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**Demanding a Radical
Constitution**
Environmentalism,
Resilience, and
Participation in Chile's
2022 Reform Efforts

Edited by
Javiera Barandiaran
Tristan Partridge

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Introduction: Demanding a Radical Constitution

Javiera Barandiaran 

Abstract This introduction explains the immediate and long-term causes of constitutional reform in Chile, with a focus on the 2019 estallido, as well as the range of forces that led a majority to reject the 2022 text. Multiple, often contradictory, factors motivated Chileans both to take to the streets in 2019 and vote to reject the constitution. This introduction examines the various political and institutional dynamics which eroded support for constitutional reform. With the benefit of hindsight, these dynamics might have been handled differently, underscoring the need to learn from this process.

Keywords Constitutional change · Chile · Social mobilization · Estallido · Protest · Constitutional Convention

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INTRODUCTION

In July 2021, in response to massive social uprisings that began in October 2019 and following delays caused by the COVID-19 pandemic, Elisa Loncon was elected president of Chile's Constitutional Convention. For the first time in living memory, Chileans were addressed by a high-ranking elected representative, at an official event of the greatest importance, in an Indigenous language. Speaking in her native Mapudungun, the language of the Mapuche people, Loncon welcomed people from across Chile, naming each region, to participate in this historic process. She gave a special welcome to queer people and to women, and offered a message of hope for re-founding Chile through a participative and democratic process into a plurinational, intercultural, and plurilingual state, which would be respectful of nature and women's rights and would stand in solidarity with those who have suffered globally (Loncon 2021; the full speech is included in this book as an Appendix).

For the following 12 months the Constitutional Convention members—many of whom were civilians with no political party affiliation or prior electoral experience—produced a text that delivered on Loncon's vision. However, in a plebiscite with mandatory voting in September 2022, this text was approved by only 38% of Chileans. The majority, 62%, rejected it. The magnitude of the defeat was shocking to those who had hoped this constitution represented a substantial change, and it empowered nativist right-wing and centrist political forces who defended the status quo (Heiss 2023). The defeat changed the distribution of power, as the progressive government of Gabriel Boric shifted gears to organize a second constitutional reform effort, now led by political parties, which also ended in defeat: in December 2023, 56% rejected this constitution which, by contrast to the first, was written by some of Chile's most conservative representatives. Understanding these dynamic events is important. Nevertheless, this book sets a different goal, to contribute to efforts to remember what was forward-thinking and heartfelt from the first proposal and, inspired by feminist lawyer Karina Nohales (2023), thus add to the collective memory of progressive constitutional reform.

Drawing on research by students and faculty, this book explores just some of the most innovative ideas and practices in the first proposed text. The book focuses on environment, science, and modes of participation, all important in a global context marked by ecological crisis and climate change along with an erosion of trust in democratic modes of

governance. The 2022 constitutional text included much more, however, that this book does not address: it adopted an ethic of care, opened legal space for collective and communal forms of property, expanded digital and social rights, and sought to decentralize power. The authors of this book have focused instead on highlighting indigenous representation, the modes of public participation used, and some of the articles that sought to redefine science, bioethics, environmental stewardship, environmental rights and enforcement, and notions of property as they relate to mining or the night sky. Though not an exhaustive account of the 2022 constitutional text, we focus on these ideas because they are among those that are too important to be forgotten.

This book has been written for students from all countries and backgrounds so that, with their help, the hopes and ideas of 2022 remain part of a process of transformation (Zerán 2023). This transformation is Chilean; this is where these events took place and where these constitutional convention members staked their reputations and energies to translate bold new thinking into constitutional text. But it is also global. Many of the reasons why constitutional reform was attempted in Chile are familiar to citizens in other jurisdictions. The intellectual debates—from neoliberalism to feminism to environmental justice—are also global, and Chilean intellectuals are in constant and shared conversations with colleagues from around the world (Quiñeño Godoy 2023). The movements and organizations involved participate in global networks of solidarity and organizing. Reflections of this global perspective were evident also on the streets of Santiago, where graffiti written during the social uprising that led to the constitutional reform promised that “neoliberalism was born in Chile and will die in Chile.” For the feminist organization Coordinadora Feminista 8 M, the process had global historical significance as the first constitutional process to take place following years of high-profile feminist organizing globally (Nohales 2023). Thus, a range of participants acted fully aware that these were globally and historically significant events.

This introduction draws on reflections published after the 2022 defeat written by Chilean scholars, organizers, and public figures, to provide context for why the 2022 constitutional reform took place and for some salient features which contributed to the text being rejected. The *Apruebo* (approve) and *Rechazo* (reject) campaigns were hard-fought, and no simple set of factors can explain why *Rechazo* prevailed so strongly. I, along with collaborators Tristan Partridge, Maite Salazar, and Camila

Torralbo, shared time working and walking together through Santiago between 2019 and 2021. We too participated in these events, and we wished to have seen Apruebo prevail. We also witnessed the harassment and blame heaped on members of the 2022 Constitutional Convention (CC) by the media and those who felt they were the victors in the 2022 plebiscite (Atria 2023); we join others in rejecting such simplistic and politically self-interested scapegoating of CC members (Ríos 2024). Instead, in this chapter I offer my still tentative assessment of what happened based on reflections from some participants and observers. It's an assessment that benefits from hindsight, but remains provisional as research on this period will continue to advance our understanding of events. That said, I argue Rechazo won less because of the content of the constitutional proposal, and more because of various political and institutional dynamics. These dynamics reflected conditions at the time and resonated with diverse ideals. Quite possibly, they could have been handled differently by all the parties involved, potentially leading to different outcomes.

WHY DID CONSTITUTIONAL REFORM HAPPEN?

The immediate cause of constitutional reform was the social uprising of October 2019, when anger with the government's handling of an increase in public transit fares in the capital, Santiago, scaled up and resonated—as if spontaneously—with pent-up frustration with the general order. The fare hike was small (30 pesos, a few US cents) but significant. Public transit was already expensive relative to salaries. Adding insult to injury, Economics Minister Juan Andres Fontaine advised commuters to wake up earlier or stay out later to avoid peak hour pricing and Treasury Secretary Felipe Larraín suggested buying flowers instead as their price had fallen. On Friday October 18, high school students occupied central subway stations, and the weekend saw widespread and sometimes violent protests. On the following Friday, one million people marched along Santiago's main thoroughfare, the Alameda; the protesting group cut across class, age, and profession, thus consolidating what became known as the *estallido*, or uprising. As they had many times before, protestors converged around Plaza Italia, now renaming it Plaza Dignidad (even successfully re-labeling it on Google Maps). The *estallido* gathered multitudes, had a rallying cry (dignity), and a symbolic center. Friday protests at Plaza Dignidad became regular.

A wide range of motivations and demands moved people to participate in the *estallido*. These can be grouped along three dimensions: growing legitimacy of protests; anger with inequalities and injustices; and disappointment and even disgust with elites in power. The *estallido* appears, from the perspective of 2024, as the culmination of a decade of social mobilizations. After democracy was restored in 1990 public manifestations were rare until 2006, when school students mobilized demanding quality public education. The crucial year was 2011, however, when environmental and pro-education protestors converged on the Alameda and Plaza Italia (Pinto 2019; Barandiaran 2021; Zerán 2023). In 2012 the southern region of Aysén was shaken by massive protests demanding improved social and economic well-being. Soon after, large mobilizations for pension reform and, from 2016, for women’s rights began to regularly take the city. Taken together, these movements point to a willingness and capacity for taking the streets to advance political aims, with important successes—a major hydroelectric project was canceled, a law allowing abortion in some cases finally passed, for-profit universities were brought down, education policy changed, and new leaders (including progressive President Gabriel Boric and many of his cabinet members) were formed.

Commitment to street demonstrations aside, the motivations of those who participated in the *estallido* varied within a shared frustration with the injustices and inequalities of development in Chile (Loncon 2023; Atria 2023). Scholars had long diagnosed a deep malaise despite the appearance of economic progress (Pinto 2019). Even as poverty fell and families’ purchasing power improved, inequality remained steadfast: for many Chileans, more education—paid for with debt—did not lead to better paying jobs. Healthcare remains expensive and the vast majority of retirees earn pensions below poverty wages (Barandiaran 2021; Atria et al. 2018). In this context, some participated in the *estallido* carrying signs for specific demands—for pensions, education, health, water—and some expressed their rejection of a neoliberal social and economic system. To what extent participants saw their particular demands as part of a broader anti-capitalist, anti-neoliberal fight, is open to debate (Zerán 2023, cf. Garretón 2023 and Richard 2023). Still others participated to reject everything; in his film about the *estallido*, “My Imaginary Country” (2022), Patricio Guzman opens with a very committed protester who was there without having, or identifying with, any political project. Her dedication to the *estallido* was anti-system but disconnected from party politics. As Chilean critic Nelly Richard (2023) noted, in hindsight, to

have seen the estallido as expressing a coherent “political people” with shared demands proved to be a mistake. Estallido graffiti (Fig. 1.1) reflects these contradictory demands and identities of those who participated in the protests.



Fig. 1.1 Graffiti in Santiago from the estallido. Estallido graffiti often celebrated revolt, denounced police violence, and playfully subverted global capitalism by re-imagining beloved comics like Pikachu (re-styled here in a police hat as ‘Pacachu’; ‘paco’ means ‘cop’ in Chilean slang). Amid the flames, the central motif consists of bleeding eyes: a reference to the many people who were deliberately blinded by the police using rubber bullets and tear gas grenades. A report in January 2020 by the National Institute of Human Rights found 427 people had suffered eye trauma or loss due to state violence since October 2019 (McSherry 2020). Some of the text here reads “solo el caos nos hace libre”/ “only chaos makes us free.” The use of global imagery (including codes like “1312” or “ACAB,” US anti-police symbols) speaks to the global ambitions of the estallido. Photo taken in Santiago, 15 December 2021 (Photo by Tristan Partridge, used with permission)

This disaffection is captured in a third dimension which resonated broadly, at least for a time. The *estallido* might have been avoided, or at least lessened in force, had the government appeared to show some degree of empathy. Instead, President Sebastián Piñera and his cabinet continued a tradition of triumphalism that could not have been further from many people's lived realities. Piñera's immediate actions exposed the yawning gap between citizens and their representatives. On the eve of the *estallido*, he described Chile to global media as "an oasis in Latin America." As the *estallido* gathered force, he was photographed celebrating a family birthday. While white- and blue-collar workers in Santiago were stranded on a Friday afternoon and unable to get a bus or subway home, the streets in gridlock, the president traveled across-town to Santiago's wealthy suburbs for his social engagement. Forty-eight hours later he announced that the country was "at war with an internal enemy" (Segovia and Leighton 2019). His comments betrayed the degree to which political elites remained wedded to a triumphant narrative of Chile's 1990 transition to democracy. Back then, another politician had described Chile "as a good house in a bad neighborhood."¹ By 2019, however, many Chileans had a very different view of their relative well-being. Not only did most feel shut out of the so-called good house, but over a decade of social policies in Bolivia, Brazil, Argentina, and Ecuador had improved access to education, health, and pensions in those countries without throwing families deep into debt. These comparative trajectories revealed to many that inequality was clearly a political choice (Picketty 2019).

Human rights were systematically violated and at risk during the *estallido*. As is usual in Santiago, protests were met with tear gas and sudden dispersal orders. But this time police repression was particularly violent: surveys by the National Human Rights Institute and Amnesty International reported that police injured at least 1,863, including causing eye trauma to more than 400 people (primarily young men) and blinding dozens in one or both eyes. Many protestors and victims reported that

¹ The exact origins of the phrase are hard to find, but evidence of its widespread use exists in various news reports and interviews (e.g., Sifón 2015). The class dimensions of the *estallido* were also explicit in other ways. In a leaked audio from the *estallido*'s first days, first lady Cecilia Morel compared protestors to "an alien invasion" which the government could not control. She warned the situation was serious, food would be rationed, and "we will have to reduce our privileges and share with the rest." Presumably by "we" she is referring to Chile's wealthy elite.

police intentionally aimed for the eyes to maximize harm. Others, like Fabiola Campillai, were caught unawares—Campillai lost her eyesight while on the bus going to work, after she was struck by a tear gas canister fired by the military police. She went on to be elected Senator for Santiago and fought to hold the police members criminally accountable. Security forces were accused also of causing several deaths, either directly (shots, beatings) or indirectly (denying or obstructing aid). Others were arrested and detained without due process. Young men in particular—estimates range from just a few to as many as 2500—were held in jails for months without charges; some were then found guilty of only minor infractions, others were released for lack of evidence. Securing an amnesty for them was a priority for many civil organizations and future convention members.

In this context, how did constitutional reform, far from the top of the protestors' agenda, become the *estallido's* most tangible outcome? Political parties turned to constitutional reform to channel the discontent on the streets into an institutional and democratic process. Their individual and collective legitimacy was at stake; debates about exact motivations notwithstanding, protestors were angry with the Piñera administration but above all with the general order of things (Richard 2023). Constitutional reform thus made sense, and some had been advocating for it for years. In 2013 a campaign asked voters to mark their ballot "AC" to demand a constitutional assembly, and in 2014–2018 President Michelle Bachelet's government ran a constitutional reform process with broad public participation. Others countered that reforms adopted in 2005 had sufficiently rid the 1980 Constitution of its most dictatorial provisions, and in 2017 Piñera campaigned successfully against Bachelet's constitutional reform plan. A group of party leaders now saw another opportunity, and within a few days right-wing parties also signed up to support what the parties called an Agreement for Social Peace and a New Constitution.

Scholars have made many arguments for reforming the 1980 Constitution—still in place as I write this—which can be synthesized thus (Castillo et al. 2022; for a longer review of this literature see, Barandiaran 2021):

- 1) It lacks democratic legitimacy because it was written under dictatorship by an elite group of men appointed by the military general Augusto Pinochet;
- 2) It puts too many constraints on the legislative process. For instance, it requires super-majorities for some legislative votes and gave the

- Constitutional Tribunal authority to review laws passed by Congress before their implementation;
- 3) It defines the role of the state as “subsidiary” to private initiative. Judges, legislators, and lawyers have interpreted the subsidiarity principle to constrain government initiative for such common tasks as enforcement of laws, funding of science, or the provision of social services;
 - 4) It creates a hierarchy of rights where property rights are strong, others like collective rights are weak, and yet others like Indigenous rights are entirely missing;
 - 5) It does not recognize Chile’s Indigenous people, in practice denying them tools to advance through institutional channels collective demands for land, language, and recognition.

Members of the 2022 Constitutional Convention (CC) were aware of this history and the challenges ahead, and the possible consequences for their own standing and legitimacy. In a discussion group organized by researchers early in the process with members representing left, center, and right-wing positions, the members expressed a shared concern that their work could lead to a long list of new rights which might exist only on paper, thus betraying public expectations (López and Rodríguez 2022). They worried about the possible disconnect between constitutional reform and the *estallido*’s varied but immediate demands for better pensions, for instance, just as the COVID-19 pandemic aggravated economic needs and fears. This in turn exacerbated political fights over relief policies, including the broadly popular one of allowing people to withdraw from their pension funds prematurely to get through COVID-era restrictions. CC members had to navigate all this, including complicated politics of representation that were inherent to the circumstances of the *estallido* and the structure of the process.

THE DIFFICULT MATTER OF REPRESENTATION

Compared to recent constitutional reforms undertaken in other countries, Chile’s 2022 effort “was one of the most innovative, inclusive, plural and participative” (Espinoza Troncoso 2023, 33). This assessment rests on several design features, including: entry and exit plebiscites, elected constitutional convention members with gender parity, reserved seats for Indigenous members, and numerous public participation mechanisms

(Salazar 2025, this volume). To hold both an entry and exit plebiscite is unusual—only Ecuador’s 2008 Constitution had both, conducted with obligatory voting (Fuentes 2023b). The Chilean process stands out also for its degree of transparency (all sessions were transmitted live on YouTube) and because no political party or coalition had a controlling share of the vote. As the process advanced, grand agreements were left aside, and Chile’s elites and those in power withdrew support for constitutional reform. The 2022 CC was a citizens’ assembly in which political parties participated, but did not dominate. Yet the ideal that partisan politics could be kept at bay proved to be illusory. Instead, the CC had to navigate difficult contradictions that pitted ‘disruptive’ against ‘polite’ democracy.

Those elected in May 2021 to serve as members of the CC were diverse in many senses. Half were women, 14% were Indigenous, and 68% were not affiliated with any political party (so-called independents). By contrast, at that time Congress had 23% women, 1% Indigenous, and 8% independents (Fuentes 2023a). Their life experiences were also varied. Many members came from grassroots social movements typically focused on local injustices and needs. Quite a few were teachers, professors, and scientists. Some were working class Chileans who played protagonist roles in the *estallido*. Many felt that this was their chance to be relevant and influential. The CC seemed to provide, finally, an opportunity to exercise some power for those whose opinions had never been given airtime or been taken seriously, no matter how long they had been participating in social causes or lobbying for more just policies. Unfortunately, because it ultimately undermined their power by contributing to perceptions that the CC was chaotic and uncivil, the CC operated with a view of inclusivity that led them “to exclude those who had always been included” (Atria 2023, 42; Heiss and Suárez-Cao 2024). In other words, and regardless of their intentions or reasoning, some CC members used their status as outsiders as a weapon against those who had long exercised power—including those affiliated with political parties.

The relationship between the CC and political parties was tense also for many other reasons (Fuentes 2023a). Delays caused by the pandemic meant that the CC’s work overlapped with the electoral calendar. The high-stakes December 2021 presidential election, when progressive Gabriel Boric defeated far-right candidate Juan Antonio Kast, distracted and exhausted political parties. The CC and partisan politics also got their wires crossed over specific issues, like attempted changes to

a rule requiring a two-thirds majority to approve constitutional articles or pension reform (Valenzuela Levi 2023; Zerán 2023). Additionally, some CC members lacked experience with and/or were hostile to institutional politics. Independents sometimes had no experience with political negotiation or, to make things worse, had a reputational stake in opposing politics as usual. Grassroots activists, protagonists of the *estallido*, and others believed they had a mandate to represent those who distrusted the kind of consensus politics that had dominated since the transition to democracy. Though credited by political scientists and elites with providing stability, Chilean-style consensus politics was seen by some activists as a cause of the *estallido* (Pinto 2019). In this view, consensus had meant narrow policy options and limited debates among a tight-knit coterie of elites. From the street, what difference if any existed between consensus and backroom deals—what Chileans call “*la cocina*” or political kitchen—was a detail. This was yet another difficult contradiction the CC had to navigate: hopes for a constitution to unify the country through a renewed consensus clashed with skepticism in consensus itself (Fuentes 2023a).

When the CC began operations, a rupture between politics-as-usual and politics-from-the-streets was evident. Through 2020–2022, protestors continued to gather every Friday at Plaza Dignidad (although in smaller numbers) and large demonstrations happened periodically. Protestors demanding investigation into human rights violations during the *estallido* almost impeded the CC’s inauguration. Just days before the exit plebiscite millions turned out in support of *Apruebo*. Together these massive events suggested that the long tradition of big demonstrations as a political tool had made a stunning come-back (Nohales 2023). Meanwhile, political parties were in disarray: no coalition had a majority in the CC, Congress, or the Senate. Coalitions kept breaking apart and reforming (Fuentes 2023a). Surveys from this period showed historically low trust in political parties, Congress, the Senate, and state institutions, in a general context of chronic distrust in others, in politics, and in the state (MORI 2023). Political parties were fickle supporters of the reform process. Within days and weeks of signing the Agreement for Social Peace and a New Constitution some parties withdrew their support. Two years later, by 2022, even the Socialist Party split, with half campaigning for *Rechazo*. In a context of vigorous street politics and raucous party politics, whether and how to work with political parties to build consensus

through genuine negotiation was not a straightforward matter for CC members.

Many CC members believed that their legitimacy as representatives depended on transmitting the feelings of frustration and anger from the streets into the CC. Rejecting politics-as-usual meant celebrating the explosion of demands expressed in the *estallido*. Any taming of these feelings in favor of ‘reasoned’ political debate would be missing the point. But this posed another difficult contradiction, anchored in a binary between a “pure and radical” street politics and a “domesticated and contaminated” institutional politics (Richard 2023, 144). Figures 1.2 and 1.3 capture these contradictory tendencies, including the fragility of the CC’s credibility and the strength of the right-wing campaign to discredit them from the *get-go*. These tensions provided yet another reason to resist negotiation and consensus building, and put individual members in a bind: any attempt to mediate between these binaries prompted accusations of selling out to the establishment. CC members who felt they represented social movements, grassroots campaigns, or the forces of the *estallido* had to navigate an impossible choice between representing their base—which distrusted consensus politics—and working with seemingly chaotic political parties which had hit rock-bottom levels of public trust. Belief in the authenticity of street-based politics and massive demonstrations clashed with hopes for democratic decorum and reasoned debate.

