


Volume 9, Double Issue, Summer/Winter 2020

Langscape

MAGAZINE



The Other
Extinction Rebellion:
Countering the Loss
of Biocultural Diversity

Langscape Magazine is an extension of the voice of Terralingua. Through the power of stories, images, and art, it supports our mission to educate minds and hearts about the vital value of biocultural diversity for the thriving of life on earth.

ABOUT THE COVER PHOTOS

Front: "The Gift," acrylic on canvasette, framed. Healing power returns to women in a matriarchal society. Artwork: Barbara Derrick, 2015

Back: Kuin Tibung, one of the contestants in the *bajual bajarupis* boat competition in Borneo, raises his right hand after successfully passing the last rapids in the river. Photo: Save Our Borneo, 2019

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 The *Other* Extinction Rebellion:
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· nature · language · culture ·
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at <https://bit.ly/3qTA76G>

EDITORIAL



Changing Our Lives, Sowing New Seeds

Luisa Maffi

With the climate emergency threatening life as we know it, an Extinction Rebellion movement has been afoot. We at Terralingua, however, believe there is another crisis against which the world should rebel too: the “biocultural diversity extinction crisis,” the ongoing loss of diversity in both nature and culture. That’s what we had in mind when launching the theme for the 2020 issue of *Langscape Magazine*: calling attention to the need for that *other* extinction rebellion.

That was in February. Little did we know that only a month later the COVID-19 pandemic would begin to spread across the planet, making our theme all the more poignant and urgent! Indigenous Peoples and local communities—who account for most of the world’s biocultural diversity—were among the most vulnerable to the effects of this scourge, which posed an existential threat to their lives, livelihoods, and ways of life. That added a whole new dimension to our theme: How were they responding to the pandemic? How were they building resilience by calling upon their cultural and spiritual traditions?

Then, with the world already in the throes of the global health crisis, came a wave of political and social turmoil, provoked by the long-festering ills of systemic racism, discrimination, and social injustice. It swept the globe like a second pandemic, exacerbating and exacerbated by the first one—and again Indigenous Peoples and ethnic minorities were hit hard. That brought into closer focus the tangle of social, economic, and environmental injustices and inequities that has long stood in the way of a bioculturally just and sustainable world. And it posed a new question for our theme: What challenges and opportunities does the current historical moment present for achieving “unity in biocultural diversity” for all?

The cornucopia of stories, poems, photos, videos, and artwork we present in the following pages is the fruit of this wide-ranging exploration of our theme. Such a bounty of contributions from all corners of the world, offered at a time of unprecedented global

hardship, is proof that our writers and artists—many of them young participants in our Indigenous Youth Storytellers Circle project—were determined to share their thoughts and feelings against all odds. We’re all the richer and wiser for their caring, generosity, and insights.

First we delve into the challenges that communities in North and South America, Asia, and Africa face in confronting and coping with the pandemic. We start in New York, where researchers **Maya Daurio, Sienna Craig, Daniel Kaufman, Ross Perlin, and Mark Turin** were in the midst of producing cutting-edge digital mappings of the spatial distribution of New York’s astounding linguistic diversity—about 650 different languages spoken there!—when the pandemic hit. Suddenly, they realized that their language maps could be repurposed to help address health problems and other urgent societal needs the pandemic brought about in the city.

Cities under pandemic lockdown inspire **Page Lambert’s** prose poem “Reclamation.” With the urban bustle at a standstill, wildlife was seen returning within city boundaries, reclaiming their ground. What would happen, muses Page, if cities remained off-limits to human activities long enough for them to crumble and turn back to the earth?

Leaving cities behind, we drop in on several local communities around the world, each dealing with pandemic challenges (and opportunities) in its own creative way. **Severn Cullis-Suzuki** transports us to Haida Gwaii, an archipelago off the west coast of Canada that’s home to the Haida people. During a period of pandemic self-isolation, she and her family discover a silver lining: finding the inner calm and stillness needed for full-immersion Haida language practice.

Radhika Borde and **Siman Hansdak** then take us to rural eastern India, where pandemic restrictions threaten the food security of an Indigenous Santhal community. Going back into the forest for once traditional hunting and gathering activities gives people “food and fun” and a renewed sense of cultural

identity—while also posing issues of long-term sustainability.

In their photo essay, **Manju Maharjan** and co-authors **Yuvash Vaidya**, **Prakash Khadgi**, and **Sheetal Vaidya** introduce us to the Indigenous Pahari community of Nepal. Paharis have long specialized in highly popular woven bamboo crafts, but the pandemic has crimped their ability to bring their products to market. Undeterred, villagers find ingenious ways to build resilience.

