scientific approaches to address contemporary challenges through mutual respect and human-plant collaboration.

Agroecology
Colombia
Ethnomedicine
Plant Intelligence
Relationality
Resistance

FIG. 1
Jajañe or *chagra* from the Quinchoa Juajibioy Family, 2024

La Chagra de la Vida—Plant Intelligence as Becomings
An Essay by Felipe Castelblanco

The Amazonian *chagra* is more than a food and medicinal garden—it is a site of mutualism where plants and humans co-create, communicate and shape their shared environment. Rooted in Indigenous agroforestry, the *chagra* fosters biocultural sovereignty through embodied exchanges of care, healing and knowledge. This article explores plant intelligence beyond problem-solving, emphasizing meaning-making and intelligibility. Through fieldwork in Putumayo, I examine how plants and humans engage in reciprocal acts that shape land-use practices, sustain ecological balance and redefine interspecies agency.

The *chagra* is an Indigenous food and medicinal garden where various plants and people grow side-by-side, supporting one another in an incredible display of mutualism. In Quechua, the term *chakra* (or *chagra*) refers to a cultivated field or farm. Often kept within the forest, these fields are crucial for securing food sovereignty, health and sustenance for many Indigenous peoples across

the Pan-Amazon region,[1] among them Kichwas, Waorani, Huitoto, Siona, Inga, or Kamëntšá, to name a few. Their *chagras* are part of a complex and localized agroforestry system developed over many generations, through which humans and plants coexist, and even collaborate to enhance agrobiodiversity.[2]

At the core of the plant intelligence debate, the emphasis is often placed on a plant's capacity to adaptively develop and overcome external challenges by computing and acting upon variable external stimuli.[3] Whether this happens through plants' plasticity, electrical signaling, memory, learning, or chemical signaling (i.e., via volatile organic compounds to signal neighboring individuals or as neurotransmitter-like compounds produced to modulate internal responses),[4] intelligence as discernment is not the end point of cognition. Communication (coding, decoding and feedback processes), information transfers, as well as meaning-making are also integral aspects of intelligence. Communication renders inputs and outputs intelligible and enables the individual to assess, understand and make itself understood. So, what if plants can also make their sensing and discernment intelligible, and transfer meaning to humans via nourishment, healing, or by responding to cultivation in ways that nature's patterns reorganize to afford livable conditions and deepen ecological engagement?

Through sites where humans and forests interact, like in the Amazonian *chagra*, plant intelligence goes beyond adaptive problem-solving to encompass communication and meaning-making, fostering human-plant alliances. These alliances take on the form of embodied knowledge transfers, merging and transformation between a plant and its caretaker through nourishment, as well as through a sort of mutual seeding that occurs with Indigenous plant medicine. In this framework, the interplay between intelligence and intelligibility calls for a relational conception of plant intelligence. Intelligibility refers to the potential of something to be understood or made sense of by an intelligent agent, while intelligence is the capacity to realize that potential through interpretation, reasoning, and meaning-making. This perspective foregrounds the *chagra* as a dynamic site of co-creation and territorial management, where human and vegetal agencies intersect in the production of biocultural knowledge, lifeworlds, and meaning.

Rather than merely cataloging signs of vegetal intelligence, this text aims to situate the reader within these acts of intelligibility, underlining where they manifest and how they articulate nuanced specific modes of communication and negotiation between humans and vegetal communities in the Andean-Amazon region.

The images and notes presented here, taken in and around *chagras* in upper and lower Putumayo, will guide us through a space between the high Andes and the Amazon rainforest. Through this exploration, I aim to unpack an

impression I've had since my early field visits with Inga and Kamëntšá collaborators in 2018: The *chagra* is not just a food or medicinal garden, but a space of reciprocal relations. Plants heal and energize human communities, who, in turn, give back to the plants by defending or producing the territories where they thrive. But what role do plants have in this act of co-creation, and how do they intervene in human land-use practices to secure conditions for their survival?

In the process of exchanging vital energy that elicits care and healing, plants and humans also become entwined in a binding relationship where their mutual capacities, and modes of intelligibility, conflate and overextend their reach.

The Garden of Life

Across Putumayo, in Colombia's Southwest region near the Ecuadorian border, many traditional *chagras* kept by the Inga, Siona or Kamëntšá families serve as the transitional spaces between uncultivated forest and planted plots of edible, medicinal and timber-yielding trees. Often functioning as the buffer zone between untouched forests and managed lands within Indigenous reserves, the *chagras* are the meeting point where microbes feeding from forest debris, animals, nutrient-rich top-level soils, and endemic trees provide the basis to cultivate food and medicinal crops. Not confined by an orderly cropping system made of furrows, terraces or fenced plots, some chagras sit in small clearings deep within the forest while others extend the forest toward human-populated areas.

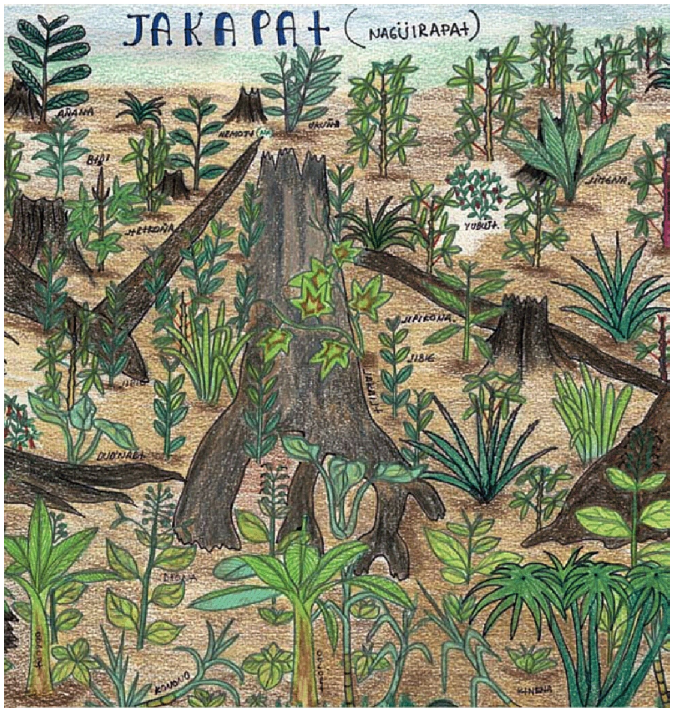

FIG. 2
Abel Rodríguez, *Chagra de Vida,* 2010, drawing (Illustration of Indigenous food gardens growing over fallen trees and forest debris.)

