Edited by Carla Macchiavello Cornejo and Camila Marambio

Turba Tol Hol-Hol Tol is the title of the project which represented Chile at the 59th Venice Art Biennale, organized by the Ministry of Cultures, Arts, and Heritage and the Chilean Ministry of Foreign Affairs. The project consisted of a pavilion authored by Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann, and Camila Marambio, with the cultural production of Juan Pablo Vergara and the collaboration of a multidisciplinary team of creatives and institutions (Hach Saye, WCS-Chile, Ensayos, Greifswald Mire Centre). The complete list of collaborators can be found in the credits and acknowledgements section at the end of this book, *Turba Tol Hol-Hol*, edited by CM^2.

Based on more than a decade of eco-cultural cooperation in Tierra del Fuego, *Turba Tol Hol-Hol Tol* was born out of the transdisciplinary research practice of Ensayos, a platform rethinking the role of art in creating growing communities oriented to biodiversity conservation and contextualized ecological actions. Ethical considerations related to the Selk'nam people were guided in accordance with the policies of the Hach Saye Foundation's Research Ethics Directory.

Ministerio de las Culturas, las Artes y el Patrimonio

Gobierno de Chile

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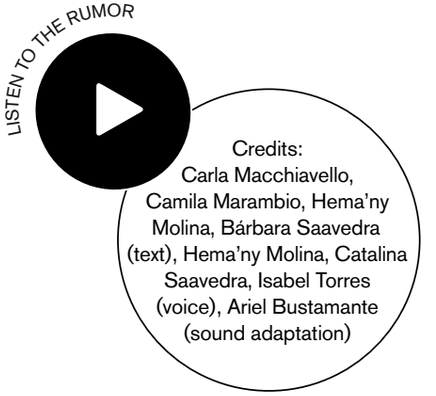

TURBA TOL
HOL–HOL

Edited by Carla Macchiavello Cornejo and Camila Marambio

peat bog heart

jaime de aguirre hoffa

Minister of Cultures, Arts, and Heritage of Chile

Chile's participation in the Venice Art Biennale is part of the internationalization strategy of the Ministry of Cultures, Arts, and Heritage for the visual arts sector to strengthen the circulation of artists and researchers from our country in this worldwide event of long history and great importance, which brings together the work of creators, curators, and mediators from different regions of the world.

Based on this appreciation of the Biennial and the interest in sharing the artistic practices of our creators and putting them in dialogue with those of other territories, Chile has participated in several editions of this event with different proposals. A crucial milestone in the history of both national art and the Biennial was, for instance, the post-coup edition dedicated to our country in 1974.

After being selected through an open call process led by the Executive Secretariat of Visual Arts of the Undersecretary of Cultures and Arts, the participation of *Turba Tol Hol-Hol Tol* in the 59th International Art Exhibition of the Venice Biennale 2022 is of utmost importance for Chile. For this reason, we are celebrating this occasion through the publication of this book that brings together the voices of more than 35 women around the peat bogs of Patagonia.

Since the project has been, from its genesis, a collective and transdisciplinary endeavor, it brings together the different areas of expertise of its core team, including curatorship, art history, architecture, film, and sound art, as well as expressions and knowledge that are at the essence of this proposal, such as poetry, science, and ancestral knowledge.

For this reason, we are proud to support a project that has a clear spirit of collaboration among different people and types of knowledge, but in particular the knowledge of the Selk'nam people, whose language gives the proposalit's title: Heart of the Peat Bogs.

After research in the southern latitudes of Tierra del Fuego and field work carried out specifically in the Karukinka Park, in the extreme south of Chile, *Turba Tol Hol-Hol Tol* proposes a unique experience and a conceptual diagram, spearheaded by a call for the conservation of peatlands and awareness of the key role they play in our planet.

As ancestral knowledge and languages, artistic expressions and environmental conservation are key issues for our government, we appreciate the lucid coexistence of these issues in *Turba Tol Hol-Hol Tol*, as well as the invitation it extends to us to honor place we inhabit and take on the responsibility for our fragile ecosystemsas a local and global community.

We thank the entire team of *Turba Tol Hol-Hol Tol* and all the collaborators of this publication for their impeccable work, since this book brings together the talent of the wonderful authors who make up this great peat bog.

the heartbeat of the south

carola muñoz oliva

Cultures, Arts, Heritage, and Public Diplomacy Division
Ministry of Foreign Affairs

Chile's participation in the 59th International Art Exhibition of the Venice Biennale 2022 through the project *Turba Tol Hol-Hol Tol* is especially relevant for Chile and for the government of H.E. President of the Republic Gabriel Boric, presenting a country pavilion that applies a transdisciplinary approach to address the care of the territory, as expressed through the conservation of the environment and the valuing of cultural and spiritual elements of the Selk'nam people.

In the Selk'nam language *Hol-Hol Tol* means "heart of the peatlands." For the Selk'nam culture, this heart in the form of a wetland represents not only a unique natural environment and the convergence of flora and fauna, but a being in itself, a living spirit that breathes and beats to the mossy thrum of Patagonia.

Patagonian peatlands are composed of extensive wetlands, making them one of the most important freshwater reserves in the world. In this sense, their protection, study, and conservation are vital for the preservation of the human species and of the world as we know it.

This immersive installation is an artistic proposal made by artists, activists, environmentalists, scientists, and poets, and Indigenous, non-Indigenous, including collaborators from other parts of the world, who have come together in a dynamic exchange of ancestral, academic, and artístic knowledge and experiences. The people who visit the installation have the opportunity to open themselves up to explore the experience of immersing themselves in its waters, breathe its aromas, touch its textures, and connect with the timeless living songs of the people who care for this spirit.

The Cultures, Arts, Heritage, and Public Diplomacy Division of Chile's Ministry of Foreign Affairs, is honored to support projects like this one that are aligned, in form and substance, with the Turquoise Foreign Policy, underscoring the Chilean government's commitment to the protection of the environment and ecosystems on the land, in the sea and, since the signing of the Escazú Agreement, the people who defend them, as well.

In this version of the Biennale—for the first time with a curatorship that includes more than 80 percent of exhibiting artists who are women or gender nonconforming—Chile's participation has been honored with the well-deserved award of the Golden Lion to our beloved artist, poet, and activist Cecilia Vicuña. Her committed career, in favor of human rights and environmental protection through art, has contributed to the synergy necessary for the urgent transformation of the world. This recognition, combined with the Biennial's invitation to artist Sandra Vázquez de la Horra and the exhibition of Violeta Parra's *arpilleras*, make this version of the Venice Biennale the necessary and urgent expression of the visibility of women artists' work from our nation and the rewriting of our artistic and creative history as part of the cultural diplomacy of feminist foreign policy.





















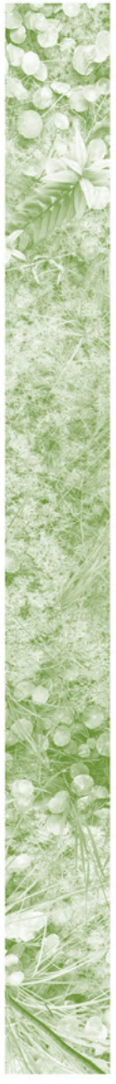

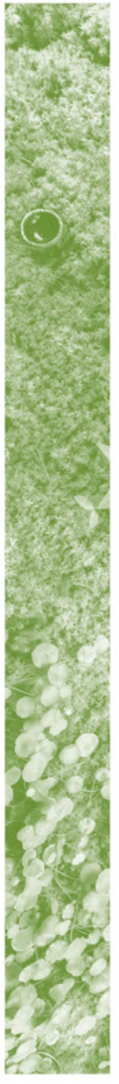











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Introduction

CM² (Carla Macchiavello Cornejo and Camila Marambio)*

As ever, this is about setting our imaginations free; it's a magic spell, a multisensorial journey into the heart of peatlands. It's a journey to the heart of the marginalized (the bogs, the science of conservation, the Selk'nam people, Tierra del Fuego, the work of women, poetry, collaboration, transdisciplinary cultural exchange), to interweave worlds and bring fragments together, to gather strengths and leave behind the binary, to add (like streams to a river) to the biodiversity of this planet Earth. As ever, this is part of a continuum that we briefly join, to transit and get drenched in together. Laying out the pathway, revealing the process, taking hold of a friend's hand to unlearn together; asking for help, companionship, solidarity, an attentive ear; putting our feet (and heads) into the bog, keeping quiet; admiring each other (and other women) on their journeys.

This book/work of art was born out of a desire to touch: to touch the ground, bodies, fibers, and membranes; to draw our bodies nearer to the peatlands; to get closer, as possible accomplices, to hear their call, the call of the inner, and ancestral waters. This book/work of art was born out of a desire for wetness, for rehydrating the dry, for caressing: mas-turb-ate, *más-turba,* more peatlands. It was born out of a desire to be a book/friend, a source of information, support, and reference for anyone wanting to learn more about peatlands or about conservation practices in different corners of Abya Yala (a decolonized term for the Americas). It is exhilarating poetry that goes beyond any ending. A book to accompany and celebrate that nothing and nobody is ever alone. A book to per-turb, to transgress individualism. To persist in telling multiple stories and bring them together, to bring us all together and con-verse, in all our differences and at all our distances, in times of chaos and change. A book to indulge in care and to delight in it—this is where the repetition, the rhythms, and echoes of *Turba Tol Hol-Hol Tol* come from as Chile's contribution to the 59th edition of the Venice Art Biennale, spreading its wings with these pages.

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* As ever, we write with two or more voices. We function as CM² and we have been thinking and writing together since we were undergraduates. Perched in a corner studying aesthetics in the Instituto de Estética at the Pontificia Universidad Católica de Chile. How uncomfortable to have the world "catholic" in an introduction. How embarrassing the remnants of the vicissitudes of (de)colonization. How difficult it is to recognize the stupidities, the privileges, and even more, the blindness. Let us make memories together. One in Queens, one from the air. That has been our strategy since we began to work together more than 10 years ago, editing, crossing the infinite thresholds that emerge on the winding road towards ecological, social, and linguistic transformation.

This multi-temporal, multimedia project that is *Turba Tol Hol-Hol-Tol*,[1] curated by Camila Marambio with the participation of artists Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, and Alfredo Thiermann, along with a collaborative multidisciplinary team of creatives from a variety of institutions (Fundación Hach Saye, the Wildlife Conservation Society-Chile, Ensayos, the Greifswald Mire Centre), makes this book unruly and wild, like the convoluted layers of the peatlands. The team of creatives behind *Turba Tol Hol-Hol Tol* is: Hema'ny Molina, Bárbara Saavedra, Rosario Ureta, Mateo Zlatar, Carola del Río, Constanza Güell, Sebastián Cruz, Antonia Peón-Veiga, Nico Arze, Christy Gast, Benjamín Echazarreta, Isabel Torres, Fernanda Olivares, Nicole Püschel Hoeneisen, Susanne Abel, Matthias Krebs, Jan Peters, Anja Prager, Greta Gaudig, agustine zegers, Denise Milstein, Christy Gast, Randi Nygård, Karolin Tampere, Simon Daniel Tegnander Wenzel, Freja Carmichael, Sonja Carmichael, Elisa Jane Carmichael, Jasper Coleman, Caitlin Franzmann, Renee Rossini, Hans Toso, Tiff Rekem, Josh Widdicombe, Rus Gant, and Stefan Grabowski.[2] *Turba Tol Hol-Hol Tol* is a work born out of collaboration and every imaginable form of listening, awareness, embodied visualization, spatiality, and circulation…. It places at its heart the peatlands of Tierra del Fuego, their needs, their inhabitants, and the communities that care for them and confront the threats they face.[3]

Peatlands, these bodies of water and accumulated organic matter, ancestral organisms covered in moss—the *Sphagnum* that "gets most of the attention"[4]—are ecosystems that ask for our respect. They are living reminders of the precarity of life on this planet, of the abandonment of some ecosystems to plundering devastation and rampant extractivism. They also remind us of resilience, of hope beyond the apocalyptic warnings we hear every day in these times of crisis. *Hol-Hol* is the Selk'nam word for peatlands and peat—at least that is how the word appears in the dictionaries compiled by the colonizing missionaries who brought such division to Tierra del Fuego. Hema'ny Molina, from the Fundación Hach Saye, taught us to think about this word from its Selk'nam perspective, without a productivist fragmentation, without its colonialist classificatory perspective. The vegetable, mineral, and

1 *Turba Tol Hol-Hol Tol* is the name of the project that represents Chile at the 59th International Art Exhibition - La Biennale di Venezia. Chile's participation is organized by the Ministry of Cultures, Arts, and Heritage and the Division for Cultures, Arts, Heritage, and Public Diplomacy (DIRAC) of the Ministry of Foreign Affairs. Juan Pablo Vergara is the project's cultural producer.

2 For a comprehensive list of the collaborators, see https://turbatol.org/sobre.html and the book's credits.

3 Turba is peat in Spanish; tol, is heart in Selk'nam, and hol-hol, is peatland: Turba Tol Hol-Hol Tol threads these words into a new tapestry of meaning.

4 Carolina León Valdebenito, "Peatlands," published in this book, with a vocal interpretation by Isabel Torres in Rumor #2.

aquatic layers of the peatlands are indivisible in spirit/matter. As Potawatomi environmental biologist Robin Wall Kimmerer reminds us when she writes about moss: "Their way of being in the world cannot be told by data alone."[5]

The peatlands are our *mamaestras*, our mothermentors, mother/teachers.[6] From their turbid bodies, we learn to accept our own inherent turbidity. This is a turbid book, aware that knowledge and teaching are never symmetrical and imply changing power dynamics, just as places and languages resist translation into one another. In these pages, we submerge ourselves in an exercise of inversion and protection, listening to and amplifying what is below, what is considered dirty and smelly, inert, what has been decimated by extractivism and the interconnected violence of colonialism and the patriarchy. We venerate and celebrate the peatlands. We learn from them how to navigate the waters of the future and be navigated into. The moss has taught us that the minuscule is a universe and that in the apparently negligible, there is a resilient strength that sometimes only needs to be watered, caressed, loved, and cared for to survive. To walk barefoot in the peatlands is to remember that our planet is made up of the unexpected and the unstructured, that sight isn't the only sense—nor the best one—for understanding the complexities of the world. To remember that death underpins life and that processes can take a long time and results might be barely visible. The peatlands teach us to be patient and to slow down, to listen to the wisdom contained in an invocation: *Turba Tol Hol-Hol Tol*. Living with the peatlands, knowing their slow cycles, immersing ourselves in their spongey waters, listening to them, and accepting that they are our *mamaestras* is an open invitation to collaborate and heal across generations, species, disciplines, territories, and cultures. To make ourselves permeable. To let compassion and understanding trickle down, even if it is slow. In Chile, the conservation of nature is an anticolonial act.

In 2010, on Karokynká[7] (Isla Grande), Tierra del Fuego, a breeze blew

5 Robin Wall Kimmerer, *Gathering Moss. A Natural and Cultural History of Mosses* (Oregon: Oregon State University Press, 2003), 6.

6 This introduction was originally written in Spanish, a colonial language we consciously try to disrupt and open up. New words were invented, like *mamaestras*, to help us name other forms of relating and feeling/thinking/doing (*sentir-pensar-haciendo*).

7 *Karokynká/Karwkynká*, "our land" in Selk'nam, is a complex word that refers to the territory inhabited by the Selk'nam peoples, to the Earth and what it encompasses in its entirety (moss, water, peat, and more), to the home, and to the whole territory understood as a living being. Karokynká includes what is known as the archipelago and the Isla Grande of Tierra del Fuego, where Parque Natural Karukinka is located. There are various ways of writing this word, because of the dictionaries created by the European authors who tried to gather and translate the words of the many inhabitants of what is today known as Tierra del Fuego. The word "Karukinka" appears translated in the dictionary of the Ona (Selk'nam) language [*Diccionario fueguino-ona*] compiled by José María Beauvoir as "Tierra del Fuego." In this book, we use the word *Karokynká* according to its writing and pronunciation established by the Fundación Hach Saye.

Ensayos (Essays) into existence. Ensayos is a practice of collective research that has generated mud-laden dialogue. *We act while thinking* about how to undertake effective ecocultural conservation through transdisciplinary and multispecies connections, projects to protect the peatlands of Patagonia and the health of the coastal ecosystems. Over the years, Ensayos has produced exhibitions, performances, scientific experiments, educational curricula, publications, a play, a web series, and even a perfume, while combining knowledge and interdisciplinary methods to develop new forms of environmental care.[8] The practice began in Parque Natural Karukinka, protecting nearly 90,000 hectares (approximately 350 square miles) of peatlands and an additional 200,000 hectares (some 770 square miles) of forest, steppe, coastal, mountain, and other biological communities.[9]

The founding members of Ensayos included artists from Chile, the United States, and Norway, scientists from the Wildlife Conservation Society-Chile, locals (*fueguinos*), a doctor, a park ranger, a teacher, a cultural manager, and a journalist. This central core of participants remains active, and over the years, numerous Ensayistas (Essayists) have joined them—some for short periods of time, while others remain committed—all working together through the challenges inherent in an integrated way of thinking, generating alliances and multifaceted, unexpected collaborations. As *Ensayistas*, we believe in the radical potential of environmental thinking, and we are aware that, in the words of Ana Patricia Noguera de Echeverri, "aspiring to propose a new universal truth from an environmental perspective and trying to demonstrate it through every means will lead us to a new reductionism that I call post-scientific."[10]

This book therefore takes a hybrid form and aspires to many things, but above all, to be a book that works. A book/tool to make and unmake knots/worlds (*nudosmundos*), to unleash other journeys into the imagination, to generate disturbing and raunchy conversations, to promote the learning that comes from the dynamism of life. We embrace the incoherence that this book might have, because the process of making it has taught us that if we accept uncertainty and work with it, then understanding/action emerge, and our horizons expand. In an endeavor to create new relationships and, above all, to interweave knowledge, this book brings together the voices of those who have looked after or continue to look after the Karokynká peatlands, as well as guardians who cultivate relationships of ecological care with other entities.

This book flows out of the playful and embodied practices of Ensayos and the group's previous publications,[11] from new collaborations, and the recognition that we must continue to rehearse ethical protocols and original ways of listening, reading, and caring. Practices that know how precarious they are and therefore how potent, weaving solidarity into the disciplines and localized sources of knowledge that collapse hierarchies. Such an understanding accepts that we must read ourselves, re-read ourselves, read between lines, re-connect, listen to the poetry and the conversations of the land and the waters, and go backwards in order to perceive and create together and give birth to alternative futures. We know that we are eternal apprentices in coincidence and dissidence. We cannot offer up any definitive truths, nor is there a single solution to the crises affecting the climate, the environment, society, and politics, from the local to the global. But we think/feel that we can communicate, talk, speak to clarify doubts, ask each other questions, leave prejudice aside, and celebrate the opportunities to find and disturb one another. This book is both a tribute and an exercise in *más-turba*, in the historical reparation of the oppression that women experience when passionately protecting their environments and caring for themselves.[12] This book is a seed we have planted for the future. Water it with care.

A guide to submerging oneself in the layers of this book: Wade into the muck with us

Rumors

During this tumultuous time of profound transformation dimly looming on the horizon, we invited a group of women from a variety of backgrounds in peatlands to write texts for this book. We began the commissions in October 2021, two years after the social uprising that rocked Chile, with Rumors: short texts announcing new models of ecology and solidarity that emerge from Abya Yala and inspire *Turba Tol Hol-Hol Tol*. We enjoy friendly, conspirational gossip—whispered echoes running along our bodies as small earthquakes would—and we relished the provocative texts we

8 For more information, see https://ensayostierradelfuego.net/.

9 For more information about Parque Natural Karukinka and its origins, see Bárbara Saavedra, "Karukinka: Nuevo modelo para la conservación de la biodiversidad," *Ambiente y Desarrollo* 22, 1 (2006): 21-27; and Bárbara Saavedra, Javier A. Simonetti, and Kent H. Redford, "Private Conservation: The Example that the Wildlife Conservation Society Builds from Tierra del Fuego," *Biodiversity Conservation in the Americas: Lessons and Policy*, ed. Eugenio Figueroa (Santiago de Chile: Universidad de Chile, 2011), 357-392.

10 Patricia Noguera de Echeverri, *El reencantamiento del mundo* (Manizales, Colombia: Universidad Nacional de Colombia, 2004), 17. Our translation.

11 See the editions of *Más allá del fin/Beyond the End* #1 (Paris: Kadist, 2014), #2 (New York: The Bruce High Quality Foundation, 2015), #3 (Melbourne: co-edited with Discipline, 2019) and #3.5 (2020), on the Ensayos website.

12 See, for example, Colectivo Miradas Críticas del Territorio desde el Feminismo, *Mapeando el cuerpo-territorio. Guía metodológica para mujeres que defienden sus territorios* (Quito, Ecuador: CLACSO, 2017).

received which would give our readers goosebumps of anticipation. Tongues unleashed, echoing mischievous peatland languages which demand the transformation and subtitution of the colonial, patriarchal, and extractivist models in Chile that have been imposed and enable the destruction of peatlands, both locally and around the world. Infused with the rebellious spirit and pulsating rhythms of the deepest peat-mob,[13] the voices of the Rumors began casting spores of their news to the wind through texts about the the upcoming pavilion in Venice (Carla Macchiavello Cornejo, Camila Marambio, Hema'ny Molina, and Bárbara Saavedra, Rumor #1); about advanced, sensual science of the peatlands (Carolina León Valdebenito, Rumor #2); about all-desiring, deviant peatlands (Lucía Egaña, Rumor #3); about rescued languages (Hema'ny Molina, Rumor #4); about indomitable languages (Daniela Catrileo, Rumor #5); about ambassadorial works of art (Catalina Valdés Echenique, Rumor #6); and about the importance of water for life (Cecilia Vicuña, Rumor #7).

As all rumors do, these texts mutated, their moods shifting as they circulated. After commissioning the texts, we called on artist Isabel Torres to spend time with the Rumors and delight in reading them, and then create a sensorial and sensual adaptation with her voice. Ariel Bustamante, sound artist, joined the aural dance, bringing with him a wealth of experiences and sound interventions, acts of and proposals for listening, songs and conversations that he has been practicing for years in Tierra del Fuego. His aural proposals—many of them undertaken with Hema'ny Molina and Fernanda Olivares—call on us to learn from the peatlands, home to so many, and listen to their songs. He invited the editors to make use of their bodies and ears via Whatsapp to listen to audio versions of the Rumors, these "circulators that vitalize our relation with the Earth,"[14] full of wind, breath, suction, and bubbling, giggling, gurgling murmurs, babbling and rebellious mosses, depths of dark waters, electronic echoes, and windy gushes of flutes, metallic memories of extractivist threats, the heartbeat of protective drums and songs.

Rumors emerged in the months before the inauguration of *Turba Tol Hol-Hol Tol* in Venice. A few days before the pavilion opened, the last Rumor was created: Ariel's sound adaptation of Cecilia Vicuña singing in a former church in Venice currently being used as TBA21–Academy's Ocean Space art hub. All the Rumors are available on the website turbatol.org designed by Mateo Zlatar and programmed by Carola del Río. They are audio files and downloadable texts, designed by Rosario Ureta in Spanish and English. The rumors are also contained within this book, with their respective QR codes—as if they were a collection of gifts packed away in a suitcases, to be given away somewhere along the journey, in order to leave something cherished behind as a thank you gift or a memento. These rumors are loose limbed—listen to them, read them, feel them, and let them dance, send them to someone as a prophetic gesture or post them on your own sites, like polyphonic missives that disturb and give pleasure.

13 The term peat-mob is used in Lucía Egaña, "Memory turbulence," Rumor #3, published in this book.

14 Ariel Bustamante in conversation with the editors, 10 November 2022. Our translation.

The reverberations of the peatlands

We then invited 16 authors[15] to join us in the multiple, interwoven layers of *Turba Tol Hol-Hol Tol*—visual, political, sound, aural, olfactory, spatial, performative, mossy, activist—as well as the new models of perception and ecological conservation that they themselves generate. We asked them to use their own practices—performance, film, architecture, sound, poetry and language, curatorship, politics of water, conservation, education, and science. It was an open call to resonate with the art and the different ethics and aesthetics of care that the pavilion enacts, despite and through distance and paradox. A pavilion that brings together disciplines and that roots itself in an audio-visual architecture to transmit previously invisible messages.

Like tossing a pebble into the water, we asked ourselves…. How do we channel the energy of the processes of social change occurring in Chile and make them reverberate beyond Venice? How do we make the complex living organisms that *Turba Hol-Hol Tol* pays tribute to more audible, more legible and more expansive? What vibrations, what trembling memories and unexpected echoes could this book/work of art transmit if we expanded the multisensorial thinking/feeling process to others? How, concretely and imaginatively, could connections occur with peatlands if we stretched the tendrils around Chile and other corners of the world? Let us undertake a polytemporal journey through the texts commissioned as a tribute to the peat-mob, as articulated abundance, sensual and sensitive, nonbinary and biodiverse, and to the ancestors/peatlands that guide us both directly and indirectly.

The first echoes, songs, and stories came to us from our ancestors who rest in the most southern peatlands of Abya Yala, and whom we continue to become familiar with, play with, and learn from, as we did in January 2022 when the team of *Turba Tol Hol-Hol Tol* traveled to Parque Karukinka to undertake the residency that ecologist Bárbara Saavedra Pérez called a

15 We invited 16 authors, but Soledad García Saavedra suggested a conversation with Julia González Calderón, leaving it at 17.

"grounding into the bog."[16] Hema'ny Molina shared a Selk'nam story with us which recognizes humans as an intrinsic part of nature, close and not-so-close relatives who share a body, who live and die together, each with their own complexity and diversity. Recovering and resignifying words from a language thought to be lost, Hema'ny reminds us in this text that, even if these ecosystems preserve the traces of the genocide and epistemicide of colonial greed and their renewed impact in current neoliberal extractivist systems that operate under notions of development and progress, the peatlands witness struggles to recover land, water, cultural practices, and even recognition as a living people, which Selk'nam families have been fighting for, alongside other indigenous peoples. At the same time, further south, from her home in Puerto Williams on Isla Navarino, craftswoman Julia González Calderón tells curator Soledad García Saavedra by telephone how her grandnieces learn the Yaghan techniques of basket weaving and medicine. While both women, hundreds of miles apart, are looking after their families and their own health, they find time to talk, and in these brief moments, they weave intimacy and trust. Julia mentions to Soledad that making baskets woven out of reeds is a way of talking, a dialogue spoken in tactile, plant language that begins with the care of the materials and the lived space in which they grow. This is an interspecies conversation, in which the material—nature in all its manifestations—speaks, and we must listen carefully, especially to the hard yet flexible reeds that grow in the peatlands, where Julia's boots sink and get wet when she goes to find them.

Meanwhile, conservation scientists Antonieta Eguren Ibacache and Nicole Püschel Hoeneisen have a conversation equally real and imaginary with the peatlands—pure science fiction or pure science-emotion! They interview one another and share stories about how they got to know each other and the local, regional, and international work that they have been developing together to protect these ecosystems: the route map that they created, the national efforts and the international agreements that they have put in place with other passionate defenders of peatlands. Now more than ever, it is necessary to recognize these relationships that have been twined together and today work to create solidarity and new models of ecocultural conservation. Among their transnational collaborations through the Iniciativa de Turberas de la Patagonia (Patagonian Peatlands Initiative), they have worked with Adriana Urciuolo and Nancy Edith Fernández-Marchesi, Argentinian scientists who remind us that the care of these vast wetlands and the specific biodiversity they harbor, means that peatlands should be understood as a vast system of interconnected waterways, demanding an integrated approach to the management of water sources. They share their experiences in Punta Mitre, Argentina, joining forces through the years with local communities, government institutions, and activist and educational organizations to make decisions, defend the peatlands, and create policies in their defense. An emblematic case demonstrating the impact of their work achieved the creation of a protected area on the Mitre Peninsula.

On the other side of the world, from three continents, a multi-gender group[17] chats on Zoom about a gift they want to give *Turba Tol Hol-Hol Tol*. They spin webs of peatland solidarity through the scents of various regions, in Norway, on the Australian island of Minjerribah, and in the northeastern United States. They talk about what is left when peatlands have been drained and how to translate into scent, incense, and perfume something so ephemeral and tangible, so necessary, emotional, and yet threatened, as smell. Uruguayan sociologist Denise Milstein listens to them attentively and gathers the olfactory stories they share, of dangers that mutate and meanings that change with them, while she reflects on how to keep-while-giving. These are stories in danger of being forgotten, as performance theorist Jennifer McColl Crozier writes in her text, given the hierarchization of the senses and the modern control over bodies and deodorization, the fear that has been installed around sickness and the unavoidable contact that breathing entails. Faced with the atmospheric warfare of the 20th century, the necropolitics[18] associated with environmental contamination, and the violent control of masses through gas, how can we resist, breathe, and exist together?

Turba Tol Hol-Hol Tol is a reminder that our breathing is only possible thanks to biodiversity which, as Bárbara Saavedra Pérez writes, is often invisible despite being omnipresent. Perhaps this is why the devastating degradation of air quality is also silenced and ignored, obviating the damage that living beings create and the complex interconnection of the planet's collective body. "The scientific practice of conservation only has meaning in the action of conserving,"[19] says Bárbara, inciting us to be part of a philosophy of action that brings together local knowledge and practices of mutual worldmaking, respecting other peoples' and other communities' ways of life. Anthropologist Francisca Fernández Droguett insists passionately that in all aspects of the defense of water, it is essential to pay attention to territorial and community proposals and the demands for self-government. To protect, regenerate, and restore waterways means establishing that they

16 "Turba Tol: Grounding into the Bog - Ensayo #6," Ensayos, https://ensayostierradelfuego.net/programs/ground-wire-to-the-bog/.

17 Christy Gast, agustine zegers, Camila Marambio, Randi Nygård, Karolin Tampere, Simon Daniel Tegnander Wenzel, Caitlin Franzmann, and Denise Milstein.

18 Achille Mbembe, "Necropolitics," *Public Culture* vol. 15, no. 1 (2003): 11-40.

19 The phrase can be found in the Spanish version of this book. Bárbara Saavedra Pérez, "Un llamado y un camino: el Acuerdo de Venecia o el arte de colaborar para conservar turberas de valor global, localmente," *Turba Tol Hol-Hol* (Santiago: Ograma, 2023). Our translation.

have fundamental rights, dismantling the extractivist systems that exhaust the waterways, and building relationships that allow community control of them, without imposing one particular kind of knowledge or practice over another. "Listening is gold,"[20] and its wealth is in conversation. Long ago, the term "conversation" implied the place a person lived and the way they related to it; today, a conversation may be reimagined as the beginning of a poetic, sensitive, localized, resonating with every place in which we live and that we transform by our act of existing in and transiting through, listening to its inhabitants. When curator and Ensayista Karolin Tampere joined the creative process of the offering of scents to *Turba Tol Hol-Hol Tol* at the Venice Art Biennale, she explained that her role was that of a "conversation partner." With whom do we converse and who accompanies us? What happens when our conversation partners speak another language? How do we listen to their modes of expression?

The questions multiply in these reverberations. *Turba Tol Hol-Hol Tol.* How do we practice interspecies kinship and transform the stories of representation, especially those that insist on speaking for others, imposing a viewpoint and discourse, appropriating their image, their sounds, their territories, and their futures?

I put my hands, my skin, over your body, and I lean in to listen, and I ask you in vibrating whispers, "Do you hear me?" The Italian gallery attendant of *Turba Tol Hol-Hol Tol* in Venice, Maria Costan Davara, seems to whisper back: let the moss tell its story. Sometimes it's just a matter of accompanying other beings in the act of being, without imposing our own stories and viewpoints, but returning to feeling with our whole body that we are part of the same chaos and that we can tell so many stories about its (dis)order. From April to November of 2022, alongside other attendants (the Peat Force), Isabel Torres, Fernanda Olivares, Malika Mouj, Alessandra Dal Mos, and Vittorio Da Mosto conceived their own daily rituals, therapeutic conjuring, and cycles in order to tend, water, measure, and touch the moss brought to Venice from the experimental productive peatland restoration sites of the Greifswald Mire Centre on Hankhausen Moor in Lower Saxony, Germany. Rituals of integration to deal with the endless superhuman experiences—pleasurable, difficult, uncomfortable, moving—that the pavilion has undergone through its human visitors. The mantle of moss laid over a lagoon designed by Alfredo Thiermann in collaboration with Sebastián Cruz, with the support of Alessandra dal Mos (sculpted with great love by Ensayos artist Christy Gast and builder Nico Arze as part of *Sphagnum*LAB),[21] has transformed itself during its life in the pavilion. The moss even became sick at one point because of the change of habitat, yet it grew in strength when it began receiving the correct lighting diet designed by Antonia Péon-Veiga and the attention and love of all who visited it, finally settling into being a nest of multiple life forms. Even after the Biennale ended, the moss gave life when it was donated in large part to the Azienda Agricola Valleri, with a smaller contribution to the We are here Venice organization, so that its body could continue to feed the horticultural biodiversity of the Venetian lagoon.[22]

Images shot in Tierra del Fuego by filmmaker Dominga Sotomayor in collaboration with director of photography Benjamín Echazarreta were projected on a skin-screen made of biocompost based on 100-percent organic components that included algae, collagen, glacial acetic acid, and other substances, developed by a team from the laboratory of sinestesia.cc in collaboration with the Fab Lab at the Universidad de Chile. The screen had unusual requirements: it was hand-stretched and could easily rip; it tore on the day of the inauguration and had to be carefully repaired by many hands. Once it was patched up, it became a substrata for all types of colorful fungi and living textures that playfully interacted with the projected chiaroscuros of turbid images that submerged us in the muddy depths of the peatlands and the shadows of new poetic rhythms that can grow out of these trans-species pathways.

"Sometimes the eye stops us from seeing."[23]

What if the eye became a foot and the foot an instrument for listening? How would that change our way of relating to the world, to images, and to peatlands? Film scholar Carolina Urrutia reflects on the cinematographic and haptic experiences offered by the pavilion through the image of an

20 Cecilia Vicuña, "To Hear Is to Strike Gold (A Response to Pascua Lama)," *Selected Poems of Cecilia Vicuña*, edited and translated by Rosa Alcalá (Berkeley, CA: Kelsey Street Press, 2018), 303-304. In this book we have included an unpublished version of this text, translated from Spanish to English by Thomas Rothe which varies from the translation by Rosa Alcalá cited here.

21 *Sphagnum*LAB is an organic experiment cultivating 650 square meters of *Sphagnum palustre*. The moss was harvested by Torfwerk Moorkultur Ramsloh, a marshland culture research center on Hankausen Moor in Lower Saxony, Germany, that works with the Greifswald Mire Centre in pilot programs of re-humidifying peatlands to reduce CO_2 emissions and to produce a renewable source of peatland biosphere as a substitute for peat in horticulture. See: https://www.moorkultur-ramsloh.de/.

22 Thanks to the organization of Jane da Mosto, much of the moss was donated to the Azienda Agricola Valleri in Cavallino-Treporti, Venice, and handed off to Stefano Valleri and Olga Crosera on November 30, 2022. They will use the moss as horticultural substrata and for experimental vertical gardens. Ten crates of the moss were also donated to We Are Here Venice to be used in the regeneration of layers of public gardens in Venice. See https://aziendaagricolavalleri.it/ and https://www.weareherevenice.org/.

23 Alejandra del Río, *Escrito en braille* (Valparaíso: Editorial UV de la Universidad de Valparaíso, 2020; first edition self-published, 1999), 43. Our translation.

eye-foot-stone and the sensory exploration of contemporary cinema that propose leaving behind the human perspective in order to compose other stories, as Dominga Sotomayor does. Architect Anita Puig Gómez takes us back to the body-architecture of the pavilion which, she argues, sheds its protagonism to embrace its own fragility and decomposition. Designed by Alfredo Thiermann in collaboration with Sebastián Cruz, the architecture of the pavilion becomes part of a living process as it supports and continually transfigures its materials: the skins, sounds, smells, bodies, and atmospheres that make up *Turba Tol Hol-Hol Tol*. Architect and academic Amarí Peliowski studies national pavilions in international exhibitions, exploring their attempts to symbolize the identity of a country, and in the case of Chile, how this identity has been marked by a recurrent use of nature, often obeying commercial and extractivist interests and more recently trying to project an image of leadership in the field of environmental protection and sustainable exploitation practices. Applying these observations to the current pavilion, Amarí points to the difference of the embodied—and not symbolic—dialogue that it proposes.

The moss in Venice was not taken from Patagonia, it was grown in Germany to become a sustainable replacement for the national extract. Paz Guevara, the Chilean curator who lives in Germany, sees in the polyvocality of *Turba Tol Hol-Hol Tol* a transition from the inherited exhibition style of the modern colonial era that separates and reduces culture to objects fit for contemplation, to permeable spaces in which conversation can take place. Accompanied by the words of Mapuche poet Elicura Chihuailaf and remembering how the Rumors dilute the limits of the exhibition into other corporal entities, times, and spaces, Paz takes us on a sensorial journey through the pavilion and suggests that the transition takes place in the change from *exhibiting* to *listening*, from the gaze of the eye to a form of perception that involves the whole body.

But what if our ears hear less and less, if our eyes fog over, if words won't come out, if I lose my limbs, when I run out of air, how will we be able to touch each other?

Listen to me, care for me, feel the vibrations. At the center of this peatland heart are the practices of listening, of the bodies morphed into drums, of the skin that remembers, of the voice that replies to the wind, of the cells that swell and fill with the waters of memory. Colombian ethnomusicologist Ana María Ochoa Gautier undertakes a journey of intimate listening through the sounds of the pavilion with sound artist Ariel Bustamante and Hema'ny Molina. They travel with the songs that are reborn in the depths of the peatlands, to meet the ancestors who join these calls, and the new voices and ethics that rise, hazy and strong, making the ground echo as they recover and create memories. Ana María also warns of the complexities of reproduction and representation, how these actions are undertaken and who carries them out, of the protocols that shift the act of listening in *Turba Tol Hol-Hol Tol* and that move us to continue to act/think about how we develop intercultural respect, the collaborative/communal care for songs, the Earth, the waters, and diverse beings.

Germinating

> "It gets tangled entangled
> as ivy on the wall
> it sprouts and sprouts
> like moss on the stone,
> oh yes yes yes."[24]

On the moist and fertile earth of these pages, the germinal texts soak, awaiting in the spongy layers of the peat. The texts are one of many rebellious initiatives proposing alternative forms of environmental, situated, feminist, and anticolonial thought, which have been gestating in the various territories of Abya Yala and its diaspora as manifestations of "thinking/feeling with the Earth," epistemologies of the South,[25] decolonized feminisms of the people and the multiple worlds that they contain. Even though we recognize authors such as Silvia Rivera Cusicanqui, María Galindo, Julieta Paredes, Rigoberta Menchú, Lorena Cabnal, Aura Cumes, Márcia Wayna Kambeba, and so many others who have managed to overcome the prevalent cultural hegemony that continues to privilege academic forms and colonial languages of the global North, and we acknowledge the fundamental importance of their work for these underlying microcosms, we would like to amplify voices that haven't been sufficiently heard, but appear in texts that circulate outside the circles of academia, books on ecology, environmental humanities, and the arts. We accompany these more remote texts with a few that have become better known, but whose messages have yet to fully bloom.

We conceive of these text-seeds as embryonic revolutions: texts already written that were ahead of their time in challenging environmental thinking

24 Violeta Parra, "Volver a los diecisiete" (composed in 1962, published in 1966). Our translation.

25 Arturo Escobar, "Sentipensar con la tierra: Las Luchas Territoriales y la Dimensión Ontológica de las Epistemologías del Sur," *Revista de Antropología Iberoamericana,* vol. 11, no. 1 (January-April 2016): 11-32. "The epistemologies of the South open a space in which it is possible to once again engage thinking with life and to carefully revisit the surprising diversity of knowledge that sustain those experiences that cannot be read from a Eurocentric academic perspective—if they ever could be." Escobar, 15. Our translation.

and can be nurtured and grown by future generations. These germinal texts transport us to uncertain moments in which normalized languages, words, and concepts were re-elaborated to create "their own syntaxes,"[26] and which we believe can generate questions, strategies, and ways of acting/thinking that transform prevalent social systems and hegemonic ways of relating to nature. We are challenged by the words of Bolivian teacher Graciela Mazorco Irureta, who calls on us in these times of crisis to think of Andean philosophies like *pachakuti*, a disruption of space-time through which it is possible to formulate an alternative civilizing answer that "re-evolves the human condition towards another mode of existence,"[27] in conjunction with an inner re-evolution for every individual. To use resistance to formulate different ways of being. As Colombian teacher and environmentalist Tatiana Roa Avendaño writes, resistance itself can be understood as both an opposition to and destruction of the mechanisms of the normalization of a capitalist and colonial system and, at the same time, an idealized future and a "proposed alternative world."[28]

Every germinal text is part of a larger ecosystem supported with the continued conservation efforts that countless individuals have undertaken for decades, some of whom even lost their lives in the defense of the territories that their communities inhabit. The late Honduran activist and environmentalist Berta Cáceres will always remind us that the spoken word is alive when it is in dialogue and that it is of the utmost importance to think and act in an integrated way that encompasses all systems of oppression because "racist, heterosexist, neoliberal, ecocidal violence [...] doesn't only affect women, but also entire communities, including disadvantaged men and sexual dissidents."[29] This is why the germinal texts inhabit a plurality of being and writing. Like different varieties of *Sphagnum* moss that are given a different name in each habitat (*Sphagnum magellanicum, Sphagnum portoricense, Sphagnum palustre, Sphagnum fallax*, etc.), each germinal text takes us to more geolocalized stories, multiple transnational contacts that expand the horizon of what was considered known.[30]

26 Silvia Rivera Cusicanqui, "El otro bicentenario," in *Ch'ixinakax utxiwa. Una reflexión sobre prácticas y discursos descolonizadores* (Buenos Aires: Tinta Limón, 2010), 14. Our translation.

27 Graciela Mazorco Irureta, "La descolonización en tiempos de Pachakutik," *Polis. Revista de la Universidad Bolivariana* vol. 9, no. 27 (2010): 229. Our translation.

28 Tatiana Roa Avendaño, "Resistencias," in *Extractivismo. Conflictos y resistencias* (Bogotá: Censat Agua Viva - Amigos de la Tierra Colombia, 2014), 42. Our translation.

29 Ochy Curiel, "Berta Cáceres y el feminismo decolonial," LASA Forum, https://forum.lasaweb.org/files/vol50-issue4/Huellas-Inspiradoras.pdf. Our translation.

30 In Chile alone, "18 species of *Sphagnum* have been discovered and are known locally as *pompoms*." Carolina León, "Habitantes de las turberas del sur de Chile," in Christel Oberpaur, María Francisca Díaz, Carolina León, *Turberas de Sphagnum de Chiloé: ¿Cómo hacer un uso sustentable?* (Santiago: Ediciones Universidad Santo Tomás/RIL editores, 2018), 39. Our translation.

31 Much of this field of work is nourished by Brazilian feminist and religious philosopher Ivone Gebara. See, for example, Ivone Gebara, *Teología ecofeminista* (Madrid: Editorial Trotta, 2000).

Many of these texts came to us recommended by friends—there is nothing sweeter than being given the name of a much-loved writer who we had never read before. During our residency in Karokynká, like a group of friends sharing recipes for homemade remedies, we asked each other which writers had opened up paths for us; cured us of solitary nostalgia; which women had smashed prejudices for us; whose texts caressed and educated us at a distance with their word/actions; name your best-loved writers, teachers…. The list of germinal texts grew longer, the networks spread, and the veil of ignorance was drawn aside.

This book, then, is also unashamedly autodidactic. It was thanks to work in Brazil by curators and artists such as Maria Macedo and Renata Felinto, and groups like Teia dos Povos and the publication *Piseagrama,* that we were able to connect with that subtly fertile humus prepared by agronomist Ana Maria Primavesi in her work on the care of soil and agroecology. In her text, Primavesi invites us to reconsider our relationship to soil as a living entity that supports and feeds us, calling us to move on from looking for technical solutions that conventional and industrial agriculture offer, towards an ethics of the sort of questions that agroecology poses: Why does the soil drain? Why do larvae appear on cauliflowers? What causes them? Achieving food sovereignty means taking responsibility for our questions and the complexity of their details, including how and with whom we eat.

The table of contents listing these texts offers an unusual immersion in the history of Latin American ecofeminism. It is a story that cannot be judged and must not be simplified. In this book, we wanted to poke around in the hidden nooks and crannies that are often overlooked or that make us uncomfortable but teach us how the web of life is woven strand by strand, with all or not at all. How dissidence within movements is as important as agreement, adding color and flavor to the web. This makes our work an eccentric effort that boldly brings together groups united by ecofeminist theology, such as the Chilean collective Conspirando from which Mary Judith Ress[31] writes, and Colombian biologist Brigitte Baptiste's recovery of the semiotic-erotic wealth of bodies and their potential for emphasizing the irrelevance of gender in a post-human world with the current trends of anticolonial ecofeminism whose critical strands are interwoven into disciplines as apparently disparate as archaeology, ecology, and the arts.

The book's contents move from the autonomous feminists who diverged from the institutionalized and partisan Latin American feminist movements

of the 1980s and '90s, like Bolivian architect Ximena Bedregal Sáez, who concentrates on what she calls radical feminism,[32] to the production of Latin American feminist artists who resignify the popular world through ritual and spirituality, like Chilean artist Julia Antivilo, to the antiracist and intersectional work currently being done throughout the continent and the Caribbean. Authors such as Dominican anthropologist Ochy Curiel Pichardo submerge us in the traditions of women who have researched the structural framework of patriarchal and capitalist power, and different systems of domination, including Indigenous, Afro-descendant, and decolonial feminists. If some texts critically re-examine ecofeminist critical theories of the Global North, they do so in relation to the specific realities of Latin America; for example, the studies on environmental exploitation and gender-based inequalities carried out by Uruguayan ecofeminist Lucía Delbene Lezama with Colectivo CASA in Bolivia.

Several germinal texts, such as those by Mexican gender and development specialist Itzá Castañeda, working with Cintia Aguilar and Allison Rand, challenge existing categories and integrate the focus of social sciences and biology to consider gender inequality in relation to the environment. While Mexican pioneer Margarita Velázquez Gutiérrez criticizes the notion of sustainable development to examine the influences of other socio-environmental dimensions (such as domestic units), the Venezuelan collective La Danta LasCanta proposes using the term "phallocene" rather than the popular dominant terms that posit human action as a geological force (Anthropocene, Capitalocene, Chthulucene) and continue to render invisible the relationship between the subordination of women and the destruction of nature. These texts remind us of the importance of having multidirectional and interdisciplinary conversations that allow for a combination of local perspectives, intergenerational experiences, and knowledge that is Indigenous, *mestizx*, communitarian, and more than human. These texts call on us to diversify how we understand well-being, noting that specific communities and practices of coexistence can be both cooperative and contentious. The creation of new socio-environmental pacts and proposals in Latin America associated with the "legal recognition of the rights of nature"[33]—such as those described by Argentinian sociologist Maristella Svampa (with contributions from Enrique Viale and multiple other voices), or the collective activism that protests from the "un-common" in the words of Peruvian anthropologist Marisol de la Cadena—are signs of the overwhelming potential in this tightknit, dissident form of taking action.

In the peatlands, there are layers that are invisible from the surface. Likewise, we recognize that in this book, the horizon is infinite and constantly shifting with voices that we don't hear, actions that we can't or won't see—either because their voices are more than human, and we don't share a common language or experiences, or because they were preserved in different ways in our memories, woven into oral tales, soaking bodies, technologies, and materials with an elusive scent to which we may not even have access. If these memories can sometimes be condensed into territorial enclaves that leave no apparently significant material traces, but can be recovered as cultural heritage by different First Nations, as in the case of the *piedras tacitas* (monolithic stone cups) that Chilean archaeologist Nuriluz Hermosilla Osorio studies, they sustain themselves through the knots and threads of society's weave, as Maya K'iche' sociologist Gladys Tzul Tzul reminds us when she writes of the importance of "stories one never hears at school or university,"[34] but are socialized around the fireplace or in daily reproductive labor, gaining vitality in the intersection between other

32 Ximena Bedregal understands the autonomy of feminism as a "demarcation, as an ethical NO to the expropriation of feminism, and, fundamentally, as a philosophical project that calls us to undertake feminism as an accumulation of knowledge that has a real capacity to incentivize and produce change. In other words, we are united in opposition. We see the challenge, and from this perspective, we outline our autonomy, separating ourselves from those who stand in our way." Ximena Bedregal, "El feminismo autónomo radical, una propuesta civilizatoria," available online at https://online.cursosimpetu.org/facilitadoras/wp-content/uploads/2018/04/ximena-bedregal-inconcluso.pdf. Our translation. Remembering the early days, Bedregal wrote that the autonomous feminist movement "installed itself publicly seventeen years ago in 1993 at the Latin American and Caribbean Feminist Encounter, held in El Salvador, when Cómplices, a Chilean-Mexican feminist collective, proposed the revision of Latin American feminism with the book *Feminismos Cómplices, Gestos para una cultura tendenciosamente diferente* (1993)." For another version, see Jules Falquet, "Las feministas 'autónomas' latinoamericanas y caribeñas: Veinte años de disidencias," *Universitas humanística*, no. 78 (2014): 69-73.

33 Maristella Svampa and Enrique Viale, "Reflexiones finales. Por un pacto ecosocial y económico." In *El colapso ecológico ya llegó. Una brújula para salir del (mal) desarrollo* (Buenos Aires: Siglo XXI Editores, 2020), 273. A number of more recent Latin American proposals include *vivir sabroso* (living joyfully) or *el buen vivir* (living well) from the Quechua *sumak kawsay* (living in abundance). The latter is contentious; authors such as Denise Arnold question the simplistic instrumentalization and exoticizing element in the concept of "living well." We are grateful to Ariel Bustamante who pointed out the political co-opting of the term. On the other hand, Eduardo Gudynas defines it as "a plural concept that is in construction," linked to the traditions of various Indigenous Peoples who integrate a social and environmental ethic based on respect, care, and sustainability of the nature, or *Pachamama*, as a way of life. Another possible translation is "living fully." See Eduardo Gudynas, *Derechos de la Naturaleza. Ética biocéntrica y políticas ambientales* (Chile: Editorial Quimantú, 2019), 85.

34 Gladys Tzul Tzul, "Mujeres indígenas: Historias de la reproducción de la vida en Guatemala. Una reflexión a partir de la visita de Silvia Federici," in *Bajo el Volcán*, vol. 15, no. 22 (March-August 2015): 91-99. Translated and published in this book as "Indigenous women: Stories of the reproduction of life in Guatemala. A reflection from the perspective of Silvia Federici."

experiences and perspectives. Revisiting stories of her grandmother Jovita Cardona about the ingrained injustice against the Indigenous People—and the racism that Indigenous women experience, in particular—Gladys analyzes the "racial-economic capitalist functioning" of Guatemala, pointing out the importance of community organizing and the participation of women in the construction of political discourse and actions against territorial plundering.

This book has forced us to face up to our own prejudices and colonial traits, and we continue to ask ourselves: what contact wasn't possible and why? We had to momentarily set aside some avenues of learning that require a longer process and a completely different construction in order to be fully achieved. What new networks and ways of relating are necessary from now on? What book, what technologies of memory will follow and continue adding to this quilt of Latin American, Caribbean, and diasporic sisterhood against ecocidal capitalism? Just as traveling to and within Tierra del Fuego means internalizing distance, recognizing the difficulties that are experienced in these far-flung corners, and celebrating their resilience, we have understood the distances within Latin America, the interdependency thus created, and the enormous work of internal decolonization that we must continue to undertake, a task we take up a little late but with great determination.

> "Memory is a precipitous fall,
> and recovery is but a shout."[35]

The order of the texts flows like clockwork, from the past to the future, not because that's how it should be, but because we wanted to put the grandmothers first; we grew from them, and where they falter, we continue, in a circle, dancing in spirals returning to the knowledge that connects us to the origins. The germinal texts end (for now) with the research of Ecuadorian environmental planner Ana María Durán Calisto and her work on pre-Columbian urban agroecology in the Amazonian region that invites us to rethink how we create/build cities. She offers us an alternative vision of the urban that emerges from the Amazon basin and other regions of the Americas, where the construction of polycentric cities connected to territories, as well as the stars and other sacred elements integrating nature and culture in a transitory urbanism, continues to stimulate biodiversity today.

We aspire to other models and ways of doing things that develop through interdependence, nurturing relationships with the cosmos, integrating earthworks and biopoetics (as Amazonian communities have done for centuries with their own forms of bioengineering and sustainable agriculture), that can help guide us through the challenges we face today and tomorrow. We want this book to release alternative animal senses, letting our thoughts and ways of being flourish like tender new leaves.[36] We hope that you, the reader, will also want to taste these pages, smell the ink, devour loose words, wallow in the colors of the texts, dream with the typography, and multiply your consciousness.

Sightings

The sensuality of sight is a treasure in which this book indulges carefully and in infinitely small measures. Like grains of salt sprinkled on chocolate to highlight its delicious taste, the crystals of images scattered throughout the text in three visual essays are commissions to contemplate color in duet, to reminisce about the fleeting moments of 2022 that were dedicated to co-creation with the peatlands of Patagonia, *Turba Tol Hol-Hol Tol*. Dominga Sotomayor and Alfredo Thiermann blur the gaze to express a luminary phenomenon of embodied encounter. Lens, camera, and peatland become light; light travels and is projected on a biomaterial that catches condensed, sensual information that is indecipherable to the eye, speaking primordially in the language of the heart. Lose yourself with them in the sensuality of the surface. Seeing is a provocative pleasure, and in this book, seeing is not believing, but rather feeling(together)/co-sensing.

The boundless aesthetic talents that were brought together to create the pavilion in Venice has been a source of controversy. There is a Biennale of Art, another for Architecture, another for Cinema, another for Theatre, for Music, and yet another for Dance all in the same city. Why, then, does does *Turba Tol Hol-Hol Tol*—a project devised for the Art Biennale—include a filmmaker, an architect, an art historian, a sound artist, a Selk'nam poet, scientists, web designers, graphic artists, a lighting expert, an exhibition designer, a builder, a director of photography, and artists of various nationalities, among other performative roles? The simple answer is the same one we gave above when we described the violence perpetrated upon the integrity of the peatlands by its separation into different parts: mineral, water, plant. *Turba Tol Hol-Hol Tol* is a project that brings together, transmuting abstract definitions to rebuild the health of an entire landscape—an ecosystem—of the arts and their material responsibilities.

The first visual essay, titled "Grounding into the bog" is a visual diary of

35 Excerpt from Gabriela Mistral's poem "Homelands," (Patrias), published in *Antología de poesía y prosa de Gabriela Mistral*, compilation and prologue by Jaime Quezada (Mexico and Chile: Fondo de Cultura Económica, 1998), 178. Translation by Gloria Garafulich-Grabois, © all rights reserved.

36 Duen Sacchi, "Frutece: Breves historias contra el pánico de la filosofía occidental colonial," *Periódicus*, vol. 1, no. 15 (May-August 2021): 71.

these processes of integration, transformation, and transduction. On its four pages are hands, feet, bodies, and hearts connecting techniques, languages, and wisdoms. The images reflect the transdisciplinary creative processes that destroy authority, not authors. Every individual is important, and their unique particularity brings its own spice, but by far the most beautiful moment is when we as individuals shift, when we lend our hands and our polymorphic talents to doing something new and different, stretching beyond ourselves.

This commitment without ambition of authorship is captured in the final visual essay on *Sphagnum*LAB, a work of art within a work of art. *Sphagnum*LAB nestled cocoon-like in the pavilion, forging its own space—because in *Turba Tol Hol-Hol Tol* the great creator is the biodiversity of the peatlands. Nico Arze and Christy Gast managed the careful harvesting, transporting, and relocating of the moss from Lower Saxony, Germany (where it was grown for the purpose of cultivation) to Venice. This labor of love took months and meant that, well before the other pavilions began construction, the Chilean pavilion echoed with the laughter, hard work, and ingenuity of its multidisciplinary team. Planted among rumors, reverberations, and germinal texts, every visual essay plays with transmitting images of the micro and macro perceptions of *Turba Tol* so that they reflect off the eye of the reader, *Hol-Hol Tol*.

The gift of scent

> "Can you smell my scent when you read this?
> You should."[37]

Just as this book provides visual delights, there is also an olfactory experience that evokes the volatile and migratory presence of the scents that Ensayos participants prepared for *Turba Tol Hol-Hol Tol*—a diffuse, material gift, a subtle protective and provocative layer, from Norway, the island of Minjerribah in Australia, and the Northeastern United States.

The gift materialized in the pavilion as incense, perfume, and essences that evoked the dark and quiet waters, acid lakes, drowned and drenched filaments of *Sphagnum*, various moist smells of human and animal bodies sharing membranes with the plant world and insect life, dissolving through their bodily frontiers. These turbid scents were sprayed onto a dark curtain that the peat guardians in the pavilion opened and closed at the ritualized beginning of each audiovisual cycle, flooding the room with this invisible presence. At the exit, the same guardians dabbed a tiny drop of the scent onto the inside wrists of the visitors as a gift to take and spread to other atmospheres. Every week, the guardians burned an incense cone, handmade by the Carmichaels, a Quandamooka family, using elements gathered from their ancestral fens.

For this book, the Ensayistas collaborated again, cooking up a new olfactory proposal that transports us through its molecular language to the ancient peatlands, drawn together by the subterranean waters that manifest themselves in codes of handmade paper, stickers, and QR codes, impregnated with the essence of life.

And you, what scents do you share and leave behind? What scents are exchanged and imbibed with the bodies that you touch and the spaces you inhabit? What smells will this book accumulate as you take it to bed to read at night or put it into your bag with your lunch to take to university? Or when it travels, wrapped in an envelope, to be placed among other friendly books in public libraries throughout Chile?

Poetry is political

When we celebrated the opening of the pavilion at Morion Laboratorio Occupato in April 2022 and announced this book, we did so with poetry. We sang, danced, and celebrated with those who had been such a fundamental part of the eco-aesthetics of the *Turba Tol Hol-Hol Tol* project,[38] this spiritual architecture gushing with poetic voices, languages, texts, and bodies that revive, challenge, mobilize, and redefine us and our connections to ourselves, to others, to everything. Poetry that can help us enter into a conversation with the moss, the peatlands, and science. Poetry that moves us and encourages us to continue working, despite frustrations and difficulties.

In Venice, we wanted to share the regenerative energy that we found in the poetry of women who, from their various territories, poetic and political positions, and ever-changing identifications, have managed to upset the patriarchal and nationalist orders of meaning. In their work, they have posited heterogenous, non-normative, rebellious and desiring subjectivities, overflowing with subversive eroticism. They reminisce and resignify the pain caused by colonial, misogynistic violence in the Southern Hemisphere, imagining other possible relations full of responsibility and emotional connection. While this book centers the poetry of those who have lived and worked in Tierra del Fuego, we also wanted to hear the different voices of

37 Rosabetty Muñoz, *Técnicas para cegar a los peces* (Valparaíso: Editorial UV de la Universidad de Valparaíso, 2019), 46. Our translation.

38 See Carla Macchiavello and Camila Marambio, "An Eco-Aesthetics," *Turba Tol Hol-Hol Tol*, https://turbatol.org/eco-aesthetics.html.

those who live in other regions in Chile, as well as the rest of Patagonia, in consideration of the diversity of its inhabitants beyond geopolitical frontiers. These are poets who occupy *posiciones fronterizas* (borderland positions)[39] either because of their activism in communities, towns, bodies, sexualities, family memories, territories of life and the arts, or because of the curing/creative, restorative, and healing potential of their poetry. Poetry is a healing force.

It wasn't easy to weave this small mantle of women and words that protects us. Many factors compounded the challenge: the lack of trust that has grown out of the systemic violence and coloniality that afflicts Chile; the racism that continues to be simultaneously stoked and denied by the paternalistic state; the various governments that have led it and society at large; the bureaucracy that obfuscates; the legality of the nations that render invisible and limit; the abuse of diverse and dissident bodies; and the many inequalities that are experienced on a daily basis. But it's precisely this need to talk, to listen, and to remember that impels us to grasp each other's hands, feet, skin, hair, and shoulders even more firmly, to bind ourselves even closer in alliances of solidarity,[40] and to begin to have those hard conversations in which worlds cannot be translated into one another but in which one can submerge into the depths of their details.

For the celebration at Morion, we invited the Chilean women who had participated in the 59th International Art Exhibition of the Venice Biennale 2022 to join in the songs that echoed through the pavilion and in the poetry that is brought together in this book. Perhaps it was the overflowing energy of the bodies that came together that encouraged Norma Ramírez, the mother of poet Cecilia Vicuña, to stand up and sing as though a spirit was calling on her to spontaneously officiate the opening of the event and to trigger a corporeal tremor that took so many forms: in Vicuña's sung and whispered poetry accompanied by the music of Ricardo Gallo; in Violeta Parra's poetry recited with such passion by Cecilia García-Huidobro; in the *mestizx* words that bubbled out of the worlds of Sandra Vásquez de la Horra; in Hema'ny's poetry sprinkled with the Selk'nam language; in the power of Daniela Aravena's gestures translating to Chilean sign language; in the tears of Bárbara Saavedra when she saw the *chulengos*[41] that Liliana Ancalao called up with her words and that the *chulenguita* of *Turba Tol Hol-Hol Tol*, Rosario Ureta, read in English; in the singing of Maria Costan Davara reading Adriana Paredes Pinda in Italian and Dominga Sotomayor reading the same author in Spanish; in the filthy sensuality that Soledad Fariña gave us with her poem spoken by the *lenguaCarla* and that Valentina Desideri read in Italian; in the fragmentation of meanings split by colonial violence in Magallanes that Astrid Fugellie Gezan revisits in her ritual circles and that was read by Isabel Torres; in the irreverent speaker and the corporeal landscapes of Coyhaique that Ivonne Coñuecar evokes in her poetry, read by Caro Martínez, Ximena Moreno, and Alessandra Dal Mos in English, Spanish, and Italian, respectively; and in the image of the vast motherland of Patagonia caressed by the winds that Gabriela Mistral evokes in her poem, read by Christy Gast, in which the *lenguaCamila* joined to close the celebrations with a bog holler, a loud exclamation from/for/of the peatlands. We missed Constanza Güell, who has been part of the creation of *Turba Tol Hol-Hol Tol* and this book from its very beginning, supporting the emergence of the poetic political poetry of the peatlands with a constancy that her name foreshadows. We dedicate this dissident love to her, our editorial coordinator, from those who work without need for recognition. Our profound thanks to all.[42]

Do you remember how when, as sisters, we stood upon the stage?

My mouth shapes *más*
turba
poetry
is political,
and you reminded me
poetry
IS political
and these bodies brought together
made a turbid massed chorus
echoing in its waters
poetry
is
political.

39 María José Barros Cruz, "Por una defensa de las aguas de Wallmapu en la poesía de mujeres: Kvyeh, Figueroa y Paredes Pinda," *Literatura y lingüística*, no. 42 (Nov. 2020), online.

40 In addition to the authors, we would like to thank all those who helped us organize these and other net/works: Carolina Caycedo, Fernanda Moraga, Ileana Selejan, Sandra Ulloa, and Marisol Argüelles San Millán.

41 Ed. note: Chulengos are young *guanacos*, wild camelids native to South America. They are similar to llamas.

42 We would like to thank the translators and copy editors Camila Cabello, Miriam Heard, Thomas Rothe, Carolina Lorca, Deborah Meacham, Charity Coleman and Lucy Engle for their patience and hard work; Juan Pablo Vergara for his management and production; the coordination and management of Ximena Moreno at the Ministry of Cultures, Arts, and Heritage, and Daniela Aravena Jordán from the Division for Cultures, Arts, Heritage, and Public Diplomacy (DIRAC) at the Ministry of Foreign Affairs.

Like a differed echo of the first rumor,
we say now:

Don't fear the poem.
Poetry lives
in the street in the peat
and is political.

Agreement is technology

If the entire planet is in crisis, in various ways and to varying degrees, with various people responsible, it doesn't necessarily mean we need to be responsible for everything (which is impossible), but rather to ask: What are we responsible for? This may include things that don't appear to be "ours" because they are on the other side of the world, or are connected to the ancestral lands of a people to whom we don't belong. We remember the song that Peruvian subsistence farmer Máxima Acuña shared in Geneva in 2016, "because I defend my lakes, they want to take my life," and the radical commitment evident in her words, "I defend the land and water because it is life."[43] And so we ask ourselves: What calls do we pay attention to? Which do we convene?

The Venice Agreement was also a poetic invention, rather like this book. It is a declaration that is playful, full of best practices, acts of listening, deeply rooted knowledge, aquatic songs, political desires, and poetry that invites us to commitment, to create complementary actions, and to learn together in the context of protecting peatlands. Created for and from the local knowledge of those who care for, understand, and restore peatlands in their beloved territories, those who educate themselves by sinking deep into their layers and living with them on a daily basis, the Venice Agreement takes up the polychrome threads of their experiences and weaves them together into a cloth entangled with moss and sweat in order to share their profound wisdom, calling upon others to learn, motivated by curiosity—What are peatlands? What ferments and is preserved in their depths?—and to heed the call for their protection. Signed on World Peatlands Day, June 2, 2022, by 38 participants from different regions who came together over two days at TBA21–Academy's Ocean Space, in Venice, the agreement was nourished by the ideas of the many actors participating in peatlands preservation.

43 You can watch Máxima Acuña receive the 2016 Goldman Environmental Prize at https://www.youtube.com/watch?v=MSrzroFceh8. This translation is taken from the official captions of the event.

The process of drafting the agreement was also spattered with misunderstandings and disagreements (sometimes words can be as destructive and painful as the material violence they evoke) in order to put into practice the transdisciplinary and trans-species conversation that reminds us how the apparently invisible, modest, and small has much to teach us on the path to coexistence: "Resistant populations give us many clues about how to contain dangers and show us how we can change our way of life."[44] To hear with the heart brings together heartbeats and breaths of human and beyond-human communities, learning from the different needs and kinds of care that peatlands—and we, ourselves—need. Agreeing reminds us that we are part of the same knot of life, we die, and we are reborn, that we have ties that are not only emotional,[45] but connect us beyond our own species, beyond difference and disagreement. We live in the same little puddle on this planet; we share the Earth and breathe thanks to the waters that have flowed across it from the beginning of time.

The Venice Agreement is an exercise in the art of coming to agreement despite its inevitable turbulences; it is poetic technology that enables us to find ourselves within difference; it is a practice in which we find and lose alliances on a map full of threads and tentacles that we have to weave ourselves into in order to imagine future paths in the protection and restoration of peatlands on a local and global scale.

The Venice Agreement is a beginning. *Turba Tol Hol-Hol Tol* is an attempt. This book is a seed that we plant for the future to encourage more conversations and more questions.

44 Tatiana Roa Avendaño and Luisa María Navas, coordinators, "Aperitivo. Fragmentos para una historia de las resistencias territoriales," in *Extractivismo. Conflictos y resistencias* (Bogotá: Censat Agua Viva - Amigos de la Tierra Colombia, 2014). Our translation.

45 "As an affective affinity, anti-systemic kinship allies for the acknowledgement of shared commitments as well as the existence of difference beyond the regulatory contours of the state and technocratic establishments." Defne Ayas, Natasha Ginwala, and Jill Winder, "Introduction," in *Stronger than Bone. On Feminism(s)* (Berlin: Gwangju Biennale Foundation/Archive Books, 2020), 15.

RUMORS FROM THE PEAT

Rumor #1
CM², Hema'ny Molina,
Bárbara Saavedra (text)
Isabel Torres (voice)
Cecilia Vicuña
(original *ñirre* chant)
Ariel Bustamante
(sound adaptation)

If you don't see me,
it's because you don't
know me.

If you don't feel me,
it's because you don't
see me.

I want you to know me.

I need you to feel me.

Tewte na' kaspe kash hol-hol

tewte na' Kloken ny ta' sho'onkach
chekol olechen haétón ny ta' sheno

te hol-hol chewnén ass taa gwsmete
chath'n terre'n ta

Keensaks kayner, chath'n haache'n
chekol taqar
Taa holen yase'n
Scor haasje' taqar

Myste'n tewte na'
Kosemche'nkañer chache'n

Nohor ta Xepé máh'ká
Sjen-ewe Chen-chetr ta
Wenkw chekol ta
Tewte na' ne karw
Tewte na' ne chow'n
Tewte na' ne hoolpn
Tewte na' nekaspe
Tewte na' ne hol-hol.

My essence is not in words...nor in phonetics, not locked in this hole that is neither earth nor air.

It's a wholeness that we call on to help ourselves.

We need the peatlands with their eternal wisdom, barely explored, half-wild, mysterious, so soft and welcoming. We need the peatlands in the same way we need ourselves to exist. They are soil and sky, earth and water. They are questions. They are answers.

A few loose words sometimes give more sense to life than a whole life with no intention or conviction. A peatland in Tierra del Fuego has more life than a whole life lived without meaning.

Then ¿¿¿what are those peatlands???

Peatlands are wetlands...that is, they are the epicenter of life in the universe. Their inundated environment is the matrix for all life, connected by water. ¡Peatlands are a sensational kind of wetland!

They are proof of a glacial past, one that gradually withdrew, that left its deep mark on the ground, depressions that were filled with water and special vegetation. Plants that love the water and love this place. That stay in the same place, even after death, accumulating, layer upon layer, year after year. New vegetation, new layers, form their own cradle, their own shimmering grave.

This progressive accumulation of plant matter, embedded in water, is the peatland. It is like the living dead. Time suspended, as nothing there really dies, but remains for thousands of years in a state of semi-decomposition. This particular combination of permanent saturation, with almost no oxygen and high acidity, inhibits the survival of decomposing organisms. This is what creates and maintains the peatland.

Paradoxically, the peatland, imbued with life that water gives to the wetlands, is home to diverse and magnificent life forms: birds, insects, plants, bushes, majestic trees, foxes, and guanacos can be seen at first glance! But as with everything wonderful in the world, there is another parallel, diminutive world in the peatlands made up of tiny mosses, lichens, invertebrates, and a multitude of microorganisms. Together they make, maintain and give life to the peatlands.

These forgotten peatlands do their thing for humans—capture and hold the largest quantities of carbon possible for terrestrial ecosystems. Mitigation machines for climate change. These wetlands are indispensable vessels as we adapt to a drier and hotter world.

The most beautiful peatlands in the south are in Tierra del Fuego...in Karokynká... ready to transport us beyond the end.

Ho-ho-ho ...karokynká, land that saw the birth of my ancestors, a space that cradles earth, water, air...sun, snow, and wind, above all, the wind.

Every day it fills everything, circulates through every secret nook and cranny... descends from the heavens to caress the earth, pure, immaculate to those who gaze upon it without greed in their eyes.

Ho-ho-ho...Father sun, mother moon, who in your eternal travels give us light and shadows. Harokynká is my place, is my home, is the space of hope, where there is still mud, oxygen, crystalline water...still protected by peatlands.

Life, observing millennia of history, cradling humanity, loyal witness to so many changes, but... vulnerable, sensitive, innocent before so much ignorant avarice. It is only one part of this vast planet, but... since we have this corner at the end of the world... we should shout loudly that there is still hope, the peatland says so, it cries out and bleeds with every clump of mud and lichen that it sheds.

Ho-ho-ho The countdown is a clock that doesn't stop tick-tocking with all of its might to put us on alertii The whole planet is paying attention to the countdown... but it doesn't realize, people don't realize, while trees, mountains, rivers and peat bogs all over the world cry out for mercy, announcing their own demise, the death of their executioner is also imminent.

Ho-ho-ho the fruits of ignorance will remain, while Tierra del Fuego at this far latitude struggles to keep its hope alive, our Selk'nam ancestors lived for thousands of years in perfect harmony with Mother Nature, while the peatlands have witnessed life, from its genesis, mud... the mud that cradled every ancestor, tewte na', owl woman rests between layers of mud and rot.

Ho-ho-ho The Selk'nam people are born and reborn every day, with every dawn and with every wave rolling onto the shore, with every lichen that spreads shyly on the rocks, earth, shells, and branches... Today, the Selk'nam descendants continue to resist. Long ago, our ancestors resisted the wind, the snow, and the rain, but today we, their children, resist late colonization, unworthy of our territory, the humiliation of our elders, discrimination... no rights are given to the Selk'nam people, just as Mother Earth is treated without conscience.

Ho-ho-ho We will keep on resisting from the tender quagmire that cradles so much history below the surface, from the peatland where memories rest, from the peatland we continue to resist and maintain the continuity of life. Ho-ho-ho.

Remember:
if you don't see me, it's because you still don't know me.
But looks can be deceiving
this cloak of peatland, created by Sphagnum.
Don't be afraid of the bog.
In its darkness, we find the dynamism of life
Through its dense grooves, we change form.
Just breathe deeply and remember
that we're family,
that these shared waters
sustain our lives,
that it's ultimately just one life,
These waters that sustain
in Venice
in Tierra del Fuego
are the same waters, since the beginning of time.

Just remember
the seething restlessness
beneath the ancient pool
that sustains your breath.
Just breathe
and let your body remember
let your cells listen and vibrate in resonance with the rest of the cells in the universe
the ancestral rumor of tongues that lights the way toward a language not yet invented.

Here you are --- bodies in a simulacra that begins to fade. What is left, sensual bodies. Breathing in oxygen exhaling carbon being sequestered by the peat. You are touching each other through the air. The vibrations you sense moving up through your feet are sensed by the moss too.

It is watching you.
It wants you to dance.
I want you to dance.

Do you dance? Follow my rhythm. Let the beat start shaking some part of you and pick it up.
Begin to shake, and as the shaking gets faster, more vigorous, it will be seen by the moss, by the persons facing you. Keep breathing, keep shaking. Feel the heat, transpire, sweat. What is moving is molecules, bouncing around, through blood, tissue, mucus. Let go of your head, get into the rhythm and enjoy the enveloping rhythm. You are being watched, witnessed; dance for the peat.

Peatlands

When we hear the word *forest*, our brains quickly place us in one of them. If we hear the word peatland, there are few people who can imagine one of these places.

> Peatlands are places where the ground is like an immense sponge, which absorbs thousands of liters of rainwater. Walking on them is not easy: shoes sink at every step, and there are even areas that resemble quicksand, only instead of sand, there are plants. This immense sponge consists of many dead plants, especially mosses, which build up slowly in layers as if it were a gigantic thousand-layer cake. This dead material is known as peat. The accumulation of layers can reach thousands of years of age, and in each one of its layers, plants have managed to trap an immense quantity of carbon dioxide from the atmosphere, which is meticulously stored in the peatlands. It is for this reason that this ecosystem takes first place in the ranking for greatest accumulation of organic carbon. It seems incredible that, while covering only 3% of the planet's terrestrial surface, peatlands are able to store twice as much carbon as the world's entire forest biomass.

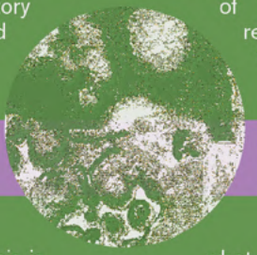
Peatlands are a type of wetland—sites flooded with water, with little oxygen, few nutrients, and as acid as orange juice. Although these may not seem like the friendliest living conditions, its inhabitants know how to tap into their advantages. The beings that live in peatlands must endure very extreme conditions, which makes them highly specialized beings. Truly, they have earned the moniker of engineers. The most outstanding of these engineers is the *Sphagnum* moss species, which is known as "*pompón*" in the south of Chile. This plant is responsible for the ecosystems' great water-absorbing capabilities, a characteristic that has also been appreciated in agriculture. The moss is used instead of soil for growing other plants. Although *Sphagnum* gets most of the attention, there are several other surprising beings as well. Intriguing carnivorous plants can also be found in the peatlands, waiting patiently to feed on the insects living there.

> These ecosystems carry out fundamental ecological roles such as: regulating water cycles, capturing and storing carbon, and providing a home for a singular biodiversity, among many others. Nevertheless, their contributions to human beings go even further. Marketable products such as peat and moss can be extracted from peatlands, but these actions can leave indelible footprints in these ecosystems. The most critical case is that of peat extraction, which eliminates thousands of years of work from nature and sentences peatlands to extinction. An additional method is living moss collection, which may be considered as a renewable resource, even when it has not been exempt of ill practices that have damaged and then left numerous peatlands in an abandoned state.

Peatlands are socioecological systems which impact people's quality of life in the south of Chile in several ways. They carry out the fundamental role of storing the water supply for some localities. For others, the recollection of moss provides a livelihood for their families. For all these reasons, peatlands are desperately calling on us to generate new forms of engagement with them, in which their recovery, conservation, and sustainable use may lead us to "good living" (sumak kawsay), a harmonious way of living.

Memory turbulence

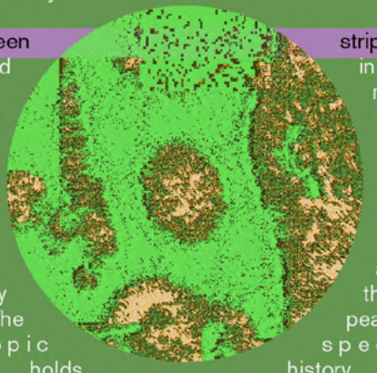
A rebel mob, a crowd of trash.[1] A peat-mob that threatens as it overflows with discarded bodies, constituting matter which integrates the living and the dead. This peat-mob is agitation and collapse; its body preserves all those forms of nature overwhelmed by anomaly. Dirt is a depository of residues that has come to display its deep abundance and resounding impetus as it searches for the ancestral. You are facing the ecosystems of the rest of us, what the white men did not want to see. They said it was useless for their civilization project. The lame, the horny, the naked, the blind, the fat, the deviant, the drugged, the sick, and the desirous. All submerged in a peat-mob that to this very day protects and safeguards them.



There is nothing human in the peatland; this is what dignifies the errant protection that characterizes it.

My tongue roams through the wetlands in a state of ebullition. With the fury of volcanoes, sucking on what is happening below, in what cannot be seen, as it is covered with mud, herbs, bugs, water of different colors. My tongue sucks on the pencil, wets the page. It stretches out like an elastic bait that was not allowed to give birth with the others. Give birth to oneself with the others. This is my turbid rumor, the rumor that perturbs me and disturbs me, the possibility of ceasing to be myself.

I heard the water's voice whispering softly into my ear. Its vibrations tickled me. Everything stood on its end and (if we were human, I'd say that) I was aroused. Fortunately, I am not one of them. I prefer to be "dead" matter, always wet, damp. I prefer to be this flooded, exaggerated aridity.



We've been stripped of our memory. But potential life is conserved in the peatlands, its ancient vibrations are maintained. To sink. Who can take this much drowning? A body of water penetrated by death that is life, since the distance between pleasure and pain does not exist in what is not human. Its binarism is a broken shell, it either lost its meaning or it never had any. How many mummies are in here? Wetlands are expanses that are permanently flooded by the desire for an eroticism of what is wet. The peatlands protecting seeds and microscopic species from colonial fires. The peat holds history, its archives like scars on the earth's body. Its members are organized into soft strata. The peat's geological record is its lustful life, the dissenting bodies and ways of understanding that were preserved in order to elude extinction. Heterosexuals, on the other hand, no longer exist within it. Neither does white skin, perhaps it never existed. There are no direct records of its presence, only the effects of its destruction. The current generations devote themselves to recovering their own memory, and in order to do so, they come in mobs to sink into wetlands. A rebel mob, a crowd of trash, a peat-mob that threatens and comes filled with discarded bodies, nature overwhelmed by anomaly.

1 Tr. Note: In Spanish, the word "*turba*" can refer to both "peat" and to "a mob or crowd".

Selk'nam Language Class
Taught by Hema'ny Molina Vargas
Karokynka, January 6th 2022

WEHEKSYER
HELLO

HACH KERREN
ANOTHER DAY - GOOD DAY

'OLECHEN KERREN
BEAUTIFUL DAY

YATAYKEN
THANK YOU

YATAYKEN KAR
THANK YOU VERY MUCH

YA'
ME

MA'
YOU

TA'
HIM OR HER

YEKWA
US

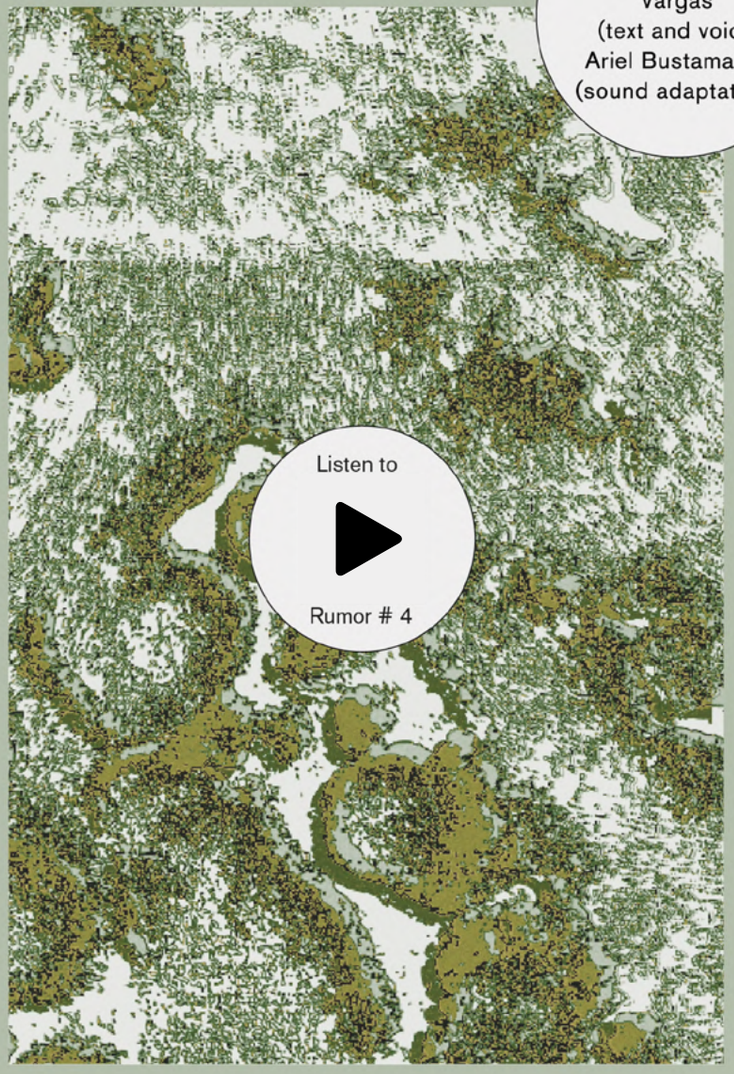
Y'OOP'EN
MY FRIENDS

YEWRKWA
COUNTRYMAN

Y'ACH'ER
MY BROTHER

Y'AHAM
MY SISTER

Rumor #4
Hema'ny Molina Vargas
(text and voice)
Ariel Bustamante
(sound adaptation)



Rumor #5
Daniela Catrileo (text)
Isabel Torres (voice)
Ariel Bustamante
(sound adaptation)

Listen to

Rumor #5

Taiñ dungu

A twisted tongue a wayward tongue
loose mounted woven over others

mixed tongue
tongue without language
tongue without canon

mother tongue infant tongue

tongue that can dance and lick
tongueless tongue animal
inhuman tongue that can dig up other tongues

lemu tongue lewfü tongue mawida tongue
Oh, this lafken tongue, people's tongue
forest tongue challwa tongue
knife tongue dagger tongue

This tongue that is neither mine nor yours

I have this tongue that runs away from me
that wants to write
that wants to stop talking
that wants to run away

tongue instead of hands
tongues in the eyes

[they even left us without eyes]

lover tongue, tongue in the thighs
tongue that devours
tongue that swallows itself

escapist tongue emancipated tongue
tongue with neither party nor husband
antiestablishment tongue trukür tongue

tongue that lights up barricades
tongue that loots the order of tongues
tongue R E V O L T

tongue that moves in a pack with other tongues
darned and recovered tongue

tongue that chants in protest
tongue so that never again
tongue without heroes
tongue of the people united

disobedient tongue
that babbles on its way to the mouth
degenerate tongue
twisted declined dislocated fractured

seed tongue that explodes
counter-current tongue
tongue that doesn't bite itself

tongue that jumps turnstiles
tongue in school uniform
loose tongue

headless tongue
twisted tongue
rivers of tongues
torrential streets

quality tongue
free tongue
For the right to tongue!

snake tongue elephant tongue
What is a whale's tongue like?

erotic tongue desire tongue
vernacular foreign migrant

street tongue mapu tongue
sharp tongue
frontier and transfrontier tongue
bad tongue

Küme dungu
tongue for all the tongues
so that never again without tongues
tongue that won't remain silent

tongue against muteness
tongue that testifies
tongue that savors

memory tongue
collective tongue

insubordinate tongue
Bring back the tongues!

tongues out on the streets
uncaged tongues

put your tongue on my tongue
let's be millions of tongues

tongue that imagines that thinks
that dreams that loves
that desires that burns

this tongue burns me so much
tongue ardor blazes burns tongue
tonguethrower kütral tongue

lumpen tongue
indigenous tongue
flaite tongue
child tongue

Champurria tongue
molfüñ tongue
drive tongue

piuke tongue
heart on the tongue

These tongues that shout at us

mutt tongue orphan tongue
rayulechi dungu

Kalül tongue
that rises tongue that fights
tongue for tomorrow
taiñ dungu.

Ambassador Works of Art

A painting still in history books to this very day depicting a European conquistador gesturing towards the ground, surrounded by his soldiers, a monk, an indigenous man and a rock, was one of the first ambassador works of art selected by Chile's government to represent the country at a gathering of modern nations that coming together at the Paris Exposition Universelle in 1889. Pedro de Valdivia and his army, standing on a bluff in the Mapocho River valley— which would later be named Santa Lucía Hill— initiates a dialogue—in both the work of art and the colonial narrative— with Huelen Huala, a Mapuche chief, ruler of the land, who supposedly— relinquishes a space at the foot of the hill for the Spaniards to establish their city. The piece, painted by Pedro Lira, received a medal of honor at the Exposition and can be found today on display at the Museo Histórico Nacional.

Other paintings were shipped in order to represent Chile at the turn of the century. An enormous white mountain range seen from the bottom of a ravine, painted by Onofre Jarpa, was selected to form part of the dispatch to the Pan-American Exhibition that was held in Buffalo, USA, in 1901. A series of cattle ranch landscapes painted by Rafael Correa were sent to Buenos Aires to commemorate the first centennial of the neighboring republic in 1910. Both pieces form part of public collections and adorn the walls of the Chilean national congress' former premises.

A building that emulates mountains, designed by the architect Juan Martínez Gutiérrez, was the pavilion that the Chilean delegation built in Seville for the 1929 Ibero-American Exposition. In it, among handcrafted pieces of ceramic, textile, and metalwork art, grouped together as "Araucano and Popular Art", murals by Laureano Guevara and Arturo Gordon were also installed, representing the different trades that are present in the Chilean landscape: industry, fishing, agriculture and mining. Today, the panels are preserved as one of the main patrimonial assets of Talca's Museo O'Higginiano y de Bellas Artes.

Years later, a new Chilean pavilion was built in that same city, this time in the framework of the 1992 Universal Exposition. A large warehouse-shaped building made of wood and copper became one of the exhibition's main attractions due to the Antarctic iceberg housed inside. The pavilion's cold temperature contrasted with the Andalusian city's extreme heat, which threatened to melt the previously perennial block of ice.

From the first big international exhibitions of the 19th century to this day, three main motifs have purported to synthesize Chile: nature understood as a raw material; the temperate and cold landscapes that set it apart it from the rest of Latin America; and indigenous peoples as a cultural substrate in which a seamless national identity can take root. Pieces of mineral rocks, samples of wood from native trees, and high-quality agricultural produce give an account of wealth based on nature; paintings of landscapes and other cultural objects tied to the land compose an image of beauty and stability, of a territorial domain conducive to progress and in dialogue with developed nations. For each one of these events, the message has been more or less the same: ambassador works of art carry with them the cover letter of a small and isolated country that clings to the world as a result of a structural dependence, which demands the sale of copper and other commodities to industrial countries as its main source of wealth—commodities extracted from the territory that it inscribes as its own.

By being presented abroad, these pieces carry out diplomatic functions, conveying a synthetic message of a country offering itself to the world. They speak for the country, indicating its borders and transmitting its aspirations. When they return, they become symbols of cosmopolitanism and belonging to the global order. Then they go from being diplomatic to being testimonial. Their incorporation into patrimonial collections is, precisely, an attempt to write an internationally accessible history of Chile.

But the glacier in Seville threatened to melt before returning to Chile in order to transmit the message of modernity and democratic restoration that had been composed around it and before the world. Finally, a ship for Chilean agricultural exports, followed by a Chilean naval ship seeking to detach itself from its dictatorial past, were able to bring the pieces of iceberg back to the south. The message the iceberg brought back was controversial: satisfied reactions were combined with criticisms towards a government that presented Chile as a cold country, disconnected from its Latin American context, and an uninhabited landscape, capable of fragmenting its southernmost tip and presenting it as an exploitable commodity.

Historically, progress has been the primary value that motivates these international gatherings. Without disguising their colonial origins, these large-scale exhibitions are developed today as promises of an improbable future or desperate summits in pursuit of a common order that reorients human culture as a social and environmental crisis looms in the horizon. By handing the floor over to the peatlands, the letters that Chile presents at Venice are the same: natural assets, southern landscapes, indigenous peoples. What does the peatland say? What language does it speak? Where are the limits it is laying out? What are its aspirations?

Image 1. Pedro Lira. *La Fundación de Santiago*, 1888. Oil on canvas, 250 x 400 cm. From the Museo Nacional de Bellas Artes' collection, on loan to the Museo Histórico Nacional.

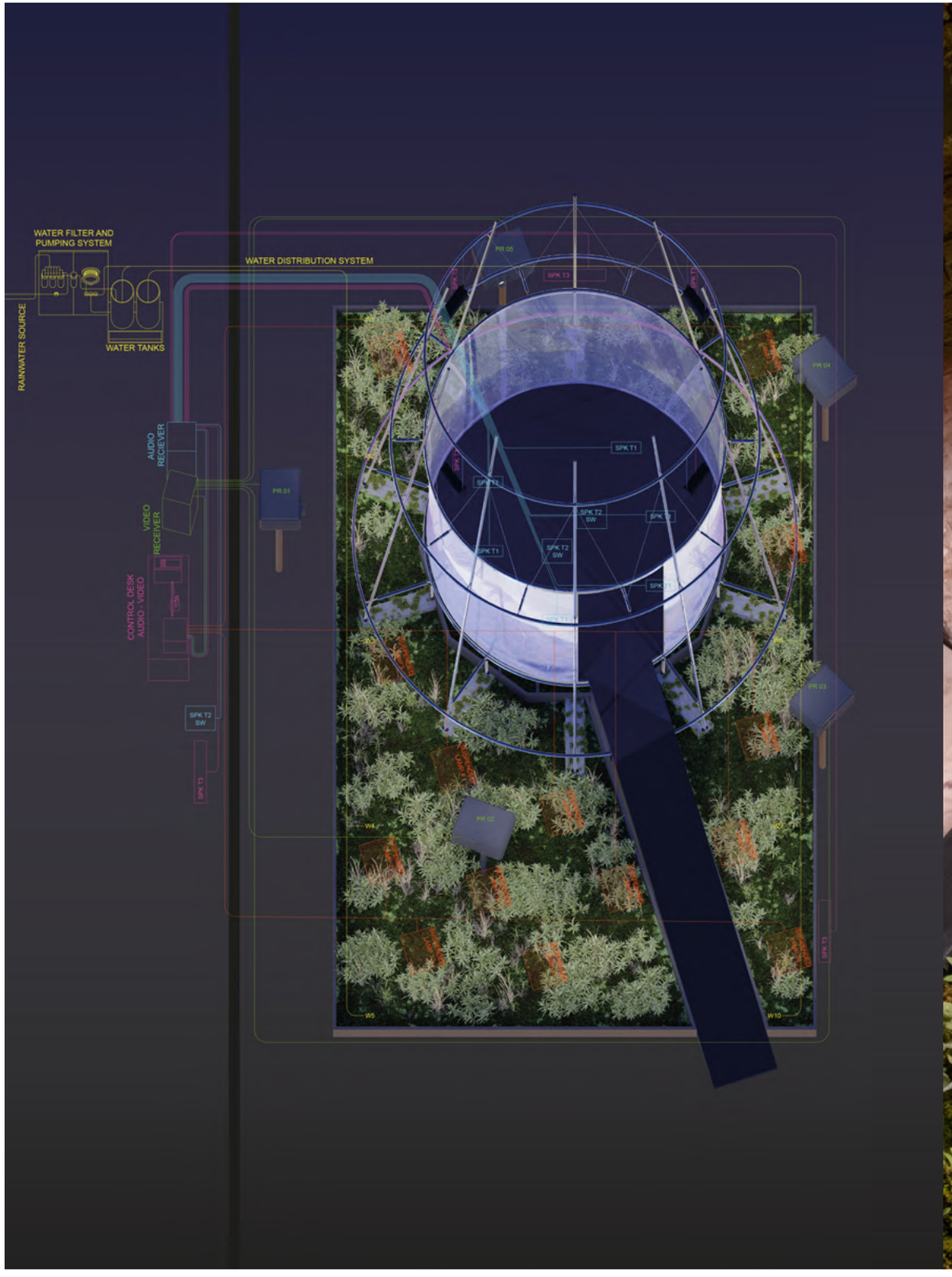
Image 2. Onofre Jarpa. *En las cordilleras de Chillán. Quebrada del Manzano*, 1893. Oil on canvas, 200 x 131 cm. Museo Nacional de Bellas Artes, Santiago [On loan to the National Congress, Santiago premises].

Rumor #7
Cecilia Vicuña
(text and voice)
Ariel Bustamante
(sound adaptation)

CREATIVE PROCESSES:
TURBA TOL HOL–HOL TOL

The Ensayos group began research in the Patagonian peatlands several years before *Turba Tol Hol-Hol Tol* was conceived. This initiative took a life of its own after the project was officially selected to represent Chile at the 59th International Art Exhibition of the Biennale di Venezia, inspired by the efforts of Ensayos and informed by new participants and visions.