Off to East Africa, where we follow **Simon Mitambo** into the farming community of Taraka in Kenya. The pandemic has disrupted their way of life and ability to grow food, but people help one another cope, and Elders remind community members that they have survived pandemics before. Ancient rituals are revived to strengthen cohesion and stave off the threat.

On to South America. Listening to Indigenous Elders and leaders in Colombia, **Daniel Henryk Rasolt** reflects on the links of the pandemic to other global emergencies: climate change and biodiversity loss. Securing Indigenous land rights, he argues, is crucial to address these interlocking crises. His story is hauntingly illustrated with artwork by **Vannessa Circe**.

The next group of stories, poetry, and interviews turns the spotlight on edgy issues of Indigenous sovereignty, racism, and discrimination. In Hawai'i, we trek with **Harvy King** up the slopes of Mauna Kea, a mountain sacred to Native Hawaiians, where ever bigger and more powerful telescopes are being built. Asserting their self-determination, Native Hawaiians are staging a peaceful but firm resistance against what to them is the continued desecration of the mountain.

Marie-Émilie Lacroix, an Innu woman from eastern Canada, is on a gently rebellious mission of her own: decolonizing language. In an intimate interview with Italian researcher **Marco Romagnoli**, she explores how language—and the meanings and attitudes it conveys—can be used either as an instrument of oppression or as a tool for resistance and liberation.

In a similar vein, **Chloe Dragon Smith**, a young Métis woman from northern Canada, focuses on the power of language to root people in the land. “Language needs Land needs Language,” exclaims her poem. Connecting to the land through language (and vice versa) offers the strength and resilience needed to live as an Indigenous person in a world of imposed Western values.

In Australia, **Mark Lock** from the Ngiyampaa people works to decolonize the country's health system, which alienates and discriminates against Aboriginal Peoples, as it was never designed to reflect their values and norms. In a probing interview with **Stephen Houston**, Mark explores the concept of cultural safety and the links between cultural life and health.

The strength of women as defenders of biocultural diversity is the thread that runs through several more stories, photo and video essays, and artwork. **Chonon Bensho**, a young Shipibo-Konibo

artist and healer, writes from Peru with husband **Pedro Favaron**. Both her words and her artwork, which illustrates the story, resound with the ancestral wisdom that comes from the depths of time—wisdom that, she suggests, we must learn to live by “despite the confusion and uneasiness of this century.”

In Canada, **Sylvia Pozeg**, also an artist, follows the trail of her ancestry back to Croatia, where she reconnects to and reclaims her family's heritage. Her striking painting, “*Hvala—Thank You*,” is a loving tribute to that heritage. In the words that accompany her artwork, Sylvia invites us to “look back to our ancestors and homelands to find more harmony with nature.”

More artwork that powerfully connects with the ancestors comes to us from **Barbara Derrick**, a Tsilhqot'in artist and storyteller from Canada. Weaving paintings and words together, Barbara takes us along on her life's journey—one of rebellion against cultural genocide and of affirmation of her cultural roots, always guided by the healing wisdom of her maternal lineage.

Iawá, the Kuruaya woman Elder from the Brazilian Amazon who is the heroine of **Miguel Pinheiro's** photo essay and video, exudes the wisdom of millennia. One of the last fluent speakers of her language, Iawá has seen it all—including the rapacious invasion of her lands by outsiders. In her eighties, she continues to be a pillar for her family and her community.

Eusebia Flores and Anabela Carlon Flores are two intrepid Yaqui women from northern Mexico who are members of a community participatory video group. Defying cultural taboos against women leaving home, they head for Brazil to share this empowering storytelling tool with the Guajajara people. **Thor Morales** is there to photograph and film the process.

Indigenous youth from all over the world take center stage in the next set of stories, poems, photo essays, and videos, sharing with us their passion for affirming their biocultural heritage and creating a more just and sustainable future. **Lina Karolin**, a young Uut Danum Dayak from Borneo, has seen the forest around her community devastated by commercial logging and palm oil plantations. She chooses the path of education to help her people overcome the destructive effects of change. We couldn't resist pairing her story with “Mist on the Mountain,” an evocative poem by non-Indigenous author **David Rapport**, as it uncannily echoes the sights and sounds of the forest that Lina recalls from childhood in her village.