In either case, traditional *chagras* frequently go unnoticed by the foreign eye, who might only see untouched forest where instead lays a well-cared-for allotment capable of feeding entire families. This makes evident a key territorial feature of Indigenous land-use practices in the Andean-Amazon region, which resist the civilizational impulses that seek to tame an apparently chaotic landscape.[5] The type of plants kept in each *chagra* varies from family to family, depending on cultural traditions or elevation. The Kamëntšá in Upper Putumayo, for example, maintain *šboachán* (corn), *tsëmbe estranjeríy* (tranca bean), *miyá* (yam), *quelbasëš* (pumpkin), *beshá* (cabbage), *šëš* (sugar cane), *shëbtá* (grapes), *cochmajash* (cucumber), *limonbé* (lemon), *matëngajbe* (similar to passion fruit), to name a few.[6]

Because of precise seed selection, low-impact seed dispersal strategies and inter-cropping, Indigenous agricultural systems play a role in maintaining or even increasing biodiversity and creating the necessary space and conditions for plants to thrive. Nevertheless, as today's brick-and-mortar homes, paved roads, deforestation, and fast urbanization take over the region, some *chagras* are beginning to look more like an oasis of diversity surrounded by monocultures and cheap housing projects. It goes without saying that this form of agricultural practice is today at severe risk of disappearance, in Putumayo at least, because of the steady process of eco- and ethnocide brought by territorial disputes around illicit coca farming and extractive mining projects.

Against this backdrop, the anthropologist William Balée has been studying anthropogenic traces in Amazonian forests since the 1980s, including Upper Amazonia along the Napo River basin, not far from today's border between Colombia and Ecuador. Balée argues that many features of the Amazon are man-made, which have also produced today's landscape as a unique type of biocultural heritage.[7] Through the use of *Terra Preta* (dark earths)[8] found across the Amazon basin, or *Hojarasca* (dried leaves and forest debris) in Putumayo as a tool to help trap minerals and enrich the soils beneath the undergrowth, human interaction has profoundly altered forest architecture and tree composition for thousands of years.[9] Seen through this lens, one could argue that nuanced agroforestry practices of the Indigenous *chagras* continue to create ecosystemic conditions that sustain the Amazon ecoregion.

FIG. 3–5
Large vines of *yagé cielo*, or *ayahuasca sky* (*Banisteriopsis caapi*), at the *chagra* of Manuel Muesas in Lower Putumayo, 2023

The *chagras* I invoke spread across the Sibundoy Valley, between 3000 and 1500 MASL (meters above sea level), making a transitional landscape between the Andean mountains and the Amazonian rainforest. While each plot is maintained by a different family, they are also part of an interconnected system forming a porous geography of human and non-human cooperation that propels Indigenous epistemic sovereignty and ecosystemic balance. Together, the *chagras* across the Putumayo foothills form a large biocultural territorial assembly where seed exchanges, organized collective labor among

families and neighbors (*mingas*), spiritual attunement through the cultivation of medicinal plants (i.e., *Brugmansia*, *Cyperus sphacelatus*, *Higrophyla titta*, etc.), and education take place. Some *chagras* are also kept in remote forests where sacred plants, among them those used in the preparation of the ayahuasca decoction (*Banisteriopsis caapi* and *Diplopterys cabrerana*), still grow hidden among shrubs and other endemic trees.[10] Considered a sacred plant, large vines like those shown in Figures 3 to 5 are increasingly elusive due to rising pressure from unwanted ayahuasca tourism and over-cultivation.

Although Amazonian medicinal plants have gained international popularity through the growing ayahuasca tourism industry, this often mirrors the monoculture mindset by isolating the plant from the diverse ecosystems, companions and Indigenous agroforestry practices that help it thrive. This situation highlights a larger contradiction: The pressure from agro-industries to transform Amazonian soils for profitable crops like soy or palm oil contrasts with the limited exposure of Indigenous Amazonian agriculture in larger markets and how few of its nutritious products like *yuca* (manioc) we consume elsewhere. The farmer and Mocoa-based agroecologist Heraldo Vallejo argues that agricultural practices attuned to the inner logics of the Amazonian forest deliver no other but more forest. For him, the trick is to learn how to see potential in unusual products that come from this situated, intervention-less and Amazonia-inspired agriculture which can transform society starting with the gut.

(VIDEO)
Felipe Castelblanco, *A Conversation with Heraldo Vallejo Martinez, Representative of Tierra de Selva Foundation and the Community Nodo de Pensamiento Andinoamazonico, Mocoa, Colombia*, 2025, video, 8 min. 30 sec.

The Jajañe and the Spacefaring Plant

The Sibundoy Valley is the meeting point of the Andean and Amazonian biocultural forces, so it is also the place where parallel trajectories of human interactions with vegetal communities forge paths of meaning-making. On the one hand, a culture of reciprocity prevails among Indigenous families, who care for the well-being of nature by upholding traditions aligned with promoting a harmonious coexistence between humans and plants. As an Indigenous farmer invests energy to care for a plant, the plant reinvests its energy—transformed into nutrients—in the person who minds it. Thus, the *chagra* embodies a mode of thinking-doing that frames human-vegetal inter-existence.

Relationality is premised on the idea that objects do not exist independently or autonomously but emerge as a result of pre-existing relationships.[11] In this context, Indigenous spatial practices are fundamentally relational through a mode of territorial management where the emphasis is not solely on the political organization of space (as may be the case in Western societies), but also on the management of life-sustaining relationships at various scales and spheres of relation. This manifests through offerings and protocols of asking

permission from plants, the commitment to preserve vegetal diversity as part of the Indigenous cultural heritage, the utmost respect for spiritual entities embodied by plants, as well guardianship of nature.

On the other hand, the *chagra* embodies an ethos of respect, care and harmony with nature, based on the *Sumak Kawsay* (good living) principles or *El Buen Vivir* as a philosophy in practice.[12] *El Buen Vivir* emphasizes a mode of living in harmony with nature and recognizes the intrinsic rights of natural entities to a dignifying life, also allowing ancestral communities to defend and enforce these rights through litigation, protest and public actions.[13] First introduced in the 2008 Ecuadorian constitution, *El Buen Vivir* is reflected too in the Inga and Kamëntšá *Plan de Vida* (plan for life), a document that serves as a blueprint for both communities to gain traction in their effort toward state-building and institutional autonomy. The *Plan de Vida* places special emphasis on the *chagra* as the place that regulates the relation between humans and non-humans based on mutual recognition, epistemic anchoring and the right of all beings to a dignifying existence.[14]

The Kamëntšá people are known for their advanced medicinal and agricultural practices across the floodplains and foothills of the Sibunody Valley. Today, Sibundoy is reached by road from the city of Pasto, the capital of Nariño, on a journey of almost two hours across a complex of Andean wetlands and around La Cocha lake. The valley is surrounded by mountains that are over 3500 meters high and host delicate aquifers and high-altitude Andean ecosystems.