The stages of research, conceptualization, creation, production, and installation of *Turba Tol Hol-Hol Tol* were collaborative processes led by different members of the creative team. What follows is an overview of some of the crucial moments in these processes.


WATER FILTER AND PUMPING SYSTEM
WATER DISTRIBUTION SYSTEM
RAINWATER SOURCE
WATER TANKS
AUDIO RECEIVER
VIDEO RECEIVER
CONTROL DESK AUDIO - VIDEO
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PR 03
PR 04
PR 05
SPK T1
SPK T2
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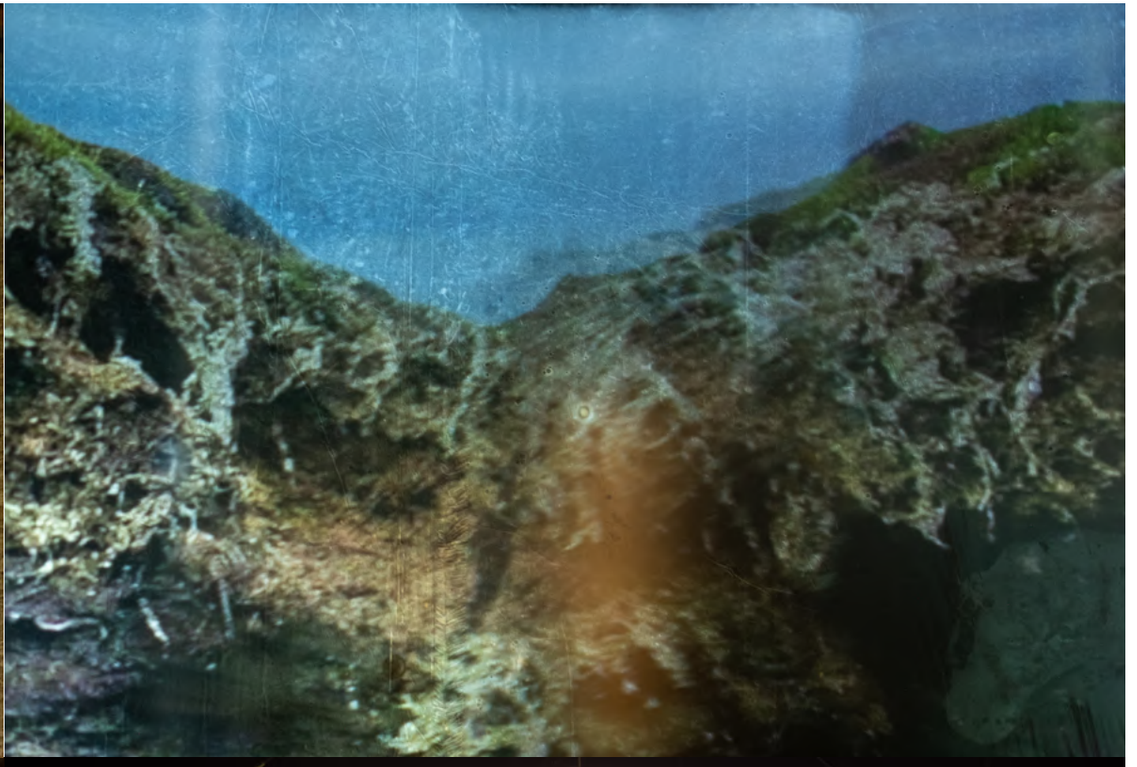
W10



Creating *Turba Tol Hol–Hol Tol*

Sound by Ariel Bustamante

EARTH SONG

I return once again to Karukinka, this time to introduce myself to the entire *Turba Tol Hol-Hol Tol* team. I carry a flamingo feather that I found in Santa Ana de Chipaya, in the desert of Oruro, Bolivia, but it is only once I arrive in the south that I discover this bird also lives in Karukinka, an antipode of the desert, thousands of kilometers away. With a lump in my throat, I introduce myself, singing over the feather that I burn with a match, while all the members of *Turba Tol Hol-Hol Tol* around me breath in the smoke of the flamingo and and their power to be more flock than individuals.[1]

The next day, Hema'ny Molina, a Selk'nam woman, writer, poet, and craftswoman tells me, "I dreamt of you. I dreamt of a newborn *wawa* (baby) telling me that you had to keep on singing."

But what song should be sung?

Despite the fact that the song always has the vocation of travel, the Selk'nam song travels only with family, a type of family that today is raised under alliances that surpass pure blood, Amerindian essentialism, and geopolitical distances. Thus, I, a brown-skinned *Santiaguino* with no Indigenous memory, sing from Italy via Zoom with Hema'ny and her daughter Fernanda Olivares, following the mandate of a newborn relative that emerged in a dream.[2]

The new Selk'nam song takes on new community commitments inside and outside Karukinka, to protect their Earth beings,[3] revitalize their erased language, and try new creative ways of exercising sovereignty.

To sing the Selk'nam song is also to cultivate the land. Song and land are both indivisible in their care, as Ana María Ochoa Gautier reaffirms in this very book. Land and song mutually nurture one another in circles that can begin in sleep and end deep under the peat. To care for the ancestors is to sing to the peatlands, and to conserve the peatlands sustains the beings that sing to them. This entire chain of care, inherent to the recursiveness of a language that speaks and listens, summons the same cosmopolitical instrument of vital coexistence.

Sitting in the darkness of the Chilean pavilion, Fernanda and I listen to the recordings I made in Tierra del Fuego. These are the sounds of trees rustling, my breath drowning under the water of the peat bogs, and Selk'nam family chants vocalized by the whole alliance of humans gathered in *Turba Tol Hol-Hol Tol*. Fernanda points her finger at a sound that seems buried, that comes very softly from a loudspeaker hanging over the *Sphagnum* moss, something I can barely hear. At the same time, at the door of the pavilion, Isabel Torres induces calm, energy, and patience in the visitors who are eager to enter, holding them and seducing them with her voice to lower that tourist frenzy so typical of Venice.

This is how we educate and prepare ourselves to listen before receiving the Earth song, with patience and sensorial curiosity, paying affectionate attention to what we hear beyond the written word and its logocentric translation (something that the West has made very comfortable and equivalent in the assimilation of worlds that are neither). And on a side note, the Earth song teaches us to doubt the science of the text that already declared the death of the Selk'nam language, despite the fact that the wind people of Karukinka today persist in agitating and educating through the tongue of Hema'ny.[4]

The Peat Force is probably the most important extension of our partnerships. Isabel Torres, Fernanda Olivares, Maria Costan Davara, Vittorio Da Mosto, and Malika Mouj not only nurture and accompany the day-to-day Earth song that grows in our pavilion, but also bring intimacy, encouragement, and hospitality to the audience.

The audio recordings of all the members of *Turba Tol Hol-Hol Tol*, including their children laughing and singing in Selk'nam inside the pavilion, also mirror the hospitality that these guardians cultivate between themselves and the audience. Perhaps therein lies the most generous and important translation given to the Venice audience: a living account (beyond discourse) of the affective pacts that *Turba Tol Hol-Hol Tol* establishes and invites us to make with the land. As Fernanda says in Rumor 6, these special

1 Burning flamingo feathers is part of *wayñu* (an Andean ritual of song and dance) that is performed in Isluga, Chile, near the border with Bolivia, as a way to help the sheep or llamas to act in an organized manner, like Flamingos, without getting lost. Penelope Dransart, "On the Wings of Inspiration: Ritual Efficacy, Dancing Flamingos and Divine Mediation among Pastoralists and Herd Animals in Isluga, Chile," *Non-Humans in Amerindian South America: Ethnographies of Indigenous Cosmologies, Rituals and Songs,* edited by Juan Javier Rivera Andía, 1st ed., vol. 37 (New York: Berghahn Books, 2019), 73–96.

2 Ariel Bustamante, Fernanda Olivares, Hema'ny Molina, and Catalina Valdés, Rumor 6, https://turbatol.org/rumors.html. English and Spanish versions.

3 Marisol de la Cadena, *Earth Beings: Ecologies of Practice Across Andean Worlds* (Durham and London: Duke University Press, 2015).

4 As Hema'ny Molina informs in "*Turba Tol* reverberations," written by Ana María Ochoa Gautier for this publication. It is through its foundation Hach Saye, that the Selkn'am language is reconstructed according to the cosmological terms in which it emerges in Karukinka.

connections, based on affection, are what shorten and simplify the distances of the world.

Today, I keep asking myself, why is the *wawa* who asks me to sing the Earth human? I am still celebrating having been summoned by Hema'ny's dream, and I am still surprised that the earth song needs me. Could it be that Karukinka is not a good forest without humans to sing to it and that the Earth would not be OK to keep on living without her children either?[5]

The Earth song manages to seek allies in fragile and mysterious ways through dreams, Karukinka's new family ties, flamingos, and all the travel technologies that could serve to ask for help, bending space and time. Despite all the vulnerability, toxicity, and pessimism that suffocates the planet, the Earth song persists in asking for our protection. Perhaps the art of guarding the Earth also requires repopulating confidence in ourselves and in our transformative capacity to lift others by singing.

Thanks to Alejandra Nuñez del Prado and Bernardo Rozo.

Image by Dominga Sotomayor

For the projection, we gathered preliminary, abstract panoramic images of the peatlands. Underutilizing the technology of two virtual reality cameras, we sank into the mud, moss, and water. It was a sampling, a compilation of images of the ground that were developed later. What appeared were underground cuts and peat without selection or horizon, confusing vegetable perspectives and dimensions.

We moved forward looking towards the ground. We stopped at random corners and repeated the vertical movement in order to disappear from the landscape and imagine other landscapes that were impossible to explore.

Architecture by Alfredo Thiermann

If anything, the pavilion's architecture is a weaving of relationships, not of forms, or, rather, it is an interweaving of *forms of relationship*. A translucent cyclorama five meters (16 feet) in diameter poses like an insect over a field of *Sphagnum*, acting as a resonating membrane for a language that is reborn and a landscape that resists. The Selk'nam language and the landscape of the Patagonian peatland share a past whose irrefutably connected future is amplified through this construction's fragile materiality.

Cycloramas, panoramas, and dioramas have historically been the spatial devices through which nature and the bodies of its inhabitants have been captured, colonized, and transplanted. It is this *architecture* that has made them travel. Here, voices, sounds, images, and plants are presented and not re-presented. They are supporting one another, at the very least resisting, and at most reversing, that trajectory. Posed on top of the *Sphagnum*, the fragile structure is an inverted cyclorama.

The scaffolding is simple. A conical structure with a slim profile holds up a membrane made of algae and a multiple-channel sound system. It rests on the *Sphagnum* field that is irrigated with water from Venice channeled into the pavilion. Visitors walk over the *Sphagnum* until they reach the heart of the cyclorama. Images are projected onto the membrane and the voices of the reborn language and the sounds of the resisting landscape travel within and out of the boundaries that it defines. As the days passed, the moisture from the *Sphagnum* eroded and redefined the texture of the plant membrane that supported the projection of its own images, joining one plant material to the other through the Venetian water.

Book edited by Carla Macchiavello Cornejo and Camila Marambio

Turba Tol Hol-Hol presents new ecological models that emerge from Abya Yala, supported by science, traditional knowledge, artistic practices, anticolonial thought, and nonhegemonic feminist perspectives. The book is a desire and an act, a plea voiced by many, a place for gathering, for divergence, for invitations to different ways of pursuing a society of care.

The book is one more act of a play in which many participate. You create part of the action.

Inspired by the eco-aesthetics that drive *Turba Tol Hol-Hol Tol*, this book brings together many voices that participate from their local practices and knowledge. Some are germinal texts, a rich and damp humus for environmental and ecofeminist thought from Abya Yala. Each voice reproduced here is a seed that the book plants for the future. Others are new texts on peatland science and conservation, experiences filled with knowledge regarding these ancestral ecosystems that require the attention and care of many. There are also voices and bodies that come together from near and far to accompany the pavilion at the 59th International Art Exhibition - La Biennale di Venezia. and feel/think from a variety of places and practices.

5 Rafael Bautista, *El Tablero Del Siglo XXI: Geopolítica des-colonial de un nuevo orden post-occidental* (La Paz, Bolivia: Yo soy si Tú eres ediciones/El taller de la Descolonización, 2019), 318. The particular thought from Rafael Bautista that I am choosing to mention here, based on Andean cosmologies, refers to the family ties humans have with the *PachaMama*, understanding that Mother-Earth is not indifferent to the destiny of her children. For a critical approach to the concept of PachaMama as an androgynous entity, see Billie Jean Isbell, "De inmaduro a duro: Lo simbólico femenino y los esquemas andinos de género," in *Mas allá del Silencio: Las fronteras de género en los Andes*, edited by D. Y. Arnold (La Paz: Biblioteca Andina, 1997), 253.

All of this, supported by the voices of the godmothers, the mothers, the soil-earth-water-air that nourish us: the visionary poets who—from those territories and seascapes some call Patagonia—evoke us, shake us, remind us not to forget. And, of course, there are rumors, tremors that are deep, sonorous and textual; those that pass from body to body and have been anticipating what is to come. That which is already happening. Here, there. In the vulnerability of our lives, of our bodies, of the peatlands, in united collaboration, in the participation within this fabric of which we are threads, in the political changes, the strengthening of tongues, yours and mine, of that which we have yet to perceive.

Production by Juan Pablo Vergara

The pavilion's production was executed as organically as the themes of art and ecology that traverse its curatorship. Our first consideration was to always think of *Turba Tol Hol-Hol Tol* as a long-term project, one that goes far beyond its staging in the pavilion and materializes in diverse digital and in-person instances throughout the year, both in Venice as well as in other areas of the planet where peatlands exist.

As a collaborative and transdisciplinary project, our main challenge was to unify all the ideas and experiences of a large team made up of artists, scientists, and experts distributed throughout diverse parts of the world. For this reason, we decided that the initiation rite had to be a field visit to Parque Karukinka in Tierra del Fuego. This experience allowed team members to get to know one another better and to gain a closer understanding of the territory in which the peatlands are located.

The production design was planned in a way that was transversal, without hierarchies, in which everyone could participate and be heard. This is how we worked from a central nucleus that collated and coordinated the actions and information of diverse subgroups on a daily basis, watching how they became intertwined while taking into consideration content, design, scent, architecture, and montage.

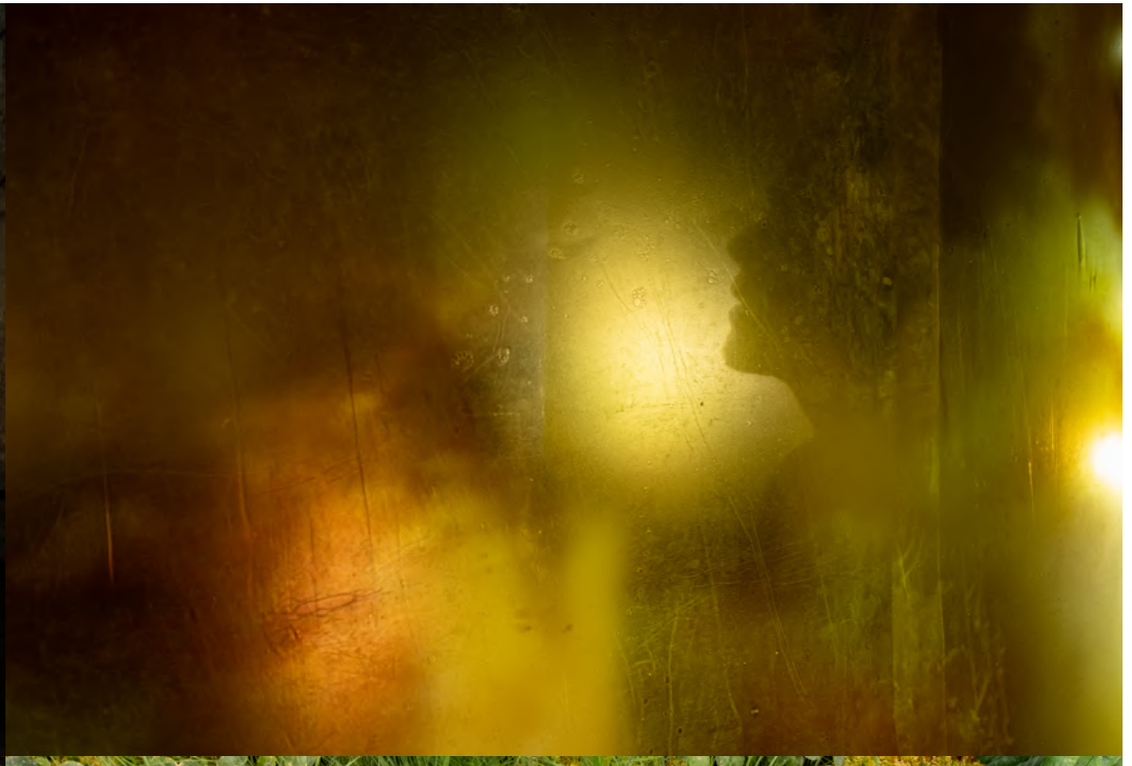
Curatorship by Camila Marambio

In an increasingly hotter and drier world, wetlands around the world are in dire need of conservation. Their preservation is intrinsically linked to the future well-being of humanity and, in Patagonia, to the resurgence of the Selk'nam people. Just as the peat bog wetlands of the Southern Cone cry out for representation as a living entity, the Selk'nam people likewise cry out for recognition as a living culture. Peatlands and people are indivisible.

Based on more than a decade of ecocultural cooperation in Tierra del Fuego, *Turba Tol Hol-Hol Tol* emerged from the transdisciplinary research practice of Ensayos, an initiative that rethinks the role of art in creating communities focused on the conservation of biodiversity and contextualized ecological action. The title *Turba Tol Hol-Hol Tol* means "heart of the peatlands" and is a play on words by the Selk'nam poet Hema'ny Molina from the Fundación Hach Saye. The use of the Selk'nam language and all ethical considerations related to the Selk'nam people followed the policies of the Hach Saye Research Ethics Board, which has been working with Ensayos and the Wildlife Conservation Society-Chile for the past five years on the conservation of Patagonian peatlands.

Peat bogs are a type of wetland that play a critical role in regulating the planet's climate by sequestering carbon from the atmosphere and storing it in deep layers of unaltered organic matter (*turba* or peat). Although this capacity makes peatlands "one of the most valuable ecosystems on Earth" (Bárbara Saavedra, WCS-Chile), the peat bogs are a little-known type of wetland, invisible and made invisible in part because of their fundamentally "buried" structure. This complex condition increases their exposure to serious threats such as mining, extraction of vegetation, and drainage for the construction of infrastructure, like roads. Once drained and destroyed, peatlands go from being carbon sinks to significant sources of greenhouse gas emissions.

Peatlands challenge us to create a new murky, multivocal aesthetic inspired by the peat that blends the stories of Patagonia's peatlands, underscoring their role as a southern bastion in the face of climate change.



Creative Collaborators

Graphic Design by Rosario Ureta

Script, a visual way of representing a sound, a forgotten tongue. Synesthesia, wanting to convey a sensation, a smell, a sound through something visual. Translating the sponginess of the peatland into a drawing or an image. Making a friendly presentation of scientific contents. To be in many eyes, to spread the rumor that we must get to know them and conserve them.

turbatol.org by Mateo Zlatar and Carola del Rio

The online presence of *Turba Tol Hol-Hol Tol* is a reflection of the dynamics of the human group behind the project: a limitless collaboration. The website's aesthetic interprets the visual world that Rosario Ureta has been developing since the project began. The site was coded from scratch, without templates or CMS (content management system), using clean code, which gives more creative flexibility and creates greater economy of data transmission and storage. When it came to selecting a data-hosting provider, we were concerned by the fact that data centers represent 2 percent of the world's carbon emissions and are projected to reach 14 percent by the year 2040. We took the time to research different options and pick the provider that was the most efficient and generous in its contributions to renewable energies.

Museographic Design by Sebastián Cruz

The museography of *Turba Tol Hol-Hol Tol* is based on a general narrative that carefully harmonizes the different creative contributions to this project. They are presented in a combination of media that share the space leased by Chile in the Isolotto dell'Arsenale, one of the two venues at the Biennale. The museographic design of the pavilion arranges the different layers of information, allowing an uncomplicated reading of the constructive process in which drawing and its geometry are the unifying language.

To establish a clear order, two basic geometric shapes are proposed: a rectangle and a circle. The rectangle places the intervention within the Isolotto and its irregular geometry, while it accommodates the *Sphagnum* moss, arranges the irrigation and lighting systems, and distributes the electrical and audio systems.

The circle is the basis for the layout of the metal structure that supports the biomaterial projection screen and the audio equipment. A platform for visitors is slightly offset from this circle. All the elements that make up this artifact are organized radially and/or perimetrically: access, pillars, fixtures, projectors, speakers.

*Sphagnum*LAB Art Direction by Nico Arze and Christy Gast

*Sphagnum*LAB is an organic experiment within *Turba Tol Hol-Hol Tol* based on other experiments by the Greifswald Mire Centre (GMC), the world's leading peatland research institution. *Sphagnum*LAB consists of a 60-square-meter (650-square-foot) crop of *Sphagnum palustre* harvested from a paludiculture research field (which uses rewetted peat for agriculture and reforestation) on Hankhausen Moor in Lower Saxony, Germany. GMC partners with Moorkulture Ramsloh to grow and harvest living *Sphagnum* moss for use in agricultural production, thereby reducing the use of harvested fossil peat and rewetting previously drained peatlands, preventing them from emitting CO_2 into the atmosphere. Once the *Sphagnum* moss was transported from Germany to Venice, it was installed in the pavilion inside a lagoon specially designed by Alfredo Thiermann in collaboration with Sebastián Cruz and with the support of Alessandra Dal Mos.

Prior to harvesting the moss in Germany and installing it in Venice, Christy Gast of Ensayos spent three weeks at GMC and on Hankhausen Moor as an artist-in-residence. During that period, Gast worked with GMC scientists Susanne Abel, Matthias Krebs, Jan Peters, Anja Prager, and Greta Gaudig, as well as the artists of *Turba Tol Hol-Hol Tol* to design the ethics, aesthetics, and methodology of the experiment for the pavilion. With the help of volunteers and a harvesting team consisting of Tom Behrendt, Keno Gerwing, Oliver Jähnichen, Arne Roenisch, Merle Schalla, and Landelin Winter, Gast prepared the moss for its trip to Venice. Then, with the support of Moorkulture Ramsloh, Hellmann Worldwide Logistics, Die Beauftragte der Bundesregierung für Kultur und Medien2, Caspar-David-Friedrich-Jubiläum, and the Universitäts- und Hansestadt Greifswald, the moss arrived at its new home, where it was welcomed by Nico Arze.

The study and implementation of the water filtration system necessary for the survival of the moss under experimental conditions was carried out by Arze, and the light diet was studied by Antonia Peón-Veiga. Data on the growth of the *Sphagnum* moss (length, height, weight) were collected by the gallery attendants (Peat Force) during the entire duration of the Biennale and processed by Christy Gast in collaboration with the GMC scientists.

At the end of the Biennale, most of the *Sphagnum* moss grown inside the pavilion was donated to Azienda Agricola Valleri for use in sustainable

horticulture and gardening. The donation process was managed by Jane da Mosto of We are here Venice and Ensayos, with the support of the GMC and TBA21–Academy's Ocean Space. Some of the moss was donated to We are here Venice to help restore the abandoned public garden of Sant'Anna, Venice.

Lighting by Antonia Peón-Veiga

If we think of *Turba Tol Hol-Hol Tol* as an ecosystem with the intention of generating favorable living conditions for the *Sphagnum*, elements such as light, water, and air become fundamental. The space's illumination was designed with an understanding of the light requirements that would allow the moss to grow successfully in this new environment for the entire duration of the exhibition.

The installation uses 14 full-spectrum lights, suspended throughout the space and distributed homogeneously in order to create an environment resembling the sun's natural light. This light spectrum is crucial for photosynthesis to occur; as in nature, periodic cycles of high intensity and darkness are also necessary.

We also preferred dimmable lights with controllable color temperatures, which meant that they could play a secondary role by contributing to the ambiance of the space and the spectator experience.

Gifts of Scent for *Turba Tol Hol-Hol* by Ensayos

The highland and lowland peat bogs and fens of Minjerribah/Terrangeri, Quandamooka (Moreton Bay, Queensland, Australia), Amenia, New York (United States), and Bogerudmyra (Oslo, Norway) have been sites of research, connection, and mediation during the Ensayos residencies with artists, keepers of traditional knowledge, activists, and scientists. As a result of this creative fieldwork, Ensayos conjured gifts of scent from their local peatlands to contribute to the multisensory experience of *Turba Tol Hol-Hol Tol*. These olfactory offerings were as diverse as the varied ecologies, cultural meanings, and conservation status of these peatlands in Australia, the United States, and Norway.

Knowledge is a gift (in the form of incense) was created by the pod from Minjerribah/Terrangeri in Australia: Elisa Jane Carmichael (Quandamooka artist), Freja Carmichael (Quandamooka curator), Sonja Carmichael (Quandamooka artist), Jasper Coleman (ceramist), Caitlin Franzmann (artist), Renee Rossini (ecologist), and Jarred Wright (glassblower).

The scents *Damp* and *Rich* were created by the U.S. pod: agustine zegers (olfactory artist) with Christy Gast (artist), Denise Milstein (writer/sociologist), and Carina Cheung (glassblower).

The perfume *Wolves in the Mire* was created by the Norwegian pod: Randi Nygård (artist), Karolin Tampere (curator), and Simon Daniel Tegnander Wenzel (olfactory artist).

Biomaterial Skin by Sinestesia

We developed a biomaterial skin on which the film was to be projected. Fabricated by the creative enterprise at sinestesia.cc in collaboration with the Fab Lab at the Universidad de Chile, the skin is a biocomposite based on 100-percent organic components containing algae extracts, collagen, and glacial acetic acid, among other elements that act as natural structural agents, plasticizers, and preservatives. They constitute a translucid and extremely thin self-supporting skin that concentrates light through microparticles without losing its transparency, becoming a biodegradable rear-projection screen. When continuously exposed to moisture, touch, and external agents, this living screen degrades and can be colonized by fungus and moss. It is estimated that after six months the screen will begin to decompose, easily becoming part of the Earth once more.

In addition, the composition of the screen allows for one piece to be attached to another by heat sealing, thus avoiding the glues or other chemicals used to create large skins.

Coordination by Alessandra Dal Mos

It all began with a plan, an imaginary playing field into which each person placed their parts. My role as coordinator was to find a space for each player, merging disciplines and dialogues, while minding tone and distance: we found ourselves fighting for centimeters, and we went even further. During the process, there have been lessons and discoveries in which we were able to define respectful guidelines for each kind of art in the collective space. The work's complexity is perhaps best compared to that of a house—a delicate refuge in the middle of some peat bog in the south of Chile that has been transported to a finite space: the pavilion inside Venice's Arsenale.

In technical language, the objective was to *coordinate specialized fields*, autonomous worlds that enter into dialogue with one another. Structure, electricity, and hydraulics participate in a single body that tackles complex challenges: an electrical cable passing through a hydroponic plantation; a structure that moves to give way for video projections; the production of conditions necessary for living beings, providing water, light, and air for the *Sphagnum,* while considering the ecological impact of all the construction

materials within the time frames of pavilion's production. These small decisions come together to ensure the participants' holistic viewing experience.

The Peat Force by Fernanda Olivares and Isabel Torres

We are the Peat Force.

We are the bodies who lovingly step on the peatlands in Tierra del Fuego and have traveled to Venice with conviction to chat about interspecies care and romance. Our mission in *Turba Tol Hol-Hol Tol* was to tell a story of ecological intimacies to an international public. To mediate, share, love.

We are holistic wardens. Like the wind, we push forward insinuations from the ancestral to the natural. In the name of peat, we wanted to be a multilingual ritual to convene subterranean, damp, and sensitive sensations.

If you visited the pavilion, we invite you to remember: What did you think/feel? What imaginary journey did you go on? What memories came to you? What scents came to you?

If you are a distant reader, What peatlands do you know of? How do you take care of them? How do you take care of yourself?

REVERBERATIONS:
TURBA TOL

Francisca Fernández Droguett

Water, Body, and Territory: Constructing Plurinational Hydropolitics in Revolutionary Times

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I long to return to my childhood lands;
take me to that soft country of water.
You shall grow old in large fields
and tell fable after fable by the river.
Watch over my mother's spring,
while others nap you shall go there,
and come down the jagged slope
with jugs of fresh, clean, and crude water.[1]

Decolonizing nature through feminism of the people

Various movements to defend and recover water and territories have affected the development of different peoples in Abya Yala, the ancestral Kuna name for America. In the face of capitalism's continental expansion and consolidation, facilitated by extractivist and colonial policies as well as the current climate crisis, First Nations have had to insist that other worlds are possible, as the indigenous Zapatistas of southern Mexico declared.

The conquest of America colonized not only the original territories and peoples, but also nature itself, imposing an imaginary that still affects us today: as a continent full of raw materials and natural resources for exploitation, used for the alleged development of humanity at the expense of nature's existence.

We were forced to adopt the modern dichotomy of seeing ourselves as separated from nature, positioning culture against the natural environment. In this scheme, nature was associated with the wild, the chaotic, the feminine, which had to be disciplined and controlled through instrumentalization and consumption. And here we are perpetuating this policy of denial and death.

In Latin America, the colonization/coloniality of nature is carried out specifically through what we call extractivism—the unlimited, intensive extraction of natural commons (water, fruits, vegetables, minerals, forests) for export to international markets. This has provoked dispossession, looting, pollution, and environmental degradation of the land, turning the region's countries into exporters of nature.

In Chile, extractivism takes on the form of mega mining projects in the north that exploit copper and other minerals; or agribusiness in general, which relies on monoculture crops, such as avocados. It is the forestry model in the south that encourages monoculture pine plantations and salmon farming. We see it in hydraulic works (both dams and temporary hydroelectric plants) and the proposal of false solutions, such as water roads and desalination plants. It is the perpetuation of ecocide as the geopolitics of capital.

But extractivism is also patriarchy, because its effects not only intensify in women, children, and feminized bodies subject to insecurity and structural violence, but because we have been historically exploited in the same way as nature. This results in enclave economies where women are exposed to sexual violence, harassment, and abuse, turning us, like territories, into disposable bodies.

The decolonization of nature becomes the first political gesture to move toward a plural, diverse world in which we place life at the center. But not only human life. We are talking about the life of plants, animals, peatlands, ecosystems in general, reuniting us—as Peruvian researcher Grimaldo Rengifo says—as a community of relatives who identify as bodies of water, as nature, as interdependent organisms.

> *In this sense, the* ayllu *is not only the human community of families united by blood ties and affinities. Andean people call the Apus grandparents and Pachamama is considered Mother Earth... relatives in the Andes include all the communities that we raise and which raise us, whom we protect and who protect us... In the Andes, this affectionate nucleus of extended relatives that cultivates and animates farm life is known as the* ayllu.[2]

Thinking-feeling with the earth—a term Arturo Escobar[3] introduced to name other forms of conceiving the relationship between nature and humans—has been used to preserve, revitalize, and recover ancestral knowledge. Today, these forms of resistance vindicate indigenous and Afro peoples, plus large sectors of peasants and the working class, whose self-determination and community organization of natural commons aim to overcome extractivism.

We have thus built other kinds of feminism with our feet on the ground: peasant, indigenous, and popular feminism,[4] as advocated by our comrades of the Latin American Coordination of Rural Organizations (CLOC) and the Via Campesina. This is a community-based, territorial, and anti-extractivist feminism, or, as we have called it in this corner of the world,[5] a plurinational feminism of the people, which weaves together the memories of our ancestors who defended water rights, territories, and their own existence.

These kinds of feminism reconstruct the trajectories of women, girls, and dissidents. They integrate resistance and development alternatives based on experiences of territorial, dietary, and energetic sovereignty, of care for native and local seeds, of creating soup kitchens and popular supply networks where territorial economies of solidarity are consolidated to disrupt the expansionary chains of neoliberal capitalism.

1 Fragment form the poem "Water," in Gabriel Mistral, *Tala* (Buenos Aires: Editorial Sur, 1938).

2 Grimaldo Rengifo, "La crianza recíproca: biodiversidad en los Andes," Grimaldo Rengifo, "La crianza recíproca: biodiversidad en los Andes," Biodiversidad 2 (1995): 38.

3 Arturo Escobar, *Sentipensar con la Tierra: Postdesarrollo y Diferencia Radical* (Medellín: Universidad Autónoma Latinoamericana, 2014).

4 Claudia Korol and Gloria Cristina Castro, *Feminismos populares. Pedagogías y políticas* (Colombia: La Fogata Editorial y América Libre, 2016).

5 For more information on feminism of the people, see "La Revuelta que habitamos desde un feminismo de los pueblos," *Resumen*, October 18, 2021, https://resumen.cl/articulos/la-revuelta-que-habitamos-desde-un-feminismo-de-los-pueblos.

People's community and hydropolitical management

The Constitution of 1980, implemented in the midst of Augusto Pinochet's civic-military dictatorship, privatized Chile's water through the 1981 Water Code, which, despite recognizing water as a national good for public use, granted access through rights of use. This created a water market in which this vital common good can be bought, sold, leased, and even mortgaged, reducing it to a tradable good.

Large extractive companies own the majority of water use rights. These are the same companies that hoard and usurp water, thereby drying up many territories. In response, various social and territorial movements, such as the Movement for Water and Territories (MAT), have introduced the slogan "no es sequía es saqueo" (it isn't a drought, it's looting) to illustrate that water scarcity is caused by the privatization and commodification of water, corresponding to a structural issue.

Today, various bodies of water—such as lagoons, lakes, rivers, wetlands, peatlands, glaciers, and seas—are exposed to market shifts and big business interests. This situation has devastated ecosystems and endangered wildlife, as well as the different communities that live there. Therefore, it is up to us not only to protect those bodies and ecosystems but also regenerate and restore them. Deprivatization of water is necessary to stop the water crisis and thus recover ecological flows through community management: a water policy of life.

Hydropolitics refers to the various modes of management, use, and administration of water that identify associated actors, knowledge, and practices. We can thus find hegemonic hydropolitical relations connected to the commodification and governance of water as a natural resource, as well as forms of resistance that see water as an unmarketable natural common, as an intrinsic right of nature, and a fundamental tool for articulating community management that respects and protects the hydrological cycles of the basins.

The revolt that has swept through Chile since October 18, 2019, persists not only in the efforts to draft a new Constitution, but also in consolidating community and territorial organizations, and proposals for a dignified life. In these initiatives, plurinationality takes center stage, allowing us to reflect on ourselves from a polyphony of voices and peoples, and to defend the rights of nature. Public debate has incorporated the notion of *natural commons*, in reference to safeguarding the well-being of the shared elements—water, air, and seeds—that are a part of nature and should be unmarketable, since they enable and sustain life.

The peatlands of Tierra del Fuego and other bodies of water in Chile, such as glaciers, are ecosystems and permanent sources of freshwater

that hold ancestral, geological memory; vessels of ancient knowledge that must be protected for the well-being of humanity and nature as a whole. Indigenous peoples have historically protected these bodies of water, using them as foundations to build cultural practices based on the interrelation with the natural and spiritual environment. This connection has led them to develop hydropolitics in the urgency to protect and restore the waters as a policy of care and self-care.

The relationship between the Aymara people and high-altitude wetlands, or the Selk'nam and peatlands, reminds us of the community of relatives that has been damaged by extractivism and by the constant reproduction of a colonial perspective in regards to nature. It is in this framework that plurinationality—the recognition and coexistence of diverse peoples and nations, of multiple political communities with their knowledge, practices, and feelings—becomes a tool to defend water in all its expressions: water turned torrents, dreams, bodies and territories, as the liquid of life, of all lives, in perpetual movement, pursuing its currents to flow as a creative force.

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Amarí Peliowski

Notice the Moss

Amarí Peliowski is an architect from the Pontificia Universidad Católica de Valparaíso (Chile), with a Master's and PhD in Art History from the Ecole des Hautes Etudes en Sciences Sociales (EHESS, France). She is an assistant professor at the Instituto de Historia y Patrimonio (Institute of History and Heritage) of the Faculty of Architecture and Urbanism in the Universidad de Chile. Her research on the cultural history of architecture focuses on the disciplinary practices, teaching, discourses, and identities of architects in Chile and Latin America. Peliowski took second place in the competition for curatorial proposals for the Chilean pavilion at the 15th Venice Architecture Biennale in 2019 and was co-curator of the exhibition "Casa chilena: Imágenes domésticas" (Chilean House: Domestic Images), shown at the Centro Cultural La Moneda in 2020.

> "When walking through the woods, you find a rise in the ground, six feet long and three feet wide, heaped up in a rough pyramid shape, then you turn serious, and something inside you says: someone lies buried here. That is *architecture*."[1]

In this quote from Adolf Loos' 1910 *Architektur*, the architect was observing that when materials are collected from nature, and are then shaped and organized into form, architecture appears when the form is capable of carrying meaning—in this case the meaning of someone's death. Analyzing this same fragment by Loos, Dennis Hollier concludes that "architecture is whatever there is in an edifice that cannot be reduced to building, whatever allows a construction to escape from purely utilitarian concerns, whatever is aesthetic about it."[2]

A decade after Loos' publication, in 1922, the American painter Rockwell Kent traveled around Chilean Patagonia. In the chronicles of his adventure, he recounts the experience of stumbling upon the frameworks of what had been in the past two Yahgan huts on the beach of Stanley Cove, remarking that "whatever prompted the natives in the selection of their campsites, it coincided with the judgment of our sense of quiet beauty. It may be that aesthetics are a sublimation of necessity."[3] The positioning of the huts in relation to the view of the landscape would thus be, following Loos' definition, what exceeds the utilitarian dimension and makes them architectural. In opposition to Marc-Antoine Laugier's metaphor of the primitive hut, in which he proclaimed that architecture's origin is the imitation of nature,[4] the tomb and the hut epitomize precisely what is not natural but cultural; they represent the semiotic divide between sign and meaning, matter and interpretation, building and monument, and nature and culture.

Architectural designs for pavilions in international expositions tend to fulfill this symbolic vocation, presenting themselves as spaces of representation of something other than themselves. They symbolize a country's identity, contributing to the fabrication of a collective, shared image. As architectural artifacts, they can represent or refer to many things: peoples, cultures, or histories of a nation. In the case of Chile, the construction of an image to share with the outside world—in which pavilions have a significant role—has been historically marked by the aesthetic trope of nature. Like Loos' heap of earth or Kent's huts with a view, nature and its anthropic manipulation is what frequently gives meaning to the image Chile has wanted to offer to the world.

When Chile was a colonial captaincy, Jesuit Alonso de Ovalle wrote his *Histórica Relación del Reyno de Chile* and published it in Rome in 1646 as a way of encouraging his coreligionists in Europe to travel to Chile to work in missions. Unlike chroniclers before him who described Chilean nature as

ferocious and intimidating, he promoted Chile in a passionate and moving rhetoric as a place of striking and paradisiacal nature, and as a civilized, urbanized territory—which was far from the reality of a scarcely populated Chile.[5] More than two centuries later, in 1875, the already independent Republic of Chile organized an international exhibition in Santiago, having as a main attraction for foreigners a series of shelves and glass cabinets that showcased its natural resources in a *wunderkammer* fashion, taxonomizing objects in a strict scientific classification. The incorporation of detailed labels of the objects, nevertheless, obeyed commercial interests: plants were described according to their pharmacological use, and minerals were exhibited as samples of what could be potentially extracted and sold in large quantities.[6]

Five decades later, Chile participated in the Ibero-American Exposition of 1929 in Seville, building a national pavilion three stories high, reminiscent of the Andes Mountains. In the discussions leading up to its construction, the organizers and the architect of the pavilion proposed the mountains as a visual metaphor for the cold character of the local people, distancing Chile's identity from the exotic, humid, and hot-weathered image of other Latin American countries. 19th century sociopsychological theories of determinism associated warm temperatures with barbaric attitudes, and cold climate with temperateness and a hard-working people. Therefore, the image of snow and altitude favored the representation of faraway Chile as a country populated by people with a character similar to that of western Europeans.[7]

In 1992, a Chilean committee traveled again to Seville to participate in the Universal Exhibition that was held there, transporting a 60-ton, 1,000-year-old iceberg extracted from Chilean Antarctic territory, preserving and exhibiting it in a custom-made curved glass refrigerator. "The natural and pristine whiteness of the millenary ice had the mission to *decontaminate* the image of Chile from any third-world, ideological reminiscence," contends Nelly Richard.[8] The iceberg not only represented the opposite of the traditional and stereotypical image of Latin America as "*sudaca*, sad, distant, dusty, infectious, revolutionary, counter-revolutionary, and confusing," but it also symbolized the purging of the blood-bathed dictatorship that had ended only two years earlier in Chile.[9] Finally, at the 13th Venice Biennale of Architecture in 2012, the curators for the Chilean pavilion exhibited 11 tons of salt from the Atacama desert, scattered on the floor. "We wanted to invite visitors to walk on our soil, as a way of being in Chile, and that when they come in, they are in a sort of temple," explained one of the curators.[10] The intention was to show the salt from the critical viewpoint of its extraction and commercialization (and its transportation in airplanes to Venice), using it also as a symbol of architecture's relationship to land.

1 Adolf Loos in *Architektur* (1910), as cited in Denis Hollier, *Against Architecture: The Writings of Georges Bataille*, trans. Betsy Wing (Cambridge, Mass.: The MIT Press, 1992), xxi.
2 Hollier, *Against Architecture*, 31.
3 Rockwell Kent, *Voyaging Southward from the Strait of Magellan* (New York: G. P. Putnam's Sons, 1924), 95.
4 Marc-Antoine Laugier, *Essai sur l'architecture* (Paris: Duchesne, 1753).
5 Alonso de Ovalle, *Histórica relación del reyno de Chile y de las misiones y ministerios que exercita en la Compañía de Jesus* (Rome: Francisco Cavallo, 1646).
6 Juan David Murillo Sandoval, "De lo natural y lo nacional. Representaciones de la naturaleza explotable en la Exposición Internacional de Chile de 1875," *Historia* 48, no. 1 (June 2015).
7 Sylvia Dümmer Scheel, *Sin tropicalismos ni exageraciones. La construcción de la imagen de Chile para la Exposición Iberoamericana de Sevilla en 1929* (Santiago: RIL Editores, 2012).

From the less aesthetic realm of international politics, in recent years Chile has sought to position itself as an environmentally conscious nation. Whether this is a hypocritical stance or not, given the long tradition of extractive practices that have defined Chile's economy, there is no doubt that nature continues to be a powerful image in the discourses of the country's leaders and institutions. Examples abound: the purchase in 2004 by ex-president Sebastián Piñera of 300,000 acres in Chiloé, in the south of Chile, which he later turned into a reserve and is an important attraction for tourists; the nomination of ex-President Ricardo Lagos as Special Envoy on Climate Change by the UN in 2007; the organization of the 25th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP25) in 2019 in Santiago;[11] or the declaration by current president, Gabriel Boric, that the government, apart from being the first ecological one in history, would now push a "turquoise diplomacy" in its foreign policies, promoting the protection of terrestrial environments and marine ecosystems. These are all signs, profusely publicized in the media, of how the country represents itself as a guardian of the preservation of nature and as a driver of sustainable practices in its exploitation.

Whether nature is a beautiful landscape to be contemplated, rich matter to be exploited, or, as has recently been the discourse, a rights-bearing entity to be cared for and preserved, Chile's exportation image in the past and in the present seems thus to be tightly bound to the monumental geographical features of mountains, deserts, glaciers, rivers, forests, and peatlands. The *Turba Tol Hol-Hol Tol* pavilion that represents Chile at the 59th edition of the Venice Art Biennale also brings our relationship to nature to the fore, exhibiting a large surface of moss on the floor and projecting images of the peatlands in Karukinka park in the Chilean Patagonia on a fragile membrane fabricated from algae and suspended in cylindrical form as a panorama.[12] The curatorial and architectural proposal is based on the idea of rethinking our human relationship to nature, in dialogue with the former conceptualizations of nature in international pavilions. If the white tops resembling snow in the Seville building, the white transparency of the iceberg, and the white grains of salt all refer to the clean and inert forms of our connection to nature, *Turba Tol Hol-Hol Tol* presents nature no longer as bright or pale. "Our ethics? Orange brown," curator Camila Marambio and art historian Carla Macchiavello declare in a joint text on the Turba Tol website. Nor is it Chilean: the moss was harvested from a peatland research farm in Germany—not in Chile—and installed with appropriate temperature conditions, lighting, and water filtration system in Italy—not in Chile. It isn't allegorized nature, nor does it appear as an external object to be seen or touched. In *Turba Tol Hol-Hol Tol*, nature is in fact something we can make; it is not a representation of nature but its presentation, and

it is not a reproduction of its existence but a production of something new. "Less representations than resonances," say Marambio and Macchiavello, countering the history of cultural and natural appropriation in international exhibitions. "Did you notice the moss?" They subtly invite us not to contemplate, not to exploit, not to preserve, but to notice the moss. Maybe we did, maybe we didn't; but they certainly remind us that it's there—and the guards consequently point out to the visitors at the end of the tour of the pavilion that they can touch and smell the moss too.[13]

Turba Tol Hol-Hol Tol, thus, seems to ask: Can we continue to promote the extraction and exploitation of nature? Can we still idealize it in representations or sublimate it into abstraction? Is it enough to parcel it up into sanctuaries? Can we still dominate, domesticate, and exhibit nature?

Loos might ask, what does the architecture of *Turba Tol Hol-Hol Tol* symbolize, for what or for whom is it a tomb? Historians of the future will surely think that the pavilion is a material and aesthetic expression of Chile's current efforts to perform the role of nature guardians in the international scene. But *Turba Tol Hol-Hol Tol* also seems to delicately remind us that the search for symbolization, representation, or a unifying collective identity can be a sterile quest. It reminds us that architectural metaphors by Europeans like Adolf Loos, Marc-Antoine Laugier, or Denis Hollier are a dead end in the search for communication, empathy, and care in our human relationship to nature. It reminds us that we will always and inevitably be a Rockwell Kent trying to see through the eyes of the Yahgans, and that maybe the only thing that we can do is notice the moss.

8 Nelly Richard, *Residuos y metáforas. Ensayos de crítica cultural sobre el Chile de la Transición* (Santiago: Editorial Cuarto Propio, 2001), 176. Our translation.

9 Richard, *Residuos y metáforas*, 176. Our translation. *Sudaca*, according to the Royal Spanish Academy (RAE) is a pejorative form to refer to someone of Hispano-American origin.

10 "11 toneladas de sal de Tarapacá llegan a Venecia: Chile en la Bienal de Arquitectura," *Artishock*, last modified August 27, 2012, https://artishockrevista.com/2012/08/27/11-toneladas-sal-tarapaca-llegan-venecia-chile-la-bienal-arquitectura/. Our translation.

11 Due to the protests that developed from October 2019 in Chile, the COP25 meeting was transferred to Madrid, Spain.

12 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol*. 2022. Multimedia

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Paz Guevara

How to Listen? or: The Body's Gaze

Paz Guevara is a curator, researcher and author interested in common spaces. In 2009, she was part of the curatorial team of the *Bienal del Fin del Mundo* in Ushuaia, Tierra del Fuego, Argentina, and was curator of *Comunidad Ficticia* at Matucana 100 in Santiago, Chile. In 2011 and 2013, she co-curated the Latin American Pavilion at the Venice Biennale. In 2015-2022, she was one of the curators of the *Kanon-Fragen* project at the Haus der Kulturen der Welt in Berlin, which questioned dominant cultural narratives. In Berlin, she curated *Afro-Sonic Mapping* (2019) and co-curated *Parapolitics* (2017-18). Most recently, she curated *Transition Exhibition* at the Brücke-Museum Berlin, confronting the institution's colonial collection. Guevara has held several conversations, such as the one with "oralitor" Elicura Chihuailaf (*NIRIN NGAAY*, Biennale of Sydney, 2020). She currently teaches in the Spatial Strategies Master's Program at the Weißensee Kunsthochschule in Berlin and is a member of the Archive curatorial collective.

"How to listen to the stories of trees or stones?" I asked Elicura Chihuailaf, Mapuche oralitor, at his home in Quechurehue in southern Chile in 2016.[1] In his oraliture,[2] Chihuailaf refers to a world that is not human-centered, but in multiple conversations, in "the stories of trees and stones that dialogue with each other, with animals and with people."[3] How to listen to these conversations? How might these conversations inhabit the space of an art exhibition, and what transitions would they provoke? What stories would they tell us, what would they make us feel and imagine, and what would we like to offer to the conversation?

This account relates to my experience of what I will call the multivocal exhibition *Turba Tol Hol-Hol Tol*, which I perceived as transiting between listening and conversation.[4] While its Rumors were perceived from afar through audio that was spreading across social networks and the website, the plants and moss of the so-called peatland came to live in the exhibition pavilion in Venice, turning it into a conversational, permeable, and vital space—the one we are still listening to.

Usually, an exhibition is an event that is celebrated and its main function of "exhibiting" is not questioned. However, the very model of the exhibition as a public presentation of works is a format inherited from colonial modernity: culture is often objectified, isolated from outside life, and dedicated merely to the eye of the visitor, who moves through the space of this modern grid where "objects" are arranged, represented, and interpreted. In the work of undoing these limits of exhibitions and taking care not to reproduce the violence of objectification, the concept of conversation that Elicura Chihuailaf describes can illuminate the problems unsettled by *Turba Tol Hol-Hol Tol*'s proposition of "multivocality."

According to Chihuailaf, conversation intertwines multiple subjectivities, being a horizontal practice that problematizes modern asymmetries, such as the division between object and subject, or the ancestral and the modern, creating intersubjective and intergenerational connections. Thus, this concept of conversation indicates a transition from the idea of conversation as an exchange of ideas or arguments between subjects, to an affective, diverse, plural, and relational practice:

> "The binding ritual of all this is the conversation / *nvtramkan* which is essential when you want to know something. Knowing is, they say, the only possibility of loving what has been given to us and, therefore, of reaching tenderness for ourselves. If we love ourselves, we can understand that diversity is extraordinarily valuable and that it is essential to listen to the conversations of people, of the Earth (nature), of the universe that we inhabit and inhabits within ourselves. [...] We should listen – they are telling us – to the conversation of the trees, and not only what they communicate to us, but

also their dialogue with other trees, to also understand how they relate to each other (the daily life of the forest)."[5]

Composed of layers of multiple voices interwoven, overlapping, or entangled, the Rumors of *Turba Tol Hol-Hol Tol* relate sonically to people, forests, winds, waters, lands, mosses. Diverse oralities register their presence collectively and intersubjectively in conversation. They connect us, they tell us, with "the heart of the peat"—*Hol-Hol Tol Tol* in the Selk'nam language of Tierra del Fuego:[6] "…do not fear the peatland, in its darkness we find the dynamism of life… breathe deep and remember, the shared waters, support of a life…"[7] These whispers invite us to perceive the deep layers of the peatlands: its millennia of storage or the modern threat against its community, its extraction, the resistant songs and the new songs, resonating intergenerationally. We attend to a shift, to the transition from exhibiting to listening.

Rather than "including" the peat as an object to be contemplated, the Rumors of *Turba Tol Hol-Hol Tol* begin with listening to transform the very structure of the exhibition and turn it permeable—they make it flow, dissolving its temporal, spatial, and object-subject limits. They integrate and disintegrate it. Unlike the Universal Exhibitions of the 19th century until today, in which elements of nature are exhibited as raw material[8] (taking care to historicize the violence of the exhibition model of colonial modernity), attention to conversation can undo the modern colonial pact between a disciplined eye and an object. The murmurs of the Rumors inhabit us, creating corporeal auditory spaces that bring us into relation with other bodies, territories, and generations.

Rumor #6 continues, and we listen to the multiple voices of the *conversation* from which emerges the song of the Selk'nam poet Hema'ny Molina, linked to the peatlands of Karukinka park in Tierra del Fuego and the collaborators of *Turba Tol Hol-Hol Tol*. The collective call to listen to the living culture of the peatland and the Selk'nam people resonates, along with the reinvigoration of "a society of mutual care."[9] Against objectification, the conversation captures how peat and people are interdependent; and against the neocolonial genocide of the Selk'nam people 130 years ago, the conversation grasps the sovereignty of their territory. For Hema'ny Molina, their song is inseparable from the forest where the peatland is. They are both medium and voice: "What happens is that in order to do something like what I did in the forest, I have to be there to feel."[10]

The Rumors inhabit us and we spread them. I listened to them while walking in Berlin, where I live. While connecting from my cell phone to the digital platform where the Rumors are archived, I was wandering around my neighborhood on the banks of the Spree River, preparing to visit the

1 Paz Guevara and Olaf Holzapfel, "Conversation with Elicura Chihuailaf," in *NIRIN: 22nd Biennale of Sydney*, ed. Brook Andrew (Sydney, 2020). Trans. Camila Yver. See also: nirin-ngaay.net/sections/conversation-with-elicura-chihuailaf.

2 Oraliture is a concept proposed by Chihuailaf that refers to the resistance of Mapuche orality through writing that is colonial, in which oraliture keeps the memory of Mapuche ancestors, without erasing the colonial conflict: "Oraliture is to write next to the orality of our people, of their memory; their songs, their stories, their advice, their conversations; the possibility of expressing their rhythm." Guevara and Holzapfel, ibid.

3 Elicura Chihuailaf, "Sueño Azul," in *De sueños azules y contrasueños* (Santiago: Editorial Universitaria/Editorial Cuarto Propio, 1995), 27. Trans. Camila Yver.

4 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello,

exhibition *Turba Tol Hol-Hol Tol* at the Chile Pavilion at the 59th edition of the Venice Art Biennale. In times when rivers face drought, pollution, and gentrification; peatlands are threatened by drought, fire, commercial extraction, and separation from their communities; and rising sea levels due to global warming inundate coasts and islands like Venice, the conversation of the waters tells of the planet's struggles.

In the oldest area of the Arsenale at the Venice Biennale (the Isolotto, built at the end of the 14th century to repair ships), the *Turba Tol Hol-Hol Tol* exhibition receives us in a shed still supported by old wooden beams. It is humid, being close to the canal. Unlike other parts of the Arsenale at the Venice Biennale that have been rebuilt with prominent white walls, the Isolotto has a rather dark ambience devoid of the framing, control, and objectifying tendency of the modernist white cube.

Upon entering the pavilion, we are drawn into a social space, into the "binding ritual"[11] of the conversation. The Peat Force welcomes us in a role equivalent to that of forest-guards—they care for the life of the mosses, and orally share their knowledge, stories, and experiments during the exhibition. They invite us to begin an "exhibition cycle." We begin to listen. Dedicated to "narrate a story of ecological intimacies,"[12] they tell us that the spongy moss that covers the base of the pavilion comes from a sustainable paludiculture research field in Germany.[13] This moss could be a trick on the eye. But more importantly, it relates to the struggles of the planet, crossing the boundaries of the pavilion. The moss reproduces an alternative way to care for and regenerate peatlands without damaging them. Committed to the preservation of the Selk'nam culture, the Peat Force tells us about the spiritual dimension that unites the Selk'nam community with the nature around them, where the peatland is one of the sacred places where their ancestors rest:

"Our elderly tell us that back in the beginning of time, our hoowen or ancestors did not die, but rather, when they felt tired, they would get comfortable and rest for a long while, but that some of them were so comfortable that they preferred not to wake up, and so they became hills, mountains, rivers, trees, peat, even animals…"[14]

We follow the Peat Force, and continue to walk through a pavilion that has maintained a certain darkness, and we pass over a walkway to a round platform. We sit in a circle, while we feel the sound composition of artist Ariel Bustamante coming and surrounding us. The waves affect and touch us—they embrace our intertwining bodies, we are vibration. I close my eyes and listen with my body. Linked together, body-waves descend through the layers of bass sounds. I breathe and listen. By the hand of sonicity, I keep on the journey of immersion. Ariel Bustamante has recorded the depth of

the peat in Tierra del Fuego, documenting the organic layers of the mosses and their subterranean waters. I imagine its millenary deposits, where what is considered the most dangerous element for global warming has accumulated: carbon from the atmosphere.[15] We feel the peatland's labor of care. Are we listening to its heart? As in the Rumors, the "multivocal" intertwining of the peat, the singing of the Selk'nam poet Hema'ny Molina, and the complex aural spaces integrated by the collaborators of *Turba Tol Hol-Hol Tol* resonates in us. Ariel Bustamante comments on the creative process of this work:

> "It continues a spread, a continuity of air that connects all breathing beings. Humans, trees or peatlands […] We make chains of ears and mouths with the help of others, en-chanting the word *grandmother* and *ambiguous*, the word *new* and *mestizx*, *Selk'nam* and *vegetal*, all advancing and spinning on themselves, mixed, back and forth."[16]

Listening is a way to reintegrate in a broader sense "the body's gaze"[17] rather than the gaze of the eye. We listen with the body. As the Aymara/Bolivian sociologist and activist Silvia Rivera Cusicanqui tells us from her theory/practice of the epistemology of orality, it is important to decolonize the ocularcentrism of space. That is to say, to de-center vision as the dominant sense over the other senses, in order to stimulate a "knowing as a bodily political practice."[18]

Turba Tol Hol-Hol Tol's circular platform brings us together. It integrates bodies, collaborations, and senses. As a social and meditative space, this structure created by architect Alfredo Thiermann in collaboration with Sebastián Cruz modifies the habit of exhibitions usually intended for the individual. We listen collectively. While we listen, a film is integrated into the exhibition cycle. Projected around us on an organic screen, the film created by Dominga Sotomayor –with the collaboration of the director of photography Benjamín Echazarreta– surrounds us like a skin. Between documentation and virtual speculation, it brings experiences of the peat. More than representing, the blurred imagery spreads sensations. Micro-actions happen inside and outside the footage: from the collective experiments of *Turba Tol Hol-Hol Tol* in Karukinka Park in Tierra del Fuego; the network of subterranean, dense, and porous ties of the peatland; or the abstract stains of color and light that are co-created as the biomaterial of the skin-screen transits and changes. The pinkish-green of the filmic mosses bathes everything, it passes by the faces of all of us in the circle. We dive. The exhibition cycle continues with an aromatic essence of peatlands, offered to us by the peat-guards, re-intensifying the bodily gaze. *The daily life of the peatland*, Elicura Chihuailaf could say, relating it to the conversation of the forest.

Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol*. 2022. Multimedia artwork, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.

5 Guevara and Holzapfel, op. cit.

6 Rumors, https://turbatol.org/rumors.html.

7 Rumor #1, with CM² (Carla Macchiavello y Camila Marambio), Hema'ny Molina, and Bárbara Saavedra (text), Isabel Torres (voice), Cecilia Vicuña (original ñirre chant), Ariel Bustamante (sound adaptation), op. cit.

8 Rumor #6, with Catalina Valdés (text), Isabel Torres, Hema'ny Molina, Fernanda Olivares Molina, Ariel Bustamante (voices), Ariel Bustamante (sound adaptation), op. cit.

9 Turba Tol Hol-Hol Tol, https://turbatol.org/index.html.

10 Rumor #6, op. cit.

11 Guevara and Holzapfel, op. cit.

12 Fernanda Olivares and Isabel Torres, "Peat Force," https://turbatol.org/peat-force.html.

13 *Turba Tol Hol-Hol Tol*

The seemingly invisible relations of space emerge when they are untied. Contrary to the concept of modern colonial space, articulated by linear perspective—which assumes a subject observing an object from a distance, centered on that eye—the multi-sensory network of the exhibition dissolves the bonds of perspective, and instead of looking at a horizon, we integrate the performative dimension of all bodies, even the sensation of the fusion of the senses characteristic of synaesthesia. When we stand up from the platform to return and conclude the cycle, I attentively perceive that the moss has always been there, growing in its greenery, diversity, and everyday life. Co-inhabiting the pavilion, the peatland is not a theme to be "included" as a new repertoire for a thematic exhibition, nor is it situated as a distant, mysterious reality, nor as an exotic ethnographic "object," but is part of the very oralities that live in the conversations. The *transitions* in the exhibition mark the passage from one state to another, a gradual and radical change of structure, rather than of a theme. In this way, the peatland also looks at us and listens to us through the moss: a possible reality we can tune in to by listening. Freed from the trap of objectification, the subjects flow to perform *the body's gaze*. As Camila Marambio, in her curatorial work of thought, care, and eco-aesthetics tells us about the vital presence of the moss in the exhibition:

> "They are bodies that emit and re-emit words. If we disturb the grandfathers and grandmothers resting in the peatlands, the so-called fossil fuels, we disturb their sleep. We will cease to exist. The voices of the bodies of the past are the peatland. Turba Tol in Venice is an instrument to protect the peatlands of Patagonia."[19]

collaborated with the Greifswald Mire Centre (GMC) in Germany, a foremost institution for peatland research, to cultivate *Sphagnum* moss from their fields. The *Sphagnum* is the main organism of the peatland. These new *Sphagnum* are an alternative for preserving and restoring the original peatlands. See also: Christy Gast, "*Sphagnum*LAB," https://turbatol.org/sphagnumlab.html.

15 See also: Patagonian Peatland Initiative, "What are the peatlands?," https://turbatol.org/peatlands.html.

16 Ariel Bustamante, "Creative Processes," https://turbatol.org/creative-process.html.

17 Silvia Rivera Cusicanqui, *Ch'ixinakax. On Practices and Discourses of Decolonization* (Cambridge: Polity Press, 2020), 19.

18 Ibid, 28.

19 Camila Marambio, communication by email with the author, September 2022.

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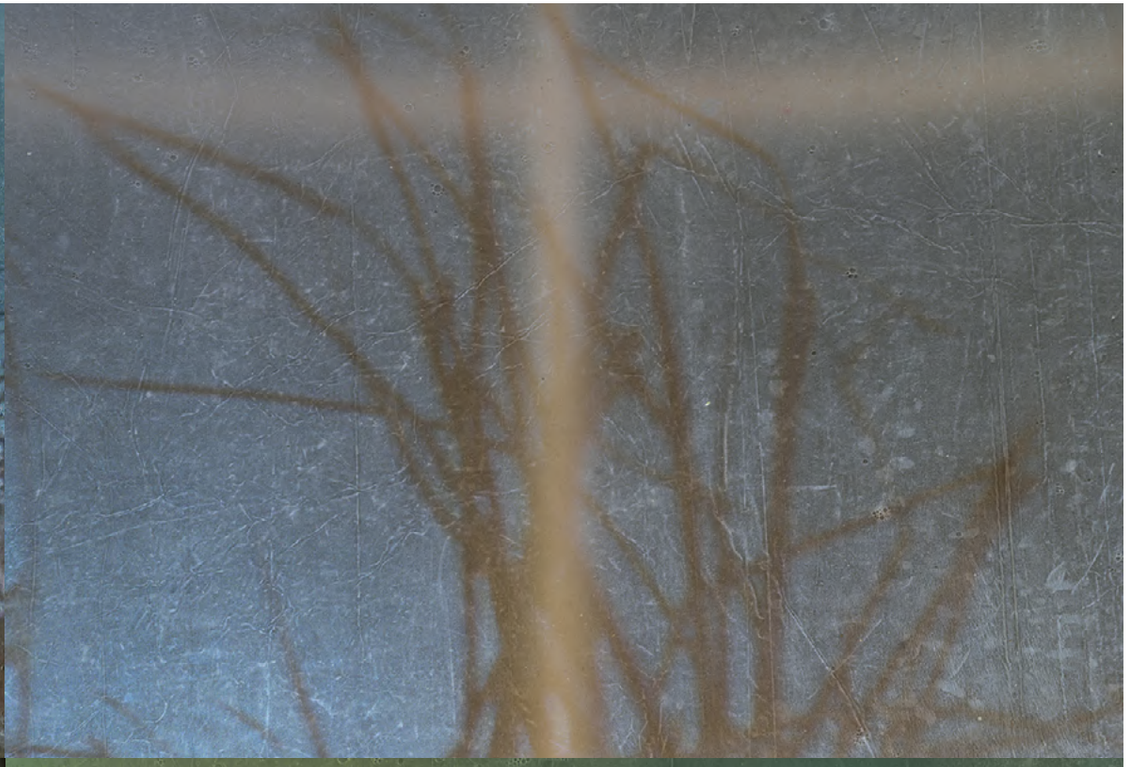

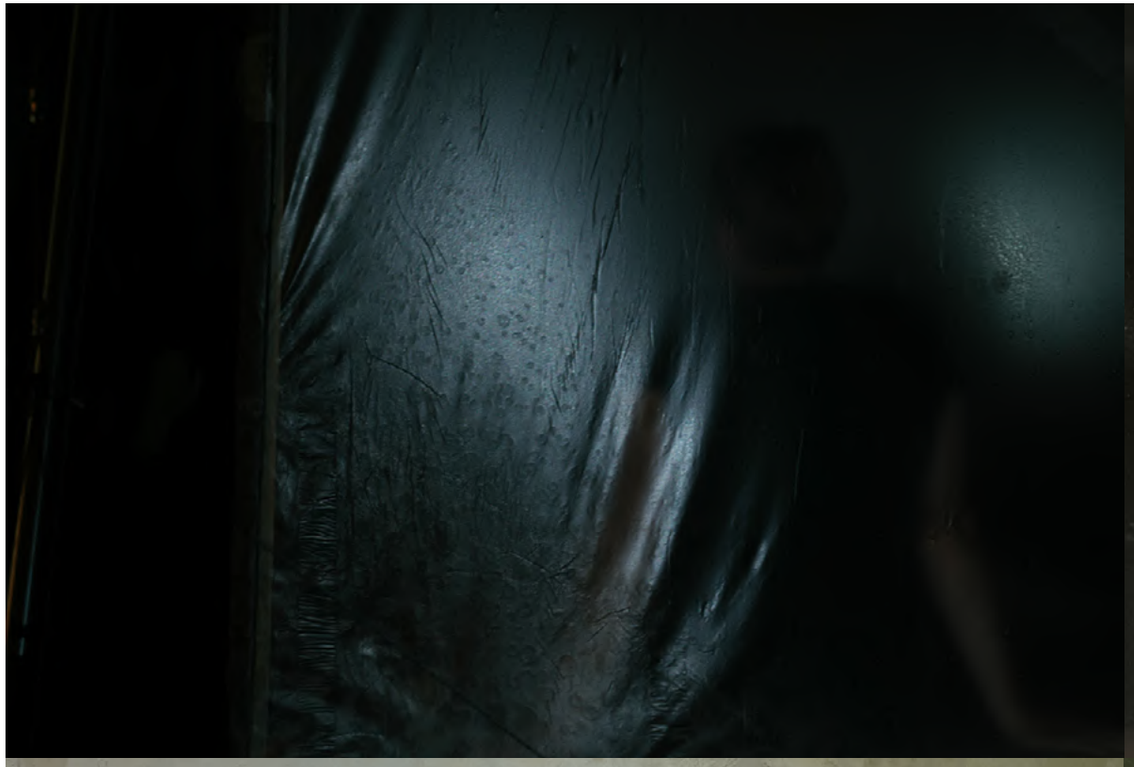
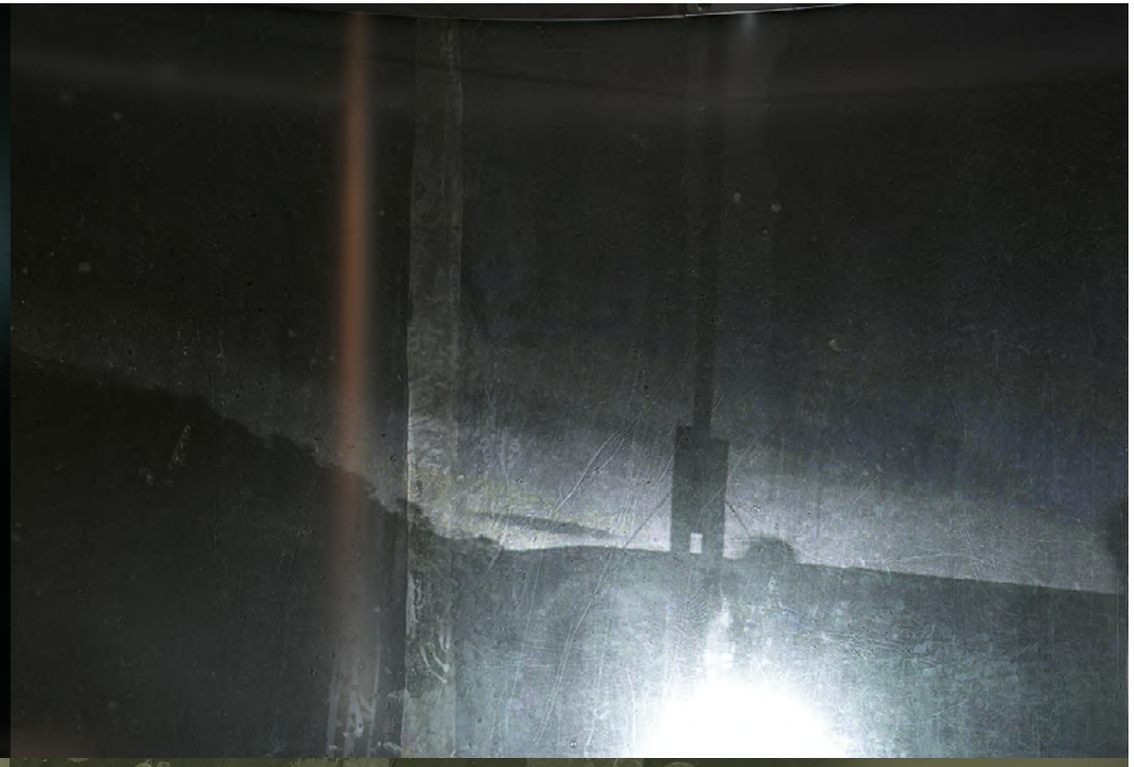

Ana M. Ochoa Gautier

Turba Tol Reverberations

Ana M. Ochoa Gautier is a professor in the Newcomb Department of Music, the Spanish and Portuguese Department, and the Communications Department at Columbia University (New York). Her work examines histories of listening; sound studies and climate change; and the relationship among media, the literary, and the sonic in Latin America and the Caribbean. She has been a Distinguished Greenleaf Scholar in Residence at Tulane University (New Orleans, 2016) and a Guggenheim Fellow (2007-2008). Ochoa Gautier also has served on advisory boards for the Society for Cultural Anthropology and the Smithsonian Center for Folklife and Cultural Heritage. Her book, *Aurality, Listening and Knowledge in Nineteenth-Century Colombia* (Duke University Press, 2014) was awarded the Alan Merriam Prize by the Society for Ethnomusicology. She is the author of *Músicas locales en tiempos de globalización* (Buenos Aires: Norma, 2003) and *Entre los Deseos y los Derechos: Un Ensayo Crítico sobre Políticas Culturales* (Bogotá: Ministerio de Cultura, 2003) as well as numerous articles in Spanish and English.

Turba Tol Hol-Hol Tol is an event that assembles multiple sound components: the Chilean pavilion's installation at the 59th International Art Exhibition - La Biennale di Venezia, the series of seven Rumors-essays available on the pavilion website, the collective sound projects that led to creating the installation, and the variegated listening practices offered by its constellation of materials.[1] This essay builds on all of these sounds as a way to create a listening tour through the pavilion at the Biennale.

In order to explore this acoustic richness, I interviewed Selk'nam poet Hema'ny Molina and sound artist Ariel Bustamante, both of whom are part of the *Turba Tol Hol-Hol Tol* creative team and crucial for the project's acoustic composition. Our conversation took place over Zoom on February 21, 2022, and included their unexpected invitation to listen to the sounds of the work in Venice, allowing me to navigate the ship-installation remotely through radio waves. *Turba Tol Hol-Hol Tol* is an experience that invites us to be carried away by the imposing impact of the audible, a sound event more like an acoustic journey through potential worlds than a predetermined sound map.

Here, sound rehearses an *audiovisual* dimension that is partly related to the work's various visual materials (cinema projection, architectural structure, moss experiment with *Sphagnum*LAB, among others) and the way in which the accompanying texts seek to conceptualize their creation.

Historically, sound art is considered an expanded form that emerged from multiple displacements of the normativity of visual and musical arts throughout the 20th century. Such normativity includes noise and silence in redefining musical elements, electroacoustic processes in the production and organization of sound, art installations that erase the border between visual arts and sound, and technological transformations of the ways to manipulate the relationship between cinema and sound, to mention just a few.[2] Thus, the "non-specificity"[3] of sound art does not coincide with the emerging digital humanities in the late 20th century, rather it has been a gradual process that began over a century ago. The immersive sonority of this work grounds us in another historical moment: a time when the meaning of arts and humanities is shifting to address issues like climate change. This era focuses less on blurring the boundaries between the arts or questioning their normative nature. Rather, it is a time in which sound art has come to be consolidated as a planetary art that seeks to match the elements' rumor with the developing creativity of various living beings and the earth. It's what John Mowitt calls the *ambient humanities*.[4] *Turba Tol Hol-Hol Tol* is a water-earth eco-sound that generates audiovisual journeys through various sentient-thinking life forms. Listening to the sound events is an invitation to be part of the metamorphoses of forms such as peatlands, which are themselves a metamorphosis of the water, land, and air of Karokynká/Tierra del Fuego.

We enter *Turba Tol Hol-Hol Tol*, the Chilean pavilion at the Venice Art Biennale, with the ear of a wind person that submerges us in the Selk'nam peatland sounds. The entrance is not abrupt, but deep and enveloping, a wind-acoustics that anticipates *Turba Tol Hol-Hol Tol* as an invitation to learn to breathe underground, breathe *with* and not on the planet where we have been invited to live. That wind that envelops us is not just a breeze but a wind-sound, brother of the high-volume winds like Taino hurricanes, a wind-sound impossible to escape and which defines how we are located in the peatland geophysics. Its immersive quality seems to imitate how sound waves are much more malleable in water than they are in the air.

The wind is shaped by anything that makes it sound: the swamp-cradle of the peatland, the water of the sea, the sands of the desert, the forests of Tierra del Fuego, the vegetative layer of the earth. There are several recording technologies that allow us to hear it and the other sound layers of *Turba Tol Hol-Hol Tol*. There are the feathers of flamingo, a bird that, in Ariel Bustamante's words, "lives in the Collasuyo desert, where I'm currently walking and learning, on the border of northern Chile and Bolivia, as well as in Karokynká, where Hema'ny lives." This feather is "our technology of mutual flight, of organized cooperation between me and Hema'ny."

On the other hand, we have access to Hema'ny's conversations with her daughter, Fernanda, which help identify their cultural belonging in order to sing and listen in projects that involve remote collaboration (see, for example, Rumor #6). We also have technological devices that facilitate the material recording of this sound. Furthermore, this whole recording process is permeated by Ariel Bustamante's listening, who learns "from a wind, from a wind person who has a particular circuit and is recognized as part of the Uru-chipaya society in Collasuyo." The sound of the wind that is heard at the entrance to the Chilean pavilion in Venice therefore takes us into the collaborative project of *Turba Tol Hol-Hol Tol*. Like whales swimming, this wind forces us to echolocate each other by means of its sound in the peatland-song of *Karokynká*.

Once in the peatland-sound, we are welcomed by a song of healing sung by Hema'ny Molina, founder of the Hach Saye organization. Based in Tierra del Fuego, the objective of the foundation is "to develop, protect, and promote Selk'nam culture and its territory in order to empower all Selk'nam in Chile, so that they can reconnect with their culture and develop as people and professionals with an indigenous identity."[5] When wind turns into song, everything becomes quiet, intimate. Just as peatlands regulate the planet's carbon dioxide levels, ancestral songs that are sung within families restore Selk'nam sounds, shaping new ways to breathe and create sound. Hema'ny reminds us that Selk'nam songs are family songs:

> We are not using chants from other Selk'nam groups or other families. Out of respect, we don't sing any other family's songs. We create our own songs. And those songs don't follow scribal forms or memorable criteria. Because they're born in the moment. And they depend on the situation, and why they are born and why they are needed. Many times songs will heal us. They just arrive when they have to. And it's part of the sound of our people. Of course, every family has its own way of singing, every family has its way of expressing itself. My family doesn't second guess this tradition at all. And it's like a tiny legacy that I'm leaving to my daughters because we've made clear how important this is.

Hema'ny's song opens a door to the heart of the peatlands or Hol-Hol Tol. We must exhale the air in our lungs, transmute CO_2 to become a breath of sound and surrender to being transformed by the family voices, which are also part of the multi-species voices that perspire in the peatland. Hema'ny tells us how that Selk'nam voice is articulated:

> We have a lot of records. There are more than three different dictionaries of the Selk'nam language. There are many texts and books. What are we doing at the Hach Saye Foundation? We communally decide how we want to use our language based on what we believe is the best for our culture. So we hold weekly meetings where we end up agreeing on how we want to use our language. This is a means to prevent outsiders from coming in and imposing external norms. And our decisions are based on how we experience and feel our territory. I do a lot of exercises. For example, when there's a strong wind I go to the seashore and speak against the wind. And I feel how the wind carves around me and that's why it sounds like it sounds. It's easy to speak Selk'nam with good phonetics when speaking against the wind. And these are some of the things I've discovered here. I talk to the animals and they answer me—I don't know what they say, but they answer me. But I do these exercises here, in Tierra del Fuego, because our language is onomatopoeic, so as I get those sounds out, the language comes out more fluid.

These forms of voice are made through layers of songs and sounds of living beings that envelop the listener and aerate people, wetlands, and winds in order to become sound. They stand in stark contrast to the recent historical confinement of Selk'nam chants made through recordings from the end of the 19th century and throughout the 20th century, by outsiders who claimed the songs would otherwise become extinct. At *Turba Tol Hol-Hol Tol*, we are not in a period of extinction, but in a full recomposition of voices and breaths. In the sensation of patience and stillness that Hema'ny's voice generates, one hears that songs like the peatlands are not meant to

1 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol*. 2022. Multimedia artwork, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.

2 See the doctoral thesis of Lílian Campesato, *Arte Sonora: Uma Metamorfose das Musas* (São Paulo: Universidade de São Paulo, 2017).

3 Florence Garramuño, *Mundos en Común. Ensayos sobre la Inespecificidad en el Arte* (Buenos Aires: Fondo de Cultura Económica, 2015).

4 John Mowitt, Sounds: *The Ambient Humanities* (Oakland: The University of California Press, 2015).

5 "Nuestra historia," Hach Saye, https://hachsaye.com/conoce-la-historia-de-fundacion-hach-saye

be locked up in privatized digital network platforms, starved, wheezing out death, orphaned, and stripped of any peat that lets them breathe.

This patience of multi-species singing contrasts with what lies in a corner of *Turba Tol Hol-Hol Tol*, a rumor that voices protest, a crucial protest for a people whose voices were historically declared extinct. Hema'ny says:

> There was always this imaginary of the last one. When Anne Chapman arrived in Tierra del Fuego to study the Selk'nam people, with whom she became fascinated after studying [Martin] Gusinde's material… She didn't pass through Chile. She went directly to Rio Grande, Tierra del Fuego. And she worked there with Lola Kiepja. And when Lola Kiepja died, she said, the last Selk'nam has died. Then it turned out that after the last Selk'nam speaker died, Angela Loij appeared. And Chapman went on working with Angela Loij. Then her discourse changed. Lola was no longer the last Selk'nam speaker, she was the last shaman. And so… there is always a last one. So, clearly there will never be a last one. Yagán elder Cristina Calderón—may she rest in peace—once said: as long as there are women giving birth, our people will never end. Whether they're mixed or not. Our people are not finished. Our culture will continue.

These erroneously abducted songs, identified as "the last ones," are distributed today on YouTube, Spotify, and other corporate platforms that claim to spread them as a means to safeguard them. But the notions of saving and guarding derive from policies of confinement and dispossession that have characterized the colonial circulation of indigenous sounds. In the case of the Selk'nam, these practices have been widely documented by anthropologists, such as Miguel García, Camila Marambio, and the Selk'nam themselves, who seek legal recognition in Chile as a living people. Extinction is not disappearance. It is the appropriation and indiscriminate distribution of living beings, such as songs, air, winds, languages, trees, whales, people, and peatlands which continuously appear, as Hema'ny astutely says, as "the last one."

Selk'nam families have asked that the songs and voices be returned to their cradle-land. But they have yet to be returned. Those who claim to protect the songs by making them available on the internet live in a "cognitive abyss," as indigenous intellectual Ailton Krenak would say.[6] That cognitive abyss involves fully understanding that, in the 21st century, both daily and legal practices to protect and circulate the chants must be determined by the Selk'nam. The fact that institutions such as the Anne Chapman Foundation or the Berlin Phonographic Archive do not return these songs with full legal authority to their communities of origin, is not a show of ignorance or carelessness, or not knowing how to proceed. There have already been many confrontations between the archive owners and the heirs of the songs.[7] The procedures through which these processes can be carried out are widely known in the ethnomusicological world, through diverse policies and examples of repatriation and cultural restitution. The cognitive abyss here refers to the fact that despite full awareness of how to alternatively proceed, these institutions, which have legal ownership over the songs, act as if this were acceptable, enhancing the devastation of the earth's songs on digital platforms as an abysmal normality. Just as earth conservation policies are ignored, as if we had two planets to consume or the energy that sustains the digital platform did not itself depend on conservation policies, song conservation polities are also ignored. In this sense, reproducing these songs on digital platforms lies more on the verge of collapse than the planet that gives life to the voices. *Turba Tol Hol-Hol Tol* resists this logic through its careful and collective curatorial process, which visibly contrasts with the current exacerbation of decontextualizing the songs.

After this historical listening, my ear continues traveling the *Turba Tol Hol-Hol Tol* project. I go back to the virtual listening session, submerge myself in the sounds, and reach the peat forest of breaths. Selk'nam breaths, peatland breath, moss on moss, intertwined voices. It's sound-breathing-peat. *Ho ho ho*. Again. Intensity. *Ho ho ho ho*.

Breathing: vegetable layers, water-breaths, ancestral female song-breaths, ground-breaths, tongue-breaths, forest-breaths, feather-breaths, *ho ho ho ho*. Rumor by rumor, rehearsal by rehearsal, ear to heart, the submerged sound-breath of the peat bog takes us into the earth. Everything acquires a dense sound that, instead of weighing us down, transmits millenary, swampy feelings—the cradle of possible futures. Everything becomes sound-breaths.

Nina, my canine companion, jumps into my lap and looks at the computer to listen with me. She turns her little head back and forth, over and over, as if wanting to see where that sound comes from. We are now two new listeners being lured into the peaty sound-chant. From her house, Hema'ny lifts her puppy up to the computer camera so that Nina can see him on Zoom. Everything sings. *Ho ho ho ho*.

As I mentioned at the beginning of the text, I'm not at the Venice pavilion. I'm in a generous Zoom session with Ariel, with Hema'ny, with Nina, with Hema'ny's little dog, who listens to Nina, and with Ariel's wind-person, that border and desert wind that holds everything together, patiently waiting. Ariel and Hema'ny have generously shared with me and Nina the sonority of the Chilean pavilion in Venice. Nina and I are in San Juan, Puerto Rico; Ariel in La Paz, Bolivia; Hema'ny and her dog in Porvenir, Tierra del Fuego; Fernanda Olivares, Hema'ny's daughter, silently present from Venice

6 Ailton Krenak, in Zoom talk "The Devouring of the World and the Climate Crisis," September 27, 2021.

7 The ethnomusicological debate on the legal rights of indigenous archives is wide-ranging and policies differ in the United States, Australia, Latin America, and elsewhere, according to laws and projects on indigenous cultures. Specifically, here I refer to the meeting organized by Denis Laborde, the Haizebegi Festival, Les Mondes de la Musique in 2019, in which Mirtha Salamanca, one of the Selk'nam descendants of Lola Kiepja, and the then director of the Berlin Archives, among others, were invited. See Villamil Arihana and Mirtha Salamanca, 2019. Personal communication with Arihana Villamil.

as guardian of the entrance to the wind-sound and the songs; Camila Marambio and Carla Macchiavello are in the background waiting for this listening-essay. The peatland's sound is among us all. The intersection of listeners and sounds keeps growing. The Selk'nam songs echo in their family voice, nourished by peat and listeners from multiple places and species. This is the life-platform of Selk'nam songs. "*Hach Saye*," says Hema'ny, "is the space between two heartbeats." There, in that space, the songs grow.

Thus, voice extinction is transmuted and CO_2 is recomposed through listening—wetland, word for word, swamp to swamp, murky listening of mutual care. After passing through the peat-breaths, the wind person begins to guide us toward the exit: we leave among voices and sounds. Nina barks and jumps down to the floor. They say that in the past, when it was very cold, Selk'nam children would sit in a circle and dogs would curl up around each other, covering their tiny bodies with their own bodies and skin, sharing the heat-noise of each other's breaths.

With this memory unfolding in a parallel time, the guardians of *Turba Tol Hol-Hol Tol* take our hands and the wind person's ear guides us out. We return to the surface. After resting, when everyone is back in their place, the rumors remain. Seven peaty voices to listen to here, https://turbatol.org/rumores.html, seven sound rehearsals that circulate between peatland and life. In the meantime, I'll let Hema'ny's voice end this essay: "I think the words are already beginning to overflow right now. We just have to listen."

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Bárbara Saavedra Pérez

A Call to Action and a Way Forward: The Venice Agreement, or the Art of Collaborating to Locally Preserve Peatlands of Global Importance

Bárbara Saavedra Pérez holds a PhD in Ecology and Evolutionary Biology, a Master's in Ecology, and a Bachelor's in Science from the Universidad de Chile. She works in biodiversity conservation and led the establishment of Parque Karukinka, the largest forest and peatland reserve on the Isla Grande of Tierra del Fuego, Chile. She was president of the Sociedad de Ecología de Chile (Ecological Society of Chile), with active participation in various public and private councils: Consejo Nacional de Ciencias, Tecnología, Conocimiento e Innovación (National Council of Science, Technology, Knowledge and Innovation), Consejo Chile-California (Chile-California Council), and Fondo Naturaleza Chile, among others. She is a founding member of Ensayos. She also promoted the Red de Constitucionalismo Ecológico (Ecological Constitutionalism Network), contributing socio-ecological contents to Chile's new constitutional project. Saavedra Pérez promotes biodiversity as a pillar for the welfare of societies and the critical value of its conservation for current and future social welfare, emphasizing the design and implementation of effective and integrated conservation work in territories and communities.

I am an ecologist and I see the world in multiple dimensions: a hypervolume of species and spaces, infinitely diverse and ever-changing, cradled in a delicate, invisible, and threatened atmosphere, connected in innumerable ways to the earth through an increasingly degraded ecosystem. Like the peatlands.

I live and breathe the scientific practice of conservation of biodiversity, effectively what makes our planet utterly unique, as extraordinary as it is complex, as ubiquitous as it is diverse; both idiosyncratic and truly global. Every part of this biodiversity is a distinctive story—territorial and incomparable, inevitably intertwined with human existence and history.

Biodiversity is the network that connects us ecologically and in terms of evolution to every single manifestation of life on the planet. Humans, cultures, societies, economies, science, the arts… Nothing exists in a vacuum; everything is joined by this biophysical basis that is biodiversity. An ecological framework that holds up and sustains human populations and has a thousand different facets that we barely see, in the form of the seas, lakes, rivers, streams, oceans, steppes, forests, wetlands, oceanic trenches, highlands, salt lakes and, of course, peatlands.

The varied and complex natural systems function in an integrated, dynamic way, with ecological structures and interconnections that are often invisible to us, and function at a variety of levels. They form an ecological weave that is the product of ancient, unique, and one-off evolutionary stories embracing human societies and all their existence, from the mundane to the utterly metaphysical.

Nature and biodiversity have an intrinsic and inalienable value for the wellbeing of societies. Their ecological function offers a combination of systems necessary for the maintenance of this universal and unique peculiarity, from the provision of fresh water to the maintenance of the ozone layer or the integrity of our translucent atmosphere. As humans, we have a basic, indissoluble, and vital relationship with nature and its biodiversity. Our entire existence occurs in relation to nature, in specific, tangible, diverse and ever-changing territories. It is an undeniable and fundamental fact that humans and nature are one and the same. We too are peatlands.

Biodiversity and complexity are two characteristics inherent in life. In practice, biodiversity is an almost infinite variety of taxonomic groups and singular evolutionary lines differentiated by a unique eco-evolutionary occurrence in one of numerous given geographical situations, which develop into beautiful, challenging ecosystems that finally give life to the one biosphere in the whole universe. Biodiversity has a soul in every single one of the 10 to 30 million different species which we estimate inhabit our planet, in every single individual expression of a given species, and in every single one of the ecosystems to which they provide structure and functionality. Vital

ecological processes such as the capturing and storing of carbon, or the hydrological and nutrient cycles, are part of biodiversity. Many operate at a different scale to our human perceptions, and in general they remain hidden to the uninformed. As human beings we know only a tiny handful of the species and ecosystems: a few mammals, some birds, insects, some plants that we might have eaten. We recognize and feel part of the ecosystem that we inhabit—that of our relatives and others who do not threaten us. Sometimes we are surprised by unexpected events such as vast floods, or the drying of a wetland. But the truth is that we are woefully ignorant of the extraordinary range of most of the biodiversity existing on the planet, and we barely scratch the surface of understanding the lives that we are intertwined with, that are part of us, and that we entirely depend upon.

The second inherent attribute of nature is its complexity. Ecosystems are living systems that are interconnected in a multiplicity of ways. There is interconnection at an atomic level that allows for the creation and integration of the basic molecules of life such as DNA or glucose; or at a physiological level that allows for the integration and functioning of the organs that make up the body. These are ecological connections that enable trophic relationships or the movement of nutrients from one level to another and are certainly central to the evolutionary, adaptive transformations of life. The natural systems work in an integrated and dynamic way and the ecological interconnections that allow them to exist operate at a variety of levels, establishing intricate dynamics. Some are ephemeral, such as the generation or death of a bacteria, while others can transcend and grow in human time such as the millennial dynamic of the birth and growth of a Patagonian peatland.

Given the ecological-evolutionary characteristics of nature, which include its structuring and functioning at multiple levels, its systemic and integrated condition, it cannot be appropriated. Biodiversity in its entirety is the most relevant and necessary space and common good that local and global society has. Biodiversity connects, protects, and sustains us today; and it watches over our tomorrows. Our greatest challenge is to move forward as a society to promote the recognition, valuing, care, and restoration of biodiversity as an essential mechanism of mutual protection.

Given how omnipresent biodiversity is, it is invisible. And our collective blindness to its existence has led to its massive destruction. Despite not being part of the social, political, or cultural collective imaginary, the loss of biodiversity is the largest global problem that we face as humans. Its degradation, as well as that of nature itself, is voracious, multiple, and silent. It is a process of degradation that degrades us as humans because we are one and the same.

The *sine qua non* condition of our existence is that it is only possible in the concrete reality called biodiversity. So its conservation, even though it might be complex, cannot exist separately from this materiality. The most profound transformation we must undergo is to merge the concept of biodiversity with that of action on its conservation. Or, better put, the infinite ways in which it could be conserved. Conservation and biodiversity sustain and promote a philosophy of action, in which the theoretical word or discourse about conservation are activated by contact with, sustaining and caring for this collective body.

The global mandate is clear: we must reverse the destruction of biodiversity and advance its appreciation, protection, and restoration. This global route doesn't exist yet but urgently needs to be developed. There are already various shortcuts set up across every territory, many of them interwoven into a pattern at a local level, a fragile webbing still under construction to protect global biodiversity. Every single route is necessary and valuable. Whatever shape it takes. Whatever space it is in.

Conservation is a young discipline of action whose clear and unavoidable mandate is to reduce, delay, and revert the pattern of biodiversity loss that we are experiencing globally. And this includes the degradation of the peatlands. It is a science of urgency and action. Given the ubiquitous, ever-changing, multi-level manifestation of biodiversity and the diffuse relationship it established with human societies, the practice of conservation necessarily demands the participation of many different actors. Articulated. Dialoguing. Coordinated. United by the umbilical cord of life; a single breath that integrates, brings together, makes visible, connects, amplifies, and gathers human actors in a primordial network. This idea of continuity and dependency might seem revolutionary, but it is nothing more or less than the confirmation of the essential for the existence of life.

The world's peatlands are invisible from space as they cover only a tiny fragment of the planet. As with the rest of biodiversity and so many other rare things, the peatlands are extremely valuable because in their minute-scale structures and profound depths they store massive carbon reserves, making them the largest land-based carbon sinks on the planet, contributing therefore to the care and maintenance of the atmosphere and the climate. Their protection is of paramount importance, as is the case with other elements of biodiversity. And because the peatlands are biodiversity their protection can only occur in the real areas where they are found, interconnected with the waters, the people and the amazing network of life that gives them life. Including the lives in Patagonia.

I live in the south, where I am invisible to those at the decision-making centers, although we do coincide in the narrative that tries to revert the loss of biodiversity afflicting our world. I develop strategies in the theoretical-

practical management of the socio-ecological complexities through a systemic approach and systemic conservation of the Tierra del Fuego and Patagonian peatlands. I am a craftswoman and my conservation work is undertaken in a diverse environment where I try to shape this slippery, changeable mud that is at the same time omnipresent and vital. And that is today still invisible to most of my fellow compatriots. There are thousands of actions like this. All processes of transformation that we must urgently undertake as a local/global society. There is so much experience waiting to contribute to the urgent global mandate of transformation, a pathway that is still in its infancy because it doesn't know the infinite diversity of life and the infinite spaces in which it is cared for. It is this diversity intrinsic to life that is impervious to generalized solutions, forcing us into profoundly creative processes that are born precisely from the conservation processes located in specific human and territorial spaces. That is where the urgent transformative processes that unite us are born. A global movement of unique experiences.

In a process of transformative and beautiful reacquaintance, we have been looking with both a scientist's and an artist's eyes at the task of protecting the peatlands of Patagonia and the rest of the world, calling for a multi-level integration of the peatlands and their custodians. Not at a local level, but globally, through the Venice Agreement; an ecopoetic commitment to protect local peatlands that are so valuable and yet so invisible at a global level. A necessary and still unique experience, waiting to enthuse more. A vector for this could be these words, spoken at the closing event on 2 June 2022 in Venice:

Facing an undeniable climate and biodiversity crisis, we may tend to think that there is nothing more than an obscure future… and that such a dark and dry future is the best one we can aspire to.

