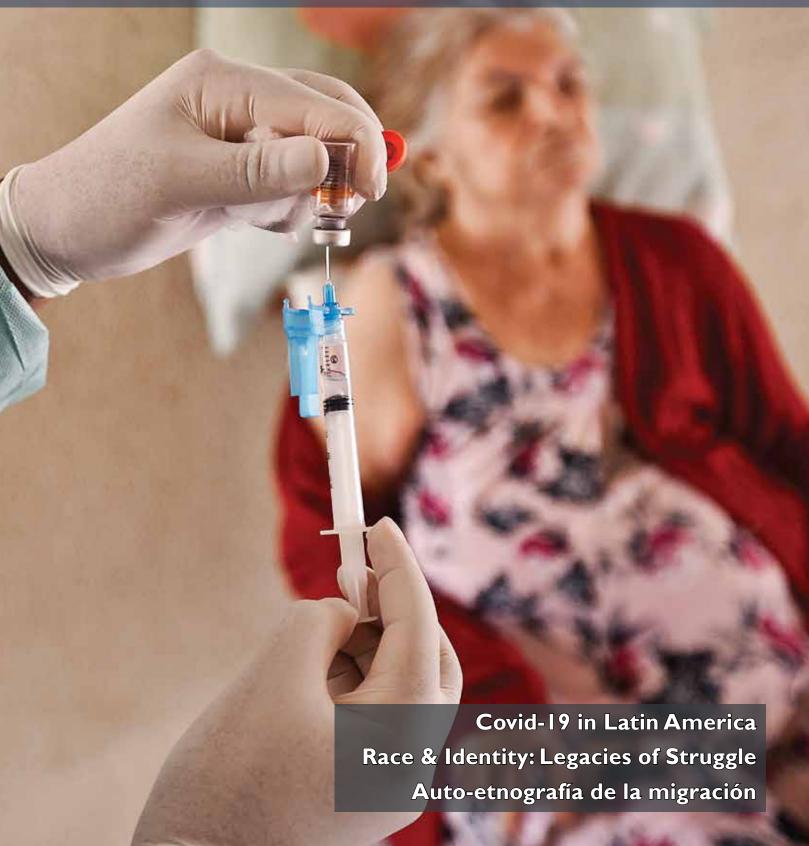


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Cover: A woman receives one of Brazil's first Covid-19 vaccinations, February 2021. (Photo by Breno Esaki/Agência Saúde DF.)

Comment

This Review marks transition to the next permanent chair of Berkeley's Center for Latin American Studies, Professor Natalia Brizuela. Fittingly, this issue reflects the breadth of research of CLAS affiliates and the strength of CLAS programs as we begin to exit pandemic isolation.

Cassandra Sweet opens with a sobering account of the differential impact Covid-19 has had in Latin America. Claudio Méndez adds a discussion of the social and political context of Chile's response, while Carlos Milani and Tiago Nery provide a grim assessment of Brazil, characterizing its treatment of Covid as catastrophic.

Covid is just one of the urgent contemporary issues our authors address, from a reconsideration the racialized of experiences of cross-border mobility from

Central America offered by Irma Velásquez Nimatuj, to a confrontation with unprecedented droughts promising a new regime of hotter tropics that Jeff Chambers, Clarissa Fontes, and Bruno Oliva Gimenez call the "hypertropics."

CLAS responds to global challenges like these through a wide range of programming. An interview with Diego Mondaca, director of "Chaco," Bolivia's nominee for the 2021 Academy Awards, testifies to the success of our CineLatino series as a virtual film-screening program. Everardo Reyes, a student in the Beginning Nahuatl course that CLAS fostered and maintained with remote instruction throughout the pandemic, provides a poetic commentary on the importance of teaching Indigenous languages.

Equally important is confronting our need to improve. John Mundell writes about the successful activism of the working group, Blackness in Latin America and the Caribbean, which questioned CLAS programming in the wake of 2020's Black Lives Matter protests and led directly to the AfroLatinx Voices roundtable series. As these contemporary events remind us, interrogating histories of race in Latin America is



Rosemary Joyce, CLAS Interim Chair Spring 2021.

an ongoing challenge and an urgent research focus one that C. Darius Gordon contributes to with their important historical reflection on Black educational activism in Brazil.

Finally, a pair of articles leave us with a taste of history and culture. Gordon Frankie, Sara Witt, Ben Faber, and Rollin Coville review the importance of native pollinators in the life cycle of the avocado, a native plant of Mexico and Central America that is an important focus of commercial agriculture around the world, including California. My own article on cacao, the plant source for chocolate, considers some of the newest unexpected findings of its early history. Both articles relate contemporary cultivation of native Latin American plants to urgent global issues of climate change and social justice — a fitting way to demonstrate the importance of the interdisciplinary engagement fostered by CLAS.

It has been my pleasure to contribute to the forward momentum of CLAS during this historic transition.

Rosemary Joyce



A nurse puts a warm water-filled glove on a Covid-19 patient in Brazil, April 2021. The phrase on the glove reads "May love prevail." (Photo by Amanda Perobelli/REUTERS.)

COVID-19

Getting Supplies in the Right Hands

By Cassandra M. Sweet

t first glance, the image is peculiar: a patient's hand, at repose in a hospital bed, covered by an engorged latex glove with knotted fingertips and wrist. The mãozinha (little hand) is full of warm water to mimic the warmth and weight of human touch and give comfort to a critical Covid-19 patient in São Paulo, Brazil. In hospitals throughout Latin America, patients lie intubated, alone and cold. Yet health care workers persist, innovating, managing tragedy with ingenious adaptations, and applying brute human force.

In the year 2020, Latin America and the Caribbean bore 28 percent of the world's confirmed Covid deaths while representing just 8.4 percent of the global population. While inconsistencies in national reporting practices and testing rates cast some doubt on this statistical map of death, whatever the approach used to analyze the global data, Covid has been devastating for the region.

The pandemic came to Latin America in a context of social, political, and economic instability. At the start of 2020, global economic demands shifted away from the commodity boom that shaped the turn of the 21st century. With the end of a global super cycle, the region grappled with a number of social and economic issues: stubborn structural poverty, surging political instability, a refugee crisis of historic dimensions, general social unease, weak institutions, fledgling political parties, and an information environment of rampant misinformation. The Covid crisis exacerbated many of these deep challenges.

At the same time, Covid shed light on an immediate problem for Latin America: throughout the region, governments struggled to source and supply medicine. Irrespective of the policy tools deployed to contain the pandemic from a public health perspective, all countries in Latin America faced a shared challenge in sourcing the pharmaceutical inputs required to launch systematic, effective public responses.

The root of the region's supply fragility is its distinctly import-dependent structure, with scant basic pharmaceutical production, heavy generics concentration, and nascent biopharmaceutical capabilities. Pharmaceutical industries represent a far smaller portion of gross domestic product in Latin America and the Caribbean than in other member countries of the Organisation for Economic Co-operation and Development (OECD). In 2018, the region had a pharmaceutical trade deficit of nearly US\$21 billion. This figure has exhibited steady growth over the past 30 years.

As an import-dependent region, Latin American governments reeled in the face of global shortages as the pandemic peaked again and again. Crucially, local capacity has not been able to scale up to meet domestic demands. In March 2021, for example, more than a year into the pandemic, Brazil faced shortages of anesthetics, sedatives, neuromuscular blockers, and pain medicines (O Globo, 2021). In Honduras, doctors have taken to Twitter to expose the desperate situation in public hospitals (Sosa, 2021). In Peru, doctors launched hunger strikes to call attention to the shortages. We have anecdotal evidence throughout the region of supply disruptions for key pharmaceutical agents crucial for artificial ventilation, though as of yet there has been no full regional review.

Still, we know that global health inequalities have been in dramatic evidence throughout the Covid crisis (Bollyky et al., 2020). High dependence on imports of medicines generally and Covid critical-care products specifically have constrained the ability of governments to guarantee essential personal protective equipment for healthcare workers, enable access to tests, provide respirators and oxygen when required, and rally the arsenal of pharmacological agents used to combat the effects of Covid-19 (Delgado, 2020). While there is no cure for the SARS-CoV-2 virus that causes Covid-19, three core pathophysiological processes triggered by the disease — severe hypoxemia, hyperinflammation, and hypercoagulability — can be combated with a protocol of pharmacological agents to reduce mortality rates (Ali et al., 2020; Benavides-Cordoba, 2020; Canedo-Marroquín et al., 2020). Though these medicines have been identified and their efficacy established, governments globally, but especially in Latin America, have struggled to coordinate a complex web of systems and procure the inputs necessary to offer treatment to their citizens (Socal et al., 2021).

Even in Latin America's most technologically advanced countries, which boast extensive systems of pharmaceutical production, ensuring the supply of key pharmaceutical agents has proven challenging. Lack of medicine has affected not only those suffering from Covid, but those battling other diseases, as well. From oxygen and masks, to anesthesiology medications, to vaccines, millions of Latin Americans experienced the scarcity of

medicine over the past year. Most alarmingly, as of this writing, the path to mass vaccination in many Latin American countries remains uneven and tenuous.

Scarcity is reshaping the debate among those of us working on issues related to access to medicine and innovation in Latin America. How has Covid highlighted weaknesses in the structure of medical innovation and delivery systems in the region? What are the barriers and opportunities currently being examined in academic and policy circles? How do we rethink and rebuild access to medicine in a context of crisis?

One interesting aspect of the supply challenge for Latin American governments is that in many streams of pharmacologic products, key medicines are no longer protected by patents. In principle, generic alternatives should be ubiquitous and available at low bulk prices. That Brazil — one of the developing world's leading pharmaceutical producers, globally heralded for its local production of HIV/AIDS medicines and for its response to Zika — should be constrained by a scarcity of such basic inputs is illustrative of the challenge of pharmaceutical sourcing during a global pandemic.

Pfizer Covid-19 vaccines are unloaded in Peru, April 2021.



Over the past three decades, a great deal of scholarship on access to medicine in developing countries has worked to unravel the role of intellectual property (Roffe et al., 2005; Sell, 2003). The "harmonization" of intellectual property systems through the intellectual property rights regime of the World Trade Organization (WTO) was originally touted by its supporters to be key to equalization. At the start of global trade negotiations in the late 1980s, the global pharmaceutical industry argued that lack of innovative output in the developing world was due to weak institutions, namely intellectual property rights. With Latin America's assent to the terms set out in the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the region expected to see increased investment in innovative activities.

Scholarship and on-the-ground policy work in subsequent years cast doubt on that argument. More rigid and longer intellectual property rights do not increase innovative output in developing countries (Sweet & Eterovic, 2015). In fact, they likely reduced access to medicines in the Global South. In the late 1990s, several large and leading developing countries

 most notably South Africa and Brazil
 led a pushback. Both countries utilized flexibilities in the agreement's Article 31 and issued compulsory licenses on components of widely used antiretrovirals for HIV/ AIDS patents (Correa, 2015). Under TRIPS Article 31, governments can give authorization to use a patented invention without the consent of the patent-holder under specific conditions, such as a public health emergency like the coronavirus pandemic. The authorization given by compulsory licensing cannot be exclusive to any particular manufacturer and is intended to supply the domestic market only.

Brazil could employ this mechanism because it had the political capital and local production capacity to back up the policy. Still, it was constrained by not locally producing active pharmaceutical ingredients for antiretrovirals. These first "building blocks" were sourced from suppliers in India and subsequently formulated into finished medicines in Brazil's public laboratories. According to the World Health Organization (WHO), Brazil's leadership made this Latin American country a "trailblazer" (WHO, 2018).







Vaccine distribution begins with healthcare workers in Huancavelica, Peru, February 2021.

By mid-May 2021, the politics of intellectual property in the battle to secure access to a coronavirus vaccine fully unfolded (WHO, 2021). Turning away from previous U.S. policy, Kathleen Tai, the Biden administration's representative to the WTO, issued a statement that the United States would endorse use of patent flexibilities: "The Administration believes strongly in intellectual property protections, but in service of ending this pandemic, supports the waiver of those protections for Covid-19 vaccines. We will actively participate in text-based negotiations at the WTO needed to make that happen" (Tai, 2021). Within 48 hours of the reversed U.S. position, the Europeans - led by Angela Merkel - dismissed this position, arguing that it would result simply in a transfer of technology to Russia and China and not supercharge efforts to distribute the vaccine globally. Many looked skeptically at the United States, who had shared vaccines globally at a comparatively miniscule rate in contrast to European partners. Whether or not this moment signals an enduring policy shift for the United States or an exceptional and fleeting moment, a division between these two groups reflects the larger geopolitical power clash regarding global vaccine distribution.

In Latin America, contrasting visions emerged. Brazil, once the leader in the push for intellectual property flexibilities, spurned the idea of issuing compulsory licenses outright. Foreign Minister Carlos Alberto de Franco França told a Brazilian Senate committee in early May, "vaccines are almost impossible to copy, in the short or medium term, without the support of the laboratories that developed them — even with the aid of the patent." According to França, "The biggest bottleneck today, for access to vaccines, is the material limits of production capacity" (Chazan et al., 2021).

While the politics of intellectual property are once again making headlines in Latin America, the crisis has put in stark relief how the rules governing innovation are one piece in a complex institutional and production landscape. To ensure access to medicine, governments in the region must address multiple inputs across the sector and a kaleidoscope of policy areas including: regulatory frameworks; public procurement and distribution policies; local production and innovation systems; and distribution programs through regionalism and multilateralism.

Still, we may only see immediate changes at the national level. Despite work to improve regional regulation (Shadlen & Fonseca, 2021), the overall environment for

cooperation has been hampered by a "hollowing out" of inter-state relations and institutions (González González et al., 2021). At the same time, most countries of the region have signed on to the global effort to secure vaccines through COVAX, the Covid-19 Vaccines Global Access, coordinated by Gavi, the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations (CEPI), and the WHO. The aim has been not only to procure vaccines, but also to facilitate vaccine delivery and the design of cold chains and roll-out plans.

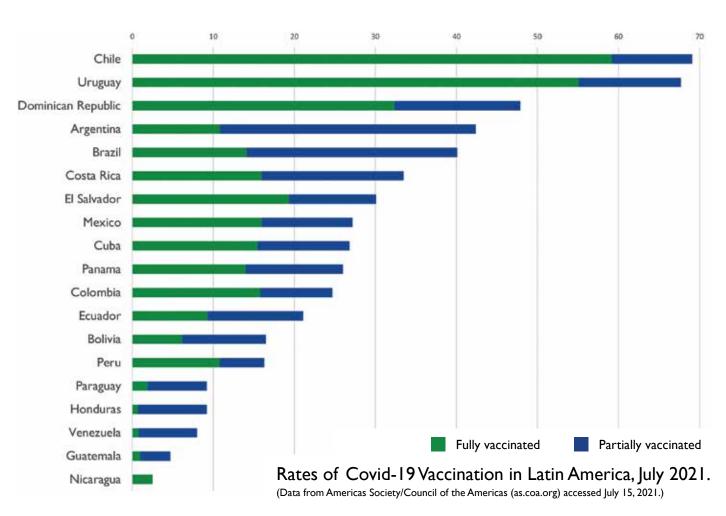
For Latin America, this roll-out at the international level has been slow. Most national governments have struggled to acquire inputs and vaccines from a highly competitive international market. A few individual cases are notable. Chile and Uruguay are regional and global outliers. Chile had achieved at least one dose of vaccination for nearly 90 percent of the population over age 60 and 65 percent of the population over age 45 by mid-May 2021 (Espácio Publico, 2021).

Many questions remain. How did access to medicine deteriorate in Latin America during the pandemic? And were there ways in which innovations could reduce the challenge of sourcing medicine during a global pandemic, be they mimicking the weight of a human hand through an engorged latex glove, launching a new procurement system, or incentivizing local innovators to adapt? How should we think of disruptions in the region from this point forward? What are the models that effectively reduce disruption with a focus on ensuring access, equality, and economic development?

The onset of the pandemic seemed to be a harbinger of shared global destiny. The promise has largely failed to materialize in Latin America. While workers on the front line scramble to get patients critical care, policymakers in ministries and congresses are facing the region's dependence and debating steps to rebuild local production systems for the future.

Cassandra M. Sweet works on research and policy relating to the political economy of trade. She consults for international agencies, governments, and NGOs and has authored more than a dozen studies on democracy, intellectual property, and innovation.

References for this article are online at clas.berkeley.edu.



COVID-19

The International-Domestic Nexus of a Catastrophic Pandemic Response

By Carlos R.S. Milani and Tiago Nery

razil is experiencing one of the greatest tragedies in its modern republican history. After more than 21 years of military dictatorship (1964-1985), the country seemed to have consolidated its democratic regime between 1988 and 2016. Economic stabilization, the organization of a federal bureaucracy in several policy areas, the implementation of a wide range of inclusive social policies (conditional cash transfers, racial quotas in higher education, participatory budgeting, public consultations and councils, etc.), the conception of an autonomous foreign policy, and an international projection of global ascent based on regional leadership were some of the accomplishments that had caught the world's admiring attention.

Since Dilma Rousseff's controversial impeachment in 2016, however, the country has gone through a critical juncture, with political, economic, and social dimensions that have jeopardized the progressive construction of democracy and its evolving institutions. After polarized elections in 2018, Jair Bolsonaro was sworn in as Brazil's president in January 2019, inaugurating a far-right and ultra-conservative administration, since then labeled "Trumpism in the Tropics." *Bolsonarismo* has provided a fruitful landscape for the uncontrolled dissemination of the novel coronavirus across the country, with potentially dangerous consequences in South America and worldwide.

From Bridge-Builder to International Pariah: Brazil's Global Status Change

Bolsonaro leads a coalition based on odd, but widely disseminated stances, including anti-communism, the defense of the patriarchy, militarism, economic neoliberalism, an Evangelical Christian alliance with Israel, and an unconditional external alignment with the United States of Donald Trump. During his presidential campaign in 2018, Bolsonaro had already promised a "new foreign policy" and a "new Itamaraty," as Brazil's Ministry of Foreign Affairs is known. He argued that the ministry should be at the service of values that have always been associated with the "Brazilian people." Itamaraty should contribute to the "national liberation," so that Brazil would finally be free of "ideological bonds."