FIG. 6
Seeds of *Frijol Tranca*, San Francisco, Sibundoy Valley, 2022

Plants at these altitudes play an incredible role in nourishment, medicinal treatment and terraforming. According to the Kamëntšá foundational myth, long ago the stars fell to earth and became people, many of whom roamed around the sacred valley today inhabited by the Kamëntšá. The star people were highly spiritual and grew crops such as corn and beans, which they cooked in stews but only to feed from the delicious smell and the steam. The star people needed to return home by burning dried bean shells, creating powerful smoke that would lift them into the sky. As a result, beans became a vital crop and a lasting symbol that connects the Kamëntšá with their ancestors in the cosmos.[15]

The *frijol tranca*, or runner bean (*Phaseolus coccineus*), is also a protagonist of the tale, along with the star people who brought agricultural knowledge to the Kamëntšá. Present across various agro-habitats of the Sibundoy Valley, the runner bean is maintained under various levels of management, such as tolerated, encouraged, sown, and cultivated.[16] Without following a precise grid-like planting layout, runner beans are used in the *chagra* as living fences, edible crops, or tutor trees for maize cultivation. Runner bean plants often come from wetland habitats, secondary vegetation on slopes and riverbanks, then introduced as bush or as stubble plant into the *chagra* to be dispersed by throwing the seeds on the ground without burying them. Later, the crop is maintained under the system of recirculation of seeds from the bush to the *chagra* and back. In sum, the runner bean is considered a healthy, natural and nutritious food, as it does not require agrochemicals for its production, which is why it is appreciated as a family diet, especially for children. It is also valued because it produces seeds continuously and is resistant to climatic changes and adversities, aspects that make it a good alternative that provides communities with food sovereignty.

Traditionally, the use of the runner bean is linked to the existence of mystical beings who come to teach people how to work the land and manage the *chagra*, thus giving the Kamëntšá special faculties in the management of plants. The Kamëntšá use the term *jajañe* to speak of this space of vast encounters. It is like an extended *chagra* where soils, rivers, mountains, sun, moon, winds, and humans also play a role in the life of plants. The *jajañe* is also a kind of open-air laboratory where plants, microbes, animals, and humans tend to level their interactions to provide and sustain more fitting conditions for one another. These are also spaces of transformation for the individual and the community; they are schools, spaces of love-making, a living archive for biodiversity, and a site of biocultural engagement beyond agriculture.

Furthermore, Heraldo Vallejo argues that the *jajañe* or *chagras* have facilitated a kind of molecular co-evolution between humans and crops; and that plants like the runner bean have chosen an evolutionary path that is compatible with the human body. In other words, plants and people who have grown together

have had a long-standing dialogue across generations, and "crops from the *chagra* really know the human body,"[17] making the *chagras* evolutionary hot spots and bastions of interspecies cooperation. Another crucial aspect of the *jajañe* is how it brings the human body, by way of sensual exposure and nourishment, closer to a sphere of untamable vegetal relations where wild and cultivated plants coexist side by side, and where potent plants like *borrachero* (*Brugmansia*) or tobacco (*Nicotiana rustica*) assist not only people but edible plants too with mineral absorption or pest control.

The Guardian Plants of the Highlands

The *jajañe* is also a space of many alliances. Through it, entire families across Sibunody learn to feed from endemic plants, and in exchange, they preserve the space, diversity and viable conditions for these plants to propagate. In this way, the body and the territory remain in constant exchange and permeate one another, while plants energize communities whose devotion toward vegetal life manifests as the preservation of seeds and soils while maintaining other agricultural chronologies based on the moon calendars and nature's inner tempo. Through the *jajañe*, the Kamëntšá propel a silent but permanent process of resistance against colonial challenges that seek to segment the territory through economic re-zoning, imported agricultural models and grid-based farming, as well as anthropogenic interventions aimed at regulating the mechanisms of life through GMO seeds and agro-industrial operations.

The historical origin of the Kamëntšá is debated among historians, for they speak a language so unique that it has no traces of Chibcha or other Quechua-derived languages found among neighboring ancestral nations.[18] The Kamëntšá call their ancestral territory "tabanok," which means: the place of departure and arrival, or return.[19] Unlike other ethnic groups that suffered displacement or were transposed to other territories by colonial armies, the Kamëntšá have remained in their place of origin, but their population has declined drastically over the centuries. However, their continuous presence in the region is linked to the conservation of vast portions of unique transitional Andean-Amazonian ecosystems, such as the paramos.[20] For an area surrounded by a subtropical alpine tundra biome at nearly 3000 MASL, the survival of the Kamëntšá and the paramos is closely linked.

FIG. 7
Frailejón (big monk), Sibundoy, 2024

As if these were extensions of the shaman's *jajañe*, many Kamëntšá spiritual leaders (among them Taita Miguel Chicunque) have assisted the paramos by helping to propagate plants like *frailejones* (big monks) and other species kept under a veil of secrecy, in order to populate the sponge-like soils with plants that help drive moisture from the air down through their roots to increase water retention. This alliance with the *frailejón* is both tactical and spiritual. Historically, the paramos were a natural barrier for colonial armies and settlers, due to the harsh conditions found at these altitudes: a combination of low temperatures, humidity and fog. The paramos have been the only places where the colonial extractive project has met its limits, with the *frailejón* becoming a powerful symbol of biocultural resistance for the whole nation. Over the centuries, colonial armies seeking riches (including the 1533 El Dorado expedition led by Hernán Perez de Quesada) and delegations of UN engineers plotting routes and mining sites have been 'bogged down' in the swampy terrain that holds the paramos.

The importance of these ecosystems is manifold. On the one hand, the paramos host the headwaters that feed important Amazonian rivers and

provide a protective buffer zone around the Sibundoy Valley. On the other hand, the paramos are also a place where high-altitude sacred plants, spiritual equilibrium and a unique combination of Andean and Amazonian shamanic knowledge are maintained by Kamëntšá medics, thus making the paramo an integral part of the constellation of Indigenous apothecaries, or the medicinal gardens kept in the *chagras* across the valley.

FIG. 8–9
Portrait of Taita Miguel Chicunque, Tabanok, 2024

Although little research has been carried out on the ethnomedicinal uses of paramo flora, local shamans like Taita Miguel Chicunque argue that *frailejones*, among other plants from these cold environments, are potent medicine to treat flu-like and respiratory illnesses often associated with these humid and cold environments. They do so by warming up the body to the point where it can withstand the coldest Andean winds and activate the immune response to rid the body of airborne viruses. Even during the peak of the pandemic, *frailejones* were among the plants used by Kamëntšá healers to treat COVID-19 patients and lower the number of casualties in the valley.[21]

I have personally experienced the counterintuitive effects of the plants from the paramo through a purge (vomitive) remedy administered by Taita Miguel Chicunque in 2023, followed by the 'planting' of 20-plus sacred plants into my system through steam inhalation carried out in the coldest hours of the night. As if my inner organs were a garden that needed care from within, the 'planting' treatment was meant to help my body balance the presence of foreign elements and repair the damage caused in my lungs by a rare fungal

infection I caught in the Peruvian Amazon the year before.[22]

Only days after the treatment, I was on a path toward recovery. My lung capacity, which at the time was well below average, quickly recovered to standard levels. The treatment also gave me a glimpse into the unusual ways in which Kamëntšá medicine engages with botanical knowledge of the paramo to harness the capacities of cold-climate plants. Like the induced warming effects of the *frailejón*, the Kamëntšá medic performs a counterintuitive act on the patients by fast-tracking the exposure of their bodies to the natural medium. And by conflating the boundary that separates the body from the plants that shape these ecosystems, the body becomes one with the environment and so the health of the plant reflects on the health of the patient. In other words, the shaman believes that once the body is harmonious with the natural medium, it can channel the good conditions of the surroundings for a healthy life. However, when a person goes against their surroundings and is hostile to plants, the medium attacks them.