Jasmine Gruben, **Brian Kikoak**, **Carmen Kuptana**, **Nathan Kuptana**, **Eriel Lugt**, **Gabrielle Nogasak**, and **Darryl Tedjuk** are Inuvialuit youth from the Northwest Territories, Canada, who took up filming to tell their stories about the effects of climate change in their community. **Maéva Gauthier**, one of their trainers, introduces us to their project.

A photo essay by **Yolanda López Maldonado**, a Mayan researcher from southern Mexico, chronicles a gathering of young

Indigenous Latin American leaders who meet in Peru to learn from one another about building resilience into their traditional food systems.

Through his poignant poetry and dance, **Fauzi Bin Abdul Majid**, a young Palu'e from Indonesia, reclaims his “oxygen”—love, joy, and connectedness to others and to nature, which a materialistic way of thinking has taken away—and shares that breath of life with the world.

Two brave Indigenous young women from East Africa tackle critical environmental and social issues of our time. **Laissa Malih**, a Laikipian Maasai filmmaker from Kenya, documents in her video the predicament of a river in her region that is being dramatically affected by climate change, with dire consequences for both people and biodiversity. **Edna Kilusu**, a Maasai from Tanzania, reflects philosophically on her brush with systemic racism while in the USA as a student, and finds strength in her mother's wise teachings.

This section ends with a heartfelt poem by **Darryl Whetung**, an Ojibway film editor and producer. Dedicated to his daughters, “This World Is Made for You” is an ode to the spiritual teachings we are given as gifts that we must learn to use to balance our lives and heal the world.

The last group of stories, poetry, and videos zeroes in on communities in different parts of the world that are fighting to protect their biocultural heritage. **Felipe Montoya-Greenheck** recounts the epic struggle of a peasant community in Costa Rica that seeks to stop the building of a dam on a river with which people's lives are intertwined—and wins, with a little help from a toad!

Teja Jonnalagadda's prose poem “The Dam Departed” makes for a striking segue to Felipe's story. An engineer by training, Teja minces no words about the dominant way of thinking that seeks to dominate, instead of harmonizing with, the forces of nature. That metaphorical “dam” must come down along with physical dams, so that water and life may flow again.

Two young Indigenous women from Borneo tell stories of local communities' resistance to encroachment onto their lands. Filmmaker **Pinarsita Juliana**, a Batakese and Dayak Ngaju, visits a village that is “fighting deforestation with tradition” by affirming their relationship to the land through the revival of a traditional festival. Activist **Meta Septalisa**, also a Dayak Ngaju, meets women farmers in another village who are tenaciously sticking to their farming traditions in their battle against unjust government regulations and land privatization.

In the lowlands of southern Mexico, the Lacandón Maya combine tradition with innovation in efforts to protect their threatened forest home. **James Nations**, who has worked with

them for decades, brings us their story. We complement that story with a video by **Steve Bartz**, a friend of both Jim's and Terralingua's, who passed away in 2020. Working with Jim in the 1990s, Steve filmed a historic encounter between the Lacandón and their Mayan neighbors, the Itza, with whom they share a common past and a common struggle to protect their forests and ways of life.

Jacquelyn Ross, a Southern Pomo and Coast Miwok woman from northern California, shares the predicament of the endangered abalone sea snail. That wondrous creature is culturally and spiritually central to coastal Indigenous Peoples there, who are now seeking to reclaim the treasured snail's marine home.

A similar attachment to a culturally important species and an equally strong determination to protect it transpire from two stories from India. **Kanna Siripurapu**, who works closely with the Goramaati Banjara tribe of Telangana State, relates their valiant efforts to protect both their beloved Poda Thurpu cattle and their nomadic way of life. **Prafulla Kalokar**, a young economist hailing from the Indigenous Nanda-Gaoli people of Maharashtra State, attends a festival in his community that celebrates their Gaolao cattle and the sacred grass the cattle feed on. And in his cultural traditions he finds an answer to his enduring dissatisfaction with the economic dogma of endless economic growth regardless of the cost to nature.

We close with a powerful piece by **Guillermo Rodríguez Navarro** about people and nature in the Sierra Nevada de Santa Marta in Colombia. Long isolated because of its unique geography, the Sierra is now under assault from logging, mining, and other relentless development. Seeing their earthly home being destroyed, the Sierra's Indigenous Peoples have decided to speak out. Their spiritual leaders, or *Mamos*, warn that protecting the Sierra means safeguarding the health of the planet as a whole.

Our **Web Extra** takes us full circle to the topic of the COVID-19 pandemic. In a series of “Pandemic Perspectives” posts on Terralingua's blog, Indigenous youth worldwide contributed timely dispatches from the field, reporting on what they witnessed in their countries and communities during the pandemic.