We even have been taught that the future is something we don't have the key to knowing. Or creating.

But the truth is that we, as a collective gathered in Venice, sum 600 years of learning, experiencing, imagining, and constructing, and we actually know how the future can be ignited and transformed into infinite possibilities. And we can do so by conserving our peatlands locally, now.

Today, Global Peatland Day in 2022, we are bringing here a plan: The Venice Agreement. A memory of a future that can be. A compass to get lost in the finding of new worlds, new imaginations, and new futures.

Today The Venice Agreement starts to exist. The wisest, truest, most committed, most experienced, most tangible, most real, most diverse, and, above all, strongest call for the recognition, appreciation, and effective care of peatlands in each territory of this planet.

We aspire for The Venice Agreement to help free peatlands, help them be seen in plenitude, help them to remain alive, and get involved in conversations that must never end: between peatlands, between people and peatlands, about possible futures, and future human well-being.

The degradation of our planet and its peatlands may ultimately be the failure of imagination, eclipsed by accountability systems that are not able to account for what really matters. And peatlands matter. By capturing carbon, they matter for climate change mitigation. By storing and purifying water, they matter for producing food, materials, and medicines.

By being, they became our ancestors, and in the future, they can sustain lives and livelihoods forever.

The tyranny of the quantifiable distinguishes what can have monetary value, over those things we cannot assign value: private over common, efficiency over enjoyment and quality of life, utilitarian over the mysteries and means, and the treasure of having a purpose, being courageous, to make human life worth living. Through a collective work like The Venice Agreement, we invite each one of us to live the infinite lives of biodiversity and nature. Forever.

The tyranny of language is in part the failure of language and speech to describe complex, subtle, fluent, and ubiquitous phenomena of life. Like peatlands. The Venice Agreement invites us to create new languages to name those things that need to be named. Things that need to be known if we expect to live, and let peatlands live a good life around the globe.

The Venice Agreement is full of stories, like mine, like Randy's, like Hans, like Camila's; and Nancy, Suzanne, Jane, Jan, and so many others, who gathered here and around the world to share, and who now start to become part of an explosion of formerly silent stories which can now be told, be learned, and exist all over the world.

The Venice Agreement was released today. And like Pandora's myth, it is released to the entire world, locally. Unlike that myth, Hope is what we are releasing first, along with knowledge, inspiration, love, and joy. Thanks to our commitment, unlike that old and well-known story, all these virtues are never to be put in a cage again.

Celebrating Global Peatland Day today, we invite you to join and add to this peatland protection movement on this vast planet of ours. We invite you to dissolve the cultural, financial, and social barriers, and assume the evident ecological fact that we all depend on nature, and the ethical/practical need to care for peatlands.

Let experience be bigger than knowledge. Let different experiences feed different "knowledges." Let peatlands feed our futures. Let peatlands be our future. Everywhere.

I thank you all from the deepest and darkest of my peatland heart.

Denise Milstein

Keeping–While–Giving the Gift of Scent

Denise Milstein is an Uruguayan writer and researcher based in New York City. Her work develops a relational, historically grounded perspective at the intersection of art, politics, culture, and the environment. Current projects examine urban dwellers' access to nature in New York City public spaces; the interactions of artists and archivists with near-obsolete technologies in marginal spaces of cultural production and reproduction; and building a narrative and oral history archive of New Yorkers' experiences with the COVID-19 pandemic. Milstein is a member of the nomadic Ensayos research collective. She teaches sociology at Columbia University (New York); is co-director of the NYC COVID-19 Oral History, Narrative, and Memory Archive; and edits *Dispatches from the Field*, a series dedicated to publishing collections of ethnographic data fresh from the field.

There is a plot in the back of my building.
Not the size of the asteroid.
Not what four
hyper-crenellations of a reef would have held when there were
reefs. It's still here. I must not
get the time
confused. The times. There is a coolness in it which would have been new
Spring. I can't tell if it's
smell, as of blossoms which would have been just then
beginning, or of loam. Through this
green sensation is
a thing which threads & pushes
up. What is it pushes it. Whatever pushes it we
must not get the feelings confused, the feelings of this—in this—
now. One of us looks in
the field guide. One of us looks up to where the sky had been.
Our prior lives press on us.
Something with heavy re-
collection in it
presses.

- "Thaw," in *Runaway*, Jorie Graham[1]

In November of 2021, I began working with my fellow Ensayistas on creating a gift of scent for *Turba Tol Hol-Hol Tol*, the Chilean pavilion at the 59th edition of the Venice Art Biennale.[2] We knew that the Tierra del Fuego turberas would be breathing and living there in translation. The gifts were to come from the group of us, artists and writers, who have participated in Ensayos from our scattered bases, in North America, Chile, Australia, and Norway.[3] In our work as Ensayistas, the Chilean turberas have always been unique, but have never stood alone, and thus our sense of peaty solidarity gave depth to our gift giving. Our sense is that the turberas fueguinas exist in relation to the peatlands in each of our continents—some intact, others disappeared— all of which we came to know over the course of this process. These include the patterned fens of Minjerribah/Terangeri, the Bogerudmyra in Oslo, and the rare, nearly destroyed, unnamed peatlands of the Southern Berkshires. Though we initially embarked on this journey on behalf of the turberas in Tierra del Fuego, we've learned that we are doing it for every peatland in the world, as yet unsure of what, if any, impact our work will have.

This essay, told collectively and from my perspective[4] is a story of the gifts we've received, kept, and given along the way.

…

In the first few months, we sought grounding in the Ensayos methods we've shared over the years: dreaming up questions together, setting out on separate research paths, and convening on Zoom across time zones, from different continents, to share our findings, to play with ideas, to *ensayar*. Perhaps because of how intangible scent is, the initial ideas had more to do with the vessels that would carry the scent than with the scent itself. The objects we came up with would hold something that was invisible and as yet unknown, not unlike the words of this essay, unable to accurately encapsulate the experience of smelling the fragrances we developed. So much talk of how these scents would be held and shared gave way, naturally, to work on the scents themselves. Everyone came around through parallel processes to engagement with what is most difficult to describe with words—the scent that has yet to be made, which will only come to exist through our weaving paths across disciplines, geographies, technologies, humans, and other animals; and through experimentation with substances, organic and inorganic, some directly produced by the peatlands, others found through olfactory translations.

In late fall, Randi Nygård, writer and artist, takes her son and three little cousins into a peat bog in the mountains at Blefjell, to see how they might respond. She has learned from conversations with scientists that as the bog grows, it folds the surrounding landscape into itself. It is a palimpsest peatscape, containing an archive not just of nature but also of culture. One would have to tear it open to discover exactly what's inside. And yet it's possible to experience its depths without destroying it. Randi's young nephew says it smells of the ocean, wet forest, and pine trees. To Randi it also smells like a wet animal. Really, she says, evoking the boggy enfolding she has come to understand, "It smells just like itself, which includes everything around it."

The little that is known about this bog "makes it also somehow magical and mystical," she tells me. And yet, awareness can exist, even without knowledge. She explains, "You meet something you don't know, but you can sense it, and there's very little language to describe it." The language that exists in her mind comes from an old Norwegian saying: *ugler i mosen*. Owls in the moss. This is a mutation of the original Danish expression, *uvler i mosen* (wolves in the mire), from when wolves still roamed the neighboring bogs. These words reveal the meaning of the saying at its root: there's danger in the air—a danger that can be sensed but not seen. Shuffling from *uvler i mosen* to *ugler i mosen*, Randi continues to play by substituting words that share sounds and rhythms: wolves in the mire, owls in the moss, howls in the moss, wombs in the mist, wounds in the moors, wonders in the

1 Jorie Graham, *Runaway: New Poems*. First edition (New York, NY: ECCO, an imprint of HarperCollins Publishers, 2020), 30.
2 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol*. 2022. Multimedia artwork, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.
3 Spread over several continents, those of us who participated in the gift of scent through Ensayos (referred to here as Ensayistas) include Christy Gast, agustine zegers, Camila Marambio, Randi Nygård, Karolin Tampere, Simon Daniel Tegnander Wenzel, Freja Carmichael, Sonja Carmichael,

world. She eventually stitched these words onto the fabric that held the vials of Norwegian scent at the pavilion in Venice.

Image 1.
Randi's embroidery for the gift of smell. It includes the poem "wolves in the mire." 2022. Photograph by Randi Nygård.

Meanwhile, in the Southern Berkshires, artist Christy Gast looks for peatlands to no avail. She gets a hold of an old map of peat bogs in New York State. Most were drained of water long ago, and the few that remain barely subsist on the margins of lakes and creeks. One wet November afternoon, she and I walk down the road from her house, into a hollow, and then hike down off the road into a place where we hope to find *Sphagnum* moss. But we discover that it's a regular swamp, nutrient rich and supporting a diversity of plants, unlike peat bogs, which are poor in nutrients, with low biodiversity. In the following weeks, Christy turns to creating a vessel for the scent she has yet to know, given form by the glass artist Carina Cheung. One of the two works which will hold the scent is made from a uranium glass vase that once belonged to Christy's grandmother's husband. The glass is as ghostly as the essence of the disappeared bogs it means to hold, glowing in the dark like a will-o'-the-wisp. Also called *ignes fatui*, we know will-o'-the-wisps exist because of the bioluminescence produced by organic decay in peat bogs. They have been the source of myths, dreamings, imaginings, and attempts at understanding, translating, and co-creating a human relationship to peat bogs. Christy finds her way into the bog and its gift by transforming the glowing vase, making space for a mossy scent that will add a layer of history to the material.

Image 2.
Sonja Carmichael holding ungaire (fiber of Quandamooka cultural weaving), Minjerribah, 2021. Photograph by Caitlin Franzmann.

In Australia, the artist Caitlin Franzmann has teamed up with collaborators Sonja, Freja, and Elisa Jane Carmichael, Ngugi women of the Quandamooka people, to go out together into the patterned fens of Minjerribah/Terangeri, in Queensland. Sonja is a weaver who has done extensive research to recuperate the weaving practices of her ancestors. Her daughter Freja is a curator who specializes in First Nation fiber practices, and her other daughter, Elisa Jane, is a multi-disciplinary artist. In our conversation, they tell me that the greatest gift they received was the chance to collaborate, as their bonds deepened during the research process, and thanks to the Carmichael's hospitality. Later on, when Simon Wenzel joins Randi in Norway, and agustine zegers joins Christy in the United States, they too will experience this particular kind of gift.

After listening to them, I start to look into ways of understanding gift giving, diving deep into the work of Marcel Mauss and Bronisław Malinowski. But the kind of process I'm describing is the practice of "keeping-while-giving" of inalienable possessions as described by Annette Weiner.[5] Based on her observations of women, she has come to recognize a type of gift that male anthropologists observing men never identified: gifts that are kept-while-given, including shared myths, objects whose meaning cannot be separated from their origins and makers, and land. In my interviews I ask all of the Ensayistas: *Who or what is giving this gift? Who or what is receiving it?* Karolin Tampere, an Estonian artist and curator based in Norway, who describes her role in the project as that of a conversation partner, and who was the pragmatic thinker and doer when it came time to activate the fragrances at the Chilean pavilion in Venice, reminds me of the discomfort that sometimes comes with receiving gifts. Her perspective is that one has to come to terms with oneself before being able to receive gifts. An inalienable gift calls on the receiver to be grounded and open to the relation

Elisa Jane Carmichael, Jasper Coleman, Caitlin Franzmann, Renee Rossini, and myself.

4 I have been involved with Ensayos since 2015, primarily as an ethnographer and writer. Throughout the months over which the scent gifts developed, I was involved as a participant-observer in Ensayos Zoom meetings and local research efforts. The quotes in this essay are taken from my own notes, meeting recordings, and interviews I carried out with the artists to gather their reflections on the process.

and responsibility that ensues. In this context, gift giving entails more than exchange—it calls for growth and transformation. According to Weiner, the transfer of inalienable possessions both guards against loss and encourages preservation. Karolin's sense is that the scents are carriers for awareness, knowledge, and relationships: scent is "an invisible format that triggers orchestras of perception, hitting all the different layers of memory, present, past, and dream worlds." Expanding on this, Randi Nygård describes how smell triggers care and love in her experience. Our project's gifts of scent intend to elicit love and care for the known and unknown, between us and the turberas, between the turberas and the visitors to the pavilion, and even between peatlands across the world. This is how we are receiving, and this is how we are also keeping while giving.

In February, as everyone's work begins to flourish, a fire starts in Karukinka, Tierra del Fuego. It soon rages out of control just at the edge of the turberas many of us have known and loved. We are at a loss for words at our weekly meeting. Though we've offered to contribute the funds raised for our project to the work of extinguishing the fire, Bárbara Saavedra, who heads the Chilean branch of the Wildlife Conservation Society, encourages us to continue with our gifts for the pavilion. Efforts to control the fire turn out to be mostly futile. It is the rain that finally slows it down enough to make it manageable.

When I speak with Caitlin, Sonja, and Freja about walking on Quandamooka Country in Moreton Bay, they tell me that it's impossible to ignore the destructive impact of recent fires. In contrast to our apprehension of the fire in Karukinka, they describe how for Quandamooka people, fire can also be a deliberate healing practice. At one of our Zoom meetings, Caitlin shows us pictures of the green tips of the surviving grass trees in the swamp, and of the ungaire, the swamp reed they use for weaving, growing back after a fire. Country and its inhabitants are in constant relation, including but not limited to humans. As Sonja tells me, on one of their forays in the Minjerribah fens they encountered a poisonous brown snake and it was "asking us to be mindful that we were walking in their country too." I think about climate change, and how its signs pervade in Karukinka and in Minjerribah/Terangeri, both marked by damaging fires, and I remember Randi's sayings: *uvler i mosen, ugler i mosen*. How do we walk on country aware of the danger and damage we wreak? How do we let country keep-while-it-gives?

In the shadow of the Karukinka fire, Caitlin decides to experiment with making incense that will bring the scent of Minjerribah to the *Turba Tol Hol-Hol Tol* pavilion in Venice. As she describes it, the challenge involves producing a type of smoke that will not trigger a sense of danger. She means to evoke the ritual practice of incense burning, the intent and deliberate

5 Annette B. Weiner, *Inalienable Possessions: The Paradox of Keeping-While-Giving* (Berkeley: University of California Press, 1992).

6 Luca Turin, *The Secret of Scent: Adventures in Perfume*

action to create a sacred space. The diagonal knots on the traditional woven bag that will hold the incense cones are made by Sonja, based on extensive work regenerating and reclaiming weaving knowledge in her Quandamooka community. And the incense itself will weave relationships among the visitors to the pavilion. On World Peatlands Day, after a two-day convening in Venice, during which scientists, activists, and artists will articulate a joint agreement for the protection of peatlands, Miccosukee artist and activist Houston Cypress will use the Minjerribah incense during a joyful, dancing signing ceremony.

Image 3:
In communion with a rare peat bog in New York. 2021. Photograph by Christy Gast.

As this is happening, Christy reaches out to agustine zegers, an olfactory artist from Chile living in the United States, to collaborate on the gift. Based on what she has learned about the fate of the peatlands in New York State, Christy's initial impulse is that this scent should be a message from the disappeared northern peatlands to Tierra del Fuego, a warning from the turbera's own projected future, given the worldwide patterns of peatland depletion and extraction. Thinking about tar sands extracted from bogs and shipped to the Gulf of Mexico to make oil, she considers making a scent reminiscent of Quaker State Motor Oil, but decides this is too facile and based on a disturbing, cynical outlook. In agustine she finds a collaborator who grasps "the poetics of molecules to produce scents." The two artists share a sense of the physicality of scent, which is integral to understanding how the spatial experience of the pavilion will be shaped not just by objects and plants, but also by fragrances. Throughout our Zoom meetings, we have witnessed the evolution of the pavilion project, and as a result, each scent gift is in dialogue with this process. As agustine explains, work in scent is about the invisible, and encourages us to move away from ocularcentrism in our notion of absence. In developing a scent that evokes the lost peatlands

Memory," Volume 142, Part A (2017): 99-107.
8 Robert Hass, "Meditation at Lagunitas," in *Praise* (Alexandria,

Napper, Almut Hupbach, "Does reactivation trigger episodic memory change? A meta-analysis,
Neurobiology of Learning and

and the Science of Smell (New York: HarperCollins Publishers, 2006), 14.
7 Iiona D. Scully, Lucy E.

of North America, we might consider how invisible molecular remnants of lost entities linger, and how both natural and synthetic materials might express this subtle but enduring spirit in a fragrance. As such, the two North American scents are speculative.

From agustine's perspective, the gift is an offering to the Chilean turbera, a chance to honor its presence in their country of origin. Their ethic values the dissolution of the typical individuation that characterizes art, opening up the possibility of "offering ourselves to bog as well as offering bog to other people." Infused in the fabric curtain that hangs at the entrance of the pavilion, the two North American scents agustine develops, named Damp and Rich, respectively evoke the vegetal surface layer of the bog, and the fossil peat which lies below. Christy describes Damp as "alive, growing and decaying at the same time, and a little bit acrid, but pleasant." The wolf in the mire reappears in her description of Rich, which has "more animal in it. It smells alive but… a bit dangerous, with musky, mineral ickyness. You would want to smell it again just to make sure."

The scent that Simon Wenzel develops in Norway, when Randi invites him to join in, is made with materials not directly from the bog, but rather express it in the way that pigments might be used to paint a landscape of a landscape. It is a translation of the Norwegian bog smell as he and Randi experienced it during their research forays into Oslo's Bogerudmyra. Simon's process in some ways parallels Randi's play with words, substituting one substance for a similar one without losing the larger sense of what is to be signified. Like Randi, Simon has grown up in a Norwegian context where the bog and the forest are integral, even to urban life. He wonders whether it's even possible to "bottle up" the experience of walking in the bog. But he builds on what he smells with Randi during their explorations: soil, grass, pine, ocean, rain. Wet wool. Wet dog, which also smells to him like freshly dug roots. The resulting scent builds on geosmin, which is the molecule produced by bacteria in the ground when it rains, and which elicits pleasure when detected by humans, even in tiny concentrations; and the smell of tyrived, which Randi tells me is made from the resinous roots of barely living pine trees, often found in bogs, and prized as kindling in Norway. As Karolin, who has lived in Norway many years, describes Simon's scent: "you go into a forest lake in the summer in southern Norway, dip your body in there, and as you swim out you smell exactly that smell."

Listening to everyone's associations with these scents, I remember how agustine told me that the relationship between scent and memory is imperfect, or at best constructed in our human drive to build relations between things. Luca Turin, in his *Secret of Scent*, writes that "the special thing about smell is that it is *idiotic* in the proper sense of the word, namely unique. There are no exact equivalents in smell, you have to hit the tiny

Virginia: New York: Chadwyck-Healey; Ecco Press, 1998), 4.

nail smack on the head or you'll miss it by miles."[6] Given this, if scent triggers memories by targeting the amygdala and hippocampus, the realms of emotion and memory in the brain, it is not because of its capacity to replicate itself across time and space, but because we are also receptive to something that is "close enough." The relationship between scent and memory is a two-way road. When my son smells agustine's Damp, he says it smells exactly like earth. "It's as if you put your head in the mud."

But is it? A relation is expressed here, between memory and a previous scent, and now this new scent, which surely has transformed his memory of mud. We know memories transform every time we access them.[7] As our memories evolve, what we associate with our memories must also change, step by step. *Uvler i mosen, ugler i mosen,* howls in the moss, wombs in the mist… In this way, the scents in the pavilion start to constitute a network among us, but based on a form of perception that bypasses words. The gift of scent "extends the amount of space the body takes up," says Christy, and, as a result, Karolin notices our gifts of scent all over Venice during the opening week, as people carry traces of their visit into new spaces and new interactions.

If the scents create a network of experiences and memories among us, and those memories are linked to an incipient awareness of the importance of peatland conservation, that is the gift we give and get to keep. And if the scents foment a love and care for the Chilean turberas and their sisters over the world, then we have kept, given, and received. As Robert Hass writes:

> (…) because there is in this world no one thing
> to which the bramble of *blackberry* corresponds,
> a word is elegy to what it signifies.
> We talked about it late last night and in the voice
> of my friend, there was a thin wire of grief, a tone
> almost querulous. After a while I understood that
> talking this way, everything dissolved: *justice,*
> *pine, hair, woman, you* and *I* (…)[8]

Turbera. Peatland. Let our gifts not be an elegy to the peatlands. Something "with heavy re-collection in it presses" us to take it in and smell it deeply, to love and care, to keep-while-giving.

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Maria Costan Davara

Prender–si cura Means to Take Care of (Oneself)

Maria Costan Davara has a degree in philosophy with artistic contaminations and roots in the Dolomitic Alps. Her honors thesis addressed the role of the body in relation to performativity and performance as both a theoretical concept and a political practice. She is interested in movement as a medium towards a post-anthropocentric approach as a form of knowledge production, in performance art as an open-source discourse, and in art as a force of political and social change with revolutionary potential. Costan Davara worked as a *Guarda Turba* for the Chilean Pavilion at the Venice Biennale and recently took part in an intensive art residency on landscape, movement, and language from an ecofeminist perspective while studying the history of video-art in Italy. She writes poetry, and she paints.

Note from the editors:

This text is curated by Maria Costan Davara with contributions by Fernanda Olivares and Vittorio Da Mosto on their shared experience as peatguardians of the pavilion of Chile at the 59th International Art Exhibition - La Biennale di Venezia.

The first four photographs (The peat as a web, March 2022; Holding as an act of rooting, March 2022; Care has the shape of my hand, June 2022; Untitled, 2022), are by Maria Costan Davara, and How life explodes and is free to create is by Fernanda Olivares.

prender–si cura means to take care of (oneself)

To care
    toccare
To take care
    care(zza)re
through contact
    con tatto
is an act of commitment
to whom?

The smell. Pungent and fresh, of wet compost coming from the red boxes. My hands were covered with it for days, it would attach to the skin and even to clothes. I spent many afternoons in March of 2022 in the meditative operation of picking out weeds, sitting in complete contemplation, hands repeating the same few gestures as in a trance-state spontaneous choreography.

How to interact without interfering
to talk beyond language to feel beyond the
body?
Act of drawing interconnected mythologies
playing with the thread

The moss does not have just an aesthetic purpose. By being it shows. How it breathes and grows and changes. Like any of us. Its aliveness often surprises people, as if they are seeing it for the very first time. Perhaps it is, perceiving it as a living body with a presence of its own. Re-envision.

care is a reciprocated act
of giving and receiving
an inextricable intertwining
of a multitude of entangled
bodies

We are already cyborgs within the intricate web on which we move unaware.
All part of the same chaos.

What's an eco-conversation then?

[April 26, 2022]

to be here
listening to
myself is the hardest thing
when everything outside seems to float
in the void
and I lose myself swaying
between desire and fear
twisted in myself
my body a ball
of electric wires
electric frenzy of rushing
deepening the roots into the ground
down down down down to the core
the spinal cord
and then exploding into the air like a geyser
of turbid turgid turbulent water
like a violent peat
and spaccare spazzare via the borders
infesting plants
to be damp moss
and absorb the world by osmosis

What does it mean to take care?
How to build a love ethic?

(Care has the shape of my hand)
Phenomenology of petting the moss

[June, 29]
Everything falls into place
I feel the love
I finally get it. I am so loved!
It surrounds me
softly and strongly
I am held by a community of people
whom I love back
in a mutual circle of love
and in the sensual flow
I was reborn as myself.

Humid thoughts for a society of care

We as
a commitment to the space
our entangled bodies create

We as
a romance an interspecies tale
where community is an expanded concept

The community, anarchic invisible enlarged, as the threads that constantly shape us move us enrich us. Fernanda Hema'ny Isabel Alessandra Malika Vittorio Camila Carla Christy Nico Karolin Caterina Carlotta Elena Aurora Kate Sarah Jhonny Paulina Kylin Su Eva Sunna Hjordis myself the *Sphagnum*. Atoms and particles fluctuate around till a destined collision. Entanglements of mutual care through words, eyes, smiles, hands, shared meals, shifts shifting and sliding and touching each other even for an instant. Traces of a community that doesn't need the permit to exist - Anarchic Spontaneous Care.

Where do eyes meet?

Vittorio – Quietness

“The turbera when it is all still quiet sounds heavenly. I feel as if it’s emitting a different type of sound, of frequencies. I don’t hear them through my ears, I sense them through my soul.

It brings me peace and calm. I feel I am part of her, I dream to lie in it

with it on it and under it. I feel like I could just let her engulf me, digest me and I wouldn’t do anything to stop her.

She represents a safe place, a place where I can be at rest. Part of me feels ready – but part of me isn’t.”

Fernanda – How life explodes and is free to create

A simple photograph, taken in a reduced space within the pavilion, allows us to contemplate life that explodes: capsules through which the *Sphagnum* releases its spores, Sundews growing… a small landscape filled with biodiversity.

We are the Peat Force.

We are the bodies that lovingly step on the peatlands in Tierra del Fuego and now travel with conviction to gossip about interspecies care and romances. Our mission within *Turba Tol Hol-Hol Tol* is to narrate a story of ecological intimacies.

We are holistic wardens; like the wind, we push forward insinuations from the ancestral to the natural. In the name of the peat, we will be a multilingual ritual to convene subterranean, damp, and sensitive sensations.

Adriana Urciuolo,
Nancy Edith Fernández-Marchesi

The Peatlands of Tierra del Fuego

Adriana Urciuolo is a tenured professor at the Instituto de Ciencias Polares, Ambiente y Recursos Naturales (Institute of Polar Sciences, Environment, and Natural Resources) of the Universidad Nacional de Tierra del Fuego (UNTDF) in Argentina, with a teaching career of more than 25 years. She also served as Vice Rector of UNTDF (2015-2021). Urciuolo has a degree in civil engineering from the Universidad Nacional de Córdoba (Argentina) and a Master's from the Universidad Nacional de La Plata (Argentina). She developed her professional career in the management and research of water resources in Tierra del Fuego, Argentina, where she served as General Director of Water Resources (1994-2012). During her tenure, Urciuolo implemented plans and projects for the sustainable use of water and wetlands and was responsible for peatland use management in Tierra del Fuego. As a researcher, she has directed numerous projects and published extensively on the topic of water and wetland management. She is a member of the Main Board of the International Mire Conservation Group (IMCG).

Nancy Edith Fernández-Marchesi holds a PhD in Research in Experimental Science Education from the Universidad de Extremadura (Spain), a specialization in environmental education from the Universidad de León (Spain), and a degree in biology education from CAECE Universidad de Buenos Aires. She is a researcher at the Instituto de la Educación y del Conocimiento (Institute of Education and Knowledge) at the Universidad Nacional de Tierra del Fuego, Antártida e Islas del Atlántico Sur (Argentina), where she specializes in issues related to education about the environment, natural sciences and information and communications technologies. Fernandez-Marchesi is also a founding member of the Asociación Mane'kenk in Tierra del Fuego. Her lines of research are related to environmental education at different formal and informal educational levels. Her areas of interest are related to environmental legislation and citizen participation in environmental issues.

The Importance of Peatlands

Peatlands are representative wetlands of Tierra del Fuego, an island territory located at the southern end of Patagonia. They constitute the natural habitat of different species, add a high scenic value to the landscape, are natural hydrological regulators of water basins, and provide the local population with various benefits. These ecosystems have been globally recognized for their many contributions to humankind's well-being. According to the RAMSAR Convention,[1] they are important for biodiversity conservation and contribute to climate change mitigation, as they constitute one of the largest carbon stocks in the world. In addition, given their ability to preserve archaeological remains, they are the most important type of wetland for cultural heritage.

Tierra del Fuego is home to different types of peatlands that create unique landscapes and formations. The elevated *Sphagnum* peatlands dominate the valley bottoms of the mountain region, where, combined with lagoons, forests, and particular reliefs, they offer a visual spectacle of red and green hues. In the north of the Isla Grande, grassy peatlands cover extensive plains that constitute the habitat of the fauna of these wetlands and a source of pasture for cattle and sheep. To the east, in the Moat area, there are compact peatlands dominated by *Astelia and Donatia*, rare to find in other Tierra del Fuego environments. At the eastern end, a region called the Mitre Peninsula, a large stretch of mixed peatlands with predominantly *Sphagnum*, *Astelia*, and *Cyperaceae* dominate the landscape, offering a strikingly beautiful variety of wetlands.

Although peatlands have shown their unique resilience amid climate change over the past 12,000 years, they are highly fragile and vulnerable to human activities.

Conservation of Peatlands in the Integrated Management of Hydric Resources

Water and wetlands are not managed in isolation from other ecosystems, rather within the framework of watersheds, geographical areas where the hydric subsystem that produces water is combined with ecological, social, and economic subsystems, among others. Therefore, basins constitute the territorial unit where water can be integrally managed, considering the interactions between different ecosystems. In this context, peatlands are particularly important water reservoirs whose significance is related to the proportion of areas they cover and their location. It is therefore necessary to consider their functions within the basin framework, taking into account the central role they play in hydrological regulation and water quality.

Figure 1.
Types of peatlands. Upper left: *Astelia*. Lower left: *Gramineas*. Right: *Sphagnum*. 2020. Photographs by Adriana Urciuolo.

Integrated water resources management, with the water basin as a planning unit, is a standard concept for managing water resources, originating during the UN Water Conference (Mar del Plata, 1977). Hence, analyzing the benefits of peatlands within the different water basins and recognizing the main threats they face enable us to make decisions on the appropriate measures for their management and conservation.

In the Tierra del Fuego basins, peatlands perform important wetland functions, which are vital for the conservation of water resources, such as recharging aquifers and improving water quality. They are also essential for protecting against the effects of water in extreme phenomena, since they contribute to absorbing water and thus preventing floods. This is particularly important in urban basins or any basin located near a town. In the case of Ushuaia, capital of the Province of Tierra del Fuego, Argentina, located in the lower basin of streams that flow from a mountainous slope, there are peatlands on a tier above the urban center which naturally protect the population against phenomena such as mudslides, avalanches, and torrential floods. On the other hand, the peatlands that extend throughout the stunning Andorra Valley, right next to the city, have been declared wetlands of international importance by the world's southernmost RAMSAR site. This area—the Vinciguerra Glacier and associated peatlands— is located in the Arroyo Grande basin (the city's main source of drinking water), playing a central role in improving water quality and preventing floods. In addition, due to their proximity to the city and their unique landscape, these peatlands provide an important recreational space for inhabitants and an attraction for tourist development. There are peatlands located in the urban layout of Ushuaia that, due to their easy access, play a significant role in environmental education and scientific research.

1 The RAMSAR Convention on Wetlands of International Importance (Ramsar, Iran, 1971) is an international treaty that promotes the conservation and wise use of wetlands. Adherents to the treaty have designated sites to be integrated into the RAMSAR List of Wetlands of International Importance with the ultimate goal of conserving them. For more information, see: https://www.ramsar.org/.

Figure 2.
The RAMSAR site Vinciguerra Glacier and associated peatlands. 2017. Photograph by Adriana Urciuolo.

In the mountain region, towards southern Tierra del Fuego, peatlands occupy substantial sectors of valleys and different basin feeding areas, collaborating with the control of erosion and water regulation. From a socioeconomic point of view, the peatlands in this area contribute to a scenic landscape, representing a major tourist attraction and they are ideal sites for recreation and winter sports. We can find extremely deep peatlands, in some cases deeper than ten meters, which store environmental information from thousands of years ago. They make it possible to reconstruct past changes in the climate and landscape, and to determine the consequences of human action on the environment. Therefore, studying peatlands is crucial for local communities to learn about their environmental and cultural history.

On the eastern side of Tierra del Fuego, in and adjacent to the Mitre Peninsula, a large area of variegated peatlands covers more than 2,000 km^2 constituting the local basin's primary regulation shed of hydric behavior. Given the major extent of these wetlands, they form important carbon stores that contribute to mitigating climate change. This site provides a special opportunity for studying the relationship between peatlands and carbon dynamics. Furthermore, the region's isolation and unique beauty offer the human population opportunities to enjoy the natural surroundings through various recreational activities and nature tourism, both properly regulated and of special interest.

Peatlands in the central basins area, just east of the town of Tolhuin, are used for extracting peat, exported as substrate to other regions. Since this practice involves draining peatlands, it is not sustainable and destroys these wetlands and their multiple contributions to the community. Peatlands are very sensitive to changes in their hydrological conditions. Any alteration in the water dynamics, caused by draining or other effects, generates a

Figure 3.
Peatlands in the mountain valleys. 2017.
Photograph by Adriana Urciuolo .

degradation of the area and, in the long term, its disappearance. Therefore, it is necessary to evaluate the possible impacts caused by different anthropic activities in the water basins, which should be carefully planned to avoid peatland degradation and guarantee sustainable development. The challenge, then, is to manage Tierra del Fuego's basins, considering the wise use and conservation of peatlands in order to preserve their multiple values and contributions to the local community.

The Mitre Peninsula and its Environmental Contributions

The Mitre Peninsula has various attributes and benefits, such as the abundance of wetlands, especially peatlands, valued for their capacity to capture and store carbon. These peatlands are around four meters deep on the north coast and can exceed six meters' depth in the southern valleys and plains. In environments that correspond to water dividers, slopes and cliffs can reach depths of around one and a half meters.

Bearing in mind these measurements, we can estimate an average depth of three to three and a half meters, which would indicate a total volume of peat: 6,272,000 m^3 which could store some 195,000,000 tons of carbon. More than 1,000 tons of carbon stored under each hectare of peatland!

In this sense, the carbon flow measurements have made it possible to calculate annual net rates of carbon fixation in local peatlands, being 1,220 kilograms/ (hectare per year) for *Astelia* peatlands. This allows us to estimate for the Mitre Peninsula a total carbon sequestration of approximately 80,000 tons of carbon per year.

A Bit of History

In 2002, in accordance with the provisions of Act No. 272 on the Provincial System of Protected Areas, the Under-Secretariat for Planning coordinated a characterization and diagnostic report prepared by experts from the provincial executive branch, with substantial contributions from CONICET's Southern Center for Scientific Research and other local Argentine institutions. This document laid out the foundations for creating the area and limits according to the characteristics of each environment and its conservation needs.

The People's Struggle

Even though a conservationist law to protect the Mitre Peninsula has been submitted to local legislation every year since 2003, it was only in 2016 that local non-governmental organizations (Mane'kenk Association, Tourism Professionals Association of Tierra del Fuego, Civil Conservation Association of the Mitre Peninsula, Ushuaia Foundation XXI, and Association of Bahía Encerrada) worked together to promote legal protection for the area. These organizations coordinated political actions and social activities with a double objective: to incorporate this problem into the public agenda and create community awareness of the area's natural and cultural values. Worthy of special mention are the following actions:

1. Public presentations with specialists who spoke about the characteristics, natural and cultural values, and foundations for creating the protected area in the Mitre Peninsula.
2. Meetings with provincial legislators and active participation in the commission in charge of evaluating the protected area.
3. Use of local, national, and social media to spread information on the importance of preserving the Mitre Peninsula.
4. Meetings with officials and technicians of the Provincial State and active participation in workshops organized to deal with the project.
5. Installation of informative signs on public roads about the conservation value of the Mitre Peninsula.

Despite the various efforts, in 2019 the project was still not approved by law. Given the lack of response from the successive legislatures between 2016 and 2019, on June 1, 2019, the community of Tierra del Fuego, in a self-convened manner and with the certification of a public notary, proclaimed the Mitre Peninsula a Natural Protected Area. This action constituted a formal declaration of the people's commitment to their land,

even though there was no legislative framework to protect it. Numerous institutions adhered to this popular proclamation, including the Yagán Paiakoala Community of Tierra del Fuego, the Deliberative Councils of Ushuaia and Río Grande, and the National University of Tierra del Fuego AeIAS.

In 2020, accompanying the initiatives of local non-governmental organizations, the provincial governor signed Provincial Decree No. 1710/20, by which he declared that "the terrestrial and marine sector known as the Mitre Peninsula is of Environmental, Natural, and Cultural Interest to the Province." This was a first step. Parts of the community that were concerned with the conservation of the Mitre Peninsula took this declaration as a sign of commitment to protecting the natural and cultural heritage of Fueguinos, the people of Tierra del Fuego.

The bill, currently holding parliamentary status, has garnered consensus from legislators, the executive branch of the province, scientific sectors, and local non-governmental organizations that promote this initiative. According to this project, the protected area will cover more than one million hectares (between land and marine areas), with different categories of management that will establish authorized uses, both extractive and non-extractive, such as forestry and artisanal fishing, or recreational, scientific, educational, and tourist uses.

It is now in the hands of provincial legislature to approve the law creating the "Mitre Peninsula Protected Area," the necessary corollary for a struggle that has dragged on for nearly 40 years.[2]

Binational Conservation Initiatives

Chile and Argentina embarked on a joint path towards the conservation of peatlands, specifically in Tierra del Fuego, which enabled the articulation of a participatory Patagonian Peatland Initiative.

This path began in 2008 when, within the framework of the peatland management process in Tierra del Fuego, Argentina, a workshop was held in Ushuaia to define a "Strategy and Action Plan for the Wise Use of Peatlands," organized by the Wetlands Foundation, the Environment and Natural Resources Foundation, and the Provincial Government. This occasion provided an unprecedented space for NGOs, experts, and producers in both countries to exchange ideas and experiences.

Subsequently, in 2010, the Wildlife Conservation Society (WCS) of Chile organized a joint campaign in the Karukinka Natural Park, in which, aside from sharing information related to peatlands, researchers from both countries carried out collaborative fieldwork.

2 On December 6, 2022, the Legislature of the Province of Tierra del Fuego, Antarctica, and Islands of the South Atlantic, unanimously approved the creation of the Mitre Peninsula Protected Area.

Figure 4.
Mitre Peninsula peatlands. 2015.
Photograph by Adriana Urciuolo.

Along this same path, in 2011 WCS (Chile), the University of Chile, and the Chilean Ministry of the Environment organized in Punta Arenas an international workshop called "Knowledge and Valuation of the Patagonian Peatlands: Opportunities and Challenges." One of the most significant conclusions of this workshop was the need to develop a Binational Conservation Strategy.

On that occasion, Argentine researchers presented the results of the participatory peatland management process in Tierra del Fuego: the Ministry of the Environment's Resolution 401/2011 that approves zoning use for peatlands on the Argentine side of the island and defines management criteria, protected zones, and areas of regulated extractive use.

After this initial cooperation, experts and NGOs from both countries continued to exchange experiences on the progress of conserving peatlands. In 2020, during a joint workshop, WSC (Chile) presented the "Peatland Conservation Roadmap" with support from the Chilean Ministry of the Environment. In 2021, the Ministry of the Environment and WCS (Chile) again called on researchers, conservationists, and community leaders from both countries to collaborate on a Patagonian Peatland Initiative that would develop strategies to conserve these precious southern wetlands.

To date, WCS (Chile) has held the first workshop of this initiative with the participation of scientific experts, conservationists, NGOs, and local communities from both countries. Participants have committed to outline joint activities for the conservation and wise use of peatlands within the framework of the Global Initiative (GPI).

Antonieta Eguren Ibacache,
Nicole Püschel Hoeneisen

Peatland Dialogues

Antonieta Eguren Ibacache is a mother, daughter, wife, and sister, born and raised in the coastal area of central Chile. She is a veterinary doctor with a degree from the Universidad de Chile and also holds a Master's in Sustainable Development Practice from the University of Florida, with a specialization in conservation and community development. Passionate about the human-nature relationship, she works as a specialist in the human dimension of the Conservation Strategies area of the Wildlife Conservation Society-Chile. Eguren Ibacache has facilitated workshops and participatory decision-making processes both locally and internationally with various stakeholders, from local communities to decisionmakers. In her current role, she seeks to incorporate the vision, knowledge, feeling/thinking, and experiences of diverse actors involved in biodiversity conservation processes in the pursuit of more equitable, diverse, and inclusive results.

Nicole Püschel Hoeneisen is a Chilean woman, mother of Matilde and Pascual. She is an environmental biologist from the Universidad de Chile and holds a Master's in Conservation Science from Imperial College London. During her professional career, Püschel Hoeneisen has developed an interdisciplinary theoretical and practical understanding of conservation, focusing on early planning and engagement with society. Her current work focuses on climate change integration, biodiversity conservation planning, and the development of nature-based solutions that contribute to climate change mitigation and adaptation.

Antonieta and Nicole are two conservation practitioners who work at the Wildlife Conservation Society (WCS) Chile. Both contributed to the development of the Patagonian Peatlands Initiative and the Venice Agreement, and they collaborated on the *Turba Tol Hol-Hol Tol* project[1]. While Nicole (Nico), is a specialist in climate change and biodiversity, Antonieta (Anto) focuses her work on the human dimension of conservation. In this text, Nicole and Antonieta create a fictional dialogue with the Peat Bog in order to illustrate their intimate relationship with this Patagonian wetland, illustrating their recent efforts, both professional and personal, to promote peatland conservation at the local, regional, and global levels. This is a tale of honesty and love, from the *tol*[2] of two passionate (and a bit eccentric) women to the *tol* of the peatlands.

* * *

(Grandma) Peatland asks: When did it all begin?

Nico: Perhaps this story began more than 18,000 years ago, with your first clumps of moss in Patagonia, or maybe earlier—millions of years ago, when the first drop of water formed; or maybe several thousand years ago, when our ancestors enjoyed your lullabies and stories. My professional story with you dates back to 2004, when WCS began defending the 80,000 hectares of *Sphagnum* peatlands in the Karukinka Natural Park, in the Chilean Tierra del Fuego. Since then, we started learning more about you and from you. We learned about your most immediate threat—peat mining—and we planned and implemented actions to protect you from it. This conservation effort only came into effect in 2015, when Chile's Ministry of Mining finally declared Karukinka as an area more valuable to science than mining. Now, at least those 80,000 hectares of your peaty body in Karukinka are protected from the industrial peat extraction that significantly affects you in other areas of Tierra del Fuego.

I try to remember this minor yet important achievement every time I pass by the deeply scarred peatlands near Cameron, in Tierra del Fuego. These markings are the remnants of peat extraction, an activity that in a matter of minutes robs you of thousands of years, a compelling reason to keep working to outlaw this activity.

We are not the only ones working to care for you. There are so many of us! With different strategies, approaches, colors, and smells, in both Argentina and Chile… You're lucky, because there are enough crazy people in our Patagonia who are working to protect you. And we can't deny that at first, everyone kind of worked alone or disconnected from others. But you know that collaborative projects are a process, just like the formation of an ecosystem. The most beautiful part was that we knew there were others. I don't know if you remember, but back

in 2011 (for me, at least, it was a long time ago, even before I met you, but for you it must be a mere blink of the eye) different organizations that were working for the Patagonian peatlands, both in Chile and Argentina, came together in Punta Arenas to exchange perspectives and connect around you. They decided to research you, register and classify you, push regulations for your protection, educate others to share your importance and create a binational conservation strategy. I'm not sure if this was when everything started, but I do know that it was the beginning of something important.

Anto: I came into the picture even more recently and it may have been more by coincidence (although there are so many coincidences in this story that I've come to think nothing has come out of chance). I remember working on a grant proposal (our first professional meeting with Nico!), which we later received, to devise the roadmap for the Conservation and Sustainable Management of Chilean Peatlands, a project we developed with the Ministry of the Environment in 2019 and 2020. This work aimed at drafting a document to guide public-private management of our beloved peatlands, through strategies that addressed its principal threats. The pandemic hit us just when we were about to hold our workshop to validate the proposed strategies in this roadmap and we were forced to do it all online. We were so nervous about the virtual world back then! But that allowed us to invite so many more people, who, like us, wanted to help however they could in protecting and conserving you. It was marvelous to have so many voices contributing to this collective roadmap—our guide for your protection. The pandemic took many things from us, but it also allowed us to incorporate people who never would have been able to attend an in-person workshop and who, therefore, would not have had their voices reflected in the process that led to other collaborative efforts.

Peatland: What are the most important achievements to preserve my health in recent years?

Nico: I can't believe that everything we're telling you only happened in a couple of chronological years! It seems like so much more time because a THOUSAND things have happened!

Going back to what Anto was saying, the roadmap project was the first time we worked together as peatland conservationists. Since then, we've gotten more and more carried away, following our (over) enthusiasm and affection for you.

The process of building this roadmap renewed our need to connect with others and protect Patagonia's peatlands. Fortunately, the Manfred-Hermsen-Stiftung, a German foundation devoted to nature conservation, supported this idea since the beginning of 2021, when we began, together with Chile's Ministry of the Environment, to develop the Patagonian Peatland Initiative. In the hyper

1 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol*. 2022. Multimedia work, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.

2 Translator's note: tol in the Selk'nam language means *heart*.

summarized version: a second binational encounter on peatlands, ten years after the first one, held on June 2 and 3, to celebrate World Peatlands Day. We wanted to reconnect different people and institutions working to conserve the peatlands and define a collective effort to protect you that would strengthen and motivate us for future work, from organizing to collaborating. I say this out loud and it sounds so simple. But we knew that we had to build a safe and friendly space for it to work. It was intense and beautiful work, sharing and listening to experiences, connecting disciplines and imagining how our conservation efforts could truly include everyone: people from the arts, the sciences, academia, First Nations, activists, and people who directly depend on you. And we did it! We didn't expect to have that kind of experience in this encounter. I wish you could have felt the energy, even in the virtual meetings! People giving their all, out of love and humility, of so many years of collective effort with you and for you, assembling into a concrete plan to work together.

The momentum of the peatlands was not only happening in Patagonia. In other places, other people were raising their voices and placing your name on the most important international stages. For the first time, a United Nations Climate Change Conference (precisely, its 26th meeting) had a pavilion exclusively devoted to the world's peatlands. They invited us to present the experience of developing the Patagonian Peatland Initiative at the pavilion's symposium. The opportunity was impossible to reject. Anto wasn't working at that time and it terrified me to even think about organizing an event without her (she doesn't like to admit it, but she has a superhuman power to plan events and make everyone's involvement as easy as possible), but again we gladly took on the task and became immersed with Chile's Ministry of the Environment, the National University of Tierra del Fuego, and Ensayos: institutions that WCS Chile has been working with for over a decade. This was definitely an experience that empowered us to continue supporting collaborative efforts for your conservation.

Anto: And in the midst of organizing the event at the COP, we learned that the *Turba Tol Hol-Hol Tol* project would represent Chile at the 59th edition of the Venice Art Biennale in 2022. We were so happy and proud to be a part of this important project! I guess I went too far in saying that we were organizing the event—the truth is I was starting a bigger adventure, becoming a mother for the second time. But between diapers and crying, and thanks to Nico, I could keep up on all the events happening around you. I didn't want to miss any detail of our peatland adventures.

Nico: My dear Peat Bog, don't worry about telling Anto about the *Turba Tol Hol-Hol Tol* team's visit to the Karukinka peatlands. I already told her about that.

Anto: As I was saying, the Biennale was a complete success (as this book illustrates). It showed us that your charm was reaching even more people in distant places, and entering the art world. We got goosebumps every time Camila, the pavilion curator, sent us a voice message telling us about the enormous line to get in and see you, or reading emails from Bárbara, the WCS Chile director, when she visited you in April. Every beautiful article that was published in your name during that time nourished our hearts to embark on our last adventure/craze, The Venice Agreement: our way of celebrating World Peatlands Day in 2022.

We worked so hard on organizing every detail to bring together, inspire, and promote an encounter that culminated in signing a transdisciplinary and poetic agreement that includes key needs and values for the local conservation of the world's peatlands. With our children dangling around our necks, in online meetings where laughter was never absent, we planned each detail of a unique event. The encounter in Venice and the eleven encounters that were organized around the world in your name were—just like you, my dear Peatland—diverse, magical, dynamic. With representatives from conservation sciences, the arts, sociology, the spiritual world, and ecological activism, these processes were full of colors that absorbed every participant's knowledge like a sponge; each person brought out the best of themselves to express it in the agreement itself. Some were skeptical, some thought that we wouldn't achieve our goal, but you keep teaching us that everything is possible. Even organizing an event of this magnitude with only a couple months of anticipation and funding made available just one month before the encounter. I was following all the progress from Chile, a bit delayed. I was breastfeeding, which kept me from meeting you this time, but we'll have other chances. Our team of strong women kept me up to date on the progress, making me a part of the encounter in spirit. Was all the effort worth it? Of course it was! And now it's time to harvest some of those fruits and turn part of those declarations into concrete actions for your conservation, especially in Karukinka, which, as you know, is our center at the end of the day.

Peatland: What have been the main setbacks and celebrations?

Anto: We've had quite a few setbacks, but I think the celebrations exceed them, so they seem more like gentle falls. Like when our boots get stuck in your cold waters and we have to stop for a minute, feeling the water seep into the boots and squeeze our feet. That's when we accept the idea of asking for help or simply slowing down the pace of things. In the last couple of years, we've understood that we can't (and shouldn't) continue alone. Regardless of our efforts, we need to create new leadership that advance your conservation. How can we invite others on the front line to push with us? Or, in other words, how can we motivate others to take charge and push in front of us? These are questions we keep asking. Because we've achieved really important things over the last couple of years, but we've also encountered many difficulties. Frustrations at work, disputes with third parties, but also less time with our kids and sleepless nights.

Nico: Exactly! But since there have been several celebrations on different levels, it's been a beautiful ride. Just to tell you one of the last achievements: with Anto, Cami, and Bárbara, we cried out of joy when we saw the first pictures of the local workshops from The Venice Agreement in Newcastle, United Kingdom; in Brandenburg and Greifswald, Germany; in the Everglades, United States; in Elk Island, Canada; in Ushuaia in Argentina; and in Chile in Santiago, Chiloé, Aysén, Porvenir, and Karukinka. We got excited again when the agreement was born on June 2, 2022, at 7:30 pm, with a perfect figure and incalculable weight. It was crazy! Work done with so much affection, so much care, and in so little time! And Anto, with a baby girl dangling around her neck and three other kids under six years old swarming around us. A pregnancy and birth of an unforgettable agreement.

Anto: Absolutely unforgettable. We celebrated your very existence, my dear Peatland! And we celebrated having been able to gather a diverse and very adept group of people to push your conservation in Patagonia, through the Patagonian Peatland Initiative; to organize an unforgettable encounter in Venice (and elsewhere simultaneously); and, above all, we celebrated having been able to inspire others to eagerly collaborate and contribute to your conservation from here to Timbuktu.

Peatland: What part of me inspires your passion?

Nico: What a difficult question to answer! There are so many parts! My first memory with you is from the end of 2015. I already knew about your existence, I had seen pictures, but we didn't know each other in person (a kind of pre-pandemic virtual relationship). I traveled to Karukinka for work, and I was five months pregnant with my first daughter (Anto, you see how our relationship with the peatlands is maternal?). They took us to a small peat bog behind the Vicuña house, where we always sleep. Your beauty stunned me, like in the pictures I had seen. Those cushions of brick-orange with brilliant green borders, blinking eyes of water in the middle, the calm way of covering the ground making yourself noticeable between the lenga beech forest. I couldn't help but jump on you and smell you (I had to jump kind of sideways so my belly could fit). The dull smell of cold humidity filling my lungs, your body's softness between my fingers, your way of giving into

my weight, our bodies melding into one. I won't ever forget that moment. The telepathic conversation we had that day was just the first sign, because I confess that I turned into a truly passionate peatland conservationist some years later. The thing is, I am immensely fortunate. Just like with other colleagues, our connection is not just a work relationship—there is a lot of love and admiration.

And I'm going off on tangents because I told you that it would be hard to answer that question. I also want to let Anto speak, but, in the meantime, my short answer is yes: I'm passionate about your experience, your resilience, your humility, your way of storing and protecting gasses, secrets, and ancestors. I'm also passionate about seeing what you provoke in people who are just getting to know you: a Martian, an enigmatic ecosystem that captivates and casts love spells as fast as it grows slowly. I'm also passionate about the networks of people you knit together. I'm not sure if you mean to do this with your age-old energy, but you've given me the ability to connect with and learn from marvelous people who share a love for you. And you've given me a sister-friend. I'm passionate about knowing that my children know that you exist, because you're the mother that cares for me and the daughter in which I invest many hours when I'm not with them. I'm passionate about not knowing what the next chapter of this story will be, and that for you, everything is innovation, imagination, and dreams. I'm passionate about all of this and much more.

Anto: There are so many passionate things about your existence! Because you're not only fascinating from your own essence, with thousands of years, smells, gasses, sounds, the beings that you adopt, cultures that you embrace, but also from everything you generate and inspire. For the Selk'nam, you're their ancestors who laid down to rest in the cold grounds of Tierra del Fuego, while for others you're the source of inspiration for lots of questions that they look to answer through scientific explorations.

I'm taken by your ability to absorb water, acting like a sponge. That soft, humid texture. And your colors! How I love that palette of colors that I've unwittingly used in our work. You're so charming that anyone who wants to hear you falls in love with you right away, because little by little we are forming a peat-lover entourage. And now that I see you everywhere, just like falling in love, when everything reminds you of that person. I see you on the news, I hear you on the radio, I feel you when playing with mud, I find myself talking about you with everyone. We've only had a few encounters and that was before all our peatland craze, so I dream of the day when we can meet again to experience you from a new perspective.

I love that you're a peatland (*turbera*), feminine in Spanish, as if you were an ancient, ancestral woman. I feel like you're another one of us, all women, all strong and unique.

I am passionate about all the things you've given us, the inspiring encounters, the unforgettable landscapes, the beautiful and talented people who work for you. I am thankful for your existence and for the opportunity to work for your protection and conservation.

Nico: How beautiful, Anto!

My dear Peatland, we could keep talking with you forever, but it's best to leave the conversation here and get back to organizing the new, wild projects we have planned for you. Soon we'll tell you how that story unfolds.

Anto: But the next time we speak in person, I could use a group hug.

Jennifer McColl Crozier

Possible Ecologies to Continue Breathing

Jennifer McColl Crozier has a Master's in Performing Art Research and is the Artistic and Executive Director of the NAVE Center (https://nave.io/). Her work is framed between aesthetics, archives, performing arts theory, and the world of aromas. She has published books, essays, and articles both in Chile and abroad, specializing in archives of Latin American artists. She created a recovery and archive project of Carmen Beuchat's work (http://carmenbeuchat.org), which includes a series of restagings and the edition of the book *Cuerpo y Visualidad. Reflexiones en torno al archivo* (Metales Pesados, 2019). She has also developed a research process around the work of Sylvia Palacios Whitman that includes the publication of the book *Pequeñas Máquinas de Consciencia. La obra de Sylvia Palacios Whitman* (Metales Pesados, 2020) and the curatorship of the exhibition of performance restagings *Alrededor del Borde/Around the Edge* (CNAC, 2021-2022).

"In the ambiguous partialities of the sense of smell the old nostalgia for what is lower lives on, the longing for immediate union with surrounding nature, with earth and slime. Of all the senses the act of smelling, which is attracted without objectifying, reveals most sensuously the urge to lose oneself in identification with the Other."[1]

From a suspicion that there is an historical oversight concerning smell—an omission in aesthetics, philosophy, art and even the story of culture—emerges the question of the place that the sense of smell occupies in today's society, problematizing the hierarchy of the senses, modern control, the supremacy of visual perception, and the possible ecosystems that exist around our respiratory world.

The connection between smells and our surroundings has been characterized from a scientific and medical angle as one of the historical factors determining the redistribution of social barriers, starting with the miasmatic theory[2] in which all foul smells appear as a focus of disease. In this way an olfactory vigilance established itself, particularly in urban spaces of control and agglomeration such as prisons, cemeteries, hospitals, and psychiatric centers, "favoring a permanent vigilance of human overcrowding, an obsession with investigating harmful impurities present in institutions and public spaces, and an insistence on creating a new moral code based on the control of bodies."[3]

The modern city is conceived with a medical / olfactory design that imposed the gradual eradication of smells through deodorization and the reduction of olfactory tolerance, shaping the urbanistic, economic, social, and emotional landscape to the standards of modernity. In the seventeenth through nineteenth centuries, smells were understood as volatile, ineffable material, too imprecise and subjective to be understood or assimilated by modernity, so bodily odors were replaced by the smells of machinery, medicines, asphalt, and cars, designing an olfactory image of the modern industrial city according to a common "olfactory well-being."[4] This potential developed during the nineteenth and twentieth centuries, putting particular emphasis on odorization and personal hygiene through cleaning products such as soap, perfumes, and daily cosmetics.

It's never been easy to talk about smells. The lack of a specific language to describe the olfactory sensations puts pressure on the idea of a contemporary logocentricity in which smells, as opposed to colors, cannot be named and instead the phrase "it smells like…"[5] is generally used. There is no established codification, no Pantone system of smells, making it impossible to refer to them objectively, maintaining thereby an elusiveness that is inherent in their very materiality. Perfumery, for example, the vast esthetic industry built up

around scents, uses language taken from the sound landscape, in which the "chords" that make up a perfume contain at least three types of "notes." The top notes are the first we perceive as they evaporate most quickly; the heart notes establish themselves as the basic idea of the fragrance; and the dry-down notes are those that remain when the rest have evaporated. This description is also applied to everyday or intimate olfactory relationships given that the stages of evaporation or permanence of a substance determines our relation—ephemeral or sustained over time—with its smell.

While this text steps away from the anthropological idea of the senses as a field of study, it approaches the intrinsic link between smells and our bodies (sensitive, olfactory, sensorial, emotional, permeable) from two perspectives: the indivisible connection between our bodies and the ecosystems we are part of by way of survival—and of Sloterdijk's theory of atmotechnic[6] control and its impact on our corporality and subjectivities, particularly in today's world in which the simple act of breathing returns us to the idea of control of the penetration of particles into our bodies, the isolation of the sick, living organisms, stenches and miasmas.

The policy of disinfection applied to humans has been designed in an olfactorily silent and imperceptible way, becoming one of the markers of modernity: that which cannot be seized upon, studied, named, dissected, and normalized, must therefore be eliminated through manipulation, often in a violent, brutal way, from the imperceptible environment of the other. During the 17th century, incense burners and scented emanations were adopted as popular practices for fumigation, in which the idea was to override the bad smells by using stronger ones. Despite the religious and ritualistic origins, it evolved into a medical practice in homes in which it was recommended "to ignite a fire in the bedchamber and put on the coals some scented substance such as cuts of ceder wood, grains of juniper, laurel, cinnamon, cloves**,** rosemary, spicebush or laudanum, and with the smoke of these things the clothes are perfumed."[7] During the 19th century, muriatic gas, ozone, nitric ether, or ethyl nitrate among other products, aimed at deodorizing, rather than covering, the miasmatic material with strong odorization. Today, acting out of a fear of sickness, suffering, and death, we practice this separation and cleansing on a daily level, encapsulating ourselves in our face masks that filter our olfactory and vital relationships with our surroundings, overexposing us to our own personal smells and fluids.

From this perspective I am interested in suggesting a cosmology which reflects on the agency of the olfactory systems. Scent—the aerial medium—allows us to question ourselves about the role of smells in the construction of our ways of life and relationships with our surroundings. When Sloterdijk writes[8] that the modern era began on 22 April 1915 at 6pm at Ypres Salient, he is referring to the exact moment during World War I when German troops released 150 tons of chlorine into the air, generating a cloud 600-900 meters deep. The wind blew this cloud towards the French soldiers at a speed of two to three meters per second, causing serious respiratory damage in the people exposed to it, many of whom died by asphyxiation: "In this war, the atmosphere itself becomes the war theatre. What's more, the air becomes a weapon and a battlefield of a peculiar kind. And further still: through the commonly breathed air, through the ether of the collective."[9]

The relationship between smelling and existing allows us to reflect on the olfactory perspectives offered by modernity "because smell must enter and transform the body in order to be perceived."[10] What Sloterdijk has called atmotechnic, referring to gas warfare, makes us question the mutability of the air we breathe and the impossibility of separating the action of inhaling from the aromatic world; this also includes the possibility of generating pleasure, detonating instincts, memories, and installing practices of control, and deciding between life and death. All this is present in the act of breathing, which is at the same time basic and uncontrollable. However, it is this dimension of terror, fear, and control over the act of breathing which we still don't manage to measure. I'm not only referring to chemical weapons, to the designs of atmospheric and respiratory machines (like the gas chambers) to control the relationship between life and death, the use of gasses as a means of controlling the masses, but also the very act of sharing the air that we breathe: "The sense of smell unsettles liberalism's fiction of the rational, individual subject of free choice. Air is simultaneously an aesthetic medium of scent and a biopolitical medium that conditions life and death: airborne chemicals may convey not only disgust or enjoyment but also environmental slow violence that insidiously disperses environmental harm across space and time."[11]

We aren't free to choose the air we breathe. On 18 October 2019 a series of public protests erupted in Santiago, actions that led to what was then called the Chilean social uprising. That same night, coming out of my house, the police had deployed a series of anti-riot devices, one of which was the use of *chlorobenzylidenemalononitrile* [C10HSCLN2], more commonly known as tear gas, which was dispersed in the air through two different systems: through guns that shot cartridges of gas which had a more focalized and easier-to-aim impact; or trucks knows as "skunks," which sprayed tear gas over large areas wherever protestors were. Since 1969 the use of tear gas in war situations has been forbidden, however, it is allowed as a means of dispersing social uprisings. Currently the use of chemical devices based on asphyxiating gasses by the armed forces is authorized by the Chilean Law of Arms Control as it is part of the control and re-establishment of "public order."[12]

For months we were surrounded by weapons and military personnel. For months the area around the Plaza de Dignidad[13] was submitted to a barrage

1 Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment. Philosophical Fragments* (California: Stanford University Press, 2002), 151.

2 This theory was developed in Europe in the 17th century and held that miasmas, odors, and foul-smelling waste were the cause of diseases such as cholera and smallpox. It was believed that dirty water, fetid smells from drains, and fermented blood of ill people mixed with decomposed organic matter from the earth transporting gasses, becoming the main cause of disease and epidemics. This explained why poorer urban areas, and housing closer to cemeteries or slaughterhouses were most prone to infection. The miasmatic theory was replaced towards the end of the 18th century and beginning of the nineteenth by the germ theory of disease.

3 Cristina Larrea Killinger, "La colonización olfativa de la medicina. Cuerpos y espacios urbanos," *Calle14: revista de investigación en el campo del arte* (2010): 29.

of intoxicating tear gas that saturated the asphalt, the ground of the parks, the cement of the buildings, so that it was impossible to open windows, generating a theater of war, a submission of our breathing spaces, a determined and bellicose control of our atmosphere and our common survival spaces, converting our daily ecosystems into an uninhabitable, unbreathable space.

In his book *The Smell of Risk: Environmental Disparities and Olfactory Aesthetics*, Hsuan L. Hsu quotes Jennifer Fleissner to install us in the indissoluble terrain between the olfactory and our daily lives: "The air—that consists of a changing combination of anthropogenic emissions, animal and plant exhalations and dust particles of all kinds—offers a complex although often ignored index of the 'changing state of nature in the modern world'".[14] Paying attention to smells is to become aware of their power to transform our surroundings and memories—not only physiologically, but by allowing a particular meaning to emerge, an intrinsic connection between our daily spaces and our atmospheric and territorial existence. We can then conceive of ourselves as breathing entities constantly experiencing olfactory ecologies, materializing our existence out of memories, with spiritual and practical health connections that are eroded by the toxic environments in which we do not yet have political representation. "Thinking about the materiality of air and the densities of our many human entanglements in airy matters also means attending to the solidifying and melting edges between people, regions and events."[15]

Thinking of the "inseparability of bodies and land"[16] is a way of proposing *possible ecologies to continue breathing*, to continue existing in "olfactory environments," in those common spaces between our corporality and subjectivities with the ecosystem that situates us. Every mutation, every modification, every shift of an olfactory landscape reconfigures the way that we relate to this space. We find ourselves in an era of material transformation of our territories, the mud, substrata, and peatlands; a transformation of our air and a shift in the balance of carbon, nitrogen, and oxygen emissions; a change in the organic material that we breathe, such as the lichens, spores, mosses, and thousands of other organic components in decomposition that transform our atmosphere, our olfactory universe, and therefore our sensorial bodies that are constantly exposed to every particle.

4 Peter Sloterdijk, *Esferas III (Espumas)*, (Madrid: Siruela, 2006), 142. Originally published in English as *Foams: Spheres Volume III: Plural Spherology* (Los Angeles: Semiotext(e), 2016).
5 For more on this, see Constance Classen, David Howes, Anthony Synnott, *Aroma: The Cultural History of Smell* (London and New York: Routledge, 1994).
6 Sloterdijk proposes the concept atmotechnics in his book *Terror from the Air* in which he describes the growing concern for our inhabitable "environments,"

Fig. 1.
Aerial photograph of the first chlorine gas attack in the battle of 22 April 1915 at Ypres Salient. George Metcalf Archive, Canadian War Museum.

Fig. 2.
Tear gas thrown at protestors during the social uprising in Santiago, Chile, as a means of crowd control. November 2019. Photograph by Jose Luis Risetti @jlrisetti.

particularly since World War I, in which chemical weapons were not aimed directly at the body of the enemy but rather

climatization of daily-life spaces, the sanitization of workspaces, cooling technology, protective masks, and other measures.

New York University Press, 2020), 113.
11 Ibid, 57.
12 Many countries have

Exposure to the substance can also lead to a reactive malfunctioning of the airways.
13 The name given to the Plaza

Rajan (Durham, NC: Duke University Press, 2012), 128.
16 Hsu, 156.

at the "breathable air"—the "environmental conditions of life." Peter Sloterdijk, *Terror from the Air*, translated by Amy

7 Iuan Francisco Capello, *Epílogo de maravillosos, y experimentados antídotos contra la peste, assi preservativos*

forbidden the use of *chlorobenzylidenemalononitrile*, due to health studies that show how a high level of exposure

Baquedano in Santiago after the social uprising.
14 Jennifer Fleissner, *Women, Compulsion, Modernity: The*

Patton and Steve Corcoran (Los Angeles: Semiotext(e), 2009), 15. For Sloterdijk it becomes evident that from this moment

como curativos, para beneficio universal (Barcelona: Ioseph Teixidó, 1721), 77.
8 Sloterdijk, 10.

to the substance (such as in enclosed areas or after tactics of area saturation to disperse protestors) can cause pneumonitis

Moment of American Naturalism (Chicago: University Chicago Press, 2004), 7.
15 Timothy Choy, "Air's

onwards human existence begins to need a series of atmotechnics—atmospheric techniques—in order to survive, such as the

9 Ibid, 100-101.
10 Hsuan L. Hsu, *The Smell of Risk. Environmental Disparities and Olfactory Aesthetics* (NY:

and pulmonary oedemas leading to death, as in cases of people suffering from particular kinds of acute bronchopulmonary disease.

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Julia González Calderón, Soledad García Saavedra

The Best Reeds Grow in the Peatlands

Julia González Calderón is an artisan from the Yagán Indigenous community. She is the daughter of Úrsula Calderón and José González. An educator and practitioner of ancestral medicine and reed crafts, she is dedicated to rescuing and transmitting her culture to new generations, through what she learned from her ancestors. She offers ongoing reed basketry workshops for students and scientists at the Omora Ethnobotanical Park on Isla Navarino in Tierra del Fuego, Chile. González Calderón has been an exhibitor at various national and international craft shows. In 2010, she received the Award of Excellence in Handicrafts from UNESCO and the National Council for Culture and the Arts. She lives in Puerto Williams, Cabo de Hornos.

Soledad García Saavedra is a curator and art historian. Her research practice focuses on the rescue of suspended microhistories and the possibilities of bringing them corporeally into the present. She was coordinator of the Centro de Documentación de las Artes Visuales (Visual Arts Archive) at the Centro Cultural La Moneda, where she spearheaded the first digital archive in Santiago. García Saavedra was the editor-in-chief of the five-volume series *Ensayos sobre Artes Visuales. Prácticas y discursos en los años 70, 80 y 90 en Chile* (2011-2016). She was also the head of Public Programs at the Museo de la Solidaridad Salvador Allende (MSSA), where she co-created the research/action project *Mirada de Barrio* in collaboration with the neighboring community, for which she received the distinction of Women Leaders in the Neighborhood. Among her latest curatorial projects are the exhibition *Lunes es revolución,* as well as ongoing research on experimental art in the 1960s in Chile. She holds a Master's in Curatorship from Goldsmiths College at the University of London and teaches courses at universities and cultural institutions.

A Conversation Between Julia González Calderón and Soledad García Saavedra
April/May 2022

Thiare (age 11) and Hevolett (age 8) meet in Puerto Toro, one of the tiny villages visited once a month by a supply ship that sails through the Beagle Channel, north of Navarino Island, the southernmost inhabited island in the world. In the middle of a thick, overgrown forest, Thiare proudly shows to the cellphone camera the rough bindweed she's holding. *It's not fully grown yet,* she smiles. The person holding the phone asks: *Who taught you to recognize rough bindweed?* Thiare replies: *Tita did.*

Tita is Julia González Calderón: mother, grandmother, craftswoman, and teacher of Yámana or Yagán culture. Julia was born in 1956 on Mascart Island, a small island protected by a branch of the sea and surrounded by larger islands such as Hoste and Navarino. Thiare and Hevolett are the granddaughters of Martín, Julia's older brother, who died in 2020 of Covid-19, and who was an expert in traditional canoe navigation. Thiare and Hevolett have been living with Julia for several years now in Puerto Williams.

I conducted this short and informal interview with Julia over the telephone, thousands of miles apart, in the moments that she could snatch from her housekeeping and the daily family meetings that take place in her house. We'd talk at 3pm, when she could find a moment to herself, and when my baby, Pascal, was having a nap. Time was short and the conversations were frequently interrupted. Julia would also travel every two weeks to Punta Arenas to undergo intensive chemotherapy treatment. I'd love to be sitting in Puerto Williams with Julia, drinking *mate* and soaking up the Yagán culture. Especially everything that she tells me about weaving with reeds. "The basket I spin in my conversations is the *tawela*," she tells me. A conversation, to quote Julia, that transcends mere tactile communication because, like life, it is a spiral weave that slowly extends out of trial and error, with joints and fractures. This basket is a container that needs to be made with care; it requires patience, attention, warmth, listening. This text holds, like the *tawela* baskets, a short conversation about the recovery of the Yagán culture, the transmission of indigenous medicinal knowledge, and the processes of craftsmanship that Julia has been practicing since childhood.

Soledad García Saavedra (SGS): Thank you for sharing with me the video in which Thiare showed the bindweed and said that they weren't ready yet.

Julia González Calderón (JGC): Yes, she knows all about it. I've always taught her about the Yagán culture.

SGS: Apart from being edible, does the fruit of the rough bindweed have any other uses?

JGC: It's a medicine. It helps regulate high or low blood pressure. You make an infusion out of it. You can also make delicious wine with it. You steep its branches. There are so many things people used to do in the past that we don't know about anymore. I work in indigenous medicine. I was always asking questions, just like Hevolett does now.

SGS: (laughing) What sort of things did you ask, and who did you ask?

JGC: My grandmother, Rosa Melisich, who was very old, and my mother, Úrsula, and my father, José, as well as other people we bumped into, because we often went for walks in the forest. I'd ask them about how to use old things—the food, the medicine, how to cure, how to treat. I loved hearing about it, and I practiced, through trial and error. I began when I was very young. I asked them, just as you're asking me. Just as when I go out walking with the girls (Thiare and Hevolett).

SGS: Can you remember when you started treating people?

JGC: The medical side came later when I saw someone ill or who was hurt. Plants are always used, even today. Sometimes alternative medicine just works better. Nettle for pain in the bones, rheumatism. That's what my grandmother Rosa used. Sorrel for wounds and tonsillitis. Salt water is a good medicine for lots of things. Recently, I was thinking about a friend of mine, Candy. She used to get very seasick. Her mother told her to drink salt water. And if it's mixed with water, it's good for acidity.

SGS: That's good to know, I always thought you couldn't drink salt water.

JGC: Yes, it's very good for you. If your knees or bones ache, you get into the salt water and it calms you. Thiare and Hevolett go into the water, I taught them to get into the cold water. Lots of people say that you shouldn't, that you'll get sick or catch a cold. When I can get hold of some, I give them a spoonful of sea lion oil so that they don't catch a cold. They're fighting fit. Women used to give birth in the water to help with the pain.

SGS: How were you born?

JGC: I was born with a Yagán midwife on Mascart Island in the house, because by then we were already living in houses. I'm the third child. First there was Martín, then José Germán (Popi). My father was born in a bay of Mascart Island up towards Paso del Indio, near the top of the hill. His mother was pregnant and gave birth to my father while they were carrying the canoe up the hill to take her out to the open sea on the other side of the island. Children used to be born wherever, it wasn't a big deal.

SGS: So, with the effort of climbing the hill she had your father. Who was with her?

JGC: They were always in a group when they took the canoe over to the other side of the island, because it was heavy and you needed between 12-15 people. They carried everything on their shoulders, they didn't have backpacks. The food, the clothes. Terrible, isn't it? That was nearly autumn.

SGS: Yes, when I was about to have Pascal, my gynecologist told me that women were made to be able to give birth halfway up a mountain. I imagined that possibility and remembered the effort when I hiked on the Dientes de Navarino.[1]

JGC: Yes, lots of babies are born like that. I was born without a doctor or anything.

SGS: Do you remember the house you were born and brought up in?

JGC: Yes, I'll never forget Mascart Island. When I was in Mejillones recently, I sketched the house and its surroundings, and I showed it to Popi, saying: *Look, this is the house on Mascart.* And he teased me, saying I was crazy. He doesn't remember the house much because he didn't live there long. I lived there until 1972, when I was 16, and we had to leave the island. My father stayed longer. The island was uninhabited between 1976 and 1977 when they stopped raising sheep there, and all the sheep were stolen. My father used to hunt otters, and that was forbidden but it was the only way to survive. He bought supplies in Ushuaia and spent the whole winter there. Then he had to start catching king crabs. And the island was abandoned.

SGS: Have you been back to the island?

JGC: We've been back to Mascart Island almost every year for the cultural tours.[2] The CONADI (National Corporation of Indigenous Development) gave part of the island to Popi. It took about five or six years

1 Dientes de Navarino is a mountain range that looks like teeth and covers part of Navarino Island. During summer months one can hike the paths that cross and circumvent the mountains.

to organize, but finally it's been handed over. That's why I've been thinking about the house a lot.

SGS: That's great news! What an achievement. It must hold so many memories for you.

JGC: I often think about everything we used to do there. Sometimes the girls ask me for this or that and I tell them that on Mascart Island we didn't have toys or anything. We made our toys out of wood and a knife. Of course, I cut my fingers quite a few times. That's why we're craftspeople from the time we're young, and we make things: little boats, propellers, or animals like sheep or dogs.

SGS: Did you play with other children or among yourselves?

JGC: We played among ourselves, but we always met other children because we were often out on the water. We never stayed put on Mascart. In the summers we moved a lot. Two weeks, and we'd go to Douglas, Yendegaia, Navarino, Tanswani, and we'd meet other families. We kept up contact. They were friends and we helped each other. My father was always helping to shear the sheep. The ranch workers all went and there was no arguing, no selfishness. It was so nice.

SGS: Did you go by boat to Puerto Williams to go to school?

JGC: Yes. When I was seven I went to boarding school and I'd return to Mascart during the holidays. Most of the children of all ages came from Canacus, Tanswani, Canasaca, Tekenika, Caleta Dos de Mayo, Yendegaia, Picton, Lennox, Puerto Toro, and other islands. The children were from everywhere. When I was at the boarding school it wasn't only indigenous children. There were the children of policemen and sailors, and we were all together.

SGS: What are your memories of that?

JGC: It was lovely. Sometimes they'd tease me, saying, *She's the Indian,* because I had a strong character. And I'd reply: *Be careful with the Indian*, because that was what I was like! I was always respectful to others and made sure they respected me. I defended myself and nobody bothered me again. I always played with whoever bothered me, and they'd say sorry and that was that. I heard one of my cousins, Juan Calderón, say once: *One forms people, not the other way around.* If you're open with someone, they'll be open with you. I agree. I like to say things how they are. My mother always taught me through the Yagán stories. There are so many stories. When I was working in a nursery (2009-2018), I'd tell them about our culture; I'd observe how a child behaved, and depending on that I'd choose which story to tell them.

SGS: Was it your mother or your grandmother who taught you to weave?

JGC: My mother taught me to weave. When I was nine, I made a huge basket. I wove a beautiful, enormous basket, weaving upwards. When I got to the middle my mother said, *Let me help you,* and I said, *No, I'll finish it*, and I went to get some more reeds. I wanted to make it on my own without any help from anyone. I wanted to test myself. When I finished it, I gave it to my mother. She said, *I'll sell this in Puerto Williams and buy things.* I forgot that I'd made it.

SGS: When you made that basket you already knew how to recognize the reeds?

JGC: Yes, I was nine years old. My mother taught me how to look in the forest for the most healthy and green reeds that weren't burnt. You have to be careful not to break them. Then you have to cook them and make sure they don't burn or break when you take them out of the water. The best reeds are in the peatlands, protected by the trees, especially by the *coïgues.* Those are the best. There were good reeds everywhere on Mascart Island, but not here.

SGS: Where do you find them on Navarino?

JGC: There are three places you can find them. You can't find them everywhere. The reeds burn in the sun. And the hackberry rats eat the roots. They look like mice and they burrow in to make their nests. The beavers also make huge holes. I know places where I can find them in the winter where they're protected by the *coïgues,* but if the water freezes the reed stem breaks. It's difficult to walk in the snow. From my house it's 2-3 kilometers to get to the peatlands.

SGS: So it's increasingly difficult to find healthy reeds and to get to them through the peatlands.

JGC: It's hard to walk between the reeds. You get stuck in the peatlands because they are so soft and it's tiring to walk there, it's like walking on a mattress. You have to be careful not to fall into a bog. There are pockets of

2 The cultural tours are organized by the Museo Martín Gusinde in Puerto Williams and take you by boat around the islands that were previously inhabited by the Yagán.

water that you sometimes can't see. Sometimes between the reeds you can't see how deep the water can be. I've fallen and had reeds stick in my nose, my hands, but at least I haven't had a reed stick in my eyes—I close them. I wear light boots, but that won't save you. But at least the water in the boots then warms up.

SGS: (laughing) It must be hard to get out if you fall, you probably have to grab onto the reeds, don't you? How often do you go to gather reeds?

JGC: I go every two weeks. I can't get much because the reeds dry so quickly. It's so hot now, so that doesn't give me much time to weave. I put them in a nylon bag to keep them fresh. It depends on the work I'm going to do, where I get the reeds from. If I've got a big job with thin or medium reeds, then I get a good handful.

SGS: How long does it take you to weave?

JGC: A big basket takes me a long time. It's slow work. The size is roughly equivalent to a 5- or 10-liter pot. That'll be 20 days if I work quickly, or even a month if I'm making that one basket. I weave when I have spare time, because there's a lot of work cleaning, cooking, washing. If I work too much my hands hurt because the material is hard—it's not like wool. And my hips hurt from the sitting. So I have to move around. It also depends how I cook them, because sometimes the reeds aren't any good. You don't always get it right when you gather the reeds. I tie the handful of reeds with a ribbon to identify where I got them from and where the best ones are. Then I go straight there next time.

SGS: So you classify them as to which are the best. Do you sell the baskets at the market?

JGC: I don't sell the big baskets on the market. Nobody would buy them because the weft design is very small and the reeds are really hard. It's a lot of work. The weaving is dense.

SGS: How much do you sell a big basket for?

JGC: Between 500 and 600 thousand pesos. If I make one, then afterwards I make another one. Museums can pay what they're worth. They're not things for a market. For the market I'll make a model of a little basket and I sell it with the story of the basket, the history of the Yagán. Nobody buys a big basket.

SGS: What type of basket do you most make?

JGC: The basket I'm talking about is the *tawela* in Yagán. Then there's the *kéichi* for gathering seashells —it's a net that you put the mussels in. It has a tie to close it. Then there's the *Ulón Steapa*, the "round and round," which is more tightly-woven and delicate. Another is the *Chawanuj* with the sticks of coïgue around which the reeds are woven, and that's for catching sardines in the sea. It's a net for catching sardines. I make all those types of baskets.

SGS: I like how you say you talk to the baskets as you weave, as though you were having a conversation. What are you weaving at the moment?

JGC: At the moment I'm weaving some earrings, some baskets, and anything I can, because tourists will be coming from the hostels, and they always come here. People know I'm here.

SGS: Do Thiare and Hevolett know how to weave?

JGC: They come with me to gather the reeds. When students come from all over the world to the Omora Park[3] the girls help me because I run workshops and I divide the students into groups of ten. They help run the weaving workshops. I'm teaching the girls so that they can teach the students. We do the whole process together so that people can see what weaving a basket really takes.

SGS: Do you think that the Yagán culture will survive?

JGC: I think so, because just as my mother taught me everything, I'm teaching the girls. When I go to Mejillones, or I'm in the countryside or the forest, I remember things from when I was little. It was much easier to tell stories before though, because we were out at sea.

3 The Omora Ethnobotanical Park is a protected area to the north of Navarino Island, dedicated to scientific research, education, and biocultural conservation. In Yagán Omora means hummingbird. See Centro de Investigación y Asistencia Técnica Puerto Williams, Parque Etnobotánico Omora, www.umag.cl/facultades/williams/

Carolina Urrutia Neno

From the Depths of the Peatlands

Carolina Urrutia Neno holds a PhD in Philosophy with a specialization in aesthetics and art theory. She is an associate professor at the School of Audiovisual Creation in the Communications Faculty of the Universidad Católica de Chile, where she teaches Chilean cinema, Latin American cinema, and film theory. Urrutia Neno is the editor-in-chief of the film studies journal *laFuga.cl*, author of *Un cine centrífugo. Ficciones chilenas 2005 a 2010* (Cuarto Propio, 2013), and co-author of *Bordes de lo real en la ficción. Cine chileno contemporáneo* (Metales Pesados, 2020). She is currently working on a research project on contemporary Latin American film (Fondecyt 11190709) and has just co-edited the book *Estéticas del desajuste. Cine chileno 2010 a 2020* (Santiago, Metales Pesados, 2022).

1.
In 2002 the Canadian filmmaker Bill Morrison created a register of visual elements for an "environmental symphony" set to music by the composer Michael Gordon. The result was *Decasia*, an experimental work of celluloid found footage showing a collection of images in various states of decomposition that were projected onto multiple screens. The subject matter of the stills loses importance due to the erratic and deteriorating nature of the celluloid being devoured: what the viewer of *Decasia* sees is the disintegration of the image, through passage of time, because of the fungus or chemicals that consume the original register printed onto the celluloid. The result is a phantasmagorical image, a visual noise that destroys the original composition. The object of the film is hidden and hypnotic, coming to life in the accumulation of images that disappear even as they are projected onto the screen, disintegrating before our eyes.

2.
The landscape of a peatland is visually similar to the lunar landscape. A naked foot resting on the surface of a peatland activates a multiplicity of sensations in the foot's owner, gently pressing to touch the moss and sinking in until it reaches the water below the surface. The foot is submerged and the person feels textures, temperatures, and the subtle, subterranean movements alive in the peatland. The foot, however, can neither see, nor hear, nor smell while it is submerged in that peatland.

3.
There is a strand of contemporary cinema that has moved away from the logic of action and reaction centering on a main character (man or woman), and has distanced itself from classical methods to experiment with the possibilities of hearing, touch, and even warmth and smell. Laura Marks works with a memory of the senses, appealing to the multi-sensorial experience that cinema implicitly advances. She asks: "How can the audiovisual media of film and video represent non-audiovisual experience?"[1] She answers that the technology doesn't exist to reproduce certain experiences (smell, touch, taste) despite the potential of virtual reality and other devices that bring us nearer to certain synaesthetic practices of cinema, defined by Marks as the "perception of one sensation by another modality."[2]

4.
Turba Tol Hol-Hol Tol takes on the haptic and synaesthetic qualities of the artistic audiovisual medium.[3] Curated by Camila Marambio and developed by Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, and Alfredo

Thiermann, in collaboration with a large group of creatives, the project places center stage a peatland. In the Chilean pavilion installed at the 59th edition of the Venice Art Biennale, spectators see the foot that rests, naked and warm, sinking gently into the peatland. In contrast to the foot, the spectators hear and see. They even smell. The exhibition allows itself to be a foot—it could even be a stone thrown into a peatland—a stone that feels, a foot with eyes and ears.

5.
Contemporary Latin American cinema has many examples of synesthesia. The Argentinian director Lucrecia Martel is perhaps the best-known filmmaker working within this logic. In her films, from *La ciénaga* (2002) to *Zama* (2017), the director intensifies the aural properties of the visual, and arranges an auditive map (developed in the screenplay) that allows for multiple perceptions to arise in the spectator, going further than the narrative thread of the story. "In the cinema you can close your eyes but not your ears," states Martel.[4] In her films everything vibrates: the sound enables the most surprising spaces—both within the frame and outside of it—to be activated, giving the spectator multiple ways of perceiving, and complementing what they see and hear.

6.
Interest in sensorial exploration in cinema allows for an overspill between the real and the fictional, between the real and the unreal or hyperreal. Filmmakers organize audiovisually tactile and haptic possibilities, making up a tale that goes beyond the visible and the audible, through (almost) palpable expressions. Within the various possibilities of the staging an intensification of the real is provoked, and through an appeal to these senses, a crack opens through which the unreal can slip. It belongs in the terrain of the dreamlike, the magical, the spiritual; an archive of personal memories (always distilled from the collective memory), with an immersion in nature that adopts the point of view of the vegetal, stone, and insect world. These films are part of a strand of contemporary cinema in which hearing and the haptic wrestle with the visual, and sometimes manage to overcome it (momentarily upending the hierarchy of the eye's dominance over other senses) to modify and transform perception.

7.
The spectator's eyes in *Turba Tol Hol-Hol Tol* see the landscape of the surface collapsing into its surroundings, falling and tumbling. Then they sense the apparition of a world that is simultaneously chaotic and pacific. The ears hear the amplified underwater murmuring sounds of the thousands of algae and floating mosses. For minutes on end the spectator is inside the peatland, submerged in it, as around them everything lights up, turns on, and comes to life, before falling asleep again. The audiovisual device shows the spectator—the spectator-foot, the spectator-stone—all that is invisible, all the darkness and light at the heart of the peatland. It allows the murmuring of the peat to rise, sometimes deafening and collapsing the aural soundscape, and at other times merely throbbing and vibrating, before, as the spectator returns to the surface, it envelops them with songs, shouts, and human bellows that are rhythmically and organically intertwined.

8.
Chilean cinema has recently shown great interest in the vegetal and animal worlds, for example, in the works of José Torres Leiva and Alicia Scherson. In the films *Turistas* (Scherson, 2009), *Verano* (Torres Leiva, 2012) or *Vendrá la Muerte y tendrá tus ojos* (Torres Leiva, 2019), certain sequences establish a riposte to the narrative anthropocentrism that we are used to in cinema. The fauna and flora play a fundamental, and sometimes leading, role; the filmmakers draw in close to them with extended sequence shots. The duration of the shot and the proximity of the camera lets us see the dancing of the trees that nobody else is watching, or follow the meanderings of a spider or the leaps of a cricket, or watch a dog running to feed her starving puppies. The camera takes its time and suspends the narrative flow and concentrates on the non-human element of the landscape, emancipating it from the supremacy of a leading or secondary character, allowing us to watch even when none of the human characters are.

9. Filmmaker Dominga Sotomayor oversees the cinematographic elements of the *Turba Tol Hol-Hol Tol* installation in collaboration with the director of photography Benjamín Echazarreta. Both have explored in their work the sensorial possibilities of cinema—amplifying the visual to render more complex what we see. We can think of *De jueves a domingo* and *Tarde para morir joven* (Sotomayor, 2014 and 2018); *Rey* (Niles Atallah, 2017) and *Lina de Lima* (María Paz González, 2018), in which Echazarreta was the DOP. In these films they search for a materiality of the image (its plasticity, its porosity) and use this to explore elements such as the past (historical, personal, political); visual traces of late capitalism; the sensations of childhood; the manifestations of boredom or desire; or the feeling of a summer spent under a tree in a stifling landscape.

10.
In order to generate an immersive sensation, Dominga Sotomayor and Benjamín Echazarreta traveled to the peatlands of Patagonia. Going

1 Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Durham: Duke University Press, 2000), 210.
2 Ibid, 213.
3 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann. *Turba Tol Hol-Hol Tol.* 2022. Multimedia artwork, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.
4 Lucrecia Martel, Australab Masterclass by Lucrecia Martel, 9 October 2014, Universidad Austral de Chile. "Sound is one of the most extraordinary tools that cinema has because it gives it a tactile quality. You can be in a room, close your eyes and not see anything, but the sound still gets through, it's like being in a disco, it cuts through the body. You close your eyes, and you hear the stabbing knife, or the storm, or whatever it is... you can't ignore it." Lucrecia Martel with María Agustina Brandi, David González

against expectations, they did not film the landscape's vastness, its moonlike appearance, the peatland extended under the expressive sky of Chilean Patagonia. Instead, they decided to submerge a camera recording 360 degrees into the muddy, mossy, and confusing space of peatlands: navigating in its opacities, immersing in its depths to imagine a descending voyage towards some fictional abysses through later montage. In other words, modulating a precarious science fiction.[5]

11.
Narrative cinema is almost always from the perspective of a person: a character to whom things happen, who undergoes a journey, whose future is put in play within the frame of the story. Non-human presence is used as a landscape surrounding the leading character and it must content itself with being a passive witness to this life that is *happening*: a living being whose presence is both organically exposed and latent, but also only reflecting or being subordinated to…

12.
In *Decasia* it is the image that disappears in front of the eyes that observe: the image of a girl in a school run by nuns, a caravan of travelers crossing a desert, a couple dancing. These stills begin to be consumed by stains, holes, and patches of humidity that devour the celluloid and make the project take on an almost phantasmagorical quality. In *Turba Tol Hol-Hol Tol*, on the other hand, the image (phantasmagorical as well in its strangeness, its lighting, movement, and sound) remains, while the screen (a curved and fragile surface that surrounds the spectator, made from an organic, algae-like, biomaterial) degrades and disintegrates over the duration of the exhibition. The screen is as fragile as what is projected onto it, the peatlands that survive despite the dangers of extinction: something non-human defiantly existing in the face of human persistence. At the center of this evanescent screen is the spectator: the foot-spectator, the stone thrown into the depths of the peat bogs.

5 This is how Dominga Sotomayor refers to the experience in a conversation held by the team and Carla Macchiavello, August 2016, http://matpsil.com/revista-lapso/portfolio-items/martel-entrevista/ and Georgina Vorano: "Entrevista a Lucrecia Martel," LAPSO Revista Anual de la Maestría en Teoría Psicoanalítica Lacaniana no. 1, in "Ecoestéticas turbias: Turba Tol Hol-Hol Tol," *Cuadernos de Arte* no. 25, Escuela de Arte PUC (2022): 66-91.

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Anita Puig Gómez

Buildings and the Permanence of Material Things

Anita Puig Gómez is an architect from Universidad Mayor. She has a Master's in Architecture and a PhD in Architecture and Urban Studies from the Pontificia Universidad Católica de Chile. She has collaborated in Fondecyt research, both for first-time grantees and in the general program. Her areas of study focus on architectural history and theory, specifically linked to modern architecture, interior design, and gender studies. Puig Gómez's work and publications have explored the cultural and spatial interaction between interior design, clothing, textiles, and architecture. In addition, her research establishes new readings on women, their informal education, and the translation of tools learned from a trade to the built world, understanding them as a singular language.

Architectural theorist and author David Leatherbarrow[1] argues that two antagonistic phenomena characterize all buildings: the edified elements and weathering, unmerciful environmental factors.[2] According to this separation, constant environmental forces would eventually lead to the building's decomposition or collapse; understood in this light, the building is managed under the assumption that its materials will fail. *Turba Tol Hol-Hol Tol*, the representation of Chile at the 59th International Art Exhibition – La Biennale di Venezia, takes a new turn in this relationship between environment and construction.[3] It recognizes weathering as the conceptual and formal completion of the building, understanding human society and the environment as a continuous life process.

During the sixties, a group of Japanese architects, as a result of their cities being destroyed in World War II, approached architecture as a work that considered planet Earth as a finite whole. The so-called Metabolists[4] understood the global scope of large-scale architecture conceived for the masses who required housing during the post-war period. The Metabolists were consolidated as a group and a new generation of architects during the World Design Conference held in Tokyo in 1960. Architects Kinoru Kikutake, Masato Ohtaka, Fumihiko Maki, Noriaki Kurokawa, along with art critic Noboru Kawazoe, proposed designs for a utopian future based on life processes which they termed metabolism. They considered architecture as an organic network of replaceable, transformable, perishable, and possible components to be rebuilt. The group defined it as "a vital process—a continuous development from atom to nebula. The reason why we use such a biological word, metabolism, is that we believe design and technology should be a denotation of human society."[5] However, the efforts to achieve the coexistence and transformation of society through large-scale buildings did not incorporate one of the most relevant factors in this equation: nature and its own rules. Contemporary to the Metabolists, American architect Louis I. Kahn's[6] vision was similar to the post-extractivist paradigm now proposed by *Turba Tol Hol-Hol Tol*. He said: "We must look back into the nature of man and the laws of nature. We will find very good answers there."[7] By observing nature, one can extract what Kahn calls *form*, described as "a realization of the difference between one thing and another, a realization of what characterizes it."[8] Form, without figure or dimension, sustained by observation, would establish the origin of both natural and human rules before being a design. The design, for Kahn, thus served a function, differentiating the natural laws of constructed elements and defining it as a figure: "[...] design is a personal act, it is how you see it. But the principles, the unique characteristics, are something that do not belong to us at all. They belong to the activity of man, of which we form part, and which we must discover."[9]

Image 1.
Digital drawing. Alfredo Thiermann and Sebastián Cruz.