FIG. 10–11
Taita Miguel Chicunque preparing harmonization ceremony, Tabanok, 2023

The Kamëntšá shamans refer to this healing process as harmonization, in which they align the intentions of the plant with those of the patient seeking balance and healing. For this process to work, the shamans partake in the ingestion of the medicine and align with the patient. The latter also needs to welcome the plant into their system through ingestion and embrace a perspective shift where they become one with the medicine, which will lead them through a path of inner healing, as opposed to simply surrendering to the pharmacology of the plant. During the harmonization, the shaman becomes a mediator in this connection as they invoke the knowledge of the plants to determine the dose and to help regulate the patient's pace along the healing

journey. This process goes through various levels of embodiment until the spirit of the sacred plant and the shaman begin to see eye to eye and act together to perform further healing. The anthropologist Luis Eduardo Luna argues that in ethnomedicinal practices "to learn something, you become what you want to learn from, therefore knowledge is becoming, transforming into."[23] That is why, for shamans, to know is to personify, to take the point of view of what is to be known.

While the paramos exist only at the top of the valley, their biochemistry already lives within medics who have trained their bodies to receive the knowledge of the plants they care for. In other words, the plants used in Kamëntšá shamanic medicine are no longer isolated and external objects but rather a type of metonymic agent made of spirit, knowing, senses, and intentions that reflect the singular individual (the 'planted' plant) as well as the collection of plants that live and thrive in the landscape and the guts of the shamans and their patients. Therefore, one nested inside the other, the person and the plant conflate their doings, and it is precisely in this negotiation where intelligibility (as a function of intelligence) takes hold of the almost metabolic interaction between person and plant. This process can unfold through plant-induced visions altering human perception, gut cleansing, changes in brain synapses, or enhanced neurotransmission. Like a key fitting a lock, plant intelligence emerges through encounters between living beings, each with complex but somewhat complementary biochemistries which together produce landscapes, heightened cognition, altered human perception, and enhanced ecological engagement.

Nevertheless, against a complex historical background where the colonial mindset rendered forest peoples as inferior, devoid of the mental faculties of the so-called 'intelligent Western man' to justify centuries of slavery and dispossession, the term intelligence remains charged with the epistemic violence that drove centuries of ethnocide in the Andean-Amazon region. Therefore, reclaimed it means to signify the vital, digestive, purgative, and transformative effects that plants afford us through Indigenous medicine and agriculture as acts of plant intelligibility. In doing so, plant intelligence becomes more about the way in which plants perform intelligible biochemical and energetic exchanges, as opposed to mere computing faculties for problem-solving.

Ultimately, this perspective shift enables a different sense of proximity to the plants of the *jajañe* as they are never confined to the plot, but instead become companions, witnesses, guides, and teachers that welcome into their expanded realms of knowledge those who care for them and their medium. In return, they provide energy, nourishment, healing, and protection against common threats, thus strengthening the human and vegetal alliance forged across the centuries to defend endangered territories like the Sibundoy Valley.

FIG. 12–13
Felipe Castelblanco, *Borrachero Dreams,* 2023, still (Taita Miguel Chicunque performing a harmonization ceremony and the 'planting' of plants into the body.)

Sëntyöyiÿna Betiyëngaca. Walking with Plants

Natalia Uribe Macías in conversation with Ayênan John Quinchoa Juajibioy

The way we perceive the world and the organisms that inhabit it is closely linked to how we interact with them and to our ways of constructing thought. Science, grounded in rational frameworks, tends to relegate the emotions of those who practice it, focusing instead on experimentation and the rigorous verification of results. Fortunately, not all forms of knowledge follow such rigid rules. Some Indigenous peoples have made the perception of emotions, sensations and dialogue with the subtle world a valid and valuable path to attaining knowledge—one as legitimate and enriching as those marked by rigid parameters. The concept of plant intelligence—a quality that science attributed to the animal kingdom alone until very recently—is nothing new to the peoples who have always regarded plants as conscious beings, with which they interact in their daily lives. *Walking with Plants* invites us to explore the dialogue between a biologist and illustrator and an audiovisual creator from the Inga and Kamëntšá communities of Putumayo, Colombia.

FIG. 14
Ayênan John Quinchoa Juajibioy, *The Intelligence of the Plants*, 2024

> **Natalia Uribe Macías**: When constructing the *chagra*, considering the particularities related to the type of soil, the conditions of the terrain and the knowledge of each family, what is the exchange of knowledge between grandparents and children like? How does this interaction take place, and do they gradually perceive the plants around the *chagra* in the process?

Ayênan John Quinchoa Juajibioy: The *jajañe* (in the Kamëntšá language) or the *chagra* (in Inga) is the living space that enables the strengthening and transmission of knowledge from the oldest members to the youngest. It is a very important element in our Kamëntšá and Inga families; in accordance with ancestral knowledge, food, medicinal and shrub plants are interspersed there, in addition to timber-yielding plants, which are used to construct bridges and houses, and for craft-making.

Our grandparents taught us the profound importance of mimicry in nature, which meant showing the highest respect for plants' natural processes, without abrupt intervention. When we understand this, we realize that there are characteristics of the plants they grasped by listening to the plants' language—knowledge they passed on to us through stories, myths, and legends. We strive to keep this plant language alive in our minds; it is not only perceived in the moment when it is told to you, but also as you meditate and

think alongside the plants. As you walk and move through the land, you gradually begin to perceive new layers of the stories our grandparents shared, deepening your understanding through growing awareness.

I used to like accompanying my grandfather (when I was around six or seven years old) because he would tell me stories as we went along, explaining things to me: medicinal plants, timber-yielding trees, the animals that inhabit the trees, and what the interaction between these natural components was like. On our walks covering kilometers, the elders would indicate a certain tree, and tell me, "this tree is a reference point for the territory." So I would ask myself, how do the they know that? It seemed as if they had studied it in a book, or that some scientist had told them, but my grandfather explained to me that practice and the inner desire to learn are what give you knowledge. That's why he would say to me, "Jouenan Betiyeng Jabuayenan," listen carefully to what the plants are telling you. Later on, I went to the mountain alone several times to meditate and connect more deeply with these stories. The paths within our reserves have taught us many ways of perceiving the land—the relationships between water, soil, air, and space.

When Kamëntšá and Inga grandmothers talk about weaving, they refer to the interactions and connections that arise between thought and movement through the territory—connections that often go unnoticed by people. As you move through different altitudinal zones, you begin to perceive the language of those life forms, those ways of being—with your skin, your thoughts, through observation and sensing—which enables you to gain knowledge. There are musical composers who meditate with the help of teacher plants (*plantas maestras*), which guide them and help them discover their talent and find inspiration. In my case, I've realized that you can also do this by walking among these plants.

This happens not only among our Indigenous peoples, but also in other parts of the world; many people have the awareness to turn to the forest in order to reach their own equilibrium through it. Transformations in various aspects of our societies are affecting people's thinking in a very accelerated manner, and this is why I emphasize the importance of listening to nature (of being sensitive to it). We are the ones to give hope, along with the practical processes that we are carrying out in order to propitiate equilibrium on different scales.