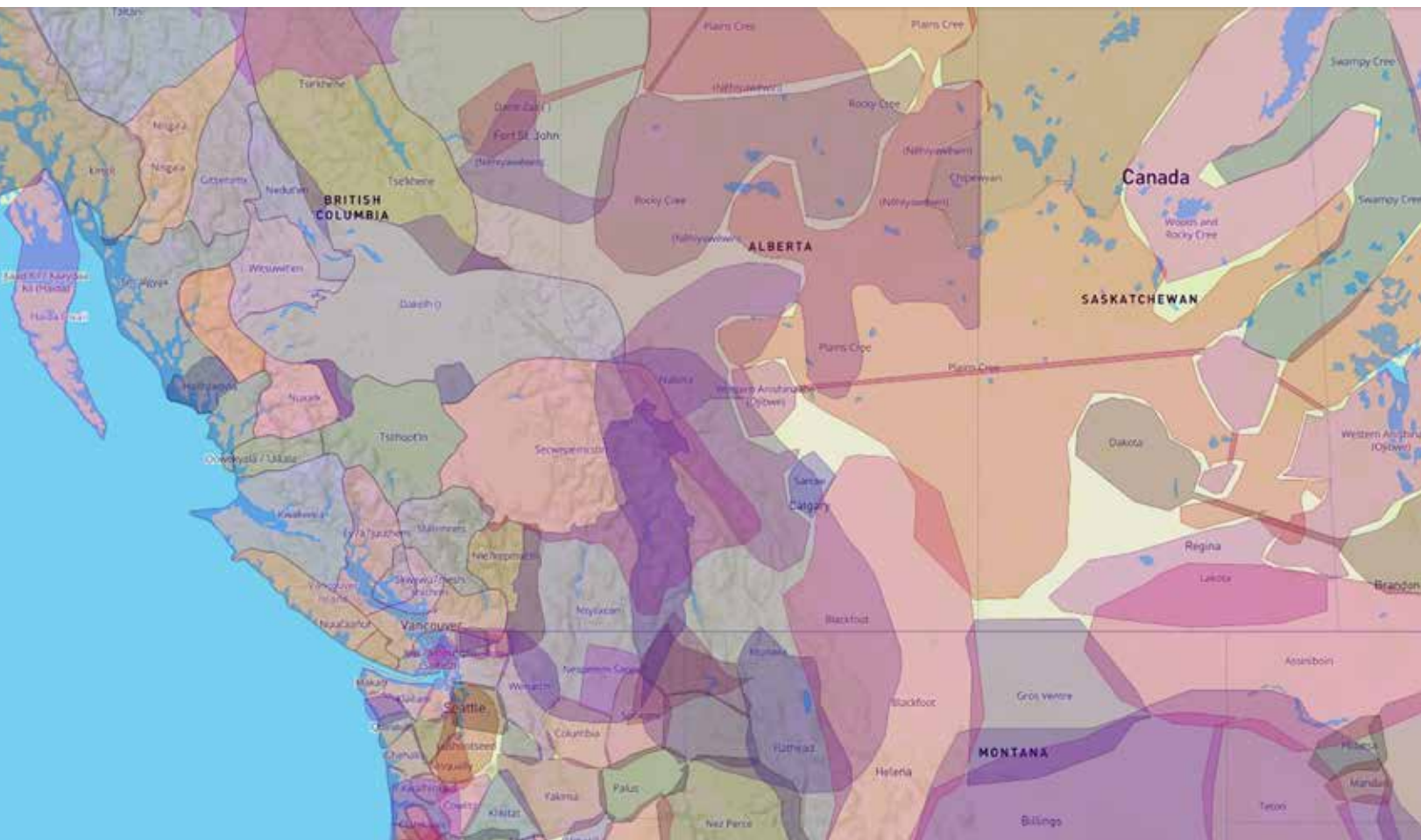
What lesson can we draw from this rich tapestry of stories? Says one of the wise Mamos of Colombia: “Why do we want to damage the earth and water? . . . Let's change our lives, sow new seeds.” When we emerge from the pandemic, we'll still have to confront, and rebel against, the climate crisis, biocultural diversity loss, and social injustice. Changing our lives, sowing new seeds—that's what we'll need to do.