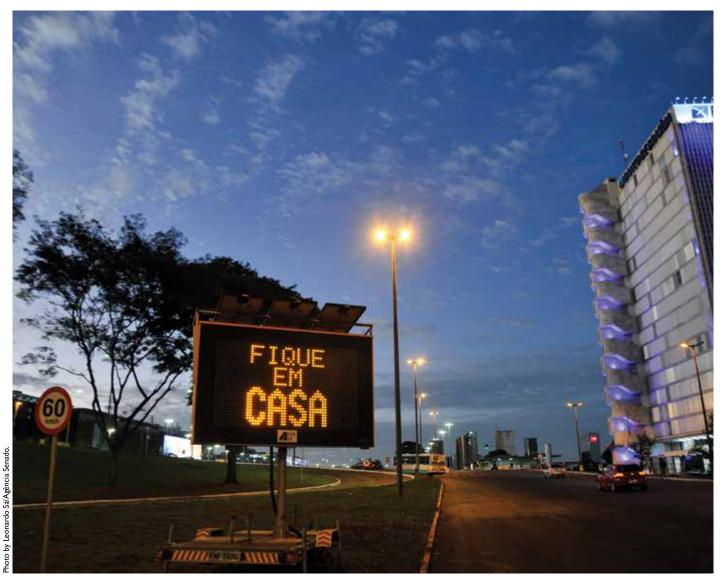
Bolsonaro's government is divided into three main groups. The first is composed of members from the armed forces, who today hold more than 6,000 federal posts, including important political positions in the Office of the Vice President, the Office of the President, and even the Ministry of Health. Army General Eduardo Pazuello oversaw Brazil's response to Covid-19 from May 2020 to March 2021.

According to political scientist José Murilo de Carvalho, since Brazil's independence, five of the country's seven constitutions (including the 1988 Constitution, the country's current charter) have attributed some political role to the armed forces. However, Bolsonaro has appointed more military officers to civilian posts than any other administration, including during the military dictatorship. Today, the military clearly continues to exercise a "guardianship role" over Brazilian democracy.

The second group is made up of technocrats who are in charge of economic and financial affairs and the agribusiness sector. They hold leadership positions in the Ministry of Agriculture and shape major decisions made by the Ministry of the Environment.

The last group is the so-called "ideological wing," formed by the followers of far-right astrologist Olavo de Carvalho (who lives in the United States) and members of Neo-Pentecostal churches. They took over the Ministries of Education, Human Rights, and Foreign Affairs. Breaking with the country's historical defense of human rights, Brazil has joined international alliances supporting a reactionary agenda of values, especially against the rights of women and the LGBTQI+ community.

Strikingly, after his nomination as Minister of Foreign Affairs and nearly a year before the coronavirus pandemic, Ernesto Araújo emphasized that Bolsonaro would liberate Brazil "through truth," which would be revealed by God and not by science. Araújo (who tendered his resignation in March 2021) has defended positions against the United Nations and China, Brazil's main trade partner and a key global supplier of surgical masks and active pharmaceutical ingredients that are necessary for vaccine production.



A sign in Brasilia advises residents to "stay home" in May 2020.

As the Biden-Harris administration rolls out progressive policies and Brazil's 2022 presidential elections loom large — former president Lula da Silva may run as a strong opposition candidate — Brazil's foreign policy will probably go through some changes. Bolsonaro has already replaced his Minister of Foreign Affairs, and his climate change and environmental policies are under domestic and international attack. Whether or not Washington will send extra funding to Brasilia based on promises of environmental protection measures is still an open question that should be closely monitored by civil society organizations in Brazil and the United States.

In the international health community, Brazil has historically played a very active role. The country's "health diplomacy" has relied on the participation not only of Itamaraty, but also the Ministry of Health and respected institutions like the Fundação Oswaldo Cruz (Fiocruz) and Instituto Butantan. In recent decades, Brazil became a regional leader due to its national public healthcare

system and drug access programs (in the fight against HIV epidemic, for example), defending health as a human right and not simply an intellectual property issue at the World Trade Organization. At the regional level, Brazil supported the União de Nações Sul-Americanas (UNASUR, Union of South American Nations) and the initiative's Instituto Sul-Americano de Governo em Saúde (ISAGS, South American Institute of Government in Health).

However, Bolsonaro's foreign policy has created a breach in the trajectory of this health diplomacy at both regional and international levels. For example, Brazil abandoned its long-standing position in favor of patent flexibility, moving away from countries like India and South Africa. The president adopted an unprecedented alignment with the United States, especially with the Trump administration, isolating Brazil from many multilateral forums. When Covid-19 hit, the country was already under the weather.

A Covid-19 Disaster: A Crime Against Humanity?

Brazil has been a global hotspot for the pandemic since the beginning. The Bolsonaro administration followed the Trump White House in verbally attacking China and the World Health Organization (WHO), while hesitating to join the Covid-19 Vaccines Global Access (COVAX), the main multilateral tool for guaranteeing access to vaccines. The Brazilian government only joined this international effort after considerable domestic pressure and in a very limited fashion. At the regional level, Brazil withdrew from UNASUR and ISAGS just as the country and the region became the epicenter of the Covid-19 crisis.

Since the outbreak of the pandemic, the Bolsonaro administration has adopted a series of erratic responses, often in opposition to WHO international guidelines. Bolsonaro has promoted scientific denial, insulted and ignored health officials, and defended the early use of ineffective drugs against Covid-19. Backed by Neo-Evangelical churches and the military, he has made the widespread use of chloroquine his primary health policy. While insisting on a false dichotomy between economy and health, the strategy of the Brazilian government has been to try to achieve herd immunity through contagion. The lack of political coordination at the federal level has also resulted in conflicts and power disputes between states and cities, on the one hand, and among the executive, legislative, and judicial branches, on the other. Nevertheless, despite Bolsonaro's fierce hostility, many states and cities have adopted restrictive measures to curb transmission of the SARS-CoV-2 virus.

The contentious handling of the epidemic by the federal government is likely to have contributed to Covid-19's rapid spread within the country's most vulnerable populations. According to two surveys from 2020, high-prevalence areas are poorer and less well served by health and other public services than the rest of the country. Prevalence among Indigenous populations was more than four times higher than among white people, and prevalence in the poorest socio-economic quintile was more than twice as high as in the richest quintile. In addition, antibody prevalence had a rapid initial escalation in Brazil's northern and north-eastern regions, the two poorest regions in the country. The north-eastern region is the only one where Bolsonaro lost the elections in 2018 and remains a stronghold of support for Lula and more pro-poor and progressive policies.

In this context, Brazil was the target of a precautionary measure by the Inter-American Commission on Human Rights for the protection of the Yanomami and Ye'kwana, two Indigenous Peoples that have been facing a situation of emergency since the upsurge of the Covid-19 pandemic. The rapid increase of cases in their territory has been aggravated by the presence of about 20,000 miners in the area and acts of violence perpetrated by miners and illegal loggers against the Indigenous population.

Since late 2020, the situation has gotten worsen. The death rate has risen from 2 to 3.3 percent, plunging Brazil into an unprecedented health emergency. According to Fiocruz, late March 2021 saw a record number of more than 3,000 deaths daily due to Covid-19. That same month more than 60,000 Brazilians died, and nearly one-third of all daily Covid-19-related deaths in the world were in Brazil, although the country makes up only 2.7 percent of the world population.

In addition to a record number of fatalities, Brazil is dealing with the spread of a more-contagious coronavirus strain that may result in reinfection. The Gamma variant has become a serious cause of concern to neighboring countries and around the world.

This catastrophic situation has provoked the collapse of the country's national public healthcare system, the Sistema Único de Saúde (SUS, Unified Health System). Fiocruz has reported lines for access to hospital beds (especially in the ICU), scarcity of supplies and essential drugs for patients with Covid-19 and other conditions, and exhausted healthcare professionals. As of early April 2021, Brazil had vaccinated only 13 percent of the population over 18 years old with the first dose and less than 4 percent with the second dose.

Brazil's catastrophic response to the pandemic has been aggravated by fiscal policies of austerity. The "expenditure ceiling" approved by a constitutional amendment in 2016 prohibits the increase of federal spending on health, education, and social security for more than the annual inflation rate for the next 20 years. Analysts are calling this strategy of overcoming an epidemic with minimal regulation and costs "epidemiological neoliberalism."

While the National Congress did vote to raise the amount of the Emergency Aid Bill, the federal government's major response to Covid-19's social and economic impact, this increase required political pressure from civil society organizations and support from deputies and senators of progressive political parties. Between April and December 2020, 68 million Brazilians received five payments of R\$600 (approximately US\$120) and four payments of R\$300 (approximately US\$60). In 2021, at the peak of the pandemic, the new aid program should pay four more

installments of approximately R\$250 (US\$50) to 45.6 million people, 22.6 million less than last year.

But even this support is insufficient. Brazil's substantial gains guaranteeing the human right to adequate food from 2004 to 2013 were quickly canceled for a large part of the population in a very short span of time. A recent survey has shown that 55.2 percent of Brazilians (approximately 116.8 million) face some degree of food insecurity. In 2020, some 19 million Brazilians were suffering from severe food insecurity.

So far, the Bolsonaro administration's gamble on achieving herd immunity, combined with scientific denial and epidemiological neoliberalism, has caused an impressive increase of poverty and hunger and nearly 500,000 Covid-19-related deaths as of June 2021. Brazil has registered approximately 1,756 deaths per million, far surpassing Peru (1,722), the United States (1,731), and Mexico (1,646). In light of this tragedy, the federal government's behavior may constitute a crime against humanity.

Conclusion: A Dismal Perspective

The legacy of the current critical juncture may be dreadful for Brazil. Domestically, health conditions and the pandemic continue to affect the population, particularly

Brazilians who are Black, Indigenous, poor, and marginalized. Internationally, the country can no longer play its traditional bridge-building role in multilateral negotiations and risks becoming an outcast in global health and climate change issues. From best practice exporter in the field of social policies to an international pariah, Brazil reveals how the connections between neoliberal austerity policies, authoritarian leadership, and bad foreign policy decisions can result in catastrophic responses to global health challenges like the Covid-19 pandemic.

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At a July 2021 inquiry on Brazil's pandemic response, nameplates are replaced by updated numbers of lives lost due to Covid-19.



COVID-19

Chile: A Health Crisis Within a Social Crisis

By Claudio A. Méndez

n recent decades, Chile has been admired worldwide as an example of political stability, economic growth, fiscal responsibility, and incremental social policies. Nonetheless, the political and social crisis of 2019 revealed a series of flaws in the "Chilean miracle." Massive public protests called for changes in major social protection policies in the pension, healthcare, and education systems. Social policies once considered successful (Taylor, 2003) were being challenged by the people.

Despite the promise of a new constitution, the political and social unrest unleashed in October 2019 left scars of profound distrust and disbelief in democracy and political institutions. By March 2020, these sentiments were reinforced by erratic health policies and long-delayed implementation of social policies needed to address the economic crisis stemming, in part, from the Covid-19 pandemic. Today, Chile continues to struggle with paradoxical outcomes in its vaccination campaign and the current political imbroglio of the Covid-19 response.

The Social and Political Crisis

In October 2019, high school students started dodging subway turnstiles in Chile's Metropolitan Region, which includes the nation's capital of Santiago. What began as a protest against a fare increase of about US\$0.04 quickly spread across the country. By October 18, 2019, people gathered in huge but peaceful rallies demanding major transformation of social protection policies (Méndez et al., 2020). After incidents of violence against public and private property, President Sebastián Piñera signed a state of emergency decree on October 19, making the armed forces responsible for restoring order in the Metropolitan Region (Méndez et al., 2020). Decrees for other regions were signed in the following days to quell protests throughout the country.

Unable to meet the social demands of the people, the government focused on restoring order and justified





its use of violence. Piñera's efforts to sway public opinion failed, and the protests continued nationwide. The National Congress likewise failed to move strongly enough to overcome the crisis. While some articles in the Constitution established under the military dictatorship of General Augusto Pinochet (1973-1990) had been amended during the administration of President Ricardo Lagos (2000-2006), a great deal of power remains concentrated in the figure of the president.

Before October 18, 2019, Chile's political landscape was struggling, as usual, with the political process and policy agenda driven by the Piñera administration. The legislative branch had enjoyed a redistribution of power since recent political reform had put an end to the binominal system under which political coalitions from both the right and left secured congressional seats. Under a new D'Hondt system, representation from other political parties increased, but political opposition remained ineffective.

Shortly after the state of emergency was declared, the first cases of human rights violations at the hands of the police and armed forces were reported. Videos from media covering the protests and from citizens recording with mobile phones as well as eye-witness accounts of human

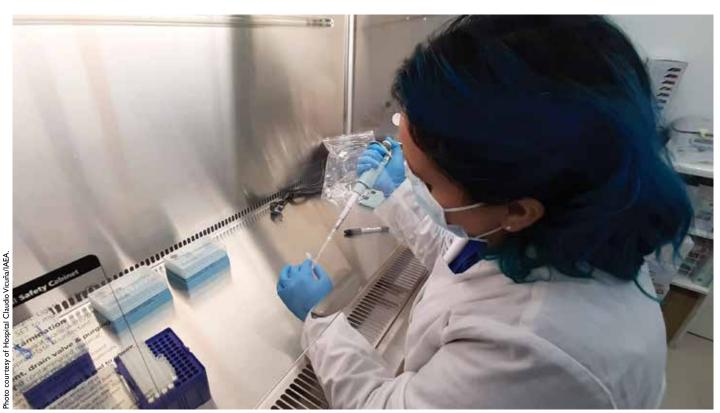
rights observers from the Instituto Nacional de Derechos Humanos (National Instituto for Human Rights) brought attention to the cases of people who had been intentionally shot in the eyes with rubber bullets or who had received humiliating treatment while in detention.

With the Piñera administration's unwillingness to change its agenda, the people continued to take to the streets, and they put the National Congress in their sights (Deutsche Welle, 2019). Weeks later, on November 15, 2019, there was still no political solution to the crisis as members from almost all the political parties represented in Chile's National Congress signed the Agreement for Peace and a New Constitution (Hernandez & Gigova, 2019). This agreement included a national referendum for a new constitution replacing the charter enacted during Pinochet's dictatorship. The referendum was scheduled for April 26, 2020.

The nation's political and social crisis was still ongoing when Covid-19 hit Chile, and the changes demanded by the people several months earlier would have been key for a better response. Nonetheless, the very same government that was incapable of making political and policy changes in October 2019 was now responsible for designing and implementing policy measures to cope with the Covid-19

Members of Chile's Congress meet to discuss constitutional reform during the pandemic, November 2020.

o hyVivian Morale



A biochemist uses equipment provided by international donors to test for SARS-CoV-2 in Chile, July 2020.

pandemic. In this context, the referendum for the new Constitution was postponed until October 25, 2020.

The Health Crisis of Covid-19

On March 3, 2020, Chile's first case of Covid-19 was confirmed at a time when the country's political institutions were still under public scrutiny. According to the Johns Hopkins University Coronavirus Resource Center, one month later, the country had reported more than 300 cases and eight deaths (Johns Hopkins University, 2020). As of May 2021, Chile has recorded more than 1.5 million confirmed and suspected cases of Covid-19 and 36,000 Covid-related deaths (Departamento de Epidemiología, 2021), despite a vaccination campaign that has garnered international attention (Kirby, 2021).

With the president unable to solve the ongoing social and political crisis (even with his ample powers) and the National Congress not able to meet the people's social demands, the Chilean government was ill-prepared to draft a response plan to the public health emergency. Once the SARS-CoV-2 virus started to spread throughout the country, with a daily increase of cases and deaths, the healthcare system was the linchpin of Chile's fragmented and conditional cashtransfer-based social protection system.

Despite the referendum for the new Constitution proposed as a path for a new rights-based society, Covid-19 clearly demonstrated that pension, health, labor, and other social policies demanded by the people were needed more than ever before. Even with the option of changing the Constitution through an elected constitutional convention that ensured parity, the social crisis increased dramatically with greater unemployment, food shortages, and inequalities in access to the health care system.

The pandemic has demonstrated the importance of comprehensive integrated social protection systems to support health policy. Likewise, the crisis has shown how neglecting social policy can undermine the response from the health sector (Méndez, 2021). In the case of Chile, a health crisis in the context of a social crisis had a one-way solution: politics, the same politics that had failed months earlier to alleviate social unrest through meaningful changes in Chile's political systems and policies of social protection.

As people started to cope with the pandemic, their severe distrust in the government and politics increased, galvanized by a generalized lack of leadership. Erratic policy measures — such as allowing the country's borders to remain open, while implementing partial lockdowns in the Metropolitan Region, the so-called "dynamic quarantines" for small areas within the city (Canals et al., 2020) — did not help connect the government's messages with a population suffering not only the consequences of Covid-19, but the symptoms of a precarious socioeconomic situation, as well.

This distrust was soon justified as the president, backed by his neoliberal cabinet, was reluctant to raise public spending. Instead, Piñera encouraged employers to give workers paid time off rather than taking steps to provide emergency income. Furthermore, media images of Minister of Finance Ignacio Briones and his fellow Minister of Social Development Sebastián Sichel as they celebrated the passage of the Ingreso Familiar de Emergencia (IFE, Emergency Family Income) seemed to imply the administration would rather prop up the economy than help the people. After long negotiations, the National Congress finally passed legislation to establish three IFE payments according to the number of family members. Under Law No. 21230, families with no formal income would receive 65,000 to 100,000 Chilean pesos (around US\$123) per person, so the income for a family of four could be as much as US\$492 (Gobierno de Chile, 2020).

To combat food shortages due the loss of formal and informal sector employment, communities started to organize *ollas comunes* (soup kitchens) (Dragnic, 2020). Municipalities stepped up to fill the gaps left by the lack of leadership. They implemented social support programs and challenged the centralization represented by the Piñera administration.

Chile's shutdown and reopening indicators were announced in the Plan Paso a Paso (Step by Step Plan) on July 2020 (Prensa Presidencia, 2020) and involved epidemiological indicators at the community and regional levels to move from quarantine to phased reopening. In the meantime, continuing waves of lockdowns have forced small business owners to close, and unemployment has increased. In light of these circumstances, the government should boost the IFE, which is still insufficient.

The Vaccination Campaign Paradox

In March 2021, Chile began an aggressive vaccination campaign through the solid nationwide network of primary healthcare centers. These efforts started in 2020 with the government signing advance agreements with Pfizer-BioNTech (United States/Germany) and Sinovac (China). The Chilean government coordinated purchase agreements of the vaccines with the best prospects according to clinical trials (Diaz-Cerda, 2021). At the same time, the Pontificia Universidad Católica de Chile helmed Sinovac's clinical trial in Chile, which facilitated the purchase agreement (Diaz-Cerda, 2021).

Under the direction of the municipalities, the primary healthcare system quickly selected and coordinated vaccination centers to facilitate access to the vaccine for



Cooks in an olla común (soup kitchen) prepare food for delivery in Arica, Chile, June 2020.



A woman is vaccinated in Santiago, February 2021.

the age groups prioritized by the government. For weeks, Chile was in the international spotlight due its high vaccination rate. Piñera and his cabinet sought to leverage the attention for political gain as soon as the shipments of vaccines began arriving in the country. The first vaccine shipment was received personally by Piñera and Minister of Health Dr. Enrique Paris. This event was broadcast on the news, and the president's approval rate increased.

However, despite a very successful start to the vaccination efforts, by April 9, 2021, the country had reached a daily record of more than 9,000 confirmed cases, compared with almost 7,000 daily cases in June 2020 (Chambers, 2021). The second wave hit harder, and it was avoidable. The Chilean vaccine campaign paradox was covered by the same media that once highlighted Chile as an "amazing vaccination machine." In fact, one of the main explanations for the paradox was the vacation leave promoted by the Piñera administration itself and a misguided communication campaign about how the two doses of vaccines worked (Bonnefoy & Londoño, 2021).