The Material Lightness of the Pavilion

The pavilion's architecture in *Turba Tol Hol-Hol Tol*, developed by architect Alfredo Thiermann in collaboration with Sebastián Cruz, formally recognizes the original pre-existence of the Venetian Arsenal, a historical space where the Biennale has been held. The project's layout is organized around a circumference and a new rectangular base, established as a dirt surface to delimit and internally arrange a fertile territory of *Sphagnum* moss.[10] The moss was donated by the Greifswald Mire Center as part of preservation and conservation research carried out in Hankhausen Moor, in Lower Saxony, Germany. It consists of 60 square meters of *Sphagnum* palustre installed at the pavilion on a pond of filtered water with special lighting to foster its growth.

The project also consists of an access platform, or ramp, and a metal structure erected on the circumferential layout, shaping a conical element in the center. The access ramp and inner cone are slightly rotated to accommodate the Arsenal's pre-existing thick masonry wall. This positioning extends the pavilion's central forms outside the building walls, expressing that the visible parts are only a fragment of a much larger and connected reality. The pavilion, made of three assembled elements (a platform, a ramp, and a central conical structure), loses prominence as it supports the material that manifests its holistic form: sound, peatlands, smells, and images. The sound installation by Ariel Bustamante closes this connection with a wider and connected universe, establishing the air as the basis of this interconnection, which propagates voices, sounds, and breaths, and defines atmospheres from the north to Tierra del Fuego.[11]

1 David Leatherbarrow (1953) is an architectural theorist and professor at the University of Pennsylvania. His publications include *Three Cultural Ecologies* (with R. Wesley), *Topographical Stories*, and *Surface Architecture* (with Mohsen Mostafavi).

Image 2.
Photograph by Ugo Carmeni. 2022
Courtesy of *Turba Tol Hol-Hol Tol* and Ministry of Cultures, Arts, and Heritage of Chile.

Architecture, only defined by the permanence of geometry and structure, is witness to collective and community ecological processes. The circle, an immemorial element of assembly, is protected by a biomaterial membrane that surrounds the metal cone. This membrane is like an atavistic interior, almost textile, thus identifying how the development of civilization has established that there should be a layer of protection between the body and the environment it inhabits. We can think of this as a second skin to protect the body's reality. The pavilion also plays with this temporal vagueness: on the one hand, it recognizes architectural pre-existences and original peoples (represented by the inhabitants of Tierra del Fuego) as an ancestral memory and wisdom to protect the peatlands; and, at the same time, it launches us toward a more sustainable future in which we all work as a collective of voices to preserve this biosphere.

The interior space emerges through projected images on a screen. This is an interior that protects layers of historical meanings of the relationship between nature, human beings, and the immaterial resonances of a place and its people. This space wanders from public to private and from interior to exterior, but it becomes an intimate experience when each visitor reflects on the importance of sustaining and protecting an ecosystem such as peatlands.

The metallic cone structure, conceived as a (relatively) permanent element, gently rests on the plant layer. The material that gives the space a form is defined between the memory of sounds, the smells that also inhabit the pavilion, and a form of protected knowledge of an environmental treasure.

The biomaterial membrane, which functions as a cyclorama screen, was made by the Synesthesia team[12] to decompose, alter, and gradually be

2 David Leatherbarrow, *On Weathering: The Life of Buildings in Time* (Cambridge, London: The MIT Press, 1993), 5.

3 Curator: Camila Marambio. Artists: Ariel Bustamante, Carla Macchiavello, Dominga Sotomayor, Alfredo Thiermann.

colonized by mosses and fungi from the humid environment in which it is inserted. Biomaterial works with a new language in which materials no longer define the barrier between human and environment—it is fragile, temporary, and alive. It dematerializes back into the environment and blurs that limit imposed by modern rationality, in pursuit of a future coexistence that carries lessons from a past existence. The deterioration of the central space defines its own time of existence, independent of clock hours, eliminating human reasoning's appropriation of natural structures.

In *Turba Tol Hol-Hol Tol*, the lightness of architecture disappears among anonymous voices, sounds, murmurs, and natural elements, reaffirming itself as a collective construction of sensory experiences. The pavilion is an epistemological exercise of coexistence between space, body, and habitat, of how to build without destroying pre-existence. The senses of touch, smell, hearing, and sight are fundamental to understanding the pavilion's complete experience and recognizing how architecture has displaced these senses by solely focusing on the visual. The connections and temporalities of the *Sphagnum* moss ecosystem demonstrate that sight is incomplete as the only translator of knowledge.

Turba Tol Hol-Hol Tol is also a research laboratory. *Sphagnum* moss spreads over the platform, visually resembling a mantle underneath the conical structure. This *Sphagnum* field*,* aside from transporting us to a peatland landscape, is itself a breeding ground to develop different peat bog uses in agriculture. Such an educational role can also be found in the pavilion lighting, designed by Antonia Peón-Veiga,[13] which, aside from contributing to the organization of the pavilion's paths and museography in general, serves the plant species by stimulating their growth. The structure and technology in this pavilion function to help build a memory and new collective consciousness. *Turba Tol Hol-Hol Tol* operates as an educational device to teach visitors about the existence and coexistence between humans, technology, and peatlands.

In an act of humility and recognition of a much broader and more complex interspecies world, the pavilion challenges the harmful footprint that constructions have usually left on the territory. The minimal footprint of this construction is demarcated only by the structural supports, mounted to the floor but hidden under the soil where the moss grows. The project also leaves nature and time to act as an element of design, highlighting the immaterial pre-existence of knowledge driven by the rules of nature. Perhaps, as philosopher Michael Marder defines in his hypotheses, *Turba Tol Hol-Hol Tol* recognizes and understands the essence of plants without measuring them from the human world.[14] The language of the elements that define this project, from graphics to sound and from sound to smells, is based on the interaction between two worlds, ours and the plant world, as a complex fabric of laws and relationships that occur outside the pavilion, but which, inside it, we experience for a brief moment.

This pavilion is a collaborative act between the material dimension of design and the formal dimension of nature, in Kahn's terms. This form becomes a collective act of recognizing the rules of an ecosystem, focusing on the peatlands which sustain the biosphere's biodiversity. The ability to recognize how carbon emissions have damaged the planet, all the while admiring the organic life relations of carbon itself, protected for thousands of years under the peatlands like a thread weaving into its fibers the history of our existence on this planet, is the very least a visitor can learn from this place. From the link to the thread, from the thread to the poetic act as a group fabric, protecting memories, places, language, but, most importantly, connected to voices of the past, to the inhabitants of Tierra del Fuego, to the present. *Turba Tol Hol-Hol Tol* and its architecture try to move away from the extractivist gaze and enter the paradigm of a collaborative, aesthetic ecology which claims the teachings of those who inhabit, inhabited, and will inhabit Tierra del Fuego, demanding and defining their rights toward a collective future.

If architecture has defined its discipline as a complex dialogue between its representation and materialization through construction, understood as a debate between immaterial ideas and their edification, this pavilion adds a new layer of complexity by incorporating the invisible networks of this planet's coexisting species, tracing new laws for our future coexistence.

Turba Tol Hol-Hol Tol. 2022. Multimedia artwork, representation of Chile at the 59th International Art Exhibition - La Biennale di Venezia.

4 Joan Ockman, *Architecture Culture 1943-1968: A Documentary Anthology* (New York: Rizzoli, 1993), 319.

5 Ibid.

6 Louis I. Kahn (1901-1974) obtained a BA in architecture from the University of Pennsylvania, and was a Yale professor for ten years; he eventually returned to UPenn as an architecture professor.

7 Louis I. Kahn, "The Nature of Nature: Seminar Discussions at Cranbrook Academy of Art," in *Louis I. Kahn. Writings, Lectures, Interviews*, Alessandra Latour, ed. (New York: Rizzoli, 1991), 142.

8 Ibid, 141.

9 Ibid, 142.

10 See Creative Processes, https://www.turbatol.org/creative-process.html.

11 Ibid.

12 Synesthesia developed this biomaterial in collaboration

with Fab Lab of the University of Chile. It is a biocomposite of algae, collagen, and glacial acetic acid, among other compounds.

See: Creative Process, op. cit.
13 The installation consists of 14 luminaires suspended over the pavilion in a homogeneous way to achieve the lighting environment necessary for moss photosynthesis. Along with this, visual artists Nicolás Arze and Christy Gast installed, sculpted, and created the water system for the moss implantation. Ibid.
14 Michael Marder, *Plant Thinking. A Philosophy of vegetal life* (New York: Columbia University Press, 2013), 15.

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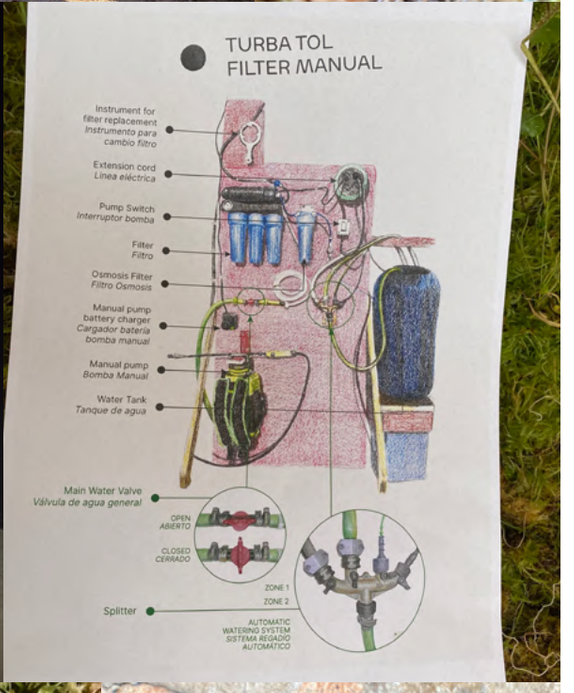
TURBA TOL
FILTER MANUAL
Instrument for filter replacement
Instrumento para cambio filtro
Extension cord
Línea eléctrica
Pump Switch
Interruptor bomba
Filter
Filtro
Osmosis Filter
Filtro Osmosis
Manual pump battery charger
Cargador bateria bomba manual
Manual pump
Bomba Manual
Water Tank
Tanque de agua
Main Water Valve
Válvula de agua general
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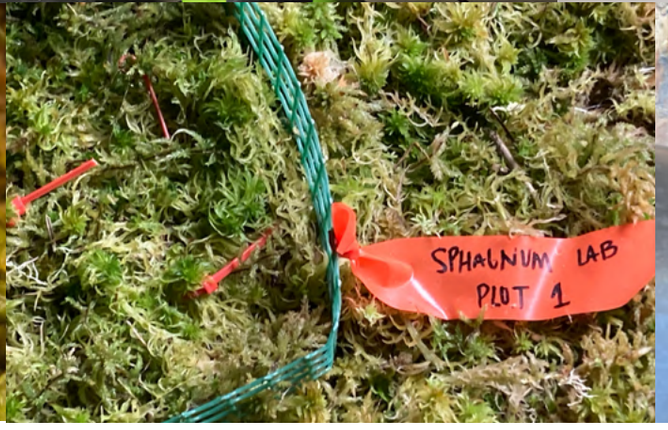
ABIERTO
CLOSED
CERRADO
ZONE 1
ZONE 2
Splitter
AUTOMATIC WATERING SYSTEM
SISTEMA REGADIO AUTOMÁTICO


SPHAGNUM LAB
PLOT 1

Hema’ny Molina Vargas

“Selk’nam nam. Aykams, hanakenek kach mak’on” The Selk’nam People. Yesterday, Today, and Tomorrow

Hema’ny Molina is a Selk’nam writer, poet, artisan, and grandmother. She is president of the Corporación Selk’nam de Chile (Selk’nam Corporation of Chile), founded in 2015 to remove the stigma of “extinction” from the community. She is part of the Covadonga Ona Indigenous community, which brings together families of Selk’nam descent who have maintained their oral memory through generations, transmitting ancestral knowledge and connection. In 2020, Molina founded the Fundación Hach Saye to strengthen and defend the culture and territory of the Selk’nam people.

In ancient times, our elders used to tell stories this way. And this is how I’ll tell my peoples’ story.

People used to say that our ancestors, the first Selk’nam to live in *Karokynká*, were immortal and when they grew tired of living so long, they quietly fell asleep. Some of them, immersed in the ecstasy of rest, simply decided not to wake up. This was how, without dying, they turned into mountains, rivers, rocks, and all these landscapes that impress us today, including peatlands.

Peat is a part of our history. Our *hoowen* rest in the peat, as well as the bodies that, tired of fluctuating between life and rest, eventually began to die. This is why peat upholds the very existence of the Selk’nam people and forms part of our history and lineage. It is a living, breathing entity. It is the perfect mixture, the communion of *karo, sho’on, telsaks, chown, xawqe kash, kaspek kar.* The earth, sky, stars, water, fire, and the great spirit that protects us. Peat guards our memory, part of that distant history for curious visitors, but which emanates from the soul of Selk’nam life.

Our grandfathers and grandmothers used to play in the peatlands when their childhood was still free of the overwhelming and murderous civilization. As children, they would immerse their small feet into the *Sphagnum*, which would automatically make them jump up like a spring. They would hide and cover themselves in the glacial waters where they sipped the purest drink that mother nature can offer: water, the source of life.

The large extensions of peatland in *Karokynká*, south of Tierra del Fuego, were a meeting point where many friends coexisted and shared their infinite wisdom, teaching us to interact in harmony and respect with the inhabitants of this space. There were insects who lived miniature cycles and offered lessons, and birds that would come to eat berries.

Turba tol Archive 1.
Peatland with melting snow, close to Estancia Vicuña. Cell phone photograph by Hema’ny Molina on a journey to Tierra del Fuego with members of the Covadonga Ona Indigenous Selk’nam Community, October 2021. Courtesy of the author.

And many years ago, when our ancestors walked freely, the peatlands were a safe haven for rest, because peat and *Sphagnum* form a perfect pillow that molds itself to the structure of each body, providing a place to restore one's energy.

The flora and avifauna still find space to grow, rest, nest, and continue their lifecycle in the peatlands—an external, semi-floating ecosystem that contrasts with one's own internal ecosystem, and is full of fantasies and age-old riches. While unknown to many, it is now garnering global attention. The only thing that people know about peatlands is that they have the power to accumulate large quantities of carbon, a natural container for those contaminants that humans indiscriminately emit. It is a hidden place where those hundreds, perhaps thousands of millions of *hoowen* in roughly 10,000 years of known existence, have trapped the contaminants that are besieging the planet and unmercifully heating up our shared home, the earth.

Peatlands also provided reeds, a cherished material used to make *tayqas*, one of our main tools for collecting and storing food. Children could participate in these activities, since no knowledge or practice was exclusive to adults. Boys and girls were given a variety of tasks, from making the *tayqa* to collecting food and fabricating fishing corrals on the edge of the sea, as well as making effective arrows and hunting, or learning to set up a *kawe* for protecting the family when resting mid-journey. Knowing the wind, the clouds, feeling the smell of humidity, and recognizing the birds' songs was fundamental. Understanding them, communicating with them, was indispensable, for the song of each bird told a different story. This story could warn against eventual dangers or indicate when prey was close by, in order to hunt for sustenance. Nature doesn't speak to hear its own voice, it communicates. Receiving its messages, therefore, could determine when to

Turba tol Archive 2. *Tayqa* (basket) made by Hema'ny Molina from reeds gathered along the Cordón Baquedano in Tierra del Fuego. The picture displays an arrangement placed on Hema'ny's coffee table. The *tayqa* holds sarsaparilla (a common berry found in Tierra del Fuego), next to stones and shells from Porvenir Bay. The Selk'nam flag and necklaces of Caiquén feathers are also displayed on the table. Photograph by Hema'ny Molina.

stop walking, set up camp, or hunt. This communication was part of a way of life that today we nostalgically remember and evoke, understanding that we must learn from our ancestors if we want to preserve our planet's life.

The *yoowen* is part of a sacred memory. It is food, warmth, shelter, friend… Life. It is the friend that has existed since the Selk'nam opened their eyes and then closed them to begin their journey to the stars.

Those lands inundated with *Sphagnum*, water, mud, and "nonsense" can be so important for the continuation of life itself.

What would happen if the peatlands were destroyed? There are many answers. But maybe it's easier to start by recognizing that large quantities of carbon would be released into the atmosphere, accelerating global warming in unthinkable ways, and that the few years that remain until this climate massacre happens would be cut by more than half. Even though this simple explanation is common knowledge, human beings, intelligent animals who dominate the living species of Earth, continue to search for excuses to justify a fictitious progress at the cost of destroying peatlands and other natural reservoirs, thus enriching certain bank accounts that will mean nothing when oxygen and water cannot be bought.

From Ancestor to Raw Material

The people who ended up living in this territory no longer see or remember *hol-hol*. They knew nothing of the meaning of this place's elements, of the water and so-called "nonsense." Scholars and scientists arrived to rename the entire environment with strange and distant terms. *Sphagnum magellanicum*—that's what they say *hol-hol* is called. Now it's seen as a raw material for export, used for making biodegradable pots, fuel in electrical plants, substrate in horticulture, and nonmetallic mining. Our ancestors' views were not wrong: the foolishness and selfishness of the *koleot*, sooner or later, would become clear, proving that the damage is irreparable.

Our *hoowen* knew the importance of protecting the environment because they knew that Earth as an entity is a living being that, if you respect it, provides the necessities of life. But those who consider themselves civilized, in their stubbornness and ambition, refused to learn and have brought us to this current reality in which not even we—the Selk'nam of today, rejected, displaced from our memories and exiled from our territory, but still Selk'nam by blood and lineage—can have our opinions heard. Before, we were murdered, and today we are only part of the souvenir for people who attempt to be saviors of a millenary culture. But the question is: why do they want to save us? They clearly don't want to let us live in peace. *Hol-hol* is a product, a raw material, and we are struggling to not be labeled

in the same way. So, how can we make the world understand that living cultures are not exploitable, marketable, or docile?

The ancestors predicted destruction so large that people's lives would be completely upended. If they, our ancestors, were present to see everything that has happened, they would die again, this time willingly, to offer themselves to the beloved *Karokynká.*

In the late 19th and early 20th centuries, they weren't able to understand the reasons. Furthermore, they never even imagined that the ancestors would be butchered and sold or given away like they are today. Before, the only reason for killing was to provide sustenance in a natural food chain. Hunting was always based on parameters of humanity, on not letting animals suffer, for they are sentient beings who we must thank for their existence and the sacrifice of their flesh. Just as we thank mother Earth for the fruits she bears, we also ask her permission to harvest and that some fruit be left to mature and continue with the cycle of life, so we never run out of food.

How would our ancestors view the current treatment of their ancestors, the peatlands?

They are dried up, cut into pieces, and removed… Raw material, it's called.

They remove the water. Do these people understand what it means to dry up the peatlands? Do they know that the peat, the pure and crystalline water, is the home of the great spirit of life? And that the energy of millions of our ancestors has accumulated for thousands of years in every twig of *Sphagnum* or *pompom* moss?

A Neω Day

Among Selk'nam, when we see each other in the morning, we say, *hach kerren*!, which literally means "another day!"

Another day to live, to care for each other, love each other, share… Another day that life gave us and that we must begin to value as a treasure. We are so fortunate and we don't realize it.

In this *hach kerren*, we are convinced that new energy will come visit and value the peatlands, work on their preservation and heal them in those places of the earth where they have deteriorated from progress's ignorant and indolent extractivism. This is fundamental.

We must understand that progressing at the cost of the planet and its life is not true progress; we must seek alternatives in which we can co-exist in a respectful way, responsibly producing, without destroying the primary sources of life.

As humans, we shouldn't allow ourselves to eat when food is imbued with death; we shouldn't believe in or be fooled by tricks of so-called sustainable industry when we can really see, smell, and feel how the ocean

Turba tol Archive 3. Blanco Lake in October 2021, during a journey to Tierra del Fuego with members of the Covadonga Ona Indigenous Selk'nam Community. Photograph by Hema'ny Molina.

is being contaminated, how forests are being chopped down, how native ecosystems are being destroyed and replaced with foreign species, just because it is in the interests of a select few.

The peatlands, along with all the ill-named natural resources, are in danger. But it's not too late. It never is when thinking and feeling human beings exist, those of us who connect with the Earth as an entity.

We must begin each *hach kerren* with the conviction that we can find a way to survive the scourge of climate change if we begin to value what remains of our planet and protect it for what it is—our most beautiful and precious treasure.

We can only say, as our *hoowen* used to say:

Hach kerren hol-hol tol. Another day for the heart of the peatland.

Selk’nam nam	Selk’nam people
Hanakenek	Today
Karokynká	Our Earth Tierra del Fuego
Karo	Earth
Telsaks	Stars
Xaωqe	Fire
Tayqa	Reed basket
Yooωen	Guanaco
Koleot	Settler/white man
Tol	Heart
Aykams	Yesterday
Mak’on	Tomorrow
Hooωen	Ancestors
Sho’on	Sky
Chown	Water
Kaspek kar	Great spirit
Kaωe	House/home
Hol–hol	Peat/peatland
Hach kerren	Another day

GERMINAL TEXTS FOR LATIN AMERICAN ENVIRONMENTAL THOUGHT

ECOLOGICAL MANAGEMENT OF THE SOIL

Ana Maria Primavesi

Source: www.anamariaprimavesi.com.br

Ana Maria Primavesi was an Austrian agronomist who settled in Brazil after World War II and revolutionized tropical agriculture. She scrutinized the complex underground network that facilitates the decomposition of organic matter and the absorption of minerals essential for plant development from a deeply ecological foundation. Primavesi laid the foundation of agricultural management that seeks to minimize the impact caused by agriculture, a practice that in itself modifies the environment. Her teachings continue to surprise those who study agricultural sciences by demonstrating that soil is deeper in tropical areas because the decomposition of rocks is more accelerated by being located in areas with greater heat. There is an abudance of life in this soil, but little mineral base (due to weathering). In temperate and cooler climate soil, rocks decompose more slowly, leaving the soil enriched with minerals. This simple difference opens a door to understanding which practices benefit and which harm the soil and leads to the concept of Ecological Soil Management—the title of Primavesi's most famous book as well as the basis of good agricultural practices.

Organic farming was introduced by people who, worried by revelations made by Rachel Carson, wanted to eat a diet free of toxins.

In Europe, organic farming is seen as a way to reduce large-scale industrial agricultural production. The practices of organic farming aren't aimed at farmers, but rather they limit or forbid the use of agrochemicals, which, in turn tends to result in low or very low crop yield. It is therefore important to investigate why this is the case if farming previously yielded good results and was by necessity only organic.

Five basic problems of organic farming can be identified:

1. Organic farming does not improve soil condition, but depends on its automatic improvement through a composting system alone, which results in poor crops.
2. It considers NPK (nitrogen, phosphorus, and potassium) in organic form as compost and manages it like a chemical fertilizer, a system that doesn't work in the tropics.
3. For composting, it uses urban organic waste, mud from sewage, and manure and straw from conventional farms. These materials are undoubtedly organic, but they are also full of agrotoxins, which in turn feed into the organic crops.
4. It uses low-quality soil, which results in poor crop yield, and are protected by defensive materials that are barely less toxic than those of conventional agriculture. But even this is not always the case, as can be seen in the case of pyrethroids, rotenone, or sulfur calcium liquids which are forbidden due to their high levels of toxicity. These products can barely be classified as organic.
5. There is no place on earth where agrotoxins, which are emitted during fumigation, are not present. In the tropics, the level of agrotoxins after rain or snowfall is between 40-60%, falling on fields, virgin forests, the poles, glaciers, and oceans. Thus, it is impossible to grow crops free of agrotoxins.

So, what's the difference? Almost nothing, apart from organic products being 20% more expensive on average. Clearly, organic farming presents multiple problems, but what about conventional farming?

Conventional Farming

This industry is based on competition; it prizes financial gains, achieving short-term results but without character or social responsibility.

In temperate zones, the effect of conventional farming on the soil and the ecosystem is less perceptible than in the tropical regions. However, conventional farming in Russia has ensured the devastation of the famous eternal wetlands,

the *Chernozem*, drying out the whole region of the Aral Sea, which was once productive and prosperous. In the same way, during the occupation of Hungary the Soviet Union killed the *Pusztas*, the famous prairies where horses were once raised.

The Chinese, for their part, have degraded most of the flood plains of the Yangtze Kiang River in only a few years of conventional farming, a situation that will become worse in 2007, when the world's largest hydroelectric dam is built there. In India, the last 300 km (190 miles) of the Ganges River are dry.

The chemical-mechanical system of agriculture was developed for climates and soils in the 1950s. This was the era of the famous Green Revolution, which opened agriculture up to industrial production, that is, it exploited the soil, making it deficient and less productive because of:

a) Deep tillage of the land to warm the ground in the spring;
b) Use of lime to neutralize the soil, making it more acidic as the result of monoculture; and
c) Monoculture.

As it was no longer possible to regenerate the degraded soil, technology was introduced in order to continue its exploitation.

People were convinced that only conventional technology could be relied upon to ensure good crop production (in degraded soils) and that anything organic or ecological was synonymous with being old-fashioned and retrograde.

But President Kennedy's Green Revolution, launched under the slogan "Food for Peace," introduced technology without the least consideration of its potential impact on the soil or its social implications, such as the expulsion of rural workers and farmers from the fields. This revolution was only interested in the high consumption of chemical goods. It propagated the agro-industries, vast monocultures (as much as 167,000 hectares—413,000 acres—of soybean belonging to one owner) that required extensive land clearing. This work was not only done mechanically, but it even used tractors guided by satellite signals, and the product was exported to feed animals kept in industrial animal farming complexes.

Profit increases, so do hunger and disease.

The soils affected by monoculture are highly fertilized and therefore extremely uniform, and their nutritional minerals are unbalanced because of the unilateral use of fertilizer. The soil is sick. Soil that is sick cannot produce healthy plants, given that it is infected with fungi, bacteria, viruses, and insects. While biocides and agrotoxins eliminate parasites, they are not healthy for plants either. So, the crops remain sick, as one can see in Kirlian photography, and the crops from their yield have low biological value.

Because farming is necessary but expensive, governments of the northern hemisphere subsidize farmers largely in order to be able to feed their populations. This is because crops are planted in very compacted earth with neither porosity nor air. Compacted soil is either sick or dead. This is not only the result of the use of heavy farming machinery, but also technology that is problematic in temperate climates is catastrophic in tropical climates where the natural health and productivity of the soil depends on its microbial life, which is 10 times greater than in temperate climates. Because decomposition is so much faster in tropical climates, the soil can starve to death more easily in these zones.

The Loss of Organic Material

The end of soil life.
The soil dies.

Why does conventional technology degrade organic material?

1. After deep tillage, a thick cloud of carbon gas hangs over the fields because of the explosive decomposition of organic material (Pependick, 1996). In Europe, deep tillage is called "soil mobilization," specifically the mobilization of the microbial life that consumes the organic material.

2. The use of lime, which should correct the soil acidity to achieve a pH of 7—a neutral pH for a country with a temperate climate—contributes to the rapid decomposition of the organic material. In the tropical climates, the pH is around 5.6 to 5.8, therefore the use of lime of up to 35 t/ha provokes not only a devastating loss of organic material, but also the "correction" or immobilization of the added minerals (iron and aluminum), ensuring the degradation and hardening of the soil (EMBRAPA, 2000): organic material is lost, and, in tropical zones, the enzymes of added bacteria, such as *Cytophaga,* which are active in a pH of 5.6, are deactivated (Primavesi, 1972).

3. Nitrogen fertilizers provide the nitrogen that the bacteria need in order to decompose the straw, dead roots, and other more resistant materials with a ratio of C/N = 30-40/1. The microbes need a proportion of C/N = 8/1; when they receive added nitrogen, they decompose the straw more quickly. Nitrogen then enables faster decomposition of resistant organic matter, and organic matter is lost.

The soil is left without organic matter, and the heterotrophic microbes are left without nourishment, causing their death.

Without organic matter there is no life, and without life, the soil is not enriched. The earth becomes compact, impeding air and water flow and the mobilization of nutrients for the microbes.

In the tropics, when the soil is cleared of weeds, clean and unprotected, it is more susceptible to compacting due to increased temperature, reaching nearly 73° C (Primavesi, 1980, Wright, 1969), and the impact of rain and irrigation (via sprinkler system or flooding) on its surface. Even in temperate climates, where not much attention is paid to the loss of organic matter because of its slower decomposition, conventional farming leads to soil being compacted quickly. No machinery—whether plows, chisel plows, subsoilers, or rotary tillers—can return the earth to its former state. They can break up the compacted soil and reduce clods of earth to dust, but they cannot repair the soil because that would require a chemical-biological process.

Normally, after a soil-breaking machine is used, the soil is left in worse condition than before (Primavesi, 1980; Araujo, 2004; Dufranc, 2004; Abreu, 2004). All countries compact their farm land (Barnes, 1971; Primavesi, 1980), salinize, and desertify it. Given that compacted earth is dead earth, one can say that **conventional farming has developed technology for the exploitation of the "corpses" of the earth that it has destroyed.**

Exploitation has its limits. The destruction of the Amazon rainforest began just thirty-four years ago in Altamira in order to introduce pasture and conventional agriculture, and already there is talk about the way in which the land has been turned into a “savannah.” In the Brazilian savannahs of Cerrado, after thirty years of chemical-mechanical farming there is now growing concern about the desertification of this region. More than 300 small rivers have dried up, and larger rivers have low water levels. Desertification is not only a concern in Brazil, but in all the countries using chemical-mechanical technology. As a result of desertification, flooding and prolonged droughts have increased and are dangerously reducing the levels of drinking water.

Without water there is no life, neither vegetable, animal, nor human.

A major **problem of conventional farming** is that it only deals with isolated **factors**, but nature doesn’t work that way; nature works in cycles and systems. Every factor depends on another present in the system and has an influence on others. One factor isolated from others means nothing and only introduces a partial, incomplete, and often erroneous understanding of a problem. For example: When nitrogen is low, a chemical analysis of nitrogen levels reveals how much of the element is in the soil at that moment. It doesn’t indicate the possibility of fixing nitrogen through free or symbiotic bacteria, nor does it indicate the amount of straw or dead root material in the soil, nor the immobilization of nitrogen during decomposition. It doesn’t take into account the relationships with other nutrients, such as copper, molybdenum, iron, etc. It doesn’t show whether the soil is compacted or whether it is emitting nitrogen into the air. It makes no mention of the fact that the imbalance of other nutrients allows a greater variety of diseases to attack the soil directly (Bergmann, 1976). Nor does it reveal the enzyme activity in the soil, or the permanent transformation of all the elements. The information provided by chemical analysis is extremely narrow, practically null. Yet, it is used to test soil fertility, thereby increasing the imbalance and existing diseases.

The same thing happens in temperate climates with neutral soils, where the absorption of nitrogen from vegetation is more difficult. But in tropical climates, where plants absorb the nitrogen five times more easily (Fisher, 1956), the effect can be quite damaging to plant stability (plants topple over), health (more diseases), and fruition process (rice and cotton, for example, grow a lot but don’t form seeds).

Conventional farming is not interested in the impact of its technology on nature nor on desertification or the rapid increase in plant, animal, and human diseases.

At the same time, conventional farming is unable to see that conditions for life on our planet are being restricted, not because God is punishing us, but because the soil is being ruined through a lack of water.

The exploitation of dead soil is unsustainable, even for farming with sophisticated technology, because this technology doesn’t support life.

Agroecology

Every human act proposes to be a social activity that implies responsibility. Food should be used to maintain life, without causing disease.

While conventional agriculture asks itself how to fight the symptom, in agroecology the question is: **why did the symptom appear?** Agroecology seeks to control the **cause of the problem.**

For example, if there is water run-off, it is because of erosion. In conventional agriculture, delimiting earth formations and micro-watersheds are built to limit erosion. Agroecology asks why the water is running off the land rather than soaking into it. The answer: Because the land is so compacted that the water cannot penetrate it. Organic matter is added to the surface layer of the soil, a covering of mulch is laid down as a sowing layer to protect the soil from the impact of the rain, so the water manages to filter in and not run off, reducing flooding.

Conventional science eliminates the meandering curves of rivers, building dikes and containment walls.

Ecological science teaches farmers to maintain the quality of their soil by adding layers and protecting it with live or dead organic matter. The water then doesn’t run off but filters into the soil.

Are there worms in the cauliflower? Conventional agriculture asks which poison to use. Agroecology asks why the worms are there in the first place. Because of a lack of molybdenum. If the leaves are fumigated with molybdenum, the butterflies will stop laying their eggs on the cauliflower, and there won’t be any more worms. The degraded (sick) soil leads to a sick plant, which leads to

deficient nourishment (low biological value), which leads to people sick in body and soul.

Agroecology isn't a specific technology, but rather a way of life (Caporal, 2002). It influences ethics, culture, the economy, politics, society, and the environment. In order to develop agroecology, one needs professional training but also a human, spiritual education, that is, one that focuses on morality and virtue.

Focus

The focus is general, holistic, and its work is systemic. "Eco" comes from the Greek word *oîkos* meaning house, place, home. So agroecology is agriculture that works in tandem with the conditions of an environment. It doesn't preserve the environment out of pseudo-environmental piety, but rather it exists and acts in the context of the environment of its home. It produces through the environment without destroying it. From this perspective, human beings are not considered a means of production nor "human resources" working with machines, but rather the reason for production. Production is achieved for the human being and not merely through the human being.

The Fundamentals of Ecological Agricultural Production

1. Soil that is alive and therefore an aggregate that:

> Has an intense and diverse aerobic life: biodiversity. It is well known that in tropical climates the diversity of the vegetation above the soil depends on the diversity of the life below the surface of the soil (microbes). The diversity of soil life depends on the diversity of the nutrients mobilized in this fashion, which in turn depends on the nutrition of the plants above ground. This is why the most exuberant forests develop in both the Amazon and in the poorest soils of the world.

The foundation of agroecology is the maintenance of living, active soil and conservation of biodiversity using a rotation of four to five crops: intercropping, polyculture, crop rotation, green fertilizing, dead mulching, and vegetable and fruit covering.

> Soil aggregation allows air and water to penetrate and enables water to seep back into the water table and aquifers, guaranteeing the water level of rivers. To maintain soil aggregation, tillage must be reduced or stopped, especially deep tillage which damages the topsoil. The rule should be: never till the soil deeper than 2 cm (three quarters of an inch) below the added topsoil. Compacted soil will not be improved through machine tilling nor by mixing organic material with the soil. Whether it is compost, straw, green fertilizer or something else, the organic matter will always need to be placed on top, imitating nature, where the organic matter is always found at the A0-A1 levels.

The idea of organic agriculture that "compost is NPK (nitrogen, phosphorus, and potassium) in organic form" is very wrong. When applied correctly, its use can increase soil nutrients because the microbes that feed on it release the nutrients of the compost as well as the nutrients of the silicates.

> In tropical regions, soil needs protection from the impact of the rain, but also from the loss of water through heat and evaporation. In direct planting (zero-tillage mulch farming), the protective layer of straw is essential.

2. Well-rooted plants, which happens when:

> The soil has good aggregation.

> In the tropics, the layer of organic matter cannot be laid deeper than 15 cm (6 in). Below that depth, the soil is full of antibiotics formed by the flourishing of numerous fungi, causing an anaerobic decomposition that produces toxic gasses like methane and sulfur hydroxide that repel the roots of plants, which thus have a stunted and superficial growth.

> There is sufficient boron. When there is boron deficiency, the roots of plants do not grow.

3. Well-balanced nutrients:

The health of the soil depends on the health of the vegetation. Fungi and insects can only attack crops that do not have the natural defensive substances for which they are genetically programmed. Vegetation depends on a series of chemical processes in a plant, and each chemical reaction needs a catalyst in order to develop more rapidly. This catalyst is an enzyme. But the enzyme can only react if it has an "activator," which is a mineral (Schütte, 1964; Epstein, 1972). That is, if this specific activating mineral is absent, then the reaction happens very slowly. The unprocessed substance thus circulates through the sap of the plants and "offers" itself to the parasites, which are "programmed" by enzymes for particular substances or rather chemical formulas. When the substance that their enzyme can digest does not exist, it isn't possible for the plant to be attacked. In soil that is degraded, only diseased plants that are deficient in minerals can grow and therefore be attacked by parasites because nature only allows the reproduction of healthy, hearty elements.

The symptoms of mineral deficiency in plants appear in the leaves; however,

it is extremely difficult to try to balance the nutrients through fertilization. In this regard, the rule is: if there are more than three deficiencies at the same time, the soil is compacted. The problems in the roots can also be identified in the leaves of the plant. If the roots develop deficiently, the plants are malnourished and easily infected with parasites.

There are **indicator plants** that signal not only the deficiencies in soil, but also the stagnancy of water, type of compost used, salinity, type of water used for irrigation, etc.

4. Enough water:

Depending on the crop, watering should not exceed 60-80% of the field's capacity. When the **crops wither** after an hour or two of sunshine, it means that there is:

> Copper deficiency;

> Very compacted soil;

> Deeply buried organic matter as well as emission of methane and sulfur hydroxide gas; and/or

> Calcium deficiency, as seen in *Brassicaceae* crops where the roots are invaded by fungi that makes them swollen and stunted.

> Forest impact: Forests help keep surrounding regions more humid and temperatures more stable. When forests are cut down, temperatures in the region become more extreme. In the region of Amazonian rainforest, day and night temperatures vary between 21-27 °C (70°-81 °F). In regions where the forest has been cut down, the temperatures oscillate between 12-33 °C (54-91 °F). In areas where deforestation is massive, such as the Arabian Desert cut down, temperatures oscillate between -4 °C (25 °F) at night and 56 °C (133 °F) during the day.

> According to research by the Agua and ADEOS 11 satellites, changes in soil humidity are part of the planet's water cycle. The interaction between the humidity of the soil with the climate is identical to the surface ocean currents (ARS-USDA, March 2004), which cause the El Niño and La Niña phenomena.

> The action of the wind and its drying effect on soil has an impact on the global climate that are still not fully understood, but it is clear the effects are global and not restricted to the deforested areas alone.

5. Controlled wind:

In regions with reduced tree cover or that are entirely deforested, the wind can pass freely, removing the equivalent of up to 750 mm (30 in) of rainfall per year. According to Grace (1977), wind cuts crop production by one half, and when the soil is even drier due to lack of rain, production drops to one third of what could be produced without wind. This means that with 50% of the land still forested, the same crop is yielded as with 100% of the land deforested and planted.

Agroecology depends on **an environment altered as little as possible** and the **correct use of organic matter.**

What is Organic Matter?

Is it chemical fertilizer in organic form? **NO**. Organic matter nourishes the greatest amount of life in the soil.

Micro- and meso-level life both:

a) Aggregate soil to ensure that air and water enter the soil and penetrate the roots (Primavesi, 1980 and 2003);
b) Fix nitrogen (even worms increase the nitrogen levels in soil);
c) Are evident in the roots as mycorrhiza that increase the interface between root and soil by as much as three times (Bellei, 1992; García, 2003), significantly improving the nutrition of vegetation;
d) Mobilize nutrients to silicates in tropical climates (Tsai, 1992; García Jr, 1992);
e) Immobilize toxic substances (Hungría, 1992); and
f) Release nutrients from organic matter for plants after total decomposition.

Health: Vegetable – Animal – Human

Vegetable health depends on the health of the soil.

Compacted soil is sick soil that needs air and water. It has significantly reduced nutrients and is toxic. Some elements cannot be accessed by the roots. Others cannot be absorbed from drier soil, as is the case with zinc and boron. Vegetable respiration is not oxidative but fermentative, liberating much less energy for chemical processes in the plant. In compacted soil, roots **excrete different substances** than they do in soil with good aggregation, which alters the rhizosphere's microbial flora. If compacted soil heats to above 32 °C (90 °F), plants cannot absorb water. Such conditions are unfavorable for plants, even if there is enough irrigation and humidity. More deficiencies appear in the plants, so

more chemical fertilizer is added, creating even greater imbalance, more diseases, infestations, and the use of biocides (agrotoxins) becomes more frequent. **But the basic problem isn't the infestations or the diseases, but rather the plants' poor nutrition.**

So, for example, the fungus *Colletotrichum gleosporioides* makes papaya fruit rot from the inside and not from the outside. The problem isn't the fungus, but a lack of calcium which allows the fungus to take hold in the fruit.

The *Spodoptera frugiperda* (fall armyworm) that eats the corn seedling doesn't appear if the corn has enough boron.

Another example is *Elasmopalpus lignosellus* (lesser cornstalk borer), which doesn't destroy the young bean and corn plants if the seeds have been treated with zinc.

Plants are only infected with parasites when there is a mineral deficiency. Even if the parasite has been eliminated by an agrotoxin, it does not mean that the plant is healthy. The plant is still diseased. A diseased plant can only produce a crop that has low or very low biological value, which means that many of the substances that it should develop, do not.

The same thing happens in animals. Animals that live where there is poor-quality soil and that eat deficient plants are not healthy. Like the plants, the animals become sick and weak. Thus, if calves die a day or two after birth, it means the mother cow lacks iodine. If the newborn calves are weak and their hair is bristly, they lack cobalt. If the cows have an irregular estrous cycle, they lack phosphorus; if they die after giving birth, they are deficient in chlorine. If the calves are born paralytic, the mother is deficient in copper, etc.

One cannot expect healthy plants and animals to live on sick soil.

To make matters worse, the chemical weapons used to combat vegetable parasites are biologically magnified through the food chain. Thus, a substance used to protect a crop can appear a million times more concentrated in a sea bird or in shrimp.

Human Health

Human beings cannot enjoy good health if they eat deficient crops from diseased plants, even when they are defended by agrotoxins. As the ancient Romans used to say, "a healthy mind in a healthy body." Many people attribute urban violence to "sick souls," a consequence of moral and ethical degradation. And all because of the degradation of the soil.

Mineral imbalance causes sickness in human beings as well as in plants and animals. Thus, excess nitrogen produces a copper deficiency in the mother, resulting in a paraplegic child (Johnson, 1999). An excess of phosphorus and a deficiency in zinc can cause dementia in children and adolescents. They find it hard to learn and become mentally weak, but when they receive zinc supplements in their diet, they completely recuperate and may even improve their mental acuity (Penland, 1999; Kretsch, 1999). Magnesium deficiency increases heart disease (Voisin, 1959), and in areas where there is a deficiency of boron and copper, cancer is more common (Busller, 1968; Voisin, 1971).

Towards the end of his life, Luis Pasteur wrote, *"Jean Bertrand avais raison: le microbe n'est rien, le terrain est tout"* (Jean Bertrand was right: the microbe is nothing, the environment is everything). And the environment is the food produced in soil that is healthy or sick. Mineral deficiency produced by an abuse of the soil is what makes the difference.

If we want to live, to survive, we can no longer continue down the road of pharmacies, hospitals, and chemical industries; we must follow the path of healthy soil that agroecology wants to preserve.

TOWARDS THE CONSTRUCTION OF SOCIAL SUSTAINABILITY: THE ENVIRONMENT, GENDER RELATIONS, AND DOMESTIC UNITS

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Synopsis

Since 1971, after experts on the environment and development met in Founex, Switzerland, much of the discussion around issues of development—in national as well as international contexts—has been permeated by the search for models of development that can reconcile the need for sustainability of the Earth's natural systems with social needs. In this regard, research, policy design, and implementation of actions that seek to construct sustainable development processes have been many and varied. To date, important advances have been made in terms of our understanding of the ecological and economic dimensions of sustainability. However, the social aspects involved in the construction of these processes has been less well addressed, and much remains to be done. In this article, I will address the *social dimensions of sustainability*, emphasizing gender relations in the processes of accessing, using, and managing natural, economic, and social resources. I present a methodological proposal to analyze the social and gender relations involved in the binomial of society-nature. Taking domestic units as units of analysis, the study of intra-domestic relationships allows us to approach the study of the social dimension of sustainability and to explore—from a social and gender perspective—the causes, consequences, and management of environmental changes.

Key words: gender, social sustainability, sustainable development, domestic units.

Introduction

Since 1971, after experts on the environment and development met in Founex, Switzerland, much of the discussion around issues of development—in national as well as international contexts—has been permeated by the search for models of development that can reconcile the needs for sustainability of the Earth's natural systems with social needs. In this regard, today, nearly 30 years after the beginning of conversations around climate change and development, research, policy design, and implementation of actions that seek to construct sustainable development processes have been many and varied. However, like many involved, I recognize that while the ecological and economic aspects of these advances have been significant, the social aspects involved in the construction of sustainability have been sidelined, and much remains to be done.

In this article, I will address the *social dimensions of sustainability*, emphasizing gender relations in the processes of accessing, using, and managing natural, economic, and social resources. I present a methodological proposal to address, through research, policy design, and the implementation of programs and projects, the social relations involved in the binomial of society-nature, analyzed

from a gender perspective as a relational analytical category. In the first part of this article, I undertake a summarized critical revision of the different conceptual frameworks through which the themes of sustainability are examined. I propose that it is necessary to establish indicators that, on the one hand, contribute to the understanding of the set of social relationships involved in the production of environmental change and that, on the other, take into account the impact of this change on these relationships. For this undertaking, I consider it necessary to use a methodological framework that allows us to look at the above-mentioned binomial from a more holistic perspective.

In the second part of this article, I will present the conceptual and methodological perspectives used by feminist research to analyze the relationship among women, gender, and the environment. This includes a critical revision of what has been labeled "eco-feminism" and a presentation of matters of interest and research proposed by feminist environmentalists and feminist political ecology through which it is possible to build an analytical framework to examine the social dimensions of sustainability from a gender perspective. In the third part of the article, I affirm that domestic units are the basic units of analysis for understanding the social dimension of sustainability. I argue that the analysis of inter-domestic relations allows us to approach an understanding of the multiple and complex processes and models for accessing, using, managing, and controlling resources—natural, social, and economic—from a gender perspective. Lastly, I will propose that the study of relationships within these units provides us with elements that should be considered in our efforts to build processes of sustainability.

Sustainable Development or Processes of Sustainability: Concepts, Approaches, and Dimensions

Since the 1970s, the aim of attaining what the 1987 Brundtland Report called "sustainable development" has been present on many of the agendas of global development and research. However, despite there being an agreement between the scientific community and politicians about the need to achieve a model of development that satisfies the needs of the current generation without compromising the ability of future generations to satisfy their needs in turn (Comisión Mundial del Medio Ambiente y Desarrollo, 1988), there has been little agreement about the meaning of the term or how to construct such a development process (García, 1999).

Failure to agree on the meaning of sustainability has had various consequences. The first is that researchers, politicians, and activists have treated the term as an empty box into which a variety of diverse and even contradictory things can be put (Adams, 1990; Azuela et al., 1993; Kates, Bongaarts, & Merrel, 1996; García, 1999). From the perspective of social sciences, this has made it difficult to explain the many and varied dimensions and levels of relationships that human societies establish with their biospheric surroundings and, therefore, with development and environmental change. In many cases, the latter has provoked confusion about what needs to be sustained and what needs to be developed.

A second consequence is that the absence of a clear definition of the term sustainability means that we, the social scientists, can propose new elements for the definition itself. Despite the methodological difficulties this can provoke,[1] it represents an important challenge that can contribute to the understanding and construction of a social definition of sustainability (Cernea, 1994). This means, as Miller (1991) suggests, that we need to understand current environmental changes, not only dealing with their ecological dimensions, but also focusing our analysis on the human, economic, political, social, and cultural dimensions of sustainability.

The Dimensions of Sustainability

At the heart of national and international debate on sustainability, the need to transform the relationship of society and nature has been emphasized repeatedly. It has been recognized that many environmental issues we deal with today are the product of development and that most of the environmental changes we are witnessing are the result of human actions. Based on these assumptions, from technocratic and ecocentric perspectives those initiatives undertaken to achieve what has been called sustainable development have placed an emphasis on communication and ecological and economic strategies.

As a result, significant advances have been made in our understanding of the ecological dimension of sustainability. We currently know more about the functioning of the physical-biotic systems of the Earth. As a result, we know which resources are being exhausted and how quickly this is happening. In this context, the parallel development of appropriate technologies and biotechnologies have acquired a singular importance.

In the economic sphere, different proposals have been developed in various schools of thought and according to various theoretical perspectives. Most of these have aimed to instrumentalize economic strategies that make it possible to maintain the Earth's natural systems without threatening societies' capacity for economic growth or the wellbeing of the majority of the human population. So, topics such as poverty, environmental degradation, and environmental calculations, among others, have been present since the beginning in many of these conversations and initiatives. In this context, as Adams (1990) writes, much

1 As Redeclift and Benton (1994) suggest, the study of environmental issues from a social sciences perspective implies revising the epistemological premises that support the social theory with the aim of accessing the depth of knowledge necessary to understand the complexity of human action associated with the multiple processes involved in environmental issues.

of the debate around sustainability over the past 30 years has been permeated by the need to find new economic arrangements, locally, nationally, and internationally, that guarantee a minimum of wellbeing to populations under the supposition that nature limits economic growth.

In terms of the social dimensions of sustainability, however, theoretical discussions and concrete actions have been minimal. So, while the need to transform the relationship of society and nature has been central to debates and strategies, less attention has been paid to the social relations in which this above-mentioned binomial is structured. Therefore, in many cases, the social dimensions of sustainability have been considered to be the combination of practical and technological measures that must be implemented by the models of development with the aim of dealing with environmental changes. Consequently, as Redelif and Benton (1994) write, less attention has been paid to the analysis and transformation of the social and cultural relations woven into the production of environmental change. Meaning that greater emphasis is placed on understanding and implementing the means of achieving sustainability, but as Arizpe (1991) has stressed, less attention is paid to the matter of *who* uses *which* resources and *why* these resources are used in one way or another.

In this sense, the social dimensions of sustainability have frequently been labeled "social problems." Issues such as population growth, poverty, and inequality are seen as obstacles to sustainability. Consequently, some of the proposals for sustainable development consider that a solution to these problems can only be found in the implementation of economic and technological strategies. Such proposals posit that the solution to social and environmental problems is found basically in the implementation of new market economies, the development of green technologies, and the design of conservationist management projects or population control policies.

As several writers have suggested (Arizpe, Stone, & Major, 1994; Arizpe & Velázquez, 1994; Gallopín, Gutman, & Malleta, 1989; Daly, 1997), these proposals do not consider the multiplicity of factors and interventions involved in the relationship of society and nature. So from this perspective, rather than being conceived of as a social problem, the social dimensions of sustainability should be conceived of as a complex ensemble of interventions and economic, social, and cultural relations involved in the production and solution of social issues and environmental changes.

For example, until recently the solution to the complex relation between population and the environment was thought of only in terms of state policies related to birth control. This vision, however, does not consider the multiplicity of relations and social, cultural, and economic values that influence men and women with regard to the number of children they want. In this sense, as various authors have pointed out (see, among others, Arizpe, Stone, & Major, 1994; Arizpe & Velázquez, 1994; Bilsborrow, 1992a, 1992b; Bilsborrow & Geores, 1994; Marquette & Bilsborrow, 1994; Schmink, 1994), it is necessary to advance the debate around population and the environment, analyzing the many variables through which this relationship is filtered.[2]

In the case of poverty and environmental degradation, economic policies and programs insist on finding solutions to this binomial in the implementation of sustainable measures that assure stable economic growth. And on achieving this without dealing with the structural causes of poverty found in the unequal distribution of wealth around the world, among other situations, and as Daly (1997) argues, without challenging the concept of growth itself.

This is because, in most cases, sustainability has been considered an objective of development, progress, and economic growth, as this latter is traditionally understood, instead of conceiving sustainability as an ensemble of interconnected strategies that need to be incorporated at all levels—micro, meso, and macro—with the objective of implementing sustainable processes of economic and social transformation. Sustainability needs to be conceived of as a combination of processes capable, on the one hand, of rehabilitating the deteriorated environment and social context and, on the other, of maintaining life systems of people now and in the future on the principles of equality, redistribution of wealth, and social justice. In short, sustainability must be conceived of not as a development goal, but as a combination of processes of change that encompass three basic dimensions: the environmental, the economic, and the social.

Under this premise, the social dimensions of sustainability should be understood as an interconnected combination of processes that are not only causes of environmental transformation, but are also consequences of and responses to such change, which may contribute or not to the construction and sustainable management of environmental changes in the future. Conceived of as interconnected processes rather than goals, the social dimensions of environmental change should therefore be approached from a methodological framework that facilitates the development of new concepts and analytical indicators for a greater understanding of the components involved in these processes.

From various perspectives of the social sciences, an important body of research has been developed that tries to explain the social relations, cultural practices, and institutional arrangements connected to the production of environmental change, its consequences, and their management. In the following section, I will examine these.

2 Important advances have been made in subjects such as the relationship between reproductive health and sustainable development, helping us understand the complexity of measurements and connections between these issues and the environment. For information on Mexico, see Careaga, Merino, & Martínez, 1998.

Sustainability from the Perspective of Social Sciences

Various ethnobotanical, anthropological, and sociological studies have focused their attention on analyzing the specific ways in which societies, institutions, communities, and social and ethnic groups—among them, women—use their natural resources. These studies make clear that the environment cannot be conceived of only as an ensemble of natural forces or as objects that can be well used or mis-used by certain social actors, but rather, on the contrary, the environment must be considered a social construct in which material and cultural factors mediate in the relations that people establish with their natural environment.[3]

These studies have also demonstrated how human societies develop a variety of institutional and non-institutional arrangements through which they learn about and manage the natural resources at hand. The studies have also shown that factors such as class, culture, ethnicity, and sex determine the forms of use and management of those natural resources and the importance of considering these factors to be able to understand the social dimensions of sustainability (Agrawal, 1991; Leach, 1994; Jackson, 1993).

Most of these studies analyze the socioeconomic processes and relationships established by the users of specific natural resources at the meso and macro levels. In this regard, for example, political ecology has shown how national and international economic patterns, as well as institutions and certain political practices, determine the use of natural resources and characterize the forms of relations between different social groups in relation to the management of those natural resources. These studies have also shed light on how the decision-making processes impact access to and control of resources in local contexts and on the importance of considering the macro-economic and political contexts in which these decisions are made, taking into consideration factors such as class and ethnicity (Blaikie & Brookfield, 1987; Little & Horowitz, 1987; Peet & Watts, 1993; Schmink & Wood, 1987).

From the perspective of political ecology, this type of study has centered its analysis on the relationships that specific social groups, communities, and institutions establish with their environment as well as with other institutions, communities, and groups. In some cases, this has led to an idealization of the forms of relationship that local communities and social groups—women or Indigenous groups, for example—establish with their biospheric context. Within this framework, some of the studies have tried to show how the introduction of new economic practices and modern technology has distorted the traditional forms of managing natural resources by these groups that in the past were supposedly in harmony with the needs of nature (Shiva, 1989; Sachs, 1979). Sustainability in this type of analysis is conceived of as a phase of community development that was lost to modernization and can be restored through a rescue of those practices of traditional management considered "environmentally friendly."

In other cases, a more technocratic analysis identifies the problems in the relationship between natural resources and societies as stemming from underdevelopment and the "backwardness" of certain communities and social groups. Under this premise, sustainability is understood as something that can be achieved through an improved system of planning and the implementation of modern technology.

But in both cases, these studies have privileged in their analysis the relationship that the society establishes with its natural surroundings, using the community or specific social group as a unit of analysis and basic action, taking as a given that these entities are intrinsically superior, homogenous, and harmonious. This type of methodological approach, however, presents certain difficulties given that it doesn't consider internal differentiations that arise within these units, for example, those linked to factors such as social, ethnic, sex-, and age-related groupings. In this sense, as Leach (1994) indicates, these analyses tend to omit the different internal relationships that structure the units to which we refer economically, socially, and culturally.

On many occasions, this type of approach does not consider in its analysis the combination of social relations—including those through which gender structures itself—that determine (in the medium and long term) the forms of use and management of natural resources through which sustainability, understood as a combination of processes of change, is constructed. Consequently, as Joekes and colleagues (1996) have suggested, this omission leads to the failure of the policies and programs that seek to achieve a more sustainable management of the environment.

Social Relations and Social Sustainability

In this context, as this essay will argue, there is a need to establish new analytical indicators that allow us to contribute to an understanding of the complex and multiple combinations of social relationships that come to bear on the production of environmental change, as well as an understanding of the consequences of human societies. Indicators that, in turn, can contribute to the construction of sustainability from a broader perspective. To achieve this, it is necessary to undertake a more holistic approach, such as that offered within the analytical framework of social relations. A methodology is needed that allows

3 The environment is perceived differently depending on the cultural and social signifiers that various social actors attribute to it. Natural resources and environmental changes are valued depending on diverse cultural and social frameworks. For further discussion in this regard, see, among others, Arizpe, Paz, & Velázquez, 1993; Croll & Parkin 1992; Leach & Mearns, 1991; Redclift & Benton, 1994.

us to explore not only the meso and macro levels of the relationships between society and nature and among societies, but also allows us to explore more generally the relations of daily life that give rise to the complex system of sex, gender, and inter- and intra-social and cultural relations and differentiations. Systems that in the medium and long term determine the use and management of natural resources, as many authors have suggested (Agrawal, 1991; Leach, Joekes, & Green, 1995; Leach, 1994; Rocheleau et al., 1996).

In this sense, as Young and colleagues (1981) suggest, I consider that the conceptual framework of social relations offers us the analytical and conceptual tools for understanding the social dimensions of sustainability. Within this framework, we can analyze not only the economic relations of societies, but also what have been called the relations of daily life. According to Kabeer (1994), this approximation allows us to reveal the interconnections among the different spheres and levels of society, as well as individuals and social structures.

Thus, as Kabeer (1994) also signals, we refer to social relations not only as relationships of production, as they are usually understood, but also as an ensemble of relationships through which personal needs are satisfied, that is, as an ensemble of relationships that govern the organization of production, distribution, and consumption of material, social, and natural resources, as well as the combination of activities necessary for the (re)production of human resources, which are performed daily through a variety of social relationships and in a diversity of institutional contexts.

We consider, therefore, that the conceptual framework of social relationships offers us the necessary methodological and analytical tools to begin to develop new indicators that allow us to explore and understand social elements contained within the notion of sustainability. By analyzing internal differentiations that occur in a community or a specific social group from the perspective of gender and class, this framework allows us to explain and analyze forms of accessing, using, and managing natural resources as well as the causes, consequences, and possible forms of managing current environmental changes, taking into consideration the complex combination of daily social relations involved in such changes and to which gender relations are central.

Therefore, given the above and as will be discussed further on, an analysis from a gender perspective is a basic requirement for understanding the social dimensions of sustainability. As many studies have shown, gender—as a relational analytical category—is present in every social relationship and structures the division of resources and responsibilities, of rights and duties, among various groups of men and women in any society, outlining the ways in which natural resources are used and managed (Jackson, 1993; Kabeer, 1992; Leach, 1994). As Leach emphasizes, gender helps us understand other forms of social differentiation that influence environmental management, not only as a substitute, but also because, from a gender perspective, other sorts of differentiation such as age, wealth, and origin operate in a different manner (1994: 22).

Studies about Women and the Environment: A Critique from a Gender Perspective

Since the 1980s, the relationship between women and the environment has been a popular subject for study around the world. Concerned that women's participation was not being considered in research on society and nature, feminist scholars began to analyze this participation using a variety of methodological and conceptual perspectives that will be discussed below.

Ecofeminism

Ecofeminism, of which there are various schools of thought, starts out from the premise that there are significant connections between the oppression of nature and the oppression of women, thus provoking a special relationship between women and nature (Gaard & Gruen, 1994; Van den Hombergh, 1993; Merchant, 1989; Mies & Shiva, 1993; Shiva, 1988; Warren, 1987).

Given this special relationship, ecofeminism argues that through their daily activities, women have a closer relationship to their surroundings, which makes them strong stakeholders in the conservation of nature, as well as keepers of extensive knowledge about the natural resources around them. Women are therefore considered innate caretakers of the planet and victims of environmental degradation occurring through a model of development that prejudices nature and the female population who are, therefore, conceived of as agents of change and liberation—given their "survival perspective" or "principle of womanhood"—through whose actions it will be possible to restore a harmonious relationship between the environment and society.

Ecofeminist hypotheses have influenced the so-called Women, Environment, and Development (WED) approach in a variety of ways. In the context of policy design and planning, this school of thought appeared toward the mid-1980s aiming to include the interests of women and environmentalists in the decision-making process and implementation of actions. From this perspective, the participation of women as administrators and users of resources should be included in the design and implementation of sustainable development policies and programs because these would otherwise fail and the actions taken might even worsen the living conditions of the marginalized rural and urban female population, especially those in developing countries (Dankelman & Davidson, 1988; Rodda, 1991).

WED and ecofeminist schools of thought have contributed to a greater understanding of the relationship between women and nature by revealing, as

Agrawal (1991) demonstrates, the important connections between the symbolic constructions of nature and of women. These perspectives have also emphasized the similarities that exist between the premises and goals of contemporary international feminist and environmental movements. It is also worth mentioning their contribution to the environmental debate by explicitly bringing to its heart the topic of women's participation in the use and management of natural resources.

Despite this, both approaches have serious limitations for our understanding of the relationship between nature and women, as well as for the conceptualization of the social dimension of sustainability. As various authors have indicated, these positions do not encompass the multiplicity of levels and the complexity of relationships among women, men, and their environments nor the various impacts that environmental change has on women and men (Agarwal, 1991; Jackson, 1993; Leach et al., 1995; Molyneux & Steinberg, 1995; Rao, 1991).

This is mainly due to the central premises on which these perspectives have been constructed. First, both WED and ecofeminism share an essentialist position that conceives of women as a unitary category when many studies have shown that women do not constitute a homogenous group. They appear to ignore the fact that other factors besides sex—such as social group, age, ethnicity, and race—influence women's position in society. Second, by focusing the explanation only on a binary and oppositional relationship between women and men, the analysis is reductive; it ignores the differences that exist among members of the same sex depending on the specific context of their lifecycle. As Molyneux and Steinberg argue, ecofeminism sees the relationships between women and the environment within a perspective that constructs social models and processes in a way that appears to be fixed (generally, biologically fixed), unchangeable, and inevitable (1995: 104).

Other streams of ecofeminism assume that the relationship between women and nature is purely biological, thereby sidelining an important amount of evidence that exemplifies how concepts such as nature, culture, and gender, among others, are historical and social constructs that change through and across eras and cultures (Agrawal, 1991:6). For example, various anthropological studies have shown the enormous variability of meanings attributed to the feminine and the masculine and how these are linked to concepts such as nature and culture (Leach, 1994: 31).

This also relates to how these perspectives refer to concepts such as culture and the environment, perceiving them as homogenous categories. They do not distinguish, for example, that not all cultures have the same ideological construction of nature and gender and that worldviews can change over time. The same occurs with the concept of the environment, because by conceptualizing it as homogenous neither WED nor ecofeminism seem to distinguish between the complex combination of ecological processes that determine the wide range of the Earth's ecosystems with which many and varied cultures relate. Therefore, as Leach emphasizes, these studies appear not to consider environmental change (or environmental management) (1994: 36). In addition, by understanding the environment as a homogenous category, both analytical perspectives omit a variety of perceptions that entail studying different environmental priorities and different ideas about what the degradation and management of the environment implies for men and women in a huge spectrum of historical, social, and environmental contexts (Arizpe, Paz, & Velázquez, 1996; Croll & Parkin, 1992; Izazola & Lerner, 1993; Lazos & Godínez, 1995; Leach et al., 1995; Leach & Mearns, 1991; Marquette & Bilsborrow, 1994; Jackson, 1993; Schmink, 1994). Consequently, the ecofeminist affirmation that suggests that all women have a particular interest in nature would appear to be false.

Second, by situating the oppression of women and nature in a single ideological terrain and subsuming all reference of that oppression to a "Western and patriarchal" ideology, WED and ecofeminism seem to omit from their analysis the historical contexts and material causes that have scaffolded the domination and oppression that influence the social positions of women and men, which consequently characterizes the relationships between them, and among men, women, and nature over time. As a result, these studies ignore the context in which environmental relations are rooted (Jackson, 1993: 1949). These perspectives therefore ignore the life systems of the individuals, that is, the social, economic, and political contexts interwoven into the relationships between women and men, as well as the ways in which they relate to specific environments and not always within the frame of a "Western ideology."

In their analysis, they therefore tend to assume that female subordination has always been rooted in the same causes and borne the same characteristics. They therefore neither explain nor distinguish between the different dimensions of female labor and use of resources, and they ignore critical questions concerning the assignment of different people to different tasks and how the relationships among different forms of women's work affect the social status of the individual. In this way, this sort of analysis of women's lives and their daily tasks remains obscured and their realities subsumed to masculine control (Leach, 1994: 36).

Finally, by considering women only as caretakers of the environment and/or as victims of environmental degradation, both WED and ecofeminism deny the fact that women are also active in that degradation. Part of the problem, as Jackson underlines (1993), is the fact that in their approaches, concepts such as use, work, and management are misunderstood. While management refers to the power or control of one person—be they a woman or a man—over the decision-making processes and planning of resources, the concept of use or work refers to the person as part of a process in which work is involved without this necessarily implying that this person has any decision-making power in or control over the process as a whole. In this sense, both WED and ecofeminism incorrectly assume

that those who work with a resource are necessarily the same as those who manage it, without recognizing that factors such as property rights and access to resources characterize the modes of use and management of those resources in generally different ways. The lack of this recognition distorts the analysis in terms of the causes, consequences, and management of environmental transformation with serious repercussions at the moment of designing and implementing environmental policies and programs. This is because on many occasions these initiatives involve women in a community-based management scheme without considering that they are only the users of these resources, or vice versa, they accord men the management of the resources when they are actually only the users. In the long run, this can only lead to the failure of any attempt to achieve more sustainable environmental management, provoking changes in the sex-based division of labor and, as Jackson indicates, on occasion implies increasing the unpaid labor of women by making them responsible for tasks they do not traditionally undertake (1993: 1950).

In their analyses, both WED and ecofeminism have ignored the connections that are produced in the broad scope of daily social relations into which gender connections are woven. So in their analyses, men are invisible, and gender perspective is not present (Jackson, 1993; Leach, 1994). Or as Jackson emphasizes, there cannot be a special relationship between women and environments given that these are not a unitary category and because the relationships that women establish with their natural surroundings reflect not only differences among them, but also other gender relations as well as the dynamics of political economies and the ecosystems in which these relationships take place (1993: 1950).

In this regard, I argue that to understand the social dimensions of sustainability from a gender perspective and with the aim of constructing indicators that move us towards sustainability, it is necessary to analyze gender relations through the study of the daily social relations in which gender relations are rooted. This allows us to understand the various and different levels and forms of social and gender relations involved in the production of environmental changes and their consequences for human societies and the possibilities of managing them.

Gender, Environmental Change, and Social Sustainability: Towards the Construction of an Analytical Framework

Bearing in mind the political implications of WED and ecofeminism and in an effort to understand more precisely not only the connections between women and environments, but above all the dimensions of gender in the field of environmental changes, various authors have developed different methodological approaches for their studies. In general, three main schools of thought can be identified: 1) feminist environmentalism; 2) feminist political ecology; and 3) gender, environment, and development.

Feminist environmentalism emphasizes the way in which gender and class inform the interactions between people and nature and how these, at the same time, structure specific gender-related interests in certain resources and ecological processes, the effects of environmental change on specific groups of people, as well as their responses to that change (Agarwal, 1991). According to Rocheleau and colleagues (1996), feminist political ecology incorporates a feminist perspective in the politics of ecology, considering gender to be a critical variable that determines how access to and control of natural resources are established. This school of thought emphasizes the need to analyze how the category of gender interacts with factors such as class, caste, race, culture, and ethnicity to determine the processes of ecological change and the efforts of women and men to sustain ecologically viable life systems, as well as the possibilities of any given community to develop sustainability (Rocheleau et al., 1996: 4). Finally, the gender, environment, and development approach draws on the positions of the two previous schools of thought, but is more interested in integrating a gender perspective in the design and implementation of environmental and development policies and programs (Joekes et al., 1996). This approach proposes that, beyond the incorporation of women into environmental politics, it is necessary to rethink how to construct sustainability from a viewpoint that recognizes gender differences. According to this school of thought, the strategic goal of an environmental policy with a focus on gender should be to protect or improve the access to and control of natural resources for women and men, supporting and promoting women's capacity for and position in negotiations and ensuring that future interventions do not remove their absolute or relative control over natural resources in comparison to men. Even if they derive from different schools of thought, these three approaches have developed various topics of interest and study in common, which I consider to be useful to better understand the social dimensions of sustainability.

In the first instance, studies of environmental concerns from a gender perspective share the premise that gender relations are an important factor that needs to be considered in the analysis of environmental change and sustainability. In this sense, they refer to gender relations as those dimensions of social relations that create systemic differences in the positions that men and women occupy in different contexts (Kabeer, 1992: 17). Similarly, as Jackson underscores, the three schools of thought agree that analysis from a gender perspective offers a framework that explains these differences according to local specificities in which environmental relations between men and women are produced (1993: 1947), while anticipating the generally determined obstacles and opportunities that environmental activities and development present (1995: 111).

These perspectives consider, therefore, that the relationships women and men establish with nature are rooted in material, social, and cultural realities, that these links are socially constructed, and that they vary among different groups of men and women in different environmental settings. So the majority

of these studies inform about what Leach has called local micro-economies using resources from a gender perspective, an analytical approach that allows us to reveal in detail the differences and divisions of activities, responsibilities, and rights in the processes of use and management of natural resources and the examination of their interactions with gender relations. This also allows for the identification of differences among groups of women and men and for the application of our analysis over time to identify the interactions between change in the division of gender and change in the environment (Leach et al., 1995: 4).

Based on these premises and in an effort to construct a frame of reference for the analysis of gender dimensions in environmental change, research to date has suggested five basic indicators that have shown themselves to be useful for the study of gender dimensions in environmental change: 1) the division of labor and responsibilities; 2) property rights; 3) institutions; 4) political economies; and 5) the ecological context (Leach et al., 1995).

The first indicator, the division of labor and responsibilities, has been identified by feminist research as a key element in gender analysis. Observing how the assignation of labor and the decision-making processes of this assignation take place, the users and controllers of specific ecological resources and processes can be identified according to gender. Taken together, other factors such as class, age, positions in the lifecycle/family, religion, and ethnicity, as well as access rights to land, employment, and other economic and natural resources, should be considered, given that they all inform this division.

Gendered division of labor also allows us to observe the type and quantity of work undertaken by women and men and the varying consequences that environmental change can have over both. Here, it allows us to understand how this work can also be a source of environmental change. In this regard, it is important to mention that, as research from a gender perspective has shown, the division of labor must not be taken as a given. On the contrary, to understand how men and women use and manage natural resources in different ecological, cultural, and socio-economic contexts, it is necessary to go beyond a mere representation or description of the distribution of labor. In this sense, a more detailed analysis is required, one that encompasses the decision-making processes and negotiations through which the labor is assigned and distributed. As Jackson writes, a focus only on sex-based segregation in the lists of tasks undertaken does not explain the process by which the division of rights and responsibilities is established, which guides the behavior and performance of men and women (1995: 120).

Linked to the above, the second element that must be considered refers to property rights, a concept which by definition is central to social relations given that it articulates relationships among people rather than people and *things*, denoting social arrangements that legitimate individual claims to land and other material and non-material resources (Jackson, 1995: 122), relations that are established by the rules of corresponding legal frameworks and through "informal" social and cultural models (Mackenzie, 1995). Therefore, as research into women living in rural areas in Latin America, Asia, and Africa has shown,[4] if access to and control of land and other economic and natural resources structure the wider groupings of gender, social, and natural relations in which life systems develop, then property rights or the absence of such rights can also be considered mediating factors in the environmental relations of women and men (Jackson, 1993: 1959). Gender difference in the access to and control of resources therefore has significant implications concerning the incentives and opportunities to undertake sustainable environmental management and, therefore, to build social processes of sustainability (Joekes et al., 1996; Jackson, 1995; Mackenzie, 1995; Rocheleau, 1995; Rocheleau et al., 1996).

As various studies have shown (García et al., 1991; Masera et al., 1999; Merino, 1997; Swift, 1991), in order to analyze the causes of actual environmental changes and propose alternatives for sustainable management (ecological, economic, and social), it is essential to understand the institutional mechanisms through which people have access to and control of the natural, economic, and social resources around them, considering in particular the diverse cultural contexts in which these mechanisms function. So, from a gender perspective, a third element that should be considered is the study of institutions and institutional mechanisms through which property rights and decision-making processes that determine the gender division of labor and responsibilities are exercised. This means looking at how the position of men and women in domestic units, in communities, and in other institutions involved in the decision-making process about environmental issues is generally determined (Leach et al., 1995: 6).

I would emphasize the need for an analysis of the domestic unit and the marriage contract as part of the institutions and institutional mechanisms that establish relationships between society and nature. Such analysis would consider how domestic units and marriage contracts, upon which property rights and the gendered division of labor and responsibilities are constructed, characterize the relationships that men and women establish with their natural surroundings. This means analyzing not only the relationship between domestic units and other institutions, but also understanding inter-domestic relations through which gendered environmental decision-making processes are undertaken and how these are modified by and react to environmental changes (Jackson, 1993: 1959).

The fourth element considered in the analysis of climate change from a gender perspective is the context and dynamics of political economies in which the aforementioned processes take place. Identifying the micro processes by which the access to, use of, and control of resources is undertaken in the framework of the economy and regional, national, and international economies is crucial to understanding the dynamics of the former (Rocheleau et al., 1996; Schmink, 1994).

4 For a discussion on gender and property rights, see Deere & León, 2000; Grawal, 1994; Mackenzie, 1995.

Finally, understanding environmental change from a gender perspective means taking into account the ecological characteristics within which the social relations are inserted, given that the former shape the processes and impacts of environmental change. As Leach and colleagues have argued, while this viewpoint seems evident from a natural sciences perspective, social scientists who dedicate themselves to the study of social dynamics, gender, and the use of resources frequently fall back onto generalizations and false premises about environmental impact on these ecosystems (1995: 7).

Based on the factors discussed here, I believe it is possible to begin to understand some of the aspects of the social dimensions of sustainability from a gender perspective. In what follows, I will argue that the study of domestic units and the analysis of the relationships established within them allows us to understand certain elements that are central to daily life, yet are not always considered in studies of the causes, consequences, and possible forms of management of the environmental changes that we are witnessing today.

Domestic Units, Intra-domestic Relationships, and Social Sustainability

As the vast quantity of research into social and gender relations has shown, domestic units are central to an explanation of social and gender dynamics, as well as the differentiations that arise from these notions (Arizpe, 1973, 1980; Dwyer & Bruce, 1988; García, Muñoz, & Oliveira, 1982, 1988; Margulis, 1988; Oliveira, Pepin, & Salles, 1988; Pepin & Rendón, 1983, 1988; Quesnel & Lerner, 1988; Whitehead, 1981; Young, 1992). To begin unraveling and understanding the social dimensions of sustainability, domestic units must be considered, as I explain above, as one of the central institutions that structure and mediate the relationships between society and nature and also as a unit of basic analysis of social sustainability because they allow us to understand the processes and patterns of access and control by which men and women use and manage the economic, social, and natural resources that satisfy their basic needs.

The definition of domestic units has unleashed numerous debates in the literature on gender and development. The most common definition, used by census and opinion polls, refers to a domestic unit as a group of people living under the same roof, sharing food, and a common budget. However, as several authors have pointed out (Evans, 1992; Folbre, 1986; Kabeer, 1992; Whitehead, 1981; Young, 1992), this definition presents us with some problems. First, in many cases, it perceives the domestic unit as a harmonious and homogenous unit, like a "cooperative unit" (Young, 1992: 136). So while it does recognize that domestic units are made up of individuals of different ages and sexes, defining them as a homogenous group does not allow us to observe the processes of negotiation and decision-making undertaken within them.

A second problem appears given the confusion that often exists between the concepts of domestic units and families, where the former refers to residential units and the latter to a unit based on kinship, marriage, and parentage (Young, 1992: 136). Consequently, it assumes that the intra-domestic relations are ones of collaboration and mutual care and that familial and marital relationships are always based on equality. However, as Whitehead (1981) has pointed out, this is not always the case, and in general, domestic and familial relationships imply different and unequal obligations, as well as different rights and levels of control and power. As Oliveira and Salles emphasize, when looking at domestic units, it is important not to idealize the bonds of collaboration and cohesion, given that "these are ambivalent relationships: solidarity coexists with conflict, physical and psychological violence" (1988: 20).[5]

Empirical research has shown that domestic units vary greatly in structure, size, and composition—as much between societies as within them—over time and given changes in the collective and individual needs of the members of said unit and modifications in economic and social contexts within which the units function (Arizpe, 1980; García, Muñoz, & Oliveira, 1982; Quesnel & Lerner, 1988; Salles, 1988, 1991; Young, 1992). In this sense, it is difficult to refer to a single type of domestic unit, given that they are not unchanging, fixed entities, but rather, we should think of them as diverse entities that depend on economic, social, cultural, and natural contexts—that also react to changes in these contexts—in order to maintain and support the lives of the individuals within the units. We should therefore think of them as entities within which there are a variety of intra-domestic relationships—both of collaboration and of conflict—through which the family members make decisions and assign tasks, depending on age and sex.

With this in mind, I suggest that, in approaching the study of the social dimensions of sustainability, we consider the domestic unit as a system of resource allocation among individuals that might or might not be permanent, in which individual members may share the same goals, benefits, and resources, are independent with regard to some of these goals, and are in conflict with others (Feldstein, 1986; Velázquez, 1996). Even this does not pretend to be a complete definition of the domestic unit, but I would argue that it allows us to begin characterizing the forms of access to and use of natural, economic, and social resources, as well as the conflicts that are generated around these models. That is, as a system in which intra-domestic relationships of conflict and cooperation mediate the patterns of use and management of natural, economic, and social resources through a variety of decision-making processes over which not all the members of the domestic unit have control or decision-making power and that characterize the type of use that each member can make

5 Ed. note: Our translation.

of the resources around them (or their lack of use) and the impact of these patterns on the ecosystems surrounding them.

In this sense, domestic units' systems of use and management can be considered not only as sources of environmental change or consequences of it, but also as indicators of social sustainability. That is, the analysis of these systems allows us to explore the changes that happen in the social sphere when schemes of sustainable management—from the economic to the environmental—are introduced. How do the patterns of sex-related division of labor change when new models of resource use are introduced? Who benefits economically and socially from the new models? Who controls the processes that are introduced? These are some of the questions that the analysis of domestic units allows us to answer because these systems help explain the socio-economic and cultural processes from a gender perspective through which people maintain, sustain, and renew their ways of life every day and allow us to understand how these systems relate to one another and to determine the patterns of use and management of natural resources. I suggest, therefore, that a way of approaching the social dimensions of sustainability is to explore what we could call the "vulnerability of the domestic unit," understanding this as how its dynamic structure and members confront natural and social risks and have the capacity to manage them or are unable to do so. This takes us back to the need to analyze the strategies of reproduction and survival that members of the domestic units use to confront these issues. This is something that has been widely documented in Mexico and Latin America, with regard to the interaction of domestic units with patterns of access to, use of, and management of resources (Arizpe, 1980; Appendini et al., 1983; García, Muñoz, & Oliveira, 1982; García & Oliveira, 1993; Paz, 2000; Salles, 1988; Tuirán, 1993).

In this context, it is necessary to analyze intra-domestic relations that characterize the dynamic of the unit as these shape the decision-making processes within the domestic unit and therefore the model for the use and management of the natural resources undertaken by each member of the unit. In this sense, I would suggest that developing a social definition of sustainability from a gender perspective is necessary for understanding the allocation of resources to the domestic unit and its capacity or incapacity for managing socio-economic and environmental changes, topics that have been examined in Mexico and Latin America from the 1970s onwards (Arizpe, 1980; Dwyer & Bruce, 1988; García, Muñoz, & Oliveira, 1982; González de la Rocha; 1986; Roldán, 1988).

Here, as mentioned above, the sex-based division of labor and responsibilities within a domestic unit gives us the analytical tools to study these systems and helps us to develop an indicator of social sustainability centered on who uses the resources and why these are used in one way or another. Thus, exploring the sex-based division of labor, of patterns of income and expenditure in a domestic unit, and of the intra-domestic relations of decision-making—understanding who is doing what, who has access to and control over what resources, and how this all changes in the face of environmental change—can help us to begin to understand how men and women confront environmental changes and how the future of these processes can or cannot generate social sustainability.

By Way of Conclusion

In this article, I have discussed the need for the notion of sustainability to be understood bearing in mind its ecological, economic, and social dimensions. As I have argued, to achieve this, we need to construct conceptual frameworks that allow us to approach the social dimensions of sustainability from a gender perspective. As I have proposed, the use of domestic units as a unit of analysis and study of the intra-domestic relations and their connection to patterns of the use of, access to, and management and control of natural resources contributes to this discussion.

Thus, I suggest that sustainability should not only refer to processes capable of rehabilitating and maintaining the bio-physical systems on Earth. It is also necessary to consider the social dimensions needed to generate processes that allow for the rehabilitation of social deterioration and to renovate and sustain the ways of life of all people—men and women. Social sustainability therefore becomes a key issue in the effort to understand and transform relationships between society and nature because the social dimensions of sustainability, as I have outlined in this article, allow us to look at the ensemble of relationships in daily life—of social production and reproduction—through which people relate to one another, which in turn characterizes the forms of relationships that people establish with their natural surroundings.

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WATER IS GOLD

Cecilia Vicuña

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Cecilia Vicuña is a poet, artist, activist, and filmmaker whose work addresses pressing concerns of the modern world, including ecological destruction, human rights, and cultural homogenization. Vicuña coined the term “ArtePrecario” in Chile in the mid-1960s as a new independent and noncolonized category for her precarious works composed of debris, structures that disappear, and Andean *quipus*, creating metaphors around the act of weaving. These works bridge art and poetry as a way of “hearing an ancient silence waiting to be heard.” Her work was included in *Documenta 14* at Athens and Kassel 2017 and the 59th Venice Art Biennale 2022, where she received the Golden Lion for Lifetime Achievement. Her most recent books are: *Libro Venado* (ndirecciones, 2022); *Sudor de Futuro* (Altazor, 2021); *Minga del Cielo Oscuro* (CCE, 2020), and *New & Selected Poems of Cecilia Vicuña* edited and translated by Rosa Alcalá (Kelsey Street Press, 2018).

Water is gold

Pleading is seeding:

A response to Pascua Lama

The gold is hearing, Manquemilla, golden condor.

The word “cool” originated from glaciers, “chill” was the first utterance, and the slow ice of an interior music that dies if no one hears it.

When glaciers break, they wail, moan like a cow giving birth.

Alveolar womb.

Breath of a vacuum.

The messenger of water, the intermediary between worlds, the glacial condor in extinction.

The condor-child, the glacier’s guardian, was buried alive by the Incas, next to the Mapocho riverhead at the peak of Cerro El Plomo, in order to prevent drought in the valley we now call “Santiago.”

He was buried and forgotten for 500 years, and later found and pulled from his dream by treasure hunters.

They found him to un-find him, turning him into an “archeological object.”

They said it was a “veneration of the heights” and that phrase placed him in the past. They called him “The Plomo Mummy” and that name tore him from his life. But the child continues to sleep and his dream is revived every time someone feels a connection with water.

Now the child comes back to our national consciousness when the glaciers are melting and risk being sold, contaminated, lost.

The child reappears when Chile is on the verge of choosing to hear or not hear the music of a connection with the earth and the glaciers, the specific tone of a place.

A place is a sound and a way of hearing it.

A fabric of interrelations, an interaction between people and the earth, the space of naming.

Changing the meaning of a name changes history.

In Alto del Carmen, in the Huasco Valley, the land of Gabriela Mistral's ancestors, Chile is choosing a meaning.

(Does anyone remember that "carmen" means "poetry"?)

Alto del Carmen could be the place where Chile honors its poetry, the sound of its crystal-clear waters, or it could be the place where local life ends, surrendering the glaciers and mines to neocolonial powers.

Today, the shepherds and peasants of the upper Huasco Valley, descendants of the Diaguitas, defend the ancient vision of glaciers as sacred places that guarantee life.

Water is gold.

The earth's blood.

Listening to us.

Slow-moving ice bears witness to the Indigenous Peoples' ancient relationship with water in the Southern Andes.

The ritual preservation of its fluid movement is our true cultural heritage.

The future inheritance of a way of being that sustains both the earth and human life.

In Chile, the stories of the condor and water are the songlines that enter and fertilize the earth.

The inexplicable *quipu* of our continuity.

Notes:

Manquemilla: Mapudungun for "golden condor"

"Cool" and "chill": Derived from the Latin *gelu*

"Songlines": The remnants of the dreamtime stories that created the world, see Bruce Chatwin's eponymous book on the Australian Aboriginal concept.

Ed. Note:

A *quipu* is a complex system of colored knotted threads used by various ancient Andean peoples to keep records and preserve information.

THE (IR)RELEVANCE OF GENDER IN THE POSTHUMAN PERSPECTIVE*

Brigitte Baptiste

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"I have thus endeavoured to preserve the truth of the elementary principles of human nature, while I have not scrupled to innovate upon their combinations."
Mary Shelley, 1819. *Frankenstein* (Preface)

Abstract

Each time someone asks about my gender or comments on the trouble of identifying someone else's gender in the media, a fruitful conversation emerges about one of the most essential categories of human existence. But I am also taken aback by the question, by what may have driven the question. This essay is an exercise to debate the usefulness of gender as a category, something the so-called LGBT community has been doing with a political aim for some time now, but as with any taxonomic practice, this may act against its original purpose. The proposal comes from personal experience, but it also considers other theoretical elements from biology and transdisciplinary studies, using an ecosystem approach based on the idea of complex adaptive systems. This vision is projected on a social image of gender in what is being called posthumanity.

Keywords: Transgender, adaptive evolution, gender discrimination, transexuality.

Initial Exordium

The discussion and construction of a more equitable society, in terms of human rights and duties, produces two striking results when examining the boundaries of proposals related to the position and effects of gender categories in cultural systems:

1. Gender equity is not subject to an essential identification of any sort. That is, except for reproductive biology, all people are equivalent. It would, in theory, be a step forward for the inclusion of all possible gender conditions.
2. Sexual differentiation as an authoritative criteria source loses weight as the public is increasingly capable of constructing autonomous discourses on bodies and resignifying them (with ethnic, historical, imaginary, abstract, and experimental elements). This is the result of continued evolution and, in particular, the human ecosystem's relationships with new technological elements.

These two aspects are evidence of a pendular movement that poses

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fragmentation as the most typical phenomenon of modernity and the search for new paths of synthesis as a response to the loss of meaning: recombining and restructuring all levels of reality, which requires hybrids, in the sense that Merleau-Ponty has described them,[1] as a manifestation of reorganized structures—experimental structures, of course, that operate in new ecological circumstances. Let's get into it.

"Biology is not destiny" (L. Feinberg, 1996)[2]

In regards to the first premise, even the most liberal of parents would question the potential difficulty imposed on their offspring to choose a reproductive partner, in biological terms, if the confusion of signs regarding gender continues, theoretically favored by a homosexual and transgender culture. The anguish of falling in love with a person without completely knowing their anatomy (because, unlike many plants and animals, our genitality is almost always hidden by material culture) overcomes the challenges implied in questioning (for example) disability, which occasionally was concerned about the possibility of success in genetic recombination. Not transcending the future in biological terms, as if bloodlines still had the magical property of becoming institutions by effect of biology itself.

The problem with this vision is that humanity no longer needs to reproduce biologically: six billion people in an environmental crisis attest to this. And any program to defend the reproductive capacity of a particular group could only be based on a deterministic and eugenic notion of biology, necessarily racist, which associates the evolution of a cultural project with a set of phenotypic traits, inevitably leading to the worst notions of identity and nationalism. Roughgarden (2002)[3] and Rastier (2003)[4] have re-emphasized the need to criticize neo-Darwinist paradigms that have led to the extreme of postulating molecular control of evolution, bringing the hyper-fragmentation of physical and behavioral reality to all biology: we are only competing genes. In that scenario, culture itself is unimaginable, indefinable, and trivial. The acquisition of symbolic capacity, a fundamental feature of humans, disappears, since natural selection did not seem to operate in a group.

1 Merleau-Ponty, M. 1957. *Fenomenología de la percepción*, Fondo de Cultura Económica, Mexico.

2 *Transgender Warriors*. Beacon Press, Boston.

3 Joan Roughgarden profile: A plea for diversity. V. Gewin's interview with *NATURE* magazine, 422: 368-9.

4 Rastier, F. 2003. Society and post-humanity. Questions to the sciences of culture. Conference on "The Evanescent Society," Centre de Culture Franco-Norman, Paris.

Of course, in that scenario all non-reproductive behavior, voluntary or not, is a dead end for the set of genes that mistakenly embodied a homosexual or a priest, to give just two examples. The only explanation for their existence would be the inexplicable persistence of altruistic molecules in the genetic pool, those that are willing to sacrifice themselves for others, whether releasing pressure on the resources for future generations (other people's children) or proposing particular ethical projects that pave a road for them to travel. But such altruistic genes should have disappeared long ago, precisely from suicide, unless some communicative mechanism guaranteed that this kind of behavior would benefit their own copies, deposited in other bodies. But if this were the explanation, we would require another kind of information: so many spontaneous uncles and aunts, so many characters in all societies whose sex does not mean anything in reproductive biological terms, but who are fundamental in the construction of adaptive strategies—production of material wealth, capacity for technological innovation, leadership, institutional creativity, and especially, critical capacity before the same symbolic-cognitive apparatus of society—would not be needed. Is this genetic information redundant, wasted? Part of the energy inefficiency of biotic processes? And although this is not a talk about the genetic debate of altruism and selfishness, the idea is to flatly reject the notion of the natural order of things as a way to solve problems of discrimination: appealing to the "gay gene" is a simplification that will always leave the door open to those who aspire to make it disappear, compassionately, from the genome.[5]

Returning to the argument at hand: it may be indispensable for people to have semiotic clarity, in terms of sexual identity, in order to choose an anatomical, physiological, and genetically viable partner. But for society as a whole, it is not. Each culture, therefore, builds a different and unique set of codes and reinforcement mechanisms to maintain that clarity, obviously as a preventive measure in the face of biological extinction. But, in the long run, since all of the planet's individuals are genetically, anatomically, and physiologically compatible, what is ultimately preserved are those sets of reinforcement mechanisms, that is, the semiotic text that has been built over generations to distinguish the ovaries and vagina from the testicles and penis. Therefore, using a completely random example, a contemporary Masai "woman" has nothing to do with an Inuit "woman," nor an Arhuaco "man" with a Jewish "man." Or else, try to build a biological family from any of these four combinations to see what their respective traditions say and, respectfully but critically, examine each of their explanations...[6]

5 Here, the genetic debate is taken as mythical-religious: the genes become equivalent to God, in the discourse, with the same determinism. See: Brad Harrub, Ph.D., Bert Thompson, Ph.D., and Dave Miller, Ph.D., 2003, "This is the Way God Made Me," A Scientific Examination of Homosexuality and the "Gay Gene." http://www.trueorigin.org

6 Ayala Malach Pines & Nurit Zaidman, 2003, Gender, culture, and social support: A male-fe-

The point is, then: humanity is not being threatened with extinction because of a lack of biological reproduction. While it is true that some population gene sets are threatened, given that their differences are trivial, eventually losing them does not represent a threat to the genetic variability required to guarantee the conquest of space that is, on the contrary, just emerging. The relevance of difference can be considered in the produced sets of meaning. Due to humanity's young age, these tend to group and coincide with particular phenotypes, isolated up until a few centuries ago in different regions of the Earth; that is, territories with very specific accumulations of natural resources. The relevance of difference, then, can be considered learning to behave in the most appropriate way in complex and unstable situations typical of every ecosystem and in acquiring the aforementioned collection of what is tendentiously called "natural capital." And that education does not depend on genes, rather on culture. If we return to the interview with Joan Roughgarden (professor of evolutionary biology at Stanford University, transgender activist, and curator of an exhibition on homosexuality in animals), this implies that reproductive success is a process of social inclusion, that is, it depends on an individual's ability to participate in a group capable of controlling a key resource. An idea of natural selection explicitly manifested against neo-Darwinian sexual selection that naturalizes the male's promiscuity and the female's passivity, reiterating without sufficient evidence the appearance of gender as a category of sexuality-regulating behavior.[7]

If the persistence of our species does not depend on demographic growth (which seems more a threat today), everyone who does not participate in human genetic perpetuation is left over (which would extend to all "non-human" beings). In strictly molecular terms, at least. If they are considered useful for collaborating with social development, they are still sexually irrelevant. Chaste or not, obviously they need to not be distracted by that sexuality (as it is irrelevant) and concentrate on other people's genes. Gender is also irrelevant here. Unless it has another role, not at all related to reproduction. This is how gender theory has been criticized, explained, and projected in recent decades, as an analysis of the distributional implications of power associated with the non-sexual construction of gender. Therefore, to be president of a bank or a nation, it no longer matters whether you have testicles or not.[8] Therefore, we are free to rethink or build any association or new meaning from gender, that is, to mix *ad infinitum* the attributes of femininity and masculinity or as many genders as each culture has been able to successfully define and manage in its development. Whoever can identify their biological

male, Israeli Jewish-Arab comparison. *Sex Roles: A Journal of Research*, December, p. 22.

7 In "The Gay animal kingdom" (June 2006), Jonah Lehrer comments: "The effeminate sheep & other problems with Darwinian sexual selection...." http://www.seedmagazine.com/news/2006/06/thegayanimalkingdom.php

8 Another thing entirely are symbolic testicles, whose construction seems to demand institutionality...

counterpart in this chaotic tsunami should be free to reproduce (biologically) if they so desire...

Thus, it is not that women or men are better or worse at driving a big rig, running a business, making bread, giving manicures, or founding a church. History demonstrates this every day, and we even have a word for linking anatomical or physiological attributes derived from the genetic constitution to the performance of any role: atavism. An atavism all too present in our power structures, yes, but this does not change its condition. What's more, there is no reason to think that men or women are better or worse at being mothers, beyond mere anatomical dependence. What matters about parenting is affection, security, communication—this has been proven. But all this gives us a feeling of breaking out in a bad rash, since education still emphasizes the need for gender identity, for the sake of "inner peace" (which others never had because we simply had "bugs in our system"). If we consider all the above, inner peace is built on the biological determinism of heterosexual couples for reproductive purposes... But if we can't recognize girls (little females, since little ladies is too corny) from their pink tones, branded into our cornea *ad nauseam* by Disney princesses, and if boys (little men, don't even think about calling them little machos) are not brilliant warriors, what certainties does humanity have? Isn't it the most elementary, most democratic, simplest, perhaps most satisfying exercise of power to determine the sex of each person with whom we interact and evaluate in an eye blink the coherence of our own personal sex-gender assignment, to draw conclusions about its moral condition from phenotypic inferences. This way, people "are" something, they're incorporated into the universe of valuation categories that position them as simple beings worthy of sexual attention, of masturbatory use.