Bioculturally yours,
Luisa Maffi

Subversive Maps

*How Digital Language Mapping Can Support Biocultural Diversity
—and Help Track a Pandemic*

MAYA DAURIO, SIENNA R. CRAIG, DANIEL KAUFMAN,
ROSS PERLIN, AND MARK TURIN



Maps have long been used for a variety of purposes, including to characterize land use and land cover patterns or to delineate the extent of territorial jurisdictions such as national or regional borders. In this way, cartography has long been a tool of the nation-state. Much like censuses and surveys, imperial governments have used maps to organize, classify, and carve up the world in order to occupy it and control its resources. More nefariously, maps have also been used to facilitate Indigenous land dispossession.

On the other hand, Indigenous Peoples around the world have produced their own maps for thousands of years for navigation, cataloguing, demarcating their traditional territories, and charting land use, to mention but the most obvious uses. And maps are also effective communication tools that allow for marginalized voices to be heard and for different understandings of place and space to be represented, challenging hierarchies and freeing people's own stories from the bonds of dominant colonial narratives.

Above: Native Land is an interactive online map that showcases Indigenous languages and territories and highlights the fuzziness of these boundaries. This view is of the Indigenous languages of northwestern North America. Map: Native-Land.ca, 2020

In our own work, we explore how cartography might play a role in creating a more just, inclusive, and equitable world. We believe that cartography offers powerful tools to highlight the risks of biocultural extinction and the importance of all forms of diversity. We see digital language mapping as a methodology that can be used in support of biocultural diversity. In particular, language mapping can yield a more accurate account of the distribution of linguistic diversity and can better represent the way in which language communities understand their own linguistic and spatial borders and their changing sociolinguistic identities.

We believe that cartography offers powerful tools to highlight the risks of biocultural extinction and the importance of all forms of diversity.

The beginnings of linguistic cartography—the creation of maps displaying features and locations of languages—coincided with the emergence of the concept of the nation-state in the nineteenth century. The fundamental underlying notion was that a “nation”—as a unit of analysis and as a political reality—ought to correspond to a single language. Associated with that notion was the belief that monolingualism was a desired norm and that multilingualism remained a historic problem to be overcome. To this day, nation-states continue to use territorial maps to define the geographical reaches of the physical, social, and linguistic worlds they imagine for themselves and to obscure other worldviews that do not align with such normative ideologies.

Yet cartography can also be subversive. There are good examples throughout the history of language maps that defy dominant colonial narratives and weave new stories of resistance and revitalization. The maps that accompanied the Linguistic Survey of India conducted in the early twentieth century, for example, diluted the political authority of the British Empire by revealing the elasticity of language boundaries. In Canada, the interactive Native Land Map creatively illustrates the fuzziness of overlapping language spaces and refutes the misconceived but enduring idea that an Indigenous territory is home to but a single language community.

These and other groundbreaking and more community-led language mapping efforts, such as the First Peoples' Map of British Columbia, highlight the possibility for digital cartography to visualize how language communities understand their own linguistic borders. Digital language maps can help represent the fluidity of multilingualism and explore the intersection of language use, linguistic identities, and power.

Cartography can also be subversive. There are good examples throughout the history of language maps that defy dominant colonial narratives and weave new stories of resistance and revitalization.

Yet, technical challenges remain in representing language communities, language mobility, and plurilingual realities in cartographic form. Most digital language maps, such as the important



First Peoples' Map of British Columbia is an interactive online map providing information about B.C.'s 203 First Nations communities and the languages they speak. Map: maps.fpcca, 2020



Languages of New York City map produced by the Endangered Language Alliance. This is the first detailed linguist-produced map showing some 650 languages and dialects mapped to over 1,000 sites around the city. This view shows the linguistically diverse neighborhood of Jackson Heights, Queens. Map: M. Roy Cartography, 2019 (<https://elalliance.org/programs/maps>)

UNESCO Atlas of the World's Languages in Danger (<http://www.unesco.org/languages-atlas/>), represent languages as specific points in geographic space. Visually, this tells us nothing of the extent of language communities, whether these communities speak other languages, or what relationships might exist between the language and the land. Furthermore, a traditional static map focusing on language endangerment sorts and displays languages solely according to standardized measures of vitality, an approach that some language activists consider reductionist and even potentially harmful.

Conventional cartographic symbols are inadequate for representing lived experience, and mapping efforts have been limited by cartographic constraints that do not actually reflect linguistic realities. This is especially true for the spatial representation of complex language practices. We know that multilingual speakers, for example, choose to speak specific languages in different contexts. They may speak one language at home, another in public, and yet another in religious practice. Or there may be instances of multilingual code-switching within one family household, where parents may speak one language to the children in a different language, and the children speak among themselves in yet another language entirely. How then can cartography be effectively used to reflect multilingualism and the context of language choices?