Finally, electoral politics was about to change dramatically, though few people remarked on it before the fateful exit plebiscite. For years elections in Chile had been voluntary, and for years voter turnout had been falling. Although 80% voted for constitutional reform in the entry plebiscite and independent and left-wing forces won upwards of 60% of representation in the CC, turnout at both these elections—and in the 2021 legislative and presidential elections—was just over half the electorate. Turnout was increasing after years of decline, and even reached a historic high since voluntary voting had begun, but it was still dismally low (Valenzuela Levi 2023). Then, in the September 2022 plebiscite that introduced mandatory voting, the other half of the electorate—an additional five million voters—went to the polls for the first time. These voters were unknown to pollsters or campaign organizers; beyond common sense conjectures—political apathy, low identification with a party or ideology, low partisan commitment—little was known about them. Very few of them voted



Fig. 1.2 CC President Elisa Loncón and Vice President Jaime Bassa face the CC on the day of its inauguration, July 4, 2021. Cristina Dorador, the constitutional assembly member who took the photo, added the following caption: “This is the Historical moment when the elected President of the Chilean Constitutional Commission Elisa Loncón asked for a minute of silence for all the people who lost their life fighting to make Chile a better place” (Photo by Cristina Dorador, Creative Commons)

Apruebo. In the end, the number of voters that voted Apruebo was nearly identical to the number that voted for President Gabriel Boric nine months prior—in absolute numbers this was the best electoral result for the Chilean left ever, but not enough to approve this bold new constitution (Nohales 2023).

EXPLAINING RECHAZO

Multiple factors led a majority of Chileans to vote against the 2022 constitutional proposal. Here I group these factors into three broad categories. One set has to do with the text itself and specific aspects of the process by which it was written. It was a long text, with many ideas new to mainstream publics, and its coherence and importance either did not resonate or were not well communicated with broad publics (Fuentes 2023a; Nohales 2023; Richard 2023). The text was long in part because it was written through transactional negotiations and a distrust of politics-as-usual, which led many CC members to seek to leave certain

PROBLEMAS INICIALES



—Resolvamos este *impasse* comenzando esta Convención en el Teatro Caupolicán, sin problemas de aforo, y, aun más, en caso de diferencias extremas, veríamos cómo reinstalar el *ring*.

Fig. 1.3 Cartoon mocking the CC inauguration, published in *El Mercurio* July 6, 2021. Framed to mimic Dorador’s iconic photo (Fig. 1.2), cartoonist Jimmy Scott satirizes the CC’s apparent rejection of political consensus and negotiation. The title reads, “Initial Problems”; the caption reads, “We can resolve this ‘impasse’ by holding the Convention in the Caupolicán Theater [in Santiago], without limits to capacity and with the added bonus that any major differences could be resolved by installing a [boxing] ring” (Drawing by Jimmy Scott, used with permission)

provisions—like the protection of water—very clear. A high number of articles made it easier for opponents to find articles to object to and to criticize the whole as too policy prescriptive. As Claudio Fuentes (2023a) notes, the committee in charge of harmonizing the final text had few powers compared to the CC Plenary. The net result was a CC with too many checks and balances: entry and exit plebiscites, votes in committees, two-third approval in Plenary, review by harmonization committee, and vote again in the Plenary. This excess reflected a desire to ensure no decisions were made outside democratic scrutiny; but it led to very public disputes between assembly members, with recriminations, and settlement for transactional decisions (e.g., you support me here and I'll support you there). The Rechazo campaign zeroed in on just a few issues—pensions, private property, abortion, justice—which it also often misrepresented, in order to reject the whole.

Another set of factors has to do with the CC's conditions and lack of experience. As former members have since stated, the possibility of Rechazo did not occur to them until it was too late. They had no time or resources to think about it. The CC had just 12 months to write and approve their operations protocol and the constitution. In the first weeks, they lost precious time due to poor infrastructure (which the then Piñera administration appeared unwilling to address), and the political spotlight and one scandal in particular also cost them time and confidence. In September 2021, a protagonist of the estallido and cancer patient elected to the CC admitted he had lied to voters (he did not have cancer). Even after he resigned, public trust in the CC fell and never recovered (Fuentes 2023b). In a context of chronic distrust, one major transgression by an individual was enough to permanently break trust in the whole. The CC also lost needed allies. For example, they proposed replacing the Senate with an assembly of regions. Instead of an honest debate about such an important issue, CC advocates of the Senate's elimination sold this as a done deal. Furious, senators from all parties broke with the CC and, henceforth, a faction of the Socialist Party chose to campaign against (Fuentes 2023a). The way the Senate's elimination was handled reflected some members' belief in the strength of their mandate and willingness to weaponize their positionality to exclude those who had always been included. In hindsight, this reflected a mistaken feeling that the estallido represented a single coherent people and an inevitable process.

Finally, the Rechazo vote has to be explained also by the massive proliferation of fake news generated intentionally and strategically to erode

trust in the CC, to misrepresent the content of the text itself, and to harass and discredit emblematic leaders of the CC (Durán and Lawrence Mujica 2023; Zerán 2023). Fake news claimed the constitution would change national symbols, like the flag, or that specific members called the national anthem a neoliberal invention. Fake news sought in particular to animate nativist fears against Indigenous rights claims (Durán and Lawrence Mujica 2023). TV and news with national circulation in Chile are owned by a handful of wealthy industrialists. Balanced and constant reporting of the CC was taken up by new independent outlets that relied on social media. But social media was a poisoned chalice, because by design it creates echo chambers which in turn create incentives for elected officials to pander to their most vocal (i.e., radical) supporters (Durán and Lawrence Mujica 2023; Zerán 2023). Loncon suffered the worst harassment over the longest period of time, well into 2023, as part of a campaign to punish former CC members for daring to dream of a different mode of politics (Atria 2023).

In the end, the political parties that should have had the resources and ground game to campaign for Apruebo did not do so. The CC did not have the resources to campaign, and few members had this kind of campaign experience. The government was not allowed to campaign, per national law. Some parties had split, like the Socialists, and others hedged their bets with the false promise of writing a better constitution. Without leadership, the Apruebo campaign was fragmented and under-resourced. It came together almost as an after-thought, while Rechazo benefited from the funding and media dominance provided by the country's economic and political elites and had begun campaigning from day one (see for example Fig. 1.3).

VOTING PATTERNS

Rechazo triumphed among every subgroup and cross-section of Chilean society. It was transversal with similar levels of approve/reject by gender, urban/rural, across age groups, and by class. As Claudio Alvarado Lincopi (2023) writes, the 2022 constitution was rejected by a majority of voters in prisons, in municipalities where families rely on water deliveries by truck because their wells are dry, and in Indigenous communities. It was rejected by a majority of women, who would have benefited from new rights and protections. A finer electoral analysis that matches voting

patterns with territorial jurisdictions and intersectional causes of vulnerability finds that Rechazo did best among the very rich, the very poor, and where class-based segregation is highest (Valenzuela Levi 2023). Controlling for various causes of poverty, like agricultural income, Valenzuela finds that Apruebo did better where Indigenous and elder populations are larger. Instead of locating Rechazo with specific groups, Valenzuela's analysis points to the importance of the experience of inequality (e.g., segregation) in voters' decisions (the experience of inequality shapes also attitudes toward *estallido* violence, see Jaime-Godoy et al. 2024). In December 2023, a majority rejected a second constitutional proposal, written by an assembly designed and controlled by political parties and in which the far right had the largest majority. Chilean voters thus rejected in 2022 a left-wing, progressive constitution, and in 2023 a right-wing, regressive constitution (Ávila 2023; Heiss 2023).² Constitutional reform now seems unlikely for a long time.

In some respects, constitutional reform is less necessary than it was in 2019. Congress replaced a super-majority with a simple majority to reform so-called organic laws which regulate everything from education to health to mining. The super-majority requirement was a major block on the legislative process, and therefore on democracy itself. Other blocks remain, however, particularly the power of the Constitutional Tribunal to block implementation of laws passed by Congress and the subsidiarity principle. Protection of this principle, and prevention of its replacement by the notion of a social democratic state, remains a fundamental rift between the Chilean left and right (Heiss 2023; López and Rodríguez 2022). For the right, subsidiarity ensures market competition and keeps the risk of state over-reach in check. For others, subsidiarity prevents the state from taking the initiative, for example, in the provision of social services like pensions or health or in environmental protections.

² Around 2.4 million voters who rejected the first constitution also rejected the second one. Both votes were mandatory, but turnout declined and null votes increased from 2022 to 2023. Data from Servel: <https://elecciones.servel.cl/>. Accessed 2 February 2024.

CLIMATE CRISIS AND CONSTITUTIONAL CHANGE

In 2012 at UC Berkeley, I came across silk screen artists printing posters that read, “Arab Spring, Chilean Winter, meet the American Fall,” in reference to the overthrow of dictatorship in Egypt, the student movement in Chile, and the Occupy Movement in the USA. The demands, hopes, and transformations these movements fought for have since suffered setbacks, encountered violent opposition and sometimes repression, and struggled to maintain their presence or coherence. Meanwhile, the climate crisis has only advanced. In 2023 weather records were again broken: 2023 was the warmest year on record globally, by far—1.18 degrees Celsius (2.12 Fahrenheit) above the Twentieth Century average (National Oceanic and Atmospheric Administration 2024). And 2024 broke even more records. In June 2024, scientists reported that the planet now has an 80% chance of experiencing an average global temperature that is 1.5 degrees Celsius higher than pre-industrial levels—up from a near-zero percent chance in 2015, when this threshold was adopted in the Paris Agreement on climate change. The UN Secretary General warned the world is heading toward “climate hell” and yet in 2023 carbon dioxide emissions—the main cause of warming—were higher than ever before (Abnett et al. 2024). In Chile in 2022, Congress passed a globally historic climate change framework law, reformed the water code to improve the state’s capacities to safeguard it, and created a new agency for protected areas. These help soften the blow of constitutional defeat, and likely would not have passed without the *estallido* (Carrere 2023).

Environmental activists hailed the 2022 constitutional text as a world-first ‘Eco-constitution’ with bold new ideas for protecting ecosystems and life itself for future generations. Yet the *Apruebo* and *Rechazo* campaigns hardly featured the environment—despite some surveys reporting high support for ecological provisions (Berasaluce et al. 2021). Interviews suggest this was another divisive issue as right-wing forces saw these environmental provisions as “nature-centric” and therefore a threat to humans (López and Rodríguez 2022). In this view, Chile is still a developing country with no alternative but to exploit its natural resources to generate growth. Pollution or ecosystem destruction can be managed through better enforcement and accountability, as in any other liberal democracy. Rights of Nature or rethinking the role of growth in development are understood as coercive, as if prescribing how humans should live (Frontaura 2023). Even sympathetic analysts have lumped the various

demands for a more just and a less environmentally destructive society into “identity politics” or, more accurately and productively, “decolonizing demands” (see respectively, Fuentes 2023a; Mascareño 2022). Intentions aside, these terms are used by radical right-wing forces to denigrate those who advocate for a cleaner environment and a less discriminatory society. The same right-wing positions also miss the gravity of the climate crisis, and the injustices and inequities that are causing it. At this rate, if Chile ever does become a developed country, it will arrive having exhausted the conditions that make life (humans included) possible.

The chapters that follow provide more context for understanding the 2022 effort. Chapters 2 and 3 expand on two novel procedural aspects—Indigenous representation and participation (Chapter 2) and the myriad forms of participation (Chapter 3). The following six chapters (Chapters 4 through 9) each focus on novel ideas in the proposed text and the constitutional articles that expressed them—again, this is not an exhaustive account of the constitutional text, but a selection that reflects personal interests. As such, these topics point to some issues of particular global resonance of the 2022 reform effort.

The authors of these chapters are students and faculty who participated in the Burdick Global Scholars Program in the School of Social Sciences at the University of California, Santa Barbara (UCSB). This program provides the opportunity for faculty to lead undergraduate students on research outside the USA. During the 2022–2023 academic year, UCSB students learned about Chilean politics and history and participated in a pilot field experience in a rural community of Santa Barbara County. In July 2023, we traveled to Chile for three weeks, visiting rural communities near the Santiago Metropolitan Region. The plan was to ask residents—working as farmers, water managers, conservationists, activists, and more—about climate change impacts and constitutional change. It soon became apparent that constitutional change was no longer a topic of interest for discussion (at the time, the second constitutional process was getting started). We interpreted these topical silences as indicative of exhaustion with political and economic uncertainties, and perhaps also of an ongoing need for reflection on what had happened. This book, written collaboratively by students and faculty from California and Chilean universities, provides one more point for reflection.

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Indigenous Representation: How Recognition, Reciprocity, and Reserved Seats Shaped the Constitutional Convention

Tristan Partridge 

Abstract When the Constitutional Convention began rewriting Chile’s constitution in 2021, 17 of the 155 assembly seats were reserved for Indigenous representatives. This unprecedented achievement, though a compromise, was the result of decades of ongoing struggle for Indigenous recognition and representation as well as intensified organizing during, and after, the 2019 *estallido*. This chapter relays how the agreement took shape, noting key debates and exchanges in the formation of this landmark in Chilean politics, highlighting the influence of persistent anti-Indigenous sentiment across Chile, and placing the move for Indigenous representation and visibility in constitutional politics within the context of parallel struggles across Latin America.

Keyword Indigenous politics · Chile · Recognition · Wenufoye · Selk’nam · Mapuche · Representation

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INCLUSION, EXCLUSION, AND THE MOVEMENT FOR REPRESENTATION

On 15 December 2020, Chile's bicameral National Congress (the lower house Chamber of Deputies and the upper house Senate) approved a bill to ensure Indigenous groups would participate as assembly members in the Constitutional Convention. In the words of then Minister for Social and Family Development, Karla Rubilar, this was a "tremendous historical milestone in recognition of Indigenous peoples... [and] a step toward repaying our historical debt [to them]" (LAA 2020). The Congressional decision meant that diverse Indigenous leaders and representatives would have a political presence and visibility unprecedented in Chilean history. These effects were further amplified when the CC was inaugurated and Mapuche leader Elisa Loncon was elected its President, with her opening address bringing Mapudungun to the very heart of Chilean politics (see the Appendix to this volume). Such landmark moments, once thought impossible within Chilean politics, reflect the determined and ongoing struggles of Indigenous groups across Chile for visibility, justice, and not only political recognition but also meaningful representation within state institutions.

The victory of securing reserved seats (*escaños*) for Indigenous people was hard won and was approved relatively late on in proceedings. While gender parity within the assembly was approved by an earlier Congressional vote (on 4 March 2020), both achievements reflected the efforts of sustained organizing, civil society campaigning, and dedicated activism. Initially, actions followed the swift momentum that had first initiated the push for constitutional change. The *estallido* in October 2019 denounced growing inequality, environmental degradation, gender-based violence, and elite impunity. These popular movements forced the government to act and respond with some offer to at least partially meet popular demands (v. Barandiaran 2025, the Introduction to this volume). The "Agreement for Social Peace and the New Constitution" signed by representatives from a total of ten government and opposition parties, was signed on 15 November 2019 (Partridge 2020, Seminario and Neahr 2020). Within weeks, in December 2019, members of The Mapuche Mayors Municipality Association (AMCAM), together with their colleagues and counterparts from Indigenous groups including the Aymara and Rapa Nui communities, met at the United Nations headquarters in Santiago to push for broader political support for Indigenous constitutional representation.

Rapa Nui mayor Pedro Edmunds Paoa described an approach that would see Indigenous groups in Chile call for a plurinational country: “We are not a people; we are nations within a state” (Huecho 2019). There was some institutional support, but the time available to secure an agreement continued to pass without formal political endorsement or approval. The President of the Atacameño Peoples Council, Sergio Cubillos, further presented the case in August 2020: “we are 67 days from the plebiscite on October 25 when it will be decided if we will move forward with the possibility of rewriting the constitution, but we still do not have reserved seats for Indigenous peoples. We, together as a broad community, are in favor of a new constitution that will, once and for all, bring constitutional recognition of our Indigenous peoples and a respect of all Indigenous rights” (Morales 2020, n). At the same time as these matters presented unprecedented challenges and opportunities for reconfiguring Indigenous political life within Chile, the push for Indigenous representation was also tightly bound up with implications of the questions asked in the plebiscite itself.

The two questions in the October 2020 Plebiscite, rescheduled from April that year due to the COVID-19 pandemic, were (i) Do you want a New Constitution? and (ii) What kind of body should write the New Constitution? The results were equally strong, with 78% voting Approve and 79% voting for a Constitutional Convention (rather than a Mixed Convention), respectively. These numbers bear repeating to give context for the Indigenous representation campaign. A Mixed Convention would have represented even greater political compromise, with 172 members in total but selected through less participatory processes: 86 members of Congress (selected in a parliamentary plenary session) plus 86 citizens (elected directly by the citizenry), with gender parity applying as a rule only to the latter 86 members (Seminario and Neaher 2020).

In August 2020, ahead of the October plebiscite, representative Catalina Perez presented a proposal that would reserve 25 seats for Indigenous people in a Constitutional Convention and 27 seats in Mixed Convention (Seminario and Neaher 2020). This would have meant 14 seats out of 25 reserved for Mapuche representatives, 2 for Aymara representatives, and 1 each for Atacameño or Lican Antai, Colla, Quechua, Rapa Nui, Yámana or Yagán, Kawashkar/Kawésqar, Diaguita, Chango, Selk’nam; in a Mixed Convention, these figures would have been the same except Mapuche seats would have totaled 16 (Morales 2020). Perez stated that “The State has a tremendous debt to Indigenous peoples and

approving reserved seats would be a way to repair that neglect. This proposal would see these issues debated and disputed not by the political parties but by the communities that, with the highest legitimacy and autonomy, can designate their own representatives within the constitutional process” (Morales 2020, n). The hope was that designating space for Indigenous representation within national political decision-making processes would not only support more direct and democratic forms of political representation for marginalized groups, it would also enable Indigenous political practices to contribute to (and play an active role within) those national processes.

It is particularly important to note here that the Chango were formally recognized as one of Chile’s Indigenous groups as recently as September 2020, following years of both community campaigning and institutional scrutiny. Furthermore, at that time, the Selk’nam campaign for formal recognition was still in process. Their request was approved in September 2023, taking the number of formally recognized Indigenous groups in Chile to 11—and it should also be noted that all 11 groups were named in the 2022 Constitutional Text (in Article 5, which recognizes Indigenous groups in Chile and acknowledges also those that might yet achieve formal recognition according to the law). Therefore this initial proposal for reserved seats was particularly inclusive, recognizing the efforts of two Indigenous groups whose long-standing fight for recognition by the Chilean state was at the time still ongoing.

It is also important to note that the initial calls for reserved seats envisioned a more expansive version of the assembly itself. An initial proposal, put forward by senators Rincón, Huenchumilla, Quintana, De Urresti, and Araya, included 23 or 25 reserved seats (for a Constitutional Convention or Mixed Convention, respectively) (Rivas 2020). This too shared a key demand with the call presented by Perez for 25 or 27 seats: that all seats reserved for Indigenous representatives would be *in addition to* the 155 or 172 convention seats. This demand, however, was not met. Instead, the Constitutional Convention was based on the 155 constituencies that since 2017 have made up the Chamber of Deputies, and the reduced number of 17 seats reserved for Indigenous leaders was incorporated *within* that 155 number.

This decision reflected persistent barriers to change. The ruling right-wing government was able to limit both the number and reach of reserved seats *and* also to reject reserved seats for Afro-Chilean people, who were formally recognized by the State as a tribal people in 2019 (OHCHR

2019). The decision to reject a seat reserved for a representative from the Afro-Chilean community was made during the same December 2020 vote in the Chamber of Deputies: approving Indigenous reserved seats (140 votes in favor, 7 against, with 2 abstentions) while rejecting a reserved seat for the officially recognized Afrodescendent Tribal People (82 votes in favor, 49 against, with 17 abstentions, which failed to meet the required quorum of three fifths) (Comunicaciones OC 2020). Anti-Black racism, as in so many countries around the world, persists through national political life—reflecting the modern assumption of Black a-spatiality and how neoliberalism operates through the simultaneous curtailment of political participation for Black people and the continuous creation of ‘empty’ spaces, vacated by exclusion and kept open for appropriation (Bledsoe and Wright 2019). Similarly, anti-Indigenous racism permeates society—often through parallel processes of exclusion and appropriation, in Chile as also seen around the world (Blaser et al. 2004; Pairican 2014). This would go on to be further revealed in the subsequent Rechazo campaign in the run up to the September 2022 referendum, as discussed below.

Despite these setbacks, the push for Indigenous recognition and representation saw diverse groups across the country engaging with overlapping opportunities to reshape the constitution, finding spaces of mutual interest in building support for diverse claims—groups including social movements, academics, critical mass organizers, Indigenous and Afro-Chilean communities, and other activists (Partridge 2020). While these processes of mobilization fostered new modes of collaboration and some novel political alliances, there were also new compromises to be made.