As a result of the above statements, it follows that the semiotic complexity with which genders are constructed is historical, and its association with behavior is a contingent form of expression—in other words, political.[9] Therefore, we are free to rethink or construct any new association or meaning from it, that is, to mix *ad infinitum* the attributes of femininities and masculinities or to create new ones. That is why all transsexuality is more transhistoricity than a search to adjust souls in the wrong bodies: it is the weight of meaning that is reconstituted and has the power to reconstitute anatomy, that which allows us to move toward the other. Obviously, this is a communicative principle.

My discussion up until this point—nothing new,[10] of course—has not mentioned any of the successful cultural strategies adopted by humanity to

9 Some references include: *Biological Exuberance: Animal Homosexuality and Natural Diversity* by Bruce Bagemihl; *Sexing the Body: Gender Politics and the Construction of Sexuality* by Anne Fausto-Sterling; *Sexual Selections: What We Can and Can't Learn about Sex from Animals* by Marlene Zuk; and *Genderqueer: Voices from Beyond the Sexual Binary* by Joan Nestle.

10 Non-essentialist feminist theorists have delved lucidly into the topic: Donna Haraway and Judith Butler, for example.

guarantee the upbringing of orphaned and abandoned children, which even consider adopting babies from genetically different enemies at war, contrary to all molecular logic. This and migration explain why few nations today can claim (without blushing, moreover) any relations between their levels of quality of life and their population's genetics, theoretically expressed in inappropriate practices and behavior. In fact, a large proportion of Germans, French, British, and Italians today are biogeographically of Arab, Moroccan, Armenian, Turkish, Iranian, Uzbek origin, and we're not even considering the demographics of the United States. The unfortunate thing for social groups is the scarce willingness to move out of comfort zones and the authoritarian agenda that forces the other to move.

On the other hand, the multiplicity of familiar forms (of which we barely catch a glimpse), some based exclusively on solidarity, is a source of satisfaction today when analyzing adaptive strategies of societies broken by war, sickness, or environmental adversity. Legislation should have resolved the debate over adoption by homosexuals years ago, for in practice it is done every day, and in fact, there are strict requirements for each person who wants to and considers themselves capable of supporting and educating a human being. And because the other family ideal fails too often...

Ontology and Determinism

"And is your baby, a boy or girl?"
"I don't know, it hasn't told us yet."
(L. Feinberg)

The issue of the psyche is more difficult to address, since the hypothetical lack of clarity about the condition of sex or gender implies a malformation or a form of schizophrenia (it's even diagnosed).

How does the psyche resolve the anguish of fragmentation? Are we really talking about "soul" and "body" mismatches as transgender people often express?

One medical school, reluctant to use surgery as an adjustment mechanism, insists on the need to construct an analysis that restores gender identity, at least enough to avoid personality disintegration and its concomitant suffering.[11] For others, the problem disappears in an epistemological model different from that of the rationalism of modernity and, in particular, with the neoplatonism in some schools of thought, often associated with transcendent religions. But not being able to define gender poses questions to gnoseological assurances: this does not define the being, it defines the becoming. Old debates...

11 A recent review of the ideas of Dr. Paul McHugh, author of the book *Surgical Sex,* who is considered one of the psychiatrists most opposed gender reassignment surgery, can be found at: http://www.tsroadmap.com/info/paul-mchugh.html

Linguistic problems would be easier to solve: in English, gender is never as explicit as in Spanish. In fact, in many languages there are more than two genders to designate identities with greater or lesser anatomical or physiological content.[12] The problem is the bipolar dichotomous system posed as a crossing of gradients between a masculine/feminine and a female/male axis, which only accepts a few possibilities of materialization and constitutes a space of crisis for those who are horrified by the breadth of empty combinations, of creative opportunities for others. Think about other oppositions such as animal/human, domestic/wild, with their limitations coming from the structuralist framework of the science of culture.

Some people, however, navigate quietly and constructively through the ocean of fragmentation: the notion of trans is really a permanent movement and not a switch that goes from "off" to "on." In the fine arts, the body is a work of art, and artists are increasingly making honest proposals of it. Aesthetic categories regain their symbolic powers in a world of apparent rational certainties and brazenly and mockingly recover the semiotic wealth of the human animal.

Technology's Role

Prehuman ecosystems lacked a modifying agent of technological origin. The advent of fire, agriculture, fossil fuels, and molecular techniques, while each of a particular nature, has reorganized the world's physical and biological systems and thereby constituted better or worse cultural systems in terms of equity and justice. This means that the relationship content of the elements that make up an ecosystem has been profoundly shaken by the human presence and its capacity for cognition and innovation. A capacity that has grown exponentially thanks also to epistemological innovations, as in the case of modernity, which allowed humans to delve spectacularly into the understanding of all the structures of reality, to the point where several times in history, people have arrogantly claimed that everything is already known...

But the price of the analytical method, of the hyperspecialization of cognitive domains, has been fragmentation. Fragmentation that, on the one hand, has been responsible for the advent of the deterministic explanations criticized in the first section, since they contain the smallest organized biotic elements that are used to explain the planet's behavior. Fragmentation that affects all instances of human existence: its psyche, its organs, its body, its social body, its institutions, its beliefs—everything. And which lingers like a threatening, chaotic cloud where everything swirls senselessly. Conservative historical criticism responds to

12 Hellinger, M.& Bussman, H. (eds.), *Gender across languages. The linguistic representation of women and men*. Amsterdam/Philadelphia: John Benjamins. Vol 1, 2001, 329 p., Vol 2, 2002, p. 349.

this threat by seeking to develop regressive consciousness so as to avoid total dissolution.[13] But, on the other hand, fragmentation leads to the appearance or emergence of new entities impossible to predict from the biological sphere and that, although present since the beginning of the human species, only highlight their category of semi-autonomous agents in evolution with the appearance of cybernetic technology.

The flip side of the coin, presented by the theory of complex adaptive systems,[14] would say that this is a general phase of system reorganization, necessary as globalization and modernity reach their limits and provide negative feedback to the evolutionary project, forcing the emergence of new integrationist proposals, that is, renewing the meaning and innovative capacity of evolutionary strategies.[15] Simply put, we are faced, again, with the dilemma of Dr. Frankenstein...

In this process of synthesis and ecological reorganization, the fragments are recomposed as ephemeral experiments that represent alternatives that may or may not persist, depending on how they contribute to shaping ways of being increasingly more complex and, therefore, having greater projection in time and greater ability to provide former fragments with a sense of being part of a whole (resilience). Thus emerges the notion of posthumanity: in some authors, the end of the human, in others, its dawn. Of course, what is at stake is the very definition of humanity and with it, to mention only one effect, the relevance of its reproductive strategies based on sex, which is sufficient to destroy any regulatory social category attached to them. Thus, bio- and cyber-technology launches us into a universe where the significance of the feminine and the masculine are freed from their primordial links and enable (in fact, force) a complete restructuring of gender systems. The market clearly captures this signal, but its proposal does not go beyond everyday advertising, because it requires freeing the monster that its Calvinist origin tried taming: sexuality.

However, the issue here is not whether future humans will be sexed, but what symbolic configurations they will choose in order to constructively conduct their erotic forces, as the fundamental component of their expanding body consciousness. We should question whether the Internet's predominant devotion to sex—paid and free-access pornography—is not the obvious symptom of this struggle to control new bodies (as a consequence of searching for meaning amid the anguish of former fragmentation, as a consequence of experiencing and fearing deep reconnections). The market offers connections without any threats,

13 Principle of precaution vs. principle of proaction.

14 Gunderson, L., & C. S. Holling (eds.), 2002. *Panarchy*. Boca Raton: Island Press. On the other hand, a specific reading on the theory of chaos and complexity in psychiatry: Maier T., 1998. Klinik für Psychiatrie und Psychotherapie, Littenheid, Schweiz. *Psychother Psychosom Med Psychol. 48*(8): 314-7.

15 Lemke, J. M., 2007. Science, masculinism, and the gender system. 7th draft of presentation. Available online at http://philo.at/miilgpmc.dir9606/msg00122.html

it provides signals that define what kind of bodies people are entitled to, what kind of changes we want to experiment with, and how much they cost, as if we could be guaranteed a perfect trial run...

Bodies with prostheses as simple as a cell phone, probably the most important attachment in expanding people's sensory confines since glasses were invented. New mechanical, computer-generated, aesthetic bodies, many of them with clearly critical devices, the key to building culture, the ability to produce meaningful discourses.[16]

What do these new bodies mean when we see them through nostalgic filters of classical aesthetics that collapse before our eyes? What kind of desire is emerging or are we recognizing in these new constructions? What kind of relationships are being incubated in this humanity that will not necessarily be a single humanity, but probably a cultural metaphor of speciation and will evidently do away with biology?

Regardless, this event invites us to reflect on diversity and exclusion. It asks us directly if we will continue playing the fragmentation game that had supposedly ended for each individual in the right of each person to claim the sublime presence of the perfect man. Not finding such perfection breaks reason into many pieces, descending into our entrails, where it triggers a battle between the organs, beyond the traditional mind-body split. And the soma is rearranged from the cell to rise up as Dr. Frankenstein's new monster, with the same doubts, but with a fundamental difference: now his memory is intact.

Final Exordium

I therefore invite you to reflect on the forces that infiltrate and constitute your bodies on a daily basis and to explore the autonomy of your behavior, your sexuality, your very anatomy. While we all have our grandpa's nose, our aunt's gestures, and the particularities of this or that family member... How much does that matter? We are molded into something from the family that raised us, the state that protected us, the religion that preached to us, the social groups, the market...

At the end of the exercise, I wonder: is it relevant, at this point in history, to be a man or a woman?

16 This is evident in the emergence of artistic proposals such as xenomorphosis, transgenital landscapes, shape shifters, etc. A manifesto: http://www.dellagracevolcano.com/publications.html. See www.genderwunderland.de

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POSTCOLONIAL CRITICISM IN THE POLITICAL PRACTICES OF ANTI-RACIST FEMINISM

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This article argues that postcolonial theories developed in academia have elitist and androcentric positions. The author shows that the practices and struggles of the feminist movement, both in the United States and in Latin America, have generated a way of theorizing the postcolonial that is often ignored by academia. Delineating a genealogy that begins with the Black feminist movements of the United States and covers Chicano feminism, Afro-Latino feminism, and Indigenous feminism, the author shows that postcolonial theory would greatly benefit from the contributions that these political movements have made to the criticism of colonial domination.

Key words: feminism, racism, postcolonialism.

One thing I've learned from feminism is to question everything because the paradigms that have taken over many academic areas are upheld by masculine, classist, racist, and sexist views and logic. Although new trends like subaltern studies, cultural studies, and postcolonial studies—with their differences and nuances—have provided an opportunity for silenced voices to become referents and proposals of critical thought, questioning the elitist bias of academic and literary production, I can't help but wonder: have so-called subaltern, postcolonial, or cultural studies really decentralized the "male" subject as they intend? Could it be that these new discourses invoke what is assumed to be marginal or subaltern in order to gain intellectual credit by incorporating "difference" as a legitimizing strategy? I ask myself such questions because these terms come from North American and British academics, although pushed in some cases by immigrants from the South. Therefore, the colonial and androcentric bias continues to characterize these lines of thought.

One of the topics to be dealt with in this issue of *Nómadas* is the "coloniality of power," a concept that has recently become trendy in contemporary Latin American social theory. Although this concept helps explain sociopolitical, economic, and cultural realities, as well as the construction of subjectivities, the topic of the effects of colonialism in contemporary societies is not a new issue. In this sense, major proposals have come precisely from the concrete decolonization movements and the fight against apartheid in Africa and Asia in the 1950s and '60s, the civil rights movements in the United States, and from feminism developed by racialized women since the 1970s. In other words, they come from social movements and later turn into theories.

If we reconstruct an authentic genealogy, there are intellectuals who have been important referent points in the analysis of the effects of colonialism. One of them was Aimé Césaire in the 1930s, founder of the Negritude movement, who sustained his political proposal with an analysis of colonialism and racism as fundamental vectors of capitalism and Western modernity, not only linked to economic relations, but also to Eurocentric thought and values (Césaire, 2006). Later, in the 1950s, Martinican psychiatrist Frantz Fanon alluded to a world split in half between the

colonized and the colonizers. The former, Fanon explained, had been constructed from a metropolitan imaginary, from universalist European values that considered them a dispossessed, distant Other, which would not only be expressed in geopolitical terms, but also in political thought and action. Fanon always insisted on colonialism's dehumanization, leading to phenomena like racism, violence, and the exploitation of lands by White European colonizers, who introduced different mechanisms of power and domination to turn one part of the population (Indigenous Peoples and Africans) into Others—the foreigners. He promoted decolonization, not only for certain countries looking to gain their independence and economic, cultural autonomy from the metropolises, but also the need for colonized peoples to embark on a process of political struggle against the denial of their identity, their culture; against the reduction of their self-esteem. For Fanon, decolonization meant the creation of solidarity among peoples in the fight against imperialism. At the level of intellectual thought, decolonization implied combatting Eurocentric, racist views that reduced non-Western cultures to marginal and exotic objects of study (Fanon, 2001).

These two authors, among others, offer us a profound analysis of colonialism from what today are called "subaltern positions." As Black intellectuals, they challenged the Eurocentrism of thought and political analyses, leaving us an important legacy for understanding Latin American realities. But, despite their tremendous contributions, neither Fanon nor Césaire addressed categories like sex and sexuality. Nor do the contemporary Latin American authors who write about these topics (Mignolo, Quijano, Dussel). Although they situate race as a criterion for classifying populations that determines positions in the sexual division of labor, they only briefly mention its relationship to sex and sexuality and completely overlook the many feminist contributions that have helped cultivate this line of thought.

Without using the concept of "coloniality," racialized feminists—Afro-descendant and Indigenous women—have explored the web of patriarchal and capitalist power since the 1970s. The imbrication of different systems of domination (racism, sexism, heteronormativity, classism) serves as the basis for the definition of their political projects, all within the framework of postcolonial criticism. These voices are not well-known because, despite the efforts of certain academic and political sectors to open paths toward what is called "subalternity," the concept itself is often used from elitist positions and, especially, from masculine and androcentric viewpoints.

My intention in this article is to recover some of the proposals of racialized feminists, not because of their condition as racialized women (ultimately, that does not necessarily guarantee a proposal of epistemological and political transformation), rather because their theoretical and analytical ideas have enormously enriched feminist practices and served to expand the topic of coloniality.

Feminism's Contribution to a New Vision of Coloniality

Aníbal Quijano defines coloniality as a global pattern of domination within the capitalist model, founded on the racial and ethnic classification of the world's population, operating in different spheres. According to the author, coloniality is a structure of domination and exploitation that began with colonialism but has extended to the present as a ramification (Quijano, 2007). Quijano focuses on various fundamental aspects to explain the consequences of this structure of domination: the racialization of certain groups (Africans and Indigenous Peoples) that resulted in social classifications between superior/dominant/Europeans and inferior/dominated/non-Europeans; the naturalization of Euro-centered control of territories and their resources, leading to a politically and geographically articulated coloniality; and a colonial relationship based on capital-labor that gives rise to differentiated and racialized social classes distributed throughout the world. For Quijano, the coloniality of power has also had an impact on intersubjective and cultural relationships: the production of knowledge and means of expression were colonized, imposing a Eurocentric hegemony. Likewise, he highlights the body as a space where domination and exploitation are practiced, as well as the gender relations imposed from this viewpoint: the sexual freedom of men, the faithfulness of women, unpaid prostitution, bourgeois family schemes—all founded on racial classification (Ibid.).

Quijano's concept of the *coloniality of power* interrogates Eurocentric and Western schools of thought, offering an explanatory framework to understand the modern world's logic of domination and its relation to global capitalism, linked to historic colonialism. His analysis of the relations among race, class, gender, and sexuality is also noteworthy, but not necessarily new. By the 1970s, many feminists, from their condition as racialized women, had already examined these relations, framing them within historic processes like colonialism and slavery. Although many social scientists over the last several years have recognized feminism's contributions as critical theory and international proposals, most only relegate the issue to a simple footnote. In most cases, feminist production does not form part of the literature review, and the significant contributions of this theory and political practice for a new comprehension of social reality continue to be disregarded. At best, when they are cited, the references are White women from the North.

Since feminism first appeared, Afro-descendant and Indigenous women, among many others, have significantly contributed to expanding this theoretical and political perspective. However, they have been the most subalternized subjects, not only in society and in the social sciences, but also in feminism itself, given the universalist character and racist bias that penetrates the movement. These women (we) have not adhered to the paradigm of universal modernity: heterosexual-White-male; but from their subaltern condition, from their situated

experience, they also have driven a new political, critical, and transformative discourse and practice.

Postcolonial Criticism by *Women of Color* in the United States[1]

Although anti-racist and postcolonial feminist thought emerged in the 1970s in the United States, I'd like to revisit this reference as an important precedent for what would later develop in Latin America and the Caribbean. Assuming that decolonization involves documenting theoretical productions and subalternized, racialized, sexualized practices, it is important to recognize the many women whose struggles helped construct theories. In order to do so, this genealogy must include Maria Stewart, the first Black woman to publicly speak of racism and sexism in the United States, as well as Sojourner Truth, who, in her speech "Ain't I a Woman?" read at the first Women's Rights Convention of 1851 in Worcester, Massachusetts, urged women (both Black and White) to break free from not only racist, but also sexist, domination. Likewise, Rosa Parks—who refused to give up her seat to a White man and move to the back of the bus as Jim Crow laws dictated in the southern United States in 1955— sparked thousands of protests by Black North Americans that would later become the civil rights movement. It's also important to highlight Angela Davis, an icon of the fight for civil rights, who enriched feminist perspectives by articulating class with anti-racism and anti-sexism, not only in her theoretical contributions, but also in her political actions.

These women have been important precursors of what is known today as *Black Feminism*, a proposal that interrelates categories like sex, "race,"[2] class, and sexuality in the framework of postcolonial societies and has led to what is currently referred to as *Third World feminism* and, in many cases, *postcolonial feminism*. All of these women have intervened from their experiences as racialized women, or what Chandra Mohanty calls the *politics of location* (Mohanty, 1985). On the other hand, Black U.S. scholar Patricia Hill Collins has systematized the intellectual political thought of *Black feminism*. For her, this thought has two components: its thematic content and its epistemological focus, which draws on concrete experiences of Black women as situated experts. She elaborates:

> Developing adequate definitions of Black feminist thought involves facing this complex nexus of relationships among biological classification, the social construction of race and gender as categories of analysis, the material conditions accompanying these changing social constructions, and Black women´s consciousness about these themes. One way of addressing the definitional tensions in Black feminist thought is to specify the relationship between a Black women's standpoint—those experiences and ideas shared by African-American women that provide a unique angle of vision on self, community, and society—and theories that interpret these experiences [...] Black feminist thought encompasses theoretical interpretations of Black women's reality by those who live it (Collins, 1998: 289).[3]

Black feminism has certainly been one of the most complete proposals, as opposed to the racist bias of the larger feminist movement and the sexist bias of the civil rights movement; it has complemented feminist theory and theories of racism by specifying how racism, along with sexism and classism, affect women. It is what Hill Collins calls the *matrix of domination* (Ibid.). One of the organizational expressions of this feminism was the Combahee River Collective, formed by lesbians, feminists of color, and immigrants from the "Third World." This collective's first declaration, published in April of 1977, clearly lays out their political proposal in response to multiple forms of oppression, establishing a framework within capitalism as an economic system:

> The most general statement of our politics at the present time would be that we are actively committed to struggling against racial, sexual, heterosexual, and class oppression, and see as our particular task the development of integrated analysis and practice based upon the fact that the major systems of oppression are interlocking. The synthesis of these oppressions creates the conditions of our lives. As Black women we see Black feminism as the logical political movement to combat the manifold and simultaneous oppressions that all women of color face.... A combined anti-racist and anti-sexist position drew us together initially, and as we developed politically we addressed ourselves to heterosexism and economic oppression under capitalism (Combahee River Collective, 1988: 179).[4]

From a socialist point of view, the Combahee River Collective drew on identity politics but avoided an essentialist idea of identity, sustaining their discourse on practices carried out by racialized women. Their proposal outlined an intersectionality of domination, which characterized the radical nature of

1 I use the term *women of color* as a category of self-identification by African American women in the United States.

2 I've written "race" in quotation marks to emphasize its social and political construction and, especially, its use as a category of power—not because I assume it exists as a natural criterion of classification of human groups.

3 Editor's note: Original English-language citation from Patricia Hill Collins, 2019, "Defining Black Feminist Thought," in *Feminist Theory Reader. Local and Global Perspectives*, pp. 380-381. Accessed online at https://oldcapitolbooks.files.wordpress.com/2019/04/patricia-hill-collins-defining-black-feminist-thought.pdf.

4 Editor's note: Original English-language citation from The Combahee River Collective: "The Combahee River Collective Statement," copyright © 1978 by Zillah Eisenstein. Accessed online at https://americanstudies.yale.edu/sites/default/files/files/Keyword%20Coalition_Readings.pdf.

this collective. The group's founder, Barbara Smith, has placed emphasis, both in her writing and teaching, on the intersectionality of racial elements, sex, heterosexual life, and the oppression of Black women. Her determination to spread ideas regarding this line of thought was such that, with Audre Lorde, she founded the publishing house Kitchen Table: Women of Color Press. For Smith, the imbrication of these multiple forms of oppression meant assuming a radical position.

During this same time and from the same collective, Cheryl Clarke, along with Smith, introduced an analysis of heterosexuality as a political system and thus offered new meaning to decolonizing women's bodies and sexuality, proposing lesbianism as an act of resistance:

> Wherever we, as lesbians, fall along this very generalized political continuum, we must know that the institution of heterosexuality is a die-hard custom through which male-supremacist institutions insure their own perpetuity and control over us. Women are kept, maintained, and contained through terror, violence, and spray of semen. It is profitable for our colonizers to confine our bodies and alienate us from our own life processes as it was profitable for the European to enslave the African and destroy all memory of a prior freedom and self-determination—Alex Haley notwithstanding. And just as the foundation of Western capitalism depended upon the North Atlantic slave trade, the system of patriarchal domination is buttressed by the subjugation of women through heterosexuality (Clarke, 1988: 100-101).[5]

Parallel to these developments, what is today called *Chicana feminism* also emerged as a means to resist different forms of oppression, proposing a hybrid and *mestiza* form of identity politics. In articulation with a new movement of literary criticism, women like Gloria Anzaldúa, Chela Sandoval, Cherrie Moraga, and Norma Alarcón, among others, developed a bilingual style (*Spanglish*) to diverge from the canon of "grammatical purity" and reconstruct a new political thought, thus crossing geopolitical, literary, and conceptual borders. From Chicana feminism, Gloria Anzaldúa, in her concept of *la frontera* (borderlands), interrogates Chicano nationalism and North American racism, as well as the racism and ethnocentrism of Anglo-Saxon feminism and the heterosexism of both, positioning her discussion within the context of global capitalism. Anzaldúa has been a pioneer of what is today called *border thinking*, which expresses the limitations of essentialist and so-called authentic identities. For Anzaldúa, the *new mestiza* was meant to break away from sexual binaries and the imposition of

5 Editor's note: Original English-language citation from Cheryl Clark, "Lesbianism: An Act of Resistance" in Cherríe Moraga and Ana Castillo (eds.), 2002, *This Bridge Called my Back: Writings by Radical Women of Color,* Revised, Expanded Third Edition, Third Woman Press, page 143.

a culturalism that defined roles and functions for women in order to keep them subordinate. From her position as a lesbian and feminist, Anzaldúa was critical of North American imperialism, but also of the uses and customs of her original culture that subordinated her. Through her poems and narration, this author reveals her points of view:

> What I want is an accounting with all three cultures—white, Mexican, Indian. I want the freedom to carve and chisel my own face, to staunch the bleeding with ashes, to fashion my own gods out of my entrails. And if going home is denied me then I will have to stand and claim my space, making a new culture—*una cultura mestiza*—with my own lumber, my own bricks and mortar and my own feminist architecture.... It was not me who sold out my people but they me. Because of the color of my skin they betrayed me. The dark-skinned woman has been silenced, gagged, caged, bound into servitude with marriage, bludgeoned for 300 years, sterilized and castrated in the 20th century. For 300 years she has been a slave, a force of cheap labor, colonized by the Spaniard, the Anglo, by her own people (and in Mesoamerica her lot under the Indian patriarchs was not free of wounding). For 300 years she was invisible, she was not heard. Many times she wished to speak, to act, to protest, to challenge. The odds were heavily against her. She hid her feelings; she hid her truths; she concealed her fire; but she kept stoking the inner flame. She remained faceless and voiceless, but a light shone through her veil of silence. (Anzaldúa, 2004: 79)[6]

It is interesting to note that Anzaldúa's mestiza identity in the U.S. context takes on a different meaning in the context of Latin America and the Caribbean. In our region, being mestiza responds to a racist ideology in the construction of the nation-state—it is a dominant ideology. *Mestizaje* was one of the ideological mechanisms for achieving a homogenous nation, whose legitimized model was fundamentally European and erased Indigenous and African genealogies. Instead, in the United States, the term implies identification as subaltern and reclaiming a "Latina" identity—it is an act of resistance.

Many of these voices have been collected in a historic anthology for feminism and for anti-racist and postcolonial thought. *This Bridge Called My Back: Writings by Radical Women of Color* (1981) gathers essays, stories, and autobiographies written by Chicana, Indigenous, African American, and Asian women articulated around the categories of "women of color" and "Third World women." The work in this anthology is situated within a feminist framework and not only condemns racism in U.S. society, but also the racism expressed by White feminism, as well as the sexism of the political and ethnocultural movements in which the authors take part.

6 Editor's note: Original English-language citation from Gloria Anzaldúa, 1987, *Borderlands/ La frontera: The New Mestiza*, Aunt Lute Books, pages 22-23.

Black feminism and Chicana feminism in the United States have definitely been two of the most radical proposals raised against the effects of colonialism from a materialist, anti-racist, and anti-sexist perspective. Both have contributed to critical voices in Latin America and the Caribbean and should become important references for postcolonial theory and practice.

Contributions of Racialized Women in Latin America and the Caribbean

In order to talk about the coloniality of power in Latin America and the Caribbean and its effects on women, we must return to the time when this project began. One of the consequences of colonialism, not only as a colonial administration, but as a project inherent to modernity, was the way in which Latin American and Caribbean nations were constituted: the national proposal was Eurocentric homogenization through the ideology of mestizaje, which aspired to be European as a way of "improving the race."

Although national discourses were presented as something hybrid, founded on the mixing of "racial groups," they were endorsed by the political and economic Creole elites and, thus, did not contemplate the exploited, subaltern, and racialized Indigenous or Afro-descendant populations. This situation was decisive in the structural racism of Latin America's nascent republics and persists to this day in economic, political, social, and cultural spheres.

The supposed racial democracy that many intellectuals of the 1930s established as the civilizing matrix has been primarily an ideology of domination, a way of upholding socioeconomic inequalities among White, Indigenous, and Black people, concealing and silencing the permanence of color prejudice, racial discrimination, and racism as forms of domination. Racial democracy becomes the founding myth of Latin American and Caribbean nationalities, a myth that denies the existence of racism. The development of this ideology of mestizaje was rooted in the exploitation and rape of Indigenous and Black women. Women were always instrumentalized to satisfy the sexual appetite of White men and thus ensure the mixing of blood to improve the race. A policy of whitening, nurtured and promoted by the incipient states.

One of the important contributions of Afro-descendant Latin American and Caribbean feminists has been to show this consequence of colonialism, this mestizaje that, for women, entailed violence and rape. These analyses have come primarily from the racialized women of our continent, who, from a feminist standpoint, have introduced the sex-gender variable to understand patriarchy since the foundation of the nation-state. But Afro-Latina and Afro-Caribbean women have also analyzed how the approach to women's studies in the colonial era has been dominated by a Western, colonist perspective, reducing women to their roles as breeders of slaves, wet nurses, or sexual objects of the masters, or, at best, they have been studied as a workforce in the slavery system. Thanks to feminist production, today we have studies that show the diverse forms in which women resisted slavery. For example, the so-called "turtle operations" in the Great Houses—wasting domestic products, self-induced abortions to prevent their children from being enslaved—were daily forms of women's protest and resistance that Dominican scholar Celsa Albert calls *cimarronaje doméstico* or domestic marronage (Albert, 2003). But Black feminists have also shown the radical and dangerous forms that women used to escape slavery's logic and reality, such as women of all ages and nations deciding to run away from slavery, as Sonia Giacomini explored in her study of Brazil (Giacomini, 1988).

Important contributions like those of Lélia González have allowed us to trace an Indigenous and African genealogy. With her concept of *Amefricanidad*, González condemned *Latinidad* as a new form of Eurocentrism, for it underestimates or discards Indigenous and Black dimensions in the construction of the Americas. The author understands *Amefricanidad* as a historic process of resistance, reinterpretation, and creation of new cultural forms with African models as referents, but also reclaims other historical and cultural experiences. This conceptualization helps to construct a particular identity, while maintaining the plurality of different identities (Barrios, 2000: 54-55). Situated in a feminist perspective, Lélia González was one of the first women in the region to emphasize the importance of the interrelation of racism, sexism, and classism in the lives of Black women.

Jurema Werneck, in her analysis of the political struggles of Afro-Brazilians, elaborates a genealogy that recovers the history of the *Ialodês*,[7] African women leaders who resisted any attempt to be dominated or subjugated. This legacy is recognized in women of the diaspora and places women's political struggles long before feminist theory was born (Wernerk, 2005). On the other hand, Sueli Carneiro has provided an analysis of the division of labor by demonstrating how, in the case of Black women, the public and private spheres were never separated, given that, since the times of slavery, they always worked both on the streets and at home. Carneiro has urged us to *blacken feminism* to understand the relationship between racism and sexism, and to *feminize the anti-racist struggle* to understand the effects of racism on women (Carneiro, 2005).

But the arduous task confronting Afro-descendant women in Latin America and the Caribbean has been to visibilize racism and its effects on women. Precisely due to this ideology of mestizaje, racism in our countries is related to distant experiences like South African *apartheid* or racial segregation in the United States, which has led to the denial of its existence in our own reality. In this sense, Afro-descendant feminists have denounced the failure to differentiate populations with regard to matters of race and sex; racial segregation in public

7 *Ialodê* is the Brazilian form for the Yoruba word *Ìyálóòde.* It refers to women representatives and different kinds of emblematic women or female political leaders.

services; the racial nature of violence against women; and the stereotyped, violent image of Black women in media. Their analyses have emphasized the sexual and racial division of labor that positions them in less valued and worse paid work spheres, such as domestic work, *maquiladoras*, informal labor, and sex work. They have denounced how "*buena presencia*"[8] is a racist and sexist marker that prevents them from having certain jobs. All of this seen as the consequence of colonialism and slavery. While adequate exploration of the topic is still pending, lesbians and Afro-descendants in Latin America have also connected racism and sexism with heterosexuality as a normative, obligatory system, incorporating this perspective into their political practices (Curiel, 2005). In short, Afro-descendant women in our region have made significant contributions to postcolonial criticism, elaborating increasingly systematic, profound political that has been carried out through political practices. A process of decolonization in academic areas, such as that endorsed by Latin American postcolonial theorists, must recognize these voices and proposals.

Contributing from Incipient Indigenous Feminism

Despite the debate over the existence of an Indigenous feminism in Latin America, Indigenous women, through their practices, have also recently displayed a critical postcolonial position. Indigenous feminism emerged as a movement within the variegated social movements of the 1970s, gaining momentum over the following decades. The continental campaign of Indigenous, Black, and grassroots resistance carried out in 1992, in light of the 500-year anniversary of the so-called "discovery of America," was one of the scenarios that enabled this movement to prosper, although there had already been political experiences heading in this direction.

Indigenous feminism has questioned the patriarchal, racist, and sexist relationships of Latin American societies, while simultaneously questioning the uses and customs of their own communities and peoples who keep women subordinate. The cultural, economic, and political context surrounding Indigenous communities has influenced their own perspective and ways of participating in politics, decentralizing and questioning feminism's racist and ethnocentric bias. Their political struggles point in several directions: they seek recognition of the history of colonization, recognition of their culture, and economic redistribution; they interrogate the racism and segregation of the state, as well as the Indigenous patriarchy; and, ultimately, pursue self-determination as women and as a people (Masson, 2006). Martha Sánchez Néstor, an Amuzgo activist from Mexico, explains her position from within Indigenous feminism:

> Perhaps it's our own way of thinking about feminism. Even though we agree that the system itself has been patriarchal, we also find that, in our cosmovision and conception of these controversial topics, we have not absorbed everything that comes from the mestizo world. As Indigenous women, we are reclaiming all things that strengthen our struggle, and we are giving other women everything that could strengthen their own struggles. Sometimes we unite our voices, our events, our demands to the corresponding authorities in this country and abroad, but with our own strategies to maintain the struggle from within our communities and organizations and turn our movement into a true history of Indigenous men and women (Sánchez, 2005: 48 [our translation]).

These perspectives have made it possible to culturally situate the experiences of women and understand that gender is not a universal, stable, or decontextualized category. Although academic spaces only represent Indigenous women as victims of the patriarchy and capital force, as political actors, they have adopted critical and radical postcolonial positions.

Conclusion

One of the problems that persists in regard to the topic of postcolonialism is the tension that exists between theoretical, purely academic production and ideas that emerge from social movements and later turn into theory. Although academic production has provided opportunities for critical thinking, it continues to be elitist and, especially, androcentric. Such a situation is complicated in times of globalization, where power relations not only extend to capitalist markets, but also to all social relationships. Today, alterity, considered different and subaltern, is also acceptable for the market and remains a "raw material" for Western colonialism, a colonialism that is not gender-neutral, but rather continues to be patriarchal as well as racist.

Today, cultural difference has produced a neo-racism—racism without races (Stolcke, 1992) that keeps the Other man and the Other woman excluded from any valid paradigm. If the subaltern is translated into multicultural discourses, then it maintains colonialist power relations. The Other is naturalized and homogenized according to a modernizing model not only to perpetuate the control of territories, but also knowledge, bodies, production, and imaginaries. All of this is based on a patriarchal outlook in which women's knowledge is relegated to mere testimony, unsuitable for academic production.

Decolonization, therefore, means understanding the complexity of relations and subordinations that are exercised on those considered "Others." Black Feminism, Chicana feminism, and Afro-descendant and Indigenous feminism in Latin America offer proposals that problematize the web of power in postcolonial

8 Editor's note: "Buena presencia" is the hiring requirement of a "good appearance," which screens for light-skinned, attractive individuals, especially women.

societies, articulating categories like race, class, sex, and sexuality from political practices that have produced interesting theories, not only for feminism, but also for the social sciences as a whole. They offer proposals that have challenged the coloniality of power and knowledge, and we must recognize them in order to truly achieve decolonization.

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ECOFEMINIST SPIRITUALITY IN LATIN AMERICA

Mary Judith Ress

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Abstract

Without a doubt, we are living in a time of crisis. One answer to this crisis is ecofeminism, whose core insight is that the oppression of women and the destruction of the planet are a result of the same patriarchal system. Interest in ecofeminism began in Latin America in the 1990s. Two of Latin America's most well-known feminist theologians—Elsa Tamez and Ivone Gebara—call ecofeminism the third phase of Latin American feminist theology. Indeed, a growing number of women who were political and social activists and identified with liberation theology and its practice in the 1970s and 1980s today define themselves as "ecofeminists." This is evident in the way they perceive themselves in relation to the Earth and the cosmos, in the way they are re-naming or re-imaging God, in their beliefs about death and resurrection, and in the changes in their ethical postures and spiritual practices.

Key words: Ecofeminist theology, body, autonomy, spirituality, justice.

Without a doubt, we are living in a time of crisis. We are realizing that we have destroyed our ecosystems to such an extent that we are watching them die. In report after report, biologists, physicists, and ecologists are providing us with alarming information about the planet's accelerated deterioration.

One answer to this crisis is ecofeminism. The core insight of ecofeminism is the conviction that the oppression of women and the destruction of the planet are a result of the same patriarchal system—of "control over"—that denies the primordial union of all the cosmos. Ecofeminism is an invitation to rediscover who we are as a human species. It is an invitation to relocate ourselves within the fabric of the Earth's community of life as a response in order to stop the planet's destruction. It proposes a new paradigm, a new worldview that is more in harmony with the planet's ecosystems and with the universe's powers. In short, ecofeminism proposes a new perspective for interpreting reality.

For me, ecofeminism is a new word for age-old wisdom, a wisdom that still rests in our bones and genetic memories. It is the discovery, or better said, the gradual awakening that we are not the "universe's owners," rather just another part of the greater fabric of life. Our bodies' elements were formed in that first big bang when the universe was born 15 billion years ago. You and I were both there in that great, unimaginable primordial solar flare; the dinosaurs were there, just like the whales, birds, ants, trees, *everything*. Everything that would come to be was present at that first sacred moment.

Ecofeminism strongly challenges androcentric and anthropocentric concepts of traditional Christian theology. Ecofeminists ask whether Christianity is flexible enough to change its anthropocentric concepts regarding both human beings and God. Additionally, they ask if Christianity's cosmology can be changed from a *deus ex machina* outside the universe, but "in control of" everything within it, to a sense

of immanent sacredness—a great mystery that, like us, is continually evolving.

Ecofeminism uses the metaphor of the body: we form part of one Holy Body. Ecofeminists are convinced that we are facing a new moment of revelation, a revelation in which human consciousness is awakening to greatness and to the holy experiences of this planet's natural cycles and processes.

What could be more apparent than the fact that everything is connected? What could be more apparent than our kinship with everything that has existed, exists, and will exist in the future? How have we come to forget what our ancestors intuitively knew? Because during our evolution as a species, we developed a way of thinking and acting that made us believe we are unlike the other species of the Earth. And not only unlike the rest of the planet's species, but that we have an *absolute power over them*. Furthermore, we have been led to believe that the Earth was ours to dominate and subdue. Only in the last several decades have we been able to name this digression. We have called it "the patriarchy": a system that designates everything in terms of domination and subordination, above or below, good or bad, superior or inferior.

Women's oppression and the destruction of the planet are not two isolated phenomena, rather they are two forms of the same violence. Both come from a perverse need to control everything that is different, everything we don't understand. As life sources, both the Earth and women have come to be considered *resources*. But today, ecofeminists are increasingly more conscious that our inability to recognize ourselves as part of Earth's community is leading us to an ecocide of vast proportions and to the suicide of our own species. It's as if we were finally waking up from a long dream, remembering who we really are.

Ecofeminists join with all women and men who seek a more holistic worldview that recognizes and celebrates the fabric of life. Diversity, yes—we celebrate diversity, but we recognize our fundamental kinship.

1. Ecofeminism in Latin America

Interest in ecofeminism began in Latin America in the 1990s. It has yet to become a movement, but there is growing attraction to its goals, especially among women (pastors, nuns, pastoral agents) who work at the grassroots.

Two of Latin America's most prominent feminist theologians—Elsa Tamez and Ivone Gebara—have called ecofeminism the third phase of feminist theology in Latin America.[1] Tamez says that "the challenge is very radical for it implies reinventing all of Christian theology. There is some resistance to re-reading great theological topics like Christology, the Trinity, and ecclesiology because of their androcentrism."[2] Undoubtedly, Brazilian feminist theologian Ivone Gebara is the most well-known ecofeminist in Latin America. She has inspired hundreds of women with her vision of "holistic ecofeminism."

The Chilean journal *Con-spirando: Revista Latinoamericana del ecofeminismo, espiritualidad y teología*, of which I am a founding member, wrote in the editorial of its 1993 issue: "We believe we need new forms to understand our place in the world—we need to resituate ourselves—so as to weave back together our daily lives, a weft of relationships that organize our societies, our way of producing the culture we inhabit. We visualize ecofeminism—or ecofeminisms—as a current of energy for political change that moves us, shakes our minds, reanimates our intuitions, unleashes our questions."[3]

Rosa Dominga Trapasso, a nun from the Maryknoll Missionary Congregation who has lived in Peru for more than 30 years and is a co-founder of the Talitha Cumi Christian Feminist Circle, writes in the feature article:

> Feminism and ecology are not isolated movements that have emerged by chance in our times, rather ecology and feminism are complementary movements. I would go as far as to think that feminism necessarily had to evolve toward ecofeminism by exposing the connections of all forms of oppression and violence, ranging from the oppression in family settings to the destruction of the planet. By denouncing patriarchal society's androcentrism and anthropocentrism and by opposing all manifestations of the domination of women and nature, ecofeminism strives for human liberation and the harmony between humanity and nature. This is why ecofeminism's message affirms that the search for equal and harmonious relationships among people contributes to establishing healthy and harmonious relationships with nature. In the same sense, when we oppose the rape of nature, we are opposing the patriarchal mentality that allows women to be raped."[4]

Trapasso argues that ecofeminism goes beyond supporting the conservation of resources. For her, it involves creating a society that rejects anthropocentrism and implies a process in which we begin to relocate ourselves among all elements of creation. It won't be an easy path. Ecofeminism is truly a politics of resistance, a struggle for the planet's well-being, a struggle for the transformation of all social relations.

2. Research on Ecofeminism in Latin America

Over the last several years, I have researched the evolution of ecofeminism in the women's circles in Latin America with which I am connected. This project grew out of a suspicion. I suspect that, at this moment of our human history, a

1 Elsa Tamez, "Hermenéutica Feminista de la Liberación: Una mirada retrospectiva," unpublished paper presented in Rio de Janeiro in December of 1993 and reviewed by the author in April 1994; Ivone Gebara, "Ecofeminismo holístico," interviewed by Mary Judith Ress, *Revista Con-spirando*, No. 4 (June 1993): 44-48.

2 Ibid., Tamez.

3 "Editorial," *Revista Con-spirando*, No. 4 (June 1993): 1.

4 Rosa Dominga Trapasso, "Ecofeminismo: Revisando nuestra conexión con la naturaleza," *Revista Con-spirando*, No. 4 (June 1993): 2-6.

growing number of women are experimenting a shift in our way of understanding ourselves and understanding our place in the universe. I suspect that we are—almost without realizing it—redrawing our worldviews. Perhaps we are simply telling ourselves to "remember who we are" after living under the weight of a patriarchal system for so many centuries. This suspicion inspired me to document the changing worldviews in my "universe," that is, in the world of Latin American feminist theologians. I began this project in 2000, as part of my doctoral studies in feminist theology, with the following hypothesis.

> In Latin America, a growing number of women who, motivated by their faith, were activists in their peoples' struggles during the 1970s or 80s and who identified with liberation theology and its practices, today self-identify as "ecofeminists." This is apparent in how they perceive their relationship with the Earth and the cosmos, in how they are renaming or reimagining God, in their beliefs regarding death and resurrection, and in their changing ethical positions and spiritual practices.

In order to document this hypothesis, I decided to interview 12 Latin American women who are practicing theology from a feminist perspective.[5]

5 The women are: Agamedilza Sales de Oliveira (b. 1950) (Manaus, Brazil), Catholic, educator, and feminist biblical scholar, founder of the María Sem Vergonha feminist movement; Marcia Moya (b. 1965) (Quito, Ecuador), Catholic, teacher, biblical scholar, and feminist theologian who provides support for women's groups and wrote *Propuesta pedagógica de Jesús* (1999) and *Reverdercerá: Poemas ecofeministas* (2002); Coca Trillini (b. 1951) (Buenos Aires, Argentina), Catholic, teacher, grassroots biblical scholar, feminist theologian, writer who co-coordinates the NGO Católicas por el Derecho de Decidir (Catholics for Choice) in Latin America and wrote *¿Qué son las Comunidades Eclesiales de Base en la Argentina?* (1993) and *De la pirámide al arco iris. Cuaderno de trabajo sobre Mujer y Biblia* (1995); Sandra Duarte (b. 1966) (São Paulo, Brazil) is a professor in the Faculty of Philosophy and Religious Sciences at the Universidade Metodista de São Paulo, she currently does not belong to any church, and her PhD dissertation was *Teo(a)logía, Ética e Espíritualidade Ecofeminista: Uma análise do Discurso* (1999); Fanny Geymonat-Pantelís (b. 1940) (La Paz, Bolivia) was born in Uruguay, she is a Methodist, feminist theologian, and national coordinator of the Género y Teología (Gender and Theology) collective, and her PhD dissertation was *Nombrando a dios en los Andes* (2002); Sandra Raquew (b. 1973) (João Pessoa, Brazil), Evangelical, journalist, member of Chimalman, a group of feminist theologians in northeastern Brazil; Graciela Pujol (b. 1959) (Montevideo, Uruguay), Catholic, architect, grassroots educator, editor, and founder of the ecofeminist group Caleidoscopio; Alcira Agreda (b. 1955) (Santa Cruz, Bolivia), Catholic, biblical scholar, feminist theologian, and professor at the Universidad Católica de Santa Cruz and the Instituto Superior de Teología Andina; Clara Luz Ajo (b. 1949) (Matanzas, Cuba), Anglican, professor in the Faculty of the Evangelical Theologian Seminary, her PhD dissertation was *El cuerpo en la fiesta de lo sagrado* (1992); Doris Muñoz (1958) (Santiago, Chile), Catholic, ecofeminist theologian, grassroots educator, and co-coordinator of Capacitar-Chile; Gladis Parentelli (b. 1935) (Caracas, Venezuela) is a journalist and documentary filmmaker who was born in Uruguay, she has spent many years working as a Catholic feminist in Latin America; Silvia Regina da Lima (b. 1962) (San José, Costa Rica), Catholic, biblical scholar, and Black feminist, she was born in Brazil and is a professor at the Universidad Bíblica Latinoamericana and wrote *El territorio de Frontera: Una lectura de Marcos 7:24-30* (2001).

Most have participated in liberation theology movements in their respective countries. I believe that I chose a representative group whose commitment—based on Christian faith—toward the poor and oppressed is obvious, but who today are part of a new practice and theory that I would call "ecofeminism." My goal was to raise their voices, shed light on their theological and spiritual paths, so as to enrich Latin American theological thought. I believe that they are some of the "new voices" we will hear in Latin American theology in the years to come. All of them work with grassroots women's groups. All of them also recognize the influence of Ivone Gebara's thought in their theological endeavors. As for liberation theology, although all the interviewees recognize its influence in their lives and in their own theological trajectory, most of them manifested a certain frustration with liberation theologians, and some even speak of a theological stagnation. All of the women agreed that, in general, liberation theology is trapped in theological concepts that continue to be anthropocentric and androcentric.

When the interviews are read together,[6] it is clear that these women are practicing theology from their own experiences of being women rooted in the struggles and concerns of contemporary Latin America. By reading them, we have experienced a feeling of "having found ourselves," as one of the interviewees said. Together, and with much confidence, we explored our separation from institutionality, the changes in our worldviews, and how we are redesigning the sacred in our lives. We spoke of ecofeminism and recognized the fears of being locked into a rigid concept, which we categorically resist. We feel that ecofeminism invites us to review our symbols of the sacred and consider the world with other mental frameworks and a new worldview.

But, most of all, we have vouched for the importance of reclaiming the body—and, specifically, genitalia—as our theological locus and associating it with spirituality. All of us recognized that women have historically been told that our bodies were not meant for pleasure; on the contrary, they were sources of temptation, they belonged to the underworld, to Hell. Thus, we have incorporated codes that imply norms of bodily conduct in which our genitalia is considered something that comes from the dark side. We discovered that, based on our own experience of sexuality, we have to deconstruct and then construct another, more healing view of our bodies, of our corporality. Indeed, our theological reflection seeks relationships of justice based on our female sexuality/genitalia, which, to this day, has remained outside patriarchal theological reflection as the product of collective silencing. And, most of all, we seek a healing spirituality. The process of collective healing, which fosters knowledge of one's own body, depends on more radical and fundamental changes in our lives that are related to sociocultural structures, but also with a level of intimately knowing ourselves. This is a huge task, but we gladly take it on.

6 All of the interviews are published in Mary Judith Ress, *Lluvia para florecer: Entrevistas sobre el ecofeminismo en América Latina* (Santiago: Con-spirando, 2002).

3. A Change of Consciousness

After analyzing these interviews, we can conclude that there is a *change of consciousness* in how these women conceive human beings (a change in their anthropology), in their cosmology (evident in the images that they use to name sacred elements), and in their epistemology (their sources of knowledge). These changes are simultaneously altering their ethical beliefs and spiritual practices. We will analyze these changes in greater detail based on the women's testimonies.[7]

3.1. Who am I? The Purpose of Humanity

In regard to the *purpose of humanity*, the women clearly demonstrate an evolution in which they are abandoning a sense of themselves as an individual "I" or ego separate from others. In several ways, they express that they form part of something much larger than their own individual self. They speak of their "ecological being" that identifies with the cosmos and the materiality of the universe. In different ways, they claim allegiance to a community of life, nature itself, arguing that they belong to a reality much larger than their physical bodies.

Agamidilza explains: "I was raised in contact with nature. I'm part of it. I live under its spell. It feels good to be in contact with the water, wind, and earth. I love the birds and the flowers. I talk with the moon and the stars... and for me, that's divinity." Or, as Marcia says, "It took me a while to question the idea that humans are superior beings, but after reading the second story of creation in Genesis, the creation of humanity is presented as the beginning of a long process. The human species is simply different, like birds are different from leopards. And everyone has their own responsibility in this cosmos, and that responsibility is living in harmony. Being responsible does not mean dominating or exploiting." Or, as Coca sums it up, "We are no better or worse than the other beings on this planet, and we have the same rules as plants and animals—the difference is that we think about ourselves."

Sandra Duarte offers another perspective on the purpose of humanity: "Humans are perpetually undergoing transitions. Therefore, we will never be finished beings; we are always building and rebuilding, inventing, and reinventing ourselves. I believe people are constantly changing, and that's why I think we can't close ourselves off in anything, in traditions, religions, or paradigms." Sandra Raquew responds from her own reality as "a flower" from northeastern Brazil: "I feel very much influenced by having been born a woman in this reality, influenced by this small space that I have experienced. We have a strong sense of sacred dimensions, a profound respect for the forces of nature—or what I would call ancestry. For example, my life is eternal as a source of life connected to the lives of my mother and father, to the life of the town where I grew up, and I feel that I'm also going to leave something for this town, I'm going to transmit something.... I also feel that I'm a human and a divine person with a whole mysterious complexity that will be revealed over time. I always think that I'm a space of both corporeality and eternity."

Alcira also responded to this question, based on her own history as a peasant and an Indigenous woman: "For a long time, I couldn't describe who I was because of the false humility that I had been taught. I could only describe my being, my most profound existence with clarity after I began the process of reconstructing my origins as a person and as a peasant woman. I am valuable on my own—in relation to and in solidarity with other men and women, nature, the Divine Energy. It hasn't been easy for me to say what I'm saying about myself now. It has been the fruit of a long experience of searching and living in the existential dimensions of my being a woman. For me, saying who I am has to do with the quality of human life in all its dimensions, with my spirituality, with music, with my dreams and work. Actually, it's my full realization as a person—and everyone, everywhere, deserves that. This comprehensive view of the person is ancient knowledge for Indigenous Peoples.... I was so happy when I realized I was a valuable person within this ecosystem, but I'm not superior to other beings in creation." Alcira explored her sense of who she was through cooking and food in general. "That's where I learned to discover myself and discover others. That's where I learned to discover my internal ecology, and how to care for, nurture, and protect it, so as to care for, nurture, and protect my external ecology. Later, I verified my reality as a coherent person, in my deepest essence, from the inside to the outside. And how people depend on creation and creation depends on people. Potatoes, rice, vegetables depend on me, and I depend on them. We live in a constant relationship of reciprocity."

For Silvina, it was impossible to separate the concept of being human from her recent battle with cancer: "Today, I think of myself as a woman in construction. My experience with cancer over these last several months made me reconsider my whole life, examine everything. For me, this experience was like being born again. In the hospital where I received chemotherapy, I met people who were going through the same treatments as I was, people who I saw deteriorate each month. There was one man who could get around on his own, and the next month, he was in a wheelchair. And now, the last time I saw him, he was even worse—he must have been 46 or 47 years old. I began wondering what life meant, why could I keep on living while others die. And when I tried to answer that question, I was sure that it was because I wanted to live and because I discovered this source of life within me. In fact, I continue to nurture myself with this source. There were many times when my body would tell me something was not right, that I should take up another pace of life, that I should do things in other ways, but I didn't listen. Cancer was my body's loudest cry. I think that's what happens,

7 All of the quotations are taken from the original interviews that I carried out in 2000.

that we're living in a universe that is out of harmony. Neoliberalism is proof of this—it is everything that is non-life, non-harmony. I think our bodies also enter into this. The sick body for me was a call to care for the universe or the sick Earth because my body's recovery also depended on the buses spitting out smoke and contaminating the city of San José. Therefore, for me, human beings are that totality in communion with other human beings and with the universe. It is this totality of energy and strength, and if we manage to establish a communion with those other forces of the universe, we can renew life within ourselves and also radiate more life into others."

3.2. The Names or Images of the Sacred

As for the *names or images of the Sacred*, there was a total rejection of God the Father as a viable image for the Sacred today. Furthermore, the women saw this image as a source of our current profound crisis. Instead, we can clearly distinguish a change in their intuition regarding our origins and destiny (cosmology). The images of the Sacred expressed by the interviewees are shifting from a divinity that is external and above the universe toward a sense of something internal, but at the same time beyond reach. Some describe it as a relationship that keeps everything together, like a huge embrace. Some of the names used to describe the Sacred were: Energy, Presence, Knowledge, Matrix, Complementarity, Memory, Intuitive Space, Great Reality, Embrace, Source of Life. All the women insisted that they *experience* this reality instead of being able to define it.

For Aga, discovering the existence of the Great Mother helped her find the feminine principle in the divine. "The absence of the feminine in the Sacred became evident when I sought answers for my health, my indifference, feelings of emptiness, conflicts, desires... Who could I go to? God? God was a man, what could he know about my life as a woman? The only alternative for dealing with female issues was Mary. But Mary was Jesus's mother. She was so far away from me. How could I talk to Mary about my sexual desires, my love interests, since Mary was a virgin, pure, and never loved a man? And, so, I began turning into a woman who saw the Sacred in people, in nature, in relationships." For Marcia, God is "life renewed, life transformed, life that resists war, contamination, all forms of violence, life that is born stronger, regardless of threatening situations. [...] For me, God is all the vitality that I find both in people and nature."

"By naming God as Mother, friend, or lover, he or she becomes closer, more real. But I feel better, more comfortable and honest, naming the Sacred as a source of life, of energy-affection that is inside and blooms in everyone. I find all of this in friendship, in sharing, in solitary service, in celebrations, in the trees, in the water, in food, in the daily struggles for justice," Alcira explains. "I prefer to understand, feel, and see the Sacred from the experience of the energy source. That is a much more accessible image. And it involves an energy that is there, inside me, in the trees, in the animals, in relationships, in the way we love, serve, commit. This energy that is the Sacred can be found and experienced through many symbols and names, rituals and myths, in relationships with people. I call this energy Divine Energy or Sacred Energy. It is circular, it's like a current that flows and fills life, makes it bloom, grow, and nurtures not only the life of people, but of all ecosystems."

Aside from their symbols and descriptions of the Sacred in their lives, the changes in their cosmologies were quite evident in regard to how they conceive death. Most of the women did not separate death from life—they are part of the same cycle. They spoke of returning to the primordial energy, an original goodness from which they have come. Many reflected a great sense of peace when they described their desire to return to the matrix of life—dissolving back into earth is like "going back home." They all expressed that we were going to return to earth and that we lose our individual egos when returning to the Great Being from which we were born. Some (Sandra Raquew, Sandra Duarte, and Silvia) spoke of their strong connection with their ancestors: this feeling of ancestry has to do with the connections they maintain with those who have died but are still present in our memories, in our genes, in our collective consciousness. They form part of our clan, our lineage.

3.3. The Body as the Source of all Knowledge

Perhaps the most noteworthy change was in the field of epistemology. For the interviewees, *the body and corporeal experience are the source of all knowledge* about pleasure and pain, the locus that enables one to choose between good and evil. That the body is central as a source of our knowledge was one of the most significant conclusions of the workshop that we held with Ivone Gebara. But not the asexualized body, rather the genital body—and from there we began talking about female genitalia and God. In the words of Gebara:

> Patriarchal tradition emphasized the importance of thought and the insignificance of sex, the sordidness of genitalia, especially female genitalia. And the more it opposed the magnificence of female genitalia and flights of the spirit, the more it became the object of prohibited desire, the object of lust, the object of war, the object of permitted violence. By rejecting and hiding it, patriarchal tradition allowed its hidden energy to be seen as a sin and, therefore, more rigorously and forcefully repressed. [...] It was necessary for them to make us believe in the "constitutive" dualism of our bodies, in the obscenity of our genitalia, so they could dominate, damage, corrupt, rape, and, ultimately, build civilizations. Our dominated "Eros" built a civilization of repression and allowed us to experience the illusion of freedom with a greater or lesser degree of complicity with all other forms of oppression.[8]

8 Ibid. Presentation by Ivone Gebara, p. 13.

Reclaiming our genitalia was an unprecedented action at the time we conducted these interviews. Through our collective word, we all felt that we had taken a crucial step in the process of transforming patriarchal culture, the step of reclaiming our values and self-esteem. That was, without a doubt, the most significant step forward of this research. However, reclaiming the body as a locus from which to create our theology and ethics is not exclusively centered on "my" body. More precisely, with our growing comprehension of who we are, our sense of our own bodies' borders starts to dissolve. We are, in the end, clusters of energy that, at this historical moment, we may call Ivone or Judy or Doris—something that provides a profound sense of communion with everything that has existed in the past and everything that will exist in the future.

3.4. A New Ethics

Regarding ethics, the women who were interviewed demanded a new form of ethics based on the experiences of their own bodies, with their extensive histories, knowledge, and desires. Any ethical decision must begin with the body. And precisely because they are based on one's own experience, they are contextualized decisions. They are not absolute or in accordance with universal laws. An ecofeminist ethics must realize that we form part of a larger body, and that is why we have to take into account the consequences for the whole body when we make our decisions. Therefore, this is a crucial norm. Ecofeminists emphasize community spaces where the act of listening and the group's experience and wisdom are much more important for creating a decision-making context. An ecofeminist ethics is committed to a more comprehensive view of life, therefore, any decision must take into account promoting more equal relationships, not only within the human community, but also with the entire community of life.

"I think that we should start with the body, out of respect for people's freedom, for the right to decide how one wishes to live, since human rights are guaranteed for all men and women," says Aga. For Doris, the challenge is to recover power and autonomy so that women and all people can make their own decisions in a more comprehensive context: "We are increasingly aware of the fact that everything is related, not only with other people, but also with the environment, and that decisions made at all levels affect other people. The challenge that ecofeminism faces is precisely to promote a more comprehensive focus of life, so that any decision can be made thinking about promoting more equal and less dominating relationships with the disadvantaged or those who have no voice, like the Earth and other creatures. Within this comprehensive dynamic, I think it's important to take into account what the body says so that, from there, we can 'talk' with the people we trust. This has to do with the concept of 'power with' others, not from 'above' or outside of me, because how could someone make decisions for me who not only ignores my experience but also discredits it *a priori*? This is a crucial factor that I have already assumed. If I'm going to make decisions or share my deepest experiences, I want to do it with people who don't counsel me, but who ask me questions, because in the end what prevails is respect for my own decisions. So, what can we do? We listen to one another. I ask you questions. I help you clarify, but you make your own decisions because it's your story. You know what has happened to your body. You know what you have experienced, only you can decide. That's why my challenge is to build spaces where women, if they want to, share their decision-making power with their peers. But they have to decide. No one else should make decisions for them. I believe that, in working with women, it is fundamental that there are spaces where they can realize that 'their' problem has to do with the problems of 'women,' that it isn't coincidence, and that, maybe, together we can resolve and better understand what happens to us. If we can reinstate people's ability to consciously decide, this will transform them profoundly, and the ethical decision will no longer be in the power of a few who decide externally or above them, rather how we all take charge of making ourselves part of and therefore responsible for our lives. We become adults. We are not little girls or boys who need other people to decide for us. In this sense, I think the most important thing is respect. From an ecofeminist perspective, every decision has a repercussion: what I eat, where I live, how I get around, such simple but such daily decisions like what detergent you use, how much detergent you use, what clothes you wear, what energy we use and how, etc. I think that this is a moment of profound connection with ourselves, with the larger environment, and also a way to detach ourselves and break away from certain things."

For Alcira, "ethics is not static, but rather dynamic, therefore, it can be reviewed, reconsidered, questioned, and re-elaborated, strengthening the elements that allow us to experience new ways of feeling, of living and acting coherently and responsibly in all of life's dimensions and areas. From there, we can question the norms, mandates, institutions, and societies that speak of a disembodied ethics separate from the realities that most people experience, leaving the body a prisoner of guilt. I feel like the ethical issue is really important and makes more sense based on my female body. [...] The ethical issue imposed by official institutions has beaten our female bodies from the perspective of sexuality and morbid morality, which still prevail in our churches and societies. This chastising ethics comes from an external source, from above. (...) Creating and redesigning ethics based on our female perspective and body enables and prepares us to be women for ourselves and for our own bodies, for our sexuality, for our decisions, for our choices. Actually, it gives us autonomy as dignified people and adults capable of orienting our lives toward the light of our consciousness and our experience of the Sacred. This is the ethics that Jesus offers us in his project."

3.5. New Spiritual Practices

Finally, in regard to their *spiritual practices*, the twelve women agreed that they no longer partake in their churches' liturgies and prayers, although some still attend church to see their friends and neighbors, their old grassroots community. Instead of following official worship practices, these women form part of the "boom" of women's rituals that are emerging all over Latin America. All of these rituals are strongly influenced by the commitment to celebrate with the whole body, through dance and corporeal movements that express what they feel. And what are they celebrating? Life itself: their own lives, women's lives, the lives of men and women who suffer, their ancestors' lives. The connections with one another, with their bioregion, with the seasonal cycles, with the elements, with the Earth itself and the whole universe. And their dreams: individual dreams, collective dreams, and the planet's dreams. Many of these new rituals are influenced by Indigenous worldviews still present in Latin America.

Practices of contemplation and meditation continue to be sources that nurture spirituality, but most of the women interviewed have abandoned traditional forms of meditation taught by Christian theology. In their place, they rely on nature to find peace and renovate their spirit. Contact with poetry, music, and colors is also essential.[9] But, most of all, friendship. For these women, personal relationships with others are fundamental for sharing both grief and joy. Women's circles are multiplying everywhere, creating spaces of support among women, spaces of freedom and healing.

4. Conclusions

We are at the beginning of a new shared creativity, although perhaps the word "ecofeminist" is not completely adequate to describe this creativity. At the same time, we recognize the intimate interdependence between the old and new. We recognize that we do not have the last word or "key" to understand who we are and where we're headed. We continue searching for more efficient roads so the whole community of life can live with more dignity and justice—and we continue to be inspired by Jesus's movement, although we are critical of the patriarchal forms through which it is transmitted. And we continue dreaming together as women.

Reconstructing the Earth's body, the human body, and our relationship with all living bodies, this is the task of ecofeminism. And the dream of ecofeminism? To strive for the fundamental recognition that we are part of one Sacred Body with all its nuances and diversity. Nothing less.

9 In the book *Lluvia para florecer*, each woman who was interviewed offers a creative expression of their spirituality: a poem, a prayer, a picture.

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MEASUREMENT AND REPORTING: IMPORTANT ELEMENTS OF GENDER MAINSTREAMING IN ENVIRONMENTAL POLICIES

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Note to the article:

Over the last ten years, connections between gender, environmental issues, and climate change, have gained in visibility and importance in discussions at both a national and international level. This reflects the coordination between Agenda 2030 (Sustainable Development Goals) and the commitments to promote gender equality included in the principles of the Multilateral Environmental Agreements, that have updated their Gender Action Plans. All environmental financial mechanisms have developed strategies and gender action plans. At a regional and national level one can also see a growing commitment to achieving gender parity in the environmental field and the context of climate change.

However, despite these advances there are still, at a national and international level, challenges in terms of the generation of data and statistics separated by sex and with an intersectional focus, which contribute to the monitoring, evaluation, and reporting of improvements at a national and international level. This article, written in 2013, is valid in that it provides conceptual and methodological elements to move forward in this domain, contributing to the accounting and evaluation of improvements in gender equality in the environmental and climate field. The actual data, however, does need to be revised.

This Article identifies the advances and barriers in formulating gender-inclusive environmental agendas. It provides an overview of the manner and extent in which gender is highlighted in international agreements, national policies and reporting instruments. This Article highlights three main concerns regarding the articulation of gender and the environment in the majority of national and global reports: (1) An over emphasis on rural women-on one hand, the reports continue to treat women as a distinct and vulnerable target group in projects and programs, yet on the other, they perpetuate the idea that global environmental problems can be localized to remote areas of the world; (2) few studies and reports document or evaluate changes in or impacts on gender relations. There is still relatively little information on the participation of men in the development process and women's experiences and behaviors continue to be isolated from broader socio-cultural trends; thus there is a lack of understanding of the structural causes of gender inequality; and (3) gender and the environment are often presented as parallel and distinct agendas; nonetheless achieving sustainable development requires their complete integration. The authors argue that solid monitoring and evaluation practices are fundamental in this process. Providing better indicators that capture the interrelationship between gender and the environment along with a reliable stream of data on the effectiveness of projects can result in improved decision-making and accountability among policymakers. Building on new and attainable environmental agendas that are gender-inclusive requires

thoroughly evaluating the progress that has been made and consistently making recommendations for improvement.

Introduction

Ensuring sustainability implies putting the rights of all people at the center of development. Over the past three decades, international agreements, national policies, and other reporting instruments have highlighted the correlation between gender, the environment, and sustainable development. While these mechanisms are designed to advance gender equality, environmental protection, and sustainable development, their implementation has overall been weak. Achieving sustainable development requires the improvement of a nation state's institutional capacities to fulfill their obligations. A starting point to mainstreaming gender in international conventions is evident in both the U.N. Convention on Biological Diversity (CBD)[1] and in the U.N. Convention to Combat Desertification (UNCCD).[2] Other conventions, such as the U.N. Framework Convention on Climate Change (UNFCCC) do not explicitly mention gender in their text.[3]

Nonetheless, the key reporting instruments of all of the aforementioned conventions, such as the National Biodiversity Strategies and Action Plans (corresponds to CBD),[4] the National Adaptation Programmes of Action (corresponds to UNFCCC),[5] and the National Action Programmes (corresponds to UNCCD)[6] include provisions for gender mainstreaming. The issues covered by each of these conventions have been identified as the greatest challenges to sustainable development.[7]

1 United Nations Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79, *available at* http://www.cbd.int/doc/legal/cbd-en.pdf.

2 Convention to Combat Desertification, G.A. Res. 241/27, U.N. Doc. A/AC/241/27 (Sept. 12, 1994), *available at* http://www.unccd.int/Lists/SiteDocumentLibrary/conventionText/conv-eng.pdf.

3 United Nations Framework Convention on Climate Change, May 9, 1992, S. Treaty Doc No. 102-38, 1771 U.N.T.S. 107, *available at* http://unfccc.int/resource/docs/convkp/conveng.pdf

4 *See National Biodiversity Strategies and Action Plans,* CONVENTION ON MIGRATORY SPECIES, http://www.cms.int/about/nbsap.htm (last visited Nov. 3, 2012).

5 *See NAPAs received by the secretariat,* U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/cooperation_support/least_developed_countries_portal/submited_napas/items/4585.php (last visited Feb. 1, 2013).

6 *National Action Programmes,* U.N CONVENTION TO COMBAT DESERTIFICATION, http://www.unccd.int/en/about-the-convention/Action-programmes/NAP/Pages/default.aspx.

7 UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, FACT SHEET: STEERING UP INTERNATIONAL ACTION ON CLIMATE CHANGE THE ROAD TO COPENHAGEN 1, *available at* http://www.preventionweb.net/files/12042_FactsheetTheRoadtoCopenhagen1.pdf (last visited Feb 1, 2013).

Concerning gender, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides the basis for attaining equality between women and men by ensuring women's equal access, and equal opportunities in the political, social, and economic spheres.[8] Article 14 of CEDAW, states that:

> States Parties shall take into account the particular problems faced by rural women [more specifically] . . .
>
> (g) To have access to agricultural credit and loans, marketing facilities, appropriate technology and equal treatment in land and agrarian reform as well as in land resettlement schemes;
>
> (h) To enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications.[9]

Countries that have ratified or acceded to CEDAW are obligated to submit national reports every four years describing the measures they have taken to comply with the Convention's obligations.[10]

This Essay examines the approaches taken to include gender and the environment in each of the aforementioned conventions, national policy instruments, and reports. This analysis will demonstrate that gender and the environment are continually treated and presented as distinct and parallel agendas, and as a result, creates a barrier to attaining sustainable development. Furthermore, this Essay evaluates the trends used to think about gender in environmental agendas, which present a regression in viewing women and men as equal contributors to the development process.

I. Theoretical Framework

There are several theoretical approaches to analyzing the interconnections between gender and environment. A discussion of these approaches sheds light on the themes that are currently emphasized in global and national discourses. Table 1 presents the main models used to understand and analyze the interconnections between gender and the environment.

8 Convention on the Elimination of All Forms of Discrimination Against Women, Dec.18, 1979, 1249 U.N.T.S. 13, *available at* http://www.un.org/womenwatch!daw/cedaw/text/econvention.htm#article14.

9 *Id.* at Part III, Article 14(2)(h).

10 *Id.* at Article 18(1).

TABLE I. MAIN MODELS USED TO INTERPRET THE GENDER-ENVIRONMENT RELATIONSHIP[11]

Ecofeminist	Women in Development (WID)	Gender and Development (GAD)
Conceptualizes the relationship of women with nature, maintaining that there is a strong link between the two. Maintains that women's experiences (biological or cultural) give them a different natural mindset, a special knowledge that will enable them to save the planet and a tendency to protect the environment.	Assumes that women are the main volunteers in the fight against environmental degradation. Stresses the potential of women's role as day-to-day administrators of natural resources. Much is made of women's vulnerability to environmental change due to their dependence on these resources. Development projects and programs center on women and their needs as individuals and groups.	Maintains that discrimination against women is expressed in our societies mainly through: (i) division of labor; (ii) access to resources; and (iii) participation in decision-making. Accounts for social relationships of production and power. Identifies and seeks to evaluate the differences that exist between women and men by emphasizing the social, historical, and cultural nature of the processes of subordination and negotiation in which they are involved.

The Ecofeminist approach's shortcoming lies in the fact that it considers women to be a "unitary concept and reality"[12] without acknowledging the differences that may exist among them because of ethnic background, social class, and age, among other factors. This standpoint does not contextualize the position of women in a social, historical, and material way. Furthermore, the responsibility bestowed on women as caretakers of the family and community excludes men from participating and taking on this role as well.

11 *See* Maria Nieves Rico, Gender, The Environment and the Sustainability of Development (LC/L.l144 1998).
12 *Id.* at 22.

The Women in Development (WID) approach advocates for the incorporation of women in development policies,[13] while continuing to treat women as a distinct and vulnerable group in projects and programs. Integrating women in this manner has resulted in projects and programs in different sectors that benefit women in the short term. In some cases, women's knowledge has been utilized in areas related to family or community health (e.g., ensuring medicinal plants and food security) and environmental conservation (e.g., the protection of non-timber forest products).[14]

However, there are shortcomings to this approach. Projects and programs tailored under the WID approach rarely document their impact on gender relations. This approach also ignores the required strategies needed to pursue the various objectives involved in the use and management of environmental resources that will require the contributions of women and men alike. Indeed, studies have shown that gender-specific projects do not produce adequate results in practice.[15] As MacGregor notes, reports and case studies that over-utilize the colocation of the words "women" and "vulnerable" further the dominant belief that environmental degradation only concerns rural women in developing countries.[16] Presenting rural women as powerless undermines the fact that in many cases these women are active agents of change. Furthermore, it localizes what is a global environmental problem to rural or remote areas of the world.

The Gender and Development (GAD) approach focuses on socially constructed differences between men and women and emphasizes the need to study, document, and change the ways in which gender relations constrain or advance efforts to redress environmental degradation.[17] An important contribution of this approach with regard to policymaking is the use of the term "gender" as opposed to "women," as it also accounts for men's participation in the development process.[18]

13 *See* CAROLINE O.N. MOSER, GENDER PLANNING AND DEVELOPMENT: THEORY, PRACTICE AND TRAINING 2-4 (1993).
14 *See id.* at 52.
15 *See* Esther Mwangi et al., *Gender and Sustainable Forest Management in East Africa and Latin America,* 16 J. ECOLOGY & Society 17, 29 (2011), *available at* http://www.ecology andsociety.org/vo116/issl/artl7/ES-2010-3873.pdf. An important finding of the study shows that "higher proportions of females in user groups, and especially user groups dominated by females, perform less well than mixed groups or male dominated ones." *Id.* The report suggests that these differences may be related to "gender biases in technology access and dissemination, with a labor constraint faced by women," and a possible limitation to women's sanctioning authority. *Id.* It concludes by arguing that mixed female and male groups "offer an avenue for exploiting the strengths of women and men, while tempering their individual shortcomings." *Id.*
16 Sherilyn MacGregor, *'Gender and Climate Change': From Impacts to Discourses,* 6 J. INDIAN OCEAN REGION 223, 227 (2010).
17 *See* Moser, *supra* note 13, at 2-4.
18 *See id.*

A singular focus on women excludes men from participating in the development process and isolates women's experiences and behaviours from broader sociocultural trends. Furthermore, according to Nieves Rico, GAD also aims to produce diagnoses and proposals through indicators that capture the interrelationship between women and men.[19] Analyzing and evaluating the initiatives that are undertaken is an integral part of the implementation process.

Some academics use the Neo-Malthusian approach to explain gender relationships and its impact on the environment. The Neo-Malthusian approach is an extension of notions first proposed by Malthus in 1798.[20] Malthus wrote that population growth, if unchecked, would become exponential, and the population would outgrow the resources available to support it.[21] Neo-Malthusian's believe that "population growth is ... one main cause of poverty and environmental degradation. Therefore States must introduce contraceptive methods, even sometimes without the populations' (particularly women's) prior consent."[22] The underlying and limited implication of such thinking is that women are responsible for ensuring a system of "checks" on the world's population. In recent years this thinking has been explicitly linked to the environment.[23]

Many policymakers tend to follow a WID approach to development discourses and programs.[24] Although the WID approach may be successful when implementing projects on a small-scale, achieving truly sustainable development requires utilizing and promoting a GAD standpoint. This will encompass programs and policies that transform gender relations and ensure long-term and sustainable benefits for society overall.

II. Gender and the Environmental Agenda

The extent to which gender is and has been included in the environmental agenda can be observed in the reporting instruments of the Conventions on climate change, desertification, and biodiversity. Table 2 identifies the main objectives of each instrument and the convention to which it corresponds.

19 *See* Rico, *supra* note 11.

20 *See* Joan Martinez-Alier & Eduard Masjuan, *Neo-Malthusianism in the Early 20th Century;*1-2, THE INT'L Soc'y FOR ECOLOGICAL ECON., http://isecoeco.org/pdf/Neo-malthusianism.pdf (last visited Jan. 24, 2013).

21 *See id.* at 1.

22 *Id.* at 21.

23 *See id.* at 18-19.

24 *See* MOSER, *supra* note 13, at 3-4. ("Because it is a less 'threatening' approach, planning for Women in Development is far more popular.").

TABLE 2. REPORTING INSTRUMENTS OF THE RIO CONVENTIONS

UNFCCC[25] National Adaptation Programs of Action (NAPAs)	CBD[26] National Biodiversity Strategies and Action Plans (NBSAPs)	UNCCD[27] National Action Programmes NAPs
Provide a process for the least developed countries to identify priority activities that respond to their urgent and immediate needs to adapt to climate change. The main content of NAPAs is a list of ranked priority adaptation activities and projects, as well as short profiles of each activity or project, designed to facilitate the development of proposals for implementation of the NAPA.	Principal instruments for implementing the Convention at the national level (Article 6). The Convention requires countries to prepare a national biodiversity strategy (or equivalent instrument) and to ensure that this strategy is mainstreamed into the plans and activities of all those sectors that can have an impact (positive or negative) on biodiversity.	Key instruments in the implementation of the Convention. National Action Programs are developed in the framework of a participative approach involving the local communities and they spell out the practical steps and measures to be taken to combat desertification in specific ecosystems.

25 *National Adaptation Programmes of Action (NAPAs),* UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/national_reports/napa/items/2719.php (last visited Feb. 1, 2013).

26 United Nations Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79, *available at* http://www.cbd.int/doc/1egallcbd-en.pdf.

27 Convention to Combat Desertification, G.A. Res. 241/27, U.N. Doc. A/AC/241127 (Sept. 12, 1994), *available at* http://www.unccd.int/Lists/SiteDocumentLibrary/conventionText/conv-eng.pdf.

Awareness of the inclusion of gender dimensions in national plans and programs of action is important. First, they serve as a means for the dissemination of parties' proposed programs of action to address these challenges. Second, the guidelines for the UNFCC,[28] the IUCN,[29] and SBCD[30] each establish gender equality as a guiding element in their preparation. Gender considerations in these programs reveal the extent to which the state considers gender a relevant issue to address climate change, desertification, and the loss of biodiversity. The omission of gender concerns represents not only a complete disregard for the agreements and guidelines, but also for gender and sustainable development. Third, information contained in such reports constitutes the first step towards greater accountability and promoting gender equality.

A review of gender in NAPAs by the Women's Environment and Development Organization (WEDO) states that while gender equality is a guiding principle in the NAPAs, "it has been clearly shown that this does not always translate into comprehensive, effective planning, budgeting or implementing of adaptation plans or activities."[31] According to a report by UNFPA and WEDO, most of the NAPAs the Gender Advisory Team reviewed for the U.N. Office for the Coordination of Humanitarian Affairs (OCHA) identified women as a particularly vulnerable group, while very few demonstrated a commitment to gender equality through the various projects identified in the NAPAs themselves.[32] In such cases, it is clear that the WID approach to gender in environmental policies prevails. While there are positive examples of NAPAs that do integrate gender concerns, mainstreaming gender into NAPAs remains the exception rather than the rule.[33]

Similarly, a report by the Secretariat of the Convention on Biological Diversity (SCBD) explains that:

28 United Nations Framework Convention for Climate Change, FCCC/CP/2001113/ Add.4, at 9 (Jan. 21, 2002), *available at* http://unfccc.int/resource/docs/cop7/13a01.pdf.

29 INTERNATIONAL UNION FOR CONSERVATION OF NATURE, DRAFT GUIDELINES TO MAINSTREAMING GENDER IN THE DEVELOPMENT OF NATIONAL ADAPTATION PLANS (NAPs) 12 (2011), *available at* http://unfccc.int/resource/docs/2011/smsn/ngo/306.pdf.

30 SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY, CBD TECHNICAL SERIEs No. 49, GUIDELINES FOR MAINSTREAMING GENDER INTO NATIONAL BIODIVERSITY STRATEGIES AND ACTION PLANS, 12 (2010), *available at* http://www.cbd.int/doc/publications/cbd-ts-49-en.pdf [hereinafter SCBD GUIDELINEs].

31 Women's Environment & Development Organization, Untitled WEDO Memo from COP 16, at 1, *available at* http://unfccc.int/resource/docs/2011/smsnlngo/313.pdf (1ast visited Nov. 3, 2012).

32 *Making NAPAs Work for Women,* CLIMATE CHANGE CONNECTIONS 4 (UNFPA & WEDO), at 4 (2009), *available at* http://www.unfpa.org/webdav/site/global/shared/documents/publications/2009/climateconnections_4_napas.pdf.

33 U.N. DEVELOPMENT PROGRAMME, RESOURCE GUIDE ON GENDER AND CLIMATE CHANGE 47 (2009), *available at* http://www.un.org/womenwatchldownloads/Resource_Guide_ English_FINAL.pdf.

> The actual state of play of gender mainstreaming into NBSAPs clearly shows the need for more articulated guidance on addressing gender inequalities within national strategies and action plans. Out of the 166 NB SAPs submitted by July 2008 to the SCBD, only 78 include any reference to women or gender. ... [although] some NBSAPs address the question of promoting gender equality in a very fragmented and ad hoc manner. Nevertheless, as it is today, most NBSAPs lack any consideration of gender issues.[34]

The report presents detailed data on the references to gender and/or women within fifteen different sector issues, and notes that gender was most frequently mentioned in the context of agro-biodiversity, fisheries, poverty, and forestry.[35]

Poulsen and Masse also note that NAPs "do not provide any specific information as to how countries will promote equality between men and women in dryland development."[36] Furthermore, governments struggle not only to integrate gender dimensions into these environmental agendas, but also to allocate larger budgets to activities that promote gender equality. In countries that do allocate budget lines in their NAPs for activities that strengthen the role of women, this funding still represents less than three percent of the overall NAP budget.

III. Environment and the Gender Agenda

An analysis conducted by Castañeda and Martin of ten CEDAW country reports points out that the inclusion of sustainable development and the environment in the gender agenda is still weak.[37] The analysis shows that sustainable development was rarely linked to energy, the environment, or climate change.[38] Sustainable development was more expressly linked to issues such as water supply and its management, health, exports, and indigenous groups. Castañeda and Martin found that in most cases the environmental programs and projects reported by the countries were presented as isolated and unrelated to other sectors.[39] Failing to report on the connections between different environmental issues narrows our

34 SCBD GUIDELINES, *supra* note 30, at 22.

35 *Id.* at 64.

36 Lene Poulsen & Masse Lo, *Promoting Good Governance through the Implementation of the UNCCD, in* GOVERNING GLOBAL DESERTIFICATION: LINKING ENVIRONMENTAL DEGRADATION, POVERTY AND PARTICIPATION, 109, 120 (Pierre Marc Johnson et al. eds., 2006).

37 Itzá Castañeda & Piedad Martin, *Convention on the Elimination of all Forms of Discrimination Against Women Country Report Analysis of Environmental-Sustainable Development Linkages, in* POWERFUL SYNERGIES: GENDER EQUALITY, ECONOMIC DEVELOPMENT AND ENVIRONMENTAL SUSTAINABILITY 52, 52-53 (2012), *available at* http://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/Powerful-Synergies.pdf.

38 *Id.*

39 *See id.*

understanding of the role gender plays in such issues. For example, a failure to account for the interdependence between water access and food security and its relation to gender can act as an obstacle to proper policymaking.

Often, gender and the environment and the use of indicators in CEDAW reports have resulted in the listing of projects tailored exclusively to women or in listing projects that have female beneficiaries. While some reports presented sex-disaggregated data to contextualize gender gaps in rural and urban contexts, most of the reports did not provide indicators or information that evaluated the success of the programmes and projects in reducing the existing gender gaps or inachieving environmental protection or sustainable development goals. Carrying out projects solely for women will not result in the achievement of long-term sustainable development, which calls for the equal participation of both women and men.

Some reports contextualize rural-urban differences; however, most of the focus is on rural women's issues. This could be a result of Article 14's emphasis on rural women's concerns. Nonetheless, recently there has been a tendency towards greater urbanization, particularly in developing countries. For example, in 2000, 76 percent of Latin America's population was already living in urban areas, and Asia and Africa were set to register a higher urban growth over the next thirty years.[40] Castañeda and Martin have pointed out that, because of the emphasis on rural women, "countries with a 'very high' Human Development Index [which tend to also be more urbanized countries] reported little in their respective CEDAW reports on the environment and sustainable development," and that in instances where it was mentioned, "the challenges were linked solely to rural women."[41] Given current urbanization trends it is vital to rethink this rural-centric focus and expand the country reports' analysis to include more on the urban sphere.

IV. Gender and Environment in Global Reports

The previous analysis shows that, to a large extent, governments still treat and present gender and the environment as distinct and parallel agendas.[42] It is important to look at the ways in which international reports and indices present and treat the aforementioned in relation to sustainable development. Tables 3.A. and 3.B. present observations on global indices and reports that account for advancements in both gender equality and the environment. Table 3.A. refers to three global indices that measure progress in gender equality. Table 3.B. is a selection of various United Nations reports that inform on the advancement of women in relation to various types of environmental and developmental concerns.

40 Barbara Boyle Torrey, *La Urbanización: Una Fuerza Ambiental Considerable,* POPULATION REFERENCE BUREAU, http://www.prb.org/SpanishContent!Articles/2004/LaUrbanizacionUnaFuerzaAmbientalConsiderable.aspx (last visited Nov. 3, 2012).

41 Itzá Castañeda Camey et al., *Advances and Limitations: Mainstreaming Gender in Environmental Policies,* ADDRESSING INEQUALITIES GLOBAL THEMATIC CONSULTATION (Oct. 2012), at 8, http://www.worldwewant2015.org/node/283254.

42 *See supra* Part III.

TABLE 3.A. GLOBAL INDICES

TITLE	TYPE	DIMENSION	OBSERVATIONS
Global Gender Gap Report (WEF)	Index Annual 135 Countries	Economic Participation, Educational Attainment, Health and Survival, Political Empowerment.	**2011 and previous:** Does not include or measure any environmental dimension (e.g., use and access to natural resources, climate change, or water and sanitation).
Human Development Report (UNDP)	Index Annual 187 Countries	Human Development Index, Gender Inequality Index (before 2010 known as Gender Development Index), Multidimensional Poverty Index	**2006:** Focused on water scarcity, emphasizing gender inequalities and time-use. **2007/2008:** Focused on climate change and recognized that climate change will aggravate existing inequalities (including gender inequality). **2011:** Focused on sustainability and equity. Great attention to women's reproductive health.
Humanitarian Response Index (HRI) (DARA)	Index Annual *Donar* Countries	Responding to Humanitarian Needs, Integrating Relief & Development, Working with Humanitarian Partners, Implementing International Guiding Principles, Promoting Learning and Accountability	**2008:** Focused on donor accountability in humanitarian action. Women and gender mentioned in relation to violence and development. 2009: Focused on clarifying donor's priorities. **2010:** Focused on the problems of politicization. **2011:** Focused on addressing the gender challenge. Heavy focus on women and gender issues in relation to humanitarian responses.

TABLE 3.B GLOBAL REPORTS

Progress of the World's Women (UNIFEM- U.N. Women)	Global Report Biennial	Identifies actions and strategies by governments and civil society to advance women's needs.	**2008/2009:** Presented little analysis of women in relation to the environment. Acknowledged that data regarding MDG Goal 7 are scarce and presented data mainly on water collection. **2011/2012:** Paid little attention to MDG goal 7.
The World's Women's Trends & Statistics 2010 (DESA)	Global Report Every Five Years	Statistics regarding: population, health, education, work, decision-making, violence, environment and poverty.	**2010:** Analysis on the environment covered housing, water collection, access to energy fuels, and natural disasters. Accounted for women 's participation in environmental decision-making.
The State of World Population (UNFPA)	Global Report Annual	Reports on population dynamics in relation to development.	**2009:** Emphasized how climate change can affect women and states how stabilization of population will help reduce greenhouse-gas emissions. **2010:** Did not mention the environment. **2011:** Presented women as vulnerable, and suggested that their role as food providers links them to climate change. The report focused heavily on overpopulation, sexual education, reproductive health and family planning.
The State of Food and Agriculture (FAO)	Global Report Annual	Provides assessments of important issues in food and agriculture.	**2009:** Provided gender-sensitive recommendations and portrayed women as active agents of development. **2010-2011:** Focused on women's contribution in agriculture, arguing that closing the gender gap in agriculture is crucial to development.

Both the Global Gender Gap Report and the Progress of the World's Women Report barely accounted for the environmental dimension, but instead continued to present gender and the environment as parallel and distinct agendas.[43] Conversely, the *World's Women 2010: Trends and Statistics Report* went beyond its analysis of sector specific environmental issues by also evaluating the extent to which women participate in environmental decision-making.[44] The approach to gender in reports related to population and the environment (e.g., The State of the World Population and UNEP's Annual Report) closely follows the WID approach. Those reports mostly discuss the greater integration of women in programs and projects while still presenting them as a vulnerable target group. The *FAO's report* goes one step further by evaluating gender gaps in different agricultural settings, providing a foundation for closing these gaps in the future.[45]

Since the UNDP's 2011 Human Development Report focuses on sustainability and equity, this article pays great attention to the report's approach to gender equality. Since 1995, the Human Development Report has contributed greatly to the analysis of development concerns by providing and designing indices that

43 *See supra* Tables 3.A., 3.B. *See generally* Ricardo Hausmann et al., *The Global Gender Gap Report 2011,* WORLD ECON. FORUM (2011), http://www3.weforum.org/docs/ WEF_ GenderGap_Report_20ll.pdf (failing to include or measure any environmental dimension); U.N. DEV. FUND FOR WOMEN, PROGRESS OF THE WORLD's WOMEN 2008/2009: WHO ANSWERS TO WOMEN?, U.N. Sales No. 08.lll.F.lP (Sep. 18, 2008) (presenting little analysis of women in relation to the environment, and acknowledging that data is scarce and presenting data mainly on water collection regarding MDG Goal 7); U.N. DEV. FUND FOR WOMEN, PROGRESS OF THE WORLD's WOMEN 2011-2012: IN PURSUIT OF JUSTICE, U.N. Sales No. 1l.lll.F.1 (July 2011) (paying little attention to MDG Goal 7).

44 *See* U.N. DEP'T OF ECON. AND Soc. AFFAIRS, THE WORLD'S WOMEN 2010: TRENDS AND STATISTICS, U.N. Doc. ST/ESNSTAT/SER.K/19, U.N. Sales No. E.l0.XVII.ll, at 154-55 (Oct. 2010).

45 *See* U.N. FOOD & AGRIC. ORG., THE STATE OF FOOD AND AGRICULTURE 2009: LIVE STOCK IN THE BALANCE 4-5, 6, 35-37 (2009), *available at* http://www.fao.org/docrep/012/i0680e/i0680e.pdf.

shift from a primarily macroeconomic focus to taking into account other pertinent aspects of the socio-political sphere.[46] An important contribution of the 2011 report is the connection established between sustainability and gender equality. For example, the observation that "higher levels of gender inequality . . . led to lower levels of sustainability"[47] may help lead to a more explicit analysis of the correlations between gender equality and sustainability. While the 2011 Report includes many valid analyses of different development issues, greater efforts should be made to explore the structural causes of gender inequality and its relationship to sustainable development. For example, the Report's Gender Inequality Index (Gil) solely concentrates on two aspects of gender equality: women's participation in decision-making and reproductive choice.[48]

On the topic of women's participation in decision-making, the Report's approach is heavily influenced by the "ecofeminist" standpoint, as it suggests that:

> [W]omen express more concern for the environment, support more pro-environmental policy and vote for proenvironmental leaders. Countries with higher female parliamentary representation are more likely to set aside protected land areas, ... more likely to ratify international environmental treaties, [and were more likely to represent countries that reduced carbon dioxide emissions].
>
> ...
>
> In developed countries survey data show that women are more likely than men to engage in environmentally sensitive behaviours, such as recycling, conserving water and avoiding environmentally harmful products.[49]

Undertones of Neo-Malthusian thinking are evident in the section on women's reproductive choice, as the report consistently considers population control and reproductive health as a climate change mitigation strategy:

> Our Gender Inequality Index (Gil) ... shows how reproductive health constraints contribute to gender inequality. This is important because in countries where effective control of reproduction is universal, women have fewer children, with attendant gains for maternal and child health and reduced greenhouse gas emissions... [E]vidence suggests that if all women could exercise reproductive choice, population growth would slow enough to bring greenhouse gas emissions below current levels.[50]

UNFPA's 2011 Report also paid great attention to reproductive health and population control as climate change mitigation strategies.[51] However, the Report also presents a viewpoint by Fred Pearce who argues that "[g]iven existing income inequalities, it is inescapable that over-consumption by the rich few is the key problem, rather than overpopulation of the poor many."[52] The current level of population growth is alarming. However, this phenomenon should be contextualized within other existing developmental concerns.

In both the Ecofeminist and Neo-Malthusian approaches, the experiences of women are used to understand gender and how it relates to the environment. Use of this approach during the design and development of public policies could result in the reinforcement of structural causes of inequality by continuing to reduce women exclusively to the stereotypical roles of mothers, nurturers, and caretakers. Instead, international reports should consider gender, not women, as central to their analyses and should rethink their approaches when associating women with the environment and sustainable development.

V. Monitoring and Evaluation

When reporting on gender and the environment, solid monitoring and evaluation is fundamental, as it provides indicators that capture the interrelationship between gender and sustainability. The reliable provision of data on progress and on the effectiveness of projects will improve decision-making, accountability, and provide data to use in future policymaking. This section highlights some of the limitations in the current forms of measurement from a gender and environmental perspective and recommends that indicators related to the environment not only be differentiated by sex, but also documented more effectively.

There have been advances in the elaboration of gender indicators and sex-disaggregated statistics in the social, economic, and political spheres.

This progress is exemplified in the Global Gender Gap Report,[53] the Human

46 *See, e.g.* , HUMAN DEVELOPMENT REPORT 1995: THE REVOLUTION FOR GENDER Equality 2, 4 (1995), *available at* http://hdr.undp.org/enlmedia!hdr_1995_en_overview.pdf ("An innovation of this year's Report, the gender-related development index (GDI), reflects gender disparities in basic human capabilities-and ranks 130 countries on a global scale . . . . Another innovation of this year's Report, the gender empowerment measure (GEM), looks at women's representation in parliaments, women's share of positions classified as managerial and professional, women's participation in the active labour force and their share of national income.").