> **NU**: Plants have different ways of communicating with each other, but some—due to their psychoactive properties—have been called 'teacher plants,' as they allow certain groups of people, with proper preparation, to access various forms of knowledge through dreams, perceptions, and intuitions. These experiences can lead to both introspective visions and a deeper connection with nature and the spirits that inhabit it. How would you relate the ability of these plants to enhance human perception and connection with the environment to the concept of plant

intelligence?

AQ: I am in a continuous process of learning, and I would like to appreciate and expand my senses in order to perceive the language of plants. When I walk through the sacred places of the Kamëntšá and Inga peoples, I begin to find answers to certain questions that arise amid the transformation we are going through as humanity. That is why, for some time now, it has fallen upon us to leave the city, to see what is going on outside, what is affecting our planet. We find answers in these sacred places—walking, meditating with the plants, giving them the respect they deserve, and activating their potential.

Some plants are disappearing due to pollution, the rapid advance of neocolonial processes, and unsustainable agricultural practices like monocultures. For that reason, one of the tasks I've taken on is to help spread certain native seeds in areas that have been affected; it's a way of strengthening the dialogue between the plants and my people. By trying to intervene as little as possible in the spaces we inhabit, we become part of nature—because we don't see ourselves as external to it.

When I was a child, I loved going to one *yarumo* tree (*Cecropia* species)—I didn't know why—but through what my grandfather explained to me, I eventually understood that it has many healing properties. Over time, I began to explore its use in making remedies, and I realized that the elders have a way—a language—for taking the leaves, or for taking a branch from the tree. I would climb that tree, without knowing that I was already receiving information just by being in it, and seeing everything that was happening around it. It was as if the tree were telling me: "Look, I am observing everything, I am in contact with the air, the sun's rays, the wind, the water, and beneath the ground, my roots are also interacting." Imagination is what connects you to the messages the plants are trying to share. That's where meditation and observation come in—ways of perceiving that you, as someone who inhabits that place, can truly appreciate.

Plants are not going to speak to us in our language, by way of sounds, but they will begin to reveal themselves, little by little, to those whom they consider to be appropriate, whether it be a group, a people, or a person. Some manifestations we have come to understand through experience, and with ayahuasca, other elements may emerge, depending on the process involved. The invitation is to engage in more respectful interactions with plants. Traveling to a region to understand its ecosystems and diverse manifestations is not just intuition or common sense—it is a deeply important principle in our Indigenous communities. Today, more than ever, this matters, because we are witnessing how societies are changing, and in our case, we are immersed in a process of assimilation that is steadily eroding our culture.

NU: Ayahuasca, or *yagé*—a brew made from the the ayahuasca vine (*Banisteriopsis caapi*) and the shrub known as *chacruna* (*Psychotria viridis*)—is used in the traditional medicine of more than 70 Indigenous communities across South America. In your community, at what age, and in what contexts is ayahuasca consumed? And in what way do you think the plant facilitates the connection with the territory and individual processes?

AQ: The region where I live is more closely connected to the Andean area; in our Kamëntšá community, most of the plants have characteristics typical of the high mountain zones, where the climate is cold. This sets them apart from the plants found in the Amazon or in the low-altitude, warmer regions. However, in the past, the highland and lowland communities maintained strong connections through the exchange of knowledge and seeds, weaving together social networks of understanding in order to reach agreements and protect both territories.

The elders used to say that during the gatherings where medicinal plants were exchanged, the highland and lowland Kamëntšá would bring plant species native to their respective territories, which they used for specific parts of the body or to relieve certain ailments. They would also share their knowledge based on their unique understanding of the language of the plants, their observations of animals, or the biological processes they perceived. Today, there are excellent disciples of this knowledge—people who went to the lower Putumayo region to learn about *yagé*, respecting the knowledge of the Cofán, the Kamëntšá, the Siona, and vice versa. It's a process of exchange and mutual understanding. Some time ago I had the opportunity to meet some elders—people who have a deep understanding, a sense of who we are—and they will tell you whether or not you are ready to take the plant. They also ask whether, in the process you are going through, you have a specific need or difficulty you want to overcome. Or, if they see you are full of good energy, they might say: "Take this plant, so that you can strengthen your good energy and continue your path." This is what the elders tell us regarding the process of ayahuasca and other teacher plants.

They are also able to perceive when a person shows certain abilities or virtues from childhood, allowing them to take a small amount of *yagé*, enabling them to carry on a legacy that has existed for a very long time. A child who possesses these virtues will, from the very first spoonful of this plant, show certain signs or special characteristics in their development—something that does not occur in others. In our Kamëntšá community today, there are some people who want to learn more about these plants. But nowadays, the process cannot begin in early childhood—it starts when a person is already mature, because contact with the outside world and cultural assimilation no longer allow us to begin this path from a young age. However, in the past, when an

elder saw that a child had these capacities or virtues, he would offer thoughtful advice and gradually teach the child how to take on the deep and expansive knowledge of the plants—so that later on, they could use this wisdom to help and support the community.

> **NU**: What do you believe to be the factors that allow the Inga and Kamëntšá peoples to preserve their knowledge, in spite of the powerful intervention by the Spanish, and attempts to uproot their culture and expertise? And what could help strengthen the preservation and transmission of this knowledge?

AQ: In their thousand years of existence, our peoples began to develop patience in every act involving nature, and this capacity is what allowed them—or has allowed us—to withstand all the external influences. It is what gives us great humility to survive all these changes. In a way, our ancestors understood the language of plants' resilience, learning to have patience in the face of all that afflicts us. There may be massive transformations taking place here—driven by the rush to extract minerals, water, and everything the earth produces—but we were taught to act in accordance with what the environment can give. Because if we rush ahead, we won't have anywhere to live—we won't even have tears left to shed, as one elder used to say. This way of understanding plants gives us the strength and energy to think about how to survive the impacts, which only become greater and greater.

> **NU**: What communication strategies are you currently using with young people and children to transmit the knowledge that the elders have conserved over the course of generations, in a context of diverse circumstances and changes? For example, I am referring to learning related to plants, to staying in and caring for the territory. Considering that new generations are more accustomed to quick answers and accelerated media, how have you managed to link them to this traditional knowledge through the use of communication media?

AQ: As time goes by, each generation has to face their own challenges and transformations. For example, my great-grandparents and great-great-grandparents experienced the arrival of settlers from other continents (mainly Europeans, primarily from Spain), and they somehow managed to survive and protect their worldview, their ancestral philosophy, and their traditions. Now we are the ones who have to face this period of history—it has fallen to our generation, and some of us have been thinking about how we can cope with the ongoing challenges and do the best we can for our communities. My father used to say that environmental laws and regulations are tools we have as thinking beings, and that we must strengthen them. One of the other major challenges is technology—but before embracing it, we must first identify where it comes from, what it's impacting, and who it is affecting or forcing to change. Once we understand this, and we go to cities to study or educate ourselves in

some branch of science or other fields of expertise, we begin to ask questions and to understand what is going on elsewhere, and whether or not it is harmful to us.