CALCULATING THE CASE: PRECEDENTS AND PROCEDURES

The 2017 Census in Chile registered 2,185,729 people as belonging to an Indigenous or native people, which was 12.8% of the national population (INE 2018). And yet, despite the fact that the Chilean government adopted the UN Declaration on the Rights of Indigenous Peoples in 2007 and ratified ILO Convention 169 in 2008, Chile remains the only country in Latin America that does not recognize its indigenous peoples within its national Constitution (IWGIA 2020). In line with an ongoing history of state-endorsed violence and discrimination against Indigenous communities, the dictatorship constitution from 1980 effectively erases Indigenous struggles, lives, and demands.

Indigenous constitutional representation was therefore both a way to address persistent forms of exclusion, violence, and erasure *and* to fulfill standards set internationally—though it was domestic pressure and organizing over many years that critically shaped the outcome. During the campaign for reserved seats, lawyer and constitutional advisor Antonia Rivas (who went on to work with Tiare Aguilera, the Indigenous constitutional assembly member elected to represent Rapa Nui) was one advisor among many who made clear the international basis for expanding and protecting Indigenous participation in political life—both in terms of self-governance and the management of development priorities *and* in how relationships with (and within) national society are to be specified and negotiated (Rivas 2020). Across such international agreements, political participation is consistently framed with regard to representation, such that the selection of representatives (as well as delimitation and oversight of their duties) reflects Indigenous practices of self-determination and histories of political action.

Rivas (2020) highlights three precedents in particular (the first two of which, already mentioned, Chile had signed): one is the UN International Labour Organization “Indigenous and Tribal Peoples Convention (1989)”—or ILO Convention 169—which states a national government duty to “establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in elective institutions and administrative and other bodies responsible for policies and programmes which concern them” (UN Article 6.1[b]). The second is the United Nations Declaration on the Rights of Indigenous Peoples (2007), which states that “Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State” (UN Article 5) and that “Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own Indigenous decision-making institutions” (UN Article 18). The third is the case *YATAMA vs. Nicaragua* in the Inter-American Court of Human Rights which ruled that Indigenous communities have a right to political participation enshrined in the American Convention on Human Rights, including specific rights to “special remedial measures and procedural safeguards to ensure effective participation” and “participation in

the national political systems according to Indigenous traditional systems” (Campbell 2007, 500).

The international basis for demanding political recognition further drew on experiences elsewhere in Latin America. Elisa Loncon notes the influence of Indigenous organizing and uprisings in Mexico in the 1990s—including the EZLN movement (Ejército Zapatista de Liberación Nacional / Zapatista Army of National Liberation), among others—and subsequent constitutional reform in that country. In particular, the constitutional amendment to Article #2 made in August 2001 that recognized Mexico as a pluricultural country and recognized the existence and the right to free auto-determination of Indigenous peoples (Loncon 2023, 74). That amendment was made following the “Los Acuerdos de San Andrés sobre Derechos y Cultura Indígena” document that the Mexican government signed in February 1996 in response to Indigenous uprisings that began on 1 January 1994—a move that saw the government promising constitutional reform in order to grant rights, including autonomy, to Indigenous peoples in Mexico (*ibid.*). Constitutional reform in Ecuador was also cited, where Indigenous uprisings in the 1990s led to constitutional change in 1998 (when the demand for plurinationality was not met and the language of “pluricultural and multiethnic” was used instead) and again in 2008, when Ecuador’s constitution actually did declare it to be a plurinational country (Becker 2011, Namuncura et al. 2016). These victories stood as landmark reference cases, and the challenges these movements faced underlined some of the many difficulties that Indigenous groups face when working with political change within settler-colonial states.

At the same time, in addition to these points of inspiration, activists and scholars within Chile recognized how international experiences also carry warnings for unfolding mobilizations. Elisa Loncon notes how Native groups in Canada (and elsewhere) have seen nominal rights to land and social security formally recognized, yet deep discrimination against Native peoples persists across judicial and political systems (Loncon 2023). *Recognition* by state agencies might guarantee very little. Fernando Pairican uses the term ‘multicultural neoliberalism’ to refer to a type of governance that promotes cultural recognition but without any economic or political redistribution that would actually help to work toward greater equality (Pairican 2022a). This term builds on phenomena of “neoliberal multiculturalism” described in other Latin American countries, whereby neoliberalism encompasses both economic doctrine and the

deliberate reorganization of ‘political society’ such that collective rights granted to marginalized groups counterintuitively come to serve neoliberal ideological goals—enabling powerful actors to extend their ability “to restructure the arena of political contention, driving a wedge between cultural rights and the assertion of the control over resources necessary for those rights to be realized” (Hale 2005, 12). Citing Chilean anthropologists (e.g. Bolados García 2012; Bolados García and Boccara 2014), Abarca-Brown (2024) notes that ‘multicultural neoliberalism’ in Chile refers to both a reduction of Indigenous struggles to cultural demands *and* an expansion of neoliberalism into sociocultural realms not previously targeted directly by political reforms, such as ‘intercultural health’ (Abarca-Brown 2024). Together, these dynamics further illustrate how ‘recognition’ by itself—especially without meaningful and accountable political representation—can be an unreliable route toward justice.

In many contexts, including the contemporary USA, any sense of justice (particularly for Indigenous peoples) is impossible using *existing* recognition paradigms or extant political and judicial systems rooted in colonial governance (Partridge 2022; Partridge and Barandiaran 2024). The US state agencies formally ‘recognizing’ Indigenous sovereignty, for example, but doing so within existing—and persistently discriminatory—legal-judicial frameworks, offers little if any support to collective efforts to confront and reverse social, economic, and environmental injustices (Whyte 2017). Analyzing American Indian relations with the settler state and describing struggles in the Haudenosaunee political context, Audra Simpson (2014) proposes a politics of refusal in place of recognition—refusing unequal participation in exclusionary political systems and demanding that nationhood and sovereignty are both acknowledged and defended (Partridge 2022). Such refusal is rooted firmly in Indigenous lives and livelihoods and the political demands and conditions that allow such ways of life to flourish (Simpson 2021). These are political approaches that assert Indigenous nationhood and peoplehood while negating the assumed authority and power of exclusionary political systems (Grande 2018). In Ecuador, for example, much Indigenous action has asserted sovereignty (within a plurinational state) while also confronting the histories of dispossession and systemic politico-economic exclusion that continue to shape political participation (Partridge 2016, 2017). These debates echo the sense of compromise that some Indigenous leaders in Chile felt was necessary to even participate in the constitutional process.

The final agreement meant that the 17 reserved seats of 155 recognized 10 Indigenous groups; the Mapuche, Aymara, Atacameño or Lican Antai (Lickanantay), Colla, Quechua, Rapanui, Yámana or Yagán, Kawashkar/Kawésqar, Diaguita, and the Chango. Assembly seats were assigned in an attempt to reflect respective shares of the national population. The largest Indigenous group in Chile is the Mapuche, who were assigned seven seats. The Aymara were assigned two seats, and the other eight groups each received one. As noted above, this did not reflect the total number of seats that Indigenous activists and their allies originally sought. The reduced number of seats also created challenges for how the reserved seats were to be distributed among Chile's Indigenous groups. Based on the 2017 Census figures and over 2 million Indigenous people in Chile, 79.8% of that total identified as Mapuche, 7.2% as Aymara, and 4.1% as Diaguita (INE 2018). In that Census, Mapuche people represented 9.9% of the national population—and those figures were the basis of the original request for 14 or 16 Mapuche seats (of between 23 and 27 reserved Indigenous seats), adding to the 155 or 172 total seats rather than replacing positions already assigned. Though many other factors beyond census data informed these demands, in terms of numeric representation, the eventual 7 Mapuche seats of 155 total clearly does not align with being almost 10% of the national population.

Thus the gains in Indigenous presence and representation also involved compromise. Mapuche journalist and author, Pedro Cayuqueo, described this in terms of solidarity and reciprocity across Indigenous groups: “The Mapuche, who correspond to 80% of the country's Indigenous population, will be the most underrepresented. This is to allow the inclusion of other peoples. Of thirteen possible seats, proportional to our demographic presence, only seven were agreed upon, barely 40% of the total. It is a political generosity worth highlighting these days. It is based on the cultural value of *kelluwün*, mutual support, and the wise reciprocity of the ancestors” (Cayuqueo 2021, 195). Multiple other forms of generosity, reciprocity, and mutuality would go on to support diverse alliances across groups with demands for regional representation, more meaningful participation opportunities and rights for historically marginalized communities, the expansion and protection of LGBTQ + rights, and calls for the Rights of Nature to be enshrined in the constitution.

VISIBILITY, PROCESS, AND DEFIANCE

The 17 reserved seats reflected not only careful political negotiation and an unprecedented degree of Indigenous participation in Chilean institutional politics, this feat also reflected a growing interest in (with diverse degrees of support for) Indigenous politics and Mapuche visibility. During the *estallido*, the *Wenufoye*—the flag adopted by Mapuche people and movements in Chile—was particularly visible, acting as an emblem of solidarity across different groups united in their struggle for dignity and against a dominant elite whose interests have enjoyed protection before, during, and since the Pinochet dictatorship. The flag itself grew out of a collective process to build Indigenous representation and visibility, the result of different groups and territories sharing designs and ideas, presented officially on 5 October 1992 in Temuco (Loncon 2023, 48). This too formed part of Indigenous mobilizations across Latin America at the time, a time of reclamation and a reversal of the institutional negation of Indigenous lives and realities (Bengoa 2000). This included actions in Ecuador, where Monday 12 October 1992 was set to mark the 500th anniversary of Columbus’ arrival in the Americas—and Indigenous people there marked it as “500 years of indigenous resistance and survival” in opposition to the Ecuadorian and Spanish governments’ celebration of an “encounter of two worlds” (Meisch 1992, 55). Reclamation of rights and the struggle for more widely recognized Indigenous political voices have been centuries in the making.

Along this trajectory, the push for more meaningful and substantial Indigenous representation in Chilean politics reflects another dimension of ongoing Indigenous action across the continent: “The question is clear. Indigenous people exist in Latin America, and they have rights. Or rather, they are demanding, defending, and reclaiming rights, little by little... [while] politicians are afraid to confront [this], saying it is ‘complex’ and ‘difficult to solve’” (Bengoa 2000, 11). These struggles are not novel—they are not phenomena from today, or yesterday, but they are ongoing and have always been in motion (Pairican 2022a; Loncon 2023). In Chile, under Pinochet, Indigenous peoples organized to defend themselves and, in the late 1980s, began negotiating “with the political parties that assumed power in 1990, to gain legal and constitutional recognition as distinct peoples, as well as the protection of land, resource and participatory rights” (Alwyn 1999, n). In October 1993, Law 19,253 was signed—*Ley sobre protección, fomento y desarrollo de los Indígenas*/Law on

protection, promotion and development of Indigenous peoples—making it a state duty to respect, protect, and promote Indigenous rights and culture and to safeguard Indigenous lands (HRW 2004, n).

The 1993 Indigenous Law also established priority ‘areas of indigenous development’ and set up a National Corporation of Indigenous Development (CONADI), which included duties to administer an Indigenous Land and Water Fund (Fondo de Tierras y Aguas Indígenas) by subsidizing “the purchase of additional lands for communities affected by land scarcity,” and also to “finance mechanisms to permit the solution of land conflicts and the provision of water” (ibid.). These were hard won victories in the struggle against state violence and in defense of Indigenous rights and recognition.

Though a landmark in Chilean politics—recognizing Chile’s Indigenous ‘ethnic groups and communities’ for the first time in the country’s history and supporting, through Indigenous involvement and the work of CONADI, the transfer of approximately 75,000 hectares of land to Mapuche communities between 1994 and 1997 through the Land and Water Fund—the Indigenous Law of 1993 had limitations (Alwyn 1999). The Indigenous Law contained insufficient protection of Indigenous rights to natural resources, nor did it acknowledge Indigenous rights to self-government (ibid). Although the Law changed relations between the state and native peoples by formally ending Chile’s ‘assimilation’ policy (whereby Indigenous people were expected to abandon their identities by adopting ‘Chileanness’)—beginning a new era of Indigenous organizing, defense, and cultural promotion—the state remained the arbiter and coordinator of economic activities allowed under neoliberal principles (Pairican 2016). Subsequent amendments to Law 19,253 include significant political gains, including Law 21,606 which marks formal recognition of the Selk’nam as one of Chile’s Indigenous peoples (BCN 2023). However, the spaces available for Indigenous identity and governance to flourish remain tightly curtailed and controlled.

Returning to the context of the 2019 *estallido*, this makes the centrality and visibility of the Wenufoye on the streets of Chile all the more significant. And yet the Wenufoye was not the only symbol of intersectional alliance-making during the *estallido*. Elisa Loncon (2023) recalls the unforgettable impact of walking the streets in late 2019 and seeing almost every inch of visible wall space reclaimed as a canvas for slogans, murals, and graffiti in support and honor of the uprising. Phrases included *Marichiwew pu peñi* [“diez veces venceremos, hermanos”/“we will win

ten times over, brothers”], *Amulepe taiñ weichan* (“que siga nuestra lucha”/“let our struggle continue”) and *Petu weichatuiñ chew püle müle-paiñ* (“seguimos siempre luchando donde quiera que estés”/“we will keep fighting, wherever you are”) (Loncon 2023, 109) (v. Figure 2.1). While a statement of defiance (that resistance will continue no matter where the oppressors are to be found or what actions they may take), the latter phrase might also be interpreted as saying that even if ‘we’ face domination, silencing, or worse, then ‘you’—a broad and growing coalition of allies—are to continue the struggle, for the benefit of all.



Fig. 2.1 Fly poster art on a wall in central Santiago, 15 December 2021. “Amulepe taiñ [taiñ] weichan” translates from Mapudungun into Spanish as “que siga nuestra lucha” or into English as “let our struggle continue” (Photograph by Tristan Partridge)

Such were the cries and demands of Chileans - both Indigenous and non-Indigenous - of indignation, raised by people tired of being ignored by an indifferent elite. These demands were both allied with and supported by a growing, expansive feminist movement that gained global recognition through the LASTESIS performance *un violador en tu camino* (“A Rapist Along Your Path”—a subversion of the slogan used by the Chilean police in the 1990s, *un amigo en tu camino*/“A Friend Along Your Path”) (LasTesis 2023; Loncon 2023, 110). Struggles for dignity in Chile in 2019 not only created a platform for Indigenous politics that had never been seen before; arguably these struggles also presented the world with one of the most widely seen and recognized instances of interdisciplinary, intersectional, and trans-inclusive feminist collective action. LASTESIS translated feminist theory and condemned rape culture through new forms of ‘collective, bodily enunciation’ and a ‘non-hierarchical, empowering format’ that invited parallel interventions and acts around the world (Martin and Shaw 2021). These were overlapping, unified and unifying struggles, envisioning a future for Chile as a state and society built on a new judicial order, reuniting demands for justice, and creating constitutional norms that strengthened democracy, inclusivity, and the protection of Human Rights (Namuncura et al. 2016, 62). Indigenous organizing and alliance-building formed an integral part of these efforts.

Nonetheless, the Indigenous population remained broadly critical of the 2022 constitutional text—something that leaves lessons to be learned for future political campaigns and which also bears further analysis and engagement beyond the scope of this chapter (Cayuqueo 2022). The results of the plebiscite on 4 September 2022 indicate that voting across Indigenous communities did not distinctly diverge from broader national trends, particularly those among the lowest income quintile, where Rechazo votes reached 75% (Pairican 2022b). Overall, the national voting patterns were the results of a massively funded Rechazo campaign—which had begun effectively from the before the constitutional assembly even met, through widespread media campaigns that sought to question, disrupt, and delegitimize the assembly process and its participants. All of which was coupled with documented circulation of misinformation—including falsified versions of the constitutional text—as well as certain assembly members and political party representatives either prioritizing individual issues over collective projects (thus diluting the power of the Apruebo campaign as a whole) or creating party splits and actively

campaigning for Rechazo (Loncon 2023, 128). The Apruebo campaign began from a position of relative disadvantage.

It is important to note, nonetheless, that the non-Indigenous Rechazo vote reflected a coordinated right-wing strategy of exploiting anti-Indigenous sentiment. The Rechazo campaign was able to mislead voters by creating a popular image of an ‘Indigenous Constitution’ which supposedly gave privileges to a minority sector and eroded national identity (Pairican 2022b). The proposal of plurinationality was thus recast as an attempt to divide the country, even though this was not true—Article 3 of the 2022 constitutional text stated that Chile would, in its geographical, natural, historical, and cultural diversity, form a ‘single and indivisible territory’ (ibid.). As Loncon (2023, 128) clarifies, the diverse demands associated with plurinationality were not intended to go *against* the broader Chilean public, but rather to act as a unifying force—respecting diversities and building collective struggles in defense of social rights, regional rights and decision-making powers, as well as the Rights of Nature, Indigenous peoples, and women. In this sense, the deliberately misleading representation of efforts to expand and secure Indigenous rights in the constitution as a threat to other marginalized groups reflects historical moves by political and economic elites to disrupt attempts at building solidarity between and within such diverse coalitions-in-formation. This, too, is a lesson to be learned—and a strategy to be confronted—in future political campaigns not only in Chile but also around the world.

CONCLUSION

The Selk’nam struggle for formal recognition from the Chilean state as one of the country’s identified Indigenous groups—a struggle that achieved milestones of success as recently as September 2023—underlines the critical role of recognition within justice campaigns. Without it, as long as the voices and demands of marginalized groups are not meaningfully heard and acknowledged, justice seems particularly distant. In the absence of such recognition, Indigenous groups (in Chile and elsewhere) face even greater uncertainty and marginalization, often being explicitly excluded from decision-making processes that directly affect them. Colonial constructs (within judicial systems, but also within social scientific narratives of extermination and loss) continue to deny fundamental rights to distinct Indigenous communities. The 17 reserved seats of the

CC sought to address this lack. For the first time, elected representatives from all of Chile's recognized Indigenous communities were to be included within a critical political process, one that would go on to influence and shape the contexts within which ongoing struggles for justice might operate.

As noted above, recognition can, by itself, become a troubling form of compromise. Communities frequently encounter new frustrations when state recognition then involves submission to the uneven execution of laws that might enforce those rights. State blindness to the rights of Indigenous groups and individuals, coupled with a reluctance or inability to enforce those laws, remains a common challenge—one that has fueled Indigenous movements in some of the countries that influenced recent events in Chile, such as Mexico and Ecuador. For these reasons, and depending on the global context, formal political recognition is often one critical step within longer struggles for Indigenous justice, sovereignty, autonomy, or self-determination.

In Chile, the reserved CC seats were seen by some as a step toward paying 'historical debts' to Indigenous groups. Here, too, however there were forms of compromise. Initial demands had called for more seats—more aligned with national census data and the demands of diverse Indigenous communities across the entire country of Chile—and had been denied. It was also the case that the officially recognized Afrodescendent Tribal People were denied any reserved participation. And calls for reserved seats for Indigenous groups began with the demand that they be in addition to the 155 (or 172) constituent seats, yet this too was not admitted. The result was a final balance of seats reserved for Chile's 10 recognized Indigenous groups that relied, in part, upon Mapuche politicians and activists acting with attention to reciprocity with other Indigenous groups in order to allow representation across all 10 groups within the CC. These dynamics reflect how formal political recognition and representation can only go so far toward repaying historical debts for centuries of crimes committed against Indigenous peoples. Though such political action might be unprecedented (and justly celebrated), it also reveals how addressing such debts requires action on far broader scales—addressing multiple intersecting forms of injustice, inequality, and the need for social peace.

The 2021–2022 Constitutional Convention is a landmark in Chilean politics for many reasons, including the inclusion of Indigenous representatives. At the same time, it remains vital to recognize how Indigenous

politics and struggle have shaped prior political actions and also continue to influence broader alliances and movements for justice. The Indigenous Law of 1993 in Chile was itself a landmark, but it was insufficient to deliver on many Indigenous demands, lacking protection of Indigenous rights to natural resources, neglecting forms of environmental protection, and allowing the state to deepen its commitment to neoliberalism as the sole coordinator of economic activities. The state also ensured that it could continue to curtail and control the spaces available for expressions of Indigenous identity or governance. In this light, the 17 reserved seats mark a significant disruption to that pattern of control—bringing Indigenous voices, demands, and political presence to the front and center of national politics. Such landmark moments reflect the power and determination of ongoing Indigenous campaigns for justice. Such moments, then, are best understood not as isolated events, or even as momentary achievements, but instead as critical points of action and collaboration within ongoing processes of political engagement and Indigenous struggle.