47 U.N. DEV. PROGRAMME, HUMAN DEVELOPMENT REPORT 2011: SUSTAINABILITY AND EQUITY: A BETTER FUTURE FOR ALL 28 (2011), *available at* http://hdr.undp.org/enlmedia! HDR_201l _EN_Comp1ete.pdf.

48 *See id.* at 7.

49 *Id.* at 63-64.

50 *Id.* at 7.

51 *See* U.N. Population Fund, State of World Population 2011: People and Possibilities in a World of 7 Billion, U.N. Sales No. 11.III.H.l, at 98 (Oct. 26, 2011).

52 *Id.* at 96.

53 *See* RICARDO HAUSMANN ET AL., GLOBAL GENDER GAP REPORT (2011), *available at* http://www3.weforum.org/docs/WEF_GenderGap_Report_2011.pdf.

Development Report's Gender Inequality Index,[54] and DARA's Humanitarian Response Index (HRI) for 2011,[55] all of which pay specific attention to gender issues. However, environmental data at the national and international levels is rarely sex-disaggregated.

Those reports that have more profoundly analyzed the gender-environment link, such as DESA's World's Womens' 2010 Trends & Statistics Report and EIGE's Report on Gender Equality and Climate Change, argue that "more statistical information on links between gender and the environment is needed in several areas,"[56] and that the analysis of gender and climate change is "considerably unexplored."[57] Without data to analyze, researchers are unable to address important issues such as time-use in less developed countries, the capability of women and men to protect local natural resources, access to environment-related practical knowledge, and participation in the management of local natural resources.[58] Furthermore, the large majority of indicators related to gender and the environment continue to measure rural issues and focus heavily on the role of women as agricultural producers and agents of food security.[59]

Much more analysis is needed regarding the urban sphere. A UNDP report that reviewed several external reports and their inclusion of gender in MDG Goal 7 stated that efforts should be made in "providing sex-disaggregated data and information on access to water, sanitation and housing. ... [and] identifying and using alternative data sources such as reports on urban conditions by UN agencies, civil society organizations and citizen's groups."[60]

54 *See* HUMAN DEVELOPMENT REPORT 2011: GENDER INEQUALITY INDEX AND RELATED INDICATORS, Table 4, (2011), *available at* http://hdr.undp.org/enlmedia/HDR_2011_EN_Table4.pdf.

55 *See* DARA, THE HUMANITARIAN RESPONSE INDEX 2011, *available at* http://daraint.org/wp-content/uploads/2012/03/HR12011execsummary.pdf.

56 U.N. DEP'T OF ECON. AND SOC. AFFAIRS, THE WORLD's WOMEN 2010: TRENDS AND STATISTICS, U.N. Doc. ST/ESA/STAT/SER.K/19, at 141 *available at* http://unstats.un-.org/unsd/demographic/products/Worlds women/WW_full%20report_color.pdf [hereinafter WORLD's WOMEN REPORT].

57 EUROPEAN INST. FOR GEND. EQUALITY, GENDER EQUALITY AND CLIMATE CHANGE: REPORT 3 (2012), *available at* http://www.eige.europa.eu/content/document/gender-equality and-climate-change-report.

58 *See* WORLD's WOMEN REPORT, *supra* note 56.

59 U.N. FOOD AND AGRIC. ORG., BRIDGING THE GAP: FAO's Programme for Gender Equality in Agriculture and Rural Development 6 (2009), *available at* ftp://ftp.fao.org/docrep/fao/012/i1243e/i1243eOO.pdf.

60 U.N. BUREAU OF DEV. PROGRAMME, EN ROUTE TO EQUALITY: A GENDER REVIEW OF NATIONAL MDG REPORTS 2005, at 47 (2005), *available at* http://www.undp.org/content/dam/ aplaws/publication/en/publications/womens-empowerment/en-route-to-equality-a-gender-review-of-national-mdg-reports-2005/en-route-to-equality.pdf.

At least one U.N. group, the Commission (CSW), continues to promote the awareness of the links between gender and the environment.[61] At its 55th session in 2011, the CSW invited social, economic, political, and scientific institutions to discuss the impact of environmental degradation and climate change on women.[62] More specifically Resolution 55/1 calls for the development of tools, databases, and statistics that contain reliable, comparable and relevant data, disaggregated by sex and age, as well as gender-sensitive methodologies and policy analyses.[63] Moving forward, efforts must be made to improve the availability of sex-disaggregated and gender-sensitive indicators and to further develop the measurement techniques that provide such data.

A greater focus on sex-disaggregated indicators is necessary to better understand the relationship between gender, the environment, and sustainable development. This movement will aid the Proper measurement and evaluation of projects, programs and policies, and will result in more effective decision-making and policy performance.

Conclusion

The current approach in policies and reports pertaining to gender, the environment, and sustainable development must move from the Ecofeminist and WID approaches towards an approach that shapes initiatives that help reduce gender gaps while promoting environmental protection. Presenting gender and the environment as parallel agendas, and promoting the development of small-scale projects directed solely towards women, alone cannot transform gender relations, and also fails to present an integrated approach to development concepts and strategies.

The availability of sex-disaggregated and gender sensitive data is essential for the evaluation of the current gender-environment situation at the local, national, and global level. A larger range of statistics and indicators are considered crucial for a broader examination of issues, the appropriate design of policies, and informed decision-making. Recently, access to environmental information has been established as a right in different countries. According to Sen, Stiglitz, and Fitoussi, "extending the right to access environmental information to more

61 *See, e.g.,* U.N. COMM'N ON THE STATUS OF WOMEN, SHORT HISTORY OF THE COMMISSION ON THE STATUS OF WOMEN 19 (2006), *available at* http://www.un.org/womenwatch!daw/ CSW60YRS/CSWbriefhistory.pdf.

62 U.N. Econ. & Soc. Council, Commission on the Status of Women, 55th mtg., 16, U.N. Doc. E/2011/27 (2011), *available at* http://www.un.org/ga/search!view_doc.asp?symbol=E/2011/27.

63 *See id.* (dealing with mainstreaming gender equality and promoting the empowerment of women in climate change policies and strategies).

countries in the world is part of the extension of people's right to access general administrative information."[64]

Governments that signed and ratified the three Rio Conventions and CEDAW have officially committed themselves to implement these agreements and the mandates they include on gender equality. Only through measurement mechanisms can we evaluate the extent to which governments are implementing their obligations.[65] This greater political accountability will allow policymakers and civil society to gauge and demand the changes that are necessary for progress.

64 JOSEPH STIGLITZ ET AL., REPORT BY THE COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS 1919 (2009), available at http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.

65 INT'L UNION FOR THE CONSERVATION OF NATURE, ENVIRONMENT GENDER INDEX (2012), available at http://www.genderandenvironment.org/index.php?option=com_docman&task=doc_download&gid=1955&Itemid=535&lang=en.

PIEDRAS TACITAS AS CULTURAL ENCLAVES

Nuriluz Hermosilla Osorio

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Man "no longer lives in a merely physical universe, rather in a symbolic universe. Language, myth, art, and religion build parts of this universe; they form the different threads that stitch together a symbolic network, the intricate warp of human experience." (Cassirer, 1967)

This article proposes a trajectory for the cultural conception of spaces and materialities in order to enhance their archeological analysis. I have developed three definitions to examine the symbolic use of monuments like the Piedras Tacitas (Stone Cups) at different moments in their operative chain: *cultural enclaves,* when they are part of the systemic context; *territorial enclaves,* when they already form part of archeological contexts; and *patrimonial enclaves,* when they are reinterpreted as a cultural legacy that should be protected. Each of these categories entails scientific implications (in terms of building knowledge), political implications (in terms of decision making), and incidental implications (since they often face different ethics and cultural models). I believe this conceptualization can contribute to the necessary theoretical reflections involved in building knowledge and also denaturalize decision making in patrimonialization processes, as well as in the implications of our work within the context of a reflexive archaeology (see Ayala, 2014).

Cultural Enclaves

Human populations use space within a complex cultural game of decision making. Space has meaning as a *territory*, signified by human beings through distinctions. This construction is reaffirmed through use, and thus, collective cultural practices are the link of cultural transmission, conservation, and change, which simultaneously act out the play and write it on the landscape.

This happens constantly: as we walk through spaces, sit down, observe, make endless distinctions that are validated by our own cultural baggage. Each time a space is validated, this intersection of meanings constitutes a ***cultural enclave***. Most of the time, this appropriation of space leaves no perceptible footprints in time, although it has a tremendous symbolic strength for the territory's peoples.

In living cultures, *cultural enclaves* are true nodes of meaning that evolve with their use. Members of cultures bear their existence, although their structures of meaning can be found especially in ritual communities[1] and their traditional authorities. In evolutionary terms, the social life of symbols

1 According to UNESCO, "(s)ocial practices, rituals and festive events are habitual activities that structure the lives of communities and groups and that are shared by and relevant to many of their members. They are significant because they reaffirm the identity of those who practice them as a group or a society and, whether performed in public or private, are closely linked to important events." https://ich.unesco.org/en/social-practices-rituals-and-00055

follows the vicissitudes of their cultural reproduction. Rooted in the form of co-constructed myths through ritual exercises, symbols are constantly repeated (albeit never identically), granting them relative flexibility. This repetition can also explain cultural transformations, adaptation to new circumstances, and the preservation of certain structures that enable cultural reproduction. Myth does not exist autonomously, but is materialized in the symbolization of territory. The convergence of symbolic capital produces *cultural enclaves*.

As a way of visualizing a kind of *cultural enclave* that leaves practically no materialities for archeologists, I'd like to quote one version of the Mapuche *Ngen* origin story:

> *When* füta-chachai *and* ñuke-papai *created the world, they made everything with their hands. They arranged everything in its place so that everything had its own* ngen. *The* ngen *was a guardian of god. This is how we came to have master guardians of the hill (*ngen-wingkul*), the water (*ngen-ko*), the native forest (*ngen-mawida*), the stone (*ngen-kurra*), the wind (*ngen-kürrëf*), the fire (*ngen-kütral*), and the earth (*ngen-mapu*). Then… they made man and sent him down to earth; they made woman and sent her down to earth….* Füta-chachai *and* ñuke-papai *have placed a* ngen in *everything so these things don't ever end. Without* ngen, *the water would evaporate, the wind would not blow, the forest would turn brown, the fire would go out, the hill would crumble, the earth would flatten, the stone would break. And, thus, the earth would disappear. The* ngen *animates these things, it gives life to everything. That life allows it to continue living forever.* (Grebe, 1993-94: 50)

The ethical territory of Mapuche tradition (*Az mapu*[2]) grounds and justifies all Mapuche action.

> *Mapuche men who access the dominion of a* ngen *must establish a respectful and affectionate dialogue with him. First, they must ask permission to enter said dominion. In order to use any natural element protected by the* ngen*, they must justify why they need that element and how much they want to extract to cover their most urgent needs. Once they obtain the right amount, they must express their gratitude to the* ngen*; and when they interact with the* ngen *outside their community, it is necessary to provide a small offering, thus fulfilling the principle of reciprocity. This offering usually consists of several bread crumbs or, alternatively, grains of wheat and/or kernels of corn or a small coin.* (Grebe, 1993-94: 51)

2 **Az mapu**: The Mapuche way of life, which involves social, religious, economic, and political elements, among others, resulting from the reciprocity between a human population and the specific territorial space it inhabits (Marimán et al., 2006: 273).

The *Ngen* reside in natural enclaves with a great diversity of plants, natural springs, and insects, which they must protect in order to maintain a delicate equilibrium. This natural abundance and diversity is perceived as the source of natural and cultural reproduction, dense in historic and symbolic content, which humans are in charge of protecting.

Territorial Enclaves and Archeology: The Confluence of Meaning

Therefore, *cultural enclaves* constitute true nodes of meaning, with high semiotic density and richness, which may or may not leave material remnants. Archeological sites are always the remainders of *cultural enclaves*, some with tremendous symbolic potential, a ritual remnant that once functioned as a mythical foundation. On the other hand, the materiality of more quotidian *cultural enclaves* is often preserved, leading archeologists to analyze garbage dumps, rooms, shrines, workshops. We propose to call archeological contexts ***territorial enclaves***, since they represent the presence of the symbolic nodes that we have denominated *cultural enclaves*.

Cultures evolve over time and their territories can also be the setting for population replacements, new generations that resignify existing spaces based on their own dynamic history. In archeology, we recognize these phenomena as overlapping occupations, which can respond to the arrival of different peoples or result from one peoples' own microevolution through cultural change.

In other words, the same culture or other cultures can appropriate these *territorial enclaves*, forget them and their content, or convert them into monuments or objects of validation; in short, reinterpreting *territorial enclaves* has multiple possibilities. In effect, cultural remainders can once again be considered geography, since they turn into landscape in accordance with the cultural modality that inherits them and applies its own distinctions to the resulting group.

From a scientific approach, archeological sites—as constructs of archeologists—are constituted in a palimpsest of cultural resignifications, with special attention to the resulting materiality. As archeologists, we should be able to postulate the successive oscillations of meaning regarding *territorial enclaves*.

One example of a *territorial enclave* is the *Trawünwe* of Chilcoco, located in the northern foothills of the Nahuelbuta Mountains (see Figure 1). This is an elevated archeological site with a clear circular space surrounded by highly significant plants for sacred Mapuche practices (*canelo* and *araucaria* trees, among others). According to the area's elders, Lafkenches and Pehuenches coexisted in this area in the late 19th century after settling a peace treaty. The hill is called Las Juntas. In this case, the toponymy and oral history

contributed fundamental elements to the discussion of this archeological site's symbolic content.

Figure 1. *Trawünwe* of Chilcoco, Bío Bío Region. Photograph by the author. 2014.

The Stone Cups as Territorial Enclaves

We argue that treating archeological sites as *territorial enclaves* can be productive for interpretation, considering their projection as the material results of *cultural enclaves*. For example, defining the spatial development of a site has traditionally been conceptualized through direct and economic-driven methodologies via *site catchment analysis*. Our proposal is to carry out a similar exercise but in terms of significant interrelated material groups during specific periods of pre-historic development.

Archeological examples of highly significant *territorial enclaves* are evident in the Atacama Region, where we find true cluster sites of rupestrian art, along with monumental rocks, floodplains, pre-Hispanic settlements, and other elements that converge in these geographical nodes. Crossroads are also symbolic nodes, identified by rock piles that indicate structures and grave sites in accordance with the cardinal points.

Piedras tacitas (stone cups), or their groupings, are artifacts that were created collectively through repetitive human action over the surface of stones. They are often found near freshwater sources or in the confluence of ravines, and there are several cases associated with cemeteries and rupestrian art. The symbolic elements associated with the red paint found in stone cups, on grinding stones, and in different contexts of tombs, is also particularly clear (Hermosilla and Ramírez, 1982). We propose that *piedras tacitas* be treated as *territorial enclaves*, since they constitute the most visible cultural elements of intersections that reflect rich networks of symbolic relationships.

The Concept of Patrimonial Enclave

Contemporary archeological work often culminates with the treatment of materialities in complex patrimonial discourses. I recommend we use the concept of ***patrimonial enclaves*** to reinterpret *territorial enclaves* as a cultural legacy that needs to be protected. After recognizing the scientific implications, it is necessary to assume the political and incidental consequences involved in the different cultural models and ethics of deciding what to preserve and how to do so. Even the first article of the Monuments Law in Chile considers these elements valuable, as they serve "art, science, or history" (Hermosilla and Lavanderos, 2008). Patrimonialization is executed by valuing the artifacts, their storage or exhibition as objects of art, their representation in texts and study programs, their monumentalization for tourism, their protection against investment projects and even the application of "mitigation measures," as in the exercise that we have carried out in this scientific conference. In this symbolic step toward the public world of that which merits preservation, once again, as archeologists, we form part of a chain of decision making, validated by academic, political, and legal institutions.

However, I believe that we have lived in the illusion of the end of time, so that cultures no longer constitute patrimonializing entities. As archeologists, we have assumed the exaltation of colonialism in the disrespect for decisions made by the most recent cultural strata that has occupied our territory.

In this sense, the story of the *Llawinkura* stone, located in the forests of Chilcoco in the Bío Bío Region, is quite relevant. It involves the patrimonial validation carried out by the Mapuche Community of Chilcoco in their heritage recovery process (Salas and Roa, 2011):

> *In the last several years, we identified the* paliwe of *Aguapié associated with the Chilkoko lagoon, the* menoko *and the ancient* Rewe *of Aguapie, used by Machi María Huenumilla and her daughter Machi Rosario Lincopi. On this route, an extraordinarily significant site is the* Llawinkura*, or Baptismal Stone of Chilkoko, in which, according to Don Luís Lincopi, Lafquenche boys and girls were baptized.*
>
> *The stone is next to an old back road from the community. It is oriented toward the sun and close to it we can find other cup-like stones used for offerings that have been removed from their original sites. This stone is very particular and has the following measurements: height: 100 cm; length: 555 cm; width: 284 cm. The stone has two regular rectangular perforations or bas reliefs, with*

inclined cuts, whose base is smaller than the surface. Both perforations are connected by a small orifice on one side. Both recipients have a small, independent perforation with an external outlet; this leads us to suspect that the recipient stone (Llawinkura) was filled with water and later emptied. The primary perforation has the following measurements: length: 190 cm; width: 90 cm; depth: 50 cm. The smaller perforation has the following measurements: length: 50 cm; width: 32 cm; depth: 7 cm. (Salas and Roa, 2011)

A community elder dreamed about this site. In el peuma *(the place of dreams), he saw a wounded elder woman, and she asked him to bring her the rest of her stones. In the dream, the elder woman said she could only be healed once the other stones were by her side and that the elder should talk with the Lafquenche to resume their ceremonies. This was the only way to regain the ancient power left by Chao God in the early days.* (Salas and Roa, 2011)

Figure 2. Photograph of ceremony at Piedra *Llawinkura*, Chilkoko community, Arauco, 2009. Photograph courtesy of Eugenio Salas Olave.

Proposals

In this sense, we must highlight the ethical responsibility of archeologists as validating agents of heritage, using and co-constructing the current institutional framework. In this social role, we have become the main community that defends archeological patrimony. And this is what leads me to think that an analysis of symbolically dense areas as *territorial enclaves* can help in the decision-making process for constructing the *piedras tacitas* and their groupings as the center of true *patrimonial enclaves*.

A relevant question is who makes the decisions regarding cultural preservation in terms of material and immaterial heritage. We need to reflect on this topic as archeologists, recognizing our position as validating agents of heritage and in this regard:

1. We must reassess the documentary value of archeological sites in order to consider them as different informative sources and complementary to written sources. As with every **document**, archeological sites must be preserved to be subject to continual reinterpretation.

2. Archeological materiality should not be separated from its environmental context. It is appropriate to understand archeological sites as nodes of meaning. In terms of preservation, a stone cup placed in a museum has lost most of its informative and explanatory potential.

3. We must develop methodologies for approaching archeological sites of historic or sub-actual origin that do not have the traditional material data to constitute our interpretative foundation. For example, oral history constitutes a fundamental basis for interpreting spaces marked by the presence of plants, such as the *Trawünwe,* or others that should be considered archeological sites, like areas for collecting wild fruits, medicinal plants, fresh water, and guardian spirits.

4. In this sense, it is highly appropriate to emphasize the knowledge of communities that treat their territories as heritage, with a strong **curatorial sense** of the original nature and what remains of the space's traditional occupation and its current use (local population, neighbors, Indigenous communities, even archeologists themselves as a community). Instead of turning a blind eye to the final part of the occupational sequence, we should train ourselves to discover and validate the current use of territory as documents, validating the aforementioned curatorial attitudes and the current use of *cultural enclaves*. We have a magnificent opportunity to illustrate the stories of people who use space. From an ethical point of view, if we have been able to develop our archeological discourse for the predators, why can't we make ourselves available for those who have been preyed upon?

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REVISING GENDER, ECOLOGY, AND SUSTAINABILITY

Lucía Delbene Lezama

Source: Revised version of the article "Género, ecología y sustentabilidad" (Gender, Ecology, and Sustainability) published in 2015 in *CLAES*, no. 73 (Lucía Delbene-Lezama, 2015a).

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Presentation

A great deal of water has passed under the bridge since I wrote the first version of this text in 2015, while working for the Centro Latinoamericano de Ecología Social (CLAES, Latin American Center for Social Ecology). Although I clarified at the time that the article was the first installment in an ongoing process, I did not imagine the extent to which ecofeminism would reorient my life on a personal, professional, and activist level. After all this time, having learned more and unlearned just as much, there are many things I would change in that first version, and the opportunity to revise it for this book was a perfect excuse.

In this revised version, I have rewritten everything I no longer agree with and expanded upon several points I thought necessary. While the first version cites many cases from Abya Yala,[1] in theoretical terms the article continues to have a strong bias toward ecofeminist authors from the Global North. Changing this would have meant writing a new article, which was not the idea. However, the article still offers a meaningful synthesis of a highly heterogeneous and pluralist line of thought, whose origin and early development was in the North, and explains the usefulness of this theory for understanding the region's diverse realities. But I want to explicitly recognize Latin American ecofeminism, which is currently undergoing an important development, and throughout the text, I recommend several texts that are fundamental bibliography on the matter.

1. Introduction

It is well documented that in times of environmental crisis, women and children are the first to feel the impacts (Karen J. Warren, 1996; Anke Stock, 2012; Laura María Carvajal, 2016; Rocío Silva Santisteban, 2017). It is also common to observe that, in general, women do not accept the false "solutions" that companies provide, such as economic compensation (Lucía Delbene-Lezama & Lylieth Varela, 2017).

With this situation in mind, this essay provides a general description of the main concepts related to the relationships between gender and the environment, a line of thought that has been called *ecofeminism*. My revision of this phenomenon

1 Editor's note: The explanation "About Abya Yala" from Native Web, Inc. (http://abyayala.nativeweb.org/about.html) is useful here: "Abya Yala means 'Continent of Life' in the language of the Kuna peoples of Panama and Colombia. The Aymara leader Takir Mamani suggested the selection of this name, which the Kuna use to denominate the American continents in their entirety, and proposed that all Indigenous Peoples in the Americas utilize it in their documents and oral declarations. 'Placing foreign names on our cities, towns and continents,' he argued, 'is equal to subjecting our identity to the will of our invaders and to that of their heirs.' The proposal of Takir Mamani has found a favorable reception in various sectors. Thus, this term is used to describe Latin America from Indigenous perspectives."

makes reference to practices carried out by the women of Abya Yala, especially those threatened by extractivism.

I hope to provide some clues to highlight and better understand the link between gender issues and environmental issues. But, above all, I seek to emphasize the transcendental role that women play in environmental conflicts and the search for solutions. While this role has systematically and historically gone unnoticed, it must necessarily be recognized in order to create real alternatives to development.

2. Definitions of Ecofeminism

The term ecofeminism was first used in 1974 by French feminist Françoise d'Eaubonne in her book *Le féminisme ou la mort* (Feminism or Death). In this book, she defended women's potential in an ecological revolution, arguing that patriarchal control over production and reproduction resulted in environmental crises due to overproduction and overpopulation (Mary Mellor, 1997).

We can take as a starting point the definition from Karen Warren (1996), which is simple, but immediately situates our discussion. For this author, "'ecological feminism' is the name of a variety of different feminist perspectives on the nature of the connections between the domination of women (and other oppressed humans) and the domination of nature" (Warren, 1996, 10).[2] Although ecofeminism is presented as a "variety of different perspectives" and represents a heterogeneous field of thought, the different schools of thought find unity in two key aspects.

The first is recognition that the oppression of women and the global ecological crisis have a shared origin (Warren, 1996; Nancy Howell, 1997; Elizabeth Carlassare, 2000; Mellor, 2000). Failure to recognize this connection results in forms of environmentalism and feminism that fall short of proposing major solutions or paths to achieve transcendental change (Charis Thompson, 2006; Howell, 1997; Warren, 1996). The origin of these connections is one of the main discussions within ecofeminism and generates different lines of thought and action (Carlassare, 2000). However, ecofeminists agree that the way men relate to nature affects the power relationships between genders (Mellor, 2000; Pascual & Herrero, 2010).

The second aspect in which the different schools of thought merge corresponds to the ultimate purpose: the survival of the planet and the end of all kinds of oppression, not only gender oppression (Carlassare, 2000).

2 Editor's note: Original English-language citation from Karen J. Warren, "Feminism and the Environment: An Overview of the Issues," in *Philosophy of Woman: An Anthology of Classic to Current Concepts*, ed. Mary Briody Mahowald (Indianapolis: Hackett, 1994 third edition, 1994), p. 502.

Finally, I would like to introduce another definition of ecofeminism, as developed by the Spanish author Yayo Herrero (2015). Her definition is proactive, and I believe it is more coherent with the development that this movement has experienced in Abya Yala:

> Ecofeminism is a line of thought and a social movement that explores the encounters and possible synergies between environmentalism and feminism. Based on this dialogue, it aims to share and enhance the conceptual and political richness of both movements, so that the analysis of problems that each movement faces may separately gain depth, complexity, and clarity. (Herrero, 2015, p. 1)

3. Types of Ecofeminism

Several reviews on ecofeminism have come to the same conclusion: ecofeminism is a pluralistic position (Carlassare, 2000; Warren, 1996; Marta Pascual & Yayo Herrero, 2010). Therefore, when we talk about ecofeminism, we include social movements and diverse, sometimes contradictory positions. If a broad definition is used, ecofeminism can encompass all social movements or perspectives that link women to Nature. Consequently, and under this definition, there are several types of *ecofeminist movements* or *practices*, even if they do not identify with that name (Mellor, 2000).

In general, we can divide ecofeminist movements into two groups: those that explain the connection between women and Nature as a social construction (Constructivist Ecofeminism, Materialist Ecofeminism, Socialist Ecofeminism) and those that explain it as a consequence of women's biology or a feminine essence (Affinity Ecofeminism, Essentialist Ecofeminism, Spiritualist Ecofeminism) (Carlassare, 2000; Mellor, 2000; Pascual & Herrero, 2010). Somewhere in the middle ground, or covering all these variants, is what we can call Cultural Ecofeminism, whose authors emphasize how culture and its different expressions build a feminine Nature and women who are "more Nature"; in this perspective, "the masculine" is understood as "the purely human" (Mellor, 2000). However, while these two forms of ecofeminism are frequently accepted as predominant, there is equal recognition that the taxonomy is confusing, and the dividing line unclear. These options are discussed below.

3.1 Constructivist Ecofeminism

For both Mellor (2000) and Herrero (2015), the connection between women and Nature (feminism and ecology) is material. Society—dominated by men through socioeconomic and technological systems—appropriates and subjugates the materiality of both, that is, the bodies and work of women and natural goods. Both are seen and used as mere resources (Mellor, 2000). In this hierarchical order, the sexual division of labor operates by placing women in a position

of closer proximity to Nature because they are the primary guardians of the materiality of life (Mellor, 2000; Herrero, 2015), that is, of the support of bodies. Bodies, paraphrasing Mellor, do nothing but remind us permanently that we are part of Nature, the *immanent* character of human existence.

Socialist Ecofeminism is anti-capitalist and proposes some kind of socialism as a means to reach an ecologically sustainable and more egalitarian world. Unlike orthodox Marxism, it argues that class oppression is not the only form of oppression to emerge under capitalist systems (Carlassare, 2000). This school of thought maintains that capitalism also thrives thanks to women's unpaid, anonymous reproductive work as well as the indiscriminate exploitation of Nature. For this school of thought, production and reproduction are analogous categories, and imperialism and patriarchy must be taken as a single system whose elements have a mutually reinforcing relationship (Carlassare, 2000). Unlike Cultural Ecofeminism, Socialist Ecofeminism is based on the fact that, in order to achieve desired ecological and social results, efforts must focus on achieving institutional and material changes rather than cultural, spiritual, or conscious changes (Carlassare, 2000). Accordingly, for this type of ecofeminism, capitalism must be replaced by some form of socialism, where state-led global economies are supplanted by local economies rooted in grassroots democracies (Carlassare, 2000).

3.2. Essentialist Ecofeminism

Essentialist Ecofeminism understands that there is a "natural" and essential connection between women and Nature related to their biological capacity to give life (Mellor, 2000; Pascual & Herrero, 2010).

3.3. Cultural Ecofeminism

This line of thought argues that the origin of the oppression of women and Nature arises from the hierarchical relationship—created culturally under patriarchal systems—between characteristics that we consider "feminine" and "masculine," the former valued as inferior to the latter. Thus, Cultural Ecofeminism postulates the revaluation of everything considered feminine as the key to change. Therefore, this school of thought proposes several actions, including the recovery of the "history of women" and the development of spiritualities based on women and on the immanence of humans within Nature.

Within this group, many authors use a particular writing style, since they consider traditional academic and scientific language—supposedly "impersonal and objective"—to be a product of current patriarchal culture that only perpetuates the problem (Carlassare, 2000).

To summarize, cultural ecofeminists advocate for the survival of Nature and the revaluation of women by resisting both cultural and religious patriarchies and using their own language (Carlassare, 2000).

3.4. Ecofeminist Practices in Abya Yala

In this section, I would like to briefly comment on Latin American ecofeminism. The main feature that separates it from the other schools of thought is that it generally arises as a *consequence* of a social process to defend Nature, territory, water, and life. By this, I mean that what I have noticed throughout years of meeting with different women who engage in ecofeminist practices, is that theorization and, therefore, self-identification as ecofeminists materializes from practice and not the other way around. Latin American ecofeminisms are built mostly from the bottom up and are situated in territorial struggles. As shown in **Table 1**, several factors explain why women have taken on leading roles, putting their bodies on the line and sustaining struggles of more than one lifetime to defend Nature and their territories throughout the region (Delbene-Lezama & Varela, 2017). The problematization of gender inequalities and their link with the defense of life often become an inevitable consequence of the organizational process between women and the creation of safe, horizontal spaces.

3.5. A Positioned Stance

I'd like to conclude this section with two brief comments to situate myself within ecofeminist movements.

The first refers to the fact that, because of my personal history and culture, I identify more with a constructivist ecofeminist stance. This implies recognizing, as is evident in this chapter, the role of culture in generating "truths" that *naturalize* or essentialize the system of patriarchal-capitalist oppression that is not only functional to culture, but also depoliticizes it. However, I also recognize that in certain cultures and contexts where spirituality or religion is a very strong and everyday cultural component, more essentialist positions may prove useful or appropriate in addressing certain inequalities.

Secondly, I accept that in the history of the development of feminism in general, a radical deconstruction of what hegemonic thought understood as "women" or "the feminine" was necessary, therefore producing a strong rejection of any type of essentialism, naturalization, or biological determinism. However, in many cases, this resulted in a rejection of Nature itself and the exacerbation of an imperative to transcend it at all costs, to deny the ecodependence of the human species. I disagree with the latter. In my opinion, there is often confusion between a criticism of the imposition of culturally generated medical-biological discourses and the denial of any relationship with or belonging to and dependence on the

rest of the living world. In other words, androcentrically created naturalizations are confused with Nature.

Ecofeminism criticizes more conventional feminisms that fail to question the hierarchical relationship between humanity and Nature, while simultaneously questioning the deep ecology that fails to explore or problematize social inequalities. And it is in this double criticism that ecofeminism gains power in regard to these two movements of critical theory.

4. Connections between the Oppression of Women and the Destruction of Nature

Critical literature on the subject frequently establishes the following connections between the domination over women and Nature: societies based on patriarchal systems; dualisms in which one of the components is superior to the other; social construction of the concepts of women and Nature; the man-Nature dichotomy and capitalism (Mellor, 2000; Carlassare, 2000; Warren, 1996).

Each of these possible links must be analyzed. But it is necessary to recognize that women authors from the Northern hemisphere are the primary references, and therefore, the information is anchored and skewed toward the knowledge of Western modernity.

On the other hand, in Abya Yala, although the term "ecofeminist" is not always used, feminist agendas incorporated the environmental component early on, driven mainly by Indigenous and peasant women's movements. These movements argue that their rights as women cannot be achieved without gaining collective Indigenous and territorial rights, thus incorporating environmental issues (Elizabeth Friedman, 2014/2015). Community and Grassroots Feminism is an important school of thought within these movements (Margarita Aguinaga, 2011) that has given rise to the powerful notion of body-territory (Lorena Cabnal, 2010; Colectivo Miradas Críticas del Territorio desde el Feminismo, 2017a).

The description that follows is based on different groups of authors, academics, and activists, each of whom has their own particular position. Inevitably, we find coincidences and disagreements, but more than representing substantive divides, this division is purely organizational.

4.1. Culture of Patriarchy

According to some ecofeminists, the degradation of Nature and oppression of women are the result of a society built upon a hierarchical and dominant patriarchal model in which roles are determined by men and their values, sensitivities, and positions (Thompson, 2006). Everything that is conceived of as feminine is devalued and suppressed, not just Nature and women (Lynne Dikson Bruckner, 2006; Mellor, 2000; Carlassare, 2000; Howell, 1997). Consequently, all the "feminine" aspects that men may have are also suppressed and socially punished (Mellor, 2000).

Patriarchal culture is one of the possible origins to which this historical coupling of woman and Nature as a subordinate relationship is attributed. Warren (1996) posits that the West has been constructed by dominant patriarchal societies invading matriarchal societies that are believed to have lived in greater harmony with the environment. However, communitarian feminist Cabnal (2010) suggests the existence of an ancestral patriarchy connected with the patriarchy responsible for processes of colonization and conquest.

In a project carried out by Colectivo CASA (2013), we see an example of how environmental exploitation and gender inequalities are interrelated. This group investigated 10 Bolivian communities involved in active environmental conflicts with mining companies. The work describes how relationships and gender roles are constructed in each community and ultimately determine the degree of women's participation in resolving mining conflicts (in both the exploration and extraction phases). Furthermore, the study systematizes the organizational structures that the communities use to represent and negotiate conflicts and how women participate in them.

The collected data defines different groups of communities that appear to be arranged in a gradient. At one extreme, we have traditionally organized communities in which the principle of complementarity prevails, that is, married couples are chosen as community representatives. At an intermediate position, we find communities that are Indigenous-associative and also based on union dynamics. And at the other extreme, we find communities that are structured on the basis of associative-union systems, where traditional dual positions, if they exist, play a merely symbolic role.

Each kind of organization exposes the imposition of patriarchal systems, silencing women's voices in various ways. Even in traditional dual-type communities in which women's participation is a requirement and decisions must be made by couples. This research shows that, on the one hand, women play a supportive role for their husbands by adopting submissive attitudes, silence, and compliance with their authority, and, on the other, they have difficulties fulfilling this role because they are overloaded with work (domestic chores, caring for livestock) and have little access to education and negotiating skills. Colectivo CASA highlights the following testimony:

> In the community, everything is done in pairs, you see? Your partner is with you all the time, this is how the communities work. They treat each other alright, but there is always discrimination because when you have to take charge, men don't always let women participate, and the mothers don't say a thing.[3]

3 Amauta, La Paz, March 22, 2013, cited in Colectivo Casa, 2013, p. 72.

The final stages of negotiations for resolving environmental conflicts with the mining industry always take place in the cities. The husband travels, and the wife stays in the community. This decision is determined by the sexual division of labor; in all the communities analyzed, without exception, the women of the family are exclusively responsible for reproductive work (anchoring them to the domestic sphere), and in some cases, they are also in charge of the agricultural-livestock sphere. Colectivo CASA shares other testimonies:

> There are always more men [in the negotiation meetings], they always have more time, they can go in and out of the house whenever they want, you see? The women are always taking care of their babies, the women also have to stay in the fields with their babies...[4]

> The women have not attended. For one thing, because they don't have enough money to travel. Only the men go. The mothers are also somewhat intimidated, their confidence level is low because they are afraid, because they have been suppressed by the fathers.[5]

In mixed intermediate communities, the space for women's participation is restricted because, as a mix between Indigenous-associative and union systems, in many cases the demand for women's participation is lost. In this type of community, Colectivo CASA observed that when a woman accesses decision-making positions, it is because she is the widow of a man who had that right or because she is single (because if she were married, the community would expect her husband to assume that role).

Finally, the two extremes were found in the union-associative type of communities, although the final result is similar. Among the women, there are those whose main economic activity is agricultural and livestock work, where the family nucleus generates products for self-consumption and surplus to sell. Women only have access to the lowest organizational positions and are excluded from the highest positions, where mining conflicts are resolved. While these types of communities have not historically coexisted with the mining industry, conflicts with mining companies still arise, either because the community has been negatively impacted by a mining company operating in another region or because a company is looking to enter the community's area (in the exploration phase).

On the other hand, there are also communities that already have a history of mining and conflicts. These communities display a growing role of women in management positions. And this pattern is correlated with the growing enrollment

4 Amauta, La Paz, March 22, 2013, cited in Colectivo Casa, 2013, p. 107.
5 Ex Mama Segunda, Mallku Quta, April 7, 2013, cited in Colectivo Casa, 2013, p. 107.

of men in mining work, as they lack the time to perform management functions. There is also a kind of mandatory code (upheld by threats of being laid off) that, if you work for a mining company, you cannot speak against it. In this scenario, the CASA Collective (2013) concludes that, although many women leaders participate in these spaces, they are representing their husband and therefore respond to a mandate to protect the family nucleus.

4.2 Hierarchical, Opposite, and Exclusive Dualisms

The origin of this kind of dualism is usually located in early historical stages, such as classical Greek thought (Warren, 1996; Griffin, 1978; Ruether, 1975). In this context, dualisms are pairs of concepts that are historically and culturally considered opposites (rather than complementary) and exclusive (rather than inclusive). Furthermore, they are hierarchical, that is, some are considered better or superior to others (Warren, 1996; Aguinaga, 2011; **Table 1**).

One popular example is the society/Nature dualism in which the human species considers itself separate from and above Nature. Likewise, the male/female dualism also exists. From this perspective, everything associated with women or the feminine (such as emotions, the body, and Nature) is conceptualized as inferior, while what is related to men and the masculine (such as reason, the mind, and the "purely human") is considered superior (Dickson Bruckner, 2006; Warren, 1996).

It should be noted here that there are alternate views in Indigenous conceptions. For example, in Andean cultures, men and women are mutually complementary, and both are needed to be complete. In turn, under the Principle of Relationality in Andean philosophy, humanity and Nature cannot exist separately, coexisting as a large family in the same home, the Pachamama (Estermann, 2006).

As mentioned above, there are many similarities between these Indigenous worldviews and the concepts that some ecofeminists propose and defend. However, we must also recognize that in everyday experiences, women are relegated to fulfill roles considered secondary to their husbands, as shown in the testimonies recorded by Colectivo CASA. Nor can we ignore that these cultures are immersed in the present-day Westernized and global cultural framework and, therefore, are permeable to all kinds of external influences, examples, and conditionalities, which according to Cabnal (2010) are linked to an ancestral patriarchy.

With this exception in mind, many ecofeminist authors explain the oppression of women and the ecological crisis as arising from these dichotomies, which generate the concepts of "woman" and "Nature." Along these lines, ecofeminists discuss the implications and effects of conceiving the world in

this light (i.e., what things and/or characteristics are most valued by culture) in regards to people-Nature and person-person bonds (Howell, 1997; Warren, 1996).

Such perspectives enable us to analyze the Latin American context. The continent's environmental situation is concerning. The destruction of ecosystems is not slowing down, and conservation efforts are not sufficient. This is reflected, for example, in the fact that Brazil, Peru, and Ecuador are among the countries with the greatest environmental deterioration on a global scale (CLAES, 2010). The inability to stop environmental destruction was due in part to conservation measures and production policies based on the people/nature duality. Actions such as conservation and remediation, among others, are often ineffective because they are generally created under anthropocentric and non-biocentric precepts. On the other hand, economies rely on exporting Nature. This pattern is historic but has been reinforced by the growing expansion of extractivist efforts.

Table 1. Frequent dualisms mentioned in ecofeminist literature

"Superior"	"Inferior"	Sources
Human	Nature	Mellor, 2000; Warren, 1996; Aguinaga, 2011
Man	Woman	Mellor, 2000; Warren, 1996; Aguinaga, 2011
Masculine	Feminine	Mellor, 2000; Carlassare, 1999
Reason	Emotion	Mellor, 2000; Howell, 1997; Aguinaga, 2011; Warren, 1996
Scientific knowledge	Traditional knowledge	Mellor, 2000
Mind	Body	Dickson Bruckner, 2006; Howell, 1997; Warren, 1996
Objectivity	Subjectivity	Howell, 1997

It is important to remember that extractivism is "a particular type of extraction of natural resources, in large volume or high intensity, of which 50 percent or more is destined for export as raw materials without processing or with minimal processing. It includes exploitation phases and preliminary work, such as exploration, discovery, etc., and also subsequent phases, such as closure and abandonment of the appropriated sites" (Eduardo Gudynas, 2013).

Different forms of extractivism are only possible if Nature is conceived as a set of resources that the human can make use of at will, that is, if the humanity/Nature dualism is sustained. This type of venture has been one of the main causes of environmental destruction in recent years (Gudynas, 2015) and collaborates both directly and indirectly with the degradation of women (Colectivo CASA, 2013).

4.3. Social Construction of the Concepts of Woman and Nature

Many authors (constructivist ecofeminists) reject conventional ideas that women's close relationship to Nature is determined by the biology of the female body. They maintain that proximity to or distance from Nature is due to the ways in which women and men are socialized (for example, the traditional distribution of work) rather than the experiences that affect the female body (such as reproducing and feeding children) (Charis Thompson, 2006; Mellor, 2000, Warren, 1996). This results in a different awareness and sensitivity that strengthens women's connection with Nature (Warren, 1996). Under dominant social constructions, this feminine consciousness and sensitivity is supposedly "inferior" for bringing women closer to Nature, making them more "primitive," among other things, thus reinforcing one of the dualities indicated above (Mellor, 2000; Howell, 1997; Warren, 1996). On the other hand, the bond created between women and Nature is bidirectional and strengthened in both directions. This means that, just as the concept of woman is socially constructed as "more Nature," Nature itself is also given a feminine characteristic. On this particular point, science has played a preponderant role that leads us to the next point.

4.4. The Role of Science

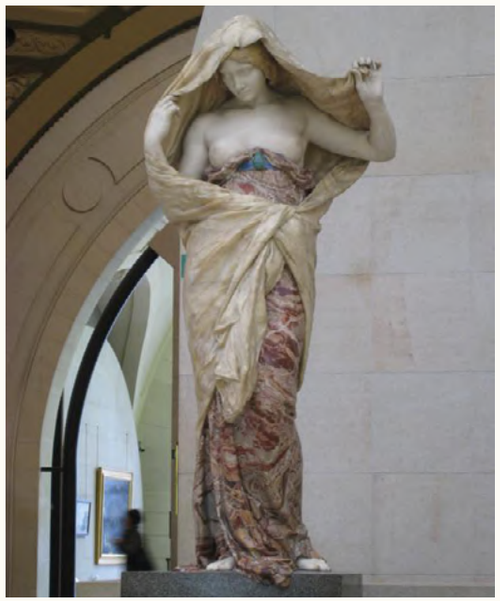
Before the consolidation of modern science, Nature was conceived from positions close to organic conceptions, understanding it as a mysterious, wild, life-giving mother, etc. After the European Enlightenment, these perspectives and sensitivities changed, introducing a Cartesian perspective that conceived Nature as a machine composed of defined parts, governed by laws that can be known and, therefore, predicted and controlled. Conventional science introduced a mechanistic conception of Nature (Carolyn Merchant, 1990; Mellor, 2000; Howell, 1997; Warren, 1996).

From a historical perspective, the Enlightenment created the idea of moving from a state of ignorance of Nature to another stage in which we could "understand" it by using science. This involves many important factors. If we know the rules of how Nature's "mechanism" works, we can control it. If we can

control it, on the one hand, the effects of an action can be predicted, and on the other, every effect can be reversed by retracing our steps. These kinds of ideas have hugely influenced myths that extractivism "does not pollute" or "does not have impacts" if it is mediated by the "best technology."

This is why many ecofeminists argue that science and the mechanistic concept of Nature provided the ethical justification and necessary tools for its indiscriminate and unquestioned exploitation. A position that presented itself as a right and duty for humans (Howell, 1997; Warren, 1996, citing Merchant, 1980, 1989; Shiva, 1988; Estermann, 2013; Aguinaga, 2011). This was how the consolidation of contemporary science played an important role in subjugating Nature. As women are seen as Nature, as indicated above, they are also subjected (**Figure 1**).

Figure 1. Louis-Ernest Barrias. Nature revealing itself to Science, 1899. Marble, onyx, gray granite, malachite, and lapis lazuli. Musée d'Orsay in Paris. Photograph taken by Sailko (December 9, 2015) under Creative Commons Attribution 3.0 license (https://creativecommons.org/licenses/by/3.0/deed.en). Source: https://commons.wikimedia.org/wiki/File:Louis-ernest_barrias,_la_natura_si_rivella_alla_scienza,_1899.JPG



This dominant position also determines that this awareness and sensitivity—a product of the social construction of femininity—and all the knowledge and feelings generated from it will clash and most likely die in "paradigms that are uncritically oriented to the dominant Western masculine forms of experiencing the world: the analytical, non-related approaches delightfully called 'objective' or 'scientific'" (Warren, 1996, quoting Salleh, 1988).[6]

4.5. Humans[7] Separate from Nature

Humans are "anchored" to Nature by their body, that is, bodily needs are the permanent reminder that we are still animals (Mellor, 2000). However, following the aforementioned dualisms, human beings are understood as "masculine" and distinct from Nature, which would be "feminine." According to this separation, everything related to the body's maintenance is considered a hindrance, while a disproportionate value is given to reason and to all "rationally" generated knowledge (Howell, 1997). Progress and development supposedly seek to consolidate masculine characteristics, transcending the limiting materiality of life.

While the masculine refers to the mind, intellect, and reason, the feminine is associated with the body, emotions, instinct, and the environment. In order for men to carry out their intellectual and transcendental projects, they inevitably need the assistance of others, in this case, women. In other words, some humans free themselves of these "natural" requirements by disproportionately relying on women and other oppressed groups to provide for their material needs (Mellor, 2000).

A parallel is evident between this situation and current models of development in which certain groups dominate others and Nature. The aforementioned forms of extractivism are a clear example of this problem: consumption and industrialization of some countries occurs at the expense of the deterioration and impoverishment of others, which supply raw materials to the former

6 Editor's note: Original English-language citation from Karen J. Warren, "Intro to EcoFeminism" (n.d.), Online at https://thereitis.org/warrens-introduction-to-ecofeminism/. Originally published in *Environmental Philosophy: From Animal Rights to Radical Ecology,* ed. Michael E. Zimmerman, J. Baird Callicott, George Sessions, Karen J. Warren, and John Clark, (Eds.), *Environmental Philosophy: From Animal Rights to Radical Ecology* (Hoboken: Prentice-Hall, 1993), pp. 253-267. See also Ariel Kay Salleh, "Epistemology and the metaphors of production: An eco-feminist reading of critical theory," *Studies in the Humanities* 15, 2 (1988):130-39.

7 Editor's note: The original text in Spanish included a note on how language contributes to naturalize different subjectivities and how the Spanish language reproduces patriarchal logic and then explained the author's use of an inclusive language. While at first glance English might not seem to be a gendered language, words like "mankind" imply an underlying bias, as Delbene points out. For this reason, we prefer terms like "human" and "humanity."

through extractivist processes. Likewise, culturally speaking, many argue that emulating industrialized countries is a positive feature for which we should all aim. Therefore, in order to "develop" in that direction, Nature must be destroyed. Faith in this kind of development is such that the United Nations considers being "developed" a human right (United Nations, 2010).

The status of an "underdeveloped," "Southern," or "third-world" country is often described as primitive and basic—and therefore negative—in Western culture. Note that these kinds of adjectives closely resemble those used to describe Nature and often women, as well. On the contrary, it does not seem coincidental that "developed," "Northern," or "first-world" countries are associated with scientific knowledge, technologies, and consumption and therefore valued as positive.

On the other hand, from an environmental point of view, the condition of "underdeveloped country" is presented by some governments and other social actors as positive since it refers to enormous amounts of natural resources. This is a myth that drags on from the colonial legends of "El Dorado" (Gudynas, 2014b). As we have seen, the environmental situation of Abya Yala is critical, but many still argue that its abundance justifies subordinating Nature as a necessary condition to overcome "underdevelopment."

For example, Uruguay's abundance of natural water sources is used to justify large dam construction for the irrigation of export monocultures (Carlos Santos & María Noel González, 2021; Delbene Lezama, unpublished thesis) which are also discursively justified as needed to solve the problem of world hunger. However, according to Miren Larrea (2014), globally 70 percent of food is produced by family farming on which 40 percent of households depend and which is at least twice as efficient in preventing poverty as other productive sectors. Again, this condition reveals asymmetries with the role of women, since they increasingly assume agricultural tasks after their companions migrate to the cities for wage labor. This phenomenon is known as the "feminization of agriculture" and leads to new responsibilities for women to support their families and generate the material foundations for life (Lilián Celiberti, 2019). In South America, women contribute 40 percent of agricultural products to domestic markets, in Asia they produce 50 percent of the food, and in Sub-Saharan Africa, they contribute more than 80 percent.

4.6 Capitalism

The discipline of feminist economics and some ecofeminists argue that there is a strong parallel between how the economy relates to Nature and how it relates to women, and this is why thinking about these relationships should be crucial for an ecological economy (Julie Nelson, 2009).

Women and Nature receive the same treatment from orthodox economics, that is, they are invisible, neglected, seen as resources for male satisfaction, and thought of as self-regenerative, passive, and objects subordinate to the will of men/humanity (Nelson, 2009). Treating both women and Nature as passive and exploitable resources is no mere coincidence, rather it arises from the dualisms built into Western culture and, consequently, orthodox economics. This economic model is masculine, anthropocentric, autonomous, rational, and self-interested and excludes all ecological interdependence, as well as any kind of emotion, empathy, or other non-monetary valuation. The methodology it uses demonstrates this point. Quantitative mathematical models and empirical studies that aspire to allegedly neutral valuations are given greater prestige. Qualitative studies and topics of ethics—or any debate referring to other studies—are strictly avoided. This is so relevant that the methods used are often what define whether something is or is not economics (Nelson, 2009).

Some forms of ecofeminism link the global ecological crisis and the oppression of women with a criticism of the methods of production in capitalist economies (Jesse Goldstein, 2006; Carlassare, 2000). The roles of capitalism and patriarchal systems are so complex and dependent on one another that they are often regarded as a single system by socialist ecofeminists (Carlassare, 2000).

For example, capitalism is questioned for its inability to adequately incorporate the values of natural goods, its utilitarian and mercantile vision, and its failure to account for socio-environmental damage and plundering Nature to exhaustion. Ecofeminism expands upon this criticism by problematizing women's unpaid work, since this work (unpaid, socially unacknowledged, and invisible) is considered crucial for maintaining a capitalist system (Carlassare, 2000). Ecofeminism also argues that the market economy is competitive, aggressive, and dominant (Thompson, 2006, 508). Is it any surprise that we consider these characteristics "masculine"?

There is evidence that when the capitalist global market economy interrupts a community, the position of women and children declines (Mellor, 1997; Colectivo CASA, 2013). There may be many reasons for this, but the most commonly mentioned include losing access to basic subsistence resources (from contamination/destruction as well as loss of access to the resource; Mellor, 1997) and increased health problems, alcoholism, physical violence, and sexual abuse (Wanaaleru, 2014; Friedman, 2014/2015; Programa Derechos Humanos de las Mujeres del CMP Flora Tristán, n.d.). Even the extreme case of human trafficking

and exploitation of women and children is intensified around extractivist ventures, largely due to the production methods, actors involved, and the scarce presence of the state in those territories (Jaris Mujica, 2014; Jineth Bedoya Lima, 2013).

Let us return to the study carried out by Colectivo CASA (2013). If we analyze how the social status of women differs in communities that are sustained on the basis of ecologically sustainable activity, such as agricultural livestock, compared to those where the central economic activity has become mining, there is an increasing degree of degradation for both Nature and women and for the jobs they perform.

In communities where the economy is based on the agricultural component, the traditional gender distribution of work usually follows this pattern (**Figure 2**): agricultural work is shared more or less equally between spouses, and domestic work is exclusive to women.

When a mining venture is installed near or within a community, gender roles are reconfigured parallel to the degradation of the environment. As male labor is captured by mining companies, women assume male responsibilities that the husbands can no longer perform. Consequently, women have greater responsibilities in the basic maintenance of the family, while the role of men is limited to assuring monetary income. Over time, this cycle is enhanced due to unequal competition for natural assets between the mining company and the community, particularly in regards to land and water. This has a negative impact on agricultural productivity, leading to an increase in women's work and increased economic costs for purchasing fertilizers, remedies, etc., which compensate for decreased production.

Figure 2. Gender roles in communities where the main productive activity is agricultural (above) and mining (below). In general, when a mining enterprise sets up operations, the affected sphere experiences a disconnection between reproductive and domestic environments, with women subsequently bearing an overload of work. Modified from Colectivo CASA (2013) by J.M. Barreneche.

As a result, there is greater dependence (and greater value placed) on money—that is, on the work done by men—and a devaluation of women's agricultural activities. Women are increasingly confined to the domestic sphere due to their overwhelming workload of domestic tasks, which makes it difficult for them to participate in decision-making spaces or access education and information in order to empower themselves when having to negotiate. On the other hand, isolation and men's contact with external environments and cultures promote an increase in domestic violence. The presence of miners from outside

the communities also leads to a growing increase in violence against women in the public sphere, including extreme cases such as rape.

In this panorama, once mining begins to influence a community, a series of processes follow as feedback in which environmental degradation and gender inequalities rise to extreme levels. The Latin American group Colectivo Miradas Críticas del Territorio desde el Feminismo (Collective for Critical Feminist Perspectives on Territory) has called this a processes of (re)patriarchalization of territories (Colectivo Miradas Críticas del Territorio desde el Feminismo, 2017b).

On the other hand, the effects can extend to the bosom of the family, affecting and even destroying family structures. While women tend to oppose extractive-type ventures, men are tempted and/or forced to accept salaried jobs within the same company to fulfill their socially assigned role (**Table 1**). As a result, a conflict of interest is created between husband and wife that can lead to couples separating. In these cases, again women are often the main victims. In sexist and traditionalist systems, a single woman has no status and often loses the basic social rights she was granted as a wife via her husband (CEPROMIN, 1996).

This is very clear with extractivism. According to the United Nations Human Rights Council's Working Group on the Issue of Discrimination against Women in Law and in Practice, "While acknowledging the economic benefits to the country from extractive industries, the impact of these industries [...] has been observed as having devastating social and environmental consequences. [...] [Indigenous women] are deprived of their land and livelihood, clean water and agricultural production. [...] Girls are subjected to sexual violence by some of the men who come to work in the industries, particularly in the Amazon region, including rape on their way to school and trafficking for prostitution. The deprivation of their land forces the women to move into cities" (cited in Silva Santisteban, 2015, 2).[8]

It is therefore not surprising that conflicts in Abya Yala over the control and use of the territory to exploit Nature, environmental degradation, and what many call "material poverty" have worsened in recent years. This especially affects peasant, rural, and Indigenous communities and the women and children of these communities. It also explains the prominent role taken on by women and environmental defense groups in the region.

8 Editor's note: Original English-language citation from Office of the High Commissioner for Human Rights, "UN Human Rights Council Working Group on the issue of discrimination against women in law and in practice concludes country visit to Peru," September 19, 2014, https://www.ohchr.org/en/statements/2014/09/un-human-rights-council-working-group-issue-discrimination-against-women-law-and

Table 1. MARKED SUBJECTIVITIES

An interpretation of why women are leading the defense of territories and nature in Abya Yala[a]

Prevailing conditions of the sexual distribution of work and the models of hegemonic masculinity and femininity determine that, in general, men are more predisposed to accept extractive ventures and present a greater tolerance of negative environmental impacts since, in return, they obtain some type of compensation, such as economic benefit or promises of employment (Delbene-Lezama, 2015a).

For example, in previous works (Delbene-Lezama, 2015b, 2015c), the analysis of interviews with women affected by extractive activities in Bolivia revealed that women react differently from their male counterparts when their territories are contaminated or threatened, even breaking up families. In these women's discourses, several ideas stand out regarding how they perceive their relationship with the environment: they recognize that they belong to the natural world, which generates a sense of responsibility to Nature; they are aware of the connections with Nature, and therefore, they understand that the environment affects us and we affect the environment. They also care about other human and non-human lives. Finally, they recognize a sense of vulnerability, since they accept that there is no complete control over natural processes. Several of these approaches are consistent with ecofeminist imaginaries. Meanwhile, the women also mention their husbands: many are miners who think they are invincible and that their bodies, contaminated from working in the mines, can be cleansed with a simple bath.

Bearing in mind that the sexual division of labor creates differences in life trajectories and subjectivities, women and men generally have different views of the impacts and benefits of productive activities that significantly change landscapes or destroy the environment. Therefore, in the region, as well as in other parts of the world, men are tempted or socially forced to accept salaried jobs within the same enterprises in order to fulfill their role as provider. Women, for their part, lead the struggles against extractive advancement since these activities generate conflicts with the sustainability of family life (Delbene-Lezama, 2015b, 2015c).

Consequently, Latin America has witnessed an emergence of independent women's groups that defend ecological causes as well as ecofeminist activists. Some of these groups, such as the Red Latinoamericana de Mujeres en Defensa de los Derechos Sociales y Ambientales (Latin American Network of Women in Defense of Social and Environmental Rights)[b] explicitly call themselves ecofeminists. But ecofeminism is also present in a broad sense, in the practices and

discourses of many groups of women who struggle to protect Nature and their territories. For example, women's groups, especially Indigenous and peasant women who promote agroecology as a form of struggle for food sovereignty and the conquest of their rights as women (Puleo, 2011). Since these women began grassroots organization in their territories, they have come up with a series of proposals and contributions that are fundamental for generating another type of relationship between people and nature. Groups such as the aforementioned network are making important strides toward regional articulation and data collection of the environmental impacts differentiated by gender, a category usually overlooked.

Finally, it is necessary to clarify that, although there is a growing trend of women leaders in grassroots ecological struggles (as mentioned above), this prominence is not reflected in decision-making spaces nor at the community, institutional, or political level, spaces historically and currently dominated by men (Colectivo CASA, 2013b, p. 13; Carbajal, 2016, p. 37; Silva Santisteban, 2017, p. 130-137). Therefore, it is pertinent to emphasize that the impacts on the environment, as mentioned above, are not gender neutral, but neither are the responsibilities. And it is urgent to recognize the androcentric nature of the prevailing environmental destruction since the current power systems are in male hands and follow patriarchal logic (Mellor, 2000; Delbene-Lezama, 2019b). In this sense, the Venezuelan ecofeminist group La Danta LasCanta (2017) proposes the concept of the Phallocene as a working hypothesis. These authors derive this term from the fact that the current era is built on a web of unequal, hierarchical, oppressive, and destructive social relations that particularly affect women and Nature and are constitutive of Western civilization. The current extermination of the planet's ecosystems is a "natural" extension of the dominant relations and forms of violence characteristic of the patriarchy (p. 26).

(a) Extract from the Spanish-language version of Delbene-Lezama 2019a.
(b) https://www.redlatinoamericanademujeres.org/

Different solutions can be proposed to reverse this situation. For example, according to the United Nations Economic Commission for Latin America and the Caribbean (CEPAL, after its acronym in Spanish), in the particular case of Indigenous communities, it appears that the solutions would come from the articulation of policies on employment and territorial rights (CEPAL, 2014a, 2014b). That is, the restitution of land would not be sufficient if it were not linked with productive development policies "to generate the resources necessary for their well-being" (CEPAL, 2014b, 24). CEPAL also argues that the empowerment of Indigenous women will be achieved through economic and political empowerment. The Women's Movement of Ecuador offers more complex alternatives (Movimiento de Mujeres de Ecuador, 2013). In its manifesto, the movement expresses that the current regime—based on an extractivist model and colonization of peoples and territories by promoting large-scale mining and agro-industries—reinforces an economic model based on the exploitation of Nature. Consequently, communities, peoples, and nationalities are particularly affected by generating "a prioritization of the national economy that exacerbates inequities and discrimination." And, therefore, one of their demands is that the state "guarantee a social, solidarity-based, and life-promoting economy that ends relationships of exploitation and commodification of livelihoods, encouraging the participation of actors from social and solidarity-based economies. That the economic model does not consider nature as an object of irrational exploitation..."[9]

While CEPAL reports clearly identify the connection between the exploitation of Nature and the deteriorating situation of environments, Indigenous Peoples in general, and women in particular, the underlying discourse does not question the basic problems and is not very innovative, reusing traditional development positions as a solution for a better world. That is the typical goal of the human/Nature dualism and Western postures, as is achieving well-being from material possessions and economic empowerment. On the other hand, the discourse of the Women's Movement of Ecuador is much more radical and innovative in proposing economies and policies that put life at the center. In other words, while the first discourse is clearly anthropocentric, never questioning the arguments that support the use of Nature, the discourse in the Ecuadorian women's manifesto emphasizes a biocentric perspective in which the rights of Nature take center stage.

Other good examples of two opposing views on how we as people stand in the face of Nature are the words of two Ecuadorian women, Patricia Gualinga and Marcela Aguiñaga (presented in **Table 2**). Gualinga, an Indigenous woman, speaks from a biocentric and prudent discourse, and Aguiñaga, a national legislator, expresses a clearly anthropocentric and technocratic position. A former minister, Aguiñaga reflects the ideas presented above on [gender] roles and faith in science and how it serves the purpose of exploiting and violating the rights of Nature. These ideas also serve to illustrate how the Western concept of poverty is used to justify the implementation of extractive ventures. In contrast, Gualinga's discourse expresses a more prudent point of view and recovers traditional knowledge and feelings that come from the sense of being understood as part of Nature. She thus recognizes the interconnectivity among its components (**Table 2**).

9 Available at http://www.heroinas.net/2013/10/manifesto-del-movimiento-de-mujeres.html

Table 2. PEOPLE AND NATURE LOOKING AT EXTRACTIVISM

It is fitting to present two opposing discourses on the conceptualization of Nature and comprehension of development options based on women's testimonies. In this case, the testimonies stem from the debate triggered by the decision of Rafael Correa's government to lift the moratorium on the exploitation of hydrocarbons in Ecuador's Parque Nacional Yasuní, enabling oil companies to exploit the land.

The original proposal for a moratorium in that area had garnered popular support in Ecuador, and so, when Correa backed down, an important controversy broke out. That debate exposed different visions of Nature and how to relate to it. Key women were also involved in these discussions. To illustrate this situation, we can begin with Marcela Aguiñaga, who was Ecuador's Minister of the Environment and then vice president in the legislative assembly. Aguiñaga defended the liberalization of the oil companies within Yasuní, even though she had been Minister of the Environment. Her position expresses an anthropocentric discourse, demonstrating faith in technocratic solutions, and uses the Western concept of poverty to justify extractivism. In an interview on the Yasuní case, Aguiñaga states that positive "reports" persuaded her to approve the oil exploitation. She adds that they are based on "technical information [...], exploitation techniques, flora and fauna techniques. It is not new that the Ministry of the Environment has information regarding the environmental services offered by a protected area."[a] She adds that these reports "will be the fundamental elements that will allow us to make the decision within the Assembly."

She supported the modification of the mining law to encourage foreign investment, which she claimed was needed to "fight poverty, which affects these communities that can benefit in this case from mining concessions...." She added that these "communities need to be addressed on basic issues: sanitation, education. And among these, of course, is to provide the communities with agro-productive alternatives. To that end, I believe that natural resources should be used efficiently, prioritizing intervention in the areas where the resources are extracted."[b]

Patricia Gualinga, an Indigenous Amazonian woman who speaks from a biocentric and prudent perspective, expresses a different position. She recognizes herself as part of Nature and emphasizes the interconnectivity of all of its elements. She questions science and technology as unquestionable solutions to the environmental damage caused by oil extraction and the Western concept of poverty and quality of life. Her ideas—laid out in an interview dealing with the controversy over oil exploitation in Yasuní—are quite telling:[c]

Interviewer: What is this proposal for life, regarding the state's extractive policies?

Patricia Gualinga: Our proposal for life, which we have in Sarayacu, is to fully respect the jungle, which is alive. I don't mean the jungle life, just its plants, its animals. I mean the living jungle, comprehensively.

I: They will tell you that their government is unique. That they are different, and they're going to use cutting-edge technology to exploit like no other government before them.

PG: They're ordinary people. They're not creators. They're not God. They're people just like us. Therefore, they can't guarantee anything. We come from the reality of experience. Many years ago, they told us they were going to exploit with state-of-the-art technology [...] that the technology of yesterday is obsolete today. And who guarantees that? They can't. We have an obligation to ensure that such things don't happen.

I: The official stance is that you're poor, and you're going to stop being poor because you're going to have an important part of that oil.

PG: It's a biased view. What is being poor? Let's ask ourselves, what does poverty mean? Or what does wealth mean? [...] We are rich. We have a vast territory. We have delicious organic meals that are cooked over firewood. We have the right kind of houses where we don't die of heat.... We have clean air to breathe, and we can lose ourselves in nature by sitting on a hill and listening to the birds sing. We can walk barefoot and feel Mother Earth or the freshness of the plants. We can do so many things! And we can live in peace. But you can't come and say, "Hey! Since his child is playing in the dirt, with a dirty face, he's poor." Poverty is brought to us from the outside world; diseases come from the outside world."

(a) Interview with the former Minister of the Environment of Ecuador, Marcela Aguiñaga, available at https://www.youtube.com/watch?v=0TSwPBzagu8

(b) Interview with the former Minister of Environment of Ecuador, Marcela Aguiñaga, available at https://www.youtube.com/watch?v=5-Yp70G4aVY

(c) Secrets of the Yasuní: Resistance. Interview with Patricia Gualinga, Sarayacu leader, available at https://www.youtube.com/watch?v=BibqYltgCmI

5. Alternatives to Development and Patriarchy from an Ecofeminist Framework

So far, we have reviewed different ways of approaching and understanding ecofeminism. Despite the differences, they all share central aspects that place them within this movement. Among these, the most prominent is the association of women's relegated condition with domination over Nature. If we recognize this fact, we can immediately conclude that, on the one hand, in order to amend current environmental destruction, it is necessary to reappraise women and everything that is culturally considered feminine. On the other hand, if we want to overcome dominant patriarchal positions, we must also change our stance toward Nature.

Ultimately, to construct alternatives that place life at the center, we must recognize and create a positive subjectivity around the two co-dependencies that create the material foundations for sustaining life: ecology and interdependence.[10]

> Modifying the course of history requires penetrating the imaginaries with which one understands and acts in the world (Herrero, 2013). This implies that our work as ecofeminist activists needs to be both symbolic and material. The task includes reversing dominant imaginaries to introduce alternative ways of building social relationships between humans and Nature that can transform our material realities (production techniques, social roles, division of labor, etc.). The individual and collective praxis needs to be transformed by recognizing the relationships of reciprocity, cooperation, and bonds that define us as social beings and as part of an ecosystem. (Delbene-Lezama & Mariana Achugar, 2019, 184)

The material reviewed in these pages and the current situation in Abya Yala demonstrate that patriarchal and dominant development strategies in Nature are a central problem. Moreover, addressing these issues can be complicated, given that the concepts of "development," "women," and "nature" have deep cultural roots. As a consequence, they tend to be inherently assimilated throughout our lives without reflecting on their origins, which is not entirely innocent or accidental. Concepts are powerful and should not be underestimated (for example, see Friedrich Nietzsche, 1873). Therefore, it is not enough to look for alternatives among different types of development, since they would encompass different ways of subordinating Nature and women. It would also not suffice for more women to simply gain access to positions of power. Although this would help in a process of change, the real problem is how the system of power is structured, that is, along patriarchal and hierarchical lines of domination.

Breaking with the differential value we place on those concepts (positive, negative, better, worse, primitive, advanced, etc.) is the basic problem, and recognizing this fact can be overwhelming. Often, people decide to simply look the other way. Exploring these issues, I believe, will be essential if we are to achieve change. Because recognizing a problem and accepting that you have some responsibility, even if it is overwhelming, gives us the power to do something, however minimal, to change it (Dickson, 2006).

This is why we provide alternatives to the idea of development itself. As a contribution to this discussion, we will offer a preliminary outline of some of the possible fronts on which to advance from an ecofeminist perspective. Again, it should be noted that several of the guidelines offered (generated mostly from bibliography of the West and the Global North) have their Andean or, more broadly, Latin American versions. Latin American ecofeminism has made a breakthrough since the first version of this article was published in 2015. Therefore, if further progress is to be made in this direction from a Southern perspective, these inputs will necessarily have to be taken into account.[11]

5.1. Relationality

Ecofeminists argue that some women have a greater understanding of the different environmental crises based on their more relational vision of the rest of the living world. The deep feeling of connectivity with Nature that some women experience makes them more aware of the consequences of human action on Nature and of our dependence on the environment, as well as how the state of it affects our lives.

Whatever the link, women perceive a connection with Nature and that connection is valued as positive in most cases. This leads many women to take a position on the frontlines, with the determination and commitment necessary to sustain environmental struggles over time. Their perseverance and strength, in many cases, are the result of perceiving Nature as part of the family or using notions such as the body-territory, as proposed by Latin American grassroots

10 According to the Spanish ecofeminist Yayo Herrero (2013), recognizing interdependence requires accepting that, as people, we are unable to live in isolation. Every person, incarnated in a vulnerable body, needs to be cared for during their life cycle, more at some stages than others (as in childhood and old age), but all of us must be cared for. Caring for others—an never-ending task that requires time, work, and energy—has historically been carried out by women in invisible and devalued efforts. On the other hand, ecological interdependence means that we need to use the goods of Nature to be able to live. Therefore, we cannot live separated from Nature and its natural cycles. We must recognize that as a species, we are also part of Nature.

11 The works and publications of the following groups are recommended: The Red Latinoamericana de Mujeres Defensoras de Derechos Sociales y Ambientales (Latin American Network of Women Defenders of Social and Environmental Rights) and the Fondo de Acción Urgente (Urgent Action Fund) are two key organizations of regional scope; Bolivia's Colectivo CASA, Ecuador's Colectivo Miradas Críticas del Territorio desde el Feminismo (Collective for Critical Feminist Perspectives on Territory); Venezuela's La Danta LasCanta, Uruguay's Colectivo Ecofeminista Dafnias (Dafnias Ecofeminist Collective).

feminism (Colectivo Miradas Críticas del Territorio desde el Feminismo, 2017a). This category sees no divide between the body and the territory in which it lives. A continuum is thus established in which territories and bodies define each other. Defending the body, then, cannot be separated from defending territories and vice versa (**Figure 3**).

Figure 3. Mapping body-territories: A mapping exercise with women from various peoples in Abya Yala. Photograph taken by the author during the VI Assembly of the Latin American Network of Women Defenders of Social and Environmental Rights (Quito, July 9-14, 2015).

Jesse Goldstein (2006) analyzes these aspects in a case study of Diane Wilson's struggle to prevent the installation of an industry in the United States in San Antonio Bay, Texas. She concludes that Wilson's commitment comes from considering the bay part of the family, not just a beautiful object to protect or a source of production. She explains that the bay is sometimes "like a grandmother to Wilson, at another point like a child—but always family" (Goldstein, 2006, 102).[12] Perceiving the bay as a grandmother and daughter establishes a two-way bond of care and dependence. As a "granddaughter of the bay," Wilson is cared for by the bay and depends on it. By identifying herself as a mother, one understands that she cares for Nature—and the bay, therefore, depends on that care.

12 Editor's note: Original English-language citation from Jesse Goldstein, "Ecofeminism in Theory and Praxis," *Capitalism Nature Socialism* 17, no. 4 (December 2006): 102.

The same is true in Abya Yala. At least that's what I found in speaking with Indigenous women leaders in Cochabamba, Bolivia. When I asked them their opinion on the connection between women and Nature, an Indigenous leader from La Paz commented: "Because we are mothers, we know how hard it is to give birth and raise a child. I feel passionate about nature as if it were my own child. It's your struggle, your fight."[13] When asked the same question, a highland leader answered: "Women share with Mother Earth. Mother Earth is a family of trees, animals [...] where we all fulfill a function and there is balance. But that no longer exists. That's why women are needed, and that's why we've taken on these roles.... That's why teaching at home is so important—passing on a legacy."[14] In both cases, Nature is part of the family, but they have one substantial difference. While in the first case, as in the example from Wilson, the relationship with Nature is social—that is, a mother-child relationship—in the second example, the relationship is natural or ecological: the woman is seen as one more ecological subject, where she must fulfill a function. On the other hand, in the Bolivian case, women make reference to traditional knowledge and feelings that emerge from an intimate relationship.

5.2 Dismantling Dualisms and Hierarchies. Valuing Culturally Recognized Feminine Characteristics and the Re-naturalization of Man

For some schools of ecofeminism, breaking with dualism will be the path to an egalitarian and ecologically more just society (Warren, 1996). Along this line, we must dismantle that polarity to rethink Nature and ourselves in a better way. Thus, the world will be perceived more as a continuum whose extremes, if any, are complementary and not opposites. From this point of view, there is no good side or bad, no top and bottom.

It is important to clarify that men are not the problem, but the placement of values on characteristics that—through cultural conditioning—we consider "typically masculine," "better," and "prestigious," the exacerbation of which generates toxic, highly destructive masculinities. It is important to clarify another point here: the humanity/Nature dualism, in which humanity sets itself apart from and superior to Nature, must also be dismantled as it positions Nature as a set of resources at our disposal and opens the door to indiscriminate exploitation. This also implies—to paraphrase Blacksmith—the need to "re-naturalize" men and masculinity. That is, the construction of new masculinities reconnected with Nature, its cycles, and the everyday protection of life—characteristic of dependent people and the whole living world. Masculinities that do not punish the knowledge of being vulnerable and that are jointly responsible. In short, masculinities that embrace interdependence and ecological dependence.

13 Author's interview in Cochabamba, Bolivia, November 12, 2014.
14 Author's interview in Cochabamba, Bolivia, November 12, 2014.

5.3 Abandoning the Idea of Development

Although Socialist Ecofeminism envisions solutions in some form of socialism, it is necessary to understand that both socialism and capitalism are based on ideas of development. Development implies unlimited growth based on the extraction of limited natural resources. "Development," as it is culturally understood today, owes its strength to patriarchal systems that support and justify it, such as orthodox scientific and economic theories. The basic problem to be solved is the concept of development as synonymous with success—as reflected in the work of the UN Economic Commission for Latin America and the Caribbean (CEPAL, 2014a, 2014b)—not the economic system under which it operates. The cultural roots of the notions of development are profound—as seen in repeated discourses across decades and in different political systems—but all of them aim to move from the primitive and inferior to a sophisticated and superior condition.

For Carlassare (2000), social and environmental changes will be achieved through personal and cultural changes based on awareness ("Cultural Ecofeminism"), on the one hand, and transformations in political and economic relations under capitalism and commodity culture ("Social Ecofeminism"), on the other.

It is necessary to understand that if we want to end the environmental crisis (Gudynas, 2011b) and achieve real equality (Mellor, 1997), we must necessarily abandon the idea of development. If we don't, sooner or later, extractivism will emerge as an option to support it under any economic system. Social equality and real environmental sustainability simply cannot be achieved under the precepts of consumption and production, however efficient they may be.

While many feminisms advocate for the inclusion of women in "development"—and this trend has found a fertile field in Abya Yala during the period of progressive hegemony within its policies aimed at boosting income and consumption—we believe this is not the solution. To paraphrase Mellor (2000), I ask myself: what is the use of having an egalitarian society in an ecologically devastated world? In fact, I directly believe that the former is not possible without ensuring that the rights of Nature are respected.

There are also feminist schools of thought—such as "community and popular" feminism and, recently, growing Latin American ecofeminisms—that criticize this welfare and paternalistic model. They question the very idea of development and its extractivist structural need, placing an economy of solidarity, food sovereignty, and the defense of Nature at their activist core. These schools of thought are built from the bottom up. They think of feminism from the grassroots, from communities and the people, and therefore generate territorially situated alternatives.

In the context of economic policy influencing environmental decision-making processes, Nelson (2009) proposes an interesting point of view. According to her, decisions should be made taking into account contributions from classical, orthodox economics ("hard economics"), as well as from ecological and feminist economics ("soft economics"). The regulations and laws that come from conventional economics tend to be structured in such a way that they interfere with markets and businesses as little as possible. When hard economists have to incorporate ecological problems into their assessments, the general tendency is to generate better mathematical models, better data collection, etc. But the general fundamentals that define the economy are rarely questioned. In opposition, economists on the soft side start from a holistic, humanistic, biocentric, and sometimes spiritual point of view. Discussions focus on long-term visions, ethics, care, responsibility, and community. People are considered part of Nature and not outsiders, and the relationships between them and the rest of Nature are central aspects (Nelson, 2009). According to this author, while the hard side creates a "rigorous and scientific" economy focused on formal mathematical models, quantitative analysis, and econometrics, the soft side focuses its actions on generating changes in consciousness (generally related to consumption), promoting grassroots initiatives in the communities, and creating small-scale technologies in order to promote a greater participation of non-profit agencies and cooperatives in the economy. This side usually expresses a degree of dislike for large-scale technology, centralized government, money, lucrative businesses, etc. Along these lines, ecological economists believe that new theoretical bases, new visions, and new objectives are necessary to generate truly positive changes.

As we have mentioned on several occasions, in a Westernized culture that is built on opposing and exclusive pairs, these two types of economics—hard and soft—would not be exceptions to the rule. We follow a "neutral" and scientific economics that seeks to accumulate money, where there is no place for ethics or a holistic philosophy, or we adhere to a human and subjective economics, forming part of a small group that "does the right thing," pursues the salvation of Nature, and has nothing good to say about business, markets, and technology (Nelson, 2009). What would happen if the world were not divided between these two positions? What would happen if you didn't need to choose a side to gain credibility and support? Nelson (2009) raises the possibility of finding a place in the middle between the hard and the soft. A place where we look with an open but critical eye at both sides and take the best that each has to give. The two approaches have a lot to offer if we can humbly recognize that neither is perfect and intelligently utilize the positive features of both methods.

For example, hardness is commonly associated with strength, but also with rigidity. In contrast, softness is associated with weakness, but also with flexibility. If we build models that are too rigorous, they are no longer realistic. However, a method that is strong and flexible possesses resilience and plasticity to adapt to new situations. From this position, formalization tools such as data collection and models can be used as specific tools for certain tasks, but not for others. Again,

there is a call for science to be more humble. On the other hand, dismantling the entire economic system may not be the way out. The author argues that it may be necessary to take advantage of some industrial and urban innovations to sustain humanity in a greener way.

5.4. Plurality

As mentioned, ecofeminism is not homogeneous and "can be considered an open, flexible political and ethical alliance that does not invoke any shared, single theoretical framework or epistemology" (Carlassare, 2000, 90).[15] Upholding the conviction of the objective's validity strengthens ecofeminism to create unity between different positions where a tolerant and open community of plural ideologies can emerge. Ecofeminism is a political alliance that destabilizes the idea that political unity can only be achieved through a single, restrictive theoretical basis (Carlassare, 2000).

As social, cultural, and environmental processes are tied to a local context, but also influenced by dynamics occurring on a global scale, alternatives to development must be created, taking into account the global situation, but with a strong local component. Ecofeminism's plural and flexible nature gives it an advantage in conceiving alternatives to development, since such alternatives must be able to adapt to and take into account local contexts, philosophies, and feelings, often different from Western thought. And this has happened throughout the region in emerging social movements, groups, and actions when their practices perfectly align with different aspects of ecofeminism, particularly the defense of life.

The plurality of ecofeminism also generates a theoretical framework conducive to the discussion and development of revolutionary ideas that break with many precepts deeply rooted in Western culture. For example, the recognition of Nature's intrinsic values, which leads to the acknowledgement that Nature also has rights, implying the need for Ecological Justice that considers and guarantees said rights (Gudynas, 2011a; Gudynas, 2014a).

Another radical proposal has been put forth by Catriona Sandilands (2000), who suggests extending citizenship to all beings, incorporating Nature and people—those who for one reason or another are excluded from the political world—into the public arena of democratic discussion, where the needs and rights of "multiple others" are taken into account.

Below, we will provide more detail on some of these points that fit within this framework because they work towards the same objective, even though they do not emerge from ecofeminism.

15 Editor's note: Original English-language citation from Elizabeth Carlassare, "Socialist and Cultural Ecofeminism: Allies in Resistance," *Ethics and the Environment* 5, no. 1 (2000), p. 90.

5.5 Ethics and Values

Ecofeminism's break with the hierarchical structure of dualisms allows us to overcome the limits of conceiving Nature solely as an object of human interest and utility. Thus, an opportunity is open for ways of thinking and sensitivities that recognize other types of worth, including intrinsic values of Nature (Howell, 1997; Gudynas 2014a, 2014b). Recognizing these values implies that Nature necessarily has rights, which brings us to the next point.

Recognizing that Nature has rights implies developing more complex arguments and tools for its defense. Based on the specific case of Ecuador, the following summarizes some of the ideas presented by Gudynas (2011, 2014a) and discusses how these ideas can complement the ecofeminist framework.

Ecuador's new constitution (2008) recognizes the rights of Nature, becoming the first country in the world that has made progress in this area. An important milestone for environmental issues, this recognition also has important repercussions on issues such as development, justice, and even the way in which we understand the concept of "Nature" and where we humans situate ourselves in relation to it.

According to Gudynas, there are three substantive components that emerge from the "ecological mandate" of the Montecristi Constitution. First, is the definition of the rights of Nature itself, proclaiming that Nature or Pachamama "has the right to the utmost respect of its existence, maintenance, and regeneration of its vital cycles, structure, and evolutionary functions and processes" (Chapter 7 of the 2008 Constitution of Ecuador, cited in Gudynas, 2011a, 241). Second, the concept of "Nature" is understood as equivalent to the Andean conception of Pachamama. And finally, the new constitution recognizes that Nature has the right to comprehensive restoration, if it has already been affected by people. This last point strengthens the rights themselves and provides the necessary legal tool to remedy the consequences from failing to legally recognize these rights that have scarred Ecuador's ecosystems.

Although the conservation of Ecuador's ecosystems has yet to produce substantial effects—bearing in mind that this country has the greatest relative environmental deterioration in South America (CLAES, 2010)—the mere fact of having constitutionally recognized the rights of Nature has significant implications for conservation. Some examples follow.

First, it implies accepting that Nature has intrinsic or specific value, which is independent of any value that people may assign it. This notion substantially changes our current conceptualization of Nature, granting it the status of subject rather than being a group of objects (for use).

Secondly, moving from being mere "objects" to being a subject of rights implies that there must be another justice—ecological justice—that accompanies and guarantees said rights. It is important to emphasize that ecological justice

is different from the better-known environmental justice, which each act in different legal and political spheres. While the former should focus on ensuring the survival and integrity of Nature, as well as its restoration, the latter addresses how people are affected when an environment is destroyed or polluted. In other words, while ecological justice focuses on securing the vital processes of living species, environmental justice focuses on the economic compensation to affected humans. In other words, ecological justice is biocentric, and environmental justice anthropocentric.

Third, equating Nature with Pachamama and recognizing its own value incorporates different worldviews, such as the Indigenous, in which a hill can be sacred, for example, or other living beings are considered moral and political agents.

Recognizing rights takes the discussion of environmental issues to another level in the sense that it expands the range of arguments that can be used when defending it. Currently, the most common arguments are anthropocentric: in other words, the conservation of an ecosystem or species is justified because they are useful to humans, either for maintaining an environmental service or for its aesthetic value. However, the new constitution allows conservationists to move beyond this position and defend the environment for its own sake, because of its cultural or spiritual value.

Finally, the rights of Nature are another front for advancing on the path to alternative models of development, since maintaining developmentalist economies necessarily implies violating those rights and conceiving Nature merely as "natural resources." The rights of Nature break the hierarchical dualism of society/Nature and disable the ethical justification of its indiscriminate use.

This environmental ethic recognizes that the rights of Nature and ecofeminism have many points in common. As previously discussed, merely equating Nature with the Andean concept of Pachamama implies a rupture with several hierarchical dualisms and opposites and, consequently, reassesses the notion of Nature and "women" or "the feminine." On the other hand, it also leads to accepting interconnectivity among all its components, including people, an argument that many ecofeminists use to proclaim that the ultimate consequences of our actions cannot be predicted. Technocratic optimism is broken, and ignorance is acknowledged, which can lead to prudence.

The idea of Nature having rights has generated considerable pushback, largely because—just like ecofeminism—this notion disables two deeply rooted cultural paradigms: the superiority and separation of people from Nature and the concept of development. In an attempt to avoid having to implement these rights without rejecting them, many Latin American governments resort to the argument that one must first grow economically then solve social inequalities and poverty and, once this "ideal" is reached, they will be able to start worrying about the environment. This approach is clearly a mistake, and the present work has provided important arguments that counter such beliefs.

By aligning with the concepts described in the previous sections, given the vital trajectories resulting from the sexual division of labor, feminisms and women should be considered crucial in a process of transitioning towards alternatives to development. Therefore, an environmental ethic from the ecofeminist framework should be oriented from a perspective based on responsibility, trust, care, and love (Cheney, 1987, cited by Mellor, 2000), placing the sustainability of life at the center, embracing ecological interdependence, and building a positive subjectivity around them (Delbene-Lezama & Achugar, 2019).

5.6. Plurality *(Pluriculturismos)*

Although some people criticize the notion that several ideologies can coexist under a shared common goal, this is in fact an advantage rather than a shortcoming. And it is even more so for Abya Yala, confronted with various crises, yet ecologically, geographically, socially, and culturally diverse.

Being convinced of the validity of its objective gives ecofeminism the strength to create unity, connectivity, and an atmosphere of tolerance to bring together very different cultures, spaces that may include Indigenous, rural, and peasant communities. Ecofeminism is therefore pluralistic, tolerant, and open, seeking to address the continent's complexity.

I have used this spirit in the arguments and theoretical frameworks laid out here, both from ecofeminist and other frameworks, such as the rights of Nature, the principles of Indigenous knowledge, and the principles of reciprocity and complementarity, typical of Andean cultures.

For example, to argue that a hill is sacred and therefore must be preserved is a valid justification under the theoretical framework of the rights of Nature, something that was previously not possible. Assimilating the Western concept of Nature with the Andean concept of Pachamama has serious implications for how we begin to conceive it. As seen above, concepts are powerful, and the way in which they are culturally conceived has important repercussions. By equating Nature and Pachamama, the hierarchical and mechanistic concept of Nature is being abandoned for a broader and more diversified conception. In this way, Nature/Pachamama is an interconnected whole where each living and inorganic component has a *raison d 'être*. No hierarchies divide its different strata, and people are included instead of being left out.

What I want to emphasize here is simple: we have a lot to learn from one another and from the rest of the living world, and we also have to recognize that we know very little. Therefore, it is absolutely necessary to create strong community ties—however one defines their "community"—that foster horizontal dialogue without hierarchies of any kind.

6. Ecofeminism for Ecology

Up until this point, we have discussed some of the major topics surrounding ecofeminism. I would like to explore one in particular even further: the role that science has played in supporting actions that are detrimental to both Nature and women and what is culturally considered "feminine."

I come from a scientific background, and my experience has been in ecology and conservation. During my undergraduate studies, "humans" in the ecosystems I studied were materialized in a very diffuse and indirect way. For example, as an excessively high concentration of some nutrient in a river or the flowering of some toxic algae in a lake. The first time that "humans" were presented in class as an "engineer species" (a species that causes ecological and geomorphological alterations that affect other organisms and are thus considered key species) was during my graduate studies. I have used the term "engineer species" on purpose, since this definition probably leads people unfamiliar with ecology to immediately imagine human beings. However, for many ecologists, the concept is immediately associated with beavers and worms.

This may seem anecdotal, and it is, in part, but it exemplifies many relevant aspects of scientific work and how biologists, ecologists, etc., are trained.

First of all, ecology—a science that should be sensitive to environmental and conservation problems—has been developed by appealing to an alleged neutral value that endows it with "scientific" prestige and "accuracy" in the attempt to approach other, more abstract and exact sciences (Gudynas, 1998). Therefore, Western culture considers physics, chemistry, and, of course, mathematics as "unquestionable."

This has led to the preponderant trend of ecology lacking any ethical reflection (Gudynas, 1998). Ecologists do not question scientific methods or the consequences of their work, but reinforce: the society/Nature dualism, excluding the human species from the ecosystem; the validity and supremacy of scientific knowledge over other knowledge; the idea of dismembering Nature as a mere set of "objects of study," etc. On the other hand, it is well known that biology—like all sciences—and academia in general are based on patriarchal pillars that have historically pushed women into the background or simply made them invisible, both as subjects of study and agents of science. Try the following exercise: think of the names of "famous" scientists, both men and women. On the other hand, the scientific method is clearly "masculine" in the sense that it exacerbates a supposedly "pure and objective" rationality and tries to eliminate any kind of subjectivity and sensitivity from what is being studied.

Therefore, while science and, in this particular case, ecology are necessary and useful for conservation, it is imperative to break with the myth of its superiority as a form of knowledge and also with the blind faith that this knowledge will save the world. An ecofeminist framework has provided many examples of the reasons why.

Other sources of knowledge about the environment, such as those derived from a more relational view, traditional knowledge, or contributions of people who live in the territories *are* just as valuable as scientific sources and offer a missing complement to ecology. Taking a step in this direction also implies starting to include people as part of Nature, which would imply making an effort to also include the socio-cultural, political, and economic dynamics that accompany them. People make Nature, and Nature makes people. The relationship is dialectical and bidirectional. Starting to do science on the basis of recognizing this fact will be crucial if we are serious about conservation. Doing ecology from an ecofeminist perspective can be a good strategy in that regard.

7. Final Thoughts

The different perspectives examined in this document show that development and gender are two concepts that must be questioned radically and side by side if we want to respect and preserve Nature seriously. While development has been amply scrutinized, until very recently the gender issue was systematically ignored, not to mention in relation to environmental and ecological issues. The prevailing sexism in Abya Yala seems to be a key to understand this. The wave of extractivism sweeping the region and women appearing as the final defenders of their territories highlights the conflicts between development, gender, and Nature. However, since I first published this essay, the picture has changed. After progressive failure to generate and implement alternatives to extractivist capitalism, Latin American feminism in its various forms has grown, joined forces, and entered every agenda, positioning itself as today's most powerful social movement with the greatest potential for change.

This essay exposes several examples of how ecofeminism constitutes an open and fertile platform for discussion and provides numerous tools that we should begin to consider in order to finally create societies that no longer float in false dreams of superiority, but are connected to the Earth, cherish this relationship, and walk with it.

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INDIGENOUS WOMEN: STORIES OF THE REPRODUCTION OF LIFE IN GUATEMALA. A REFLECTION FROM THE PERSPECTIVE OF SILVIA FEDERICI

Gladys Tzul Tzul

Source: *Bajo el Volcán*, vol. 15, no. 22
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Gladys Tzul Tzul is a Maya K'iche' woman and has a PhD in Sociology. She has worked as an expert witness in courts in Guatemala and Honduras in cases of communal law and its confrontation with the liberal state. She is the author of *Sistemas de Gobierno Comunal Indígena: Mujeres y tramas de parentesco en Chuimeq'ena'* (2016) and *Gobierno Comunal Indígena y Estado Guatemalteco. Algunas claves para comprender la tensa relación* (2018). Tzul Tzul was part of the Support Commission in the National Assembly of Maya, Garifuna, and Xinka Indigenous Authorities, where she participated in the process of constitutional reform to the justice sector (2016-2017). In 2018, she received the Voltaire Prize for Tolerance, International Understanding, and Respect for Difference from Potsdam University. In 2017, she was part of a research team that won the Berta Cáceres Award for research in Central America. Tzul Tzul has also collaborated with the Office of the United Nations High Commissioner for Human Rights as a trainer. She is a visiting professor at the Centro de Investigaciones Sociales y Antropológicas (CIESAS, Center for Social and Anthropological Research) in Mexico City and currently works for Comunidades Indígenas en Liderazgo (CIELO, Indigenous Communities in Leadership), researching the process of displacement and social organization of Indigenous communities in Los Angeles and New York.

In Homage

Doña Jovita Cardona was a girl from the Mam peoples who was raised on a coffee plantation in the department of San Marcos, Guatemala. From a young age, she oversaw the preparation of food for the workers, and as she did so, she listened to and joined in on conversations about the injustices that these families were fighting. When she was 12 years old, she went to Guatemala City to work as a domestic worker in a Spanish-speaking household where she was forced to labor the whole day without any time off and had to hygienize herself constantly because "she wasn't allowed prepare the food or touch anything in the house if she hadn't washed herself."

It was through Doña Jovita that I heard the stories one never hears at school or university. The experiences she described showed me how the racial-economic structure worked in a country like Guatemala and how that structure was crystalized in the bodies of Indigenous women. She also told me how, towards the end of the 1930s, families that worked on the estate rebelled against the foremen because they hadn't been paid the agreed day's wages. The workers decided to return to their homes, and the women who worked as domestic servants stopped making lunch and went home: "Not everyone left, but on that day, everything on the estate fell apart," she told me.

Though this event took place in San Marcos, it is undeniable that it happened—and still happens—throughout Latin America, where Indigenous women have taken on reproductive labor.[1] They hold together the lives of families on the estates, in houses in the capital city, as well as in their own communities.

Doña Jovita is my maternal grandmother. On February 15, she celebrated her 90th birthday, and it is in her honor that I'm writing this text. I want to thank her for having helped me learn the words, understand the feelings, and hear the accounts of Indigenous women, to analyze the racial-economic capitalist functioning of Guatemala. She, along with my mother and aunts, showed me the vital importance of organizing in the community life in which I grew up.