On May 15 and 16, 2021, Chile held the first round of elections for governor in the country's 16 regions and for mayor in the 345 municipalities. Among other elected officials, voters also chose the 155 representatives to the constitutional convention who are charged with drafting the country's new charter. Yet, the political and social crisis

continues, as the government and the National Congress discuss various social measures, including universal basic income for the entirety of the vulnerable population on the Registro Social de Hogares (Social Household Registry).

The next few months will be crucial for Chile, with upcoming elections for president as well as senators and deputies within a political environment dominated by the constitutional convention. And yet, the social crisis and distrust in political institutions remains far from diminished.

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References for this article are online at clas.berkeley.edu.

RACE & IDENTITY

Legacies of Struggle: Reflecting on the AfroLatinx Voices Roundtable Series

By John A. Mundell

n the wake of the murders of George Floyd and Breonna Taylor by police in the United States, Black Lives Matters protests spread across the world in the late spring of 2020. Many communities added the names of their loved ones killed by state violence, revealing that Covid-19 wasn't the only global pandemic. During that same time, the murder of 24-year-old Anderson Arboleda by police in Puerto Tejada, Colombia, rattled the Afro-Colombian community. Other tragedies, like the still-unsolved 2018 assassination of queer Black Rio

de Janeiro city councilwoman Marielle Franco, continue to remind us that power and prestige cannot stave off state-sanctioned anti-Blackness.

In response to the onslaught of racial violence and outrage, UC Berkeley's Center for Latin American Studies scheduled an online event called "The Latino Community and Black Lives Matter," with Daniel Coronell, the awardwinning Colombian journalist who heads the news division at Univisión. The title and description echoed a common social media hashtag, #LatinxForBlackLives.

A march after the assassination of Councilwoman Marielle Franco and her driver, Anderson Gomes, Rio de Janeiro, March 2018.



Yet, the slated speakers were all white men. In response, the graduate students who co-founded the Blackness in Latin America and the Caribbean (BLAC) working group in 2017, with sponsorship from CLAS, nervously penned a private letter to the staff to express our concerns.

As scholars of race in Latin America and the Caribbean, we believed that the title and its description, much like the hashtag, reified an imagined separation and distance between Latinidad and Blackness. Latinidad, or Latinness in English, is an identity sometimes erroneously categorized as a race or ethnicity, particularly within the United States, that seeks to combine the panoply of Latin American cultures along the lines of shared histories of Spanish and Portuguese colonialism, languages, and mestizaje, or race mixture. However, due to the conquest and enslavement of Indigenous Americans and Black Africans whose histories, cultures, and genealogies were subsumed into Latinidad by white and mestizo elites in order to appear more European, Latinidad continues to structurally erase Blackness as well as Indigeneity. The everyday experience of Black Latinx or AfroLatinx people is rarely present in national media beyond simplified folkloric gestures by the nation-state (often limited to music, dance, and food).

In this context, our opposition was further intensified because of the headlining speaker's leadership position in a news organizations that notoriously vilified the anger and pain of Black Lives Matter protesters. Anti-Blackness continues to be pervasive in Latinx communities in the United States, in Latin America and the Caribbean, and within Latinidad itself as a structure of cultural identity. We wanted to recognize the good intentions of CLAS because, truly, white people (including myself) need to be having these conversations with each other. The same must be said of the entire field of Latin American Studies as one populated by mostly white scholars in the United States and Latin America. Yet, as the CLAS platform is respected the world over, it should be used differently.

Photo by Mídia NINJA.



In our letter, we asked:

How can we effectively engage anti-Blackness in the Latinx community without actual AfroLatinx voices in a public forum such as this? [...] Latinidad as an ethnic project can neither exist without Blackness nor effectively engage with the struggle for Black lives in the U.S. and across the Americas without reflecting inward and through the lens of AfroLatinx scholars and artists. [...] It remains incredibly difficult to begin and continue the conversation on what the broader Latinx community in the U.S. and across the world can do if we do not see Black people as members of that very community and foundational to its existence.

A day after sending our letter, the staff at CLAS responded with grace and the desire to listen to our concerns more directly via videoconference. They indefinitely postponed the event in question. Former director Harley Shaiken welcomed our criticism and asked what CLAS could do in order to (as we wrote) "take concrete action to include AfroLatinx scholar-activists and let them lead, especially on issues that disproportionately affect them, not only in grassroots activism but in academic spaces." We agreed that a series of webinars featuring Black Latin American, Caribbean, and AfroLatinx artists, academics, and activists would provide an entry point. Our virtual roundtable series AfroLatinx Voices was born.

The goal of AfroLatinx Voices has been to feature Black voices in a predominantly white academic space and field. We sought to diversify our perspectives and the broader communities involved in the Center for Latin American Studies at UC Berkeley and beyond. Presented as conversations that straddled the academy and the constituencies of our speakers, a member of BLAC moderated each roundtable addressing a different theme: literature and writing; Black feminist activism; the historiography of Black Atlantic religions; and critical whiteness. As Blackness and anti-Blackness pervade the confines of borders, languages, and statecraft, we also wanted to use the series to stretch our conception of Latin America beyond Spanish America and Brazil. This approach meant a more open embrace of and critical engagement with the Caribbean as a porous discourse of culture, thought, and being that extended beyond its Spanish-speaking constituent nations and the archipelago itself, which was especially the case in our first event in October 2020.

This first virtual roundtable, "Writing Black Caribbean Women," featured a conversation between Afro-Puerto Rican novelist and poet Aya de León and queer Jamaican novelist Nicole Dennis-Benn, both based



Nicole Dennis-Benn (top) and Aya de León.

in the United States. The discussion was moderated by BLAC co-founder Nicole Ramsey, a Ph.D. candidate in African American and African Diaspora Studies, who works on Blackness in Central America, cultural production, Belize, and Belizean migration to the United States. Both authors graced us with readings: de León read from *The Accidental Mistress* (2018) and *Side Chick Nation* (2019), two books from her feminist heist series (Justice Hustlers), while Dennis-Benn read from her queer Black transnational novels *Here Comes the Sun* (2017) and *Patsy* (2019), which reflect her own life story.

Both de León and Dennis-Benn embraced the title of the roundtable to describe themselves as Black Caribbean women writers, as well as the everyday act of writing Black Caribbean women's stories. In her opening statement, Dennis-Benn remarked how most books she read about the Caribbean while she was in school in Jamaica were written by white British men. "Growing up, I felt like I was a caricature on the page as opposed to a real person," she said. "I never saw myself, especially as a Black working-class Jamaican girl, now woman." De León explained that it was the testimonies of Caribbean women that stayed with her, in particular, Audre Lorde's collection of essays *Sister Outsider* and her autobiography *Zami*.

Notably, Dennis-Benn and de León mentioned the importance of language as a mode of recognition, representation, and affirmation for both author and reader. While de León discussed her reliance on research and friends to check her language, Dennis-Benn was greatly influenced by the Black U.S. anthropologist and writer Zora Neale Hurston. Echoing Hurston's incorporation of African American Vernacular English and its regionalisms, Dennis-Benn explained that writing in Jamaican patois "forces the reader to slow down and sit with it, to listen to the people" who are regularly left off the page. Like Conceição Evaristo in Brazil and Mayra Santos-Febres in Puerto Rico, among many of their Black women writer counterparts in Latin America and the Caribbean, both Dennis-Benn and de León envision their use of language as a Black feminist praxis. Through an insistence of language, their writing implodes the categories of respectability, of genre, and of a canon altogether, in order to most effectively write Black women's stories the way they deserve to be told.

In December 2020, our second virtual roundtable revealed how these theories moved across borders in the collective actions of activists. "Transnational Black Feminisms and Activism in Latin America and the Caribbean" welcomed Tito Mitjans Alayón, an Afro-Cuban trans masculine feminist activist living in Chiapas, Mexico; Djamila Ribeiro, an Afro-Brazilian feminist philosopher, journalist, and activist based in São Paulo, Brazil; and Laura Hall, an Afro-Costa Rican human rights activist and political organizer based in Limón, Costa Rica. The event was moderated by BLAC member Ashley Ngozi Agbasoga, a Ph.D. candidate in Anthropology at Northwestern University working on Afro-Indigenous feminist movements and rights in Mexico. With people tuning in from all over the world, Mitjans, Ribeiro, and Hall discussed how their Black feminisms and identities were transnationally (in)formed.

Mitjans mentioned reading well-known Afro-Brazilian feminists like Carla Akotirene, Lélia Gonzalez, Sueli Carneiro, Beatriz Nascimento, and also Diamila Ribeiro, who affirmed this shout-out with a smile. However, it was afrotransfeminismo as co-imagined in a 2018 viral article by Afro-Brazilian trans women activists Maria Clara Araújo, Giovanna Heliodoro, and Erika Hilton — the first transgender city councilwoman in São Paulo, with a record-setting number of votes — that helped Mitjans situate himself within a Black trans/nationally informed identity. "I learned that there were Black people everywhere, despite the white mestizo Cuban narrative that locate them only in determined geographies. [...] Black feminist cartographies, for me, was a beautiful tool to locate myself." Likewise, Afro-transfeminism allowed Mitjans to assert his place within new trends in feminism, despite the ongoing marginalization of Black women and trans people.

nage by CLAS.

As Ribeiro discussed her own trajectory reading Black U.S. feminists like Patricia Hill Collins and Angela Davis, she challenged activists and academics in the Global North to actively read Black women's writing in Brazil. Referencing her activist work that successively pressured publishing houses to translate these Black U.S. feminist authors into Portuguese, she mentioned two collections of books she is presently curating. The first, Feminismos plurais (Plural Feminisms), is a series of eight books authored by eight different Afro-Brazilian authors, women and men. The second collection honors the legacy of Afro-Brazilian feminist Sueli Carneiro. Several of the books have been translated into French, Italian, and Spanish and affordably priced in an effort to foster transnational conversations, especially among Black women. The collection includes Mulheres quilombolas (Quilombola Women), co-authored by 18 different women from Brazilian quilombos. Also known as "maroon communities," these settlements were

From top: Djamila Ribiero, Laura Hall, and Tito Mitjans Alayón.



formed by Africans escaping slavery prior to abolition in 1888 and often incorporated Indigenous peoples; many quilombos still exist today.

Laura Hall posed the transnational work of Black feminisms differently. As a descendant of West Indian immigrants who built the railroads in Costa Rica and harvested coffee along the country's Caribbean coast, she discussed how Black women's leadership has been integral to African cultures over a long history. Perhaps implicitly gesturing to Costa Rica's Vice President Epsy Campbell Barr, a Black woman, Hall said, "It is nothing new that Black women are at the head of government. For people of African descent...it's not novel. It's novel in this part of the world, but we come from kingdoms ruled by women, and we come from maroons guided by women." Hall herself is the vice president of Costa Rica's chapter of the Universal Negro Improvement Association in Limón, originally founded in 1914 by Jamaican political activist Marcus Garvey while living in Harlem. Hall reminded us that Black people are far from being a minority in Latin America and the Caribbean when we think beyond national borders.

Mitjans, however, challenged the use of "transnational" as a term because of his migrant status in Mexico. He showed how the state and the everyday discourse of mestizaje — the notion that the national population's race mixture stemming from the colonial period was congenial and free from violence — often

given by exiled Black Panthers and Black U.S. hip hop artists visiting the island. On this note, Ribeiro agreed that the left in Brazil remains incredibly Eurocentric and led by white men who seem to still believe in racial democracy, despite the fact that quilombos were "places of socialism before socialism." These comments on the Black feminist legacies of transnational activism — from pan-Africanism and Black intellectualism to music and marronage — prove the continued relevance of history as a site of contention for Black social movements to stake their rights to difference.

Our third event in February 2021 spoke to the concerns of history and historiography of Afro-descendant populations in colonial Latin America and the Caribbean. "Re-writing Black Religions in the Atlantic World" featured Afro-Colombian historian of race, religion, and visual art Andrea Guerrero-Mosquera in conversation with Andreina Soto, a BLAC member and Ph.D. candidate of History at UC Santa Barbara, who studies race, religion, and law in colonial Venezuela.

Soto opened the event by asking how we might re-write histories where populations of African descent are the protagonists. Guerrero-Mosquera followed with a beautiful presentation on the history of *bolsas de mandinga*, amulets made of metal, cloth, or leather, often containing prayers scrawled on paper, that were worn by Afro-descendants. Guerrero-Mosquera offered examples from the colonial



Andrea Guerrero-Mosquera (left) and Andreina Soto.

repress efforts to see a shared experience along racial lines. Referencing his own flight from Cuba as a Black, queer, and trans person who was politically active in the hip hop community, Mitjans cited the long tradition of Black knowledge production in Cuba prior to and after the Revolution. While the Castro government, "in its effort to end racism, erased Black critical production," Mitjans said, "the Black Cuban movement of hip hop [in the 1990s] was the beginning of the Black Cuban revolution that we have today." As examples, he cited workshops

period in Brazil, Suriname, and New Granada (modernday Colombia, Ecuador, Panama, and Venezuela), citing several cases from New Spain in the Inquisition records that showed enslaved Black and mixed-race women using the talismans to protect themselves from their masters and to attract men they desired.

Archival research helped Guerrero-Mosquera recognize and affirm her own personal identity and its intersection with her work: "The fact that I could research and narrate people's histories through the archives...was so fascinating.

When I began my career, I didn't have an idea of my own consciousness as a Black woman, as a Black woman historian. [...] I didn't know what it meant to be Black...until I was finishing my undergrad when I was reading about [Alonso de] Sandoval in Cartagena de Indias."

Sandoval was a Jesuit priest who evangelized recently arrived enslaved Africans. He wrote one of the most detailed early accounts of slavery in the Americas, De instauranda Æthiopum salute (1627), and Guerrero-Mosquera's early interactions with the descriptiveness of his account spurred her to consider how the archive is often already a visual text, even when constructed only by words. When we consider actual images as text, Guerrero-Mosquera explained, "they let us go so much further," eventually establishing "a relationship between research on color, the conception of the body, of gender, and the circulation of knowledge more broadly."

Guerrero-Mosquera also observed how the field of History with a capital "H" is changing in Latin America and the Caribbean. More Black and Indigenous people in the region are arriving at a consciousness of their roots and proactively seeking to tell the stories of their own people, past and present, including via a wider access to academia. This "taking back" of the field, as Guerrero-Mosquera put it, allows us to counter the common notion of "there are no Black people here." As an example, she cited Erika Edwards's award-winning 2020 book on Black women in the archives of Argentina, a country that has long touted its "successful" whitening campaigns in the late 19th and early 20th centuries, which brought thousands of European immigrants to its shores. Guerrero-Mosquera pointed to the commonplace narratives of mestizaje and whitening proffered by the state as the biggest culprits in the erasure of Blackness and Indigeneity in history and people's identities. As Guerrero-Mosquera's own personal story and research show, the struggle for recognition and rights for populations made invisible by these narratives is bolstered by the influx of Black and Indigenous scholars asking these questions of the field itself.

In April 2021, the fourth and final virtual roundtable in AfroLatinx Voices, "No Longer a Racial Democracy: Critical Whiteness in Latin America and the Caribbean" presented Black Studies scholars Patricia de Santana Pinho (UC Santa Cruz), Isar Godreau (Universidad de Puerto Rico en Cayey), and Erika Edwards (University of North Carolina at Charlotte). I had the pleasure of serving as the moderator. As critical race scholars in the social sciences, each presenter showed how they approach the looming question of what constitutes whiteness in a region that in



From top: Erika Edwards, Isar Godreau, and Patricia de Santana Pinho.

its majority has long denied the importance of race as a structure of difference in society.

Pinho opened by invoking her own configuration of whiteness in 21st-century Brazil, first as "wounded" in its reactions to the broader expansion of rights and economic opportunities for poor, mostly Black and Indigenous Brazilians under the Partido dos Trabalhadores (PT, Workers' Party). With far-right President Jair Bolsonaro's rise to power leading up to his 2018 election, Pinho described whiteness also as "aspirational" — a tenet held since the days of slavery in the colonial period. This attitude became even more evident as many poor Black and brown Brazilians, who had previously benefited from PT policies, voted for Bolsonaro as a candidate who embodied heteropatriarchal, nativist, and elite whiteness.

Godreau approached whiteness in Puerto Rico as always interpolated with U.S. racial structures and the island's status as a colony of the United States. While the U.S. census of 2000 showed that 81 percent of Puerto Ricans identified as "white," Godreau recently conducted



18th-century Casta painting of ambiguous racial classifications in New Spain (present-day Mexico).

an open-ended study in collaboration with Puerto Rican political anthropologist Yarimar Bonilla to understand how Puerto Ricans identified themselves racially. The responses for whiteness ranged from "burnt white" (blanco quemado) and "white Latina" to "white but mixed," all in an effort to generate distance from Blackness and support the mestizaje narratives of convivial race mixture that literally bred out racism.

Edwards, on the other hand, explained how whiteness in Argentina became the "standardization of identity" to the point that any scholarship on race in Argentina, let alone whiteness, is almost an "afterthought." Argentina had a long history of racial slavery with a high prevalence

of Black Argentines in the interior through the 1700s - and today in Buenos Aires, there are Black immigrants from the African continent, Brazil, other parts of Latin America, and the Caribbean — yet homogeneity has always been the goal. Massive immigration campaigns from Europe strived to "lighten" the nation, even though some immigrants (such as the Italians) were considered trigueños or dark-skinned. Homogeneity also meant that Black and Indigenous people of lighter skin tone would likely be classified as "white" in Argentina. 19th-century Edwards, like Godreau and Pinho before her, revealed the confluences of these state projects in creating whiteness and its desires as quite flimsy taxonomies.

Over the past months, the AfroLatinx Voices series has shown us how Blackness and anti-Blackness in Latin America and the Caribbean are and always have been transnationally informed. They remain integral to how we understand identity formation, popular culture, and governance more broadly in the region. Black Studies as an interdisciplinary field in and beyond Latin America and the Caribbean is under persistent transformation and in multiple directions. Perhaps most pressing is our return to questions

of enduring relevance that undergird the field and its personal/intellectual investments. What does it mean to be a racialized subject in the world? And in the context of mestizaje, what does it mean to become a racialized subject, to become conscious of one's racialization in the face of society and the state? How does race as a construction of the state but also of grassroots social movements and cultural production intersect with place, history, and modes of knowledge production?