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Public Participation in Constitutional Reform: The Challenges of Chile's Experiments in Expanding Citizen Involvement

Maité Salazar

Abstract Public participation is valued and viewed as a key aspect of most modern constitution-making and constitutional reform processes. In Chile, different publics played multiple roles as initiators, electors, contributors, and approvers during the constitutional-building process. The Constitutional Convention (CC) developed but struggled to implement an ambitious, multi-layered public participation framework. From the perspective of the participation process and considering the negative results, it seems that the process failed to fully connect with expectations and sentiments. This chapter identifies three aspects which contributed to this disconnect, while noting the range of participatory methods enabled

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by the CC under pandemic conditions and in a country with limited recent participatory experiences.

Keywords Public participation · Democracy · Citizen consultation · Deliberation · Popular education · Grassroots politics

INTRODUCTION

The Constitutional Convention achieved the highest public participation in political decision making in Chilean history. (Heiss and Suárez-Cao 2024, p. 284, licensed under CC-BY 4.0)

Public participation is valued as a key aspect of most modern constitution-making and reform processes. As Houlihan and Bisarya (2021) suggest “... the key question for decision-makers is not whether to involve the public, but how and when to involve them and in what ways” (19). Calls for more participation reflect the normative view that a robust democracy is a participatory one. Yet, scholars and practitioners from diverse fields caution that—while a key aspect of democracy—participation per se is no panacea nor magic bullet. In practice, the outcomes and success of public participation are influenced by a country’s history and the contemporary social and political context. The CC was a major participatory experiment for Chilean society. Using Houlihan and Bisarya’s (2021) categories, people in Chile participated as: (1) initiators of the process, (2) electors to a constitution-making body, (3) contributors of ideas for content and design of the process, and as (4) approvers of the final constitutional text.

This chapter examines participation in the 2022 constitutional process through a look at the types of participation mechanisms used, when participation took place, and the roles that publics played at different times. The first section examines participation experiences that preceded and led up to the 2022 Constitutional Convention (CC). The text then describes participation in the 2022 process organized around three questions: what roles diverse publics played immediately before and during the process, how participation materialized, and when did it occur. The

text box, below, illustrates participation-in-practice through the initiative *Decidimos participar* (We decide to participate), which I co-led to promote deliberation on the role of science and constitutional reform. Finally, the conclusion draws some incipient lessons from this experience.

LIMITED, YET IMPOSSIBLE TO IGNORE, ANTECEDENTS

The 2022 reform effort occurred in response to the intense social uprising of 2019, known as the *estallido social*, which arguably represented the culmination of social mobilization processes since the return to democracy in 1990 (see Barandiaran 2025, in the Introduction to this volume). During the 1990s, a rich network of social and grassroots organizations were largely swept aside from decision-making during Chile's democratic transition, despite the crucial they had played in the pro-democracy movement (Delamaza 2014). Participation was reduced mostly to informative and consultative mechanisms (Pogrebinschi 2023a, OECD 2017). When participatory mechanisms were implemented, for example to deal with environmental or agricultural decisions and controversies, participation was more technocratic than deliberative (Barandiaran 2016, 2018; Salazar et al. 2019; Ureta 2016). More recently, the central government has undertaken experiments with participatory policy making in certain areas (see for example Chile: Participatory Planning Process for long-term Energy Policy "Energy 2050" or the National Artificial Intelligence Policy). Yet, for the most part, public participation has been limited to voting every few years for local and national representatives. National referendums have been a rarity and require special authorization from Congress; they are rarely used to determine policy. Decision-making processes at local, regional, and national levels afford scant opportunities for direct citizen participation. With few opportunities to influence decision-making processes, it is no surprise that organizations and citizens in Chile often take to the streets to express their views. Nevertheless, two major constitutional participatory efforts preceded 2022.

The first was initiated by President Michelle Bachelet, who campaigned in 2013 with the promise to pursue reforming the 1980 constitution via a participatory process. Once in power, however, her initiative was effectively blocked by the opposition and, some would argue, by allies in her own center-left coalition. Mid-way through her term, the congressional authorizations required to initiate the process never materialized. In response, Bachelet attempted to gather citizen support for

the idea by launching a state-sponsored, participatory process to draft a new constitution in 2015. The process included three deliberative instances, occurring at multiple levels: citizen dialogues; self-organized local meetings; provincial and regional citizen assemblies (*cabildos*).

The self-organized meetings gave citizens, collectives, and various publics the opportunity to deliberate and effect ideas for a new constitution. At the local level, more than eight thousand self-organized citizen meetings (*ELAS or Encuentros Locales Autoconvocados*) were registered and approved, with a total of 106,412 participants (OECD 2017). Most of the self-organized meetings took place in the Metropolitan and Valparaíso Regions, Chile's two largest urban areas. Nevertheless, meetings and *cabildos* were organized in most municipalities of the country. Overall, in addition to ELAS, 204,402 individuals (1.13% of the population) participated in different stages of the process, a large number compared with similar processes in other countries (Raveau et al. 2022). The process was organized by the executive branch and followed a standardized methodology. A team of scholars from Chile's two main universities and the United Nations Development Programme (UNDP) was charged with processing the results. The entire process was overseen by an independent Citizen Council of Observers, to ensure transparency and political independence. The results from this multi-level process were processed, analyzed, and compiled into the document *Citizen Foundations for the Constitution (Bases Ciudadanas para la Constitución)* (for more details of this process, see Pogrebinschi 2023b, SEPC 2023, Una Constitución Para Chile 2017).

During the process, participating publics contributed with specific ideas for constitutional content via a standardized deliberation methodology which framed, limited, and guided the discussions. The process itself was a learning experience on civic, political, and constitutional issues for those participating. However, participation was skewed as participants tended to be educated, be politically engaged, have access to internet, and support the government (Raveau et al. 2022). Furthermore, the process was criticized for not integrating social organizations and movements, thus treating citizens as atomized individuals (Heiss 2016). Despite these shortcomings, it represented a first in Chile in terms of a large-scale experiment in citizen deliberation. The ideas debated during the process presumably informed a proposal for a new constitution drafted by the Executive and submitted by Bachelet to Congress only days before leaving office in 2018. It was largely ignored by Congress and discontinued by

the incoming administration, the right-wing coalition led by President Sebastián Piñera. It is unclear if or how ideas and insights from that process shaped or influenced the 2022 process.

Less than two years later and in the wake of the 2019 *estallido*, decentralized, self-organized citizen assemblies or *cabildos* surged throughout the country to deliberate on many matters of public concern. For the first time in Chile's recent democratic history, thousands of people congregated in parks, plazas, and other public spaces to discuss their concerns and share their dreams for a better future. These locally organized assemblies emerged simultaneously and seemingly spontaneously throughout rural and urban settings, although institutions and social movements also convened broader initiatives (Ureta et al. 2021).

PARTICIPATION EXPANDS DRAMATICALLY IN 2022

According to Negretto (2021), the November 2019 Agreement to Foster Social Peace and Enact a New Constitution (*Acuerdo por la Paz Social y la Nueva Constitución*), signed by representatives from all but one of the major political parties, established three basic features important for democratic constitutional building: the assembly that would draft the new charter was bound by pre-existing rules (set forth in the agreement), inclusive mechanisms of representation, and the idea of direct citizen involvement. The rules for the election of delegates covered a further three aspects important for inclusive participation: gender parity for candidates and elected delegates, special seats reserved for Indigenous representatives (v. Partridge 2025, this volume), and equal conditions for the election of independents. These comprehensive rules were surprisingly forward-thinking in the context of Chile's electoral system.

Continued demonstrations on the street during the *estallido* were key to bringing about this outcome, as they tipped the balance toward change that had been unimaginable just a few months earlier. The result of the entry referendum further ratified calls for change and provided a mandate for constitutional reform. The roots of this process can be traced to 2011 when movements for social change began to tentatively connect their demands with the need to change Chile's neoliberal constitution (Grez 2019; Heiss 2017). However, and most importantly, without the pressure exerted by protesters during the 2019 *estallido*, the then governing right-wing coalition would not have negotiated the drafting of a new

constitution, an idea they had rejected and effectively blocked for more than three decades.

As voters, citizens also shaped the process by electing a diverse and inclusive constitution-making body. On May 15 and 16, 2021 they took to the polls to elect the 155 members of the CC. For the first time in Chilean electoral history, rules ensured gender-parity and reserved seats for Indigenous representatives and also facilitated the election of delegates not affiliated to political parties. Election results were remarkable in that the major political parties did not dominate, as is typical for Chile. Delegates came from diverse socioeconomic backgrounds, locations and areas of expertise or work. Most were not professional politicians: only 15 delegates had either been ex-legislators or government authorities, and 95 delegates were independent (not formally affiliated with a political party). It is worth noting that this was the first charter in the world drafted by a constitutional body composed of an equal number of men and women. Also notable was the diversity of backgrounds of the women elected as delegates. For example, five women scientists and scholars from diverse regions and ethnicities were elected, bringing a particular mix of perspectives to the deliberation process.¹ Although left-leaning independents and social movements dominated in numbers, no one group held a majority, making the assembly a politically fragmented space. In addition, many delegates were holding elected office for the first time. Thus, for the first time in Chile's history, elites did not dominate a crucial decision-making body and peoples from a wide range of backgrounds, places and experiences had the opportunity to shape the nation's social contract.

The 2022 constitutional process established different forms of participation that, at least in theory, provided individuals, grassroots collectives, and organizations with opportunities to contribute ideas on constitutional content. According to Houlihan and Bisarya (2021), to contribute ideas people must be supported as learners by strong civic education and awareness programs. The Convention faced various challenges that limited the scope of their work and impacted their education and awareness programs. In this sense, civil society organizations and others with access to levels of expertise were probably in a better position to take advantage of the opportunities offered.

¹ The five women scholars were Elisa Quintero, Elisa Giustinianovich, Cristina Dorador, Lorena Céspedes, and Elisa Loncon.

AN AMBITIOUS, MULTI-LAYERED PUBLIC PARTICIPATION FRAMEWORK, LACKING THE SUPPORT FOR EFFECTIVE EXECUTION?

The 2022 constitutional process offered individuals, grassroots collectives, and organizations a wide range of opportunities and mechanisms to express their views. During the organizational phase, the CC established a guiding framework to promote a participatory and inclusive process. This framework was formalized in regulation, which established the following key elements: (1) a set of guiding principles, (2) organizational duties and responsibilities, (3) twelve mechanisms for engaging the public, from public communication, deliberative forums to more participatory, bottom-up practices and formats (summarized in Table 3.1), (4) extensive and detailed guidelines for the inclusion of underrepresented groups, and (5) a public education program on topics relevant to the process, containing both outreach and literacy components.²

Two entities oversaw the implementation of this framework: a Secretariat composed of 16 experts (*Secretaría Ejecutiva de Participación Popular*) and a permanent Commission for Public Participation (*Comisión de Participación Popular*) made-up of 21 delegates.³ The Secretariat took on the task of designing and implementing public participation, including procedures, mechanisms, and methodologies, between November 2021 and June 2022. However, it was established in November–December of 2022, in other words, mid-way through the process. The Commission was tasked with leading and supervising the Secretariat’s work. Thus, the CC laid out an ambitious, multi-layered public participation framework which included specific mechanisms for information giving and gathering, shared decision-making, and empowerment of disadvantaged groups and

² Final amendments to the document, entitled Regulation for constitutional popular education, and participation mechanisms, organizations, and methodologies (*Reglamento de mecanismos, orgánica y metodologías de participación y educación popular constituyente*) were approved on 18 November 2021. The document is no longer publicly available on the CC website.

³ The literal translation is “Popular Participation Commission,” in a clear nod to progressive, bottom-up participatory traditions in Chile and Latin America which use the term *popular* instead of *public*. I have chosen to use the term *public participation*, because it is more commonly used in the English language. However, I would like to note that in Spanish these terms have different symbolic value.

Table 3.1 Constitutional Convention’s public participation mechanisms, by format and status

<i>Participation format or mechanism</i>	<i>Type of format</i>	<i>Status</i>
Public hearings to receive proposals, experiences and testimonies	Direct citizen involvement or outreach	Implemented
Popular Norm Initiative		
Self-organized citizen meetings to deliberate on constitutional issues (in-person or virtual)		
Citizen meetings convened by institutions: municipalities, regional governments, public universities and other entities		
Territorial week where CC members engaged with constituents		
Official CC message or address to inform on progress and fulfillment of established goals		
Digital platform: communication, outreach resources, information database	Information gathering	
Public Participation Registry (website)		
National deliberation days	Direct citizen involvement or outreach	Not implemented
Deliberative Forums		
Intermediate Referendum to decide issues midway through the process		
Local constitutional offices to be situated primarily in isolated, rural areas as well as in communities with poor internet access		

communities. In addition, it established inclusion guidelines in a clear effort to give voice to the powerless and excluded.

Although the CC’s plan envisioned 12 different participatory mechanisms (Table 3.1), in practice two—the Public Hearings and Popular Norm Initiatives (PNIs)—mobilized the highest level of participation by social organizations and individual citizens. Public hearings were held at two stages of the process and galvanized participation from a wide range of actors. They were convened by transitory (temporary) commissions, which were set up by the CC to organize work during the first three months when basic CC regulations were debated and established, and by the seven permanent commissions that functioned once regulations were established. More than seventeen hundred people expressed their views at hearings, either as private citizens or representing organizations (SPP 2022a). To participate, interested individuals or organizations had to register via an online platform, indicate their topic, and choose the

commission they would like to address. Each commission then selected participants based on the inclusion criteria set forth in the regulation.

For the most part, particularly during the first months, each commission organized their hearings independently and informed participants of the time, place, and protocol for participation. Citizens entered the room and usually addressed the commission one by one, with a 15-minute limit on their presentations, followed by a Q&A session with the commission. Most hearings were held in person at the CC or using virtual formats. However, some commissions were able to organize hearings in other locations (for example the transitory commission on decentralization). Organizing hearings at this scale demanded a huge logistical effort, in part because they occurred while pandemic social distancing and maximum capacity rules were in place. For many of the participants, this was their first time addressing elected representatives via a format where their experiences, grievances and expert opinions could be heard (CC aide, pers. Comm.).

A case that illustrates these processes includes the 280 hearings held by the transitory Commission on Human Rights, Historic Truth and Bases for Justice, Reparation and Guarantees of non-Repetition (*Comisión de Derechos Humanos, Verdad Histórica y Bases para la Justicia, Reparación y Garantías de no Repetición*). This case also symbolizes how members of the CC attempted to include multiple voices in process. The commission was promoted, among others, by the CC member and environmental activist, Constanza San Juan, and established despite strong opposition from the conservative right. In an outright provocation, right-wing CC members nominated and elected Pinochet's ex-naval aide Jorge Arancibia Reyes as a member of the commission. During its functioning, the commission heard testimony from organizations and individuals addressing a wide range of human rights issues, including violations during the *estallido* and the dictatorship, violations against Indigenous peoples, immigrant rights, and the rights of communities living in environmental "sacrifice zones" (*zonas de sacrificio ambiental*).

As expected, right-wing commentary criticized the commission's work as a waste of time and resources. However, human rights scholars and experts also raised concerns: if the scope and nature of the commission was too broad it would not be able to focus on discussing the human rights basis for the new constitution, particularly given its short time frame (Basoalto et al 2021; Maureira 2021). Most commission members felt a strong responsibility to make human rights a basic tenet of the new

constitution, given Chile’s history, and to hear from those often silenced. In practice, the commission made extraordinary efforts to meet the high demand for participation during the short time frame available, developing tools, criteria, and guidelines for their work along the way. As one staff member indicated “there was no template for how ‘to do things’ in the CC, everything from the basic regulations had to be debated and formulated and most CC members did not have that kind of political-institutional experience... there was little to no state support to guide and assist CC members, who for the most part were eager to work—often long-hours and weekends—and had a strong sense of responsibility” (CC aide, pers. Comm.).

Popular Norm Initiatives (PNIs) proved to be tremendously popular, with more than two thousand submitted and 78 meeting the required votes (at least 1500 e-votes) to be considered for debate by the CC. Almost a million people participated via this mechanism and most of the initiatives admitted were presented by social organizations (Andahur 2022, SPP 2022a). A significant number (17) of PNIs addressed socioecological topics related to water, mining, and pollution among others (Andahur 2022; Figueroa and Rabi 2022). According to the Secretariat (SPP 2022b), content from 69 PNIs were partially or completely included in the final constitutional draft, suggesting that they influenced the final draft content. However, their report does not shed light on if and how they shaped deliberations at crucial moments of the CC or whether their most important function was as a communication tool by allowing people to interact with the process in a simple manner. To contribute ideas in a meaningful way, people must be supported with strong education and information programs which the CC did not implement.

There are at least some indications that this may have affected the quality of participation, for example by transforming PNIs into a more general opportunity to submit petitions on a range of issues or a means for interest groups to co-opt participation. For example, one of the most voted PNI was a proposal to legalize marijuana, an issue best addressed at the legislative level. Conservative groups succeeded in passing a PNI that would have constitutionalized the current private pension system, contrary to widespread support for reform across society, and despite the fact that such reform in part motivated the *estallido*.

Although popular during the *estallido*, citizen assemblies and meetings did not mobilize a high level of participation during the formal process convened by the Convention. For example, around 300 self-organized

assemblies and meetings were registered on the participation platform, compared with the thousands organized during the *estallido* and during Bachelet's previous process in 2015–16 (Ureta, 2021, OECD 2017).⁴ Municipal governments and universities convened a similar number of citizen assemblies and meetings that were either registered on the platform or included in the database developed by the Secretariat. These differed from self-organized citizen meetings in that they were larger in scale, used a standardized methodology implemented by a professional team and were sponsored by formal institutions rather than local collectives and organizations.

The relatively low number of assemblies and meetings registered on the platform suggests that people, collectives, and organizations struggled to effectively engage with the participation opportunities offered by the constitutional process. This is not surprising as the participation time frame for this format was less than a month and occurred during the summer holiday season (at the last minute, the deadline was extended an additional month). To address the relatively low number of assemblies participating, the Secretariat decided to include data from citizen meetings and assemblies, self-organized or externally convened, held from October 2019 to June 2022. Overall, and with the collaboration of several universities, they compiled data from over sixteen hundred assemblies and meetings. Secretariat rapporteurs reviewed and used these data to provide input for deliberation at various stages of the process (SPP 2022a). We do not know whether this large dataset was used via other mechanisms to inform deliberations.

The Secretariat tried to ensure that participation was meaningful during two key stages, before and after norms were discussed and voted on by the CC plenary. In addition to the use of the *cabildos* dataset mentioned above, Secretariat rapporteurs also used hearing reports and transcripts to support the CC's deliberations during constitutional text discussions and at the voting stage. Unfortunately, much of this work—the procedures, methodologies, and results—was not clearly communicated to all those who gave their time participating in hearings and

⁴ The exact number is hard to estimate since the data are no longer available on the Convention's platform and because results from various reports differ slightly due to variations in their data categorization methodologies.

cabildos. This contributed to a feeling among many citizens and organizations of confusion regarding when, or if, their input would be used by the CC.

Having been set up mid-way through a complex yet short one-year process, the Secretariat had too little time and too few resources to do its job well. In practice, it implemented only eight of the twelve participation mechanisms initially outlined in the regulation: six forms of direct citizen engagement and outreach and two techniques for information gathering (Table 3.1). As noted in their final report, the Secretariat faced various time, budgetary and administrative challenges which delayed and limited the scope of their work. For example, the CC's digital public participation platform (<https://participacionpopular.chileconvencion.cl/index.php/quienes-somos/>) was launched on November 26, almost four months into the process. An overview and schedule of public participation was not publicly available until February 2022, even further into the process.⁵ These delays made it hard for interested publics to understand and connect with the process in a timely fashion. Key information for participation—such as deadlines, resources, and requirements—was uploaded in a fragmented and piece-meal fashion (when the different mechanisms were organized and opened up for the public). Clearly, implementing public participation in a timely and opportune manner was an important challenge for the Convention.

Decidimos participar [We decide to participate]

During 2020, my colleagues and I developed the initiative Decidimos.cl to connect with the CC's participation process and give voice to women researchers and practitioners on issues related to the constitutional role of science and the climate crisis. Our first step was to contact relevant social organizations and invite them to collaborate. The organization Association Network of Women Scholars (Asociación Red de Investigadoras, known as RedI), an advocacy group focused on gender and science issues, accepted our invitation to collaborate. Our team was composed of scholars and practitioners with a range of backgrounds and experience working on socio-environmental, science and technology, public participation, and

⁵ See an overview of the participation process in Spanish at: <https://participacionpopular.chileconvencion.cl/wp-content/themes/secretariaparticipacion/adjuntos/Cronologia-horizantal.pdf>.

gender issues. We organized two participation experiences for women: a virtual platform with asynchronous deliberation based on scenarios and a virtual citizen assembly to discuss three norms on the role of science in society that had been presented for debate by the scientist and delegate Cristina Dorador (v. Torralbo & Salazar 2025, this volume).