Drawing from other efforts to use cartography to redress inequity and dominant representations of difference, we are engaged in a project to demonstrate the distinctiveness of the language landscape

of New York City, one of the most linguistically diverse urban areas in the world. Through a partnership (<https://languagemapping.org/>) that brings together the University of British Columbia, Dartmouth College, and the New York-based Endangered Language Alliance (ELA, <https://elalliance.org/>), we are developing a digital, interactive map of the distribution of linguistic diversity across the city, based on data collected by ELA across these language communities. In collaboration with language consultants, ELA has collected linguistic, geospatial, and community information for over 1,000 neighborhood-level language groups that represent approximately 650 unique languages in and around New York City. This collection is enriched with audio and video recordings of approximately a hundred languages.

Our interactive map builds on an existing and publicly acclaimed static map that illustrates the locations of different languages spoken across the city, represented in the communities' own orthographies. The very notion of mapping languages in a diaspora context challenges traditional linguistic cartography which focuses either on the expansion of "global languages" or on the traditional territories of Indigenous languages, giving only scant attention to the contemporary distribution and movement of the latter. Our interactive map aims to showcase the richness of linguistic diversity in New York City in visually and representationally accurate ways. Through a web-based interface, we also seek to promote civic engagement and needs-based delivery of public services, particularly among historically marginalized immigrant communities.

We know that multilingual speakers choose to speak specific languages in different contexts. They may speak one language at home, another in public, and yet another in religious practice.

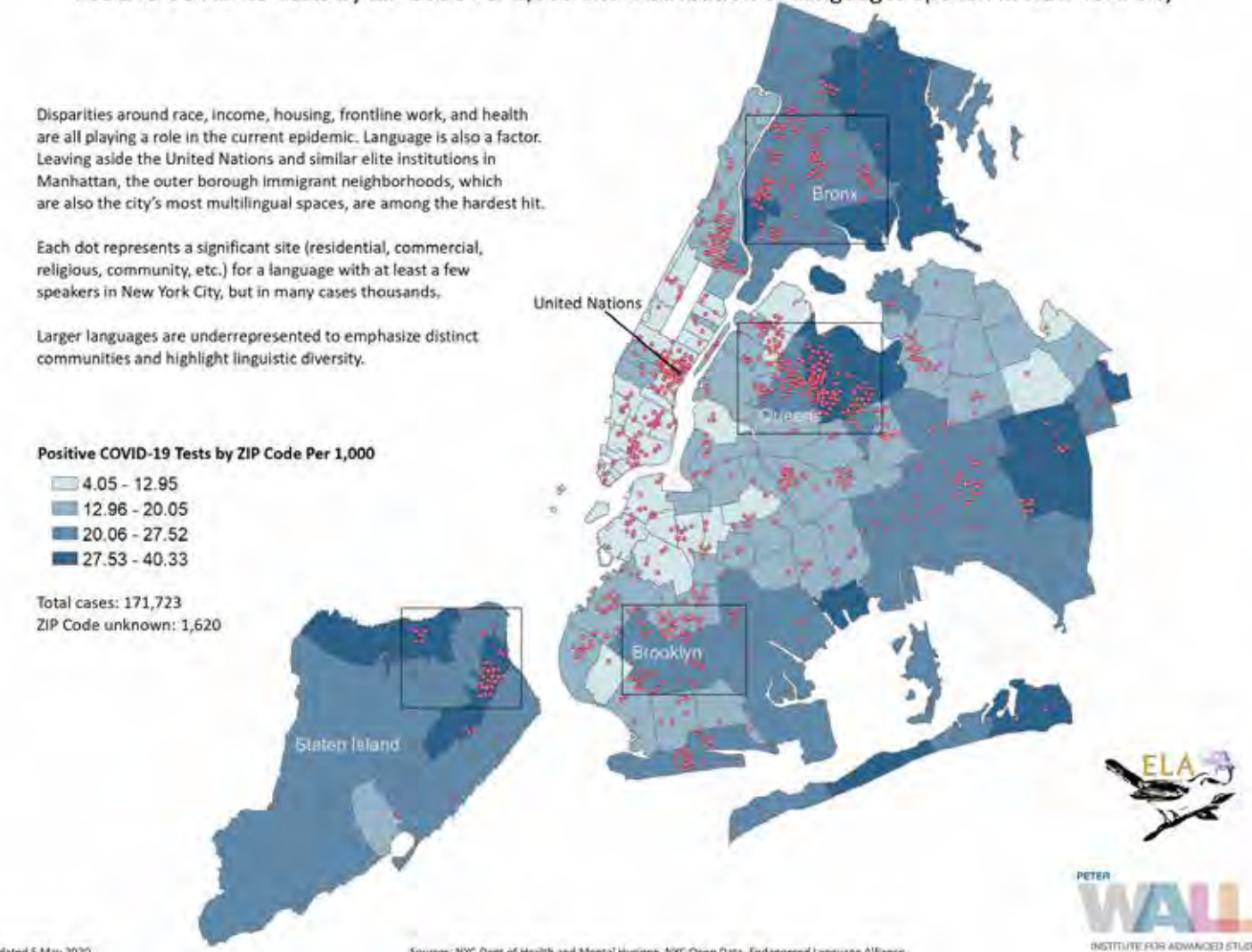
We could have not predicted how relevant and increasingly urgent this objective would become when we embarked on this partnership in 2019. Early in 2020, New York City became the epicenter of the global pandemic brought on by a novel coronavirus named SARS-CoV-2, which emerged in China in November of 2019 and has since spread around the world, causing the severe respiratory disease known as COVID-19. Combining ELA language data and COVID-19 testing data released by the city's Department of Health and Mental Hygiene, we plotted positive tests per capita and the distribution of linguistic diversity across the city on a map, showing the interplay between the highest number of COVID-19 cases and neighborhoods with the highest linguistic diversity. We may speculate about why this may be the case.