Be it in the form of artistic expression, activism, or academia, our discussions with these phenomenal speakers have underscored the centrality of Black feminisms to approaching these questions in the context of Latin America and the Caribbean. As a means to simultaneously engage across race, gender, sexuality, and class, the privileging of lived experience in Black feminisms extends the production of knowledge beyond academia's ivory tower, across borders and languages. From this perspective, we are able to more horizontally deconstruct national narratives of race mixture in the Americas like mestizaje, creolization, and racial democracy that have come to fashion Latinidad in the United States as a pan-ethnic "Brownness" that silences Black and Indigenous voices. When we take these factors into account and listen to these voices, the separation of Latinidad from the everyday lived experience of Blackness should be understood as yet another form of exclusion. Be it a hashtag or a hyphen, even with the best of intentions, this discursive distance risks rationalizing the Othering of Black and AfroLatinx people to the point of their violation.

In her presentation, Djamila Ribeiro invoked the late Black Brazilian feminist and scholar Lélia Gonzalez who said, "Our legacy is not just a legacy of pain, but one of struggle, of resistance, and of power." AfroLatinx Voices sought to honor these legacies of Black struggle across

Latin America and the Caribbean. As one of the authors of that letter written last June, I am grateful for the response and action taken by the Center for Latin American Studies to trust our vision as graduate students to bring more voices into the Berkeley community, even online. We sincerely thank the UC Berkeley Departments of African American Studies, Gender and Women's Studies, Ethnic Studies, Spanish and Portuguese, Comparative Literature, and English, as well as the Doreen B. Townsend Center, the UC Santa Barbara Department of History, and Associate Professor of English Nadia Ellis, for sponsoring our events so that our speakers could be compensated. On a personal note, AfroLatinx Voices taught me so much and affirmed the scholarship and activism to which my colleagues and I have dedicated our lives. Each speaker came with effervescence and generosity to share their experience and their knowledge. We thank them and we thank you for joining us. May the lessons endure. As we say in Brazil, a luta continua, the struggle continues.

John A. Mundell is a Ph.D. candidate in African American and African Diaspora Studies at UC Berkeley. He is the co-founder and co-director of the Blackness in Latin America and the Caribbean (BLAC) working group alongside Nicole Ramsey.

A 2015 women's march in Brazil calls for greater respect for Black Brazilian citizens and culture.





A Brazilian classroom.

BRAZIL

The Struggle for Black Education in Salvador

By C. Darius Gordon

t's been 16 years, and you're still making plans for implementation?!" Daniela, a professor at the Universidade Federal da Bahia (UFBA) in Salvador da Bahia, Brazil, exclaims as she opens the first round of discussion. It is early August 2019, and I am at the regional kick-off for enforcing Federal Law 10,639/03, the mandate that schools teach African and Afro-Brazilian history and culture. The approximately 50 other participants of this Thursday morning townhall, predominately Black women, nod their heads and murmur in agreement. One after another, the people in the room express their frustrations. Tired of waiting for the government to provide adequate resources for their predominately Black schools, many of them were looking for an alternative. These activists did not all agree on

what to do next, but in that meeting, an implicit yet unanimous vote was cast: it was time to re-strategize.

Education has long been central to the work of Brazilian Black Movements and continues to be one the most important fields for action. Studies show that Black community organizers and *militantes* (activists) throughout Brazil identified the struggle for the implementation of Federal Law 10,639/03 as the second most urgent struggle of the movement, just after the fight against police violence. This struggle for formal curricular representation that presents Black history and culture more fully and accurately dates back at least to the 1930s, when the first Black political party in Brazil, the Frente Negra Brasileira (Brazilian Black Front), critiqued school textbook content. I've seen firsthand how the longevity of

this particular battle has led to frustration for activists in Salvador da Bahia. Reflecting on this current moment of frustration and thinking back along the legacy of Black educational activism in Salvador, the words of Brazilian activist Ana Célia da Silva come to mind. In April 1988, after years of engaging in a curricular campaign for K-12 African Studies, she asks, "Estamos querendo exigir que o diabo reze missa? Are we trying to demand that the devil say mass?"

From June to August 2020, I conducted research in online archives in order to understand the educational battles fought by Brazilian Black Movements in Salvador since the 1970s. By reading newspapers from the independent Black press in Salvador, such as Nêgo and Jornal do MNU, I sought to historically situate the presentday battles for educational access, opportunity, and self-determination. This project recounts the struggle for formal curricular reform in the late 1980s. It is part of my broader work on Black educational struggle throughout the 20th century.

On June 18, 1978, the Movimento Negro Unificado (MNU, Unified Black Movement) solidified themselves as a national organization with their Carta de Princípios, a platform that named improving Black education as a principal struggle. The MNU in Bahia was very active in the field of education since its inception and was one of the first chapters to propose that African and Afro-Brazilian content be introduced into public schools, nearly 20 years before the federal mandate.

In 1984, the MNU chapter in Salvador began gathering signatures in support of a petition to the Bahia State Secretary of Education, Edivaldo Boaventura. They demanded that he implement legislation that would include teaching "Introduction to African Studies" in primary and secondary school as part of the formal school curriculum. They argued that the Eurocentric schooling of Brazilian education was a form of violence enacted upon Black youth, leading especially to lowered self-esteem and a poor sense of identity. To support this call for reform, they revived a similar request made by the Centro de Estudos Afro-Orientais (CEAO, Center for Afro-Oriental Studies) just one year prior. After much delay, on June 10, 1985, Boaventura approved the implementation of their request with Municipal Ordinance No. 6068, which allowed for the teaching of African Studies in all state schools.

To oversee this process, the Office of the Secretary of Education first created a commission made up of three representatives from Black organizations and three members of CEAO. The commission met with a branch of the Secretary of Education, the State Counsel

of Education, and Gerência de Currículos (GECIN, Curriculum Management) in order to determine a path for implementation. This constellation of actors came to the consensus that teachers would need a "refresher course" to be prepared to teach the specialized content of African Studies. All parties agreed that this specialization course would be taught by CEAO to current schoolteachers in the discipline of Human Sciences, to teachers at non-state community schools, and to militantes working in the area of education. The content of the course would be determined according to criteria established by CEAO and other Black community organizations.

Shortly after these decisions were made, the Secretary's office also created an advisory council for African Studies that was appointed by and responded directly to Boaventura. The MNU righteously remarked in one of their newsletters that they had been cut out of the process. Excluded from both oversight and daily operations regarding the implementation of African Studies, the catalysts for the reform had been dropped from the process almost entirely.

The teacher specialization course was planned to begin in March 1985, in order prepare educators to start teaching African Studies by February 1986, the start of the academic year in the southern hemisphere. However, there was yet another delay: no institution was willing to fund the course. Several months passed, and finally, the Universidade do Estado da Bahia (UNEB) agreed to finance the course. Due to the delayed decision and fiscal constraints, the course was suspended another year. Eventually, in conjunction with UNEB and UFBA, Boaventura hosted the specialization course with CEAO from March to December of 1986.

In early 1987, with the teachers prepared, it seemed that Introduction to African Studies would finally make its way into the schools. The MNU was eager to ensure successful implementation but had been edged out of the process early on, so they called for a meeting with Boaventura. They were worried because they hadn't heard any news about the implementation process. After several public hearings that involved the Secretary of Education, community organizations, school leaders, and members of the advisory council, six high schools volunteered to implement Introduction to African Studies during the 1987 school year. While it is unclear whether these schools would have volunteered without the encouragement and support of the MNU, the public hearings certainly reanimated the possibilities for African Studies in the public schools.

By the spring of 1988, nearly one year after the first implementation of Introduction to African Studies, a total



An MNU rally in Salvador da Bahia celebrating 40 years of the movement, July 2018.

of nine schools in Salvador had begun teaching the subject. Additionally, many more school directors throughout the state requested that their own educators be allowed to teach the course. In response to these requests, Boaventura claimed that there weren't enough specialized teachers.

According to Ana Célia da Silva, in the April 1988 issue of Nêgo, this assertion was untrue. Of the 35 teachers who took the initial 420-hour course: only 10 teachers were actually employed in schools, 10 others didn't teach in the discipline of Human Sciences, and the rest simply weren't state-certified schoolteachers. She also observed that of the five militantes who took the specialization course, only two were able to complete it because the meetings were held during the workday. There were enough educators, da Silva argued, the state just refused to recognize them as such.

Not only were there already plenty of educators, but the possibilities for expansion could have been vastly improved if the MNU's concerns had been taken seriously. In early 1988, the MNU had anticipated high demand from the schools and had requested that the Secretary order

another iteration of the teacher specialization course. During a long waiting period, which felt more like neglect, da Silva wrote in the same Spring issue of Nêgo that "as the main stakeholders and those responsible for the [initial] implementation of the discipline, we hope that we will not be once again removed from the process." She noted that there were plenty of militantes capable of teaching the discipline, but they did not have university degrees. What these activists do have that many of the current official schoolteachers do not, she explained, is an understanding of race and racism in Brazil, an experiential knowledge unrecognized by the state. She recommended that these militantes be contracted to teach African Studies for the schools. Her recommendations were ignored.

After two years of implementation in nine different high schools, the Secretary of Education assumed new leadership under Professora Maria Augusta Rosa Hocha, the first woman to serve as the Secretary of Education for the State of Bahia. Unfortunately, it seemed as though many of the gains made during Boaventura's term were lost. Hocha failed to prioritize African Studies and instead implemented teacher specialization courses on other

topics. In her first years in office, she also failed to support municipalities outside of the capital, Salvador, that sought to incorporate African Studies into their curriculum. Many teachers had to use their own free time outside of class or vacation/medical leave to meet up and train themselves without institutional support.

Those schools that did implement African Studies in these early years faced many challenges, as well. Lack of material resources, antagonistic colleagues, and no direction from school administration or the Secretary of Education were all common struggles as the program entered its third year.

Throughout those first two years of implementation, MNU continued to hold and participate in many more public hearings between the Secretary's Office and the community. In 1988, Hocha signed an agreement to finally begin another teacher specialization course for African Studies in 1989. This promise went unmet, but the MNU remained committed to the uphill battle for curriculum reform. In the June 1989 issue of Nêgo, they acknowledged that Black community organizers were dedicated to these

struggles because they knew that "the goal of [African Studies], that of developing the self-esteem, personal identity, and the respect for differences, are in disagreement with the objectives of the ideologies of whitening and inferiorizing that the school promotes."

As a result of this continued state neglect, by 1989, more than five years after the initial MNU campaign, all of the schools had abandoned the teaching of African Studies, with the exception of one school: Escola Cidade de Curitiba. This is where the story, seems to run cold; this brief rise and fall of educational struggle in Salvador disappears from the MNU's newspapers. It's possible that there are still more archival materials, not-yet digitized, that would expand this story. It is also likely that the struggle wanes at this moment because, like many Black political organizations, the MNU's efforts begin to shift toward national organizing after the promulgation of the new Constitution in 1988.

By the 1990s, information about identities and ethnic relations, especially in history, began to appear in the federal curriculum standards issued by the Brazilian Ministry of Education, and in 2003, President Lula signed Federal Law 10,639, requiring all public and private schools to teach African and Afro-Brazilian history

and culture. These federal policies would not have been possible without the work of Black Movements, such as the MNU and other community organizations in Salvador. However, as my opening vignette demonstrates, these governmental promises remain unmet in the ongoing struggle for Black education.

This brief story reveals a pattern in Black educational organizing in Brazil; a pattern of promises followed by state neglect and displaced responsibility. Black activists have been and still are caught in a tension between demanding their right to a quality education in a supposedly democratic society and the knowledge that schooling serves the state's reliance on white supremacist capitalism. As I consider how this historical legacy of challenging anti-Black schooling haunts the present, I return to da Silva's question: are Black educational activists in Brazil still just demanding the devil say mass?

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Brazilian students participate in a pilot program that supports nutrition, transportation, and extracurricular activities, July 2017.

An Ethnographer's Perspective

By Rosemary Joyce

n the following article, Irma A. Velásquez Nimatuj provides a reflection on the racialized aspects of migration from Central America too often missing in contemporary writing. From her unique perspective as a social anthropologist born in a Maya K'iche' community, she draws on her own experiences and those of her family to make four intertwined points.

First, migration (or mobility) was a normal part of Indigenous life before colonial powers began to control people's movement, and it continued through succeeding centuries, despite a variety of barriers from nation-states. She characterizes as the positive side of migration the opportunities it afforded and continues to afford for commercial exchange, religious participation, and cultural and intellectual exchange.

Second, among Indigenous peoples living under racialized regimes, she traces the ways that opportunities for mobility became split by gender, with women staying in home communities where they were safer from the double vulnerabilities of racial and gender violence. Following the existing patterns of mobility within Central America pursued by men in support of the economic survival of their home communities, migration to the United States was primarily led by men who then sought to bring the family members they had left behind to join them in the United States.

Third, many of the actors and steps in this process may seem to be the same today but have become more dangerous and riskier in recent decades. Velásquez Nimatuj identifies a major watershed in 2006 when the violent conflict between the two then-dominant drug cartels (Sinaloa and Zetas) escalated. Migrants passing through Mexico faced new danger from or obligations to these cartels, resulting in the deaths and disappearances of thousands en route to the United States.

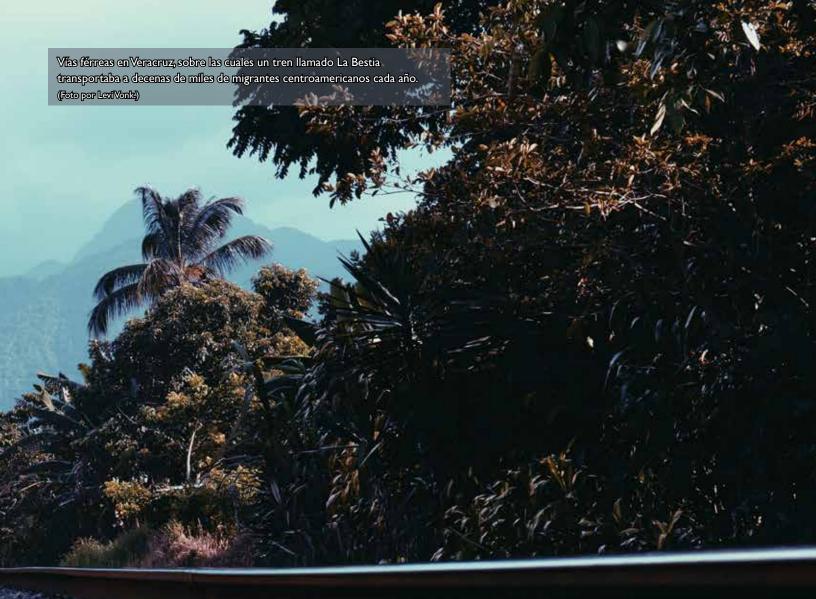
Yet, she notes that migration continued to grow, despite higher costs and greater risks, as the political regimes in the region increased in impunity and corruption. Due to racialized structures of inequality, the governments of El Salvador, Guatemala, and Honduras have taken no effective steps to increase economic opportunity for the Indigenous population or the lower-income rural population in general. Instead, they profit from the funding sent back from family members in the United States, now a critical part of economies in the region.

Finally, she considers the role of gangs — North American in origin — in the increasing violence in Central America, which has motivated large numbers of children to save their lives by attempting the long journey to the United States alone or with family members. Velásquez Nimatuj argues that the regional governments do not care to retain these youths, many of whom are the grandchildren of marginalized Indigenous people who were displaced during violence in the 1980s.

In her conclusion, she calls for moving from a policy of closing and militarizing the U.S. border, which in recent years has resulted in the violations of children's human rights, towards support for a system of migration that permits thousands of men and women to travel between the United States and their countries of origin. Urging a decolonial rethinking of migration, Velásquez Nimatuj identifies the beneficiaries of the present situation: those who seek cheap labor without social responsibility and nation-states concerned more with asserting territorial integrity than supporting their people. She notes that for Indigenous migrants, the desire is always to return to the land where they were born, but in the historical precedents they follow, movement has always been part of Indigenous practice and will continue to be.

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MIGRACIÓN

Una mirada auto-etnográfica de la migración

Por Irma A. Velásquez Nimatuj

quí me propongo abordar el tema de la migración y de su racialización, y debo reconocer que reflexionar sobre migración y raza resultó una tarea difícil dado que este no es un tema del que pueda separarme. Soy antropóloga social, también periodista, pero sobre todo soy una mujer maya-k'iche' de Guatemala, un país que ha estado en los últimos años presente en las noticias del mundo, por las caravanas de miles de personas migrantes y por las políticas inhumanas de separación de familias impulsadas desde los espacios de poder, que han provocado la muerte de varios niños guatemaltecos, todos ellos y ellas provenientes de diversas comunidades mayas.

Es decir, lo que desde los Estados Unidos se ha definido en términos de "crisis migratoria" para nosotros, como pueblos indígenas no es sino la continuación de un proceso de genocidio que se constata al observar la destrucción de las generaciones que debieran sustituirnos. Por eso, desde mis múltiples identidades, pero sobre todo basada en mi experiencia como indígena k'iche', no puedo hablar de migración sólo como una categoría analítica o como un proceso reciente y exclusivamente negativo. Para nosotros, como pueblos indígenas del norte, del centro, o del sur, migrar no era una necesidad de sobrevivencia como lo es ahora — por la presión del sistema económico mundial — sino que era parte de un rico proceso de comercio, de intercambio cultural e intelectual, existente desde la época prehispánica que se modificó radicalmente con el comienzo del colonialismo hace 500 años, con la llegada de Hernán Cortés, a lo que hoy es el puerto de Veracruz,



Una mujer espera el transporte público en Quetzaltenango, Guatemala.

en México. A pesar de ese impacto destructivo y brutal en muchos centros indígenas, esos circuitos de intercambio lograron sobrevivir y hasta el día de hoy siguen siendo vibrantes. Es así como mi análisis de migración y raza van atados a mi análisis personal.

Siendo una niña de siete años e incorporada al negocio de mi familia, observé que las migraciones eran normales en mi mundo k'iche' y eran motivadas por el comercio, la espiritualidad, la religión, el trabajo, entre otras razones. Comercio existente desde épocas ancestrales, cuando las fronteras políticas de hoy eran risibles y los pueblos y civilizaciones veían el ir y venir de personas o el intercambio de conocimiento, artes, poder, acervos, o productos como algo fundamental para el fortalecimiento y la reproducción como pueblos. De hecho, mis bisabuelos y tíos abuelos invertían seis meses del año en esos circuitos comerciales que fueron los que les permitieron escapar del trabajo forzado de finales del siglo XIX y principios del siglo XX. En ese momento, ser comerciante era de las pocas válvulas de escape que los hombres indígenas encontraron para no tener que incorporarse al trabajo forzado que el Estado

criollo, blanco, racista, y conservador les exigía y el cual la mayoría de las familias fueron obligadas a prestar.

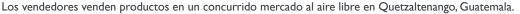
A partir de ese legado de explotación que siempre ha estado presente en la memoria social indígena, se me enseñó lentamente que como familias y pueblos indígenas debíamos de luchar por escapar del trabajo mal pagado, explotador y de servidumbre. De hecho, las mujeres mayores de mi familia insistían que como jóvenes debíamos trabajar desde temprana edad para poder ir construyendo nuestras propias independencias económicas que nos llevarían a alcanzar la libertad de acción. Uno de los mensajes fundamentales era que una sólida base económica, aunque pequeña, evitaría que traicionáramos a nuestra familia, que vendiéramos los principios, o que subastáramos las luchas colectivas. Más adelante, entendí que esas diversas independencias eran además importantes para defender el espacio territorial en donde vivíamos y para no tener que dejar el hogar y la tierra en donde había quedado enterrado nuestro ombligo.