We faced various challenges which shed light on broader obstacles to participation in the 2022 effort, despite the numerous opportunities. First, the short timeframes and lack of relevant information made it difficult to plan-ahead and envision how a bottom-up initiative such as ours could feed into the general process. The CC's deliberation process was complex and multistage, and final drafts of the norms were not available until the end of January and first days of February 2022. In practice, we proceeded with our project despite the lack of clarity on what was being debated or when decisions would be made simply out of faith that opportunities for providing input would eventually emerge. Second, we observed that while women scholars were motivated to participate, many were exhausted and overburdened with multiple demands on their time, all of them exacerbated by the pandemic: online schooling, working from home, taking care of aging parents, and more. Although their fatigue was palpable, these women still participated in *Decidimos* – and, like with the Secretariat itself, this shows an incredible commitment to the process and willingness to work hard to overcome limited time and resources. But sheer force is not enough, and certainly was not enough to generate the robust modes of participation that many Chileans had come to expect or demand. This may have created a gap between people's expectations for meaningful, timely and binding participation and the limitations imposed by the realities of an ambitious plan that did not have the required support.

Despite these challenges, we succeeded in organizing a women-scholars assembly or *cabildo* that took place on January 17, 2022, and we registered the results on the CC's participation platform. The objective of our *cabildo* was to discuss and comment on specific norms that were being considered by the CC. These norms were later included with modifications in the constitutional proposal. We do not know if or how our contributions shaped the final draft of the constitutional proposal. Nevertheless, both team members and participants valued the opportunity to participate, despite any shortcomings of the process.

CONCLUDING REMARKS

Overall, the participation process was highly complex and implemented within very short time frames, which challenged public knowledge and understanding of the process. Three aspects greatly influenced the outcome of the public participation process. First, the time span of one year was insufficient to implement such an ambitious plan, especially when resources were insufficient and in a context marked by the COVID-19 pandemic which further limited possibilities for collective action. Many in Chile also had little to no experience participating in such a large-scale process and in deliberations on such complex, multidimensional issues. Effective and meaningful participation takes time and requires resources, even more so if the process seeks to be inclusive and allow for a mix of bottom-up and top-down forms of participation.

Second, the social and political context of constitution-making changed drastically between the start of the process, when the agreement setting the terms for constitutional change was signed, and the implementation of the process. In one year, widespread protests and a resurgence of grassroots activism gave way to strict, long lockdowns due to the pandemic. Lockdowns either shutdown much of the grassroots momentum of the *estallido* or re-directed those energies to meeting basic, urgent needs. The pandemic accentuated social, emotional, and economic burdens for many. In addition to the loss of dear ones, many families lost income and struggled to meet basic needs. Schools closed and learning went online for months, revealing huge socioeconomic disparities in students' real-life possibilities to effectively use technology for learning from home. The pandemic intensified and made more visible the inequities that had ignited the *estallido*, but also disconnected people from each other and imbued life with urgencies oriented at meeting subsistence needs.

Third, conservative forces were not committed to the process, particularly after the election of delegates put them in a minority position with no veto power. From the start, right-wing forces boycotted the process, generated and spread fake news, and polarized debates (Barandiaran 2025, the Introduction to this volume). This, plus the crisis of trust in institutions and in the media in particular, posed clear obstacles to public education efforts and damaged public perceptions, no doubt reducing motivations needed to sustain robust participation. As scholars have long argued, no participation mechanism can per se overcome deep

riffs and power imbalances rooted in elites' staunch opposition to make reforms.

From the perspective of participation and considering the negative results, it seems that the process ultimately failed to connect with citizens' expectations and sentiments. While some of the participation mechanisms were quite successful in generating interest and sharing information (particularly about the initial stages of the process, e.g., PNIs and Hearings), their timing and type of input was not designed to fine-tune the draft proposal to societal expectations. Citizen meetings, a mechanism with great potential for empowerment and designed to provide direct input to the draft proposal, did not generate high levels of participation. Possibly, the absence of timely and clear information about the process—that is, an overview of participation, a complete schedule, requirements and how results would be used by the delegates—negatively affected participation. Overall, the Chilean experience illustrates some of the challenges of integrating bottom-up mechanisms into a complex, large-scale, formal participation process.

Had the three participation mechanisms that were not implemented been used, they may have contributed to a better outcome in terms of providing input for deliberation, support outreach efforts, better align public sentiment with the proposed draft and help to build consensus among different groups.

Without robust civic education and public outreach strategies, even successful formats run the risk of not influencing deliberation in meaningful ways or of being co-opted by interest groups. Such is the case of the conservative groups that succeeded in passing a PNI that would have constitutionalized the current private pension system or the citizen PNI proposal to legalize cannabis. Although these PNIs were not included in the 2022 text, their popularity points to the perils of not connecting participation with key dimensions of the constitutional debate. In this sense, Chile's CC process illustrates some of the challenges of implementing robust and meaningful participation that is timely, inclusive, and able to engage multiples publics with complex, multidimensional issues.

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Rights of Nature in an ‘Eco-constitution’: Needs, Goals, and Hopes for a Paradigm Change in Environmental Governance

Javiera Barandiaran 

Abstract The proposed constitution included Rights of Nature (RoN) provisions, building on Ecuador’s 2008 Constitution and experiences found in over 30 countries worldwide. Had the constitution been approved, Chile would have become the third country with national RoN. This chapter argues that RoN are an idea whose time has come, with a long history and wide-ranging philosophical foundations in Indigenous and Western thought. In Chile, RoN drew on these varied traditions to integrate RoN into what activists, lawyers, and CC members called the Eco-constitution. This sought to lay the foundations for state responsibility for environmental stewardship, expand access to environmental justice, and make environmental rights transversal.

Keywords Rights of Nature · Environmental justice · Sustainable development · Environmental governance · Socioecological relationships · Buen Vivir

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Articles

Article 8

Individuals and peoples are interdependent with nature and form an inseparable whole. The State recognizes and promotes buen vivir [good living] as a relationship of harmonious balance between people, nature and the organization of society.

Article 18

1. Natural persons are holders of fundamental rights. Rights may be exercised and demanded individually or collectively.
2. Indigenous peoples and nations are holders of fundamental collective rights.
3. Nature is the holder of the rights recognized in this Constitution that are applicable to it.

Article 103

1. Nature has the right to respect and protection of its existence, regeneration, maintenance and restoration of its functions and dynamic equilibrium, including natural cycles, ecosystems and biodiversity.
2. The State must guarantee and promote the rights of nature.

Article 127

1. Nature has rights. The State and society have the duty to protect and respect them.
2. The State must adopt an ecologically responsible administration and promote environmental and scientific education through permanent training and learning processes.

Article 128

1. The principles for the protection of nature and the environment are, at least, those of progressivity, precaution, prevention, environmental justice, intergenerational solidarity, responsibility and fair climate action.

2. Whoever damages the environment has the duty to repair it, without prejudice to the corresponding administrative, criminal and civil sanctions in accordance with the Constitution and the laws.

Article 129

1. It is the duty of the State to adopt actions for prevention, adaptation and mitigation of risks, vulnerabilities and effects caused by the climate and ecological crisis.
2. The State must promote dialogue, cooperation and international solidarity to adapt, mitigate and confront the climate and ecological crisis and protect nature.

INTRODUCTION

Over thirty countries have adopted Rights of Nature (RoN) laws at some jurisdictional level (Putzer et al. 2022). Most of these are local laws (e.g., municipal or provincial) and just two countries recognize RoN nationally; had Chile’s 2022 proposed text been approved, it would have become the third country with constitutional RoN. Although all three of these countries are in South America, the Chilean proposal varied in important ways from the precedents set by Ecuador in 2008 and Bolivia in 2012. The specificities of the Chilean proposal are the focus of this chapter, centered on six articles. Three of these establish nature’s rights: to exist, regenerate, and maintain its functions with autonomy (Article 103), as a rights holder alongside individuals and Indigenous groups (Article 18), and as existing inter-dependently with humans (Article 8). The other three articles focus on environmental protection, its guiding values, and the state’s obligations given the climate crisis (Articles 127, 128, and 129, respectively). Chile’s proposal added to the global enthusiasm around RoN—just a few months after Chileans rejected this constitution, in December 2022, national delegates approved the Montreal Biodiversity Convention which recognizes RoN, the first time this paradigm appears in an international treaty. And, as analyzed below, it articulated constitutional RoN in novel ways.

Chile’s RoN provisions were part of what many called an ‘Eco-constitution’ which aspired to create the foundations for a state tasked

with safeguarding the environment and nature at a time marked by ecological crisis—caused by decades of intensifying industrial activity and pollution, climate change, and globally unsustainable and unjust economic systems. The concept of an Eco-constitution emphasized two key things. First, the responsibility of the state for advancing collective well-being; and second, the transversal (multiple, complex) relations of connection that link the environment and collective well-being. As discussed in the Introduction (Barandiaran 2025, the 1980 Constitution circumscribes the role of the state in delivering social services and conducting many basic functions, like producing environmental science and monitoring data. The subsidiarity principle works to subordinate state initiative to private initiative, including when it comes to environmental monitoring, protections, and enforcement. In this context, the 2022 constitutional text redefined the role of the state in all these tasks, and expanded it to include responsibilities for integrating environmental care into education, science, and justice systems.

In the Eco-constitution, the importance of environmental health and protections, and of nature's rights and well-being, were transversal to all other rights and to collective well-being. It thus presented a break with past approaches where environmental rights are subordinate to others (as in the 1980 Constitution) or considered a niche concern (as has been the norm in political science or law until recently). One of the great novelties that Chile's CC developed is the Ombudsman for nature, as discussed by Wercinski 2025, in this volume). In what follows, this chapter addresses why RoN was attractive in Chile, the specific forms it took, and how it compares with experiences elsewhere.

WHY RIGHTS OF NATURE (RoN)?

Globally, the need for RoN stems from the failures of conventional environmental laws and policies to slow—let alone reverse—ecological destruction. Conventional here refers to laws and policies that emerged in the 1970s emphasizing principles like polluter pays, demonstrated harm, and rational assessment (through an administrative process like environmental impact review). Widely adopted, these policies have helped manage industrial pollution and avoid the worst impacts of industrial projects. These policies are used to set environmental quality and use standards for each element of nature; thus, water, soils, or air are each subject

to specific sectoral rules, often overlooking the interactions, interdependencies, and cumulative environmental impacts of industrial activity. By contrast, RoN advances a holistic view of nature and of protection that emphasizes precisely the interconnections and interdependencies between elements of nature and between nature and humans (Gilbert et al. 2023; Kauffman and Martin 2021).

Since the 1970s, the pace, scale, and acuteness of ecological destruction have grown worse everywhere as measured by the volume of wastes produced and natural resources consumed (Editorial 2023). One global metric of these trends is “Overshoot Day,” when human demand for natural resources exceeds what nature can give without depleting itself. Whereas in 1971, global overshoot day was in late December, in 1991 it was in early October. In other words, in 20 years, humans globally ran out of natural resources three months earlier than before. Over the next twenty years, humans exhausted nature even more quickly: by early August—a date which has remained stable for the past decade (Overshoot Day 2024). Chile entered into ecological deficit in 1995, significantly later than industrialized countries. At the time of writing in 2024, Chile enters into deficit in May; by comparison the USA enters into deficit already in March, despite its vast territory and extensive natural resources. The United States’ early overshoot day underscores both how unsustainable the US economy is, relying on natural resource imports from around the world, including Chile, and the shortcomings of conventional environmental policies for delivering environmental sustainability. Faced with such a large and often growing ecological deficit, many activists, scholars, and practitioners have turned to RoN to overhaul conventional environmental laws.

In Chile, the ecological deficit is felt acutely. Water has become scarce due to over-consumption (in mining and agriculture) and glacier loss, putting Chile in the top 20 of countries suffering water stress (CR2 2015). Biodiversity losses are high; for instance, over two-thirds of marine species living near the coast or traditionally fished have disappeared (UN 2017). Soil erosion, pollution, and aridity (desertification) are in critical states, leaving a large majority of Chileans living with unhealthy levels of air, soil, and water pollution. All of this is aggravated by climate change (CAPP 2019; MMA 2023, 2020). When the 1980 Constitution was ratified, Chile still lived within its ecological means as measured by the Earth Overshoot organization (Overshoot Day 2024). Still, environmental quality and destruction had been a concern for some years, and the

military-appointed writers included the constitutional right to live in an environment “free of pollution”—a pioneering step at that time. Nevertheless, subsequent laws and institutions developed slowly and weakly: in 1994 Congress passed the first environmental framework law, in 1997 the first substantive regulatory process (environmental impact review) became required, and only in 2013 did enforcement capacities with any bite develop. Overall, many in Chile remain frustrated with environmental laws and capacities.

Decades of jurisprudence turned the 1980 Constitution into a barrier to effective environmental protections (Hervé 2021; Galdámez et al. 2021). The hierarchy of laws in the 1980 Constitution puts property, business (“economic freedom”), and private initiative rights above the right to live in an environment free of pollution (Galdámez Zelada 2020). It also restricts the state’s responsibilities for safeguarding the environment through the subsidiarity principle. Jurists have interpreted the constitution narrowly to require proof of direct individual harm to have standing in environmental cases. Meanwhile specialized environmental tribunals and enforcement are limited primarily to reviewing administrative decisions and questions of compensation. Enforcement can be very slow; on average the environmental enforcement agency takes two years to investigate an environmental infraction and decide (Cordero et al. 2017). Progress has been made in enforcement capacities and in jurisprudence, particularly after 2010 (Galdámez Zelada 2020). But this has still been far too slow compared to the pace at which ecosystems are destroyed, sometimes beyond repair, and climate change remains largely absent from Chilean jurisprudence (Mansuy et al. 2021). A governance framework that is more holistic and preventative, and that can shape administrative and judicial decisions, is therefore sorely needed.

THE PROPOSED ARTICLES

As the CC got to work, a broad coalition of lawyers, scholars and activists advocated for an “Eco-constitution” that recognized RoN, which they saw as paradigm-shifting (Fig. 4.1). The organization Civil Society for Climate Action (SCAC in Spanish) was formed as an umbrella group of dozens of environmental organizations ahead of the UN climate meeting which was due to take place in Santiago in November 2019; due to the *estallido*, it moved to Madrid. Nonetheless SCAC continued to operate and in February 2021 issued a report outlining the Eco-constitution:

this should hold an “eco-centric” view and be based on “the search for harmony between the human species, all other species who live on Earth, and existing ecosystems, and respect for nature” (SCAC 2021, 1). This idea that society and nature are intimately connected, and not separate hierarchical spheres where humans dominate over nature, is captured in Articles 8 and 18 which, respectively, recognize that “individuals and groups are interdependent with nature and form with her an inseparable assemblage” and put nature as a rights-holding subject on par with individuals and Indigenous groups.¹ At its core, this bio- or eco-centric view was anathema to the ideological right, who advocated for an anthropocentric view of law and the constitution and believed better environmental protections were possible within that framework (López and Rodríguez 2022; see also comments by Hernan Larraín, CC member of the Evopoli party, mentioned below).

That nature and society are interdependent is central to Indigenous philosophies, including Mapuche philosophy. In Mapuche thinking, nature and human society are not separate—nature is not “out there” and the object of assessments like pristine or intervened, but is co-constitutive of human experience (Loncon 2023; Millaleo 2021). The emphasis is therefore on relationships, which should be reciprocal and are spiritual. This philosophy is shared by other Indigenous groups in Chile, and non-Indigenous activist groups embraced it to advocate also for RoN.² That said, in Chile, RoN were not linked to a specific Indigenous concept or deity (as was the case in Ecuador and Bolivia, discussed below). Rather, advocates of RoN understood the concept to have deep roots in both Indigenous and certain Western philosophies like intergenerational ethics (e.g., as proposed by Hans Jonas) and feminist perspectives (e.g., writings by Vandana Shiva, Karen Warren, and others) (Barandiaran et al. 2022). Globally, Pope Francis and UN officials have advocated for RoN. Part of the power of RoN lies precisely in the fact that the basic values which RoN legal provisions express carry resonance across many global contexts.

¹ I have translated the Spanish *pueblos* as “groups” rather than “nation” because the articles refer to sub-national entities (e.g., within Chilean borders). The legal status of Indigenous peoples in Chile is unlike that of recognized Indigenous nations in the USA, who as nations have political and legal autonomy.

² See for instance the CC manifesto of the Atacama Constitutional Assembly, led in the CC by Constanza San Juan.



Fig. 4.1 The idea of an “Eco-constitution” (Una Constitución Ecológica) gained widespread support (Artwork by Antonia Lara G., used with permission)

Concretely, nature’s rights are three: the right to exist, to regenerate, and to maintain and have restored its functions and dynamic equilibria (Article 103). Though it may seem superfluous at first, nature’s right to exist is threatened by extensive and well documented extinction of species, native forests, glaciers, and more. Together, these three rights affirm the autonomy of nature in a relationship of interdependence: nature cannot exist only as a result of human engineering or artificial processes; rather, nature exists as autonomous ecosystems outside the control of (but in existence with) humans. Environmental organizations, working with constitutional scholars, published several reports advancing RoN as one part of a series of constitutional principles needed for an Eco-constitution (e.g., Hervé 2021; Galdámez et al. 2021). By contrast, the Socialist Party’s environmental committee also advocated for “harmony” and advancing the “regeneration of nature’s cycles”—which gets to the idea of nature’s autonomy from humans—but did not name RoN explicitly, pointing to one of many rifts between non-traditional groups participating in constitutional politics for the first time and traditional parties (Partido Socialista 2020). As reflected in their respective comments at the virtual launch of the book, *A Socioecological Constitution for Chile*, held on 21 August 2021 and organized by the think tank Centros de Estudios Públicos, whereas right-wing CC member Hernan Larraín found RoN to be infeasible, Mapuche lawyer Salvador Millaleo argued RoN could help prevent harm as well as advance repair and accountability.

Three articles—127, 128, and 129—provide further guidance on how RoN would advance prevention. Though these articles do not explicitly refer to RoN, they further specify the state’s responsibilities for preventing harm and advancing more just, progressive, and holistic environmental protections. The first two articles emphasize environmental protection as a responsibility of the state and society, through education and research, and guided by justice-based principles that have become important globally also in response to the failures of conventional approaches: prevention, precaution, in solidarity with future generations, and environmental and climate justice. Some of these are found also in the Socialist Party’s environmental report referenced above. Article 129 singled out climate change and the state’s responsibility for adopting climate actions at home and abroad, by fostering international solidarity and dialogue. This capped another novelty of the CC, which declared, within its first month that its work was happening in a “climate and ecological emergency.” Every member and committee was tasked to keep the need for

progressive environmental and climate action in mind. This speaks to the CC's intention of making environmental care transversal to the entire constitution, as SCAC called for in its February 2021 report (see also Galdámez et al. 2021).

Importantly, the 2022 constitutional text put RoN near the top in the hierarchy of laws. This is evident in Article 18 which specifies individuals, groups, and then nature as rights-bearing subjects. Other articles state that nature's rights place limits on the right to entrepreneurship (Article 80) and the rights of territorial organizations (Articles 187–8). An article on sustainable development says the state, within its financial constraints, will pursue sustainable development in “harmony with nature” (Article 184). Though using different language, as discussed by Lessmeier 2025, in this volume), articles on mining included the environment as a constraint. RoN appear also in other articles, for example, the goals of education are defined to include, among many other things, respect for nature's rights (Article 35) and an article on bioethics integrates nature (Torralbo and Salazar 2024, this volume). The judicial system as a whole was tasked with advancing RoN (Article 307), and Article 119 specified that any person or group could seek protective judicial action (what is known in Spanish law as *cautela* or *tutela*) for environmental rights and RoN. Of fundamental importance for the Eco-constitution were articles that provided a framework for containing and enforcing these measures, the Ombudsman for nature, as discussed by Wercinski (2025, in this volume).

RoN AS JUSTICE

To what extent are RoN conducive to creating a new economic model? Or, perhaps more simply, do RoN offer a pathway to transform environmental law and policy? Some CC members from grassroots movements saw RoN as part of a series of measures needed to move Chile away from an economy focused on the extraction and export of raw materials—minerals, fisheries, timber, and agriculture for export—to one that is more sustainable, with more value added, and more attuned to local needs and

possibilities (v. Lessmeier 2025).³ From their perspective, this export-based natural economy is highly exploitative, as Chile’s ecosystems are put at the service of far-away consumer economies while leaving behind ecological destruction. While many lawyers would probably agree with this assessment, in their writings lawyers typically advocated for RoN for its potential to achieve environmental justice, understood as access to legal recourse, the courts of law, and environmental information; the ability to influence decision-making and force a more holistic view of nature; and expanded legal standing to defend local ecosystems and territories (Hervé 2021; Galdámez et al. 2021). Others emphasized the need for RoN to institutionalize lived realities in which communal, collective, and group identities, particularly Indigenous ones, are intimately rooted to a particular place or ecosystem. Often, these places have spiritual significance as deities (Loncon 2023; Millaleo 2021).