Then that thought arrives—whether during meditation, in an ayahuasca ceremony, or after taking a purgative—when you begin to ask yourself what to do with the knowledge acquired outside the community: How am I going to use it to benefit both my people and the environment, the territory I live in—or at the very least, to avoid causing harm? From my modest perspective, audiovisual media have been tools that have helped me understand and shape certain processes, to show what needs to be made visible, what needs to be reflected on, where we can change or recover our history, and, in some way, protect it.

Today, we need to face certain dynamics with greater responsibility, because we are well aware of what audiovisual creation entails in ecological terms. They are the result of various extractive processes used to create the equipment that allows us to record aspects of life. I've come to see it as my responsibility to analyze, study, and reflect on these issues—to determine how we can use the existing technology in service of the preservation of what truly matters.

Today, recycling is something that concerns all human beings, without exception. It is also our responsibility to show that there must be limits to the extraction of these materials, because the pollution of water, land, and air is approaching its limit. When we draw nearer to that limit—and I hope it happens through reflection and greater visibility of these processes, not through catastrophe—maybe we will finally come together in a shared way of thinking, one focused on caring for the only Earth we have: the only place where we've had the chance to breathe, to fall in love, to walk, to drink water, to feel the wind, and to connect with the universal cosmic energy.

FIG. 15–17
Photographs taken during the production of the documentary film *Jouenan Betiyeng Jabuayenán* (*The Plants that Guide*) by Ayênan John Quinchoa Juajibioy, 2024

NU: In many Indigenous peoples, the elders, shamans or spiritual guides make use of plants or mushrooms in their rituals in order to strengthen the connection with natural elements and to search for clarity in making both personal and community decisions. This use gives the plants a relevant role that goes beyond their function in terms of food, housing and clothing. This approach differs considerably from the contemporary model, in which plants tend to be valued for their usefulness, and they are even made invisible in cities (so-called 'green blindness'). In this context, how do you perceive the role of plants in the

process of humanity's formation, and their connection to the spiritual and social bonds that Indigenous peoples maintain with them?

AQ: At present, I believe we are in the stage of small chaos, which could lead to medium chaos, and when we reach the stage of great chaos, there may no longer be a way back. Well, those are the possibilities that can be perceived, more or less, in a qualitative, quantitative, and scientific way. From our Indigenous peoples, we have always tried to emphasize the importance of preserving plants and their languages—their ways of interacting with this planet and with humanity. In order to continue to preserve the forms and places of origin of teacher plants, it is necessary for the economic, political, and other spheres that mobilize humanity to begin awakening to greater awareness. Because there are very difficult processes happening in cities and across all countries, to which we have to respond. As I was saying, perhaps it will take a great catastrophe for us to truly feel the need for the messages and intelligence of the plants, so that they may be received in the way they deserve. Because if our Indigenous peoples are driven to extinction, as some already have been, this way of contributing to humanity—this possibility of finding a solution to the chaos which has repeated throughout history—may be lost forever.

With the current flow of information, it's easier to find out what's happening in another part of the planet or how to preserve something. However, this communication system is starting to get out of hand, because much of the content being produced is not the most appropriate for younger generations—it is double-edged. For that reason, it's worth asking ourselves whether we're going to keep using science, communication, and technology to benefit only a select few, or whether we will instead choose to use them in conjunction with the knowledge and ways of life of our Indigenous peoples, so that we can live better and in balance with this planet.

For us, it has become increasingly difficult to sustain our ancestral wisdom. It requires strong connections to ensure that others in the community can access that knowledge. Often, they don't have it, or they simply rely on anyone's opinion without having a solid foundation to reflect deeply. I believe that one of the ways we can continue exploring the intelligence of plants is by joining efforts with people from outside our communities who have both deep knowledge and a strong sense of awareness. Together, we can reach institutions and help them understand, strengthen, protect, and in some way carry forward the legacy of Indigenous peoples—who live immersed in or surrounded by today's built infrastructures.

We want to put our efforts and dedicate part of our lives to continuing to protect these plants, these sacred places. We call them sacred because they are the reserves that will allow you to prolong life in time and space. We do our

best, using the least amount of resources, so that future generations can breathe and drink water in appropriate conditions. The message is for those who want to reflect, who want to join this effort, but it is also for consumers in industrialized societies. Plants have already found a way to communicate with us as humanity, and this message will reach those consumerist people too, who will internalize it according to their level of sensitivity. We will share it through various actions: through video, music, poetry, writing, by planting a tree or a plant to feel it, so that at least we can have this closeness when we come into contact with them.

> **NU**: Exactly how is plant intelligence understood in the Kamëntšá and Ingas culture?

AQ: Our Indigenous peoples understand this concept in a holistic, symbiotic and symbolic manner (to express it in words from the English language), because we comprehend it through our cultural practices and sensory interactions, feeling and distinguishing their shapes, forms, tastes, and aromas. In this way, plants are not simply seen as biological organisms; we try to understand them as beings with their own consciousness, who interact with us, serve as food for animals, and also interact with them. Sometimes, for example, when we feed the animals we consume, we recognize that they also know about plants, and there is an interaction. But further research is needed to understand how they perceive them, those sensations that we, as human beings, are able to understand with our minds and our hearts.

From experience, we know that plants are beings endowed with their own consciousness, who interact with us as humans and with animals, and are part of a nearly reciprocal exchange network with fungi, which carry out various processes to transform matter, allowing a complete life cycle to continue functioning, just like our existence here. In my research process throughout the territory of Colombia, I was fortunate to meet people who have internalized these three aspects (holistic, symbiotic, and symbolic), and this has allowed them to endure, teach, and understand the language of plants, which I found very beautiful.

It is also important to note that we have food, medicinal, and arboreal plants ... and as Indigenous peoples, these are the ones we consider to be "teacher plants," as they guide us and other plants through various interactions between pollen, roots, and the exchange of water and nutrients. We consider them wise because a food plant is also sharing the knowledge it has carried genetically through the ages, and it gives life to us and other living beings. This holistic understanding that a plant gives us life is what an elder or a teacher embodies, as for us, all plants are sacred, even though they have different characteristics, because through their various functions, they contribute to the greatness and richness of the wisdom we refer to as the great spirit. There is

no plant that does not exchange carbon dioxide for oxygen, no matter how spicy or poisonous it may be, or that does not contribute nutrients to the soil when it decomposes.

Ancestral knowledge is based on observation, physical characteristics, medicinal properties, uses, and also on the understanding of signals and their interactions. We, at a spiritual level—beyond the physical aspect where it is touched, ingested, and smelled—move to another realm, and that is why we say they have wisdom, because they possess intuitive knowledge for ecological balance that is evident when they exchange information with other plants. Variations in form or color are some of the aspects of their language that our elders taught us to perceive. Thus, we realize that up in the mountains, there are hundreds of interactions, which we identify if we take the time to closely observe the dry leaves on the ground, the drops falling, the fungi everywhere, the lichens, and all the small, medium, and large plants that attract birds and other animals. We take note of all this in our mind and heart in order to understand it in this holistic way.

FIG. 18
Ayênan John Quinchoa Juajibioy, *From Within the Cascading Water*, 2024

NU: How does this understanding translate aesthetically in the media collective's audiovisual works?