Comprendí entonces, que migrar por razones comerciales era un medio para mejorar, para prepararnos y retornar a nuestros lugares de origen, como lo hacían decenas de hombres k'iche' que comerciaban los productos que producía nuestra región en el sur de México, Honduras, y El Salvador. Nuestros ancestros volvían con otros productos y además con nuevas ideas que buscaban poner en practica con los miembros de sus familias. Esto los llevó a instalar pequeñas y medianas fábricas a mediados del siglo XX, en la capital de Guatemala y en algunas ciudades del interior. Entonces, eran los hombres quienes migraban, a ellos se les despedía cada vez que partían y su retorno era recibido con fiesta y comida tradicional, mientras las mujeres no migraban. Se asumía que para ellas las posibilidades de desenvolverse dentro de sus comunidades eran muchas, podían convertirse en bordadoras, tejedoras, dueñas de negocios, prestadoras de servicios, entre otras opciones.

Fuera de ese mundo cultural y comunitario era difícil pensar que las mujeres podrían lograr lo mismo, porque el racismo era tenaz y brutal, especialmente contra ellas. Las comunidades, entonces, se convertían en el escudo cultural que las protegía del racismo del mundo exterior, ese que las aplastaba material y emocionalmente; por eso, se les motivaba a quedarse dentro, porque allí estaban "seguras". Aunque el "quedarse dentro", como mujeres, implicaba enfrentar relaciones de poder desiguales, en donde los hombres poseían el control y el sistema patriarcal reinaba. Obviamente, las mujeres que me antecedieron siempre

buscaron formas de violentar esos círculos de poder y de cierta manera lograron abrir ventanas, aunque con severas dificultades. A muchas de esas mujeres, yo las conocí y fueron inspiradores modelos que siempre me han acompañado.

Ese mundo maya-k'iche' en donde crecí me fue enseñando que los otros mundos indígenas también migraban, pero de diferente forma. Se trataba no de cientos sino de miles de familias que bajaban durante varias semanas cada año y que provenían de los mundos rurales de comunidades pobres, que siempre pasaban por Quetzaltenango — mi lugar de origen — a comprar productos que necesitaban para ir a trabajar a las fincas de café, algodón, banano y algunas de caña de azúcar, ubicadas en la costa sur del país. Esa era una migración de miles de seres humanos que nadie veía. Yo las recuerdo con claridad porque compraban en el negocio de mi madre y su paso significaba una buena temporada para nosotros. Allí iban desde bebes cargados en las espaldas de sus madres hasta ancianos, quienes cuando bajaban se veían en una condición estable, pero meses más tarde, cuando regresaban y volvían a pasar para comprar sus productos antes de retornar a sus hogares ubicados en las tierras altas, lo hacían en una condición de salud difícil, no sólo iban delgados sino el tono de su piel era amarillento. Esa era una experiencia que se repetía año tras año.







Inhumación de restos óseos recuperados en la aldea Cambayal, municipio de San Pedro Carchá, Alta Verapaz Guatemala, febrero de 2012.

Siendo una adolescente, en el año de 1984, a mí me toco migrar de Quetzaltenango a la capital para ingresar a la universidad, en medio de la agonía del genocidio. Fui una de las tres jóvenes k'iche' de mi generación que tuvo el privilegio de ingresar a la universidad pública. Esa etapa, en la que para sobrevivir la guerra oculté mi identidad k'iche' y mi identidad de estudiante, me mostró otros rostros de la migración, uno en el que nosotros teníamos la oportunidad de ejercer el derecho a estudiar, y otro, en donde miles de nuestros hermanos, igual de jóvenes como nosotros, estaban siendo masacrados como parte de la política de tierra arrasada que impulsaba nuestro propio estado.

Allí en la universidad y durante mis viajes a mi comunidad, aprendí de la imparable migración de comunidades indígenas que huían como podían, de la represión y de la muerte. Se trataba de esas mismas comunidades que años antes pasaban por el negocio de mi familia para abastecerse de productos, antes de ir a trabajar a las fincas agroexportadoras de la costa sur del país. Entonces, más de un millón y medio de personas dejaron de ir a cortar las cosechas de las fincas y huyeron. Las tierras altas de Guatemala se vaciaban por la persecución y el genocidio estatal que se enfocaba en acabar con las mujeres y los hombres mayas. La capital del país también fue un centro que acogió a miles de

personas, aunque de manera hostil. Eran desplazados internos, quienes se refugiaron en espacios no aptos para vivir y donde llegaron a engrosar los cinturones de pobreza y pobreza extrema urbana. Fue allí, donde la mayoría de las mujeres mayas fueron obligadas a dejar sus trajes regionales, su idioma, su cultura, y sus pueblos.

De igual manera, la universidad pública aún vivía el exilio de decanos, profesores, trabajadores y estudiantes. De un día a otro, luego de secuestros, ataques a la sede universitaria, persecución, asesinatos, o torturas, se exiliaban quienes podían y eran considerados enemigos del Estado. La universidad enfrentó una masiva pérdida de generaciones de extraordinarios pensadores y estudiantes. Nos quedamos huérfanos de múltiples debates académicos.

Generalmente, en discusiones sobre migraciones centroamericanas en círculos académicos se aborda la migración de la década de 1980, provocada por la violencia política que acabo de citar. Y se habla de cómo el espacio hostil, violento, de pobreza, y discriminación de los barrios estadounidenses a donde los migrantes fueron a dar, terminó llevándolos a crear pandillas para defenderse. Con el paso de los años, al ser deportados a sus países de origen, dieron vida a algunos de los más violentos grupos criminales del presente, que se han tragado a dos o tres generaciones de jóvenes. Sin embargo,

en las discusiones actuales tanto del gobierno de mi país como de los Estados Unidos, ese análisis está ausente y se retrata a los que migran bajo una lupa de estereotipos racistas, como criminales, traficantes, violadores, entre otros epítetos. En general, fuera de la burbuja de la administración de los Estados Unidos, tampoco se habla de las otras razones por las cuales miembros de las comunidades indígenas siguieron migrando en un periodo supuestamente democrático, que inició en 1985. Y aquí cuestiono la tendencia a presentar una imagen de la migración como una categoría homogénea que no ve las complejidades de origen, raza, etnia, historia, genocidio, o despojo, sólo por mencionar algunas.

Y es que a pesar de la esperanza que traían consigo las negociaciones de paz, al inicio de la década de 1990, Guatemala no permitía a los jóvenes espacios para soñar y hacer realidad sus sueños. En otras palabras, no había espacios para dar todo lo que se tenía, por eso, para explorar y explotar su potencial, los jóvenes debían salir del país y dejar atrás la tierra que amaban.

Para entonces, del millón y medio de refugiados que dejó el genocidio de la década de 1980, miles habían huido a los Estados Unidos y ya estaban establecidos. Muchos lograron legalizar su estatus y son esos lazos los que motivaron a quienes se quedaron a reunirse con sus familias e intentar vivir aquí en los Estados Unidos. Fue así como empezó otro éxodo silencioso. En su mayoría — pero no exclusivamente — eran hombres de diferentes edades y lo hicieron, poco a poco, usando sus ahorros, buscando préstamos familiares, vendiendo o empeñando alguna propiedad para pagar a los "coyotes" o "polleros" (hombres y mujeres dedicados a trasladar a personas de las comunidades a diversas ciudades de los Estados Unidos).

De hecho, los "coyotes", hoy criminalizados en el discurso público e institucional, para la década de 1990 y principios del siglo XXI eran personas apreciadas en las comunidades porque jugaban un rol fundamental, que era trasladar a vecinos, amigos, conocidos, y a toda persona que requiriera sus servicios. Les tenían agradecimiento porque ayudaron a unificar a miles de familias separadas, a miles de hijos e hijas que estaban sin sus padres.

Sin embargo, para los migrantes, el año 2006 fue un parteaguas porque la guerra entre los dos carteles mexicanos más poderosos en ese momento — el Cartel de Sinaloa y Los Zetas — trajo el estallido de la violencia en espacios urbanos y rurales. A partir de entonces, la guerra no ha cesado y aumenta en la medida que los carteles se multiplican, se fortalecen o se debilitan. La violencia del crimen organizado impactó en los miles de migrantes que transitan por México, obligando a los "coyotes" a apostar por rutas peligrosas o pagar a los carteles para continuar el viaje. Este fenómeno dobló el precio para transitar por





México y llegar a los Estados Unidos, pero también produjo la desaparición masiva de migrantes, miles de los cuales hoy son buscados en dolorosas caravanas por sus madres, hijos, o familiares.

Pero ni la violencia del crimen organizado ni la desaparición ha detenido a los miles de hermanos guatemaltecos, hondureños, o salvadoreños. Al contrario, el número ha aumentado. En parte porque la corrupción generada desde las oligarquías nacionales permitió el fortalecimiento de redes económicas y políticas licitas e ilícitas. La cooptación de nuestros estados ha sido un proceso histórico enmarañado y eso llevó a que los acuerdos de paz firmados en El Salvador (1992) y Guatemala (1996) terminaron siendo cheques en blanco para que las elites vaciaran las arcas nacionales y que Honduras terminara sumergida en una de sus más sangrientas etapas.

En este marco, las remesas se convirtieron en los salvavidas que han mantenido a flote a estas tres economías, a extremo que hoy las remesas contribuyen entre el 15 al 20 por ciento del Producto Interno Bruto de estos países centroamericanos. Es gracias a las remesas que miles de brazos de mujeres y hombres envían mes a mes que llega el pan, la leche, o la carne a los hogares. Gracias a las remesas miles de familias en estos tres países dejaron de vivir en covachas y accedieron a una casa decente. Gracias a las remesas miles de familias pudieron llevar agua potable, energía eléctrica y otros servicios a sus hogares. Las remesas no sólo son cifras, son el motor que ha permitido que nuestras economías no colapsen. Además, como una ironía, han facilitado que los bancos del sistema se enriquezcan con el diferencial cambiario que le cobran a las familias que las reciben. La migración en la "era democrática" fue en parte fortalecida por la ausencia de institucionalidad estatal en las comunidades lejanas como en las propias capitales, por el racismo estatal y cotidiano que es indiferente y que niega el cumplimiento de los derechos que las poblaciones indígenas y pobres poseen.

En parte, por el caos económico y político en que vive Centroamérica, ejércitos de jóvenes se han integrado a las pandillas y hoy tienen de rodillas a sus propios hermanos. Sin embargo, las pandillas centroamericanas son la cosecha de no haber invertido en la juventud de la posguerra y de haber impulsado políticas que buscaron la despolitización de la juventud que, junto con la población deportada, terminaron creando seres armados hasta los dientes. Así, las pandillas y el crimen organizado, en todas sus vertientes, se repartieron los territorios de la región creando una nueva guerra que no se reconoce, pero que golpea a la población civil desarmada, como ocurrió en la década de 1980.



A raíz de esta cotidiana violencia, a partir del año 2007, empezaron cientos de menores de edad a migrar, solos o acompañados. Nuevamente lo hicieron en silencio, dejando a sus padres, hermanos, y familiares para evitar integrarse a la violencia urbana. Esos niños y adolescentes guatemaltecos dejaron sus escuelas, renunciaron a sus amigos, e iniciaron un largo viaje para salvar sus vidas y con ellos a sus familias. Y nuevamente, esa migración no le importó a nuestros estados, porque las niñas y los niños pobres, que viven en áreas marginales o clase media pobre, en su mayoría, son las nietas y los nietos de las familias indígenas que migraron en la década de 1980 a las ciudades, buscando salvar sus vidas de la represión estatal, y terminaron viviendo en áreas marginales en donde se aprende a vivir con la violencia o se termina siendo parte de ella.

No fue hasta el año 2014 que el presidente Barak Obama reconoció el éxodo de miles de menores centroamericanos, quienes llegaron a la frontera en búsqueda de que este sistema escuchara sus historias, entendiera las causas que los habían obligado a recorrer miles de kilómetros, atendiera sus urgencias y les proveyera de derechos, exigiéndole a nuestros gobiernos el cumplimiento de leyes y marcos internacionales. En cambio, las niñas y los niños terminaron hacinados en centros de detención, en jaulas o separados de sus padres. Y cuando la comunidad internacional, empezando por la población de los Estados



Trabajadores migrantes cosechan maíz en California, 2013.

Unidos, aceptó estas violaciones e hizo poco para detenerlas, evidenció que no se buscó atender las causas estructurales de la migración infantil, que sólo reflejan las injusticias y la voracidad de las elites centroamericanas.

Las niñas y los niños son los embajadores que han mostrado a la nación más poderosa del mundo las agudas desigualdades en que las elites los han mantenido. Esa fue una oportunidad para atender y entender lo que los pueblos indígenas y afrolatinos han enfrentado en América Latina. Sin embargo, se perdió la oportunidad, y se permitió que el caldo de injusticias siguiera fermentándose y terminara en las masivas caravanas de 2018, que salían de Honduras y en el camino se nutrían de salvadoreños, guatemaltecos y de algunos mexicanos, quienes terminaron siendo el espejo de la crisis humanitaria en la que seguimos sumidos.

En la última década, de mi país han huido todas y todos los que han podido, incluso quienes se han formado y poseen especializaciones, hacia cualquier parte que sea mejor que la Guatemala violenta. Yo volví a mi país en el 2005 con el profundo deseo de aportar y ha sido difícil. Las pocas mujeres indígenas que salimos al extranjero y hemos regresado somos catalogadas como voces disidentes y terroristas. Nuestra vida ha terminado siendo criminalizada públicamente en nuestra propia tierra. Por eso, cuando me encuentro aquí con hermanos que están

destacando en múltiples áreas, con o sin documentos, reconozco que nuevamente las fuerzas del sistema económico y racial han logrado descabezar a nuestras comunidades, forzándonos a integrarnos a una nueva etapa migratoria para poder vivir y seguir luchando.

Conclusión

Aquí he buscado presentar, brevemente, las largas raíces de la migración indígena guatemalteca, que tiene rostros prehispánicos, posteriormente de trabajo esclavo, trabajo forzado, trabajo en fincas, de violencia política y genocidio. Así como de pobreza, producto de estructuras caducas y corruptas. Y ese rostro indígena sigue presente en la actual crisis humanitaria, pero se subsume en la categoría de migrante que reconoce que dejar el hogar es la única solución de sobrevivencia frente a los índices de pobreza que abarcan a más del 60 por ciento del total de la población y a un 80 por ciento de la población indígena de mi país. Con esos índices sumados a la violencia extrema, es imposible no optar por salir, por huir, pero desde el poder se busca ignorar que quienes huyen son en su mayoría indígenas, al igual que en la década de 1980.

Frente a este escenario, las soluciones a esta crisis humanitaria no pueden venir disfrazadas de un nuevo asistencialismo que no apuesta por modificar las estructuras de poder que tienen cooptados a nuestros países. Es decir, la solución a la realidad migratoria, en su mayoría de indígenas y pobres, requiere que los gobiernos nacionales e internacionales descolonicen su pensamiento y su actuar. Por eso, enfocarse únicamente en cerrar y militarizar fronteras sólo acrecentará el problema. Hay que seguir luchando por una migración no penalizada que permita y facilite un estatus legal para los guatemaltecos — la mayoría de ellos indígenas — quienes han migrado por múltiples razones. En otras palabras, los papeles deben de ser para todos sin ningún tipo de discriminación. De hecho, facilitar el estatus migratorio de más de 3 millones de guatemaltecos creará un dinamismo cultural y económico sin precedentes entre Guatemala y EE.UU. porque no obligará a miles de ellos a quedarse sin documentos en un país en donde sólo desean estar temporalmente y además, facilitará que miles apuesten a retornar e invertir en sus diferentes comunidades luego de una vida de trabajo. Fundamentalmente, porque los indígenas, en su mayoría, desean regresar a cerrar el círculo de la vida al lugar en donde dejaron el ombligo y descansar en la tierra de sus ancestros. De igual manera es urgente y necesario facilitar legalmente el reencuentro familiar, dado que las condiciones en que la migración ha ocurrido sólo han destruido a millones de niños y niñas que han crecido sin el apoyo emocional y cultural que es fundamental para formar seres humanos plenos.

La experiencia de vida y la académica me han enseñado que la migración es sobre todo un proceso humano que no debe reducirse solamente a cifras, a caos, o a desastres. La migración tampoco es sólo economía y ganancias que nutren el producto interno bruto de las naciones. Es, sobre todo, pueblos que viajan, que se mueven, mujeres y hombres que se marchan con elementos de sus culturas que les son indispensables para protegerse de un entorno ajeno que los discrimina. Así, la migración para los mundos indígenas ha sido parte de sus vidas, luchas, y escapes. Los pueblos indígenas viajan desde antes de la invasión española y algunos de esos circuitos económicos siguen teniendo vigencia en el presente, aunque con cambios y con nuevas rutas. Por eso, debe demandarse el derecho a migrar de manera segura y no permitir que se les criminalice.

Si bien, la migración es generada por el resquebrajamiento de los estados-nación, también las elites nacionales y trasnacionales son responsables y pocos se atreven a responsabilizarlas. O sea, la migración también está siendo fomentada por el capital trasnacional, que busca que personas, familias y comunidades desalojen territorios ricos en recursos naturales para tomarlos y explotarlos sin presión social.

Además, la migración forzada y criminalizada está desestabilizando el corazón de los pueblos y las comunidades, los está reconfigurando racialmente y esto repercutirá en un futuro en las comunidades indígenas y afrolatinas. Por eso, debe reivindicarse el derecho a una migración segura para los pueblos indígenas, los pueblos pobres, especialmente para los niños, las niñas, y las mujeres. Frente a esto, el migrar no puede convertirse en un derecho sólo de los ricos, de los blancos, o de quienes controlan el capital trasnacional.

Finalmente, nosotros no elegimos el tiempo en el que nacemos, pero podemos, si deseamos, luchar para intentar transformar la época que vivimos. Con estas palabras honro a todos los pueblos migrantes, a todas las mujeres y hombres indígenas y no indígenas que nos enseñan que hoy, el migrar, además de ser un viaje para probarnos, es sobre todo para denunciar y transformar las inequidades que dejamos detrás.

Irma A. Velásquez Nimatuj es antropóloga Maya-K'iche.' Una versión más extensa de este trabajo fue presentado en la sexta Conferencia sobre Etnicidad, Raza y Pueblos Indígenas en América Latina y el Caribe, ERIP, realizada en Gonzaga University, Spokane, Washington, el 13 de septiembre de 2019.



Clara Nimatuj Ajqui, la madre de la autora, en su negocio en Quetzaltenango, Guatemala.



courses next year.