Compared to existing international models, the Chilean proposal perhaps emphasized the second perspective detailed above, which I call here a justice focus. These three perspectives—RoN as new economic model, as spiritual practice, and as justice—can be complimentary in practice and in theory, but they could also come into conflict. In their study of the politics of RoN, political scientists Craig Kauffman and Pamela Martin (2021) identify two models of RoN: “nature’s rights” and “legal personhood.” In the nature’s rights model, a set of unique rights (those found in Article 103, above) apply to all of nature, and everyone has authority to speak for nature. It is a largely reactive model, meaning “RoN are protected when violations are reported and upheld” (Kauffman and Martin 2021, 15). By contrast, under the legal personhood model, the rights of a specific ecosystem are recognized to have what amounts to an extension of human rights which are upheld by guardians appointed to make proactive decisions to prevent violations of RoN. Examples of the legal personhood model are found in Colombia and India, where judges delivered decisions enacting RoN, and in New Zealand, where Maori iwi negotiated recognition of specific ecosystems—the Whanganui River watershed, the Te Urewera forest—as living spiritual beings, and codified these in treaty law with the New Zealand government (Kauffman and

³ This view is seen clearly in the “Declaración Pública ‘Norte Constituyente’” signed by Indigenous and non-Indigenous CC members from the north of Chile, and released in the early weeks of the CC’s work. 23 CC members identified as grassroots socio-environmental activists, elected in every save a few of the country’s regions.

Martin 2021). By contrast, Chile follows the nature’s right model, found in Ecuador, Bolivia, and parts of the United States.

Ecuador and Bolivia’s RoN laws are similar in many ways. They both recognize all of nature as a living spiritual being, the Andean deity Pachamama, with the rights to exist, regenerate, and maintain its integrity. Both empower any citizen or entity to denounce violations of RoN. However, a fundamental difference lies in the relative hierarchy of RoN to other constitutional laws and rights. In Bolivia, RoN are codified not in the constitution but in the 2012 Framework Law of Mother Earth and Integral Development for Living Well, which promotes socioeconomic development. It effectively subordinates RoN to socioeconomic rights, including the right to live “free from material, social and spiritual poverty,” and empowers the government to pursue economic activity—including mining and monocrop agriculture—to fulfill social and economic aspirations.

By contrast, Ecuador’s 2008 Constitution opens saying, “we decide to build a new form of civil coexistence, in diversity and harmony with nature, to achieve *buen vivir*, the *sumak kawsay*.”⁴ Sumak kawsay is an Indigenous Kichwa concept that refers to an alternative development paradigm premised on balance and harmony. Thus, RoN here have full constitutional status, are transversal, and recognize nature’s rights to be repaired beyond human claims to compensation and be considered independent of human interests. As a result, the 2008 Constitution does not subordinate RoN to economic rights and debates over extractivism took place in the political sphere while the courts of law took up RoN cases. Between 2008 and 2020 there were 34 court cases invoking RoN, and in 27 of these the courts upheld RoN (Kauffman and Martin 2021). That said, debates in the political sphere were indeed conflictive, with many grassroots activists and anti-mining protestors emphasizing that effective implementation of RoN would have meant protecting also human rights (Rzedzian 2023).

The Chilean experience with RoN is similar to Ecuador and Bolivia in its expansiveness—all of nature is included, everyone has authority to address violations to RoN—and in terms of the rights recognized, but

⁴ The Spanish original reads, “Una nueva forma de convivencia ciudadana, en diversidad y armonía con la naturaleza, para alcanzar el buen vivir, el sumak kawsay.” Preamble of 2008 Constitution of Ecuador, available here, <https://www.lexis.com.ec/biblioteca/constitucion-republica-ecuador>. Accessed on 16 June 2024.

there are also differences. Chile follows RoN experiences in parts of the USA where nature has been recognized as a natural and living entity, but not a spiritual being. And the Chilean experience follows the Bolivian precedent of creating an ombudsman for nature (though this was never implemented in Bolivia) (Kauffman and Martin 2021). Like in Ecuador and the USA, Chile’s 2022 constitutional text did not subordinate RoN to economic activity, and instead specified that RoN, harmony and stewardship were transversal and set limits on other rights. As noted above, Chilean RoN sought to limit corporate and business rights, as is the case with RoN statutes in the USA. *Buen vivir*, instead, is mentioned only once in Chile’s 2022 constitutional text, in Article 8. Instead of *sumak kawsay*, in Chile RoN were part of what was called an Eco-constitution which emphasized environmental protection first and foremost, as a matter of ethics, justice, and future well-being (FIMA 2021). This included recognizing rights of access to institutions, information and public services; affirming an ethics of care and solidarity across territories and generations; and attending to injustices in patterns of economic activity. As mentioned above and discussed by Wercinski (2025), the Ombudsman for nature helped tie it all together with a mechanism for enforcement.

CONCLUSION

The 2022 constitutional process gave RoN visibility in Chile like never before and, arguably, has contributed to rendering this an increasingly familiar idea. A range of environmental advocates, from grassroots activists to those trained in law, coalesced around RoN and particularly its central tenet, to advance a bio-centric view of the world, rooted in a holistic approach that recognizes the interdependence of human and non-human beings. For its advocates, RoN represents a mechanism for transforming economic, political, social, and cultural systems that have caused great ecological destruction even when complying with existing, conventional environmental rules and regulations. In other words, existing environmental policies have proven incapable of protecting the natural world and thus safeguarding the ecosystems that sustain all life, forcing a search for alternatives, like RoN, which revalue nature and empower it, legally and politically. Crucially, the Chilean experience advanced a form of RoN not linked to specific spiritual beliefs (that is, a secular RoN) and networked within a range of norms and mechanisms which all together formed the

Eco-constitution. Nature and environmental protection were not circumscribed to a single right or principle, but added transversally to reshape economics, education, science, and more.

Will RoN advance in Chile even without a constitutional mandate? In some ways the electoral swings observed in Chile between left- and right-wing forces are observed also in other societies—see for instance the shift from Presidents Obama to Trump in the USA, or the 2024 European Union elections where support swung from Green parties to far-right parties. Climate change and environmental concerns play a role in all these electoral dynamics, possibly contributing to growing ideological cleavages. The 2022 Chilean experience suggests that it was grassroots and expert groups that introduced RoN into the constitutional debate, and available data suggest they convinced only a segment of those in traditional political parties to support them. Nevertheless, and although the Eco-constitution failed at the ballot box, Chile’s legislature passed several landmark environmental laws in the months and years that followed—on climate change, water, and conservation and protected areas. They also rejected others, e.g., a glacier protection law years in the making. In short, RoN and related transformations remain both contested and important in electoral politics; the inclusion of RoN in the 2022 text suggests that grassroots groups will be crucial to advancing such changes.

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An Ombudsman for Nature: Putting Environmental Protection into Practice Within an ‘Eco-constitution’

Mia Wercinski

Abstract A component of the 2022 ‘Eco-constitution’ was the creation of an Ombudsman for Nature (in Spanish, *Defensoría de la Naturaleza*)—an office with the authority and tools needed to hold accountable the myriad forces responsible for ecological destruction. The need for an Ombudsman stemmed from Chile’s relatively weak environmental enforcement capacities in a context of rich biodiversity and export-oriented extractivism of minerals, industrial agriculture, and forestry products. This chapter explores the articles within the 2022 constitutional text that sought to create an Ombudsman for Nature, focusing on their necessity and the office’s four central traits.

Keywords Environmental governance · Rights of Nature · Environmental protection · Accountability · Environmental law

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Articles

Article 148

1. An autonomous body, with legal personality and its own assets, called the Ombudsman of Nature, shall have as its function the promotion and protection of the rights of nature and environmental rights guaranteed in this Constitution, in international environmental treaties ratified and in force in Chile, against acts or omissions of the organs of the State Administration and private entities.
2. The Nature Ombudsman's Office shall be deconcentrated into regional ombudsman's offices. The law shall determine the attributions, organization, operation and procedures of the Ombudsman of Nature.

Article 149

The Ombudsman of Nature shall have the following attributions:

- a. To supervise State agencies and private entities in the fulfillment of their obligations regarding environmental rights and the rights of nature.
- b. To formulate recommendations on matters within its competence.
- c. To process and follow up on complaints about violations of environmental rights and to derive in its case.
- d. Deduct constitutional and legal actions, when environmental and nature rights are violated.
- e. Promote training and education in environmental and natural rights.
- f. Any others entrusted by the Constitution and the law.

Article 150

The direction of the Ombudsman of Nature will be overseen by a defender of nature, who will be appointed in a joint session of the Congress of Deputies and the Chamber of Regions, by the majority of its members in office, from a list of three candidates prepared by environmental organizations of civil society, in the manner determined by law.

INTRODUCTION

In 2022, the Constitutional Convention of Chile proposed a new text to replace the 1980 Constitution that was written and ratified during the 1973–1990 military dictatorship of Pinochet. Within this newly proposed constitution, the creation of certain articles reflected ongoing efforts to expand environmental rights and specifically, to establish an ‘Eco-constitution’ (Barandiaran 2025a, this volume). This chapter explores three articles that sought to institutionalize legal tools for upholding and enforcing environmental rights, including Rights of Nature (RoN). One of the most novel aspects of these efforts is found in Articles 148–150 of the 2022 constitutional text, which develop the Ombudsman for Nature.

Articles 148–150 detail the structure, roles, and appointment process for the Ombudsman for Nature, which would have created an autonomous state office for environmental legal advocacy and action. Compared to Chile’s 1980 Constitution and to governance systems in place globally, an Ombudsman for Nature was a novel move. Article 148 outlines the structure of the Ombudsman for Nature as an autonomous government body with regional offices, tasked with upholding environmental rights and international environmental treaties, and for reviewing the actions of both government and private entities. Article 149 summarizes the Ombudsman for Nature’s legal and public-facing roles and responsibilities, such as supervising government and private entities, generating recommendations on environmental issues, looking into legal complaints of violations of environmental rights and delivering legal action when violations occur, as well as promoting the training and education of environmental and natural rights. Article 150 clarifies that the Ombudsman for Nature will be overseen by one main Advocate, who would be congressionally appointed out of a group of candidates nominated by environmental organizations.

While various countries have constitutionally recognized the significance of legal environmental protection, the model proposed in Chile’s 2022 constitutional text outlines a unique format for advancing environmental rights. The model presents a direct platform for judicial investigation, litigation, and legal responses to violations of environmental rights—a platform that aims to be more accessible to the public, with a greater ability to hold both government and private entities accountable, and ultimately strengthens environmental justice by expanding emphasis on accountability and responsibility. The focus on public access and state

responsibility are especially significant, offering a potential intervention to address widespread and persistent mistrust among Chilean publics of state and government agencies and their relationships with the corporate sector. This chapter identifies common themes in Articles 148–150, their cultural and political implications, and their broader significance within the long history of the Chilean environmental movement—highlighting the critical need for renewed forms of legal accessibility and accountability within environmental protection.

THE NEED FOR ENVIRONMENTAL PROTECTION

For several decades leading up to these efforts at constitutional reforms, Chile and other Latin American governments created frameworks, platforms for discourse, and mobilization efforts to forge and strengthen environmental regulations. Principles of sustainability, dignity, and rights of protection and accessibility have long been central in debates and movements surrounding environmental justice and protection, and organizations have put forth legal instruments such as agreements, research initiatives, and jurisprudence through litigation efforts to advance such principles.

One such foundational framework for environmental rights and justice in the region is the Kichwa Indigenous concept of *sumak kawsay* (or *buen vivir*, typically translated into English as ‘good living’)—a concept that describes seeing the natural world not as property or resources, but instead accepting a broader notion of well-being and cohabitation with others and nature (Gudynas 2011; Walsh 2010). Such a shift in perspective gained particular strength in Ecuador with the adoption of a new constitution in 2008, in which *buen vivir* is a guiding principle for not only environmental protection but also for national development. That constitution was also the first in the world to formally recognize a related concept, Rights of Nature: “Nature or Pacha Mama, where life is reproduced and realized, has the right to the integral respect of its existence and the maintenance and regeneration of its life cycles, structure, functions, and evolutionary processes’ (Art.71). It also has the right to reparation or restoration (Art.72)” (Walsh 2010, 18). Rights of Nature thus presents one method through which the environment can be legally protected as an entity for its intrinsic value, rather than as a resource valued instrumentally, and therefore entitled to protection and to health. Ecuador’s 2008 Constitution ushered a new era for Rights of Nature, turning a

cultural philosophy into a foundation for legal development and policy. Many in Chile hoped to follow this example (Barandiaran 2025a). Of particular relevance to this chapter, Rights of Nature were foundational in the Ombudsman for Nature in Articles 148–150.

These proposals marked significant advancements on the existing institutions created to advance environmental accountability. These are the Environmental Enforcement Agency (in Spanish, *Superintendencia del Medio Ambiente*) and Environmental Tribunals (*Tribunales Ambientales*). These institutions were created in 2010 (and became operational by 2013), after Congress reformed the 1994 environmental framework environmental law that replaced an environmental coordinating agency, called Conama, with a full-fledged Ministry of the Environment (Law 20.417, followed by Law 20.600). This was a transformative change, providing for the first time in Chile dedicated resources for environmental enforcement and accountability (Carrasco and Maillat 2019; Barandiaran 2021). The Enforcement Agency is tasked with investigating compliance with environmental laws and administrative decisions, particularly those made through the environmental impact review process, and the Tribunals offer a forum for companies and citizens to contest state agencies' administrative decisions. Prior to the creation of the Enforcement Agency and Environmental Tribunals, all enforcement, compliance, and accountability actions were undertaken by Conama—widely recognized as under-staff, under-resourced and, as a coordinating agency, lacking the autonomy to pursue violations of environmental rules and regulations.

Three Environmental Tribunals, with regional jurisdictions (north, center, and south), can “order the reparation of environmental damage and annul illegal administrative acts” (Berasaluze et al. 2021, 15). The success of the tribunals perhaps explains their presence in the 2022 constitutional text which expanded their reach, from just three to one in every region (as stated in Article 333). In just one decade since coming into operation, the Environmental Tribunals have improved the quality of legal expertise applied to administrative environmental decisions and expedited cases against the state and companies for arbitrary or illegal administrative decisions affecting the environment. As such, they reflect a broader trend of judicialization in Latin America, in which “residents affected by pollution and other environmental harms, or threatened with displacement, use multiple strategies to gain political leverage, mobilizing through disruptive protest politics as well as institutional channels and litigation” (Akchurin 2023, 1; Díaz Chacón 2022).

Nevertheless, scholars argue that the Tribunals remain limited in scope and have not met citizens or communities' demands on environmental matters. Regarding scope, Chilean institutions are focused on reviewing administrative decisions and still lack scientific capacities needed for effective monitoring and enforcement (Bergamini and Pérez 2022; Bergamini et al. 2018). Social unrest and environmental conflict have continued, signaling an inability of existing laws and institutions to effectively anticipate or respond to citizen demands for environmental rights and to remedy for environmental damages (Akchurin 2023; Carrasco and Maillet 2019). One limitation to existing institutions is that the only environmental right that currently exists in Chile is “the right to live in an environment free of pollution,” as defined by pollution regulations (Barandiaran 2021). By contrast, environmental organizations like the nonprofit law firm FIMA have advanced other rights, including “the right to live in a healthy environment and ensure the protection of nature” (FIMA 2024, n.)—a right first formulated in the 1972 Stockholm Convention and now recognized by the United Nations and over 150 national jurisdictions, and which goes well beyond the more limited right to live in an environment free from pollution found in Chile’s 1980 Constitution (Aguila 2021).¹

REJECTION AND DISTRUST

Despite expanding on themes of environmental rights, welfare, plurinationalism, sovereignty, social freedom, and equality—ideas and demands that underpinned the *estallido* and the Chilean environmental movement as a whole—the 2022 constitution was ultimately rejected. As noted in the Introduction to this volume (Barandiaran 2025b), distrust in politics and government institutions remains high, as does frustration with policies still grounded in dictatorship-era principles. For many, there is also grief as the momentum for progressive change stalled following the *estallido* and subsequent failed constitutional reform efforts. Distrust in the state reflects multiple factors, including lack of confidence in environmental protections, suspicions of corruption, and a deep dissatisfaction with formal institutions resulting from a gap between citizens’ expectations and institutional performance (Feddersen et al. 2024). With issues

¹ Author translation of the original Spanish: “Promover activamente el derecho a vivir en un medio ambiente sano y velar por la protección de la naturaleza” (FIMA 2024, n.).

like increased water scarcity and drought, growing hazards like fires and flooding, and increasing demand for minerals leading to the expansion of mining operations, the necessity of environmental protections only grows, and communities live in the reality of that necessity. One such community I had the chance to visit is Calle Larga in the central Valparaíso Region, where we met individuals who are deeply familiar with intersections of environmental threats and different industrial and infrastructure projects.

As part of the Burdick Global Scholars Program research group in Chile in Summer 2023, I joined a team examining questions around constitutional reform and climate change. We met with multiple environmental groups in central Chile, including community members of Calle Larga, volunteer citizen science initiatives and water monitoring groups, people involved in reforestation efforts, as well as university faculty and student colleagues. Across these multiple contexts, we learned about how diverse groups are actively navigating global, regional, and local climate-impacted challenges, and the different types of vulnerability that Chileans in rural and urban communities face regarding the environment. For example, we observed how severe droughts punctuated by heavy rainstorms negatively impact community-managed water distribution systems, which must account for those local climate impacts. Our conversations touched upon a range of climate impacts, including local flooding and regional forest fires, as well as nationwide debates about mining and its consequences, and further issues such as water use, land degradation, air pollution, the energy industry, environmental injustices, and Indigenous rights. This is precisely the range of environmental issues that Chilean scholars identify as having driven support for an ‘ecological constitution’ (Berasaluze et al. 2021). Our experiences in central Chile a year after the reject vote suggest that these concerns, and with them the 2022 constitutional ideas, remained relevant.

In Calle Larga, residents are grappling with climate change also in the form of expanded mining and the transformation of open and agricultural lands into solar and wind energy sources. These pressures make Chile an active battleground for the ongoing struggle to balance the needs of citizens, the needs of the environment, and the ability and willingness of the government to recognize and protect these diverse needs. Residents worked collectively, sometimes with state support, to confront these various challenges (on collective environmental action, see Martínez-Alier et al. 2016). Yet another challenge I observed while in central Chile had to do with the privatization of land, resulting in reduced access

to parks or wilderness areas. Studies show that time spent in nature is associated with increased perceived value of the environment, leading to greater pro-environmental attitudes and behaviors (DeVilleville et al. 2021). All this points to both the multidimensional qualities of environmental (in)justice, as outlined by Park and Pellow (2011), and to collective, social, and community-level ways in which climate and environmental needs are experienced, well beyond the individual.

THE OMBUDSMAN FOR NATURE

The Ombudsman for Nature contained four main traits which together addressed the fact that, under the 1980 Constitution, citizens lack the necessary tools to translate environmental suffering and lived experiences into legal complaints. Under the 1980 Constitution, to bring legal attention to climate concerns, individuals need to provide evidence of having suffered direct harm, for example, because an administrative decision was arbitrary or because a company failed to comply with pollution standards (Hervé 2015; Barandiaran et al. 2022). What makes this ineffective is that it is often communities, rather than individuals, that suffer indirect, collective, and/or cumulative harms, and seek to act to prevent these. Under current law, such community harms can be difficult to prosecute, as it is individuals that must seek remedy for individual harm. The Ombudsman for Nature expanded the scope of who has legal standing to bring a case to court and provided stronger opportunities for enforcing legal decisions. In a world with Rights of Nature, the Ombudsman promised to be the advocate and representative of Nature, understood as a subject with rights. Bolivia's 2012 Rights of Nature law included also an Ombudsman for Nature, but this was never implemented (Kauffman and Martin 2021). The Chilean 2022 proposal had four central traits:

1. An Autonomous Body with Its Own Assets and Regional Offices

As an autonomous body, the Ombudsman would have stood separately from—and complementary to—other environmental institutions contemplated in the 2022 constitutional text, such as the Environmental Tribunals (Article 333), the judiciary (Article 307), local, regional, and national government (e.g., Articles 202, 220, and 106 respectively),

and a national service for protected wilderness (Article 132). Autonomy underscored a desire for the state to allocate resources to advocate for nature—as a subject with rights—to have its own, independent institutional voice. In practice the Ombudsman, coupled with Rights of Nature, provides legal standing and tools for recognizing collective or community-level environmental needs and complaints. For some of the lawyers who championed the Ombudsman, it could have “centralized certain capacities that are currently dispersed, and also expand opportunities for action and defense of nature and of human environmental rights” (Barandiaran et al. 2022, 27).