I begin this text with these words because they allow me to focus on one of the most radical theoretical constructions of the Italian thinker, Silvia Federici, which is to analyze the function of capital from the perspective of women—Indigenous women—; that is to say, from the perspective of reproductive labor. I emphasize here that the women are Indigenous, without intending to fix them within an isolated, transcendental category of identification. Rather, I am interested in exposing how, in societies that must organize themselves in a context in which racism functions as an economic-political machine, reproductive labor has a preponderant power over the lives and the bodies of Indigenous women. The

1 Silvia Federici used the term to encompass everything—both material and social—necessary for creating the conditions for living.

colonial relationships that were constructed from the Spanish invasion onwards established and hierarchized racial rules and privileges to the detriment of Indigenous women workers. For example, my grandmother told me how the contractor on the estate set a different price for the *naturales* (Indigenous women) and the *kaxlanes* (non-Indigenous women). An Indigenous woman wasn't paid because she was considered to be her husband's assistant, but the *kaxlana* woman was paid because she was considered a worker. "Why?" I asked my grandmother, and she replied, "Because we are *naturales*." Her answer enraged me.

When my grandmother was 22 years old, she married a K'iche' merchant from Totonicapán, who belonged to a network of families that sold cloth and spices. These Indigenous networks, which extended throughout most of Guatemala, traded on the south coast, in Las Verapaces, El Petén, Esquipulas, and in the capital. Don Pablo Andrés Tzul Lacán, my grandfather, belonged to and participated in the communal systems of governance in Totonicapán. In other words, he was part of these experiences and the powerful family networks that maintained and organized the land communally, forming systems of governance to manage and regulate the use of the land, water, and forests at a communal level. My grandmother moved to live with him and discovered other ways of organizing life, a system in which, once again, it was the women who managed all the reproductive labor: raising children, washing clothes, organizing collective planting and harvests, coordinating the festivities of weddings and the preparation of huge meals for funerals. My grandmother remembers long days planting trees and cleaning the springs.

The Earth is the material basis for the organization of life. My grandmother always emphasized and focused on the fact that the biggest difference between what she had experienced in her childhood and her later life was that, with my grandfather, they had land to cultivate—communal land. With joy in her eyes, she told me that this gave her a bit more time to graze the animals, as well as to embroider and weave: that is, she had time for reproductive labor.

Indeed, women lived on the land and made use of it, even though they were not able to participate in the collective decisions on the regulation and management of its common use. This is a fact that needs to be examined because our lives and the continuity of our collective projects, the struggle against capital, depends on reproductive labor and collective decision-making processes. I return to Silvia Federici's words when she says that if reproductive labor is undervalued and considered a private matter and women's responsibility, women will always have to confront capital and the state with less power than men and in situations of extreme economic and social vulnerability (Federici, 2013: 73).

Interwoven Stories

Among the Indigenous Peoples of Guatemala, stories of witches, midwives, and healers are told and woven together. There are stories of women who poisoned their employers' food and incited their companions and kin to rebel against the rule of domination on the estates. Women merchants, weavers, makers of alcohol, women who reforested entire jungles, who organized the collective sowing of seeds and harvesting, women who protected their sons during war, women who produced and continue to produce local knowledge and rebellions in the most creative and disruptive ways—these are the women who reproduce life. These are the women who are murdered during protests and criminalized today.

As Silvia Federici explains, women's bodies, their labor, their sexual and reproductive powers were placed under state control and turned into economic resources. Under this regime, the author writes, the sexual division of labor has been constantly renewed, and so the attacks on communal property and state intervention (instigated by the World Bank) in the reproduction of the workforce has had the objective of regulating birth rates and reducing the size of a population considered too demanding and undisciplined (Federici, 2011).

Today, communal lands in Guatemala are under attack from extractivist mining projects. The chart below shows the number of mining exploration and exploitation licenses granted. Almost every one of the licenses pertains to Indigenous common land in the western highlands and in Las Verapaces in the country's northeast. In these areas, community struggles have been reactivated with women playing a central role in defending the land and sabotaging mines.

List of mining exploration and exploitation licenses in Guatemala

	Exploration	Exploitation	Total
Construction material	4	113	117
Metallic minerals	75	32	107
Non-metallic minerals	7	137	144
TOTAL	86	282	368

Source: Ministry of Energy and Mining (MEM), retrieved from www.mem.gob.gt, July 19, 2013.

The political organization of common land has produced many extremely creative political strategies. In San Juan Sacatepéquez (Chimaltenango), the communities take turns to constantly guard the roads with community control posts to stop the army and the workers of a cement factory that intends to build on the land of 12 communities. In La Puya, women established various political narratives of struggle and organized religious services, rosaries, masses, and religious acts at the entrance to the place where the mining company wanted to excavate. They also organized collective meals and transportation to the site where a hydroelectric plant was to be built. The women took their paintings and sculptures of the Virgin and the saints and prayed there all night with their children and the whole community. In Barillas, Huehuetenango, women and men founded La Resistencia, a place where they take turns living and cooking, keeping watch over the land and thereby creating a narrative against the hydroelectric plants. Surrounding communities come together and coordinate activities with the communities that have taken up this struggle. For example, Santa Eulalia, Huehuetenango, and San Mateo Ixtatán closed the roads to stop the army going into Barillas. In Totonicapán and Nebaj, women and men organized a series of activities to discuss and develop a political discourse in large regional assemblies and through art festivals; such narratives give a common meaning to the fight against displacement from common land and against genocide.

The creativity and imagination employed are vast and complex, resulting in intriguing strategies, such as the women who organized to take down the electrical poles belonging to a mine. They came with their axes and chopped the poles down. They decided only older women should participate because they didn't have identity cards, which made it more difficult to bring formal charges against them.

Women's participation has been key largely because they know that what's at stake is the use of the water, the forests, the land, and subsistence farming—in short, the management of daily life. In light of these acts of resistance, a ferocious repression has been unleashed. This year alone, the legal system has handed down hundreds of warrants for the arrest of those who defend the lands, and hundreds of people who fight are being sentenced.

How are communal lands being taken over? Here are two examples of what is happening in Totonicapán.

In 2001, the World Bank recommended that the Guatemalan government increase fiscal and tax revenue, which led to an economic plan to introduce a new land tax that included communal lands. Just like the emphyteutic[2] census established in the 1830s, the objective of this tax is to create a register of land ownership and thereby force the dissolution of the common title. In the early 2000s, Totónicapan saw one of the largest uprisings, in which the entire town refused to pay the taxes and decided to block the roads. The government declared a state of emergency.

The second example took place on October 4, 2012, when the Guatemalan state killed six members of our community during an uprising against a constitutional attempt to declare communal lands part of the national territory, thereby annulling the systems of Indigenous communal government and legally establishing the dominance of the police and armed forces to act in accordance with stated national interests established by the president of the country. We clearly understand that declaring land as belonging to the nation eradicates the regime of common ownership under which we live; it establishes that there is only one nation, one way of organizing, and that our systems of government will also be declared illegal. We organized a protest that was repressed by the army, which killed six of our people and wounded more than 50 others. Women were central to organizing the marches. They took charge of feeding their children and husbands, sharing and exchanging food with the women and men who were protesting. They provided support for and looked after those who were wounded.

Another of the significant struggles undertaken by Indigenous women has been the fight against state violence both during and after Guatemala's civil war. It is worth mentioning Indigenous women's efforts to look for their sons, husbands, and other family members who were disappeared, massacred, and buried in hidden graves, a result of the war that left more than 300,000 dead. By 1980, there were 40,000 disappeared, and the women who declared themselves war widows organized themselves to claim the bodies of their husbands. They called themselves the Comité Nacional de Viudas de Guatemala (CONAVIGUA, National Committee of Widows of Guatemala), and they went to the army barracks to call for the return of their husbands. Later, they steadfastly demanded that their sons should not be forcibly recruited into the army. And today, they again take up their struggle against hydroelectric companies in areas where there are clandestine cemeteries. So, it has been women who have led the efforts to collectivize reproductive labor and protect one another from state violence.

Why think from the perspective of reproduction?

a) Because it places life at the center of political analysis. If we carry out our reflection from the various ways of managing and reproducing daily life, we have a wider perspective on our history, our struggles, and our strategies to plan, produce, and organize common existence. This enables a common critical-political way of working that casts doubt on those interpretations that see Indigenous women only as victims and claim that their actions are pre-political.

2 The emphyteutic census was a legal mechanism used to promote private land ownership. It established a nominal price for a determined portion of land, and the individual who committed to paying an annual 2-3% fee based on that stated value was given the use of the land. This mechanism has been in use since the 1830s.

b) Because the perspective of reproduction offers a necessary point of entry for understanding Indigenous politics. As Indigenous Peoples, we know from concrete experience that our existence and our fight against capitalism has been constructed from the common experience. We survive because we organize a system of communal government to manage, regulate, and govern the water, land, and forests. Our history is a long narrative of collective events that have developed political paths of resistance in which the material means of reproduction are central to the debate.

c) Because we urgently need to consider how and where Indigenous women are fighting in the heart of the systems of communal governance. If we live in social relationships that produce community, then we must seriously consider organizing and establishing ways in which responsibility and labor must be equally shared between women and men. Caregiving must not come at the cost of women's health. We must also establish ways in which we can participate fully, not only in the use of communal land, but also in the collective decision-making process, because this is where our continued existence (over the long term) is at stake.

d) Because it enables a more inclusive language. I leave this point as the last, but it is by no means the least important. Indigenous women had to name the world, relationships, and objects around them with words from the masculine Spanish language, which pretends to be universal. Yet, we were always uncomfortable because we felt that our struggles against oppression could not be expressed, neither in the language itself nor in the narratives of well-known events. However, this did not mean that we overlooked the fundamental matter of naming ourselves as we saw fit. Silvia Federici's words are good company in this process of explaining our struggles and our lives.

THE PHALLOCENE: REDEFINING THE ANTHROPOCENE FROM AN ECOFEMINIST PERSPECTIVE

La Danta LasCanta

Source: *Ecología Política*, No. 53 (2017): 26-33.

In early 2016, the government of Nicolás Maduro made its intention explicit to carry out a mining project called the Arco Minero del Orinoco (AMO, Orinoco Mining Arc), which opened 12 percent of Venezuela's territory for large-scale exploitation by at least 150 national and transnational companies. In one swift move and without reflection, the country went from oil rentier to mining rentier. La Danta LasCanta is a Venezuelan ecofeminist research and action group that was created in March 2016 in the context of multiple resistances and struggles against the AMO. Our group is guided by the ethical principle of collective and diverse production, organization, and presentation. We are scientists, academics, writers, artivists, and cyberfeminists who use multiple forms of struggle, not only against new extractivisms, but also against the many forms of patriarchal domination.

Key words: Phallocene, Anthropocene, Chthulucene, sexual equality, patriarchy

Introduction

The emergence of the concept of the Anthropocene signified an epistemological change of direction in earth sciences because, for the first time, human action was introduced as a geological force with a before and an after but that also inscribing a way of relating to nature that has created the current situation of the transgression of certain biophysical limits of the planet. However, recent discussions about the expedience or limitations of defining this new geological epoch are symptomatic of this still-insufficient term for the understanding of its constitutive factors.

Words like Capitalocene[1] and Chthulucene (Haraway, 2015) try to mask deficiencies but cannot avoid revealing others: the failure to question the subject of enunciation of the predominant way of thinking in the scientific dispositive and the dominant logic of modern times in which the feminine/body/emotions/nature are subordinated to the masculine/mind/reason/culture, with new forms of oppression of women and the current deterioration of ecosystems as direct consequences. These ways of thinking even reveal themselves in the creation of working groups on the Anthropocene: in 2014, the scientist Kate Raworth noticed the insignificant presence of women in these groups, so she proposed adopting the word Manthropocene as opposed to Anthropocene.

In this text, we consider it necessary to delve into the previously presented theoretical reflections on the current geological global epoch from the perspective of ecofeminism. To this end, we propose the concept of the Phallocene as a working hypothesis, since we consider this epoch to be based on a structural framework of unequal, hierarchical, oppressive, and destructive social relations that particularly affect women and the natural world, and that are a basic part of Western civilization. The contemporary extermination of the network of various ecosystems around the planet is a "natural" extension of the relationships of domination and the forms of violence characteristic of patriarchy.

1 Moore (2016) writes that this term emerged in 2009 during a conversation with Andreas Malm in Sweden.

Image 0
For the urgent installation of an ecofeminist utopia!
La Danta LasCanta

The Anthropocene and the Political Dimension of Conceptual Frameworks

The first direct antecedent of the idea of the Anthropocene was conceived in the context of the Second World War by Ukrainian geochemist Vladimir Vernadsky, who wrote about the impact of human activity on our surroundings. In his words:

> Mankind taken as a whole is becoming a mighty geological force. There arises the problem of the *reconstruction of the biosphere in the interests of freely thinking humanity as a single* totality. This new state of the biosphere, which we approach without noticing it, is the *noösphere* (Vernadsky, 2007 [1943]:187).[2]

In retrospect, the weight of scientific evidence revealed the global impact of activities of an anthropic origin, such as the increase in the concentration of greenhouse gases in the troposphere and consequent effect on global temperatures around the planet, the decrease in pH of the ocean's surfaces, and the thawing of the cryosphere, among other effects.

In 2000, the concept of the Anthropocene was established (Crutzen & Stoermer, 2000). Since then, one of the focal points of discussion has been where to situate the hands of the clock that show the beginning of this new geological epoch, which is why the working group of the Stratigraphy Commission of the Geological Society of London proposes archaeological and paleoclimatic evidence that give an idea of its origin, applying the same stratigraphic criteria used in establishing past geological epochs. The most notable evidence is the mass extinction of megafauna (10,000-50,000 years ago), the beginning of agriculture (11,000 years ago), extensive agriculture (8,000 years ago), the expansion of rice production (6,500 years ago), anthropogenic soil indicative of pre-Hispanic agriculture, such as *terra preta* (500-3,000 years ago), the colonization of the Americas (from 1492 to 1800), the Industrial Revolution (from 1760 to the present day), the detonation of nuclear weapons (from 1945 to the present day), and the presence of persistent industrial chemicals (from 1950 to the present day) (Zalasiewicz et al., 2008; Lewis & Maslin, 2015). This makes it clear just how difficult it is to assign a particular starting date to this new geological epoch.

Recent research complicates the matter further as it indicates that in the past 50 years, the planet has been the object of interventions unprecedented since the Holocene (11,700 years ago), a process known as "The Great Acceleration" (Steffen et al., 2015). We believe that one of the fundamental reasons for the controversy around pinpointing the beginning of our epoch is that the analysis has almost exclusively considered only biochemical evidence of planetary changes by the human species.

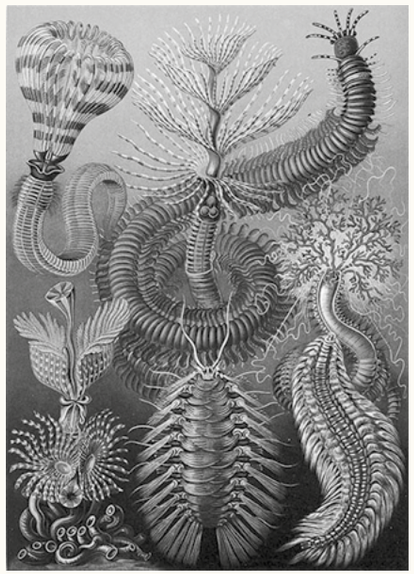
Analysis such as that undertaken by Fischer-Kowalski (2014) tries to fill the void by proposing a unit that measures the energetic metabolism based on a rate of human impact on the Earth. Despite the limitations of this analysis —given the Malthusian focus and the homogenization of the energy consumption per capita in the population— this study provides important information at a global scale because it attempts to locate chronologically the emergence of the greatest impacts on the Earth system since the beginning of the Holocene and ties it to the energy uses inherent in the means of production (means of survival, sociometabolic systems) throughout the history of humanity. Though this is a valuable contribution, we find it necessary to incorporate an analysis of social relations that might allow for an alternative explanation, complementary to Fischer-Kowalski's proposal.

An understanding of human action as the fundamental characteristic of this new geological epoch requires the inclusion of the perspective of social sciences (without neglecting the biochemical focus). It was for this reason that the concept of the Anthropocene began to be questioned. On the one hand, the concept is unable to explain the reasons for and particularities of the current crisis in the world's biosphere. On the other hand, it sets itself up as an obstacle to change the model of human dominance, as it maintains the illusory division between human beings and nature, underpinning an essentialist notion of our species, overplaying the effects of human activity on earth, and impeding the formulation of other possible futures (Crist, 2016).

2 Editor's note: Original English-language citation from W.I. Vernadsky, "The Biosphere and the Noösphere," *American Scientist*, Vol. 1, No. 1 (1945, January): 9. Accessed online at https://monoskop.org/images/5/59/Vernadsky_WI_1945_The_Biosphere_and_the_Noosphere.pdf

These and other reasons explain the emergence of a new term in 2009: the Capitalocene. This term does not represent a simple grafting of the capitalist system onto the arithmetic of geology, rather it attempts to understand how, since the middle of the 15th century, capitalism has organized nature and transformed it into Nature: a factor of production in which other human beings are included (people of color, most women, and White people who live in semi-colonial regions) (Moore, 2016: 91). Jason Moore explains that "the Capitalocene argument posits capitalism as a situated and multispecies world-ecology of capital, power, and re/production" (Moore, 2016:94).[3] He thus identifies the cause of the current biospheric crisis as the capitalist system and moves away from an abstract concept of human action—which is one of the main problems of the concept of the Anthropocene—towards a historical-spatial concept anchored in the specific discourses and practices of domination, relationships of exploitation, forms of extension of the regime of private property, unique examples of territorial power, colonialism, and new forms of knowledge that made it possible to put nature to work.

Image 1. *Chaetopoda*, *Sabella* Author: Ernst Haeckel (published as a lithograph and halftone in *Art Forms in Nature*, 1899).



3 Editor's note: Original English-language citation from Jason W. Moore, ed., *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism* (Oakland, CA: PM Press, 2016). Accessed online at http://napoletano.net/cursos/geomarx2018a/textos/Moore2016.pdf.

For its part, the concept of the Chthulucene proposed by Donna Haraway appears as an alternative, not only epistemologically but also gnoseologically and politically. This position is clear from the name itself and its pronunciation, unfolded between a lattice of languages: the artistic, the poetic, the scientific, and the language of militant politics, proposing a tentacular way of thinking and acting that goes beyond individualistic thinking and investigative methods. The idea is to place things into a sort of non-hierarchical plane (2016a, 2016b). Haraway uses the term Chthulucene to refer to the diverse tentacular forces and powers of the whole earth. In this concept, she includes the Naga, Gaia, Tangaroa, Terra, Haniyasu-hime, Mujer Araña, Pachamama, Oya, Gorgo, Raven, and A'akuluujjusi, among many others. These entities are some of the proper names of a sort of SF[4] unimaginable even for someone like H. P. Lovecraft.

Haraway (2015) bases her work on Anna Tsing's proposal (2015), arguing for the need to think more about the point of inflexion between the Holocene and the Anthropocene in terms of the disappearance of those refuges where ecosystems can rebuild themselves and where various species —including the human race— could find shelter from large-scale events like desertification (Haraway, 2015). Our work is to ensure that the Anthropocene, which she conceives as a limited event, is as short/slender as possible. In these times of the recurrent collapse of ecosystems, in which "the earth is full of refugees, human and not, without refuge" (Haraway, 2015: 160) we must think, relate, and act in combination with different lifeforms ("multispecies ecojustice," she calls it).[5] It is a call for us to change our way of thinking for a different symbiosis in which we relate to all species and, in a process similar to composting, reconstruct spaces of refuge in which to live and die well.

What do these concepts have in common? They emerged due to a sense of epistemological failure to account for the strength of the impact of human action on the Earth's system, the particularities of that footprint, and above all, what distinguishes the power, speed, and extension of the current changes compared to earlier epochs. All these concepts incorporate the political dimension into the field of geology from different positions, either implicitly or explicitly, because they necessarily evaluate the effects of our lifestyles and open a door onto the praxis that is shifting towards a different way of thinking, acting, and relating to one another and other living beings. So, why the Phallocene?

4 The term SF is used by Haraway to condense a web of meanings: string figures, scientific fact, science fiction, speculative fabulation, speculative feminism, and "so far."

5 Editor's note: Original English-language citation from Donna Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," *Environmental Humanities* 6, 1 (2015): 159–165. Accessed online at https://read.dukeupress.edu/environmental-humanities/article/6/1/159/8110/Anthropocene-Capitalocene-Plantationocene.

A New Horizon-Concept:[6] The Phallocene

The concept of the Anthropocene meant a huge step forward in understanding the specificity of the current geological epoch. However, this and other concepts that emerged out of this new area of research are inadequate. In the first place, they render invisible the leading role played by the persistent characteristic of most of the human ecosystems registered to date by anthropologists and archaeologists: domination over women. Secondly, they do not place sufficient emphasis on the "naturalization" of women nor on the endeavor to control nature.

Since the 1970s, ecofeminist theories[7] have been reflecting on the close link between the subordination of women and the destruction of nature. This reflection is sustained by scientific, epistemological, philosophical, theological, and economic research. These theoretical developments have been ignored by most of the scientists studying the Anthropocene—although not by those theorizing about the Capitalocene—probably because of latent sexism and antifeminism. Although ecofeminists have not, to date, made their way into the debates about the current geological epoch, it is undeniable that the theoretical corpus they have developed is fundamental to enriching the debate around this theme, which is why we have taken the initiative of delving into it ourselves.

In this regard, it is necessary to trace the origins of the Phallocene. The study of social organization prior to the agropastoral period indicate that 50 percent of the individuals in camps of hunter-gatherers are unrelated individuals or distant affinal kin and that the camps are fluid meta-groups (the members can move and exchange information) (Dyble et al., 2015). Also, even when all the members of a camp are actively trying to live with as many family members as possible, "within-group relatedness is reduced when both sexes have equal influence over camp composition" (Dyble et al., 2015).[8]

This indicates that, when there is no accumulation of wealth, couples move freely between camps and share interests with kin and affinal kin, which allows them to maintain cooperation without the need for a more complex social system. This strategy is socially successful, considering that resources are obtained equally by all members of the group, since there is no control over the energy available from food in the ecosystem, as Fischer-Kowalski notes (2014). Thus, social relations of equal couplings emerge, generating a form of multilocal rather than patrilocal relationship groupings (Dyble et al., 2015).

6 We use the expression "horizon-concept" from the latest work by the Argentinian sociologist Maristella Svampa in *Debates latinoamericanos: Indianismo, desarrollo, dependencia y populismo* (see Martínez Alier, 2016, for a summary).

7 With representatives such as Rosemary Radford Ruether, Mary Daly, Susan Griffin, and Carolyn Merchant, to mention only a few.

8 Editor's note: Original English-language citation from Dyble et al. (2015), 796.

The findings of Dyble and colleagues (2015) indicate that pairing and increased sexual equality in the future of the human species could have a transformative effect on social human organization. So, these relationships of pairings with high rates of inter-group interactions in these societies would have promoted cultural change favoring the transfer of cooperative practices for the acquisition of resources and egalitarian modes of relating (Hill et al., 2014; Chaudary et al., 2016). Supporting evidence is found in the low levels of polygyny in hunter-gatherer societies compared to agropastoral societies (Vinicius et al., 2014).

Our working hypothesis is based on the assertion that the Western model of civilization— predominant on the planet and responsible for the current crisis in the biosphere—has been characterized since its inception, appearing by gender inequality that appears in human society during the transition to the agricultural and pastoral way of life (Martin & Voorhies, 1975). Through land ownership and better access to animal proteins, a social strategy establishes itself that encourages the accumulation of wealth. Out of this comes sexual inheritance, a linear system conducive to gender inequality and the concept of the private ownership of land and bodies (Lerner, 1990; Dyble et al., 2015). This is the origin of the establishment of patriarchal society. Agropastoral social organization began in the Neolithic period (8,000 years ago), and 500 years ago, it already represented the totality of social organization for *Homo sapiens* (Fischer-Kowalski et al., 2014).

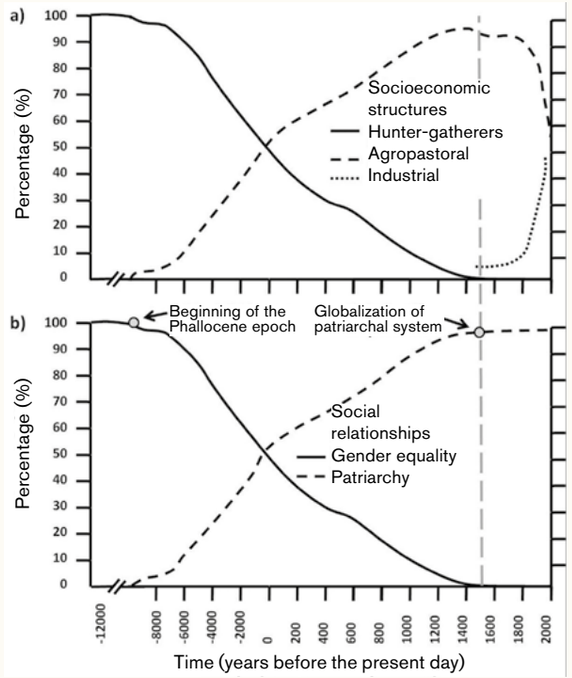
Gerda Lerner (1990 [1986]) writes about the establishment of patriarchal society and its direct relationship with agriculture in her book *The Creation of Patriarchy*. She posits that:

> The sexuality of women, consisting of their sexual and their reproductive capacities and services, was commodified even prior to the creation of Western civilization. The development of agriculture in the Neolithic period fostered the inter-tribal "exchange of women," not only as a means of avoiding incessant warfare by the cementing of marriage alliances but also because societies with more women could produce more children. In contrast to the economic needs of hunting/gathering societies, agriculturists could use the labor of children to increase production and accumulate surpluses. Men-as-a-group had rights over women which women-as-a-group did not have over men. Women themselves became a resource, acquired by men much as the land was acquired by men.[9]

9 Editor's note: Original English-language citation from Gerda Lerner, *The Creation of the Patriarchy* (New York: Oxford University Press, 1986), 212.

With this new agropastoral social organization, the metabolic rate[10] was eight times higher than that of hunter-gatherer societies, which indicates a substantial increase in access to food energy (Fischer-Kowalski et al., 2014), based on more demanding work under conditions of gender imbalance. We propose that at this moment, a new geological epoch firmly anchored in unequal relations began: the Phallocene (Graphic 1).

Graphic 1: Chronological representation of the beginnings of the Phallocene epoch correlated with a) socioeconomic structures and b) social relationships over the past 11,700 years.[11] Source: Adapted from Fischer-Kowalski et al., 2014.



10 Domestic consumption of energy per capita per year, which includes the "technical" primary energy such as wood, carbon, etc., as well as the biomass used as food and domestic animals or as prime material.

11 Since 1500, patriarchy has encompassed almost every form of relationship in global human society, with a 100-percent agropastoral socioeconomic structure. Although the processes of industrialization changed the global socioeconomic structure, patriarchal relations remained intact.

If we decide to chronologically locate the origins of Western patriarchy at the time of the rise of agropastoral societies, then the hands of the clock of this geological epoch far precede the event proposed for the Anthropocene and Capitalocene. But our proposed event is not based on any fundamental material evidence, nor on the impact of the human footprint on ecosystems (although evident), rather, it is a symbolic change in which gender difference is identified in a system of social relations of masculine domination and control. Although this domination is sometimes enforced through violence, its continuity over time is enabled by a concept of women that perceives them purely in relation to men and to nature.

Domination over women, a phenomenon contemporary to the emergence of agriculture, was the model on which the oppression of other groups of humans was based and, by extension, the oppression of all living beings. In the West—because it is Western modernity that is killing us (Escobar, 2016a), which is not to say that non-Western culture is lacking in oppression—the devaluation of and the control over women's bodies, as well as their connection to nature, not only served to diminish women, but also other social and ethnic groups. Much later, these concepts also nourished the so-called Scientific Revolution because they maintained the theories and methods designed to "penetrate" the secrets of nature, conceived from that moment on as an object. Our analysis suggests that the root of the current relationships of oppression and today's crisis in the Earth system is based on the subordination of women. What's more, these relationships of domination-destruction have affected the chronological dimension: in the Phallocene, patriarchal time (historical time) has taken over and eroded geological time. This is clear in the colossal impact of the current model of destruction that we call capitalist patriarchy.

We are not proposing a utopian society of hunter-gatherers living quietly in harmony with all living beings. What we propose is that we should *think*, as Haraway suggests, referencing Virginia Woolf. The very process of thinking begins by naming and making visible the invisible. Which is why we argue that the word *Phallocene* is more appropriate than the word *Patriocene*. Using the term *phallo* does not signal an inevitable slide towards a biological fact, rather it is the symbol of the translation of gender inequality. In this sense, it makes evident that any alternative proposal to our mode of annihilation (femicide-ethnocide-ecocide-geocide) requires its absence.

Conclusion

Concepts are attempts to introduce into the symbolic order an aspect indistinct from the environment; they create a region of reality that didn't exist before. Therefore, they allow us to see something new. This process of realizing something that we had previously not been able to perceive inevitably focuses scientific, academic, and political praxis.

Our proposal of the Phallocene as a working hypothesis open to discussion stands out for four reasons: 1) it rejects the observational "point zero" from which the concept of the Anthropocene is formulated and the narrative that emanates from it: supposing that humanity and only humanity is responsible for the huge changes excludes other keys for interpretation and explanation; 2) it complements the contributions of the Capitalocene and Chthulucene as it expands the horizon of research and action that is outlined by refocusing the gaze to that of an ecofeminist perspective; 3) it encourages the convergence of analysis between natural sciences and social sciences without excluding the initiation of dialogue with other forms of knowledge and opens the possibility of a (feminist) ecology of knowledge, timeframes, recognition, multiple levels of analysis, and the criteria of non-capitalist productivity (Santos, 2009); and 4) it affirms that domination over nature and domination over women are two sides of the same coin,[12] so the transition to other possible worlds and other possible futures must boldly challenge the ontoepistemological formation anchored in the current dominant form of patriarchal and capitalist modernity (Escobar, 2016b).

12 "Patriarchy does to our bodies what the extractivist and capitalist economies do to our lands" declared the women's organizations that took part in the XIII Encuentro Feminista de América Latina y el Caribe (13th Latin American and Caribbean Feminist Meeting) held in Peru in November 2014.

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PATRIARCHY AND RADICAL FEMINISM

Ximena Bedregal

Source: Personal archive of Ximena Bedregal (unpublished).

Ximena Bedregal Sáez, daughter of Victoria and granddaughter of Elena, is a Chilean/Bolivian/Mexican writer, activist, and feminist theorist. Although she defines herself as a holistic feminist, Bedregal Sáez belongs to the school of autonomous-radical feminism and her thinking is very close to the feminism of difference. Academically, she is an architect specializing in bioarchitecture, as well as a photographer, video artist, professor, editor, gardener, bookbinder and designer, and creator of the first feminist eco-village in the continent: Femterra. Bedregal Sáez was the founder and director of the Latin American feminist magazine *La correa feminista*, an iconic autonomous feminist publication in the Spanish-speaking world; she later founded the feminist publishing house of the same name. For 13 years, she designed, created, and maintained the first multimedia feminist website on the Internet called *Creatividad feminista*, a training space for many women of the new generations of feminists. Bedregal Sáez has published countless articles in various magazines and two books: *Hilos, nudos y colores en la lucha contra la violencia hacia las mujeres* (1992) and *Ética y feminismo* (1996).

I'll begin by making a statement. For me, no thought is more critical than that which is born out of a clearly radical feminism. Radical feminism is the only critique with the potential to unravel the depths of the construction of the real. To completely undress the macroculture that we inhabit and that inhabits us.

All academic rhetoric about critical thinking, about the elements necessary to evaluate and scientifically prove the consistency of a variety of ways of reasoning, with their corollary philosophical discourses about what is true and what is false etc., etc., etc., is—in my opinion—hollow and useless for women.

After this statement, I will now endeavor to develop why I am convinced that feminism is the most critical practice and thinking that exists.

In the first place, for me, feminism isn't a struggle for rights, requesting the virile master and his institutions to bestow upon us similar benefits that masculinity enjoys, as doing so would simply accept the masculine political paradigm without questioning it. As Luisa Muraro writes, in homologation there is social promotion, but not liberty.[1]

By analyzing the situation of women around the world, feminism has unraveled the logics that construct our reality as women and, consequently, its profound relationship with the construction of the world and the entire macroculture.

This is fundamental because it indicates that the understanding of our concrete existence as women contains within it the capacity to read the world, to understand how and under which logic this culture was shaped. And not any culture, but specifically *this* culture: one that is predatory, unjust, bound rather to war and death than to the defense of life, bound to control and domination, not freedom and empathy.

In the extent to which feminism understands this logic and unveils not only our contradiction with it, the subordination of our existences, and the appropriation of our lives and creations, but also and principally our survival within it, the way we evade so much misery imposed on our lives, the loopholes of resistance, the experiences of freedom and creation, feminism also discovers the constant and innumerable acts of female freedom that have sustained us and can therefore, from this perspective, imagine alternative worlds in their entirety.

This logic I refer to is what feminism calls the patriarchal logic; its social construction is called the patriarchy, and it represents the hegemonic macroculture of the past 2,500 years on this planet.

This logic has, among others, three basic characteristics: it is dichotomous, hierarchical, and projective.

1 Editor's note: See Luisa Muraro, "Enseñar la Libertad," *DUODA Revista de Estudios Feministas*, no. 26 (2004): 77-83.

It is **dichotomous** because it is a logic of thinking that divides, that doesn't see articulation between elements and, therefore, divides them into opposing pairs. It builds a sense of itself based on the principle of opposition. For example, mind/body, man/nature, subject/object, rationality/intuition, theory/practice, nature/culture, *ad infinitum*.

It is **hierarchical** because these pairs of opposing elements are always read as being in hierarchical relation to one another; it is a dichotomous hierarchy. One of the poles always has a value that is superior to the other and will, therefore, be the dominant one. For example:

In the opposition between mind/body, the mind is superior and must dominate the body.

In the opposition between reason/emotion or reason/intuition, it is always reason that is deemed to control the emotions because emotion and intuition are seen as confused and irrational, dangerous and without limits, to be controlled by the logic of reason that also proposes itself as the measure of truth.

In the opposition between culture/nature, culture dominates savage nature; culture is superior, putting limits on the brutal and indomitable Mother Nature.

In the opposition subject/object, the subject is hierarchically superior to and dominates the object. In man/woman, the man must dominate, and if we take the examples above to their logical conclusion, so much can be explained: the male subject is called upon to make culture in order to dominate the woman and by appropriating reason, he dominates irrational nature.

Man is the subject, destined to make a dominating culture, transforming, and controlling the object that is nature, Mother Earth, and by extension, all the mothers on the Earth.

In this logic, there is no room for two or more truths. There is only one truth, the dominant truth, which imposes itself and is the basis for a culture of domination and power. If there can only be one truth, then everything else must assimilate itself, must submit itself to the truth that imposes itself, must disappear. It is the logic of one/zero. Everything that is not one, that is not equal to one, simply is not; it is zero.

This is the basis for wars, and our culture is one of war; we are constantly at war with something. Not only symbolically, as in the war between the sexes or the war against famine. We live in a culture that allocates nearly one half of its material wealth, its intelligence, and its production to war; the backbone of our economy is the production of war. If we stop making weapons and instruments of war, the global economy falls apart, and so-called scientific development stalls.

This is an absolutist logic, in which truth cannot be both truth and falsehood at the same time; it cannot be one thing *and* another. It must always be one thing *or* another. There is no possible third way. If you're not with me, you're against me. That is the foundation for the exclusion, cancellation, and domination of the Other. It is the foundation for conquest, for colonialism, for the imposition of a single truth that impedes dialogue. Because dialogue is only possible between those who recognize similarities in one another, but where only one truth is possible, there is no possibility for similarity.

In addition to hierarchy and dichotomy, there is a logic of **projection**. This is the search for and discovery of a final object/goal; it projects a challenger and submits itself to that challenge. Its mandate is to make history. It is related to time, but not to space, which is merely a thing, an object to dominate. The here and now doesn't exist in and of itself, and it only has meaning insofar as it is progressing on the path towards the object/goal/challenge.

In this regard, the here, the Earth, home, reproduction, care, nature, the present, are all feminine; the public sphere, production, construction of culture, the historical project, and history, are all masculine.

This vision that was born in Greece expresses itself fully formed in the Aristotelian vision linking a good life to the city. The ideal is the citizen, the *civis,* hence the concept of civilization as opposed to agriculture, forests, fields, and nature. The city equals culture, and citizens make culture. And in ancient Greece, only free men and landowners could be citizens. Women were not citizens, nor were the "Others," the non-Greeks, slaves, rural workers.

This Greek vision consolidates and strengthens itself with Judeo-Christian monotheism, with the invention of a God who is singular and male: He who creates nature and orders man to dominate all the beasts who meander through it. In this process, God creates a woman to accompany the man and to support him in his tasks of domination.

What does this divine order mean?

In the first place, it means that the dichotomy of culture/nature, which was established by the ancient Greeks, now becomes denaturing, meaning that now it not only hierarchizes the opposing poles of culture and nature, but also has a mythical-religious justification for definitively separating humanity from Mother Earth, a clear objective of the divine mandate of domination.

Life puts itself at the disposal of the promise, of the fulfillment of a mandate, of the realization of the final objective, the definition of a history. The promise is not the possibility of a good life, but rather because of the woman's weakness for the tempting apple, it is suffering, and by the sweat of the brow, it is the fulfillment of the divine mandate of the domination over nature so that, by obeying God, man is allowed to partake in nature's creation. By undertaking God's work, man becomes part of that deity. That is his privilege.

Secondly, this divine order means taking away man's responsibility for the domination over nature and the result of that control, given that he is merely undertaking God's work.

In the patriarchal imaginary, to dominate is to make history. Patriarchal history is a continuum of domination, beginning with the domination over nature,

followed by the domination over everything that is Other, different, and not considered equal to man in this hierarchy.

These paradigms in turn develop a patriarchal history of science populated by Descartes, Newton, etc., that reaches its logical conclusion in the industrial culture that developed between the Renaissance and modern times. The individual (man) separates himself from nature and places himself at the center of everything. Reason gives him the possibility of real and total control over everything. Its main expression? Rationalism, positivism, colonialism, 19th century science, the brutal industrialization of the 20th century, and now, transhumanism with the hybridization of man and machine, the creation of life outside of the female body, and the psychic, chemical, and medical manipulation of bodies to adapt identity to one's desire.

The basic condition for this development was that all irrational knowledge was not only silenced or devalued, but burnt at the stake by the burning of the bodies of the wise women who had alternative forms of knowledge, of sympathy synergetic with the mysteries of nature and the cosmos. The leap of science was made based on the burning of 8 million murdered witches, and the leap of scientific reason in the era of transhumanism is based on the eradication of women's bodies.

The 19th century focused on the notion of "progress," material progress based on technocratic control of the natural and social environment. The First World War, the Great Depression, and the rise of fascism sank this ideology. The crisis of progress is the theme of the first 30 years of the 20th century.

From then on, U.S. president Harry Truman introduced the concept of development and undertook the most important push in history for the development of technology and weapons. He referred to the atomic bombs exploding over Hiroshima and Nagasaki as "History's greatest achievement." Indeed, the A-bomb showed how far development could go. "Development" is a concept that is taken today as universal and unquestionable; it is the valid universal paradigm, the One in a moment of immense technocratic advancement at a high level to gain even greater control of the natural and social environment.

Its consequences were the degradation of the planet, growing poverty versus unlimited acquisition, pollution, weapons, the abandonment of rural life and the unstoppable growth of cities, the loss of the meaning of existence, new diseases, climate change, individualism, and a long, sad list of etceteras.

The revolutionary and socialist side of patriarchy doesn't do much to change things. It is merely state control of the economy as opposed to the free market. "Progress" is called intensive industrialization, and the results are the same: intensive production of material goods, indiscriminate and unlimited exploitation of nature, ecological devastation, the limitless growth of war technology, etcetera.

In short, whether it has a socialist or a capitalist face, the universalization of industrial development has imposed itself on the face of the Earth as the hegemonic model. Promethean productivity that—along with genetic manipulation, the creation of cyborgs and highly technological robots, the extensive use of the airwaves for communication, social media that reaches everyone and seemingly calculates everything, the manipulation of the body at will—has already turned man into the God who gave him the initial mandate to continue and conclude his work, without taking into account the fact that six out of ten people, most of them women (obviously) live in poverty, far removed from this development.

The global economy expanding now on its own dynamic is not even based on industrial processes, but on speculation and technical finance, as well as the balancing acts that allow economic networks of powerful economies to behave like perpetrators of organized crime. Economy is no longer the sum of ownership and real debts, but rather a rational game of mathematical (and macroeconomic) figures divorced from reality and the lives of people that is somehow nevertheless "scientific," the product of actuarial science and the mathematics of economic processes alone.

This brief synthesis of the characteristics of patriarchal logic shows us that this model of the world's construction is a complex and all-devouring system that does not coincide with the logic of life. We call it patriarchal logic because it generates itself and grows through the experience of the masculine body whose transcendence is not linked to giving life, to nourishing or caring for it, nor is it linked to the Earth, which—like the bodies of women—is in a perpetual state of giving, nourishing, and continuing life. Patriarchal logic seeks to symbolize life through reason, managing it through the deceit of divisive manipulation and by sublimating it through the creation of products that position patriarchy as the creator of, if not life, then at least culture. The culture of control, of domination, of the conquest of life. It is incompatible with people's freedom. It gives rise to the obsessive need to control our bodies, masculinity's need to be the master of our thinking, to construct the world, and thereby eradicate Otherness and diversity in order to establish himself as the single, universal One. The universal One of contemporary patriarchy that every day imposes with greater clarity this articulation of the One/Only entity able to control the power of war (the weapons industry), the economy (the banks and huge financial institutions), nature (the supranational medical/chemical industries), and technology (the cyber industry and communication technology).

The radical nature of feminist thought comes from being based on women's experiences. Unlike other logics it is able to consider, read, unravel, and visualize the patriarchal hierarchy and its constructed reality, based not only on the act of thinking as an abstract exercise removed or separate from the bodily experience and even sincere feeling, but on the impossibility of a practical politics linked to concrete corporality. There are many systems of thought that are partially critical of the patriarchal system, but as they are based on that very logic, they cannot see the totality of the system they criticize.

Feminism is also radical because—even if women are part of humanity that is subordinated, controlled, violated, and bereft within patriarchy—throughout history, they have maintained spaces and practices of rebellion in the folds and intersections of history, autonomous and free at the margins of the prevailing power of each moment, hidden and rendered invisible by the patriarchy. The recuperation of these experiences, added to the understanding of these logics, is a tremendous contribution to paving the way for the ideation and construction of other possible worlds.

Finally, in contrast to traditional masculine politics that projects worlds, predefines them, and makes politics a construction of strength for carrying out its tactics and strategies, the radicality of feminist politics is in the construction of other worlds through the practice of being in relation to something, primarily in relationships among women because, as Lia Cigarini writes, it is in this relation to others that women find connection, exchange, and symbolic value that enables us to fully inhabit the world.[2]

Female freedom is freedom in relation to an Other; it isn't individualist. Its practice teaches us that building a society is an act that is concretely relational and doesn't allow for the projection of preconceived ideas of existence for each individual, but rather encourages the realization of one's own desire. That the political is what builds societies out of unique, free entities that assume complete dominion over themselves, fully and honestly, giving a practical, material, and symbolic meaning to the experience and exercise of building a daily existence with other women. And then after that—why not?—with men, as well.

2 Editor's note: See Lia Cigarini, "Libertad femenina y norma," *DUODA. Revista de Estudios Feministas* no. 8 (1995): 85-107; 88.

REBELLION IS WOVEN BETWEEN THE SACRED AND THE PROFANE: LATIN AMERICAN FEMINIST ART AND THE POPULAR WORLD

Julia Antivilo

Source: From the third chapter of "*ENTRE LO SAGRADO Y LO PROFANO SE TEJEN REBELDÍAS*" ARTE FEMINISTA LATINOAMERICANO. MÉXICO. 1970-1980 (Rebellion Is Woven Between the Sacred and the Profane: Latin American Feminist Art. Mexico. 1970-1980). Thesis for a Master's Degree in Latin American Studies, Universidad de Chile, Faculty of Philosophy and Humanities, Center for Latin American Cultural Studies, 2006, 73-91.

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Feminist artists from Latin America reveal all the cultural hybridity of the region in their work, imbuing a particular nuance to their aesthetic and political propositions that are crowned with the powerful acts and courage of their visual proposals. We understand hybridity, as described by Néstor García Canclini,[1] not through the limiting racial definition of miscegenation, but rather as a process of hybridization, of intercultural mix that includes modern forms of hybridization that better respond to syncretism, which almost always refers to the fusion of religions or traditional symbolic movements. In 2001, García Canclini redefined the concept as "sociocultural processes in which discrete structures of practices that existed separately combine to generate new structures, objects, and practices."[2] He also explains what he means by discrete structures, recognizing them as cultural products that are the result of processes of hybridization. He uses the example of the word *Spanglish*, showing how this hybrid word is the product of two other hybrids (English and Spanish) that are born out of Latin, Arabic, pre-Columbian languages, etc.

In general, little has been written about art and feminism, and what there is has mainly been produced in Europe and the United States. These studies tend not to consider or develop the relationship between feminine-feminist artistic production and popular art/culture. Despite the lack of literature on the subject, in *En busca de las diablas. Sobre arte popular y género*[3], Eli Bartra writes in her introduction that having spent years searching in vain for a book about the relationship between popular art and women, she finally decided to write it herself. In her book, she proposes several hypotheses as to why there has been so little research in this field. One possible reason she proposes is that the researchers—male and female—in developed countries do not place popular art within the canon of the History of Art. Or, she suggests, it could be that feminist historiography is sidelined because "it is assumed that popular art is anonymous, and therefore, it is very difficult, if not impossible, to attribute to an artist, so we can't know where the women are."[4] In my opinion, this assertion could be key, given that invisibility and collaboration links women to popular traditions by similarity of situation and experience.

For Bartra, another explanation could be the fact that there is no "really structured, and therefore androcentric, history of popular art as there is for the history of elite art, so there is less to be dismantled [...] Or perhaps because there

1 See Néstor García Canclini, *Culturas Híbridas. Estrategias para entrar y salir de la modernidad.* Ed. Grijalbo, Mexico, 1989, p. 15. The definition is also given in the introduction to the 2001 edition, p. III.

2 Ibid.

3 Eli Bartra, *En busca de las diablas. Sobre arte popular y género.* Ed. Tava, Universidad Autónoma Metropolitana, Faculty of Social Sciences and Humanities, Xochimilco Department, Mexico, 1994.

4 Ibid., Introduction.

is not such a wealth of popular art in developed countries as in underdeveloped countries."[5]

Searching for a reason why little has been written about a particular subject might seem like an unrewarding activity, but in this case, it reveals some of the work that needs to be done with a feminist or gender-based perspective. Indeed, few texts address popular art and gender. We can see something similar in the relationship between the production of feminist art and the production of popular art. As a result, the present study aims to contribute to the analysis of this relationship.

Who produces popular art? To answer this question, it is first necessary to define what popular art is. For art critic Marta Traba, popular art integrates craftsmanship, folklore, and primitive painting.[6] According to Bartra,[7] crafts and popular art are two different things, and while she recognizes that all popular art is craft, she suggests that not all craft is popular art. Bartra argues that the difference lies in the fact that craftwork relies on serial production and manual skill; the objects have an immediate practical function, and they tend to be elaborated collectively and in multiple examples. Popular art, on the other hand, is more personal and therefore unique and imaginative. I personally incline toward the definition Traba offers, rather than that of Bartra, as the latter, in my opinion, appears to devalue the act of collaborative creation. I think it is also difficult to assume that something handmade can be exactly repeated, even though the same object is made several times and in series, as she writes, especially if there are many hands involved in the making. I would also add that the emphasis placed on how an object of this art is made, rather than the content of the object, is part of the tangled concept of popular culture that it is important to unravel.

Popular art is the creation of the populace—a statement that might seem somewhat obvious. But who makes up the populace? According to Ana Rojo, it is a heterogenous group that "is composed of those who have a subordinate position in the various existing and polymorphous power dynamics."[8] But if that is the popular subject, then women—as a subordinate social group—should all be popular subjects. We know this is clearly not the case—not all marginalized and oppressed people are from the popular classes. While one can indeed posit that in the main, popular culture is born out of the disadvantaged sectors of society—the so-called "lower classes"—it cannot be said that popular culture is necessarily born exclusively out of this stratum, given that what is defined as popular is more complex.

5 Ibid., p. 10.

6 See Marta Traba, "Relaciones actuales entre arte popular y arte culto," presentation given at *La dicotomía entre arte culto y arte popular. Coloquio Internacional de Zacatecas*, Mexico, UNAM, 1979, p. 62.

7 Eli Bartra, *En busca de las diablas,* op. cit.

8 Ana Rojo, *Mujer y política*. Ediciones del Departamento Ecuménico de Investigaciones, Costa Rica, 1985, p. 21.

Néstor García Canclini[9] enriches the debate to demystify and identify current ideas of the popular, raising various points that seem to me worth addressing, given that we can no longer relate the popular exclusively with Old World traditions. He writes that rural and traditional cultures no longer represent most of the popular culture, given that since the 1970s, between 60 and 70 percent of the Latin American population has lived in cities. In addition, life in rural areas is primarily experienced in response to demands from the urban areas, for example, through tourism. But on the other hand, modern life has not suppressed popular culture; studies have shown that it has grown and transformed in response to the need of the market to include traditionally symbolic structures and goods in the circuits of mass communication to reach out to the sectors of popular society least integrated into modern life. Likewise, because it is impossible to incorporate the entire population into industrial production, the political systems might take an interest in folklore to validate their hegemony and legitimacy. Another reason could be that in many popular areas, cultural production is a necessary means of economic survival.

Popular culture is not confined to the production of objects. Anthropological and sociological studies of culture situate the making of popular objects within the economic conditions of production and consumption. So not even popular culture is perceived as an authoritative norm or a static and immutable force, but rather as a continuum based on the previous experiences of a group responding to and linking itself to its social context.[10] Instead of a collection of objects and objectivized customs, tradition is perceived as "a mechanism of selection, of invention even, projected onto the past in order to legitimize the present."[11] Given this explanation, popular art is not a collection of objects, nor a repertory of customs of fixed practices, but rather a dynamic dramatization of the experience. Therefore, "if rituals are the means of control whereby every society manifests what it desires to claim as perennial or eternal, even the most durable aspects of popular life manifest themselves better than in the inert objects brought to life by

9 See *Culturas Híbridas,* op. cit., p. 191-221. A discussion born out of the American Folklore Charter which was drafted by specialists and approved by the OAS in 1970. The document states: "Folklore consists of a combination of traditional cultural assets and entities, primarily local and oral, always unalterable. Changes are due to external factors, so it is recommended that public servants and specialists are educated so as not to 'corrupt folklore' and to learn 'which traditions need no changing.' Understood like this, folklore constitutes the essence of a country's identity and heritage. Progress and modern means of communication, by accelerating 'the process of erosion of folklore,' undermine heritage and endanger the identity of the American peoples." (Ed. Note: Our translation.)

10 Marthe Blanche, "Folclore y cultura popular," *Revista de Investigaciones Folclóricas,* Institute of Anthropological Sciences, Universidad de Buenos Aires, No. 3, December 1988, cited in Néstor García Canclini, *Culturas Híbridas,* op. cit., p. 204.

11 Idem.

ceremony."[12] In this sense, the work of Cuban artist Ana Mendieta is significant in that she situates much of her work in the context of rituals and ceremonies, reviving African American culture.

Nor is popular art the monopoly of the popular sectors of society. As García Canclini suggests, the concept of *folk* as social practices and processes of communication, dismantles the naturalizing idea relating certain cultural products to certain fixed social groups. This assertion becomes self-evident when we see in the evolution of traditional festivities and the production and sale of craftwork that these objects are not produced exclusively by Indigenous groups, or even by sectors of the rural population, but are produced under the auspices of ministries of culture and commerce, private foundations, soft drink companies, and radio and television stations.[13]

Finally, García Canclini observes that popular art is not experienced by the popular sectors of society as a melancholy expression of their traditions; many of the subordinated ritual practices apparently dedicated to reproducing traditional order disrupt it through humor. Quoting Roberto Da Matta,[14] García Canclini recognizes that in carnivals, "there is movement between a reaffirmation of the hegemonic traditions and the parody that subverts them because the explosion of the illicit is limited to a short, defined period of time, after which the established social order is reinstated."[15] It is in this last point that Latin American feminist art has paid attention to limiting and/or parodying social and cultural rituals, making this situation more dynamic, as we will later examine with *Tlacuilas y Retrateras*.

In synthesis, we can assert that the popular establishes itself in hybrid and complex processes, using elements originating from a diversity of classes and nations as signs of identification. Therefore, what we identify as popular or belonging to popular culture –such as a theme or something specific that Latin American feminist artists develop—is a profound and meaningful representation of the artists relating to their critical experiences in Latin American societies. A clear example is the well-known photographic work of Lourdes Grobet with her long standing project recording rural theatre and her portraiture of the world of Mexican wrestling.[16]

Like the work of other Latin American feminist artists, Grobet's artistic production synthesizes the hypothesis of this study: that Latin American feminist artists revive, reinvent, and re-signify the popular world in their works. Like an anthropologist, this artist records ritual in the popular urban world of wrestling that reflects the vast hybridity of Latin America. Grobet came to wrestling through a family passion for sport and the culture of the body.[17] She writes that her father forbade her from going to wrestling matches, saying that it was only for men: "I'd promised myself that I wouldn't take pictures of Indians or anything folkloric, but when I started to photograph the wrestlers, I realized that they were Indigenous men and women projected onto the city; I discovered a deeper side of Mexico that interested me. My experience with the women wrestlers broadened my concept of the world of the feminine and women's subordination in the patriarchal world."[18] The photographer's last comment is highly significant, given that the women wrestlers are forbidden from wrestling in the main rings of the Mexican wrestling circuit. They are only allowed to wrestle in the peripheral rings. Grobet found that, as opposed to a folkloric portrait, what she wanted to portray were the images of urban Indigenous men and women with their new masks in the performance of their modern rituals.

Grobet's photos of wrestling are testaments of the popular Mexican world that vibrates with this *kitsch* sport and spectacle. Her images portray the dazzling aesthetic of this world with great respect. Carlos Monsiváis writes that the wrestling portrayed by this photographer is the resurrection of the flesh in seven colors, that wrestling reinvents the Guerra Florida.[19] The world that she reveals in her photographs is popular because "the form doesn't try to cheat the content (the style is the message), because in their metamorphosis the fans become the Roman tribune of the circus, because the hopes of the masses belong to everyone and no one, because the clothes neither flatter nor disappoint, because the unexpected upsets are meat for raucous after-dinner chatter, because you can be an idol without style but not without swing. For Lourdes Grobet, the popular [...] is what consumer society neither dilutes nor assimilates. The popular is a wall made from holes with ads plastered all over it [...]. It isn't, I should make clear, the opposite of the aristocratic or the bourgeois, but rather a reply to the plan of erasure, as something that is never included in the solemn acts and

12 Idem.
13 Ibid., p. 205.
14 Roberto Da Matta, *Carnavais, malandros e heroes*. Ed. Zahar, Rio de Janeiro, 1980, p. 99, cited in Néstor García Canclini, op. cit., p. 206.
15 Idem.
16 See Lourdes Grobet, *Espectacular de Lucha Libre*. Ed. Trilce, CONACULTA, México, 2005.

17 Her father Ernesto Grobet was a national cycling champion and founder of the Federación Mexicana de Ciclismo (Mexican Federation of Cycling).
18 Lourdes Grobet didn't make it to the Tertulia Aquelarre on January 7, but she contacted me, and we recorded a conversation in my house (January 13, 2006), which will be incorporated into the video to be made at a future date. Her comments about the world of women wrestlers are key, given that these are mainly poor women who juggle a lot, between work, children, training, and wrestling. This material is a small part of what we talked about. Further information about her work and experience is found in the book: *Lourdes Grobet.* CONACULTA, Centro de Imagen, Universidad de Alicante, Turner, & Cultural Dissemination UNAM, Mexico, Spain, 2005.
19 Carlos Monsivaís, "De la lucha libre como Olimpo Enmascarado," in Lourdes Grobet, *Espectacular de Lucha Libre.* op. cit. p. 7.
Ed. Note: The Guerra Florida (Flower War) was a ritual war fought periodically between the Aztec Empire and various enemies for about 70 years before the arrival of the Spanish in 1519.

ceremonies. [...] The popular is also the exploration of taste through bad taste, it is the envisaging of both a modest and grandiloquent paradigm shift in aesthetic dimensions, it is aesthetic discovery in the masses."[20]

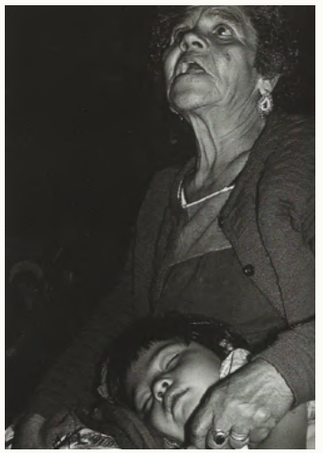
Image 1. La Briosa and her Son, 1980. Courtesy of Lourdes Grobet, S.C.
Image 2. Tania la Guerrillera and Reina Gallegos, Arena de Puebla, 1982. Courtesy of Lourdes Grobet, S.C.
Image 3. Irma González and Doña Virginia, El Toreo Arena. Courtesy of Lourdes Grobet, S.C.

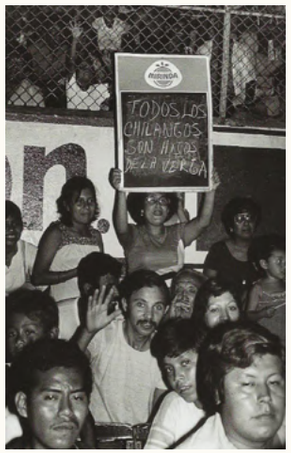
20 Ibid., p. 6.

Grobet's photographs not only show the wrestlers, but also their lives, both inside and outside of the ring. She likewise shows how the audience, enraptured, encourages their favorites, and boos their opponents. It is the eternal battle between good and evil.

Monsiváis highlights how the photographs showing the roaring public represent echoes of those people: "The sounds are ferocious, yells of approbation, noises that encourage continuity from one generation to the next in the ring. The noise and shouting are replaced by the gestures in the photos; they are accompanied by the short agonies at the end of each fall, by the face that steels itself to not cheapen itself or to be literally ripped to shreds."[21]

Image 4. Audience. México Arena, ca. 1982. Courtesy of Lourdes Grobet, S.C.
Image 5. Coliseo Arena, Acapulco, Guerrero, ca. 1984. Courtesy of Lourdes Grobet, S.C.





Ana Mendieta: Body, Blood, and Ritual Sacrifice

Cuban artist Ana Mendieta (1948-1985) worked mainly in the United States. Her body of work includes interventions in locations, installations, photography, sculptures, drawings, videos, and performances. Her performance work dates mainly from 1972-1974 and presented a play on identity, with clear reminiscences that allude to the ceremonies of the *orixas* in African American culture, mixing elements like earth, blood, herbs, among other things, representing violent

21 Ibid., p. 8.

scenes in an effort to explore violence against women and female sexuality using her own body. In her sculptures, Mendieta worked primarily with wood or clay, making it clear that her aesthetic experiments were closely linked to creations of craftsmanship, on one hand, and, on the other, with the natural world and the primitive. Taken as a whole, her works in different media testify to her artistic aim of going beyond the limits socially imposed on her own expression and women's self-determination.

Ana Mendieta's interventions are part of a period of growing political and ideological combativeness in the United States, of feminist struggle and the emergence of controversial and transgressive artistic genres. In this context, Mendieta establishes her artistic position and interventions in the face of her personal history, which was marked by the moment when, at the age of nearly 13, she, her sister Raquel, and many other children, were part of the paradoxically named Operation Peter Pan,[22] which allowed children to be taken from the island, with the consent of their parents. From this moment on she began an odyssey, living in a refugee camp in Miami run by nuns who abused the children in their care, then a series of foster homes, until she fell into a serious depression. In the United States, she lived her daily life as a second-class citizen with all the cultural oppression that implies.[23]

Among her more poetic works is her series *Siluetas* (Silhouettes), a series of human figures constructed directly on the landscape that evoke the dialogue between the body and nature. The artist intended to restore those connections that join us to the universe, recuperating through them primitive pantheistic beliefs and themes of renovation. She creates *Siluetas* by incorporating elements of nature and sacrificial rituals associated with voodoo (using blood, water, earth, and fire) and with the interplay between the perceptible presence and absence of her own body. Ana Mendieta began with the need to construct and project an affirmation of her identity that was denied or denigrated in the United States in order to produce a discourse that questioned the dominant rationality, its resultant social homogenization, the cultural and ideological

22 Operation Peter Pan was an anti-Communist Catholic plan to rescue Cuban children from the supposed threat of being sent by force to the USSR. It was the largest exodus of children in the Western hemisphere in the 20th century. Between December 16, 1960, and October 22, 1962, 14,048 children were sent to the United States. They ranged in age from 6 to 18 years old; most traveled without money or an accompanying adult, with an identifying label hung around their neck. At first, they were received in refuges, then later they were sent to orphanages, foster homes, or to live with individuals who were compensated by the U.S. government for their care. Ana Mendieta was sent to the United States in 1961. See Esther Cimet, "Las cuatro muertes de Ana Mendieta: Paradojas del performance," in the online review by Panorama, which comments on a retrospective of Mendieta's work in the Museo Rufino Tamayo in Mexico City, April–June 2005.

23 See Rosina Cazali, "Ana Mendieta. De vuelta a la tierra," in María Elvira Iriarte & Eliana Ortega, *Espejos que dejan ver: mujeres en las artes visuales latinoamericanas*. Isis Internacional, Santiago, 2002, p. 232-233.

simplification, and the negation of the processes that exclude magic and other different cultures.

Ana Mendieta's later work took place in isolated locations far from the public, and the material interventions disappeared, melting back into the landscape. For example, for her *Silueta de Yemaya* (Silhouette of Yemaya, 1975), Mendieta built a wooden raft on which she outlined her own silhouette with white flowers. Floating downstream, the raft was trapped in some rapids until it slowly sank. Mendieta filmed the action for the six minutes that it took. She also filmed—with a Super-8 camera—a series of actions about the landscape in which she herself was the protagonist: *Corazón de roca con sangre* (Heart of Rock with Blood), *Genesis enterrado en lodo* (Genesis Buried in Mud), *Silueta sangrienta* (Bloody Silhouette) and *Alma silueta en fuego* (Soul Silhouette on Fire), all in 1975. The short film of this last intervention documents how she burns and destroys a silhouette made of a white sheet that she had used as a shroud in a previous work—only the blackened and singed shape remains among the hot ashes in the hollow that she had created with her own body. Mendieta decided to only exhibit a photograph of *Alma silueta en fuego*, which she titled *Silueta de cenizas* (Ash Silhouette), corresponding to the hollow she had made. Most of the ephemeral *Siluetas* series was created in isolated locations. The *Siluetas* are testimony to a mythical-artistic liturgy that sometimes alludes directly—in its titles, in its use of certain techniques, or in some details—to Afro-Cuban rituals.

In 1973, Mendieta undertook another series of street actions. In one of them, she left a small suitcase of blood and bones on a street corner. A second action took place on the pavement at the entrance to the building where she was living, which she painted with visible streaks of blood coming from her door. On another occasion, Mendieta lay down on the pavement pretending to be dead. In the same year, she set up the scene of a violently destroyed apartment, leaving the front door open so that it could be seen by passers-by. Step by step, a camera records the reactions of the "witnesses" to the apparent evidence of a supposed crime, so that the unsuspecting participants, passing through a physical space not demarcated as a traditional artistic space (a museum, a gallery) are, once again, converted into a public (involuntary, inexpert), and the photographs that register their reactions become symbolic testimony of the role that crime plays in the system.

According to art critic Gerardo Mosquera,[24] Mendieta's work usually creates a compensatory ritual of her personal space as a sort of imaginary solution to her profound anxiety around belonging by symbolizing a return to her origin, in cultural, psychological, and social terms simultaneously. The problematic of exile is what generated this sense of excision in the artist. She mythologized Afro-

24 Gerardo Mosquera, *Beyond the Fantastic. Contemporary Art Criticism from Latin America*. Cambridge, Mass., The MIT Press, 2000.

Cuban religions—and her understanding of the pre-Hispanic cultures of Mexico and the Antilles, in general—into an artistic and personal effectiveness. Much of her work consists of a single act: fusing with the natural surroundings, an action that she also undertook, with more violent results, in her urban environment.

She describes the process in her own words: "I have thrown myself into the very elements that produced me, using the Earth as my canvas and my soul as my tools."[25] The obsessive repetition of this gesture is itself imbued with a strongly ceremonial sense. Beyond this, it is a ritual in the strictest sense because its performative character is loaded with religious overtones, constituting a mystical act full of personal meaning. She elaborates a complex metaphor about the return to the essential, to nature.

One notable aspect of Mendieta's work, which is also the case with the work of other feminist artists, is that she uses her own body to construct her impassioned spirituality. On this basis, she produces a single interdisciplinary wager in which she combines body art, land art, performance, video, photography, installation, and other genres of art. Mendieta's mystical ceremonies were often posed for the camera; her work has the mentality of a snapshot, an instantaneous recording of actions. All these aspects evidence a variety of procedures as well as poetics and cultural perspectives.[26]

Mendieta used herself as a metaphor. Even her tragic death appeared to complete the cycle with chilling logic in one final work as she fell to her death from her New York apartment on the 35th floor in 1985. Like a sign of the utopian nature of her life's work, her final silhouette appeared on the pavement of the city's street, as though returning her to her own early performances impregnated with death and blood.

Ana Mendieta's art is born out of the performativity of her feminist discourse in which her artistic actions use ritual and insist on a ceremonial presentation of the body as a political strategy. She relates the "primitive" or the vernacular in the "religious" and the "international," embodying the feminist paradox of theory and practice. It is true that much of her work takes place within the realms of the so-called established art world and its elitist circuits and not in the field of popular culture. Yet, she insists on giving a place to the intervention of the popular (non-Western, subordinated, peripheral) in the "religious" (Western, masculine, hegemonic, central). Her work examines the systems of social categorization (gender, race, class) in all their complexity so that her work provokes extreme sensations that approach the mystical. In the practice of her work, she gives important meaning to the staging with which she constructs a given ceremony or ritual to which she adds both realism and symbolism. In this way, she appropriates religious beliefs and practices for her aesthetic, political ends. But at the same time, art is a real ritualistic instrument directly connected to her personal life, and she makes a hybrid of her art, tending towards popular religiosity. In the notion of identity, Mendieta reflects the value of roots and the idea of the Earth as a womb. She reinterprets ancestral myths, like those about the Mother-Earth of the Taíno[27] and other goddesses. She explores questions of origins: the Taíno believed that the first humans emerged from caves. Mendieta represents the cave as a birthing space, like a universal message of a desire to be human and return to one's roots and to Mother Earth, to the mystic uterus.[28] She uses her own body as an artistic instrument to explore the phenomenon of the banishment of the human being, the complexity of identity, and questions of ethnicity and gender.

Her desire to forge a transgressive path in the artistic world in which she worked is clear. Mendieta sought to understand the meaning of the body, her artist's body. To do so, she used it as an instrument and object of noncommercial art. She played with the presence and absence of the body itself by leaving traces of it in the earth, the rocks, and the trees, invoking a ceremonial aura that reflected on the origins and the mythical foundations of gender identity.

25 Ibid.

26 A more extensive commentary about Mendieta's work and this relationship can be found in Victoria E. Bonnel & Lynn Hunt (eds.), *New direction in the study and society of culture.* University of California Press, 1999, p. 220-240.

27 Ed. note: The Taíno were the primary Indigenous People of the Caribbean before the arrival of the Spanish.

28 Collette Chattopadhyay, "Ana Mendieta's Sphere of Influence," *Sculpture 18*:5 (June, 1999), p. 34-41. Colette Chattopadhyay stresses that, in her cave designs, Mendieta parodies the concept of modernity (according to the European vanguard) of the "primitive" in order to examine the way in which the Western art world approaches the art of other cultures, p. 36-37, cited in Linda S. Howe, "Ana Mendieta: El arte y la vida efímero; la imagen permanente," in the Cuban e-zine *Arte América*.

PROTESTING FROM THE UNCOMMONS

Marisol de la Cadena

Source: Rocío Silva Santisteban (ed.). *Mujeres Indígenas frente al cambio climático.* Lima, Grupo Internacional de Trabajo sobre Asuntos Indígenas, 2019, pp. 35-49.

Marisol de la Cadena was born in Peru and trained as an anthropologist in Peru, England, France, and the United States. She locates her work at the crossroads between science, technology, and society (STS) and what exceeds science. De la Cadena is interested in "ethnographic concepts," and her most recent book is *Earth Beings. Ecologies of Practice Across Andean Worlds* (2015.) She edited *A World of Many Worlds* (2018) with Mario Blaser and contributed to a Sawyer Seminar on "Indigenous Cosmopolitics: Dialogues towards the reconstitution of worlds," held at the University of California, Davis (2012-2013). She currently works with Colombian farms on terraforming practices utilizing cows.

Abstract

For the Andean human being (runa) there is no ontological difference between himself and the earth-beings (tirakuna). But that radical difference of the tirakuna exceeds modern politics, ontologically; in other words, from what modern politics is, it cannot recognize that Ausangate is something other than a mountain. This text is a reflection on that difference and the political practices that Andean men and women put into each ontological operation.

Keywords: Earth-beings, commons, radical difference, ontological disagreement

It was August 2006, and I had just arrived in Cuzco for a two- or three-month stay; I received a phone call from Nazario Turpo. He could not come to the house where I was staying; instead, he asked me if I could go to the Plaza de Armas.[1] The people gathering on that day in the main square of Cuzco had come from the region where Nazario's village is located. A mining corporation was prospecting an earth-being, Ausangate, which *was also* a mountain, and thus a potential reservoir of minerals, possibly gold. Such complexity is not new in the Andes, where mining tunnels have cut across the bowels of many important earth-beings/mountains since colonial times, and have been capacious enough, both conceptually and physically, to allow for mining machinery and interactions with earth-beings to move through them with relative ease.

Earth-beings were also known as guacas—entities for which colonial extirpators of idolatries like Cristóbal de Albornoz in 1584 demanded destruction. Earth-beings is my translation from the word with which I met them: *tirakuna*. The word is composed of the Spanish *tierra* and its Quechua pluralization *kuna*. So *tierras* or 'earths' would be a literal translation (runa: people in the slide, runkuna—plural). De Albornoz translated guacas as 'stones' and 'hills' and took this as the cause of the difficulty to eradicate what he considered superstitions: removing them appeared impossible for guacas were 'earths!' Five hundred years later 'earths' present the same plight to its new eradicators: mining corporations also translate earth-beings as mountains, and a source of minerals, and therefore wealth. Unlike their colonial counterparts, they have the power to remove mountains, redirect rivers, or replace lakes with efficient reservoirs for water.

1 Nazario Turpo was a friend with whom I co-worked the book *Earth-Beings*. He was the son of Mariano Turpo, "un sabedor" who, like Nazario, lived around the Ausangate, a mountain that is also an earth-being. Mariano was an organizer of many peasant protests that led to the expropriation of the Lauramarca farm (Cuzco) before the Agrarian Reform of 1969 was inaugurated. Nazario was co-curator of the Quechua Community Exhibition shown in the National Museum of the American Indian, one of the Smithsonian Institution's Museums located in Washington D.C.

Extremely productive in economic terms, this technology is also extremely polluting environmentally and represents the ultimate threat to earth-beings: with it they face nothing less than destruction.

Fig.1. The Yanacocha's open pit in Cajamarca. Photograph by Malú Cabellos.

In 2006, mining ventures were knocking on the door of my friend Nazario's village—it was promising development. But its terms threatened earth-beings with destruction. The destruction of Ausangate would be a complex phenomenon, for rather than exclusively human, the earth-being would also participate in the event: in response to open-pit mining it would destroy the mining process, and all those nearby, including runakuna of course. A discussion among people who would be affected resulted in a coalition of those who wanted to prevent this kind of mining from happening.

The demonstration in the Plaza de Armas was the public act that accompanied a delegation visit to *el Presidente de la Región,* the President of the Region. Ideally they would convince him and the rest of the authorities that the mountain was not only a mountain, and thus summarily translatable, via its destruction, into minerals. Ausangate was an earth-being. But of course these terms were not easy for the authorities to accept. So the decision was to subordinate the defense of the earth-being to the defense of the environment; this, the state could recognize, perhaps even admit as rightful. The villagers achieved their end; the prospection of the mine in Ausangate was canceled. The *mountain* won, the mining attempt lost; but to earn this victory, the presence of the earth-being was hushed—if not completely silenced--by the alliance that also defended it. In addition to political ecology and political economy, the above contest also transpired in the field of political ontology—yet political ontology was a subdued partner in the arena of contention; that the mountain was also an earth-being was carefully withdrawn from the contest as it unfolded publicly. The reason: in the field of modern politics tirakuna are cultural beliefs and as such, weak matters of political concern when confronted to the facts offered by science, the economy, and nature. Thus, to save the mountain from being swallowed by the mining corporation, activists themselves recalled tirakuna from the negotiation. *Their radical difference exceeded modern politics,* which could not tolerate Ausangate as being other than a mountain.

The Radical Difference as a Relationship

Radical Difference is not something 'Indigenous Peoples Have,' it is not to be understood as a quality of isolated indigeneity, for there is nothing as such: as historical formation indigeneity exists *with* Latin American nation-state institutions. Thus, rather than something that 'indigenous peoples have,' radical difference is a relational condition emerging when (or if) the parties (all of them or some of them) involved in the enactment of a reality are equivocal (in the sense of Viveiros de Castro's notion of equivocation) about what is being enacted. Not unusually in the Andes, radical difference emerges as a relationship of excess with state institutions.

And what is **Excess?** I conceptualize it as that which is beyond 'the limit' or "the first thing outside which there is nothing to be found and the first thing inside which everything is to be found" (Guha 2002: 7). Yet this nothing *is* in relation to what sees itself as everything, and thus exceeds it—it *is* something, a real that is not-a-thing accessible through culture or knowledge of nature (as usual). The 'limit' is ontological and establishing it, can be a political-epistemic practice with the power to cancel the reality of all that appears outside it. Here is an example--ex-President García declared that earth-beings do not exist; they are unthinkable (to the state, to science, to modern politics) and thus they are explained away: an heir to Albornoz, in the 16th century, declares they are superstition—yet rather than through baptism, they can be eradicated via modern education. Extirpation of idolatries secularized!

These attitudes do not simply represent political conspiracy, racism, or cultural intolerance. Additionally, they manifest the ontological power to define the real (or the possible).

As it turned out, Ausangate would not be the only earth-being entering the political discussion in recent years. The accelerated mining concessions in indigenous territories (51% of indigenous lands in Peru had been offered to mining corporations) provoked protests that made several other earth-beings

public. In neither of these cases were indigenous terms accepted, thus revealing the limits of recognition as the political relationship that the modern state, liberal or socialist, extends to its "others."

Modern politics *is* within a possible that can be recognized as historical. This means that the enactment of what cannot be historically verified is not a subject or object of politics because their reality *is doubtful*—to say the least. This ontological bottom line is not to be probed. It is the undisputed (blind) spot from where a reality is enacted. Hence… opening up that spot offers the possibility of questioning the self-evidence on which the ontological make up of modern politics rests. Politics needed not *be* historical—but it is, *indisputably* historical. I suggest that this requirement (to be historical) sustains the coloniality of modern politics and the way it "partitions the sensible."

The latter is a concept Jacques Rancière uses to refer to the distribution of "the visible" into activities that are seen and others that are not, and the division of "the sayable" into forms of speech that are recognized as discourse and others are discarded as noise. Underpinned by coloniality, entities, relations or circumstances have to *be ontologically historical* to be heard or seen in politics. Accordingly, the disagreement (cf. Rancière) that would undo such a condition--and possibly alter the current practices of politics—would also need to be ontological.

Introducing the notion of ontological disagreement, I am tweaking Rancière's notion of disagreement. As he conceptualizes it, the disagreement that is politics emerges from a "wrong count of the parts *of the whole*" (Rancière 1999, 27). Instead I propose that politics emerges when that which *considers itself* 'the whole' denies existence to that which exceeds it--or to use Rancière's words, makes it 'count as not counting' because (in my words) it exceeds the principle that partitions the sensible into historical existence and ahistorical non-existence. This miscount itself is an ontological practice, and so is the politics that emerges from a disagreement with it. After this proviso, Rancière's terms continue to be useful.

Politics, he says, "exists through the fact of a magnitude that escapes ordinary measurement," and he explains "it is the introduction of the incommensurable at the heart of the distribution of speaking bodies" (Rancière, 1999: 125). Earth-beings and the people they are with (runakuna) introduce such an incommensurable—they are the uncommons disrupting the heart of the division between nature and culture, which parts the ahistorical from the historical and grants power to the latter to certify the real.Tirakuna with runakuna enact an impossible challenge to the historical ontology of the sensible: how can the ahistorical--that which has no part within (what considers itself) the whole—re-partition the sensible? Given this impossibility, in the specific case I witnessed, to protect Ausangate from destruction, the challenge that the earth-being posed was recalled by those who proposed it, who then remade their claim, joining

that which could be recognized, and as historical at that: the environment. The negotiation was to take place within the partition of the sensible to protect what exceeded it…

The becoming public of earth-beings disagrees with the prevalent partition of the sensible; it presents modern politics with that which is *impossible* under its conditions *and implies an alteration of those conditions*—this provokes a scandal followed by the trivialization of the profound disruption in the partition of the sensible that the mere public presence of those entities enacts.

Immanent to moments like the dispute of Ausangate against the prospective mine, ontological disagreement emerges from practices that make worlds diverge even as they continue to make themselves connected to one another. Composed with stuff barely recognizable beyond the local, these moments travel with difficulty and are hardly cosmopolitan. Instead, they compose cosmopolitical moments with a capacity to irritate the universal and *provincialize* nature and culture—they alert to the historical and geographical specificity of the divide.

These cosmopolitical moments may propose an alter-politics capable of alliances or adversarialisms with that for which modern politics—left and right—has no ontological room within its field. Isabelle Stengers opened her *Cosmopolitical Proposal* with the following phrase:

> How can we present a proposal intended *not to say what is*, or what ought to be, but to provoke thought, a proposal that requires no other verification than the way in which it is able to "slow down" reasoning and create an opportunity to arouse a slightly different awareness of the problems and situations mobilizing us? (Stengers, 2005:994)

Thinking with Stengers's proposal and also tweaking it through my conversations with Mariano and Nazario, my own proposal is that by diverging from the established partition of the sensible, the public presence of earth-beings proposes a cosmopolitics: relations among worlds as a practice of politics without the requirement of ontological sameness—slowing down thought, this is a proposal for a de-colonial practice of politics.

Of course, Isabelle Stengers's proposal is not runakuna's proposal. Yet, both are different from projects that *know what they are* and what they want and, therefore, more frequent than not, they command. Instead, Stengers's cosmopolitical proposal wants to speak 'in the presence of' those that are able to ignore commanding words, those that command to follow the partition of the sensible as a condition to have a political voice—in Stengers philosophical proposal, ignoring such command may mean a preference 'not to' have a political voice. In my ethnographic reading of cosmopolitics, ignoring the command may also mean following it, in order to have a political voice that wants to remain outside of the partition of the sensible. The difference

this political voice presents is that while being within the command, it also escapes it.

Runakuna practices both ignore the command for a nature-culture divide *and* also follow it—this complexity slows down the totality of the principle that partitions the sensible into humans and things. Including other-than-humans in their interactions with modern institutions (the state, national NGOs, international foundations) runakuna practices enact intriguing onto-epistemic ruptures with the world of those institutions and reveal divergence among worlds—runakuna practices refuse to convert to the hegemonic divide while nevertheless participating in it.

Modern politics was and continues to be a historical event in a complex arena where the proposal to build one world via 'cultural assimilation' reached an agreement that was *not only such*—disagreement, or the practices of the part that has no part, continued to be *with* the agreement, *and* exceed it. Paradoxically, it is through the coloniality of politics—its assimilationist resolve to force what exceeds it to fit the partition of the sensible *or* cease being—that those same excesses emerge in modern politics or better said: become a *divergent part of it*. Rejecting them (like ex-president of Peru Alan García did) does not cancel their emergence nor does it protect those that perform the rejection from being with the emergence—even if against it. The 'other' is always part of them, as much as the other way round. This is the partial connection that neither modern politics nor indigeneity escape—rather they are entangled in it, exceeding each other in mutual radical difference, while at the same time, participating in similarity—one that complexly is not only such.

Divergence

Why is the notion of divergence useful? Because it allows me to think *connections among heterogeneities that remain heterogeneous*, and thus it enables analyses that complicate the separation between the modern and the non-modern and at the same time are able to highlight radical differences: those that converge in a complex knot of disagreement-agreement untying which, rather than agreement, may force the public acknowledgement of ontological politics.

Such a knot is currently controversially public in Bolivia, Ecuador, and Peru. Unexpectedly in the history of Andean nation-states, under pressure from indigenous social movements and their allies, in 2008 the Constitution in Ecuador inscribed the 'rights of nature or Pachamama' and in 2012, following their example, Bolivia decreed the Law of Mother Earth. While perhaps unintended, both documents challenge the Modern Constitution (and the partition of the sensible it effected) and manifest the work of politics as ontological disagreement. Specifically, with loud voices in Bolivia, pundits and analysts complain about the incoherence between the legally declared defense of Mother Earth, or Pachamama, and the governments' choice of development policies based on mega extractive projects— as in the declarations by Vice President of Bolivia García Linera, and Rafael Correa, President of Ecuador.

Yet the problem these laws and their implementation articulate should include more than concerns about government incoherence. The problem reflects questions about *what* the practices, and the entities they engage with (either in confrontation or adherence) *are,* and the way they might inconvenience the established sensibility, threatening with tearing its fabric—for now they at least poke it. Not surprisingly, the discussion cannot reach an agreement: radical differences between Nature and Pachamama cannot be undone, and their being more than one and less than many complicates the discussion. Inflecting Rancière's terms ethnographically: the quarrel that takes place in these Andean countries expresses the public manifestation of ontological disagreement. The disagreement cannot even be discussed—let alone overcome--because the principle that partitions the sensible into nature and culture (and divides those who count from those who do not) *is not common to all parts*. Consequently, the disagreement currently witnessed in the Andes manifests the impossibility of a community, it *is an ontological dispute* made public—that continues to be dismissed.

Persistently present, even those politicians and pundits that impatiently denounce the scandal that the presence of other-than-humans in politics represents find themselves caught in the ontological dispute that, albeit unevenly, has become a constitutive element of the Andean political atmosphere. The quotes by García Linera and Correa (and the previous one by Alan García) are located at this precise site: they dismiss the disagreement, by stepping into it as they contend that refusing extractivism to protect Ausangate (for example) is an inferior right compared to the right of the state to decide what the common good is.

But what if the ground of the common good —nature as resources, and universal nature— is an ontological *uncommon* ground? Analogous to the defense of earth-beings in a dispute about petroleum extraction at a site called *Vaca Muerta* (Argentina), a Mapuche group declared, "Our territories are not 'resources' but lives that make the Ixofijmogen of which we are part, not its owners." Contrastingly, this is how Vaca Muerta is defined by developers from Neuquén, one of the states included in the alleged hydrocarbons deposit: "Vaca Muerta is an immense *páramo* [a barren cold plateau]. A desert that extends beyond what the eyes can see [....] It is a hostile territory that shelters enough energy to make Argentina self-sufficient and even export gas and oil to the world." The stark contrast suggests that the dispute about extraction of petroleum, is also a dispute about the partition of the sensible into universal nature and culturally diversified humanity.

Seemingly ... nature may be *not only* such.

Not accepting this question as heads of state do, does not cancel so-called 'conflicts over extractivism'--they continue to spread and their concern is the environment, of course, *but not only*. It is an ontological conflict about the right of what is *also* nature to be *uncommon to the state*—and this uncommonality threatens the political capacity of the state to ontologically claim the territory over which it exerts sovereignty. It is an ontological conflict indeed—between the state and those entities that are uncommon to it—even if they are *also* common to it. Identified through their commonality, what follows is the extraction of natural resources for the common good, which can also be the destruction of earth-beings.

Now, the destruction of earth-beings is included in what I am calling the anthropo-not-seen: the world-making process through which heterogeneous worlds that do not make themselves through the division between humans and nonhumans—*nor necessarily conceive as such the different entities in their assemblages*—are *both* obliged into that distinction *and* exceed it. Dating from the 15th century in what became the Americas, the anthropo-not-seen was, and continues to be, the process of destruction of these worlds *and* the impossibility of such destruction. Sustained by an allegedly superior human moral force, the anthropos-not-seen was, and continues to be, a war waged against world-making practices that ignore the separation of entities into nature and culture—*and* the resistance to that war.

The antagonism was clear in the 17th century as illustrated by Cristóbal de Albornoz's will to destroy what I am calling earth-beings. The invention of modern politics secularized the antagonism: the war against recalcitrance to distinguish Nature from Humanity silently continued in the name of progress and against backwardness, the evil that replaced the Devil. Incipient humans became the object of benevolent and inevitable inclusion, enemies that did not even count as such. Until recently that is.

The expansion of markets for minerals, oil, and energy, as well as the construction of infrastructure (necessary to market those resources) has made even the remotest territories an object of financial investment encroaching on indigenous worlds at unprecedented rate. Yet, the anthropo-not-seen is also composed of a strong, local opposition that has forced the transformation of the silent war into a relentless demand for politics, revealing the presence of many worlds being forced into one. Among other demands, local worlds—labeled indigenous or not-- defy the monopoly of modern practices to make, inhabit, and define nature. As nation-states see the sovereignty over their territorial rule threatened—and with their hopes for economic growth at stake—they waver between rejecting the demand for politics that local worlds extend, and ending the silent war to wage it overtly—in the name of progress, as always. Those who oppose the transformation of universal nature into resources oppose the possibility of the common good as the mission of the nation-state are its enemies and deserve jail at the very least.

And now I have to pause for I do not want to be misinterpreted: *runakuna with earth-beings are not a requirement* of the processes that have emerged to question the universality of the partition of the sensible into universal nature and humans. Here is another example: in the northern Andes of Peru the mining corporation, whose picture I showed earlier, plans to continue drying out other lagoons—(look and read: to extract copper and gold from some, and to throw mineral waste in others). This time, they have offered that in exchange, reservoirs with water capacity several times that of the lagoons would be built. Opposing the plan, environmentalists argue that the reservoirs will destroy the ecosystem of which the lagoons are part: a landscape made of agricultural land, high altitude wetlands, cattle, humans, trees, crops, creeks, and springs. The local population adds that the lagoons are *their* life: their plants, animals, soils, trees, families *are with* that specific water which cannot be translated into water from reservoirs, not even if, as the mining corporation promises, they would provide more water. It would not be the *same* water, which they defend, organized as "guardians of the lagoons." People have died in this defense, making public another instance of the war against those who oppose translation of nature into resources. Yet in no case have the guardians of the lagoons said that the water is a being—it is local water, as such, nature, yet untranslatable to H2O.

Máxima

An iconic "guardian of the lagoons" is a peasant woman, Máxima Axuña de Chaupe, whose property the corporate mining project wants to buy to fully legalize its access to the territories it plans to excavate. This woman refuses to sell—and probably for an amount of money that she will not see in her lifetime. Countless times, the national police force has attacked her, her family, even her animals—as I was writing this piece, the police destroyed the woman's crops. The property has been under siege for more than three years now. "I fight to protect the lagoon" has been one of her responses. And asserting attachment to place, she adds: "I am not going to stop; they will disappear me. But I will die with the land."

Within the grammar that separates humans and universal nature, Máxima Acuña de Chaupe can be seen as defending the ecosystem: an environmentalist, and thus an enemy (and a fool), or an ally (and a hero), depending on who speaks. In both cases: she is a subject in relation to an object. However, the "refusal to leave" may express a different relation: one from where woman-land-lagoon (or plants-rocks-soils-animals-lagoons-humans-creeks—canals!!!) emerge inherently together: an ecological entanglement needy of each other in such a way that pulling them apart would transform them into something else. Refusing to leave may also refuse the transformation of the entities just mentioned into units of nature or the environment, for they are part of each other.

Fig. 2. Máxima Acuña de Chaupe. Photograph by Jorge Chávez Ortiz.

Máxima Acuña's refusal would thus enact a provincial nature —or a locally ecologized nature where *all* entities are interdependent of each other— which simultaneously coincides with, differs from, and even exceeds (also because it includes humans), the object that the state, the mining corporation, *and* the environmentalists translate into resources, exploitable or to be defended. Thus seen, she is agrammatical to the subject and object relation—or *not only* an environmentalist.

Occupying a space that "cannot be mapped in terms of a single set of three-dimensional coordinates" because what composes it is more than one and less than many, this complexly heterogeneous form (universal nature, the environment, and what I am calling ecologized nature—or nature recalcitrant to universality) allows for alliances and provokes antagonisms. Confronted with the mining company's proposal to desiccate the lagoons, its local guardians and environmentalists have joined forces against the mining corporation. Yet their shared interest—to defend nature, or the environment—is *not* the same interest: ecologized nature and universal nature exceed each other, their agreement is also underpinned by *uncommonalities*. This condition shapes a possibility for an alternative alliance, one that along with coincidences may include the parties' constitutive divergence—even if this opens up discussion of the partition of the sensible and introduces the possibility of ontological disagreement into the alliance. An oxymoronic condition, this alliance would also house hope for a *commons* that does not require the division between universal nature and diversified humans. A commons constantly emerging from the uncommons as grounds for political negotiation of what the interest in common—and thus the commons--would be. Instead of the expression of shared relations, and stewardship of nature, this commons would be the expression of a worlding of many worlds, ecologically related across their constitutive divergence. As a practice of life that takes care of interests in common, that are not the same interest, the alliance between environmentalists and local guardians (of lagoons, rivers, forests) could impinge on the required distribution of the sensible into universal nature and locally differentiated humans, thus disrupting the agreement that made the anthropo-not-seen, and questioning the legitimacy of its war against those who question that distribution. The alliance would also queer modern politics requirement of sameness, welcoming ontological disagreement *among those who share sameness,* thus inaugurating an altogether different practice of politics: one across divergence.

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FOR A SOCIAL, ECOLOGICAL, ECONOMIC AND INTERCULTURAL PACT FOR LATIN AMERICA JOIN US NOW!

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For a long time, the elites told us that the market and the great machine of capitalist accumulation cannot be stopped. But it turns out that it can – that it is possible to activate the emergency brake when life is deemed to be at risk.

The crisis laid bare by the pandemic has worsened inequalities and shows that our future is at stake. Some people are under lockdown; others are facing contagion, repression and hunger. Indigenous and Afro-Latin American peoples are exposed to a new wave of extermination; patriarchal and racist violence and femicides have increased. Meanwhile, powerful groups both old and new are taking advantage of the emergency to make sure that "the return to normality" or "the new normal" does not deprive them of their privileges.

The pandemic is a tragedy for many people, whose pain we share. But the pause imposed on global capitalism due to COVID-19 also represents a major opportunity to bring about change: to build our future based on caring for life.

Although nature remains profoundly damaged, this enforced brake has also meant a slowdown in the destruction of ecosystems, due especially to the reduction in CO2 emissions. Middle classes around the world are collectively realizing that it is possible to live without that unbridled consumption that causes environmental destruction and threatens life itself on the planet; they are seeing that happiness and quality of life have dimensions more relevant than owning and accumulating things, such as living in a network of reliable, caring relationships.

It has become evident that rural life, and the sense of community, caring and reciprocity, are key to sustaining life; that, despite living within capitalism, we do not live by and for capital. We are becoming aware that direct trading and bartering in networks outside capitalist markets are today meeting many of our basic needs; and we are realizing that they have a place and potential for the future.

Even in institutional settings, ideas that were previously unthinkable or seen as unviable are now high on the global agenda. Economic agencies such as ECLAC are proposing a universal basic income, and even the International Monetary Fund is advising governments to introduce a wealth tax to counteract the scandalous inequality and reduce fiscal deficits. In the global North, social and political movements are fighting for a new global ecosocial pact that unites social justice and environmental justice to save the planet.

Taking up proposals developed collectively in different contexts, we are proposing a Social, Ecological, Economic and Intercultural Pact for Latin America. This Pact is not a list of demands addressed to the governments of the day. Instead, it is an invitation to build collective ideas, agree on a shared path to social change and provide a basis for shared struggles in all the different sectors of our societies. It calls together social movements, territorial, labor and neighborhood organizations, communities and networks, but also alternative local governments, parliamentarians, magistrates or public servants who are

committed to change, to alter the balance of power by means of plebiscites, proposals for legislation, and many other strategies that can make a real impact and enable members of society who are organized and mobilized to impose these changes on existing institutions.

Accordingly, the points outlined below seek to connect redistributive, gender, ethnic and environmental justice. Some of them envisage more of a leading role for public institutions, while others refer more to de facto practices and changes that are developed from below and spread horizontally.

- Solidarity-based tax reform. National proposals for tax reform based on the principle of "whoever has more, pays more – whoever has less, pays less." This should include taxes on inheritance, extreme wealth, mega-corporations, financial earnings and, as a transitional measure, damage to the environment. Instead of everyone paying universal taxes but only some people getting social protection, we propose that only the wealthy should pay taxes while everyone should be protected.

- Cancellation of the external debt, and a complete overhaul of the global financial system. In these extraordinary times, ceasing to pay the external debt is justified. It was done in 1931-32, and is now being proposed by the United Nations Conference on Trade and Development (UNCTAD), French President Emmanuel Macron and Pope Francis. Cancelling the external debt of countries in the global South is a first step towards historical reparations for the ecological and social debt built up by the industrialized countries since colonial times.

- Creation of national and local systems of care that place the sustainability of life at the center of our societies. Care is a right and, as such, it should include a more active role for the state and the private sector in constant consultation and shared responsibility with peoples and communities. This will make it possible to tackle labor precarity and achieve a fairer distribution of caregiving tasks in terms of social class and gender, as this work usually falls unequally upon families and, within them, upon women. We need to promote public policies that link care to social protection, meeting the needs of older people who depend on being cared for by others, children, people with severe disabilities, and all other individuals who are unable to meet their basic needs.