During a pandemic, in which public health mandates and protocols can change on a daily basis, the ability of politicians and public health officials to communicate effectively with all

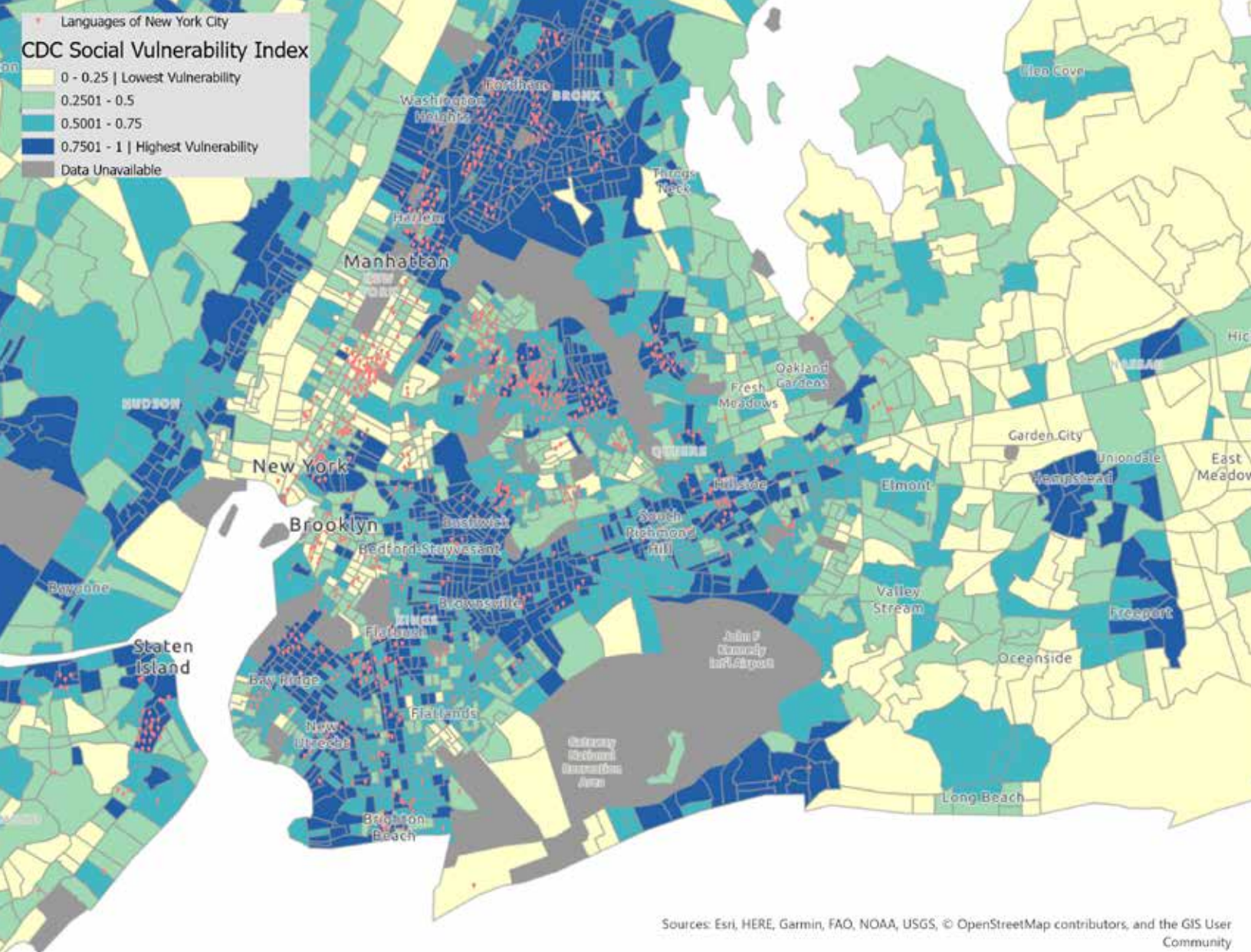
members of the population is critical for containing and mitigating the spread of infection. It can be hard to translate complex and rapidly changing messaging and new terminology such as "social distancing" consistently into many different languages without an established and pre-existing infrastructure for doing so. In times of crisis, community networks become vitally important for timely and effective communication. Knowing the approximate locations of different language communities is essential context for city officials to craft appropriate and time-sensitive messaging.