2. Tasked with Enforcing Environmental Laws Found in Chilean Law and in International Treaties

The articles detailing the Ombudsman for Nature explicitly include authority to enforce Chilean and international treaty law, and thus reflect global and Latin American debates environmental advocates have been engaged in. The 2022 text caught Chile up with the global standard, by recognizing the right to live in a healthy environment (Article 104) and the right to enjoy access to nature (Article 107). Furthermore, among the international treaties that bear mention here is the ‘Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean,’ also known as the Escazú Agreement. Adopted in 2018 and ratified by Chile June 2022—the thirteenth and final nation to ratify it, consolidating its entry into force—the Escazú Agreement serves as both a legal instrument for environmental protection and as a human rights treaty, built on the foundational understanding that legal certainty and trust in public institutions are crucial to sustainable development (UN 2018). As a UN and international treaty, the Escazú Agreement would have fallen within the Ombudsman’s purview.

The Escazú Agreement is an international treaty that forges a new path by connecting human rights with environmental care, protecting human rights defenders and activists, and advancing environmental justice. For example, the agreement includes the right to live in a healthy environment, the right to defend the environment, and rights of access to environmental information, courts of law, administrative proceedings. It also emphasizes the interrelation and interdependence of access rights,

highlighting how they build on each other, and the responsibility of states to create safe conditions for environmental defenders (UN 2018). Escazú together with the Ombudsman for Nature created powerful institutional opportunity for individuals to have greater access to environmental advocacy and justice.

3. Supervising, Following Up on Complaints, Pursuing Actions When Environmental Laws Are Violated, All led by an Advocate/Defender for Nature

A designated Advocate/Defender that ‘speaks for’ nature, or the position of a prosecutor or attorney general with the capacity to investigate and litigate violations of environmental law, is also significant. In the context of the Escazú Agreement, the Advocate makes progress toward preventing violence against human and environmental rights activists or, at least, holding those responsible for abuses criminally accountable, and makes this an explicit responsibility of the state. In a broader global context marked by multiple judicial innovations—judges designating ad hoc stewards of rivers or forests to protect their rights, as in India or Colombia; courts deciding in favor of youth and future generations for violations of their rights to a stable climate; and the International Criminal Court’s recent move to initiate policy to advance accountability for environmental crimes—a constitutionally appointed Advocate represents yet another potentially game-changing innovation by transitioning to a bio-centric, collective approach to environmental justice (cf. Kauffman and Martin 2021). What makes the Ombudsman for Nature especially significant was the effort to make this a responsibility of the state—it builds on a need, growing desire, and willingness to increase the moral stakes of crimes against the environment as threats to human life itself.

4. Advocate/Defender for Nature Appointed by Congress from a List of Candidates Proposed by Environmental Organizations

Finally, the Ombudsman for Nature advanced environmental law and practice with a dose of democratic accountability coupled with expertise, by specifying that the Advocate/Defender for Nature would be selected by Congress from a list of candidates nominated by environmental organizations. By incorporating experts in the environmental field, not just

political actors, this both decentralizes power and reduces the risks of greenwashing. It also provides the legislature—a democratic body—with power and oversight, making it a democratic process. This two-tier accountability structure was another one of the novel mechanisms that the Ombudsman for Nature sought to establish as a tool for increasing citizen participation, environmental protection, and accessibility.

CONCLUSION

All efforts to improve environmental protection are concerned with the connections—damaged, thriving, or otherwise—between individuals, communities, organizations, businesses, governments, and policies. Climate change impacts continue to put further strain on these connections, while also pointing to new ways in which local, regional, and global dynamics interact. Even during a short visit to Chile, we witnessed some of the ways in which these interactions have become visible in different ways, including disruptions caused to millions by a rainstorm (Ramos Miranda 2023) or caused by a dried-out lake that changed a rural town’s relationship with the surrounding ecosystem (Voiland 2019). Reckoning with political histories of dictatorship and contemporary constitutional reform efforts, across ecological contexts that span varied, resilient, and threatened ecosystems, many environmental efforts in Chile stand at the forefront of movements for sustainability.

The Ombudsman for Nature, as an unprecedented government institution in Chile, sought to provide legal means for protecting and promoting Rights of Nature; by allowing nature to be represented within the legal system by an autonomous agency as a subject with its own rights, these constitutional articles sought to bridge law, government, and environmental rights to a degree that no previous constitution had envisioned. Such forms of environmental protection and forward-thinking constitutional changes were novel not only within Chile—they also represent emergent global efforts to reconfigure societal, legal, and ecological interconnections.

Articles 148–150 demonstrate an attempt to both forge a new relationship between the public and the government through accessibility and accountability, and also to provide a new approach to environmental protection grounded in Rights of Nature. Such a reconfiguration of environmental law also re-articulates relationships between individuals, private companies, public organizations, and government policies.

The Ombudsman for Nature can serve as a model for future attempts to find environmental protection strategies at the intersection of citizen inclusion, legal structures, and transformative environmental philosophies like Rights of Nature. Further expansion of engagement with environmental justice as a collective experience, rather than an individual one, is necessary moving into a future of heightened climate conflict and urgency. Initiatives like the Ombudsman for Nature represent a possibility to create better structural approaches to collective representation and remedy through increased accountability and accessibility to courts, information, and legal action.

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Managing Mining: New Environmental Contracts In Light Of Loss, Inequality, and Climate Change

Katie Lessmeier

Abstract Mining, particularly for copper, has long been considered ‘Chile’s national salary.’ Similarly, hopes for national wealth have long coexisted in tension with the environmental harms that mining causes—water use, toxic waste, landscape destruction, and more. This tension has become acute as mining has intensified and its impacts amplified with climate change. The CC grappled with these competing goals in its efforts to redefine the conditions for mining in Chile, aiming to create a framework better able to take mining into a future rocked by climate change. This chapter highlights the importance of constitutional reform for the governance of extractive operations, in Chile and elsewhere, as well as the implications of the CC Statute of Minerals (Articles 145–147) for how to assess and understand the global expansion of ‘green’ energy initiatives.

Keywords Climate change · Extractivism · Copper · Montana · Chile · Green energy · Resource governance

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Articles

Article 145

1. The State has absolute, exclusive, inalienable and imprescriptible dominion over all mines and mineral substances, metallic, non-metallic, and deposits of fossil substances and hydrocarbons existing in the national territory, with the exception of surface clays, without prejudice to the ownership of the land on which they are located.
2. The exploration, exploitation and use of these substances shall be subject to a regulation that considers their finite, non-renewable nature, intergenerational public interest and environmental protection.

Article 146

Glaciers, protected areas, those established by law for reasons of hydrographic protection and others declared by law, are excluded from all mining activities.

Article 147

1. The State must establish a policy for mining activity and its productive chain, which will consider, at least, environmental and social protection, innovation and the generation of added value.
2. The State must regulate the impacts and synergic effects generated in the different stages of the mining activity, including its productive chain, closure or stoppage, in the manner established by law. It is the obligation of whoever carries out the mining activity to allocate resources to repair the damages caused, the environmental liabilities and mitigate its harmful effects in the territories where it is developed, in accordance with the law. The law will specify the way in which this obligation will apply to small-scale mining and pirquineros.
3. The State shall adopt the necessary measures to protect small-scale mining and pyre mining, promote them and facilitate access to and use of tools, technologies and resources for the traditional and sustainable exercise of the activity.

INTRODUCTION: GLOBALIZATION AND GROWTH IN THE MINING SECTOR

On August 14, 2023, just weeks after I returned from our fieldwork in Chile, a momentous shift occurred much closer to home—in the Montana Supreme Court. The state, the Court concluded in *Held v. Montana*, could no longer turn a blind eye to the potential climate impacts when evaluating new fossil fuel projects. This might seem like a painfully obvious stance, but for me, a Montana resident long resigned to the state’s indifference to its environmental responsibilities, it came as a welcome shock.

The verdict hinged on the Montana Constitution’s guaranteed right to a “clean and healthful environment” for both “present and future generations.” Despite this eco-conscious language, a rarity among state constitutions in the USA, the court found that Montana’s carbon footprint is equivalent to that of entire nations such as Argentina, the Netherlands, or Pakistan, branding it a “substantial factor” in the global climate crisis (Gelles and Baker 2023). This is largely due to Montana’s rich mining history which, similar to Chile’s own industry, has both brought economic benefits and wreaked environmental havoc. The Berkeley Pit, a former copper mine in Butte, Montana, is part of one of the largest Superfund sites in the United States, a testament to the environmental degradation that continues to jeopardize local ecosystems and communities (EPA n.d.a).¹ In 1972, Montanans poured their frustration over the environmental impacts of extractivism and the lack of community benefit into the demand for a new constitution.

“Some historians called it a corporate colony: all the profits were going out of the state, and residents weren’t seeing the benefits,” Michelle Bryan, a law professor at the University of Montana, told the *New York Times* (quoted in Gelles 2023). They described the 1972 Constitution as Montana’s “declaration of independence from corporate mining” (ibid.). The constitutional reform aimed to prevent economic interests from spoiling the rights of Montanans to a clean and plentiful environment, a sentiment echoed in the landmark *Held v. Montana* case.

¹ “The term “Superfund” refers to the Comprehensive Environmental Response, Compensation, and Liability Act passed in 1980, which gives the Environmental Protection Agency the authority and funds to clean up hazardous waste sites, informally known as “Superfund sites” (EPA 2023).

As Chile considers how to preserve its own rich natural resources, particularly mineral wealth, and environmental integrity, I am struck by the importance of making accessible the benefits of nature to all Chileans, rather than primarily to corporations and foreign entities. The demand of Montanans in the 1970s parallels the grievances of many Chileans today: they receive little to no direct benefit from the immense environmental wealth and beauty of their country. Chile's 2022 proposed constitution sought to address such inequalities, particularly with regard to the mining sector, over which members debated the ideal balance of environmental protection, extraction, and benefit distribution. The proposed changes to the mining industry, however, would only be a partial solution to the larger problem of environmental inequality. This chapter explores the potential changes to the mining industry that would have been required by Chile's 2022 constitutional text, along with an overview of other necessary considerations within the green energy sector to pave the way for a sustainable and equitable future.

MINING IN CHILE

Whereas Montana once supplied 23% of the world's copper (Montana Department of State Lands 1975), Chile has since taken the top spot, satisfying 29% of global copper demand, along with significant shares of lithium (22%), iodine, rhenium, sodium, and potassium nitrate.² In 2021, the mining sector accounted for 15% of the country's GDP and more than 62% of its total exports (ITA 2023). Considering the industry's economic importance, it was no surprise that mining took center stage during Chile's Constitutional Convention. However, the discussion went beyond economics, with many constitutional constituents expressing concerns about the environmental and social impacts of the mega-industry.

Lithium-ion batteries have become ubiquitous in modern society, powering everything from electronics and appliances to energy storage and electric transportation (EPA, n.d.b). With the increasing accessibility and demand for electric vehicles, the demand for lithium—an essential component of these batteries—is also surging (Gomes 2023). While the potential for a zero-emission transportation future is promising,

² The same company, Anaconda, owned the largest copper mines in Montana and Chile for five decades until Chile nationalized the industry in 1971 (Finn 1998, 1–28).

exploitative mineral extraction practices in places like Chile undermine the environmental benefits.

The majority of Chilean lithium mining occurs in the Puna de Atacama region of the north using a brine evaporation process that poses threats to the local ecosystem, water supply, and Indigenous communities' livelihoods. Unfortunately, limited transparency of private-sector research has made it challenging to assess the full extent of this technique's environmental impact. Scientists have expressed concern that brine extraction processes jeopardize microorganisms that support other critical components of the food chain (Gutiérrez et al. 2022; Saccò et al. 2021). The mining industry's water usage also poses significant concerns for human and nonhuman life in Puna de Atacama, already one of the driest regions globally. Although the brine that mining companies extract is not subject to the same legal framework as water because it is not fit for human consumption or irrigation, experts speculate that such surface water depletion may attract fresh groundwater from neighboring wetlands, reducing its availability for the surrounding ecosystems and communities. Furthermore, lithium mines produce toxic byproducts, such as magnesium and lime, whose impact extends well beyond the site of operation, and leave unnatural salt mounds in their wake (Blair et al. 2022).

Long before global demand for lithium skyrocketed, Chile's landscape was perforated by copper mines, which have also been criticized (and sanctioned) for their disproportionate use of water and ill-regard for the environment (Prieto et al. 2022). In addition to requiring environmentally invasive infrastructure, the mining process—extraction, crushing, smelting, and refining—releases a plethora of potentially toxic elements (PTE) that accumulate in ecosystems and surrounding communities. In a study examining the Alto El Loa Indigenous Development Area, which is located less than 10 kilometers from a mining operation in Chile's Antofagasta region, researchers found abnormally large concentrations of PTEs in the dust collected on windows and roofs, which they linked to local copper mining activities. Despite the potential health effects associated with the elements detected—cancer, cardiovascular and peripheral vascular disease, developmental abnormalities, and neurological and neurobehavioral disorders—scant attention has been paid to the concerns of the communities, and no official attempt has been made to monitor these impacts (Zanetta-Colombo et al. 2022).

CC members recognized that the current state of regulation and enforcement was not sufficient to eliminate the dark underbelly of mining,

especially amid the economic incentives of the growing centrality of South American minerals in the green energy revolution. The country's current constitution, adopted in 1980, grants absolute ownership of all mines to the state, but also allows for private companies to extract resources through concessions granted by the courts (Art. #19, Sec. 24). The vast majority of copper mines in Chile (72%) are owned by private companies, while the remaining 28% are owned by state-run Codelco. In April 2023, President Boric announced plans to reinforce state ownership of the lithium industry by consolidating operations through Codelco but, until then, the industry remains dominated by private operations Soquimich S.A. (SQM) and Albemarle Chile Ltda (Villegas and Scheyder 2023).

THE 2022 STATUTE OF MINERALS

Chile's mining industry presented the Constitutional Convention with a fundamental conundrum of extractivism: mining has the potential to drive economic growth and mitigate climate change globally, yet it often exploits the communities and ecosystems it depends upon. For many CC members, finding a solution hinged on reassessing the balance between public and private extraction.

Initially, the Convention's Environmental Commission proposed nationalizing Chile's strategic assets, including copper and lithium (Harris 2022). Convention delegate and Independent Plurinational Coordinator, Ivanna Olivares, adamantly advanced this initiative, explaining that "we (Chile) have had an economy with an extractivist pattern for 500 years, where we get used to being the ones who deliver the raw materials to the First World and they are the ones who industrialize and restrict our freedom to be able to decide sovereignly" (El Mostrador 2022, n.). In her eyes, nationalization would enable Chileans to reap the full benefits of their natural resources, rather than relinquish the profits to private, often foreign, corporations. Indeed, many left-wing groups represented at the convention saw the nationalization of mining to be the economic means of guaranteeing social protections enshrined in the new constitution (Cordova 2021). This was also the motivation behind the proposed constitutionalization of the government's responsibility to generate "added value" in the mining processes (Sect. 2 of Article 147). Developing and capitalizing on the more profitable stages of refinement and product development—for example, lithium batteries—instead of exclusively raw mineral extraction, would direct the economic benefit

inward and break from the imperial, exploitative pattern that Olivares referred to.

But while state ownership of the resources was broadly agreed upon, the nationalization of mining companies, i.e. elimination of private extraction, was quickly rejected by the constitutional plenary (Villegas and Ramos 2022). In the debate that ensued, various alternatives were introduced. The Communist Party affirmed the ultimate authority of the state over minerals but proposed allowing private extraction through temporary authorizations. The Social Movements and Social Convergence groups, too, proposed that private operations be allowed, but suggested a mandatory one-third state ownership of said companies. Speaking on behalf of the Chilean Mining Chamber, general manager Manuel Viera admitted these were preferable to complete nationalization, but expressed opposition to both variations, claiming that the uncertainty of the regulation changes would discourage investment, thereby harming the industry (Cordova 2021). The plenary rejected both proposals.

In following sessions, little progress was made in the debate over the balance of power between the state and the private sector (Herrera 2022). In the final draft of the 2022 constitutional text, this dynamic goes unstipulated. The key implication of this absence is that private actors, without a constitutional right to mineral concessions, would experience greater uncertainty in the face of future legislative regulation; i.e., future laws could severely limit or eliminate completely private extraction (HSF Notes 2022). While many CC members hoped that constitutionalizing greater state control over mining would give the state more power to resolve associated environmental and social inequalities, they ultimately settled instead for robust constitutional regulation of mining that would apply to both public and private extraction.

Central to the discussion on regulation was how to ensure the industry's benefits—and harms—could be more equitably distributed. CC members agreed that “whoever carries it out must allocate resources to repair damages caused...,” but rejected a proposal from Frente Amplista Fernando Atria, which went further to allow for the state to directly “allocate part of the resources collected to the repair of socio-environmental damage generated by mining activity” (Herrera 2022, n.). Still, the obligation to repair damages would mark one of the most significant divergences from current regulation of the mining industry. It would require mining companies to compensate communities like those in Alto El Loa, where toxic dust from nearby copper mines settles, and those in

the Puna de Atacama, whose local ecosystem and water supply are threatened by lithium and copper mines (Ecosistemas 2022). Article 147 would provide a concrete channel to address the environmental degradation and social impacts associated with mining activities and deter companies from inflicting further damage.

After much negotiation, the final Statute of Minerals comprised three articles, 145–147. Article 145 established state ownership of all minerals, as discussed above, and required consideration of “[the minerals’] finite, non-renewable nature, intergenerational public interest and environmental protection.” While similar to the 1980 Constitution, which establishes the state’s absolute dominion over all mineral wealth (Art. #19, Sec. 24) and enshrines the right to a clean environment (Art. #19, Sec. 8), the 2022 constitutional text goes further to allow regulation to look forward to future environmental impacts, instead of considering only current effects. In requiring consideration of the limited nature of mineral wealth, the 2022 text echoed a trend encompassed in current legislation (adopted in the 1980s) imposing quotas on the quantity of lithium companies are entitled to extract (Vásquez 2023). The constitutionalization of this theme, however, creates an enforcement mechanism—on the highest level—to guard laws like this from changes in administration and legislative codes.

Article 146 established that no mining was to occur in protected areas or glaciers, which, if adopted, would have prompted significant changes to the landscape of Chile’s mines. While the glaciers of Chile’s national parks are protected, there are no comprehensive regulations to safeguard those outside of park boundaries, rendering them vulnerable to the damages of mining projects (Mendoza 2022). In fact, when a bill limiting mining operations near glaciers was introduced in the Senate in 2021 (it failed), the state-run copper company, Codelco, wrote that such regulation would threaten up to 40% of its copper output, impacting their Andina, El Teniente, and Salvador operations (Sherwood 2021). The Fundación Glaciares Chilenos (Chilean Glacier Foundation)—which addressed the CC to advocate for glacial protections—explains on their website that glaciers provide crucial water reserves for Chilean cities, agriculture, and even mining itself (Shaw n.d.). Article 146 would have created a channel to protect this vital resource.

Article 147 called for a mining policy that considered “environmental and social protection, innovation and the generation of added value.” The policy would have to address each stage of mining—extraction to

site closure—with requirements for damage reparation and special considerations to protect small-scale mining. Article 147, like 145, built upon values already reflected in certain legislation. For example, the Mining Sites and Facilities Closure Law passed in 2012 requires that all mining companies prepare a plan to sustainably end operations in the event of a closure in accordance with environmental regulations (Bambach and Pulgar n.d.). The standard the constitutional text would have created for sustainable and equitable mining operations was certainly novel; it went much further than the 1980 Constitution to safeguard both minerals and affected communities from extraction impacts, but not from thin air. Rather, CC members expanded upon many pre-existing regulations, elevating their underlying values to constitutional significance.

As the debates discussed above demonstrate, the articles were undoubtedly a compromise of values. Many of the specifics could not be agreed upon and therefore, the final statute lacked a concrete plan for how to achieve the vision the CC members laid out. What the Statute of Minerals did, however, was pave the way for change. In constitutionalizing a strong commitment to the environment and to an equitable distribution of the benefits of mineral wealth, the statute would have set the ultimate standard for future legislation, whatever it may be, to meet.

Although the Chilean people voted to reject the 2022 Constitution, efforts to rectify the unequal distribution of mining benefits and harms have been carried into recent legislation. The new Mining Royalties bill passed in 2023, designed to increase the financial contributions of mining companies (particularly the larger ones) to the state, allocates a portion of the revenue specifically to compensating communities affected by the adverse consequences of mining activities. Finance Minister Mario Marcel explains, “With this legislation, we seek to avoid what happened many times with our country’s natural riches: they were exploited, they disappeared, which left very little for the country and its future development” (Cambero 2023, n.). Many also view the anticipated nationalization of lithium mining as a means to redirect the benefits of mining inward to the Chilean people, rather than to private corporations. However, the mining industry is just one sector that creates and perpetuates environmental inequalities of different kinds. There are many cases where the ‘green’ energy and conservation sectors are also implicated in driving environmental inequalities (Partridge 2022), often masked by pledges of environmentally friendly innovation and economic development.