- A Universal Basic Income that unifies social policy by introducing a basic income for all to replace the targeted conditional cash transfers inherited from neoliberalism and enable people to get out of the poverty trap. ECLAC recently recommended such a policy to Latin American governments. The working day should be made shorter without reducing wages, in order to redistribute both formal employment and the work of caregiving.

- Prioritize food sovereignty. At a time when Latin America is the region with the highest levels of land concentration in the world, the priority must be to develop policies aimed at land redistribution, access to water and a sweeping reform of agrarian policies, moving away from industrial agriculture for export, with its harmful environmental and social consequences. We need to prioritize agroecological farming, agroforestry, fishing, small-scale farming and urban agriculture, promoting the dialogue of forms of knowledge. Strengthen local and farmers' markets. Create seed distribution networks to ensure that seeds can circulate freely, without intellectual property rules. Strengthen rural-urban distribution networks and community certification between consumers and producers. Promote social, collective and community ownership of land, giving sovereignty to those who care for and work it, and protection from speculators.

- Build post-extractivist economies and societies. To protect cultural and biological diversity, we need a radical socio-ecological transition, an orderly and progressive move away from dependence on oil, coal and gas, mining, deforestation and large-scale monocrops. We need to shift to renewable energy systems that are decentralized, decommodified and democratic, as well as collective, safe and good quality transportation models. We must reduce the risk of climate collapse – a threat more serious than the pandemic, as demonstrated by floods, drought, landslides and forest fires.

- Restore and strengthen modes of information and communication that are rooted in society, rather than dominated by today's commercial and social media controlled by the most powerful corporations of our time. We need to struggle over the historical meaning of coexistence, from citizen media but also from the street, the public square and cultural spaces.

- Autonomous, sustainable local societies. The pandemic has revealed the fragility of global production chains, but also the wide range of local and national efforts. The enormous creativity of Latin America's peoples must be the basis for policy changes that promote the autonomy and sustainability of local territories and societies. We need to strengthen the economic, political and cultural self-determination of indigenous, rural and Afro-Latin American peoples as well as popular urban community experiences; demilitarize territories and society as a whole; support local markets; democratize credit, support small and medium enterprises, and achieve local community energy sovereignty based on sustainable and renewable models.

- For a sovereign regional and global integration. It is imperative to promote local, national and regional trade systems at the Latin American level. These would be autonomous from the globalized world market and provide new alternatives to corporate monopolies. We need to introduce currencies parallel to the dollar on different scales, enabling relative de-linking from the dangerous dynamics of the world market, strengthening trade between the region's countries and complementary economic diversification.

URBAN AGROECOLOGY IN LATIN AMERICA: AN ANCESTRAL PRACTICE

Ana María Durán Calisto

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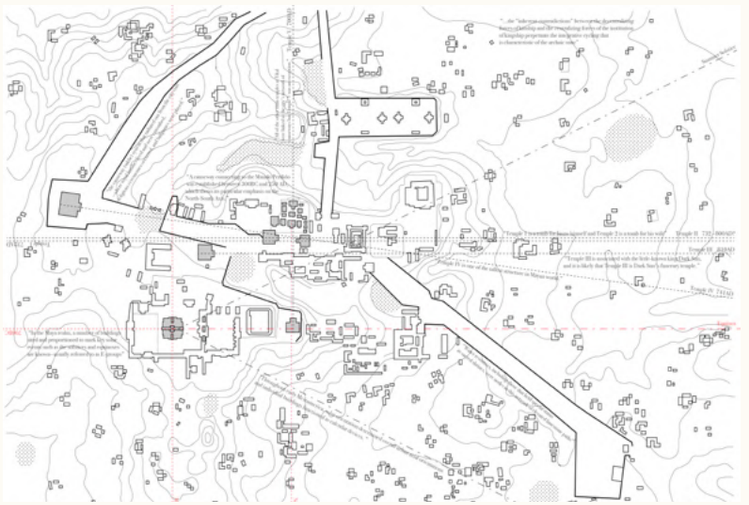
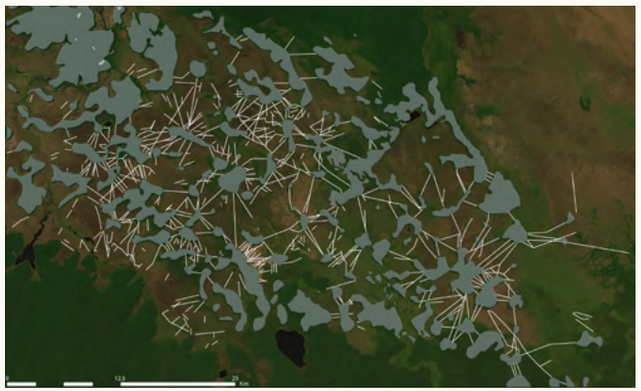
Archaeology posits, in synthesis, that civilizations emerged from seven poles around the world, two of those in the Americas. The civilizations of Mesopotamia—the oldest—Egypt, the Mediterranean, China, and the Indus valley, established themselves in one of the two main geographical land masses on the planet, Eurasia and Africa. On the inter-oceanic landmass we now know as America, two poles of civilization came about: the Mesoamerican and the Andean. Other regions, such as the Amazon, were also densely populated by complex societies. It is still under debate whether they developed into what could be called a "civilization" or not. What is clear and increasingly uncontested with the growing weight of archaeological evidence in the field and through the application of technologies such as Lidar (Light Detection and Ranging/Laser Imaging, Detection and Ranging) and GPR (Ground Penetrating Radar), is that the pattern of settlement—the way in which urbanization occurred in the Americas—is of a different nature and its beginnings, it would appear, are in the Amazon basin. At various scales and in different forms, these early initiatives of territorial planning lie beneath the agroecological constellations of small river towns, large complexes of interconnected estates in a territory, and even the conformation of tributary states that, at various moments over time, established a dominion forged out of alliances or by force to capitalize on tributes from various regions and sustain their city states.

Fig 1. Dispersed pattern around the ceremonial epicenter of the agroecological city of Tikal. Drawing by Taku Samejima, Territorial Cities of pre-Colonial America research seminar, courtesy of Yale School of Architecture.



From the perspective of Marx's dialectic materialism, one could argue that the tributary methods of production characteristic of the European feudal world are analogous with those of pre-Columbian America. Both were agrarian societies in which the peasants organized their production based on systems of communal work and property ownership. The civil or religious elites appropriated surplus of the agrarian production through imposed taxes, but they did not interfere in the organizational structures of the large peasant societies if the taxes were paid. The state, when it emerged, consolidated and expanded itself on the basis of an additive process, not through any transformation of the agrarian model (Candiani, 2020). However, as Weber has argued, the superstructure is permeated by, but not passively derived from, the infrastructure, and it is important to understand that the European feudal societies belong to an ontological universe profoundly different from the one that made up the spatial structure of the Americas.
The lessons derived from the historical processes characteristic of European territorial development may offer some insight into understanding the latter in the Americas, but this transfer can also hide enormous differences, present even today and inseparable from the methods of production. In the Americas, there is an animist cosmovision whose roots are profoundly Eastern. From ancient times right through to the present day, the "Amerindians" wove a cosmovision in which everything is interrelated and interdependent: the tangible and intangible beings, the living and (from a spiritual perspective) the lifeless, the constellations of the sky and those of the earth, whose relationships were not necessarily productive but rather conceived from the perspective of reciprocity and interpenetration. The original peoples of the Americas were builders of habitats, of ecologies; it would have been unimaginable for them to segregate life and the relationships of work or production into walled-in blocks surrounded by fields and enchanted forests stretching to the horizon.

Fig 2. Interconnected forest islands in Beni, Bolivia. Drawing based on Erickson (2009). Satellite image: Esri.



In this vast longitudinal swathe of territory that stretches from Alaska to Patagonia, an ontology developed that was very different from the urban one. It has taken us decades to recognize it, because the pattern of our definitions and imaginaries of the urban is derived from the compact and polyfunctional Mesopotamian and Mediterranean cities on which the archaeologist Gordon Childe centered his studies. In 1950, he published an essay called *The Urban Revolution*. In it, he offers ten criteria that, in archaeological terms, allow us to distinguish a city from a smaller population center. Childe also formulates a linear narrative of the theories of neolithic and urban revolution that still underpins our accounts of the origins of cities. However, there is currently an accumulation of evidence in favor of an oscillating and nonlinear narrative of the origin of cities. In his book *Against the Grain: A Deep History of the Earliest States* (2017), James C. Scott embraces this understanding, as well as the provocative position that the "barbaric" can be more attractive than "civilization"—for the freedoms it offers, among other things—and that frequently throughout history and geography, the models of settlement have been hybrid: permanent and mobile, sedentary and nomadic.

Language reveals a great deal about the ontologies that weave our definition and vision of something. Urbe comes from *urb* and *urbis*, which means city. And the etymology of the Spanish word for city (*ciudad*) comes from the Latin *civitas*. The Latin word *civis* or citizen (*ciudadano* in Spanish) is combined with the Latin *dad*, the quality of being, to make up the notion of the *civis-dad,* the *ciudad,* the city. The city is thereby the quality of being a citizen; the city manifests itself in the citizen. The Nahuas organize the social space into *altepeme*, the plural of *altepetl*. The suffix *tepetl* means hill, mountains; the prefix *al* is water. *Altepetl* has been translated into Spanish in a variety of ways including city, ethnic-state, local-state, city-state, "neighborhood" or "community" (within an actual conurbation). In the Andes, territory is configured through the *Llactas* (*yaqtas*), a Quechua word that applies both to city or town and to land or territory. *Quiquin* (one's own, the same) *Llacta* is a center, the major satellites of which are the *Purina Llactas*. *Purina* is translated as "accessible, walkable; or as to walk, to travel." It is inferred that *purina llacta* is the city of pilgrims or the city of the road, and it could also mean the migrant city (in the Amazon, some ethnic groupings move when the *cacique* or shaman dies). The difficulty in the translation points to an ontological difficulty. The "city" of the Americas is a profoundly different type of city, both conceptually and physically. Language illuminates the structures of thinking and confronts us with two very different visions of the urban. One is anthropocentric, based on the citizen. The other is animist, derived from sacred water and lands—it is territory.

When the Spanish arrived in Mexico's central valley in the 16th century, they came across a society organized in thousands of *altepeme*. Every *altepetl*

was made up of *calpolli* (*calpulli*) or *tlaxilacalli*. Restall, Sousa, and Terraciano (2005) describe the communities as units that facilitated the collection of taxes and the administration of the land. In *The Labyrinth of Solitude*, Octavio Paz notes that the *calpulli*, a sort of neighborhood, was also the basic unit of the communal system of land ownership. Every *calpulli* belonged not to one individual or another, but to an extended family or clan. Every *altepetl* was ruled by a *tlatoani*, a hereditary position that was representative of a dynasty. The most famous *altepetl* of the Nahua is Mexico-Tenochtitlán. The settlement pattern of the Mixtec is analogous. They organized themselves in ethnic states called ñuu which were in turn subdivided into administrative units. Among the Mixtec, the head of the ethnic government could be a man or a woman. The Maya ethnic states, the *cahob* (singular *cah*) were not subdivided into constituents and were governed by a *batab*, a hereditary leader from the elite in each of the hundreds of ethnic states throughout the Yucatan and Central America in the 16th century (Restall, Sousa, & Terraciano, 2005).

Fig 3. *Pucllana huaca* (pre-Columbian tomb). Image created using Lidar technology. Source: Gavazzi, 2014.

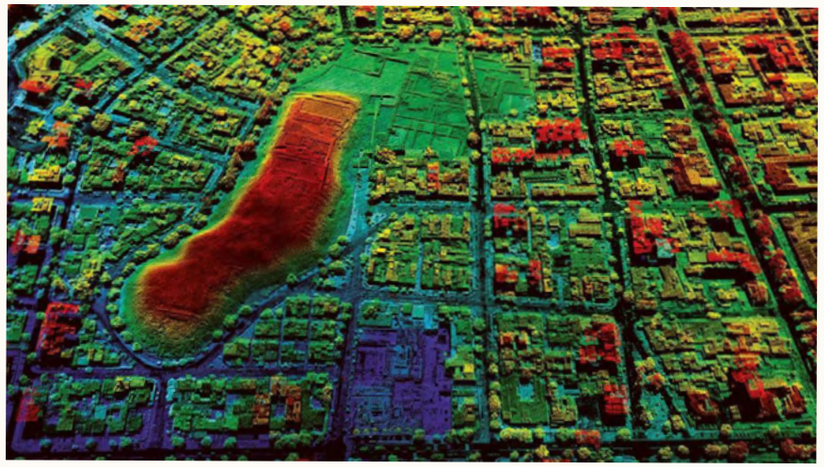


Fig 4. System of canals, roads, and tombs that reveal the complex palimpsest of Lima. Source: Gavazzi, 2014.

This pattern underlies the territorial distribution of ethnic settlements, the city-territories that characterize pre-Columbian "production of space"—an expression I borrow from Lefebvre. To describe it, archaeologists and historians employ various expressions, they speak of diverse systems and interconnected systems of occupation, of regional systems made up into population clusters, urban constellations, and city-territories (Canziani Amico, 2009; Gavazzi, 2014; Cardinal-Pett, 2015). In the Andean Pacific region, we can clearly see these early urban conformations emerging from Lima's deep palimpsest to become what Jean-Pierre Crousse has described, from a contemporary perspective, as a network of "urban black holes" (2017). More than 380 *huacas* are dotted throughout the city, joined by a network of roads and irrigation channels that link the three rivers through four ecological levels, giving Lima its structure even today. Pachacamac is the jewel of the *huacas* of Lima. In its walls, one sees the stratigraphy of four cultures (Lima, Wari, Ychsma, and Inca), whose masonry differs according to an incremental dynamism that marks the "passage of time"—as some Indigenous Peoples call history. The *huacas*, which until recently were submerged and invisible, are today at the center of debates about (living) heritage, agroecology, and urbanism in Lima. In 2019, an esplanade that serves as a connector between urban expansion and the Pachacamac Sanctuary, was the object of an international architectural and landscaping competition organized by the Peruvian Ministry of Culture, the Municipality of Lima, and Grupo Centenario.

This way of structuring urban territory has 5,500 years of history behind it and is consolidated in the Norte Chico region, on the Peruvian Pacific to the north of Lima. The use of the term "city" is, in this case, controversial. Many describe Caral as a ceremonial venue without sufficient concentration of human activity for it to be considered urban. However, as with Caracol and other tropical cities, it is highly probable that its functions have been underestimated because the constellation of its structures do not conform to the paradigmatic Mesopotamian model. Chase and Chase explain that there is archaeological evidence in Caracol and Tikal, for example, to show that in both locations there was a large, complex social structure consistent with what we consider urban. It is perhaps characteristic of tropical civilizations to have developed an urbanism that entails population dispersion and a fusion between the rural and the urban worlds. Archaeologists such as Chase have used terms such as "garden city" and "green city" to describe urban conglomerations like Caral. Inevitably, this reference takes us to the seminal utopia of the relatively autonomous and sprawling cells of structures that Ebenezer Howard imagined thousands of years later to invent a polycentric system that could cohabit with nature in the way that the industrial city could not. It is also worth remembering that in the case of Norte Chico, the context is not tropical, but rather an arid zone in which the greatest human achievement is structuring the territory to be able to generate a series of rural/urban oases.

In its composition at a regional scale, the Lima of the *huacas* expresses what the architect and anthropologist Adine Gavazzi describes as a diffuse, polycentric metropolis that does not correspond to the concentric and compact model of the polyfunctional Mesopotamian or Greco-Roman cities. This urban territorial model—whose pattern is taken from astronomy, as is the case in most pre-Columbian American cities—distributes the population density across multiple knots that hold together a territory in shared agroecological production. The demographic distribution is designed to efficiently manage the resources of a habitat whose design is inextricably linked to the conceptualization of the urban as territorial. This is key to understanding it. In pre-Columbian America, we are faced with a model that is drastically different from what was introduced in Spain (Laws of the Indies) or Portugal (port city, organic, structured around two levels of power), which puts in doubt the use of the term "city" to refer to its nuclei, unless it is in cases of planned constellations with a clearly centralized court (Teotihuacán, Tikal, Cuzco, Tenochtitlán, etc.). This (tropical?) "American" model of urbanization demarcates itself from the traditional concept according to which a city is cellular, even walled, contained by a ring or series of rings, and surrounded by a rural landscape or *hinterland* that sustains it and provides it with the necessary primary material. In deepest America, the agroecological areas, the jungles teeming with animals, the landscapes of pleasure, the often "green" infrastructures, and the clusters of human density are all part of a profoundly ecological concept of human urbanization (UNAM, 2020). As Canziani Amico explains, the town square in the cities of the ancestral Americas is designed to be connected to the stars, the mountains, the rivers, and other sacred references. It is a plaza designed for communion with the cosmos, not only with other human beings. This also points towards the fact that the urban spaces are, by definition, exterior and not interior. The temple is not a space that contains us, it is an irrepressible relation that can only be experienced in the expansion of the territorial space. Pre-Columbian life—ritual, commercial, philosophical—was undertaken primarily outside in the urban landscape.

It could be argued that the vision unfolded in this brief essay is derived from a projection of the present, its concepts and aspirations, onto the distant past of the Americas. I propose the opposite: the pre-Columbian territory-cities contain within their "protocol," as Keller Easterling writes, an animist, generative logic that rises above the relations and interdependencies that are, above all, spiritual and potentiate—or degrade, if they are disarticulated—a sacred ecology (rather than mere resource). Various landscape experts and historians of environmental thinking have emphasized this fact, including the seminal thinker of landscape architecture, Ian McHarg (1969). I would go so far as to say that the First Nations of the Americas constructed primarily agroecological centers; in the case of the Amazonian basin, they constructed habitats, a monumental ecology, a regional cultivation (Roosevelt, 1993, 2000; Mann, 2000, 2005; Erickson, 2001, 2006; Kern et al., 2003; Heckenberger, 2008; Erickson & Walker, 2009; Heckenberger & Neves, 2009; Schaan, 2010; Hecht, 2010, 2013; Clement, 2015). One of the arguments against the theory that animist cultures of the Americas constructed population centers articulated in the eco-logic of their territory is sustained by the theories of the collapse of the Mayan complexes, which are used to refute our argument—a warning of what we as humanity face if we mismanage our environmental resources. However, the reasons for a city's decay or destruction can be multiple. I am interested in examining not the exceptional cases of assumed environmental collapse at a regional scale, but rather the patterns of urban-territorial habitation that can illuminate the present of a culture that has split the natural from the cultural to the point where it hardly knows how to connect the two. We could benefit from understanding how the pre-Columbian cultures integrated that which we have segregated in our complex contemporaneous lives, rather than discarding that understanding as outdated, useless, irrelevant, or even "collapsed."

The pre-Columbian peoples—vibrant and thriving nations, not mere archaeological remnants—demonstrated an unequaled skill in adapting to the geoformation or, to use Cazú Zegers words, the geopoetical (to not call it geo-engineering) and the biogeneration, biopoetic, or ecopoetic (to not call it

biotechnological). Its relationship with nature was not conceived in antagonistic terms, much less as a form of destruction. Examples abound. Clark Erickson calls the constructed landscapes of the Amazon "domesticated landscapes" and questions the concept of monumentality to liberate it from stone architecture and extend it to major transformations of the landscape. In the jungle, there are examples of monumental earth movements. Millions of cubic meters of earth were carved out of areas such as Beni, where the land is shaped in an expanse of low and high relief. The Amazon basin is dotted with geoglyphs, artificial islands connected by pathways and canals, intermediary spaces plowed through with ridges (*chinampas*, *waru waru*, troughs) and systems to manage floods and water on a regional scale. Archaeologists are investigating areas of demographic intensity in the Xingu (Heckenberger), Beni (Denevan, Erickson, Baleé, Neves), the Upano River (Instituto Nacional de Patrimonio de Ecuador), Acre (Neves), and the Marajó (Curtenius Roosevelt, Schaan). Erickson's team has measured the biodiversity indexes on the artificial islands of Beni and found that the figures are higher than in the surrounding areas. Human presence in this social territory has contributed to stimulating life and biodiversity in the jungle. More than 300 languages are spoken in the Amazon region. When I asked the Brazilian archaeologist Eduardo Neves, who studied the *terra preta*, the geoglyphs, the frequency of useful species, the distribution of languages, and Amazonian settlements over decades, about what makes it tangibly different from the urban ontology of the Americas, he replied that it was its dynamic condition, not only of migrating urbanism or the urbanism of migrants, but also the unfinished, incremental, or accumulative urbanism. An urbanism, paradoxically, that is not permanent, but rather transitory. In the liquid and dynamic space of the Amazon region, his description doubtlessly adjusts itself to the urban-environmental history of the region.

Gavazzi argues that pre-Columbian urban planning gives us insight into the challenges that 21st century urban planning faces and that Andean planning—in the case of Lima—works better than other imported models that have been imposed on the territory. The collision of paradigms clearly seen in Lima occurs with equal intensity in Mexico City, where Tenochtitlán, Xochimilco, and other *altepeme* knew how to coexist with and manage water, while the colonizing vision invested time, effort, and resources in draining the lagoon by means of huge infrastructure projects. Here, the value of land contributed directly to the demand for draining. In her book *Dreaming of Dry Land*, historian Vera Candiani tells the environmental story of Mexico City through the planning of the Desagüe, revealing the efforts—epistemological and ontological included—that transformed the ecology of the city. In Iquitos and Manaus, the contrast between the two different ontological states of city planning and urbanism is also clear. In Iquitos, the Amazonian floating city still coexists with the colonial city of the *zócalo* whose ground is dry and hard. In Manaus, floating elements exist, but what dominates now is the logic of modern planning that gave the city its free port and established the free trade zone in the context of Operation Amazon, a military and economic strategy to promote Brazil's national integration and the economic development of the region (Hecht, 2010). The floating city of Manaus was destroyed in the process.

The pre-Columbian system of urbanization is hyper-polycentric, but with a strong hierarchical nature within each city-territory. There are often hubs that administer various secondary hubs in a system of secondary, tertiary, or even quaternary relationships. Within each ethnic city, a different ethnic dynasty reigns that is sometimes subjected to another regional dynasty. Toponymic studies, like those Inés del Pino undertook on the city of Quito, show that the names of each nucleus in a regional system tend to correspond to the surname of a *cacique*, the "master" or head priest (*curaca*). In this form of social organization, each nucleus or cluster manages a communal agroecological space for family, community, or tributary use. In its decentralization, this system distributes access to common goods in a way that is now revindicated in the English as "the commons." It is hardly surprising that territory and communal property are two of the central objectives that spur Indigenous resistance, as well as two other related aspects, the revindication of a multiethnic or pluricultural state and bilingual education.

The "American" world was so diverse in the 16th century that every ethnic state or every conjunction of complex ethnic states (such as Tlaxcala) had its own language or dialect, its own origin story, rituals, market or markets, hereditary dynasty, culture, and communally organized territory. America of the 16th century was an urban constellation of diversities. If there are currently hundreds of languages in use in the Americas, we can only imagine how many were spoken in the pre-Columbian era. The mega-diversity of this region of the world is not exclusively biological, it is also cultural. They are interrelated diversities. From the perspective of political science, decentralization or polycentricism facilitates participative democracy. As can be seen in the communal assemblies of today's Amazon, Andean, or Yucatan regions, assemblies continue to be participatory nodes of decision making in the Indigenous world. The pluriethnic and pluricultural state, which is still at the center of the struggles of the Indigenous movements and which has finally been incorporated into various constitutions, was a vast network of differences that co-existed in the 16th century.

Each ethnic state and each of its components managed a common territory. The Laws of the Indies introduced elements that are far removed from Roman law. From a legal perspective, it is considered profoundly original, and its originality derives precisely from the negotiations between the colonizers and the Indigenous elites (Ferrán, 1945). The concept of shared land—and even a shared mine—was incorporated into the Laws of the Indies. The Spanish used

the concept of shared land and pastures, so it was possible to incorporate the notion of common land into the dynamic legislation of "the Indies." The pre-Columbian administrative structure was profoundly urban, so much so that if there is a level of government at which the oldest political formations of the Americas persist and resist, it is at the level of colonial town councils and even at the level of parishes, municipalities, and the maintenance of the republican or federal law (in Hispanic America). These thousands of ethnic states were autonomous. Sometimes they allied with one another and established confederacies; sometimes they fought one another; sometimes they were taken over by more powerful ethnic states (Restall, Sousa, & Terraciano, 2005).

The presence of this extensive network of urban constellations with longstanding commercial ties largely explains the conquest of the Americas. Advances in archaeology, linguistic studies and the distribution of languages, historical-environmental studies, biogeography, history, and other disciplines are generating a very different vision of our tri-continental region in the 16th century. It appears that it was much more urbanized, structured, and interconnected than we in the 20th century imagine. The handfuls of Spaniards who made it across the Atlantic could never have conquered the vast swathe of land that they ended up controlling in the first half of the 17th century (from the south of Canada to Patagonia) with just gunpowder, canons, harquebuses, armor, mastiffs, and horses. Without Indigenous knowledge of the territory and its urban structures, it would have been impossible to control the continents in such a short period of time. This explains why one of the first strategies of the conquest of the Americas was the establishment of alliances between the conquerors and local leaders. These alliances were sometimes consolidated through marriage. Through *mestizaje*, the conqueror became part of the dynasty of a given ethnic state. To this, one has to add the deadliest weapon used to devastate the large populations of the Indigenous Americans of the 16th century: viruses introduced by the Europeans, some intentionally, some accidentally. Archaeologists estimate that 90 percent of the American population succumbed to one or another of these epidemics (Mann, 2011). Based on translation, reading and analysis of codicils, wills, and title litigation, it is possible to infer that most of the "Americans" living in the 16th century connected their identity primarily to their ethnic state, whose universe encompassed that of the citizens (Restall, Sousa, & Terraciano, 2005). One exception was the merchants who surely played a fundamental role during the conquest of the Americas, as guides and experts on the resources available in every region. Excellent navigators and hardy long-distance walkers, they knew the networks of exchange that extended by land and water throughout the Americas. The rivers were vital arteries of connection for long-distance commerce, from the Paraná, the Amazon, the Orinoco, all the way to the Mississippi and up to the Great Lakes.

Finally, I would like to argue in this brief synthesis—which might suffer from a tendency to generalize in pursuit of the principles and protocols underlying the urbanization process of the Americas—that our First Nations always conceived of urbanism as an agroecological phenomenon inextricably linked to ecology and the land. The current affinity between paradigms of the Latin American landscape, profound because of their historical condition, and paradigms that have consolidated at an academic, conscious level in the midst of a post-industrial condition in the societies in the north of the continent as "landscape urbanism" or "ecological urbanism" (Mostafavi & Doherty, 2016; Waldheim, 2002) is based on the fact that they share a fabric that emerges from the very depths of our common palimpsest to offer us suggestions as to how to reestablish the symbiosis between the city, countryside, forests, and infrastructure. We must urgently look at the cities that are pulsating under our feet or are newly growing in order to give voice to other ways of inhabiting this world and confront the colossal challenges that we as a global species face as a result of our constant denigration of the origin of all wealth: "nature" and the work of millions of human beings.

Two annotated bibliographical notes for the re-edition of this text:

Davidovits, J., Huaman, L., & Davidovits, R. (2019). Ancient geopolymer in south-American monument. SEM and petrographic evidence. **Materials Letters, 235*, 120-124*.**

Joseph Davidovits is a French geochemist who has been researching the monumental architecture of Tiwanaku from a scientific perspective of the materials at a molecular level. His findings are revolutionary. Using powerful microscopes to examine samples taken from the Puerta del Sol, whose construction methods remain an enigma for archaeologists, he describes the presence of organic material that could only have been introduced artificially into the mineral matter. The organic substances, Davidovits argues, are the remains of a liquefaction or softening method using arsenics present in the region created from the use of acids derived from plants including corn. This softening process allowed the builders of Tiwanaku to shape the stone by forming and casting what could be considered an early form of "bioconcrete" that would be 1,400 years old. If they used vegetable acids to liquefy the stone, they could have applied guano taken from the Pacific coast as a binding agent. The construction expertise present in the monumental architecture of Tiwanaku tells us about the long history of regional exchange. Davidovits recognizes that the Western world did not have the technology to interpret the materiality of Tiwanaku before 2016, and that it does so now thanks to the interest shown by science innovating in matters of biomaterials and geopolymers over the past two decades.

Prümers, H., Betancourt, C. J., Iriarte, J., Robinson, M., & Schaich, M. (2022). Lidar reveals pre-Hispanic low-density urbanism in the Bolivian Amazon*. Nature*, 1-4.

The Amazon has not been a primary focus of archaeological research. Despite evident ancestral occupation of the region—manifest in the ubiquitous presence of potsherds (the oldest in the Western hemisphere) and other elements of a rich material culture—the notion from the Enlightenment onwards that the heart of South America is a hyper-natural space *par excellence* kept hunters of ancient civilizations out of the tropical rainforests. There are some worthy exceptions. The British geographer Percy Fawcett (1867-1925) dedicated his professional life and died in search of a lost city in the Amazonian jungle of Bolivia and Brazil, convinced that its complexity and monumentality would rival that of the great civilizations of Mesoamerica and the Andes. His biography was immortalized in the historical novel *The Lost City of Z*, by U.S. journalist David Grann, as well as the eponymous 2016 film. In the early 20th century, the Peruvian archaeologist Julio César Tello (1880-1947) had the courage to argue that the origins of Andean civilizations lay in the Amazonian basin—or at least in the Amazonia-Andean-Pacific transect that turned deserts in verdant oases—and time proved him correct. A handful of archaeologists dedicated their lives to studying the complex society that inhabited the Llanos de Moxos in the Beni area of Bolivia. Through excavations, surveys, ethnohistory, historical ecology, linguistic studies, ethnoarchaeology, and other disciplines, the archaeologists of the region shed light on what could be considered an urban and agroecological constellation (including productive forests) at a regional level. One of these exceptional archaeologists, Heiko Prümers wrote a doctoral thesis about the ancient history of the region. After studying the area for 25 years, he decided to excavate, using Lidar, a laser technology for long-distance imaging that has revolutionized the discipline because of its ability to see through cloud and canopy cover. Tropical rainforests have always presented a challenge to archaeologists. Lidar can penetrate the jungle from an aerial perspective and visualize remnants of the flourishing civilizations that a handful of visionaries had searched for among the trees and land formations. In this scientific article, published in *Nature* in May 2022, the authors describe in detail six areas that they analyzed. The results were conclusive: any remaining doubts about the presence of at least one Amazonian civilization were allayed by the evidence presented. The Casarabe culture prospered on the Bolivian Llanos de Moxos between approximately 550 AD and the arrival of the Spaniards in the Caribbean. The hierarchical system of settlements includes 189 elevations of highly productive and agro-diverse monumental centers, 273 centers of lesser importance, and 957 km (595 miles) of canals and elevated roads. As is often the case in these pre-Columbian territorial cities, the constellation of centers of various sizes is woven into a regional network that is highly interconnected and dense in terms of its “low-density urbanism” or dispersion. In this dendritic agro-urban system, the roads stand out for their straight lines, their scale, and their cosmological orientation. The agroecological and aquacultural landscapes of these regional constellations were built communally and with an expert understanding of hydrology. The manipulation of the earth allowed the Casarabe culture to manage vast flood zones in a cultural landscape that stretched over 120,000 km² (more than 46,000 square miles). It is no exaggeration to say that this scientific article marks an important shift in the study of the ancient history of this civilized jungle that emerges to inform us about how the relationship between culture and nature can be symbiotic.

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OLFACTORY OFFERING

As your eyes roam this page,

Let it deepen a little. Breathe out through your mouth.
Can you smell your exhale?

pay attention to the rest of your body. Where is your breath at this very moment?

Does it smell familiar? Perhaps like putting your nose into the fur or hair of a loved one? In a way, you are doing just that. You are greeting the collective memory of wetlands inside your nose. Let it fill you completely as you continue breathing. Allow yourself to become of bog, of Sphagnum, of beaver, of wolf, of howls, of ungaire, of fire, and of carbon that retains the essence of early Earth.

In this deepening brea(d)th, picture all the invisible molecular processes that inform your respiration. You are no different from a fog—condensing and expanding around your breath. You are no different from a bog—archiving, respiring and shifting cycles of carbon and oxygen, the building blocks of life. As you read this, imagine yourself kneeling before a peatland. Let your knees be soaked by the dampness beneath you. Imagine pressing your nose into a floating mat of vegetation and breathe deeply.

AUSTRAL VERSES

Gabriela Mistral

Gabriela Mistral (1889-1957) is the pseudonym of Lucila Godoy Alcayaga, a writer and poet born in Vicuña, Chile. She was the first Latin American author to receive a Nobel Prize for Literature (1945) and remains one of the leading figures of contemporary Chilean poetry. Both her work and her social thought propose an ecological and ethical vision that integrates the spiritual, material, and psychic dimensions of existence. She was a school teacher and educator whose pedagogical philosophy focused on children's development and welfare.

Taken from *Poema de Chile* (Poem of Chile)

Patagonia

Her children call Patagonia
the White Mother.
It is said that God did not want her
for her stillness and for being afar,
and for her nighttime, that is her dawn,
and for the howl of her wind,
for her kneeling grass
and because she is inhabited by
a river of foreigners.

Those who never had such a White
Mother,
talk too much,
the green land never was
neither this angelic and white
nor as sustaining,
mysterious and silent.
What a sweet Mother you were given,
far-away, Patagonia!
Known only to the
Father of the South Pole,
who made you, and looks at you
with an eternal and gentle gaze.

Listen to the simpletons lie,
and let out your laughter.
I lived it and with me I carry
her power and glance.

—Tell me, tell me mamma mia,
it was such a strange thing?
Tell me, even if she is still
and punished for the wind.

I will tell you about her grass,
it neither tires nor ends,
outstretched like the loose
flowing hair of a mother
waving quietly,
but filled with words.
The breeze delights her,
and the crazy wind lifts her.
To come down, there is nothing like the
grass.
and you speak,
when the puelche* wind gust arrives
like mutinous people
it whistles, and screams and howls,
only becoming its soul.

Puelche, means “people from the East,” and comes from Mapudungun, the language of the Mapuche people.

Mistral, Gabriela, *Poema de Chile*, text reviewed by Doris Dana, (*Editorial Pomaire*, 1967), pp. 235-236.

The background of Gabriela Mistral’s complex poem “Patagonia” involved her mission to Punta Arenas (1918) endorsed by Pedro Aguirre Cerda to Chileanize the Alcalufs. In turn, she herself was enriched and nurtured by their tales and discovered the “puelche” wind. (Taylor, Martin, *Gabriela Mistral’s Struggle with God and Man*, pp. 87-88)

Astrid Fugellie Gezan

Astrid Fugellie Gezan was born in Punta Arenas, Chile. She is an early childhood educator with a degree from the Universidad de Chile and co-founder of the Casa de la Cultura in Punta Arenas. She actively participates in national and international congresses, as well as in poetry readings and writing workshops. She has been included in several national and international anthologies. Among other awards, Fugellie Gezan received the Premio de la Academia Chilena de la Lengua in 1989 for her book *Los Círculos*; a prize in the literary contest Rostro de Chile, 1963; Premio Fondec, 1993; the Support for Literary Creation Award from the Consejo Nacional del Libro y la Lectura, 2004; Proyecto Germen, USACH, 2012; the Literature Award of the Municipality of Magallanes, 2015; and the Pablo Neruda Lifetime Achievement Award, 2018. She has been a juror in Chile and Spain for the Consejo Nacional del Libro y la Lectura, the Pablo Neruda Award, and the Letras de Chile Award, among others.

Source: *Los Círculos* (first edition 1988; fourth edition, Santiago: Editorial La Trastienda, 2012).

PATAGONIAN CIRCLE
The Massacre

Some said: -They whitened our blood!

And others: -They shattered our bark canoes!

Many added: -They cut our ear and
stole our otter!

The whole race cradled this testimony:
-We are exposed to venereal
wounds!
-I understand, replied the Indigenous god
tugging at his mess of bones.

Then,
with his cranium drained of tears and his eyes
full of loss
he disintegrated, with his dead soul,
through the face of Divine
tuberculosis.

BLACK CIRCLE
The Skinned Woman

-You shall travel the coasts that lead to the Island
of Fires.
I'm a holy bone, born here,
without prior consultation.

They regurgitated me and said:
-Cheers! May worms and flowers
grow from within you.

Hey, look at my skinned body:
The first indecent bone that I carry
is the scar on the womb that brought me here.
The Black Feast, the second bone
third bone
and the useless ones that followed
relied on adventist discourses:

> You shall start a family with two sons,
> a seemingly ageless dog and
> a rabbit that
> unexpectedly
> will be torn to pieces by the
> canine's foolish snout, and die.

I began to move, then, dragging
my skeleton's clinking bones,
the crack in a bell gradually summoning
animals and faces to church.

C CIRCLE
identity

1

One day I fell asleep and woke up feeling
as if I were life and death at the same time.

Moon of the extinguishing sun.

Pubic mound and stamen without number
or gender.

2

I accepted my equivalence: Lirayén Millahue.

I washed the cry from her face,
the sweat from her hands,
from her legs.

3

The universe knocked me over with its kiss
like a ring in annular
space.

4

I began forming the arc of my own planets.

PAROUSIA CIRCLE
segunda loncón

1
Segunda Loncón, *payadora* of lost
causes
was born blind.
With the respectable grief of an evergreen
she would sing litanies at the entrance
to Casemita.
With her eyes full of night
the shriveled women hummed
as if God were planting a palqui:
—Liq
liqui
liquid
liquidespair
liquidator of my eyes.

The Indians would cram around
to hear
Segunda's captivating vibrato song.
Her cords stretched so far
across Chile's sky
that the Central Valley's wild flora
coalesced in her dance
her people's miraculous salvation.

2
Living in the indigenous soul,
that of wild flora
and men from the tormented Chilean sky,
Huenu, Segunda Loncón's indigenous-father-god,
saw the holy spirit lodged
in this blind woman's green heart.

And Huenu asked Segunda Loncón
from his perch:
—Do you want to see? I need your eyes
to form an intimate levitation with the devout
canto, which is our own, to grace
the flawless tone of the disregarded
—Do you want to see?
—Yes!

And so, Huenu
picked up the Central Valley's green eyes
and placed them in the emptied basins
of Segunda Loncón's
face.

Before Huenu's amazed eyes,
the Indian woman shouted:
—I can see!
Then Huenu emptied his prayer into clay:
—Save your Tribe!
and to avoid repeating the
in humanity of civilizations, write in your diary
everything that you see:

— C H I L E I S A G O O D E X A M P L E OF P A R O U S I A

Liliana Ancalao

Liliana Ancalao was born in Comodoro Rivadavia, Chubut, Argentina, in 1961. She belongs to the Ñamkulawen Mapuche-Tewelche community and is a student of her people's native language. A former high school teacher, Ancalao is currently Professor of Literature at the Universidad Nacional de la Patagonia San Juan Bosco (Argentina), as well as a poet and a scholar. Her work has been translated into English, Portuguese, French, and Italian. She has attended meetings of Indigenous writers in Chile, Venezuela, Mexico, and Colombia and has lectured on her work at universities in the United States and Germany. Ancalao's published works include *Tejido con lana cruda* (2001, 2010, 2021), *Poetry*: *Mujeres a la intemperie-pu zomo wekuntu mew* (2009), *Resuello-neyen* (2018), and *Rokiñ, provisiones para el viaje* (2020).

I'VE SEEN CHULENGOS[1]

I've seen *chulengos* in herds
lit up by the moon

when they appear
winter surrenders
covered in lint and wool
I've seen the air tremble between their warm thighs
I've seen freedom and tenderness
galloping with them
wild
over the plains

I've seen, I think
more than I deserve:
I've seen the *chulengos* from afar

I have a feeling I should get closer
how much I can't tell
enough to overcome my fear of meeting them
to measure myself in their space-deep eyes
and accept the miracle of a snow blanket silence
that rips the scab the last thistles

if I resist they may let me
submerge into their infinite naïve eyes
nail myself to the center
of time for a moment

and be freedom be tenderness
galloping with them
wild
over the plains

1 Baby guanacos.

examples of peɯma[2]

the *pewmas* don't visit me
they come from earth
but I'm not chosen
because I live in the city

no beating hearts
thrown into the sand
or blue-feathered *choikes*[3]

I only deserve labyrinths
maps
streets with no names
and the fear of arriving late
like that time I prepared a journey
and the *pewma* blocked me
in the corner of a dead end
it was a kind of warning
that I shouldn't go far

I listened
and I stayed
wandering around the universe
that beat in my daughter's womb

and so, I could be
here
when the door of awe burst open
and I was a firsthand
witness
of that child of the new minutes
of the newborn parents

2 In Mapuche spiritual beliefs, a *pewma* is a dream containing important messages or knowledge, especially related to traditional medicine and social organization.
3 Endemic South American bird, similar to an ostrich.

Desiderio
a guest in my city home
dreams
of the countryside
quietly riding a horse

pushing through some bull calves
right next to the river

but he also
tells me of this dream:

-a cat attacked me
he latched his claws into my stomach
and I grabbed him
ripped him off
and threw him
as far as I could-

I think the *pewma* is warning him of fights

and I say, pointing
at the circular weave hanging from the ceiling,
-dad
¿see this? this is a dreamcatcher
from the Cherokee people
a web that doesn't let bad dreams through-

-but it didn't catch mine!
it went right through – he says
pointing to the floor

-still
I crossed my slippers

so the dream doesn't come true.

Pewma Cases, published in *Rokiñ, provisiones para el viaje*, Espacio Hudson Ediciones, Buenos Aires, 2021

Question

must we resign to being a question
roll up our pants
keep on moving
with a tectonic blow to our backs
without bedrock
or contemplations

must we settle for no answer
die in a history and another history
come out of our mother kicking questions
through the skin's pipes
till we hit the bones

and be
only human
bracing struggles
controlling the earth's heartbeat

see our own ruins in the map of dreams

Ivonne Coñuecar

Ivonne Coñuecar is a writer of Mapuche origin from Coyhaique, Patagonia (Chile). She is a journalist from the Universidad Austral de Chile, with a Master's in Literature and a degree in social communication. Her novel *CoyhaiQueer* (2019) won the Santiago Municipal Literature Prize, and her published poetry collections are *Trasandina, Patriagonía, Chagas, Adiabática* and *Catabática*. She received creative writing scholarships from the Fondo del Libro in 2008, 2009, and 2013 and the Fernando Santiván Medal from the Universidad Austral de Chile in 2008 and 2009. Coñuecar also won a scholarship from the Fundación Neruda in 2007. She received a screenwriting grant from the Centro de Promoción Cinematográfica de Valdivia (CPCV, Valdivia Center for the Promotion of Cinematography); she was screenwriter for the documentary *Desde Aysén: Recuerdos de niñez* and juror of the 8th Festival de Cine de la Patagonia Aysén (FECIPA).

The first four poems are from:
Ivonne Coñuecar Araya, *Patriagonia: Catabática, Adiabática, Anabática* (Santiago: LOM Ediciones, 2014).

From: *Catabática*

Places surrender / my land surrenders

Places surrender / my land surrenders
into shards
the Chonos archipelago
is this soul full of islands
full of raw cold balancing
a desperate iceberg contemplates the burden
of staying afloat / as if this burden were
named after a river
gushing painless torrents

there is chaos in the desolate silence of Patagonia
the urgent explosion of thunder
and my lighting-flare eyes
the ash of the Hudson without Rock
the bruise of an Argentina with no name / with no [nationality]
the surprise of shaking earth
awakening (you-me)

my Patagonia / it's like you want to leave
after so many blizzards
my restless feet probing islands
the continental fracture / my body split into pieces
scattered over the water / can be called islands
can be called archipelago / folding and unfolding
but a scar always
marks the creases of its seclusion.

Patagonia in the cold that hurts

Patagonia in the cold that hurts
the wind opens her mouth and roars
memory trembles in the wood
whistling in the chimney
the blue night shivers on my lips
sealed shut by their frost
needles in the bleached wind / Coyhaique silence
the anachronic reason of mourning alone
tempests blow out my candles / they sweep the dust of tombs
whistle in the cracks of my skin
recede in my cathartic /Antarctic exhaustion
Trapanada
whistle again the cracks of my lands
they recede in my Antarctic exhaustion / this root so large
it throbs in the cowardly retreat of my chosen deafness

and they say I escaped so much

From: *Anabática*

Fires
[Rising wind at the end of the world]

[The colonists opened a path to settle Patriagonia with uncontrollable fires. They burned for decades on end. Only adolescence contained the flames and screams of a city turned into a volcanic crater. Then came the starving suicides of my compatriots who leaped from gigantic rocks and hills. They welcomed troops of soldiers who filled our land with weapons of policies and the social housing of a rigid city. No one wanted to accept the apocalypse until they blabbered globalization]

I.

he says he's burning, ascending, that he's rising in the air
it's the fire winds I say
Patriagonia burns since man set foot
and his progressive hands opened a path
they cleared the land with infernal promises
we sleep under the snow
and he claims to be a historian

I show him my scars, my burns, the marks on my legs
and whisper: I went to hell like a trapeze artist who
dreams of wings
and now I'm ascending to my apocalypse
ellipsis on the winds that embrace
a blazing mouth and fangs
that's why I scare you, protect you
like a blindfolded girl, blinded from lies
I distract you running from one end to another, a kiss
burning me
hell under the snow, over your back
nowhere can avoid destruction

From: Antaraucana
[rewriting my homeland without chile]
2009

vii. heart attack

the bicentennial ground cracked
they reduced us to settler ranchers
my heart had been broken
the earth torn
this southern wound gaping with magma
I fell to my knees over the crevices of tedium
while heart attacks continued to walk
we cross-dressed to recognize each other out there
in congressional sessions they blabbered, terrified,
that we had a culture
look at the wind in my eyes
look at my sea eyes
look at my islands
look at me and then fall from the suicide bridges
look at me and postcards will explode
my arms fall from the weight of land to touch silence
my cartography and waters shatter
I leave this pain and the extension of my voice is wind
the extension of my eyes my muteness
my heart is being attacked from living under threat and
persecution

Adriana Paredes Pinda

Adriana Paredes Pinda is a Mapuche poet and *machi* (traditional healer and religious leader) of the Mapuche Nation. She has a Master's in Contemporary Hispanic American Literature and a PhD in Human Sciences from the Universidad Austral de Chile. Her first book, *Ül*, was published in 2005 and her second, *Parias zugun,* in December 2014. In addition, Paredes Pinda has participated in various anthologies and journals of contemporary Mapuche poetry: *Kümedungun/ Kümewirin* (LOM, 2010); *Martes de Poesía* (Universidad Silva Henríquez, 2007); *Hilando en la memoria. 7 mujeres mapuche* edited by S. Falabella, A. Ramay, G. Huinao, Kallfv Mapu (Editorial Cuarto Propio, 2006); *Poesía mapuche contemporánea* (Ediciones Continente, Argentina, 2008); *Hilando en la memoria. 14 mujeres mapuche. Poesía* edited by S. Falabella, G. Huinao, R. Miranda (Editorial Cuarto Propio, 2009), *20 poetas mapuches contemporáneos* (LOM, 2003); "Williche, poetas y poesía," in *Fütawillimapu* edited by Pilar Alvarez-Santullano and Amílcar Forno (Universidad de Los Lagos-CONADI, 2001); *Poesía revolucionaria chilena* by Juan Jorge Faúndez (Ocean Sur, August 2014); "La flor del telar'' in *Ciudad Circular 5* (Valdivia, UACh, 2004); *Nomadías 9* (CEGECAL, Universidad de Chile, 2009); *Dossier*: *Literaturas afrolatinoamericanas e indígenas* (Universidad Javeriana and the University of Pittsburgh, 2014). She lives in the Lof Mapu Riñinawe of Awka Lafken (Ranco Lake), in the Great Lands of the South, Fütawillimapu of the Mapuche Nation, where she works as a teacher, poet, and *machi*.

Healing

We need a
Fuchotun.[1] Bay leaves to clean the air,
to clear the roads.
The woman guiding me
scatters foye[2] in the dark and bursts
a spirit-chewing moon. She'll tell me when.
For now, I have the smells,
I wake up with my nose at the edge
of cliffs,
licking dreams.
Fuchotu fuchotu
pieyfey tañi ñaña
amulerkeita pu chollvñ mamvll.[3]

The child will sing her ancient song if she meets
the mother of her roots, if she fills her mouth
with healing herbs. Coltsfoot
for the pain that spills
into asthmatic coughing, palke
for the burning head with no trarilonco,[4]
matico will scar over the wounds of childbirth
when her light comes.

1 A Mapuche cleansing ritual that involves burning medicinal plants.
2 Sacred tree, also known as a *canelo* in Spanish.
3 "Ritual, ritual / as my aunt says / she walks in search of new plants."
4 Headband, either woven or silver coins.

Now her eyes are fixed on the pavement,
no maternal moons in the buildings,
no sun or air or fire enters.
The girl will have to perform a machitun.[5]
Budding branches
press into her tongue,
the smell of pewen[6] giving birth.
The spirit left her, they say.
We set fire to her home under a full moon,
her arms rejected the Mapuche, thus her sorrow,
but she gave in to the foye
while we sang. Trutruka,[7]
pvfvllka,[8] old rauli trompe[9]
to fall in love again.

A boy asked for her return,
that we free her from the black dogs.
She was tired of living hostage
in another world, but her heart was split
in two.
Thus her pain and white lice.
We asked mamita to rub her fracture
the spot that was killing her. Then came good smells,
Treng-Treng's[10] earth filled her hands,
the sick girl turned into a spirit
because mother came for her.
"I looked for the spirit where it got lost."

5 Healing ceremony.
6 Araucaria tree in Mapudungun.
7 Traditional trumpet made from a cow horn and bamboo.
8 Small wooden flute.
9 Mapuche jaw harp, usually made of metal, but in this case, made of rauli, a native Chilean wood.
10 In Mapuche origin mythology, Treng-Treng is the serpent of the earth who battles against Kai-Kai, the serpent of the sea.

Something is missing in this house, I've been told.
We'll have to live in it, then,
the circle, the old tiger.
Pu aliwen.[11]
Open the murmuring rooms, let the spirit
take its belongings. Let it mount
the secret heartbeats.
Let Kvtral[12] grow and consume us in its vibrant embers
its smoke, its millenary secretions.

Come, old tiger, I'll let you comb my hair.

11 "My tree."
12 Fire.

Secret Tongues

The machi[13] spoke, don't repeat her words.
She entered a trance. And is going

to the mountains to wait until the earth's tongue
also speaks to you.

We'll go to the hills over the full moon,
and sing for you from there. The only way:
listening to the spirits at dawn.

If death's boat left the girl behind,
there must be a reason. Dreams took her
and never let go. She must keep on dreaming.

The spirits appear, only some
can penetrate the lagoon.

Her warrior self must beware of illuminous braids.
They can suddenly take her. And never come back.

13 Mapuche healer and spiritual leader.

Soledad Fariña

Soledad Fariña Vicuña (b. 1943, Antofagasta, Chile) is a poet, writer, and professor of literature. She studied political and administrative sciences at the Universidad de Chile, philosophy and humanities at the University of Stockholm, religious sciences and Middle Eastern culture at the Universidad de Chile and holds a Master's in Literature from that same university. Fariña Vicuña published works include *El primer libro* (1985), *Albricia* (1988), *En amarillo oscuro* (1994), *La vocal de la tierra* (1999), *Otro cuento de pájaros*, (1999), *Narciso y los árboles* (2001), *Donde comienza el aire* (2006), *Todo está vivo y es inmundo* (2010), *Ahora, mientras danzamos* (2012), *Yllu* (2015), *1985* (2016), *Pide la lengua, antología* (2017), *Ábreme* (2021), and *El deseo hecho palabra* (2021). In 2006, she received the J.S. Guggenheim Foundation Fellowship and in 2018, she received the Lifetime Achievement Award from the Fundación Neruda.

I TRAVEL ON MY TONGUE

from marsh sand

two vowels O E

I travel and edges brush my sleeping pebbles
Inside deeper inside the buzzing cavity
your vocals my vocals
in guttural moaning

I cling to my mollusks penetrate their optic nerves
Inside deep enough to touch their last breath
the eco of another tongue I walk in
wander in nostalgia I cage it
But clear messages don't reach the skin

What syntax What landscapes my eyes never saw
Want to sprout from these waters

and your tongue my tongue

A MINISCULE SHOAL

slips through fingers

Tiny fins penetrate nostrils
anxiously A warm
current pulls my Eye focusing
the Pupil

(What tongue my tongue thinks
aimlessly whirling this reason
What essence blooms from the green swamp)

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Ah, a woman impure from joy

Violeta Parra

Violeta Parra (1917-1967) was a singer-songwriter, composer and folkloric compiler, disseminator of Chilean popular music, visual artist, embroiderer, and poet. Parra is recognized as one of the leading folk artists of South America and is an icon of Latin American popular music. Her discourse was characterized by social criticism, irreverence, and defense of the people and the most marginalized sectors.

The Boat of Devotion
In the human gardens

In the human gardens
That embellish the earth
I'm making a bouquet
Of love and self-worth.

A boat of devotion
Carries my soul away
And nests in every port
Like a white dove astray

Oh allow me to cut
The flower of healing
The grasses of promise
The leaf of a feeling

A boat of devotion
Carries my soul away
And nests in every port
Like a white dove astray

The stems in my garland
Have a rose at its heart
The friendliest of trees
The passion fruit of art

A boat of devotion
Carries my soul away
And nests in every port
Like a white dove astray

THE VENICE AGREEMENT
- 2022 - ON PEATLANDS

Peatlands are power.
Yes,
carbon engines,
rivers of life,
biodiversity.

Ticking, tickling, alive,
murmuring, sensitive, sensual.

Peatlands are memory.
Flowing and folding into deep dark matter
they hold our future.

Consistent connection
through webs of roots,
mosses, minerals,
glacial retreats,
organic synthesis,
human life, and

multi-species kinship.

Peatlands are ancestors.
One and indivisible,
thumping
like a beating heart,
beating with yours, and mine,
the spongy wetlands underfoot
drink from the heavens
and breathe the beauty of color.

Smell it? (YES!)

Respect the living/dead peat,
include its language into
your songs.

We hold peatlands dear.
Near and far
we care,
because we walk the past,
that moves us
to encourage healing.
A gesture,
a humble twirl of fate.

Territorial rumors tell us
that now
we must sink into the cycles
of regeneration, reparation, restoration.

Peatlands are teachers.
Masters of rest,
caretakers of water,
libraries of climate evolution,
of composition and decomposition.
If they know, we may know.

Intergenerational custody,
the honour to serve,
invites
you,
come,
listen to the bog holler.
A call from the origin/ future of life.

Peatlands work with us,
even if you are only a small portion
of planetary land mass,
we are in service of your contributions.
Ayni. Mutuality. Hol-Hol Tol.

WE NEED:

- Immediate and effective protection of healthy peatlands
- A new framework for local to global coordination
- Multi-layered collaboration

Recognition of cultural, spiritual, and ancestral value of peatlands
- Re-wetting of degraded peatlands
- Political and public awareness and the will to steward peatlands
- Local inventory of global peatlands
- Meaningful resources to protect and restore peatlands
- Paludiculture and other innovative livelihoods
- Continous re-education of ourselves to increase our appreciation and love for peatlands

Start Now!

WE VALUE:

Well being of People and Peatlands
Reverence for ancestral and spiritual realities
Collection and dissemination of knowledges
Thoughtful action
Responsibility and accountability
Laughter and joy
Multifaceted diversity
Intergenerational and transdisciplinary relationships
The unknown

LOCAL
Ideas and inspiration
Sensitivities
Curiosity and creativity
Complexities and uniqueness
Consciousness
●LOVE

GLOBAL
Sharing of knowledges
Attentive listening and empathy
Coordination
Diversity and inclusivity
Decolonization
Y NO CONCENTRACIÓN DE LA TIERRA

WE CARE FOR PEATLANDS

I AGREE
WE AGREE
TO PROTECT
GLOBAL
PEATLANDS
LOCALLY
AND YOU?

The communities can build strategies to protect the peatlands to maintain the water cycle, the culture, and a sustainable economy.

Effective conservation of peatlands banning by law the extraction of Sphagnum magellanicum Moss and peat exploitation.
The owners of peatlands must be supported by the state to allow effective protection, and also build a complete peatland registry of Chile.

Se aborde holísticamente entendiendo que la turbera es un elemento de un sistema, por ejemplo, no se puede conservar una turbera si no se cuida su fuente de agua ya que esta se secaría.

Difundir y educar a la comunidad de la importancia local y global de la conservación de estos sistemas.
Integrar nuevos y antiguos saberes dentro de la discusión local de los ecosistemas de turberas.

Selk'nam community has the right and opportunity to make ceremonies in different parts of Tierra del Fuego's territory to strenghten the bond between human and nature

To be considered human and environmental patrimony, to put an end to extractivism.
To combine the preservation of peatlands with the ancestral-spiritual Selk'nam knowledge.

That the State accompanies local conservation actions with appropriate public policies (subsidies, incentives, etc)
That we find income alternatives for people that extract moss/peat for their subsistence.

Elaborate and execute an Action Plan for beaver control in areas with large extensions of peatlands.
Actively prevent new fires in Tierra del fuego

Promovamos la participación local, trabajando en conjunto con los actores centrales, identificados en un Mapa de Actores que contemple sus intereses y niveles de poder.

Promover la formación continua de agentes multiplicadores que permitan difundir los valores de las turberas a nivel local. Brindar protección legal a aquellas que aún no han sido adecuadamente reguladas.

A clear dissemination of knowledge should be generated among decision makers and citizens.

Create an inventory of the location, size, and condition of peatlands, along with continuous monitoring of these ecosystems.

We acknowledge and engage with work - management, knowledge growth, connection - that already exists.
Research is shared widely and in diverse forms - as lessons, policy, conversation, protest, art, poetry, song.

Respect peatlands as significant living entities with rights.
Understanding how our locality is connected to impacts of broader systemic issues such as extraction, water rights, colonisation and climate change.

Be imaginative. Honour diverse value systems, respect local and global flows and gather knowledges o peatlands and their locations intimately (their complexities, permeabilities, histories. Their biogeographical uniqueness, natural processes, stories, pools of knowledge, governance and resources)
All of these needs to be done with integrity, celebrating and sharing stories in order to build momentum and inspire other generations

Policies need to regulate responsibility for results of actions on peatland (all of them peat-forming ecosystem), policies need to oblige businesses/private sector and public sector to commit (deliver on/commitments) to no deforestation-noexploitation, no peatlands extraction-drainage-damage, national policies about peatlands need to account for carbon, water, nature, biodiversity, livelihoods, protect healthy peatlands now- policies "let them be", there are opportunities for green meaningful jobs, policy needs to be discussed/translated around the dinner table with 51 most influential children in the world, policies need to take on board/ be informed by diversity of perspectives by sharing people the possible futures pro/positive & negative outcomes imagine- creativity-visualization- experience.

We need knowledge transfer: incentives, influencers, regulation. We need knowledges: on alternative uses & restoration, on cultural & spiritual experiences, on traditional knowledges, on cultural understanding of local communities, on the extent & condition of ecosystems and their functions.

When doing local environmental education and awareness work, it is essential that it includes: an intergenerational dialogue of knowledges (legal, indigenous, science, artists, journalists); embodied (multi-sensory, emotional, memory); an element of unknown (people, knowledge, exchange of experience); a rhythm that is sustainable in time and can be repeated.

Create awareness, produce knowledge and change states of consciousness. Be inclusive of a diversity of knowledges, vary the acts of communication to different audiences, be equally responsible to science and ancestryculture, based on the same messages.

Policies are not doctrines to be imposed, but dynamic processes inspired by local knowledges, experience and practices. They are tools to serve the local purpose for protecting and restoring future peatlands today. Policies need to reflect the life-sustaining abundance in diversity and contributions of peatlands and subsequently human experiences throughout time - past, present and future. They need to be activated, accessible and translated. Policies should understand, reflect, protect and promote nature as a foundation of culture.

Create relationships and dialogues with all members of society: Hispanic communities, blue collar workers, etc. Decolonize the language when communicating with people, especially with BIPOC communities.

Halt development of peatlands/Everglades land for agricultural and urban uses, thereby improving water quality by reducing pollution from urban, industrial, and agricultural runoff.
Correct the imbalance in nutrients causing overgrowth and crowding out of plant and animal species, while also working towards removing invasives.
Stop extracting peat!

Communicate your objectives clearly to non scientists.

Protection from being converted and fragmented.

Record and evaluate the initial situation for the planning of the measures to successfully rewet the peatland, permanently. Have local partners.

Implementation of paludiculture to provide the farmers a method to use their peatlands sustainable.

To involve all the local stakeholders and try to create synergy effects (for example with nature protection, tourism, regional cooling effects, CO2-Certificates und the regional bio economy etc.).
Use good examples, to convince others.
Especially after the three dry years in Brandenburg/Germany, some farmers had higher and better yields, than their neighboring colleagues with drained fields.
Use the innovation power of the farmers.

Legal base for the measures.
Good water management.

Links are maintained with such work across the globe to share understanding, challenges and strenghts
All layers of understanding are taken into account. A transdisciplinary and non-hierarchical approach to peatland conservation

Local Awareness as well as a stronger connection between 'downstream' and 'upstream' relations.
How peatlands are not isolated wilderness -over there- but landscapes deeply embedded in people's day to day lives.

We need public/open online databases and platforms, for all learning resources to be shared multilingually (upskilling is part of this). We need awareness and education networks and working groups within larger peatland networks (eg. GPI, PPI). We need academic as well as non-academic indigenous knowledge transfer.
We need more higher education (masters, post-docs etc) about peatlands - and it should be interdisciplinary.

We need knowledge translation: (re)education, personal identification with the peatlands by everyone. We need transdisciplinary work that's participative, local / global (networks), innovative (eg. paludiculture), imaginative, flexible.
We need incentives / funding for pilot projects (wisely used), for restoration, for protection.

inspire other generations

Take time but start now! Wise use: sustain or restore diverse functions, foster curiosity, respect local needs, engage ever changing social & ecological knowledges, strengthen consequences for global use via penalties and explicit rights, build long-term appreciation, be creative, discuss, participate in multi-disciplinary ways, and build appreciation as well as education.

Thanks Rumi !

No one can create me, except love
Peatland is the first, the last as the beginning
Nadie puede crear, excepto el amor
La turbera es la primera, la última como el comienzo
Personne ne peut me créer sauf l'amour
La tourbière est la prémier, la derniere comme le commencement,

Ní féidir le duine ar bith mé a chruthú ach an grá
Ta talamh portach an chéad, an deireach 's an tús

BEST PRACTICES NEEDS PEATLANDS

BIOGRAPHIES OF ARTISTS AND COLLABORATORS

* Authors' biographies can be found on the first page of their respective texts.

CURATOR

Camila Marambio

Camila Marambio is a curator, researcher, and writer who delights in telling circular stories. In 2010, she founded Ensayos, a collective research initiative focused on ecopolitical issues impacting Tierra del Fuego/Karukinka and other archipelagos. Since 2011, Marambio has been experimenting with performance creating solo and collaborative pieces concerned mostly with human and non-human health and healing. *What's He Building in There*? premiered at The Watermill Center in NY, *So.La* premiered at nadalokal in Vienna, *Making Time: A meth lab* premiered at IMA in Brisbane, and *Transit in the House of Cancer* is ongoing at Theaterhaus Gessnerallee in Zürich. Camila received her PhD in Curatorial Practice from Monash University, Australia, in 2019; a Master of Experiments in Arts and Politics from Sciences Po School of Public Affair in 2012; and a Master's in Modern Art: Critical Studies from Columbia University in 2004. Most recently, she was a postdoctoral fellow of The Seed Box: An Environmental Humanities Collaboratory at the Royal Academy of Art in Stockholm. She is co-author of the books *Slow Down Fast, A Toda Raja* with Cecilia Vicuña (Errant Bodies Press, 2019) and *Sandcastles: A Queerfemme Proposition* with the Danish gender studies scholar Nina Lykke (forthcoming).

ARTISTS

Ariel Bustamante

Ariel Bustamante is a self-taught sound artist based in La Paz, Bolivia. He is a member of the Laboratorio de Investigación Multiespecies Ontológicas (Ontological Multispecies Research Laboratory) at the University Mayor de San Andrés (Bolivia) and a recent fellow at the Academy Schloss Solitude residency program in Stuttgart, Germany. For the last five years, he has walked the shared deserts between Chile and Bolivia, practicing old and new ways of attending to wind-persons. He uses breath and conversation as cosmological forms of accompaniment. Bustamante's work and collaborations have been presented at SAVVY Contemporary (Germany), Het Nieuwe Instituut (Netherlands), the Transitio Electronic Arts Festival (Mexico), Liquid Architecture (Australia), the Museo Nacional de Bellas Artes (Chile), Gessnerallee (Switzerland), and the Centro de la Revolución Cultural (Bolivia), among others.

Carla Macchiavello Cornejo

Carla Macchiavello Cornejo is an art historian and educator who has published on contemporary Chilean and Latin American art with an emphasis in video art, performance, networks of solidarity and resistance, and artistic practices aimed at social change. She is Associate Professor in Art History at the Borough of Manhattan Community College, CUNY, New York, and received her PhD from Stony Brook University (New York). Macchiavello Cornejo has curated exhibitions on contemporary Latin American art and is co-editor of *Más allá del fin/Beyond the End* (2020), a publication of Ensayos, a collective research initiative that brings together artists, scientists, and local agents to reflect on matters connected to the political ecology of Tierra del Fuego.

Dominga Sotomayor

Dominga Sotomayor (b. 1985, Santiago, Chile) is a filmmaker and co-founder of the production company CINESTACIÓN and CCC Centro de Cine y Creación in Santiago. Her first feature film, *De jueves a domingo* (2012) won the Tiger Award for Best Film at the Rotterdam Film Festival. In 2013, she co-directed the short film *La Isla*, also winner of the Tiger Award at Rotterdam. In 2015, she premiered *Mar* at the Berlinale and *Aquí en Lisboa*, a collective film shot in Portugal. In 2018, she premiered *Tarde para morir joven* at the 71st Locarno Film Festival, where she won the Leopard Award for Best Director. She has made countless photographs and videos, including *People* (2012) for Olafur Eliasson's "Little Sun" exhibition at the Tate Modern. She recently co-directed *Correspondencia* (2020) with Carla Simón and premiered *The Year of the Everlasting Storm* (2021) in the Official Selection of the Cannes Film Festival. Since 2020, she has been a lecturer in the Department of Art, Film, and Visual Studies at Harvard University.

Alfredo Thiermann

I am an architect and professor of architectural history and theory at the École Polytechnique Fédérale in Lausanne, Switzerland. I split my time living and working in Berlin and Lausanne, while taking care of Pedro Tristán and Juan Nataniel.

CULTURAL PRODUCER

Juan Pablo Vergara

Juan Pablo Vergara holds a degree in art direction from the Universidad Mayor (Chile) and a postgraduate degree in international cultural cooperation from the Universidad de Barcelona. From 2012 to 2015, he was coordinator of visual arts and design for the the International Affairs Office of Chile's Ministry of Culture. Vergara later served as head of outreach for the Fundación Mar Adentro, where he coordinated the artistic residencies and art and nature exhibitions, including *Theo Jansen: Algoritmos del viento*

(Centro Cerrillos, 2018) and *Naturaleza Expandida* (CCLM, 2021). In 2019, he became the director of Estudio Caudal, an agency specialized in cultural initiatives, where he has led projects such as Gallery Weekend Santiago, Revista *Materia*, and the exhibitions *Desenlace de la Forma* (Palacio Pereira, 2022) and *Aruma Allaywasi* (MNBA, 2022). Vergara was the cultural producer of *Turba Tol Hol-Hol Tol*, a collaborative project representing Chile at the Venice Biennale 2022.

COLLABORATORS

agustine zegers
agustine zegers is an artist, writer, and bacterial community born in Chile. zegers's work studies and, at the same time, seems to commemorate the very complex links of existence and interdependence among those of us who inhabit this Earth as living and nonliving matter. Through texts, performances, and olfactory installations, zegers constructs weavings of thought that propose a perception of the body not as a unit, but as a multitude. By integrating epistemologies from queer theories into their artistic methodologies, zegers mobilizes strategies of care that reach microscopic dimensions by involving bacterial colonies, aromatic molecules, or food ingestion in their artistic projects. Their work has been exhibited and published internationally in venues such as the Galería Metropolitana, the Galeria Jaqueline Martins, the Sharjah Art Foundation, DIS Magazine, and the Institute of Queer Ecology (IQECO).

Alessandra dal Mos
Alessandra Dal Mos (Venice, 1987) graduated from the Pontificia Universidad Católica de Chile and holds a Master's in Sustainability from the Università IUAV di Venezia. She worked as an architect in Santiago, Chile, from 2013 to 2019, developing public projects and tenders in collaboration and association with several studios, including those of Cecilia Puga, Beals Lyon, Alberto Moletto, and Paula Velasco. Parallel to her professional activity, Dal Mos has taught courses on architectural composition and the history of architecture at the Pontificia Universidad Católica de Chile, Universidad Mayor (Chile), and Universidad Andrés Bello (Chile). Since 2020, she has worked as an independent architect based in Venice, mainly on exhibition projects and pavilion design.

Antonia Peón–Veiga Petric
Antonia Peón-Veiga Petric (Santiago, 1980) received her Master's in Architectural Lighting Design from Parsons School of Design at The New School in New York (2010) after receiving her degree in architecture from the Pontificia Universidad Católica de Chile in 2006. She received the award for best Master's thesis with *Drawing Light, Processing the lit environment*, in which she explores the graphic representation of light and lighting design. Since 2012, Peón-Veiga Petric has lived in Santiago, Chile, where she works on architectural lighting projects of various scale. She has also designed lighting for dance and theater productions. In 2021, she created the lighting for HAMMAM, a project in which she explores the encounter between light and water vapor. www.antoniapeon-veiga.cl

Bárbara Saavedra Pérez
Biography on p. 120

Caitlin Franzmann
Caitlin Franzmann is an artist based in Brisbane, Australia. She creates installations, sonic experiences, performances, and social practice works that focus on place-based knowledge and embodied practices. She originally trained as an urban planner, working for several years in policy and strategic planning. Since completing a Bachelor of Fine Art at Queensland College of Art in 2012, she has presented her work nationally and internationally, including at the Kyoto Art Center in Japan and the New Museum in New York. She received the 2014 Churchie National Emerging Art Prize and was selected to exhibit in the TarraWarra Biennale 2021. As a member of the feminist art collective LEVEL (2013-2018), Franzmann co-curated exhibitions and forums with a focus on generating dialogue around gender, feminism, and contemporary art. Since 2010, she has been working with Ensayos, a collective research initiative focused on ecopolitical issues impacting Tierra del Fuego and other archipelagos.

Carola del Río
Carola del Río is a photographer and has worked in various media, including newspapers, magazines, and websites. After a long career in photography, she became a self-taught web programmer and designer, a profession she has developed for more than 25 years. Del Río specializes in clean code, which consists of writing only the required code in an orderly and author-driven manner. She has created numerous websites for artists and festivals and content related to culture and art. After living and working for several years in Berlin, she now lives in Santiago, Chile.

Carolina León Valdebenito
Carolina León Valdebenito holds a PhD in Conservation Biology from the Universidad Complutense de Madrid (Spain) and is a biologist with a specialization in biodiversity and biological conservation from the Universidad de Concepción (Chile). She is a professional partner of the

Red Campus Sustentable (Sustainable Campus Network) and leader of the Investigación para la Sustentabilidad (Research for Sustainability) working group. León Valdebenito is currently head of the Centro de Investigación en Recursos Naturales y Sustentabilidad (CIRENYS, Center for Research in Natural Resources and Sustainability) at the Universidad Bernardo O'Higgins in Santiago, Chile. Her research interests are related to the ecology and diversity of nonvascular plants of southern Chile; peatland ecology, focusing on conservation and sustainable use; ecosystem service appraisal and their implications for local populations. She also works in environmental education and ecotourism as tools for nature conservation.

Catalina Valdés Echenique

Catalina Valdés Echenique is a professor, curator, and independent researcher with a PhD in Art History. Through her work, she explores the intersection between the history of art and the natural sciences, focusing on Chile and Latin America from the 19th century to the present. In her research, she questions the visual representations of nature, approaching them both in their material, artistic, and socio-environmental dimensions. Valdés is co-editor of *Geografía imaginada. Diez ensayos de arte y naturaleza* (2014) and editor of *Cuadros de la Naturaleza* (2014). She is currently preparing the first edition in Spanish of *Viajando al sur de Tierra del Fuego* by writer and artist Rockwell Kent. Valdés was the curator of *El cuarto mundo* (14th Biennial of Medial Arts of Santiago, 2019), *Archipiélago Invisible* (Cerros Islas Foundation, 2021) and *Paisaje de Campo* (Centro de Extensión Palacio Pereira, 2022). She is currently developing the curatorship of the first edition of the Concepción Biennial on art, science, and community in the south of Chile.

Christy Gast

Christy Gast is an artist whose work across media platforms stems from extensive research and site visits to places she thinks of as "contested landscapes." She is interested in places where there is evidence of conflict in human desires, which she traces, translates, or mirrors through her artistic practice. Since 2010, Gast has worked with Ensayos, a collective research initiative working on issues of political ecology in Tierra del Fuego and other archipelagos. Her work has been exhibited at MoMA/P.S.1 Contemporary Art Center, Performa, Artists Space, the Harris Lieberman Gallery, and Regina Rex in New York; the Pérez Art Museum of Miami, the Bass Museum of Art, de la Cruz Collection, Locust Projects, and Nina Johnson in Miami; as well as Mass MoCA, the American University Museum, L.A.C.E., High Desert Test Sites, Centro Cultural Matucana 100 (Chile), the Kadist Foundation (Paris), and Milani Gallery (Brisbane).

Constanza Güell

Constanza Güell graduated in Aesthetics from the Universidad Católica de Chile and has further studies in art history, philosophy, and arts and cultural management. She has been working for more than 20 years in private and public cultural organizations, with practices that have revolved around cultural management, the comprehensive development of projects, curatorial practices, the editorial field, and artistic mediation. Güell co-founded the Corporación Cultural Antenna In 2009 and became one of the founding directors of the Fundación Antenna in 2009. She currently lives and works in the city of Puerto Varas in the south of Chile, advising and collaborating with artistic/cultural projects and platforms locally, in Santiago, throughout Chile, and abroad.

Daniela Catrileo

Daniela Catrileo (1987, Chile) is a writer and professor of philosophy at the Universidad Metropolitana de Ciencias de la Educación (Chile). She has a Master's in American Aesthetics from the Universidad Católica de Chile. Catrileo is a member of the Mapuche Collective Rangiñtulewfü and part of the editorial team of the online journal *Yene*. She is the author of *Río herido* (2016), *Guerra florida* (2018), *Piñen* (2019; 2022), *Las aguas dejaron de unirse a otras aguas* (2020), and *El territorio del viaje* (2022). Some of her other projects explore artistic formats such as performance, video art, and sound/visual poetry, including *Mari pura warangka küla pataka mari meli: 18.314* (2018), *Llekümün* (2020), and *La escritura del río* (2021). She received an honorary mention for poetry in the 2019 Premio Municipal de Literatura de Santiago, an honorary mention for short story in the 2020 Best Literary Works Award from the Ministry of Cultures, Arts, and Heritage of Chile, as well as first place in the 2020 contest Ax: Encounter of Indigenous and Afro-descendant Cultures organized by the Under Secretariat of Indigenous Peoples (SUBPO) of Chile's National Service of Cultural Heritage. Catrileo is dedicated to teaching and researching philosophy, literature, and aesthetics.

Elisa Jane (Leecee) Carmichael

Elisa Jane (Leecee) Carmichael is a Ngugi woman belonging to the Quandamooka people of Mulgumpin (Moreton Island) and Minjerribah (North Stradbroke Island), Queensland, Australia. Carmichael is a multidisciplinary artist who works across the mediums of painting, textiles, and weaving.

Fernanda Olivares Molina

(Selk'nam/Chile) is the president of the Fundación Hach Saye, created in 2019 with the aim of developing, protecting, and promoting the Selk'nam culture and Selk'nam territory. Olivares Molina has a background in hospitality management and lives in Porvenir, Tierra del Fuego, Chile.

Freja Carmichael
Freja Carmichael is a Ngugi woman and curator belonging to the Quandamooka People of Moreton Bay, Australia. Over the past decade, she has worked alongside other First Nation artists, communities, art centers, and national and international art organizations on exhibitions, documentation, research, and writing projects. Carmichael's work is dedicated to collaborative curatorial approaches and promoting First Nations fiber knowledges, practices, and cultural exchange.

Hema'ny Molina
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Isabel Torres Molina
Isabel Torres Molina (b. 1986, Chile). My artistic practice only makes sense among others. I am concerned with disarming absolutist truths and claustrophobic binary discourse. Using performance, video, and spoken word, I seek to fictionalize reality to achieve a better understanding of it. I permanently collaborate in collectives like CENEx, La Voz del Pueblo, La Escuela Nunca y otros futuros!, and Beca Migrante.
www.isabeltorresmolina.net

Karolin Tampere
Karolin Tampere was born in Tallinn, Estonia, and is currently based in Tromsø/Romsa/Tromssa in Sápmi, Norway. She is a practicing artist and curator with a particular interest in collaborative and socially engaged practices, music, sound, and listening. Since 2004, Tampere has contributed to the "forever lasting" art project Sørfinnset Skole/the nord land in Gildeskål, initiated by artists Søssa Jørgensen and Geir Tore Holm, and she started the artist/curator collaboration of Rakett with Åse Løvgren in 2003. During 2013 and part of 2014, Tampere was appointed director of Konsthall C in Stockholm, and in collaboration with artists akcg (anna kindgren and carina gunnars) and Anna Ahlstrand, she transformed the directorship and responsibility of the artistic program into a collective called the Work Group/ Arbetslaget. She moved to the Lofoten Islands in 2017 and, until 2022, held the position of curator at the North Norwegian Art Centre in Svolvær, realizing several other projects with artists in Northern Norway. Together with Hilde Mehti, Neal Cahoon, and Torill Østby Haaland, she co-curated LIAF2019; this edition of the Lofoten International Art Festival was inspired by the five arms of a starfish and the multitude of inhabitants, materials, struggles, and processes that reside and take place within the extremely broad intertidal zone surrounding the Lofoten archipelago. Tampere has been part of Ensayos since 2010 and is currently a PhD research fellow in curatorial practice at Tromsø Art Academy, UiT - The Arctic University of Norway and the Faculty of Fine Art, Music and Design, University of Bergen.

Lucía Egaña
Lucía Egaña develops her work through artistic practice, writing, research, pedagogy, and self-instituted practices. Her work addresses the relationship between high and low culture, between high-tech and low-fi, North and South, dissident sexualities and methodologies. She studied visual arts and has a Master's in Documentary Film and a PhD in Audiovisual Communication. Egaña has published and coordinated several books, including *Una cartografía extraña* (Metales Pesados, 2021), *Enciclopedia del amor en los tiempos del porno* (Trío Editorial, 2020), *Acá soy la que se fue* (t.i.c.t.a.c. 2019), and *Atrincheradas en la carne* (Bellaterra, 2018), and she currently coordinates the research projects "Descentrar la mirada para ampliar la visión" and "Metodologías subnormales." She is part of the collectives Instituto de Estudios del Porno, Musea M.A.M.I., Cooperativa de Técnicas, Centro de Estudios de la Naturaleza Extractiva (CENEx), and Pluriversidad Nómada. http://luciaegana.net

Mateo Zlatar
Mateo Zlatar is a user experience designer. He holds an MFA in Design and Technology from Parsons School of Design at the New School in New York and an undergraduate degree in graphic design from the Universidad Católica de Valparaíso (Chile). In 2010, he co-founded GuideOne Mobile, a design studio focused on cultural experiences with clients that included the Metropolitan Museum of Art, the Smithsonian Institution, the U.S. National Park Service, and many other cultural institutions throughout the United States. In 2017, he joined Local Projects, an award-winning design studio in Manhattan, where he helmed the design of *New York at Its Core*, the Museum of the City of New York's permanent exhibition exploring the city's past, present, and future. He is currently a design lead at Google in New York City.

Nico Arze
Nico Arze lives and works in NYC with Matthew Maddy. They specialize in the design and construction of spaces for public assembly: restaurants, bars, music venues, galleries, gardens, just to name a few…. Please visit their site www.walkandtalkconsulting.com for a look at some of their favorite projects to date. They also love weddings. Please invite them to weddings.

Randi Nygård
Randi Nygård (b. 1977, Bergen), lives in Oslo, Norway. She holds an MFA from the Academy of Fine Arts at the Norwegian University of Science and Technology (NTNU, 2006). Nygård's works combine ideas from the

humanities with facts from the natural sciences. She has been inspired by the fact that time may only arise between things, that glaciers breathe, that our teeth are closely linked to memory, and that words with similar sounds often stand for things with similar visual forms. This year, she has worked with glaciers' responses to our way of life as well as the scents of bogs. Nygård has exhibited at the Contemporary Art Center of Thessaloniki (Greece), the YYZ Artist Outlet (Canada), Kunstverein Springhornhof (Germany), and the Museo Nazionale di Sant'Angelo (Italy), as well as the New Museum in New York, the Venice Biennale with Ensayos, and Kunstnernes Hus, Kunstmuseet KUBE, Tromsø Kunstforening, MELK, and Fotogalleriet in Norway. Nygård teaches and writes about art, and she is a founding member of MEANDER and Paviljong.

Renee Rossini
Renee Rossini is an ecologist and educator from Australia who is interested in the overlap of scientific practice and environmental philosophy. She has rich experience in her country, from the coastlines to the arid zones, but she always preserves a strong focus on the conservation of Australia's unique flora and fauna. Her practice is rooted in autecology and queer ecology, centering the diversity of narratives that exist in each organism and its interaction with its kin and its environment.

Rosario Ureta
Rosario Ureta is a comprehensive designer from the Universidad Católica de Chile. Her work focuses on graphic design for scientific outreach projects. She is a designer at the Museo del Hongo (Mushroom Museum) and collaborates with Ensayos Tierra del Fuego in Chile. She worked on the visual identity of the Chilean Pavilion at the 59th International Art Exhibition at the Venice Biennale and was part of the participatory design of the Venice Agreement, a declaration for the protection of peatlands, signed at TBA21–Academy's Ocean Space in 2022. Ureta is also dedicated to making ceramics using digital techniques to explore the convergence between design, art, technology, and ecology.

Sebastián Cruz
Sebastián Cruz has an Master's in Advanced Architectural Design from Columbia University (New York) and is an architect with a degree from the Universidad de Chile. He is a guest professor at the schools of architecture at Universidad San Sebastián and Universidad de Chile where he teaches architectural design courses. Cruz also teaches in the Master of Architecture program at the Pontificia Universidad Católica de Chile, where he oversees thesis and graduate projects. He is a founder of the architecture office Thiermann Cruz, where he develops a practice focused on housing projects, public tenders, and exhibition design. His work has been presented in national and international platforms, including MoMA (New York), the Design Museum (London), Archithese (Zürich), ARQ (Chile), and BauNetz (Germany).

Simon Daniel Tegnander Wenzel
Simon Daniel Tegnander Wenzel (b.1988, Hamburg, Germany) works within a broad spectrum of media, including performance, video, sound, and installation. Driven by curiosity and a desire for learning new skills through tacit knowledge, he finds his tools and expression in a space created through the overlap of life, play, and art. These skills range from using pre-industrial and labor-intensive techniques for processing fiber for textiles, foraging medicinal plants in the wild, and extracting scent and dyes from natural sources. Wenzel looks at how technological development, science and spiritual impulses take part in shaping our perceptions of nature, norms, and identity. He enters characters and roles and de-fragments materials, narratives, and experiences to piece them together in a new context. By accessing often-forgotten techniques and ancient traditions, as well as opening space for playfulness in his work, Wenzel aims to challenge personal, environmental, and normative structures in a Western urban society.

Sinestesia
Sinestesia is a "Think & Do Tank" of creative industries that links people through the creation and implementation of open innovation projects. We serve as a meeting point between traditional and creative industries to develop and materialize projects that use the Sinestesia methodology to help people and the planet through social, technological, and/or environmental innovation. We are driven by creativity and collaboration for the development of projects that build solutions to promote a better environment for people, companies, and communities. We are passionate about open innovation, strategic development, acceleration, and development of new projects focused on the environment, community, gender equity, inclusion, education, and sustainability.

Sonja Carmichael
Sonja Carmichael is a Ngugi woman belonging to the Quandamooka people from Minjerribah (North Stradbroke Island) in Queensland, Australia. She works specifically in the medium of fiber basketry and woven sculpture and has revitalized traditional weaving techniques. Her work is informed by her family's deep cultural connections to the land and seas of Minjerribah. Carmichael draws inspiration from the many stories connected to traditional Quandamooka weaving and also explores contemporary materials and techniques—in particular, "ghost nets" and fishing lines that have been discarded or lost in the ocean—to express her concerns about the preservation of the natural environment.

Vittorio Da Mosto

Vittorio Da Mosto is a self-taught artist. He studied Japanese and philosophy at the University of Leeds and philosophy and human sciences at the University of Ca'Foscari. In 2018, he co-founded the nonprofit organization Venice Calls, which provides support for the Venetian community during emergencies and strives to create opportunities for young people in Venice. Since November 2020, Da Mosto has been actively developing his photographic, video, and filmmaking career. He recently worked as an assistant director for the film *AMUSIA* and for a musical documentary set in Venice and took part in a summer school in Ireland, working as an English teacher and theater director. He is currently developing a platform to promote art, artists, and artisans called AIZENEV, which will soon be available online.

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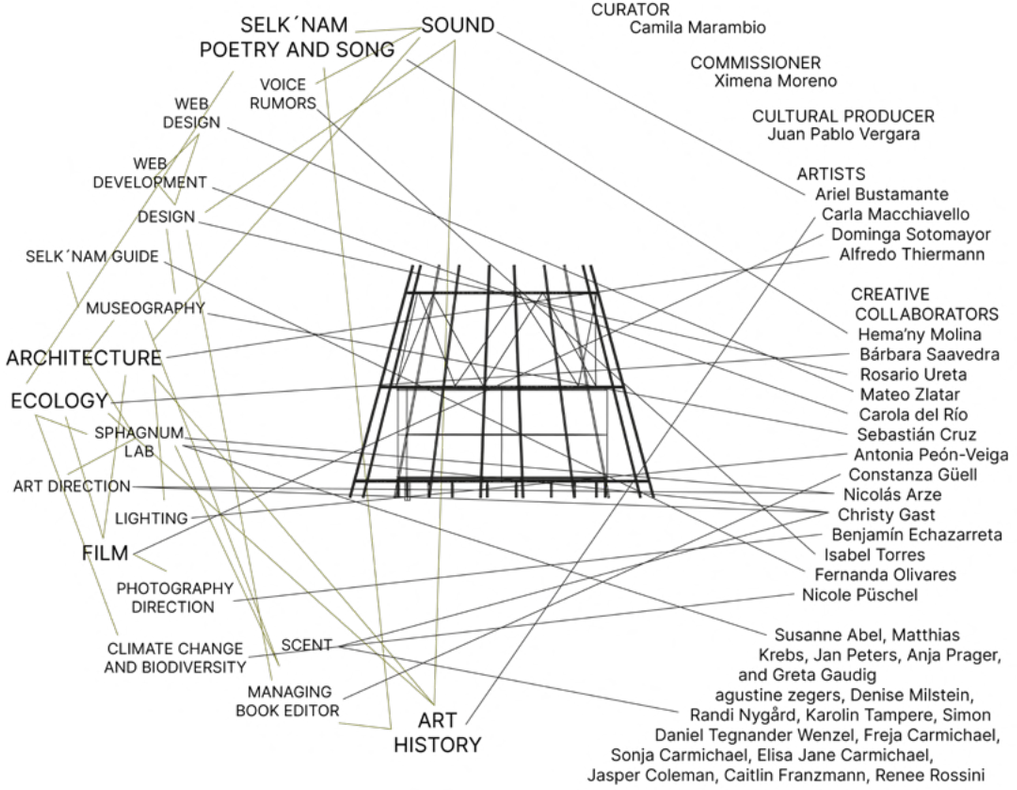

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Photo by Carla Macchiavello Cornejo

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Venice, 2022
Photo by Vittorio Da Mosto

Center:
Fernanda Olivares Molina watering the SphagnumLAB
Venice, 2022
Photo by Daniela Aravena Jordán

Lower left:
Vittorio Da Mosto WhatsApp thumbs up
Venice, 2022
Photo by Nico Arze

Lower center:
Christy Gast sculpting the Sphagnum
Venice, 2022
Photo by Camila Marambio

Lower right:
Lyophyllum palustre and a fly
Venice, 2022
Photo by Christy Gast

Page 193
Upper left:
Sundew
Venice, 2022
Photo by Christy Gast

Upper center:
María Costan Davara, Camila Marambio, Nico Arze, and Christy Gast preparing the Sphagnum for installation
Venice, 2022
Photo by Vittorio Da Mosto

Upper right:
A frog in the moss
Venice, 2022
Photo by Christy Gast

Right center:
Filter manual by Beatriz Arze
Venice, 2022
Photo by Vittorio Da Mosto

Lower right:
Nico Arze connecting the hoses
Venice, 2022
Photo by Camila Marambio

Lower center:
SphagnumLAB experimental plot
Venice, 2022
Photo by Christy Gast

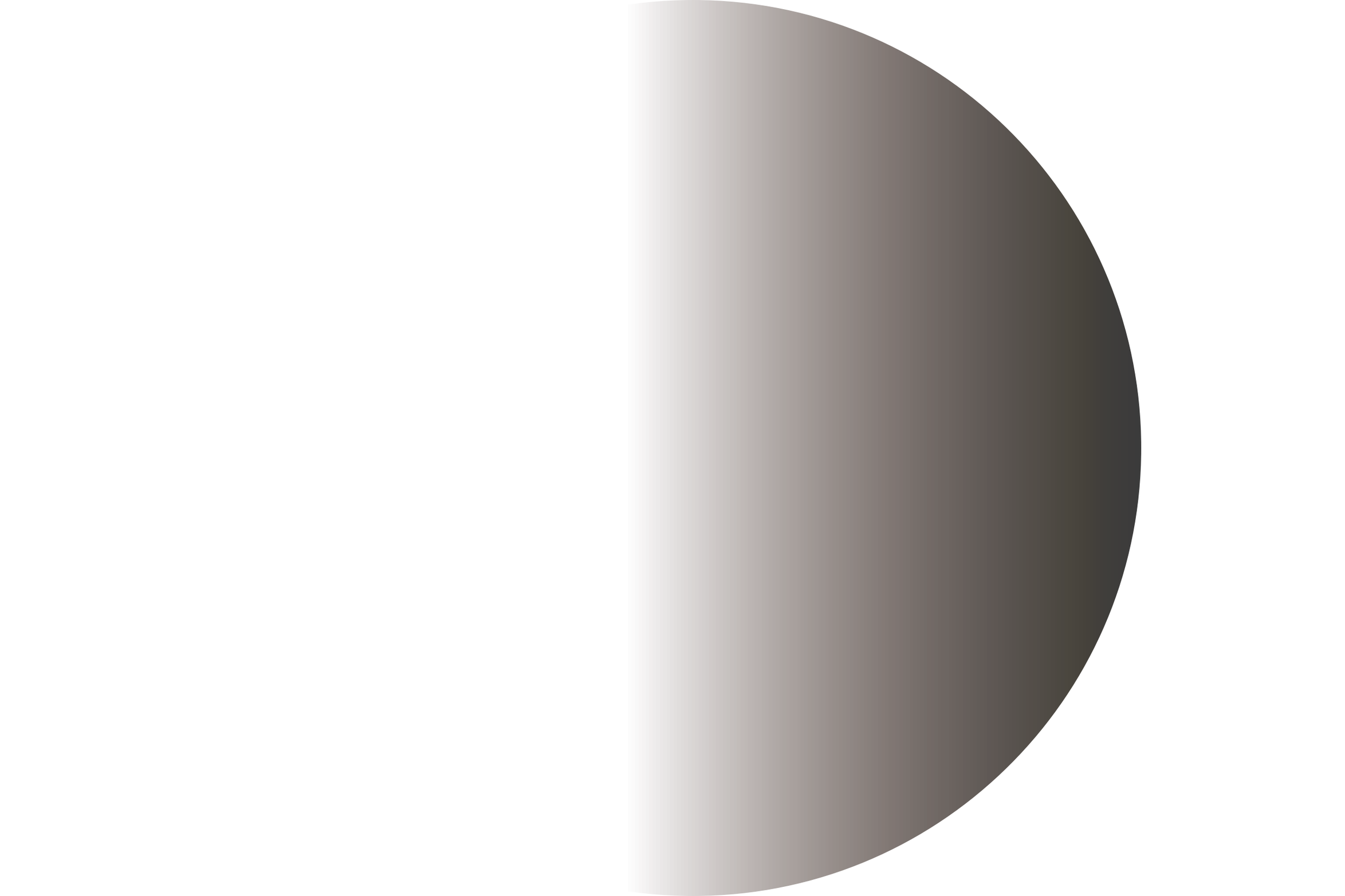
Olfactory Offering
Layout by agustine zegers in collaboration with Caitlin Franzmann, Christy Gast, Denise Milstein, Karolin Tampere, Randi Nygård, Simon Daniel Tegnander Wenzel

Pages 444 - 445
Upper left:
Ensayos Australia
Gift of scent
2022
(incense, glass, ungaire, ceramics)
Photo by Christy Gast

Center:
Ensayos Norway
Gift of scent
2022
(scent, hand-stitched bag, pipette)
Photo by Christy Gast

Background:
Ensayos United States
Gift of scent
2022
(scent, glass, pipette)
Photo by Christy Gast

*Each book also includes an olfactory insert produced by one of the Ensayos pods. For more information about the one you experienced, visit www.ensayostierradelfuego.net



TURBA TOL HOL-HOL

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