Furthermore, people hospitalized because of this highly infectious virus can find themselves isolated and without the comfort of visits from family members—individuals who, under other circumstances, might have served as trusted and accurate, if unofficial, medical translators. This new reality has profound implications for both patients and health care workers facing language barriers during the pandemic.

Positive COVID-19 Tests by ZIP Code Per 1,000 and Distribution of Languages Spoken in New York City



Updated 5 May 2020 Sources: NYC Dept of Health and Mental Hygiene, NYC Open Data, Endangered Language Alliance
This map shows positive COVID-19 tests per 1,000 people by New York City ZIP Code, along with the distribution of languages spoken in the city. Map: [Languagemapping.org, 2020 \(https://languagemapping.org/covid-19/\)](https://languagemapping.org/covid-19/)



In this map, we illustrate the interplay between the distribution of languages in New York City and a Social Vulnerability Index from the U.S.-based Centers for Disease Control (CDC). This index is calculated based on a number of risk factors. Map: [Languagemapping.org](https://languagemapping.org), 2020

Our digital map detailing the linguistic geographies of New York City's urban spaces can help identify the public service needs of urban language communities. An advantage of an interactive map, particularly during an emergency such as a pandemic, is its capacity to combine geospatial data provided by agencies such as the New York City Department of Public Health, the Census Bureau, and the Centers for Disease Control (CDC) with language distribution data to spatially visualize patterns of vulnerability. CDC data that can be cross-referenced with language data include, among many other variables, the percentage of uninsured households, the percentage of crowded households or those estimated to have more people than rooms, or the percentage of households with people 65 years of age and older.

Our digital map detailing the linguistic geographies of New York City's urban spaces can help identify the public service needs of urban language communities.

Incorporating such information into an interactive language map offers clues for understanding why it may be that linguistically rich areas of New York City have been hit particularly hard with COVID-19 and can help the city target public service delivery to the most seriously affected neighborhoods through focused translation into specific languages. If it is clear, for instance, that there are many uninsured households within a five-block radius, then such information would help municipal and community organizations develop messaging in languages predominantly spoken in those neighborhoods about how the uninsured can best access health services. The challenges in actually making this happen are many, from triangulating the data to making and disseminating the messages, but the need is clear. The fast-moving

COVID-19 pandemic illustrates the importance of community-based language mapping and highlights the ever more urgent need for cartographers to attend to the diversity of language landscapes, including those in urban areas, and commit to mapping languages in ways that are more representative, collaborative, and participatory.

Cartography has a key role to play in highlighting the vital component of language in the biocultural diversity of our fragile planet. Language maps, whether in print or online, need to represent more than just points or polygons. There is great potential for utilizing cartography and visualization

Underlying our partnership is a shared goal: identifying the role of maps for making sense of marginalization so that resources can be better mobilized to address and mitigate these inequities.

tools for illustrating the complexity of language practices, language mobility, and linguistic identities. Our collaborative approach to language mapping offers ways to explore how linguistic geographies may intersect with health disparities and other social vulnerabilities. Underlying our partnership is a shared goal: identifying the role of maps for making sense of marginalization so that resources can be better mobilized to address and mitigate these inequities. We see in cartography an opportunity for untapped social good, harnessing the formidable power of maps to explain, represent, and heal.

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