Latin American Studies.

Julia Byrd is the Vice Chair at the UC Berkeley Center for

Indigenous and less-commonly taught languages,

distance learning greatly multiplies access to the limited

number of experienced instructors.

Niehciz, I Will Arrive:

A Song for the Future From the Past



First Chorus: The Past

The warm grains of sand swish under our feet as we walk through the New Mexico desert. My grandfather kneels next to me as his hands wrap around a dry weed. This memory rattles like an old film reel at the end of a movie. He shares with me a message, a way of knowing, a philosophy about the desert. I often share this story with my son, never really sure if it will take hold the same way. I keep my grandfather's words close to me: not all things are up for academic extraction.

First Verse: Connections

I have a personal connection to Indigenous language. My grandfather spoke Rarámuri. Although he kept the details of his Indigenous heritage from his children, he could never hide his excitement when speaking Rarámuri with the community on family visits to Chihuahua, a state in northern Mexico. By the time I was born, my grandfather had gone entirely deaf, so the only communication I had with him was through sign language.

I was never able to learn Rarámuri from my grandfather, but when I had the opportunity to take a Nahuatl language class at UC Berkeley, I jumped at the chance. Nahuatl is an Indigenous language spoken largely in Southern Mexico in the Huasteca region. However, the language is spread around Mexico and travels with Mexican diaspora to the United States. Though the languages are not the same, I feel connected with my grandfather every time I speak Nahuatl. There is a harmonization I feel between us. This harmonization is reflected here in the choruses. The similarity between these themes is meant to mimic the rhyming of choruses. Yet, the content is different, moving along the song/story.

When first learning the language, I journaled about my experience:

It's like I can taste the words. The words carry with them a legacy and sweetness. They are a testament to something I cannot yet explain but that I feel to be there. The words whisper a message underneath the sounds, something I am close to hearing.

I did not grow up in Rarámuri culture, nor did I grow up in Chihuahua, Mexico. As a result, learning Nahuatl provides me some connection to Indigenous culture in Mexico. And since my grandfather was multilingual, I relish in the thought that he may have spoken or understood Nahuatl.



Second Chorus: The Present

Fall 2019. I put my son on my back as we race for the bus. I push his stroller in front of me and chuckle. It's only on the days that we are running late that he refuses to ride in his stroller. We see the number 52 bus sitting at the bus stop. The sliding doors squeak as they flop open. I hop on the bus frazzled with urgency. Out of breath, I swipe my AC transit pass. My son is giddy with joy. Our weekly routine is running after the bus so we are not late for class. We ride the 52 to UC Berkeley's Latinx Research Center to take a Nahuatl class.

Professor Arturo Dávila-Sánchez graciously teaches the course as my son wanders around the room. "How do you say cat in Nahuatl?" my little boy asks. "*Mizton*," the professor tells him. I know that I will retain less information as I try to learn Nahuatl and watch my son. But it is far more important to me that he hears Nahuatl.

Every now and then, he falls asleep on the bus ride back. He snuggles with me tightly as the bus bounces

The author and his son riding the bus after Nahuatl class.



around University Avenue. The moments I share with my son remind me of the early memories with my grandfather in New Mexico. I feel the past and present harmonize or rhyme and ponder the future. My heart warms as I think about how my son will carry our memories and Indigenous ways of knowing forward. I can't even imagine the future that will come from us learning Nahuatl together.

Second Verse: Importance

Indigenous language revitalization is powerful because language provides a connection to culture while paving the way for Indigenous futurism: it creates a possibility for healing. By speaking Nahuatl, I actively participate in this future, and it is this space of possibilities that my research grows.

My scholarly work focuses on Indigenous selfdetermination, sovereignty, and language revitalization through technology and music. For about seven years, I

> have been studying the relationship between social stratification, access to music, and musicians from disadvantaged backgrounds overcome barriers to create and distribute music. Currently, I am in the early stages of creating a collaborative documentary about Indigenous radio in Canada with music journalist Brian Wright-McLeod (Dakota-Anishnabe) and Dave McLeod (Ojibway/Métis), the general manager of Native Communications Incorporated (NCI). Our goal is to create a series of short films that explore the relationship among technology, Indigenous language, culture, music, and politics.

> My doctoral dissertation will examine how Indigenous communities reject settlercolonial borders and make trans-Indigenous coalitions with technology, media, language, music, and art. I am interested in what ethnomusicologist Trevor Reed (Hopi) calls "sonic sovereignty" and how music and performance create a type of Indigenous governance that rejects colonial recognition (Coulthard 2014). For me, sound, law, and sovereignty are interrelated and a point of resistance for Indigenous artists throughout the Americas. When we speak our Indigenous languages, we are deconstructing the national borders that try to limit our sovereignty and human rights.



A Zoom meeting of Beginning Nahuatl II, taught by Abelardo de la Cruz de la Cruz (upper right). Everardo Reyes is center.

Third Chorus: The Future

It's Fall 2020. The tiny little boxes on my blue screen move every time a new student "enters" the Zoom classroom. I shift around in my seat and try to get comfortable as Professor Abelardo de la Cruz goes over the syllabus. The Nahuatl course I took in 2019 with my son was not a formal class. As I go back and forth through the Nahuatl workbook, trying to understand the language's pronunciation and agglutination, I realize that this is the first time the university will formally recognize my Nahuatl studies. Receiving credit for my work on Indigenous language gives me a sense of pride. But even if the class were not recognized, I would still be in front of that screen.

A semester later, I still struggle to identify intransitive words, but the language is sticking. In the mornings, I say to my son, "Queniuhqui tiitztoc? How are you?" "I'm good," he says in English as he runs off to play. Professor Dávila-Sánchez and Professor de la Cruz gave me a gift that I can pass down to my son. I am grateful that CLAS supports the Nahuatl language course in partnership with the University of Utah.

As I reflect on the importance of Nahuatl, I think of the book by Nez Perce scholar and writer Beth Piatote. In The Beadworkers: Stories, Piatote writes about the sweet and often overwhelming feeling of language revitalization:

There were times I was discouraged, when I faced the entire ocean of words and I feared the undertow would pull me under, like an eagle who is dragged into the current of a river, talons locked on the back of a salmon. Later, I would learn another word, and I would hold it just as close, say it to myself, to the sky, say it to Phil and those who spoke: pá·yca pá·ytogsa. I am coming. I am coming back.

I hold close the word niahciz, Nahuatl for "I will arrive." The "z" at the end of the word denotes the future: I look forward to the possibilities I cannot even imagine.

Everardo Reyes is a Ph.D. student in Ethnomusicology at UC Berkeley whose research focuses on Indigenous sovereignty and self-determination through music and technology.

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References for this article are online at clas.berkeley.edu.



Chocolate's Deep History in Latin America

By Rosemary Joyce

s he enjoyed his morning cup of chocolate in the novels of Agatha Christie, the Belgian detective Hercule Poirot followed a long European tradition that associated drinking beverages made from cocoa with luxury. In the late 17th century, the wealthy and powerful of London visited new chocolate houses to argue about politics. In France, consumption by the nobility made chocolate drinking a mark of elegant living in the 17th and 18th centuries. Chocolate cups and pots continued to appear in paintings by artists including Pierre-Auguste Renoir, Mary Cassatt, and Henri Matisse as signs of luxury through to the turn of the 20th century. These powerful, wealthy Europeans were following in unlikely footsteps, adopting a practice of Indigenous rulers of states that thrived centuries earlier in what is today Mexico and Guatemala.

At noon every Tuesday in Spring 2021, I met virtually with a group of Berkeley undergraduates taking the

elective sophomore seminar "Chocolate: History, Culture, Science." Over the course of the semester, we traced the journey of chocolate from its original botanical roots in Latin America to the place it holds in the global economy today, generating more than \$100 billion in retail sales. I hoped students would gain an understanding of the history of human engagement with Theobroma cacao, the plant that is the source of chocolate, from its origins in Indigenous uses, to those that continue today in countries like Mexico, Guatemala, Belize, El Salvador, and Honduras.

I also wanted to share my own research on the early history of cacao in Honduras. Studying the way cacao emerged from its Latin American home and reached around the globe illustrates the power of transdisciplinary research grounded in curiosity about a single world region. It shows that in order to understand the history of Mexico, Central America, and South America, researchers have

Painted tiles show scenes of chocolate drinking in Spain in the early 18th century.



to adopt the kind of broad geographic scope that crosses modern national boundaries — especially when the story in which we are interested began prior to 3000 BCE and extended from the Amazon to north of the Rio Grande.

My own interest in cacao comes from more than 30 years of research in Caribbean coastal Honduras. I came to Honduras originally as an undergraduate doing what I thought was a single field school in Central America, before pursuing a doctoral degree I believed would concern the archaeology of European settlements in North America. What started as an eight-week summer study grew into a life-long commitment to research in Honduras. My work is dedicated to understanding the complexity of histories from the earliest villages that we can detect, inhabited more than 1,500 years before the common era, to the end of Spanish colonial administration and transition to self-governing republic in the 19th century.

And chocolate — or more precisely, cacao — is central in that history. Understanding why requires mobilizing knowledge from the natural sciences, social sciences, and humanities.

The Caribbean coastal area near the modern city of San Pedro Sula, where my research is focused, is a geographic landscape composed of high mountains bordering a vast tropical plain created by the intertwined Ulúa and Chamelecón Rivers. This river valley, which extends over 2,400 square kilometers (927 square miles), became the site of banana plantations in the late 19th and early 20th centuries. The same features that made this environment hospitable for bananas are likewise beneficial for the source of chocolate: *Theobroma cacao*.

This evergreen tree requires shaded, warm, humid environments to stretch its well-watered roots. Cacao plants put out their blossoms — as small as a fingernail — directly from the wood of the trunk and branches. If pollinated by small flying insects, these blossoms grow to become cacao pods, which resemble acorn squashes in size and shape. Inside the pods, a delicately flavored, moisture-rich white pulp surrounds light-brown seeds the size of almonds, which are the ultimate source of chocolate.

My research explores the effects of the Ulúa River valley and floodplains becoming a significant source of cacao for Indigenous societies in the 16th century. Spanish colonial documents recorded that the Ulúa region was recognized as an important center of cacao cultivation by both Mexica (Aztec) and Maya societies. People from Maya cities in the Yucatán peninsula traveled to the Ulúa Valley to trade for these seeds. Authorities in one

The flower and fruit of the cacao plant (Theobroma cacao).



of the cities on the edge of the territory controlled by the Mexica shared maps with Hernán Cortés, leader of Spain's campaign to colonize Mexica territory. This map showed the overland routes to Honduras.

The first field research with which I was involved as an undergraduate in Honduras included excavations at a place called Naco, where affiliates and competitors of Cortés stayed as guests of one of the powerful local families in the 1520s. That experience shaped my understanding of Honduran archaeology. Years later, a Berkeley doctoral student I advised, Kira Blaisdell-Sloan, conducted excavations on an ancient course of the Ulúa River, which had been re-occupied by the modern Chamelecón River. In the 16th century, the site where she worked was the location of a town recorded as Ticamaya. Ticamaya was the center of resistance to the Spanish invasion in the Ulúa region and was led by a person referred to in Spanish sources as Çocamba (sometimes spelled Çisumba, Çocumba, or even Soamba). Çocamba was, these sources said, "a great merchant in cacao." When the campaign to resist the Spanish ended, Ticamaya was ordered to provide tribute to the local colonial authorities in seeds of cacao.

The use of cacao seeds, an organic product, as an economic standard of value in Mexico and northern Central America

has long fascinated researchers. Descriptions of the early colonial marketplace in Tenochtitlán — the capital city of the Mexica state, taken over as the center for the colonial administration of New Spain, and today, the historic center of Mexico City — describe cacao seeds being used as currency in buying and selling goods. Early colonial reports also suggest the circulation of counterfeit cacao seeds at that time. Anthropologist René Millon even titled his 1955 doctoral study of the plant "When Money Grew on Trees." While descriptions of market exchange in Tenochtitlán offer accounts of a new hybrid colonial economic institution, this market system was built on the previous importance of cacao seeds as a fundamental medium for tribute payment. Demanded by political overlords from the communities that acknowledged their dependency, packs of cacao seeds were depicted in painted images created by



Pottery shows a woman carrying a vessel filled with liquid as part of a ceremony. Ulua Valley, ca. 700-800 CE, from the Museo de San Pedro Sula.

Indigenous artists for the administrators of New Spain. Centuries before, painted scenes from the city-states of the Classic Maya featured cacao-seed tribute payments.

Caribbean coastal Honduras was one of the areas where large-scale cultivation of cacao plants was especially productive. Similar zones provided this important commodity to places outside the ideal environments for the plant to grow and thrive. Paying tribute in this Indigenous resource had ended in most towns in Honduras by the mid-17th century. Yet raising cacao for local use continued to be important to Ulúa Valley Indigenous towns well into the 18th century. Anthropologist and Berkeley Research Associate Russell Sheptak notes that when raids from coastal marauders endangered these towns, one of the main arguments residents used in seeking help from colonial authorities was that the loss of cacao groves endangered the survival of everyone.

Sheptak and I examine the concerns about destruction of cacao groves expressed by colonial Ulúa residents, and we relate them to the Indigenous philosophies of the Lenca who live inland today. Sheptak identifies one of the languages of the colonial Ulúa Valley, probably spoken by the great merchant Çocamba, as a Lenca language, which fell into disuse as colonial townsfolk developed fluency in Spanish. Today, Lenca people are at the forefront of fighting environmental damage from hydroelectric projects involving damming rivers and multinational mining companies operating in central and southern Honduras.

For traditional Lenca today, cacao plays an important role in *pagos a la tierra* (payments to the Earth), which are also called *composturas*, meaning "arrangements" or "repairs." These ceremonial meals are held for the animating spirits of plants, animals, and other nonhuman beings on which humans depend for subsistence and survival. Sheptak argues that when the Indigenous leaders of Jetegua, an Ulúa Valley town, wrote in 1679 that without cacao "the Earth will suffer," they were warning of the damage to the reciprocal relationship with animate forces that sustained these communities.

When I began the fieldwork in Honduras that led to my doctoral dissertation, I was unaware of this history and not yet informed, as I am today, by the Indigenous knowledge that these ancestral Ulúa residents expressed. What I knew was that the Ulúa Valley occupied an important place in the economy of the region at the time when it was first described in European documents. I wanted to understand how far back in time this role in the regional economy went.

Initially, my interest in possibly tracing earlier histories of cacao use in Honduras was frustrated. While the people of the Ulúa Valley produced narrative artworks depicting humans and beings with both animal and human features engaged in a wide range of activities, including consuming beverages, they did not use a system of writing — as their Maya neighbors did to label the specific contents of jars and bowls shown in ceremonies. I turned to studies of traditional methods of processing cacao seeds for ideas about what evidence I might find through excavation and learned that the tools that might have survived were multifunctional, like metates. These stone grinding platforms were (and still are) used for grinding corn or cacao, interchangeably. Other steps in traditional cacao processing employ materials like wooden containers that would not be preserved in the tropical forest environment of the Ulúa Valley. I could suspect that at least some of the ceramic



vessels I studied once contained cacao, but at the time, I had no way to confirm my hypothesis.

Nonetheless, I suggested that my doctoral dissertation site, Cerro Palenque, had been part of a network for long-distance cacao trade. Cerro Palenque was the single-largest settlement known from the Ulúa Valley. It was a product of very rapid growth and witnessed equally rapid decline. Cerro Palenque reached its height during the 9th and 10th centuries of the Common Era, just as the Maya city-states in Guatemala, Mexico, and Belize were undergoing political disruption, abandonment, or population loss. I argued that during this time, the Ulúa people established their position as a reliable source of cacao for the city-states that emerged following the so-called Classic Maya collapse. From this historical transition, a later network of settlements emerged that included Maya towns recorded as sending traders to the Ulúa Valley in the 16th century.



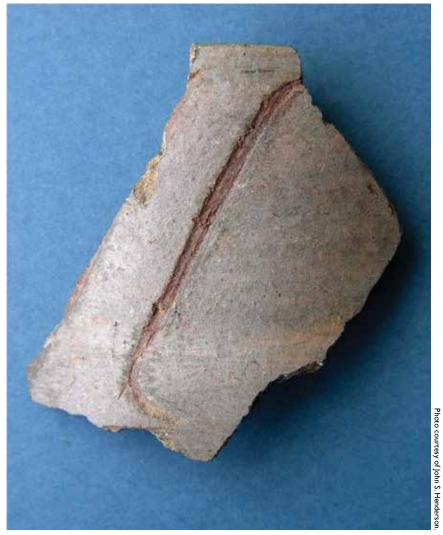
Julia Hendon leads excavations at Cerro Palenque, Honduras, in 2002.

People continued to inhabit villages along the Ulúa River following the decline of Cerro Palenque, after 1100 CE. The names of many riverbank towns were recorded in a Spanish document from 1536, which described grants of colonial demands for labor and tribute to Spanish participants in wars with Ulúa people. Among those 16thcentury towns was one located at the base of the hill (cerro) that gives the Cerro Palenque site the first part of its name. Today known as Santiago, in the 16th century, the full name of the town was Santiago Cocumba, a clear association with the family of the "great merchant in cacao" whose defeat initiated Spanish control. The Honduran historian Rodolfo Pastor Fasquelle suggests that we consider the possibility that palenque in the name Cerro Palenque, which translates to "Hill of the Palisade," might be a preserved reference to this later riverbank town as one of the places that Çocamba fortified against Spanish attack.

By the time I published my book, Cerro Palenque, in 1991, I was satisfied that the combination of historical and archaeological research had at least plausibly pushed the history of cacao in Honduras back to 800 CE, recognizing it as a driving force in the growth of Cerro Palenque. A revolution in research was yet to come that would enable scholars to add almost 2,000 years to the history of cacao use in the Ulúa Valley. That revolution emerged from new transdisciplinary approaches that allow researchers to identify the presence of plants in the genus Theobroma through previously undetectable residues left behind on tools used to process the plant and serve foods based on it.

Understanding chocolate is a good example of the way transdisciplinary research works: the efforts of people from many different fields are required to understand a given focus, in this case, a plant that transformed global history. We could begin with the botanists and plant geneticists who have done the research needed to identify the relationships of plants in the genus Theobroma: T. cacao and T. bicolor, a second species used in Central America, often called pataxte. They point us to northern South America, where related uncultivated plants are used by local people. We can add the chemists who study the active substances found in plants in the genus *Theobroma*, including caffeine and a distinctive compound called the obromine. Chemists and medicinal researchers have probed the effects of cacao on human biology, tracing potential already evident in Indigenous medical uses. Traditional Indigenous uses in food, medicine, and religious life are documented by researchers from the specialized field of ethnobotany, an interdiscipline that bridges anthropology and botany.