AQ: The aim of the documentary I am working on is to show that the extent of ancestral knowledge is very respectable in comparison with scientific knowledge, since there is already evidence that science has managed to demonstrate things through its methods based on ancestral knowledge. In this way, it will come to confirm conclusions that our Indigenous peoples have known for millennia. As audiovisual creators, we can produce a story on the basis of an image, and analyze a context that is either investigated or already known from our past. On this occasion, it is about our grandparents and great-grandparents in Tabanok, as this documentary has to do with a part of history that is missing, taken by Europeans, in this case, the Capuchins. I want to partially integrate these processes because they form part of history and cannot be ignored. I managed to review a photographic archive in Barcelona,

belonging to the Capuchin monks who arrived in our territories to evangelize our people, covering the period between 1935 and 1950, dealing with Manoy, Tabanok and Bastok (Indigenous places). In the archive, people, places and actions can be observed that are closely related to the preservation of our territory, its great cultural legacy, and ancestral knowledge. These are some of the missing fragments needed to complete our history, to remember the memory of our peoples, and to strengthen our spirit as descendants of ancient knowledge.

In my imagination, I had created a kind of vision of what is happening in Latin America, in Colombia, in the departments, and in our ancestral reserves. They are like layers and fabrics that we cannot see at first glance, they are invisible to our senses, but they do exist, like when you listen to the plants, for example: this action of visiting some very important places energetically (spiritually speaking) that are still protected by people who have reflected very consciously from the deepest part of their being—"Ayenokan Aslëpay," as we say, thanks from the deepest part of our hearts. This observation and this imagination—and thanks to this ancestral knowledge—have allowed me to attempt to connect some of these places, distributed in different ecosystems with different, complementary energies, that want to manifest their own language of preservation. I also greatly appreciate the effort made by the *Plants_Intelligence* project, whose members invited me and expressed a genuine desire to learn and be part of this great universal fabric. That makes it possible to comprehend a little more, to reflect and to strengthen the connection with plants.

I have been thinking a lot about how we might show just a small part of that great power that exists—and how our Indigenous peoples, while not the only ones, may be among the most attuned to connecting with the great energy that sustains balance. Science aims to reach a point where it can control all the energy of the universe. However, as our elders say, it should not be done that way, but rather by weaving together ancestral knowledge and science. These are some of the insights the elders have shared through their wisdom. In this audiovisual project, I hope I can show a small part of that incredible knowledge that still exists, which is valuable to me, to our Indigenous peoples, and to all of humanity.

> **NU**: What is art's (political, epistemic) function with respect to the guidance and the teaching that plants offer people?

AQ: Humankind invented something it calls politics, and I perceive it as the act of coming together and making collective decisions. With that premise, plants have offered us, as Indigenous peoples, a form of resistance, reflection, and reconnection with ancestral knowledge. It's not that they are challenging dominant structures of power and knowledge—rather, they are offering a

teaching, like when one reads a parable. This is the kind of knowledge we are trying to protect, preserve, and sustain as a moral lesson.

To speak of art: Our Indigenous peoples have transmitted knowledge through language, but there are also places where visual expression plays a very important role—as in the Serranía de Chiribiquete (Caquetá and Guaviare), Ciudad Perdida (Santa Marta), or in our own territory (Putumayo), where remnants of ancient visual art can be found in Patascoy. This suggests that there are many ways of making these processes visible, presenting them through art and ensuring that it serves a function in the protection of this knowledge.

This leads to a cultural vindication, both for new generations who are losing all this knowledge, and for the people around us. It represents a resistance against the imposed models, knowledge, and power that reside in the system, in modernity, in post-colonialism. In some way, art is a tool that enables us to protect and preserve our traditions and our knowledge, as well as to narrate the stories of Indigenous peoples and to share their processes of survival. Plants play a fundamental role as guides and as a source of wisdom. Teaching about them and learning from them is of great importance to those of us who try to raise awareness through art.

Translation of the conversation by Tamara Stuby

Please cite as follows: Felipe Castelblanco/Natalia Uribe Macías/Ayênan John Quinchoa Juajibioy: "Jajañe—Chagra—Garden." In: INSERT. Artistic Practices as Cultural Inquiries, Issue 7, Plant Intelligence - Towards a Vegetal Aesthetics, 2025, URL: https://insert.art/ausgaben/plant-intelligence/jajane-chagra-garden/, DOI: https://doi.org/10.5281/zenodo.15768529.

NOTES

1 See the website of the Food and Agriculture Organization of the United Nations, URL: https://www.fao.org/giahs/giahs-around-the-world/ecuador-andean-chakra/en (accessed: 04/04/2025)
2 Cf. Hernandez Marentes/Venturi/Scaramuzzi/Focacci/Santoro 2022.
3 Cf. Trewavas 2017.
4 Cf. Ibid., p. 3.
5 Cf. Gómez-Barris 2017.
6 For Kamëntšá names and spelling, see the blog of Pueblo Indígena Camëntsá Biyá, URL: http://puebloindigenacamentsabiya.blogspot.com (accessed: 04/04/2025)
7 Cf. Balée/Swanson/Zurita-Benavides/Ruiz Macedo 2023.
8 Terra Preta, or Amazonian dark earth, is a fertile soil in the Amazon Basin. It consists of charcoal, which gives it a dark color and enhances fertility. It also includes organic matter like kitchen waste and crop residues. The creation process resembles composting, mixing organic materials with charcoal to decompose. This leads to nutrient-rich soil with high carbon content, fostering beneficial microorganisms. See the website of Biochar, URL: https://biochar.co.uk/terra-preta/ (accessed: 04/04/2025)
9 Cf. Speetjens 2023.
10 For information on the various plants used in the preparation of the ayahuasca decoction, see the website of the International Center for Ethnobotanical Education, Research, and Service (ICEERS): https://www.iceers.org/ayahuasca-basic-info/ (accessed: 04/04/2025)

11 Cf. Escobar 2013.
12 See the website of the Pachamama Alliance, URL: https://pachamama.org/sumak-kawsay (accessed: 04/04/2025)
13 Cf. Hanna/Langdon/Vanclay 2016.
14 See the baseline document "Plan de Vida Kamëntšá," updated in 2020, available on the website of the Ministry of Justice of Colombia, URL: https://www.minjusticia.gov.co/programas-co/fortalecimiento-etnico/Documents/banco-2019/25.%20DOC.%20FINAL%20LINEA%20BASE%20DE%20JUSTICIA%20KAMENTSA%202020%20(1).pdf (accessed: 04/04/2025)
15 See the website of the Ministry of Culture of Colombia, URL: https://maguared.gov.co/perfiles/wilson-chindoy/ (accessed: 04/04/2025)
16 Cf. Diago Sanabria/Argueta Villamar 2015.
17 Heraldo Vallejo, interview with the author, July 4, 2024.
18 See the website of the Grand Council of Indigenous Authorities, URL: https://www.gobiernomayor.org.co/kamentsa/ (accessed: 04/04/2025)
19 Cf. the blog of Pueblo Indígena Camëntsá Biyá, URL: http://puebloindigenacamentsabiya.blogspot.com (accessed: 04/04/2025)
20 A high-altitude ecosystem in the Andes, characterized by alpine tundra vegetation above the timberline and below the snowline, primarily found in Colombia, Ecuador, Peru, and Venezuela. The flora in these ecosystems comprises large rosette plants, shrubs, and grasses, all of which are uniquely adapted to endure the cold and humid conditions characteristic of the páramo climate. These ecosystems are integral to biodiversity and are crucial for water regulation and carbon sequestration, thereby underpinning environmental sustainability.
21 Taita Miguel Chicunque, interview with the author, Tabanok, October 2023.
22 The disease was caused by a severe fungal coccidioidomycosis infection, which I developed after a trip to La Pampa, a former gold mining site in the Madre de Dios region in the Peruvian Amazon. My medical case turned out to be the first ever case reported in Perú and one of the few active cases treated in Europe, which was later reported in a scientific paper authored by Dr. Andreas Neumayr, Chief Medical Officer, Swiss Tropical Institute Basel. See Neumayr/Rickerts/Ackermann/Castelblanco/Kuenzli/Durovic/Seas 2024.
23 See "Conversation with Dr. Luis Eduardo Luna about the Science and Philosophy of Plant Intelligence," Harvard Divinity School, 03/04/2024, YouTube, URL: https://www.youtube.com/watch?v=Hz2PDnoSJq8 (accessed: 04/04/2025)