Even with all of this, we have hardly begun to explore the social lives of this plant. Archaeologists and art historians trace cacao in depictions of the plant and sharing of cacao-based foods in pre-Hispanic art from Mexico and northern Central America. Work by documentary historians like Marcy Norton, in her 2008 book Sacred Gifts, Profane Pleasures (based on her 2000 UC Berkeley doctoral dissertation in History), trace the transmission of cacao from Mesoamerica to other parts of the world. Economists, political scientists, anthropologists and geographers assess the effects that followed when this introduced plant became the center of agricultural economies from West Africa to Indonesia. Environmental studies expose the negative consequences of cultivation of this plant today, while researchers from social science and policy disciplines examine the troubling role of child labor in cacao cultivation as a cost of the taste for chocolate.



Testing on this potsherd was positive for theobromine.

Puerto Escondido, ca. I 100-900 BCE.

The Ulúa Valley is recognized in this transdisciplinary research as one of the early sites of confirmed cultivation and use of cacao, a significant point in the adoption of cacao before 1000 BCE. The revision of our understanding of cacao's history in Honduras was already underway when I published my study of Cerro Palenque in 1991. In the decade following my doctoral research, archaeologists working in Guatemala carefully collected visible residues from ceramic vessels in a tomb at a site called Río Azul. One of these vessels had a painted text that was newly deciphered as labeling it a container for cacao. The archaeology doctoral student who collected these samples, Grant Hall, asked the key question: is there a way to identify remains of cacao in these residues?

Up to that moment, attempts to identify physical traces of the cacao plant were mostly unsuccessful. To produce edible cacao in the traditional way, the pulp and seeds are scooped out and fermented until the pulp breaks down (leaving a watery substance that is discarded). The seeds, desiccated by their alcohol bath, are ground, mixed with

water and other plant-based condiments (chile, vanilla, and flowers), and eaten. While paleoethnobotanists — specialists in the interdisciplinary study of ancient plants — can detect some plants by the distinctive silica structures they form (phytoliths) or by their pollen, early attempts at this kind of research on cacao were inconclusive.

Faced with this challenge, Hall reached out to scientists at the Hershey Company, the U.S. chocolate manufacturer. Jeffrey Hurst, a chemist with the company, had a suggestion: plants in the genus *Theobroma* produced a distinctive chemical, theobromine. In Mexico and Central America, they were the only plants known to produce this compound. If theobromine was preserved in the residues from the Maya pots from Guatemala, a relatively simple chemical technique should be able to detect it.

The experiment worked. It ushered in a continuing effort by researchers to delineate where plants yielding theobromine were used in the past. Yet, we were still unable to test samples from Ulúa Valley sites. The original procedure was based on retrieving samples from complete pots. For much of their history, residents of the sites along the Ulúa River did not bury complete vessels. We only had broken bits.

The picture changed with work I co-directed in Honduras with anthropologist John Henderson of Cornell University starting in 1994. Our plan was to explore households from the period between 500 and 1000 CE in a site being bulldozed for construction: Puerto Escondido, near the city of San Pedro Sula. We made an unexpected discovery: these houses were built atop the buried remains of a much earlier village, occupied before 1500 BCE. Elsewhere in the valley, early stages of residence were deeply buried, but at the Puerto Escondido site, the bulldozers had removed 600 years of deposits, allowing us to reach previously unsuspected early phases of the settlement. These early villagers were wealthy, part of a cosmopolitan network extending from Olmec towns on Mexico's Gulf Coast to Honduras. We proposed that the history of cacao cultivation that made the Ulúa Valley important might have begun earlier than originally thought, explaining these long-distance connections.

Our research caught the attention of another chemist, Patrick McGovern, who specialized in

analyzing archaeological materials. He was willing to test for residues using potsherds. When his results came back, we were all startled: even fragments of pottery sent as controls, which we had not expected to contain theobromine, proved positive.

This finding led us to push early use of cacao to before 1150 BCE, almost 400 years earlier than previous studies. Testing by other researchers expanded and consistently found cacao residues in sites dating before 1000 BCE. In 2010, Henderson and I wrote that the only obstacle to identifying even earlier cacao use was that researchers couldn't test vessels from periods before pottery was made. These perishable containers were likely made of the kinds of gourds mimicked by early pottery. Researchers, we argued, should assume cacao use was earlier than we could confirm.

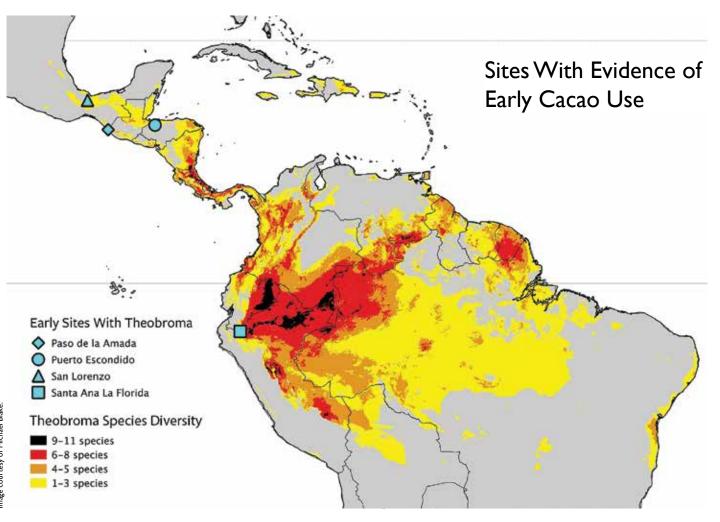
We could not have predicted what came next. In 2018, an interdisciplinary research team led by archaeologist Sonia Zarrillo, with participants from Ecuador, Canada, and France, as well as U.S. institutions including UC Davis, detected residues of cacao consumption and genetic traces of cultivated Theobroma genus plants in an ancient

village in Ecuador dating to 5,300 years ago! Ancient DNA, theobromine, and newly identifiable starch grains specific to Theobroma all were detected. After decades of research, the chocolate research agenda has shown that one of the most widely repeated assertions, that cacao cultivation started in Mexico or adjacent Central America, must be revised. Cacao now begins the next stage of its story: linking the early history of South America with that of Central America and Mexico.

It all comes back to chocolate: sacred gift, profane pleasure, and fascinating object of Latin American research.

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References for this article are online at clas.berkeley.edu.





The Changing Global Tropics: Hot Droughts in the Amazon

By Jeff Chambers, Clarissa Fontes, and Bruno Oliva Gimenez

hen you step into a tropical forest, you expect to feel the humid air on your face, step on soft wet topsoil made mainly from decaying leaves, and see bright green surroundings of different vegetation layers. Yet that wasn't what we observed in late September of 2015 when we entered the oddly dry air of a forest in the Amazon of central Brazil. The surface leaf and twig litter crunched and snapped as we walked on exceptionally dry soil, and the leaves of many sapling and adult trees were wilted in a way we had never seen before. The hot and dry drought conditions imposed by the 2015-2016 El Niño were strongly affecting the world's largest rainforest.

Droughts are nothing new. They occur with a large drop in a region's expected precipitation from a variety of causal factors. What is new — and becoming increasingly problematic — are droughts that occur simultaneously with historically high temperatures due to climate change.

Since the onset of the industrial revolution, human activities have continually pushed atmospheric CO, (carbon dioxide) concentrations to current levels not seen on Earth for probably millions of years. Year-byyear, Earth's temperature will act to equilibrate to this changing atmosphere, and the additional heat is pushing our warmest tropical ecosystems to new novel higher temperatures beyond current conditions. The last time the planet had a heat-trapping atmosphere of similar composition — in the Pliocene, 2.6 to 5.3 million years ago — sea levels were at least 10 meters (30 feet) higher, temperatures were warmer by four to five degrees Celsius (seven to nine degrees Fahrenheit), and modern humans were not among Earth's inhabitants. Climate warming lags behind greenhouse gas changes to the atmosphere, yet in 2021 we are already at least halfway (about $+0.75^{\circ}$ C/1.35°F) to the level of warming (+1.5°C/2.7°F) that is expected to cause major disruptions to human

A dry riverbed in Amazonas, Brazil.



and planetary systems. We are in the midst of creating a hotter climate maximum that has been absent on Earth for millions of years. What can we expect from this new hypertropical climate?

The Global Tropics

The region of the tropics lies geographically between the parallel latitudes of the Tropics of Capricorn and Cancer and includes the hottest deserts and wettest forests on the planet. The biomes of these latitudes cycle more carbon, water, and energy than any other global region and play critical roles in regulating Earth's climate. The tropics are also home to vast biodiversity including more than 40 percent of the world's human population. Most of Latin America resides within the tropics, from the latitudes of central Mexico and all of Cuba, down through to São Paulo in Brazil and the entire country of Bolivia.

The Global Tropics reside at the center of a number of globally important topics, yet the Global North is often woefully ignorant of these leading roles. For example, a better understanding of tropical ecosystems is essential to project how climate change will impact Earth system processes and human livelihoods from local to global scales as our climate continues to heat up: expected precipitation is essential for agriculture; temperatures even hotter than our current maxima directly impact human activities; forests play key roles in regulating climate both regionally and globally; and trees provide a number of renewable resources. We study how tropical

Clarissa Fontes measures leaf water potential in the Amazon.



forest trees interact with the climate system, a knowledge base that continues to expand thanks to strengthening pantropical partnerships across Latin America, Southeast Asia, and Africa.

One of the best-known direct effects of additional CO, is its beneficial effect on plants. CO, is the substrate for photosynthesis, and additional CO, can also improve how efficiently a plant uses water — the fraction of water lost per unit carbon gain. In fact, this effect is precisely what we've seen as CO₂ has accumulated in the atmosphere: plants, ecosystems, and the oceans act as "net sinks" for atmospheric CO₂ to the tune of about 50 percent of anthropogenic (human-produced) emissions. But the consensus among scientists across the planet studying plant-atmosphere interactions is that this carbon sink service will dramatically change: the beneficial direct CO, effect will soon be reduced by negative climate impacts as the planet warms at an ever-accelerating rate. "Hot droughts" are one way that this fundamental change in how ecosystems interact with the climate system will become increasingly apparent as the climate system continues to ramp up to increasingly hotter temperatures.

Plants are adapted to a set of conditions that have prevailed for thousands of years under the current Holocene climate, a climate that has been relatively steady for the past 15,000 years or so. We've already increased Earth's temperature to levels that are pushing the high temperature maxima for those 15,000-odd years, and within this century, we'll reach conditions that have not been prevalent for hundreds of thousands, if not millions, of years. As a result, droughts will occur at increasingly elevated temperatures, and tree communities will be pushed past irreversible physiological thresholds that cause irreparable harm to plant tissues and structures. Hot droughts will also be extremely challenging to human communities, causing shortages of drinking water, decreased food production, and poor air quality from drought-associated fires, particularly in the Global Tropics. Let's take a closer look at some of the things we have learned with our Brazilian partners.

Examples from the Brazilian Amazon

From late September of 2015 through early 2016, huge swathes of the Amazon experienced one of these hot droughts that was associated with a strong El Niño climate event. We hear a lot about how El Niño affects temperate regions and our local California climate, but the direct impacts of El Niño over the vast expanses of the Amazon basin are often more severe and occur as intense droughts. This 2015-2016 harbinger of

hotter future tropical climate conditions, which will be much more prevalent on Earth in the coming decades, provided opportunities to study how high temperatures coupled with low moisture supplies affect tropical forests.

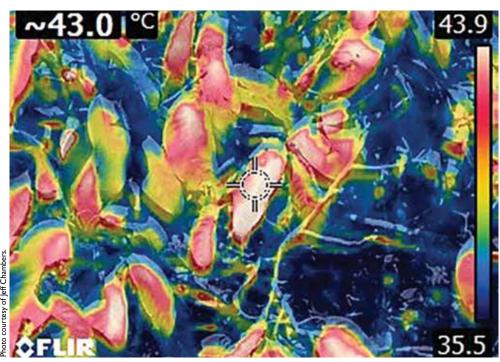
work We with groups international researchers, students, and mateiros (forest workers) in the Amazon with leadership from Brazil's Instituto Nacional de Pesquisas da Amazônia (INPA, National Institute for Amazon Research). This partnership has grown from many decades of deeply collaborative research, and we are building a knowledge base

that is simply not possible without such a strong reciprocal relationship. These collaborations generated opportunities to study the hot El Niño drought of 2015-2016 using a number of novel approaches.

Many tropical forests experience a dry season lasting anywhere from one to five months. The local plants and trees are adapted to the associated seasonal moisture deficits and happily photosynthesize and thrive throughout the sunny dry-season months. Droughts are different, and in the tropics, they often develop as an extension of the dry season, creating conditions that tropical trees are less able to tolerate. Add to this mix a warming climate, and trees are often pushed past irreversible thresholds causing permanent damage or death.

The hot and dry conditions we encountered in the Brazilian Amazon in September 2015 motivated a quest to find out how water stressed the trees were. For a number of these tree species, we measured the "turgor loss point," also known as leaf wilting point. The wilting point is the minimum soil moisture required by a plant to not wilt and is irreversible. Once a plant crosses its wilting point, leaf cells are not able to rehydrate, leaves dry out, droop, and wither, causing permanent damage. We found that many trees passed their turgor loss point during that extreme drought, and many others were very close to reaching it. These types of studies are vital if we are to predict what will happen to plant communities and forest ecosystems under a hotter and drier climate.

Trees are also limited by factors that determine their maximum height. Water moves under tension from the



An infrared image of temperature in the forest canopy shows 109°F.

soil to the root up the stem and out the pores on leaves, which are called stomata. That tension is caused by a drier atmosphere pulling water off the wet internal surfaces of leaves — the vapor pressure deficit (VPD). Under a warmer climate, VPD induces an increase in tension in the conductive tissue of the trunk (the xylem), and the water stream can snap under this elevated pressure, producing what is known as a "cavitation bubble" in the water stream that can damage or kill a tree. You can actually hear this cavitational popping with a special audio device similar to a stethoscope placed on the trunk of a drought-stressed tree.

But plants have defenses: they can close stomata to increase leaf hydration. There are costs for this hydration control, however, because the transpiration of water off the leaf surface also cools the leaf, and CO₂ enters those same pores. Preventing cavitation can come at the cost of higher leaf temperatures and carbon starvation, which can reduce plant growth, flowering, and fruit production. Trees often push their height to balance these costs, edging out their neighbors for additional photosynthetic light, but that maximum height was originally determined by a cooler climate. Many trees might be just a little too tall for the hotter tropical climate humans are creating.

Understanding how tropical trees will respond to hot droughts requires accessing the crowns of canopy trees, and those crowns often sit 30 meters (100 feet) or more off the ground. This accessibility issue is a real problem and has hampered tropical forest research for decades, consigning the upper-canopy biosphere



to a largely unknown biological frontier. Our research group in the central Amazon has tried everything to overcome this challenge. Local forest para-botanists, whose incredible skills come from a life of experiential knowledge, are often amazing climbers, quickly ascending trunks and vines to frightening heights, but this approach is too risky. Tree-ascending gear akin to rock-climbing equipment is another approach, but only a few trees per day can be safely accessed. Some research groups have resorted to permanent canopy cranes that enable access to about a hectare (2.5 acres) of trees, but one small breeze and your leaf is sheared away from the photosynthesis chamber by the swaying basket that sits dangling at the end of a cable. Some researchers have even resorted to mini inflatable zeppelins. Our group is developing a new canopy system that includes a 25-meter (82-foot) telescoping lift, a "cherry picker," that was recently transported from California to Manaus. We'll be testing this approach soon at our research site 50 kilometers (31 miles) north of Manaus.

The relationship between climate and tropical forests is reciprocal: forests affect the climate as much as they are affected by the climate. Rain that falls on a patch of tropical rainforest only occasionally makes its way straight to a river. Most precipitation is captured by the roots of plants and then transported up the trunk and out the stomatal pores of leaves right back to the atmosphere. This recycling of precipitation by the forest acts to pump water deeper into the interior of the Amazon basin. The loss of forest by human land-use activities, such as deforestation for pasture or soybean production, can diminish this pump, acting to reduce precipitation patterns far from the regions that experience deforestation. A major challenge is protecting the role of forests in regulating a region's precipitation patterns, while also developing sustainable agricultural practices.

Welcome to the Hypertropics

While we have a good qualitative understanding of how climate change will impact forests, we are lacking quantitative precision on exactly how climate change impacts will play out over the next few decades. Even if we make major progress in reducing CO₂ emissions and slowing the relentless rise of heat-trapping gases in the atmosphere, human activity has already changed the atmosphere enough to cause major disruptions, and we lack clarity on how those disruptions will play out with enough detail to make meaningful interventions.

Left: A telescopic lift raises researchers to the top of the forest canopy. (Photo courtesy of Bruno Oliva Gimenez.)



Graduate student Daisy Souza works in the lift basket high in the canopy.

As a hotter tropics emerge over the coming decades, impacts to human livelihoods will also be numerous. An important trait enabling the broad biogeographical distribution of human populations is our ability to efficiently wick heat away. An interesting aspect of the hot and humid tropics is that the direct air temperature rarely exceeds approximately 32°C (90°F) due to the effect of atmospheric moisture in keeping temperatures lower.

But simple air temperature does not sufficiently convey the level of stress on the human body — just imagine spending a day laboring outdoors in the tropics under high humidity at more than 30°C (86°F). A better measure of heat stress comes from the "wet bulb temperature" determined by wrapping a water-soaked cloth on the thermometer. A wet bulb temperature of 32°C (90°F) has a human-felt heat index of 55°C (130°F). Human survival outdoors is limited to a few hours when the wet bulb temperature exceeds 35°C (95°F), representing a literally off-the-charts heat index of 70°C (160°F).

The emergence of the hypertropics throughout the Global Tropics will bring with it many challenges. Addressing these challenges requires deep engagement with communities that span planetary boundaries. A worldwide approach toward knowledge that will help in mitigating impacts to people and ecosystems cannot be only centered on institutions and scholars from the Global North. A path forward benefits from deep partnerships and reciprocal engagements with an international academy that is inclusive of a multitude of languages, ethnicities, genders, social status, and approaches to scholarship. One metric of success in creating a global academy is the development and coauthorship in the production of new knowledge with international partners. Science works best at problem solving with a diverse community, and that community needs better engagement with the Global Tropics.

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Gourmet avocado toast.

AGRICULTURE

Native Pollinators and the Avocado

By Gordon Frankie, Sara Witt, Ben Faber, and Rollin Coville

here does your guacamole come from? A local Mexican restaurant? Or do you make it yourself from scratch? Do you prefer your avocado on toast with pink Himalayan salt? Or Chilean style as pan con palta?

Have you ever wondered how it all begins with avocado flowers on an evergreen tree?

Any delicious avocado dish starts with tiny creamcolored blossoms, which are about the size of a pea and grow in clusters called racemes. The flowers are not showy or fragrant, but that doesn't matter to the dozens of insect species that are attracted to the flowers in spring.