BIBLIOGRAPHY

William Balée/Tod Swanson/María Gabriela Zurita-Benavides/Juan C. Ruiz Macedo: "Evidence for Landscape Transformation of Ridgetop Forests in Amazonian Ecuador." In: *Latin American Antiquity*, 34 (4), 2023, pp. 842–56, DOI: https://doi.org/10.1017/laq.2022.94
Arturo Escobar: *Sentipensar con la tierra. Nuevas lecturas sobre desarrollo, territorio y diferencia*. Medellín, Colombia: Universidad Autonoma Latinoamericana, 2013.
Macarena Gómez-Barris: *The Extractive Zone. Social Ecologies and Decolonial Perspectives*. Durham: Duke University Press, 2017, DOI: https://doi.org/10.1215/9780822372561
Philippe Hanna/Esther Jean Langdon/Frank Vanclay: "Indigenous Rights, Performativity and Protest." In: *Land Use Policy*, 50, 2016, pp. 490–506, DOI: https://doi.org/10.1016/j.landusepol.2015.06.034
Maria Alejandra Hernandez Marentes/Martina Venturi/Silvia Scaramuzzi/Marco Focacci/Antonio Santoro: "Traditional forest-related knowledge and agrobiodiversity preservation. The case of the *chagras* in the Indigenous Reserve of Monochoa (Colombia)." In: *Biodiversity and Conservation*, 31, 2022, pp. 2243–2258, DOI: https://doi.org/10.1007/s10531-021-02263-y
Andreas Neumayr/Volker Rickerts/Sina Ackermann/Felipe Castelblanco/Esther Kuenzli/Ana Durovic/Carlos Seas: "Suspected Acute Pulmonary Coccidioidomycosis in Traveler Returning to Switzerland from Peru." In: *Emerging Infectious Diseases*, 30 (11), 2024, pp. 2432–2435, URL: https://wwwnc.cdc.gov/eid/article/30/11/24-1034_article (accessed: 04/04/2025)
Olga Lucía Diago Sanabria/Arturo Argueta Villamar: "Cosmovisiones Y Naturalezas En Tres Culturas Indigenas De Colombia." In: *Etnobiología*, 13 (2), 2015: pp. 5–20.
Peter Speetjens: "'Many features of the Amazon are man-made.' Q&A with archaeologist Eduardo Neves." In: *Mongabay*, 05/03/2023, URL: https://news.mongabay.com/2023/05/many-features-of-the-amazon-are-man-made-qa-with-archaeologist-eduardo-neves/ (accessed: 04/04/2025)
Anthony Trewavas: "The foundations of plant intelligence." In: *Interface Focus*, 7 (3), 2017, DOI: https://doi.org/10.1098/rsfs.2016.0098
Carlos Alberto Rodríguez: *Sistemas Agrícolas. Chagras y Seguridad Alimentaria*. Bogotá: Fundación Tropenbos Internacional Colombia, 2010.

CREDITS

Fig. 1, 6, 8–13: © Felipe Castelblanco, photo: Felipe Castelblanco

Fig. 2: © Abel Rodríguez, courtesy of Tropenbos Colombia
Fig. 3–5: © Felipe Castelblanco, edited infrared photo: Felipe Castelblanco
Fig. 7: © Felipe Castelblanco, infrared photo: Felipe Castelblanco
Fig. 14–18: © Ayênan John Quinchoa Juajibioy, photo: Ayênan John Quinchoa Juajibioy
Vid.: © Felipe Castelblanco

AUTHORS

Felipe Castelblanco is a multidisciplinary artist and researcher working at the intersection of participatory, film, and media art. His current research focuses on biocultural peacebuilding in the Pan-Amazon region, exploring modes of vegetal–human cooperation and epistemic justice. His films and artworks have been exhibited internationally, including at ZKM | Center for Art and Media in Karlsruhe and the Royal Academy of Arts in London. Felipe holds a PhD from the Basel Academy of Art and Design FHNW, in cooperation with the University of Arts Linz. He is currently a postdoctoral researcher for the SNSF-funded project *Plants_Intelligence. Learning Like a Plant*.

Natalia Uribe Macías is a biologist, scientific illustrator, and environmental educator. She is a professor of Scientific and Naturalist Illustration at the University of Antioquia. She is the founder of BioGrafos Illustration Collective, organizing exhibitions, workshops, editorial projects, and large-scale public art in various cities. She has contributed to several phases of *Arquitectura Emocional*, a project by artist Angélica Teuta. In 2019, she participated in *Sucesiones*, a live cinema piece developed with BioGrafos and Cinevivo at the Metropolitan Technological Institute. She co-organized the botanical art exhibitions *Plantas, Sabores y Saberes* (2025) and *Plantas Nativas de Colombia* (2018) at the University Museum of the University of Antioquia. She serves on the board of SalvaMontes Colombia, supporting nature conservation in the Andes Tropicales and Tumbes-Chocó-Magdalena. Her work is rooted in a transdisciplinary approach that fosters ongoing dialogue between art, conservation, and science.

Ayênan John Quinchoa Juajibioy, a member of the Kamëntšá and Inga peoples from Putumayo, Colombia, is a conservationist, programmer, and empirical videographer. He studied Materials Engineering at the University of Antioquia and is a computer programming technician at CENSA (Centro de Sistemas de Antioquia). He has worked as a multimedia content creator for the virtual and distance education platform of the University of Colombia, Medellín. Ayênan currently leads the Ayênan Camëntšá Collective (AC2), a communications collective which supports Indigenous autonomy, cultural memory, and environmental protection through film, radio, and multimedia productions. The media collective's work seeks to communicate and explain the extermination of the cultural memory of the Kamëntšá and Inga peoples through social, economic, and cultural transformations caused by globalization, the misuse of natural resources, and the disharmony of humanity. He is a research partner of the SNSF-funded project *Plants_Intelligence. Learning Like a Plant*, and is currently developing two videos for this project.