In early spring, each avocado tree is covered with more than 1 million of these unique and beautiful flowers. Despite abundant flowering, each tree only produces 100 to 500 fruits each season. This limited fruit production is due to the fact that each flower alternates between a female stage (pollen accepting) and a male stage (pollen producing), and male and female flowers often aren't present at the same time on the same tree. Insect pollinators must move pollen from male to female flowers, flying from flower to flower and tree to tree. A certain amount of fruit drop is also expected.

The avocado, *Persea americana*, is native to Mexico and the Central American tropics. Dating back to prehistoric times, large mammals were the primary dispersers of avocado seeds. Mammoths and giant ground sloths (genus *Megatherium*) ate the fruit and spread the seeds in their scat.

Avocado seeds have been found in the remains of temporary encampments dating from nearly 10,000 years ago as people moved down the Pacific coast from Mexico towards South America. The fruit is highly portable and nutritious and is one of only a few fruits with a full complement of amino acids that goes perfectly with corn tortillas. Avocados also contain energy-rich oil that is low in cholesterol.

Today, the green-skinned, pear-shaped fruit is grown commercially in many places around the world, including Mexico, Chile, Peru, New Zealand, South Africa, Israel, and California. In many parts of Central America, avocados represent a significant portion of the diet. In each exporting country - including Mexico, Chile, Peru, and Colombia — avocados represent a significant part of the agricultural economy. Mexico produces more avocados than any other country, growing more than 900,000 metric tons annually, or 40 percent of the world production (Can-Alonzo et al., 2005).

In avocado orchards around the world, a diverse assortment of insects visits the flowers, from bees and wasps to flies and beetles. A study in Mexico (Castañeda-Vildózola et al. 1999) recorded 70 different insect species visiting avocado flowers. In southern California

A flowering avocado tree.

orchards, some 60 species of insects are attracted to the delicate flowers (Frankie et al., 2021). About one-half of these insect species are California native bees; the rest are mostly flies and wasps. The approximately 30 bee species that visit avocado flowers in California are there for pollen and nectar produced by the flowers.

Honey bees and bumble bees are social insects that live in large colonies. All other bee species are solitary in habit. Of the approximately 1,600 bee species recorded in California, most are solitary and make their nests in the ground (about 70 percent). The remaining 30 percent are solitary and cavity nesters, which means they live in natural crevices like tree holes or cavities left behind by wood-boring insects.

Here are some of the most common insect species visiting avocado flowers in California.

The ultra-green sweat bee (Agapostemon texanus, images on following page) is the most common solitary native bee species in California. Smaller in size than the honey bee, this sweat bee has a brilliant metallic-green exoskeleton and flies quickly from flower to flower. These bees are ground nesters and are active for many months of the year. Ultra-green sweat bees are especially common during the flowering season of avocados in the spring. In addition to avocado flowers, ultra-green sweat





bees can be found on bush sunflower, globe mallow, and Calandrinia flowers.

Another fan of the avocado flower is the yellow-faced bumble bee (*Bombus vosnesenskii*, above right), one of the most common bumble bee species in California. These bumble bees are especially fond of flowers that bloom in the early spring and early summer, such as the California lilac (*Ceanothus*) and the California poppy. Yellow-faced bumble bees decline in number after spring, but occasional individuals persist for the rest of the year. In late winter months, they also visit and pollinate early-flowering manzanita. Yellow-faced bumble bees can fly and forage at lower temperatures than most other bees.

Small carpenter bees (*Ceratina sp.*, below right) appear to be some of the most common native bee pollinators of avocados. Female bees nest in plant stems that they hollow out to make room for brood cells. Small carpenter bees visit a variety of native and nonnative plant types, as well as avocados. Despite its petite size (about one-half inch long, with a slender darkish abdomen), this tiny bee may be one of the best native bee pollinators of the small avocado flowers. Planned research in 2021-2022 will evaluate the effectiveness of small carpenter bees as avocado pollinators.

Hoverflies (*Syrphidae*, following page) are another beneficial insect group that visits avocado flowers. Adult flies pollinate the flowers, and immature larvae feed on aphids and other herbivorous insects that eat ornamental and crop plants. Hoverflies pollinate many other plant species in addition to avocados.

On top of this array of native insect visitors comes the European honey bee, *Apis mellifera*, which California growers favor because they can transport hives to control the numbers of bees needed to pollinate the standing crop of trees in an orchard. Curiously, the honey bee is not known to be very attracted to the avocado flower. But honey bees don't have much choice when their hive boxes are placed in an orchard and there are few other flowers from which to choose — avocado growers usually keep their orchards free of flowering weeds, many of which are attractive to native bees, flies, and wasps.

Studies have shown that honey bee populations are declining in the United States and in many other parts of the world. While these findings are troubling for many reasons, including those related to agricultural production in general, for avocado growers this decline means the cost of renting honey bee hives continues to increase. UC Berkeley's Urban Bee Lab and many other researchers worldwide are interested in providing habitat for native pollinators in agricultural settings in the form of hedgerow



A yellow-faced bumble bee (top) and small carpenter bee.

gardens. Researchers want to know more about native insect pollinators, their needs, and their effectiveness as pollinators as they will become more important in agricultural operations.

So what about these other insect pollinators? How many of them can pollinate avocado flowers? Which are the best pollinators, and shouldn't we know more about them? These questions motivated the Urban Bee Lab to start a





long-term research project in 2014. Our efforts are just now beginning to produce useful results that can be passed on to growers in southern California. This information may also benefit avocado growers in other parts of the world, especially in Latin America where many native pollinators have co-evolved with avocado flowers and where avocado pollination by diverse pollinators has been the focus of studies in the region (Pérez-Balam et al., 2012; Can-Alonzo et al., 2005).

In an early stage of our project, the Urban Bee Lab established a series of pollinator habitat gardens to attract diverse insect visitors and pollinators in three large avocado orchards in Santa Barbara and Ventura Counties in southern California. The flowering plants installed in each garden were the result of years of research on bee-flower relationships conducted by the lab throughout California. Our book, California Bees and Blooms: A Guide for Gardeners and Naturalists (Heyday, 2014), offers a close-up look at some two dozen local bee species and shares useful information on growing bee-friendly plants.

Once the gardens were in place, we intensively monitored native bees and honey bees in the participating avocado orchards each spring from 2014 to 2019. Bees were observed in pollinator habitat gardens or "treatment sites" and in areas with no gardens, the "control sites." The comparative numbers indicate that the garden sites are supporting more diverse bee species, and this pattern can be tied to the diverse flowering species established in the gardens. It is noteworthy that differences in bee diversity between the treatment and control areas were not as great as one might expect, and this finding suggests that native bees are regularly flying through the orchards.

As part of the outreach component of our project, the growers of each of these three orchards have been kept informed of the results of the studies. This communication has led to requests for more habitat gardens and expansion of existing gardens on each property. Growers have also offered resources — such as irrigation equipment, labor, and water — to help us move the research forward. In other words, they have taken some ownership of the project. We expect that the installation of larger gardens will increase the number of diverse insect visitors to avocado flowers in the future.

And there's so much more to learn about pollinators and their relationships to avocados. In New Zealand, researchers have discovered that some avocado flowers stay open at night and draw in diverse nocturnal insect visitors. Because environmental conditions between New Zealand and California are similar, we wondered whether California also has nocturnal visitors to avocado flowers. Our UC

Berkeley Urban Bee Lab is just beginning research on this issue in California. Many hours of observations at night with special cameras (and lots of coffee) will be required to determine whether we also have nocturnal flower visitors in the state. We also suspect that there may also be nocturnal pollinators of avocado flowers in tropical Latin America.

Other new plans for research include evaluating the effectiveness of each insect visitor to avocado flowers. This work is being designed with colleagues from UC Santa Barbara who have expertise in pollen studies.

We also will be working closely with the UC Cooperative Extension, Ventura, to develop a user-friendly manual that can be passed on to growers, with macrophotography of most of the insect visitors to avocado flowers and images of the garden plants insect pollinators prefer. Regular discussions with avocado growers are proving very helpful in developing the extension manual.

Much work remains to be done to gain more information on the pollination ecology of avocados in California. Especially important is learning more about the most effective ways to protect avocado pollinators as a part of the avocado pollination system, which includes creating and caring for insect habitat in and around

avocado orchards. This research could also serve as a model for avocado growers in Latin America and in other parts of the world.

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Rollin Coville has been photographing insects and spiders for more than 25 years. He received his Ph.D. in Entomology from UC Berkeley.

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A habitat garden provides an excellent environment for pollinating species.



FILM

Remembering to Avoid Repeating

Interview with Diego Mondaca (translation by Deborah Meacham)

The film "Chaco" was one of the most popular offerings in the Spring 2021 CineLatino Series produced by CLAS. After the screening, director Diego Mondaca spoke with CLAS staff member Ana De Carolis about the film and the stories behind it.

Ana De Carolis: What motivated you to make "Chaco"?

Diego Mondaca: The most immediate reason, or the most obvious one, was the need to know a little more about my past through my grandfather [who fought in the Chaco War]. But it was really about a need to propose imaginaries that could talk with us in the present. Questioning the narrative about the Chaco War [between Bolivia and Paraguay, 1932-1935] that was imposed on Bolivian history, about who the heroes were. A narrative that was

constructed at the expense of thousands of Indigenous people who were murdered or abandoned in precarious and impoverished conditions where the Bolivian army was sent to fight a made-up enemy. Narratives that were written by those in power, a social class that was white and mestizo, that systematically marginalized and continues to marginalize most of the population of my country today.

So that's where our narrative came from. That was the aesthetic and ethical basis of the film. I also think that it's a very political film because it highlights something that should be much more common in Bolivian film and in Latin American film in general: the way we speak and our languages, which also means recovering our culture, a culture that has so often been shot down by the colonizers,

the dictators. Thanks to their own strengths, and our profound connections with them, [our languages and our cultures] survive and help us survive, as well.

So that's the general context for what motivated "Chaco" — confronting the lies, going against the system set up in Bolivia, confronting the tendentious manipulation of political circumstances, the kickbacks of money or status that disadvantage "the weakest." And it also examines our dead, our defeated, not in the sense of analyzing the defeated like [German philosopher Walter] Benjamin, who I obviously reference, but rather by putting ourselves in the position of *our* defeated, which allows us to critique ourselves more fully. I'm not critiquing the Other, I'm critiquing my present and myself in this present. I use this landscape of war, this story that I invented about the 1930s, to talk about the present day of our country and even Latin America in general today.

ADC: In "Chaco," the limits between the body and the landscape seem to disappear. The camerawork and the sound make the audience feel as if they were there on this endless march. What was it like to film in the Chaco region?

DM: It was really hard to make decisions in a place so distant in our memory. Because most Bolivians — and I think most of the world — only knows the Chaco region from the photos that the military took during the war. We also had to fight against that. And it's important because all the photographic evidence we have of the Chaco War was taken by members of the military or white adventurers who were able to buy a camera and travel.

So this record comes from a patriarchal, white, classist, racist perspective that viewed the Indigenous soldier dressed in uniform like something from the circus. The joke just kept going, making fun of the Indigenous people, their language, their behavior. The mockery is in the photographs and so is the horror. I saw it in a series of nine images that I found during my research — a sequence that showed a firing squad, the Bolivian army shooting Bolivian soldiers. It was as if the orders had been given by the photographer, not the captain. There's the photo of when they put the blindfolds on, when they tie them up, when they make them stand. There's a priest giving them the last rites, the shooting, the fallen bodies, the confirmation of death, and the burial of the bodies. But the only image that shows movement, a slight tremble,

"So now tell me, how is your hell where your glory has gone?" Somber lyrics from a Bolivian song echo in this still from "Chaco."



is when six Mauser rifles shoot the three soldiers in unison. The ground shakes, and so this photograph is shaky. For me, that was the horror, and for me, that is the Chaco War.

Now, as I was telling you, the landscape of the Chaco region looks really strange to our eyes and in our memories because there is no real record — very few people go all the way into the Chaco, which is 2,500 kilometers (1,550 miles) from La Paz, from any urban environment. [Going to the Chaco] means going to see what it's really like and telling the story from a different point of view. And that allows for so many of

the film's aesthetic sensibilities, because you can really get swept away by the landscape. You can play at being Werner Herzog in a place where no one else is ever going to go. But the whole team had to really concentrate and especially in this case [the cinematographer] Federico Lastra had to really focus on what we were trying to achieve with each frame.

The Bolivian soldier of that era was 1.6 meters (5 feet, 3 inches), on average. So the camera was always 1.6 meters off the ground, the height of [the protagonist] Liborio's eyes. It's possible to think that you are looking out over the landscape, but in reality, you cannot. And that sensation of the "almost possible" contributes to the feeling of claustrophobia, hopelessness, and because of all the other factors, it generates that feeling of insanity.

And there's also the dust, that blinding dust. There's the wind. We definitely subjugated ourselves to the landscape. We told the story with it, using what nature gave us. If the screenplay said, "you need a table in the shot," and there wasn't any table, but there was sand and a tree trunk, well, you used that trunk, and you used that sand. Every object that we had in front of us took on a new meaning. Adapting to the landscape, rather than fighting, it made it really easy to do our work and gave us a lot of freedom.

And something that I really appreciated about working with Lastra is that I never talked with him about cinematography. We talked about history, about literature. We got way out there, as [the Chilean director] Raúl Ruiz would say, to find the real meaning.

The movie was filmed in a square frame so that the subject is always in the center of the frame. The Indigenous man is a central figure and so is his language. And that



In 1932, Paraguayan soldiers in Alihuatá, site of two major battles during the Chaco War.

changes the depth of field. It changes the cinematography. In this composition, we are set in an almost infernal depth of field, where we are in a much larger space than the sound can reach, in order to create an imaginary in which the audience can participate. The audience can also create their own horrors based on the information that we give them. Thanks to the soundtrack, you feel a series of sensations that I don't think would have been possible just through the cinematography. Because the sound goes right through your body. It touches you in a different way. It can hit your spinal column, not your optic nerve like an image. Sound lingers much longer in the memory than images, and that's why it is so central to the film.

ADC: What was it like to work with the cast of "Chaco" and with many different languages?

DM: I started my work in film making two documentaries — "La Chirola" y "Ciudadela" — with really small teams. In "Chaco," I tackled my first historical fiction with a team of nearly 40 people, with actors from the theater. It was a huge challenge to go against the stigma of "bad acting" that Bolivian film had and, I think, still has.

I should clarify that bad acting is a problem with the director, not the actor. A lot of directors say, "There are no actors." The problem is that the directors that exist are not trained well enough, and they don't know how to communicate.

I used my experience in documentary filmmaking to work with the actors. I did a systematic search for actors who came from the theater for the corporality that the discipline encourages; total corporal expression where the body suffers, not just the facial expression. That was



A still from "Chaco" shows soldiers' delirium and euphoria when it finally rains — no one knows how to quench their thirst.

fundamental for being able to understand the physical dimension of horror and not just the spoken word.

We had six theater-trained actors, and all the extras were Aymara- and Quechua-speaking soldiers, young men between the ages of 16 and 19, who are still doing their military service in the Chaco region. We filmed in Ibibobo, right where the war took place. It seemed unbelievable, but so many years later, these soldiers are reproducing the same journey that my grandfather must have made 80 years ago.

The issue of language was complicated, but it was a very powerful aesthetic decision, and it needed to be done. The first thing was to establish a channel of communication with the actors from my language, which is Spanish. Sadly, I don't speak Quechua or Aymara or at least not very well. But establishing communication on another level means that they feel committed to and curious about the story that we also want to tell.

It means that somehow they also became interested in what we went there to do. They were very interested in the technical equipment, the cameras, the sound gear, etc. And gradually, through that curiosity, I introduced the reasons why we were making this film — the same reasons that I explained to the cinematographer, the sound engineers, the producers, and the financial backers — the basic motivations for making this film, as well as my questions, that ended up being their questions, too, because after all no one knew what had really happened.

That established a narrow bridge for communications. But obviously, the most complex part was the language, working in their language, with their language. Fortunately, Raymundo Ramos, who plays the part of Liborio, is a Quechua speaker. I explained everything in Spanish and Raymundo translated it to Quechua, but he also gave them suggestions from his discipline, which is theater. Raymundo collaborated a great deal on these aspects, which demonstrated how horizontal all of our work had been. We were all able to contribute.

I was also very lucky to have a team that was very savvy technologically speaking, but also quite sensitive and respectful of each and every one of the people working there. That respect facilitated a group dynamic that fostered a sense of trust, trust in the actor, in the camera, trust that we were all there doing something truly collective. And that meant each scene became a sort of ritual, because at some point, we all became aware that we were talking about our dead, we were working with our dead. So that gave our work a sense of ritual that imbued it with a different rhythm.

ADC: You mentioned at the beginning of the interview that "Chaco" is engaged in a dialogue with the present. How do you see Bolivia today, and what does the film tell us about contemporary Bolivia?

DM: That's an interesting question, and one that's also very difficult to answer. I started writing the screenplay in 2011, 2012. During those last few years of Evo Morales's administration, there was a tremendous political and social decline in Bolivia, that lost all of us, everyone who was trying to contribute to this very necessary change - because Bolivia is a different country thanks to Evo Morales and the MAS [Movimiento al Socialismo/ Movement for Socialism]. But there's also burnout. I think that feeling is also evident in my writing, because I wrote the screenplay shortly after the disappointment, after understanding how far we still had to go and that we are very vulnerable to the lust for power and messianic delirium.

Something else interesting is that the last phase in making the film — the stage of color correction and sound mixing — took place in October 2019, that terrible time of killings during the coup. I talked with the sound crew a lot, with [sound designer] Nahuel Palenque, and with Federico Lastra, about how the meaning of the film was changing and growing because Bolivians were hitting bottom.

In our society, a society that has been torn to pieces, something began to break out again, something that we didn't see or didn't want to see - racism and classism began to erupt, and you would see these attitudes in the people around you. It became clear that we still had a lot of work to do. That was proof we had not overcome our failures. When we can't critically analyze our history, we repeat it systematically.

It's very similar to what happened in the Chaco War, in the revolutions of 1952, in the dictatorships, in 2003, in 2008. The same thing is happening now. And I say we don't have the critical capacity because there is a narrative that makes us say, "No, everything is fine, let's keep going." But no, everything is not fine, and it's really hard to keep going. This pandemic has given us

"When we can't critically analyze our history, we repeat it systematically." – Diego Mondaca

this much — it has brought us to a full stop and allowed us to return to a different scale. It has forced us to rethink the scale, to rethink the body as a space, and from the body, to recognize the possible spaces that we have to inhabit, how much impact we have, and how we impact each other.

That's one of the ideas that we've used a lot in "Chaco" - understanding our scale, human scale, which means the body. We don't use machines, we don't use cranes, so that we don't ever lose that scale. And in this human scale, the audience identifies with us and with the film.

Diego Mondaca studied film at the Escuela Internacional de Cine y TV in Cuba and directed the documentary films "La Chirola" (2008) and "Ciudadela" (2011). This interview took place on April 21, 2021.

Diego Mondaca