“GREEN” ENERGY IN CHILE

One such example is the case of the growing green hydrogen industry. In 2022–2023, the Boric administration announced plans to use copper and lithium revenue to finance new hydrogen production projects. These utilize renewable energy sources to produce hydrogen fuel that can be used in industrial processes and transportation. Unlike some other renewable energy sources, hydrogen fuel can be stored long-term. With Chile’s abundant solar and wind power capacity, the government anticipates that the country will become a global leader, producing an estimated 13% of the world’s green hydrogen at highly competitive prices (Conley 2023). In June 2023, the World Bank approved a US\$150 million loan for the development of Chile’s green hydrogen sector, the first loan it has given with this aim (World Bank 2023). Although such projects have the potential to provide clean fuel for the country’s current carbon-reliant industries, particularly mining, it is not the panacea that many proponents claim. Hydrogen production is energy, water, and land intensive. Furthermore, despite the potential benefits, some claim that because the emphasis of development is on producing a ‘commodity for export,’ Chileans themselves will reap little benefit. This is compounded by the high price green hydrogen is expected to command, making it accessible only to Chile’s wealthiest sectors (OLCA et al. 2023).

Exacerbating this lopsided distribution of benefits, the solar and wind energy projects required for Chile’s green hydrogen initiative have adverse consequences for local communities and ecosystems (CREW 2023). As the impacts of climate change continue to disrupt water supplies, some ranchers struggle to find sufficient grazing for their livestock and are forced to find alternate uses for their land—diversification that can include leasing land to solar energy companies. Though not extractive in the sense associated with mining and mineral removal, the construction of solar plants affects local flora and fauna. Multiple studies have shown that solar projects across Chile affect the microclimate and ecosystems in which they are built (Suuronen et al. 2017). Solar plant construction often requires the removal of native plants and occurs without adequate community consultation (OLCA et al. 2023). A typical solar plant provides few local jobs (Brunet 2022), and residents do not usually benefit significantly from the energy generated since it is directed to larger energy markets in Santiago or industry.

Similar complaints have been made concerning wind energy projects in Chile. Residents of Renaico, located in inland, southern Chile, provide one example, repeatedly calling attention to the environmental and audio-visual damages from the nearby Renaico Wind Farm (Vallejos-Romero et al. 2020). With the removal of plant cover often necessitated by turbine construction, the soil is left vulnerable to erosion from wind and rain. Combined with habitat fragmentation due to the infrastructure required to support the farm—powerlines, roads, etc.—this makes the crowding out of native species for their more adaptable invasive counterparts more likely. Studies have demonstrated that wind farms increase rates of bird and bat mortality, and can affect their migratory and breeding patterns (Dai et al. 2015). While Chile’s renewable energy, similar to mining, is praised for its role in facilitating the global transition away from fossil fuels, the adverse local impacts have been largely neglected. Add to these concerns the issue of water use in energy initiatives of all kinds—in a broader context where, at the end of 2021, more than half of Chileans lived in an area deemed to be in “severe water scarcity” (Bartlett 2022)—and another critical question emerges: as important as renewable energy is to prevent the most extreme effects of climate change, how much water can Chile afford to divert into such projects?

While wind and solar energy require comparatively little water, mining and green hydrogen are a different story. The success of both industries relies on substantial fresh water availability, more than the country can naturally supply. To meet its goal to keep freshwater use in mining operations under 10% by 2025 and 5% by 2040, the government has approved the construction of numerous desalination plants, particularly in the northern Antofagasta region (Bnamerica 2022). Although this technology is framed as a solution to the socio-environmental conflicts over freshwater overuse, a recent examination of desalination in the Antofagasta Region found this claim contradictory for communities in proximity to such projects. These communities were subject to “four mechanisms of dispossession—through exclusion from decision-making, through physical displacement, through environmental degradation (and related social impacts), and through inequitable distribution of benefits and burdens” (Campero et al. 2023, 236). The amounts of seawater removed, chemicals utilized in the process of reverse osmosis (a common desalination technique), and the disposal of the resulting brine have the potential to alter the composition of the seawater, thereby affecting local marine ecosystems, which also constitute a local economic resource. Because

most desalinated water is used for industry, often mining, the communities do not benefit from increased water security to the extent that is often suggested (Campero et al. 2023). Like solar and wind energy projects, desalination is described in terms of large-scale development and environmentalism, obscuring or disregarding local-level impacts.

CONCLUSION

For many Chileans, the hope for constitutional reform was not a reflection of specific grievances with the 1980 Constitution's text, but rather a call for change to the status quo. Unfortunately, current extraction in Chile—including both mining and other 'green' energy projects—tends to overlook localized complaints in the name of technological progress or the global fight against climate change. While commendable in rhetoric, this discourse often serves to justify local-scale ecological destruction and exacerbate inequality. The 2022 constitutional framework provided an opportunity to regulate mining in a manner that prioritized the well-being of the Chilean people and their environment, moving beyond profit motives and the overarching narrative of a global green energy transition. Just as Montanans viewed constitutional change as a tool to challenge powerful actors and safeguard their resources, the Statute of Minerals presented a means of empowering Chilean communities to push back against the status quo: deprioritizing the demands and interests of mining companies.

The larger fight against climate change indeed relies on green energy technology—lithium-ion batteries, solar, and wind power—and Chile is a crucial supplier for the globe. But this strategy is only as sustainable as its components. If the lithium mine required to produce batteries to power electric vehicles drives communities into water scarcity, should it be praised for its role in combatting climate change? If the production of green hydrogen depletes the sea of vital resources, how 'green' can it be considered? The failure to protect the communities and ecosystems on which they rely renders these components intrinsically unsustainable. In championing local environmental preservation and an equitable distribution of mining's impacts, the Statute of Minerals in Chile's 2022 constitutional text sets a global example for sustainability efforts and environmental stewardship: that they must be grounded in the local.

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Re-thinking Property and Pollution: Conserving the Night Sky as Natural Commons

Isabella Millet

Abstract Chile’s 1980 Constitution stands out globally for instituting strong private property rights over many things—including water, mineral concessions, education, and health services—with the result that access to basic human needs is at the mercy of the market, often leading to higher costs for low-income people and increasing inequality. A major objective of the CC was to address or reverse these dynamics by introducing novel notions of property such as common goods—as distinct from public goods—and using the concept of ‘natural commons’ within environmental governance. This chapter explores the natural commons through a novel lens—the movement to protect dark night skies—and acknowledges long histories in Chile of astronomy research conducted by Indigenous peoples, community organizations, and university scientists. Studying two constitutional articles in particular, this chapter examines the possibilities they open up for reimagining nature, knowledge, research relations, and the critical framing of environmental justice issues.

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Articles

Natural Commons

Article 134

1. The natural commons are elements or components of nature over which the State has a special duty of custody in order to ensure the rights of nature and the interest of present and future generations.
2. Natural commons are the territorial sea and its seabed; beaches; waters, glaciers and wetlands; geothermal fields; air and atmosphere; high mountains, protected areas and native forests; subsoil, and others declared by the Constitution and the law.
3. Among these goods, water is non-appropriable in all its states, air, territorial sea and beaches, those recognized by international law and those declared as such by the Constitution or laws.
4. In the case of natural common goods that are non-appropriable, the State must preserve, conserve and, if necessary, restore them. It must also administer them in a democratic, supportive, participatory and equitable manner. With respect to those natural common goods that are in the private domain, the duty of custody of the State implies the power to regulate their use and enjoyment, with the purposes established in the first paragraph.
5. The State may grant administrative authorizations for the use of non-appropriable natural commons, in accordance with the law, on a temporary basis, subject to causes of expiration, extinction and revocation, with specific conservation obligations, justified in the public interest, the protection of nature and collective benefit. These authorizations, whether individual or collective, do not generate property rights.
6. Any person may demand compliance with the constitutional duties of custody of the natural commons. The law shall determine the procedure and requirements for this action.

Article 135

1. The State must promote measures to conserve the atmosphere and the night sky, according to territorial needs.
2. It is the duty of the State to contribute to and cooperate internationally in space research for peaceful and scientific purposes.

THE NIGHT SKY AS NATURAL COMMONS

“Yo solo quiero ver el cielo.” “I only want to see the sky,” reads a marker-scrawled plea on a bench in Plaza Ñuñoa. This sentence greeted me in Santiago in July 2023 on the day I was to give a presentation at the Universidad del Desarrollo on the relationship between Chilean citizens and the major astronomical research that takes place under the night skies of Chile. This phrase can be read simply as a romantic wish, as a desire to enjoy the natural world. It can also be read as a plea, a lament that the ability to view the sky and stars is being eroded by careless development that, among other impacts, obscures the sky with pollution and too much light. This interpretation is particularly compelling in the context of Chile’s *estallido* and public demands for better environmental protection as part of constitutional reform. As I read this anonymous wish on a smoggy morning during Santiago’s winter, a clear sky felt wistfully inaccessible.

In this chapter, I explore the implications of considering the dark night sky a common good as outlined in the 2022 constitutional text and explore how this designation could support diverse coalition building to protect a clean and clear night sky and to challenge hierarchical norms of research and knowledge building in Chile. Articles 134 and 135 appear under the heading *Bienes comunes naturales*, or natural common goods (natural commons). Natural commons are described in Article 134 as “components of nature over which the State has a special duty of custody in order to ensure the rights of nature and the interest of present and future generations.” The natural commons protected by the 2022 constitutional text include glaciers, high mountains, and native forests, among others. Article 135 names the night sky as a natural commons, thus prompting questions around the night sky’s role as a recreational, cultural, and natural space. The 2022 constitutional text raises several questions about the role of natural commons and how this legal framework may

have been interpreted if the proposal had been successful. What would this text mandate were it to become law? Does a categorization as natural commons mean that the night sky should be regulated, controlled, and protected by the state? Does it imply that citizens should have equal access to the night sky as a space for recreation through naked-eye observation? These questions, though speculative, frame the historical and political analysis of this chapter (Fig. 7.1).

Two things in particular are striking about Article 135. First, this portion of the legislative text does not dictate that the atmosphere and night sky be preserved exclusively for scientific study. Nor does Article 97—which states that “The Constitution guarantees freedom of research” and further details protection and promotion of the right to scientific study—single out Chile’s monumental role in astronomy (research which is largely undertaken by foreign entities). Together, these choices make for a notable deviation from the pattern of accommodation that the Chilean state has historically granted foreign astronomy. Second, the legislative phrase “according to territorial needs” exists without further specification, an interesting omission since the majority of Chile’s professional observatories are in the far north, in a select few provinces. This phrasing leaves ample room for Article 135 be interpreted broadly to

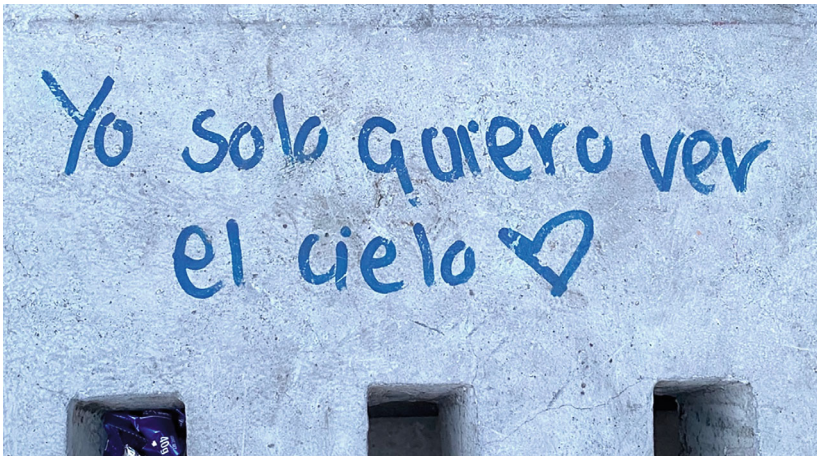


Fig. 7.1 Graffiti on a bench in Plaza Ñuñoa, Santiago (Photo by Isabella Millet, used with permission)

spur atmospheric protection across Chile, even in regions without active astronomical investigations.

The democratic nature of the night sky makes it unique among the natural commons listed in the 2022 constitutional text. One (in theory) need not travel to a specific geographic location or purchase expensive recreational equipment to experience the night sky, such as would be required to spend time amid glacial or mountaintop natural commons. Thus, the night sky is unique in its relationship to recreation, curiosity, and culture. This distinction is particularly clear in the social context of Chile's 2021–2022 reform efforts. The forging of the 2022 constitutional text was a direct response to the *estallido*, a mass social uprising mired in state violence and human rights violations, as discussed in the Introduction to this volume (Barandiaran 2025). In the context of such a heavy moment in Chilean politics, a legal discussion of stars strikes a notably different tone, conjuring joy, and curiosity. It is this deviation that I find compelling, as it requires a more expansive imagining of what a state might owe its citizens. The Chilean sky certainly occupies a weighty station given the prestigious research that it supports, with over 70% of the world's ground based astronomical research being generated in the Atacama region (McGowan 2024; Cabezón and Rodríguez 2016). However, the night sky carries a sense of poeticism, spirituality, and whimsy that balances this weight and makes the night sky a compelling resource for many outside the academic world.

What could the democratization of the night sky mean on a national scale for the use of light and air pollution reduction methods? Could this constitutional article expand the understanding of night-sky stakeholders to include communities outside of formal astronomical research? What would it mean for a nation to acknowledge that humans have a right to view the stars?

COALITION BUILDING IN THE FACE OF GROWING LIGHT AND AIR POLLUTION

In the north of Chile, where astronomical research is concentrated, scientists are raising concerns about the growing threat of light and air pollution from rapidly expanding population centers near research observatories. One example is the town of San Pedro de Atacama, whose population grew by 121.29% between 2002 (4969 inhabitants) and 2017 (10,929 inhabitants), according to the National Institute for

Statistics (INE 2017). To curb excess light pollution, municipalities will need to develop and implement policies that are accepted by residents. The Sociedad Chilena de Astronomía (SOCHIAS) runs a working group on light pollution which emphasizes the vital role that community understanding and support plays in successful efforts to implement pollution reduction measures, underscoring the strategic benefit to nurturing shared priorities between researchers, environmentalists, and local communities (SOCHIAS 2017).

The expansive nature of Article 135, which is inclusive of all Chilean territories, necessitates that we broaden our analysis beyond the center of professional research. In the case of air pollution, a clear case study can be found in Santiago, now home to 6.9 million Chileans. Santiago is somewhat notorious for the smog that settles over the city each winter, blocking celestial visibility and posing health risks to its population. Poor air quality is a source of concern not only for environmentalists and social advocates but for all Chileans.

We might well wonder what could be achieved if the political and economic weight of astronomical research was leveraged to address related concerns. A significant source of air pollution across Chile is smoke produced by stoves, which are the most accessible and common source of interior heat. Might leveraging the national importance of astronomical research then lead to support for policies which increase accessibility of cleaner heating sources across Chile? Could raising public understanding of the risks of air pollution, as well as drawing connections between light and air pollution, help develop a citizen support structure for pollution reduction measures? Could reaffirming the night sky as a joyful space of natural commons forge a novel perspective on light and air pollution as a recreational concern, creating new frameworks for citizen investment in environmental protection? Given the persistence of air pollution in the capital and other cities, such possibilities are worth considering. After all, Santiago's history goes hand in hand with nature and astronomy. Cerro San Cristóbal, the most widely used park in Santiago and the largest urban park in Chile, was founded with the construction of the Manuel Foster Observatory by the University of California in 1903 (Instituto de Astrofísica n.d.; Silva 2019a). Astronomy is already at the heart of natural spaces in Santiago.

It is true that urban environments are near-ubiquitously understood as sub-par locations for high quality stargazing. However, with measures to reduce light and air pollution, Santiago could offer recreational urban

astronomy experiences akin to cities that have embraced progressive measures on light and air pollution, such as the Joya-La Barreta ecological park situated near the large cities of Querétaro and San Miguel de Allende in Mexico. This park is managed by local municipalities, and is certified as an Urban Night Sky Place by astronomy advocacy group DarkSky International (Reagan 2023).

The infrastructure of Santiago's San Cristóbal Park offers an apt point of entry for community engagement with air and light pollution reduction efforts for the sake of night sky accessibility and human health. A study published in *Ecology and Society* found that conservation efforts led by local and Indigenous communities had more positive impacts and were more sustainable over long periods of time when compared to externally driven conservation, underscoring the need to take diverse approaches to generating community investment in light and air pollution reduction across Chile (Dawson et al. 2021). Air and light pollution are issues that cross boundaries of environmentalism; involving health risks, biodiversity loss, degradation of recreative natural spaces, and loss of cultural heritage. Even without the framework that the 2022 constitutional text proposed, a cross-interest coalition of researchers, communities, and environmentalists invested in clean and clear skies could, today, produce much needed political engagement at local levels across Chile.¹

EXTRACTIVIST RESEARCH AND CHILEAN ASTRONOMY

The vision I am outlining here is to create cross-Chilean commitment to and investment in the night sky. Under current conditions, however, political energy around these issues—and concern about the degradation of the night sky—gathers the most attention in the Atacama desert, for specific reasons. With involvement from 23 nations, the Atacama Desert now hosts 67 observatories that produce immense amounts of groundbreaking scientific research (Leman 2019). With the completion of recent projects elsewhere in the country, including the Vera C Rubin Observatory, Chile is expected to generate around 70% of data seen from Earth by 2025 (McGowan 2024; Cabezón and Rodríguez 2016).

¹ Numerous organizations are already doing this work, and their efforts could serve as a spring board. See for example, Fundación Ciudades Astronómicas, and outreach work by academic groups like the Centro de Estudios Interdisciplinarios en Astrofísica y Exploración Espacial (CIRAS) of the University of Santiago de Chile (USACH).

Favorable positioning, an extreme lack of humidity, temperate weather, and sparse light-polluting population centers have made this region a global hub of astronomical study and innovation—and a valuable commodity for the Chilean state. Thus, the treatment of the night sky has in some ways mirrored the governmental treatment of other resources, such as copper and lithium, prioritizing European and Western economic interests and involvement. Barandiaran (2015) analyzes these dynamics, arguing that the Chilean state initially supported scientific research in the Atacama on the promise of “export-led growth” and is thus motivated to prioritize foreign interests over researchers and communities in Chile (Barandiaran 2015, 142). This dynamic not only causes harm to Chile’s internal scientific community and to communities across Chile with autonomous relationships to astronomy, but also creates systematic difficulties for the pursuit of collaboration and tending of shared interests between scientists and broader communities.

Analyzing the potential for a diverse political coalition based on shared investment in the night sky involves studying the historical context of astronomical research in Chile. The land in the Atacama that now hosts the European Southern Observatory’s Very Large Telescope was expropriated by Pinochet in 1988 without due process (Long 1994). Since then, enormous amounts of money and resources have been funneled into construction of this industry, sidelining other community needs and contributing to epistemic colonialism, which ignores Indigenous philosophies, histories, and scientific methods.

Some projects have been undertaken to begin relational repair, or at least to recognize historical wrongs. One such project is *El Universo de Nuestros Abuelos* (The Universe of Our Elders), a project by community researchers in partnership with the ALMA observatory to document surviving Indigenous understandings of the Andean skies (Cruz et al. 2013). This report, in addition to documenting remaining Indigenous understandings of the Andean sky, reveals how the presence of Western astronomy has sidelined and devalued Indigenous astronomical histories. Initially, the elders who were interviewed for this study of Indigenous astronomy often tried to redirect the researchers to the “astronomers” in the ALMA project, saying that they themselves “did not know anything” (Cruz et al. 2013, 19). The colonial dynamic of astronomy in the Atacama coupled with the accelerating degradation of celestial visibility means that we are quickly losing our opportunity to extend respect to histories of Atacameño astronomy. Much has already been lost.

In Chile and across the world, power asymmetries between researchers and local or Indigenous communities manifests in land dispossession, environmental abuse, and disrespect of sacred or heritage sites. One example is the founding of the University of California (UC), relevant to the history of astronomy in Chile, as a land-grant system. The creation of the UC was based on appropriation of 150,000 acres of land from California Indigenous communities, according to a study by UC Berkeley (CRNAI 2021). Many universities and research centers around the world share similar histories, which have set the stage for continued power imbalances between researchers and local or Indigenous communities. Often overlooked Indigenous histories of the Atacama present another such case.

In *El Universo de Nuestros Abuelos*, community researchers from the Atacama point out that the Andean sky is a sacred place, a “place of departure” in the Kunza language (Cruz et al. 2013, 5). The report also points out that even in the Atacama, one of the most pristine night skies in the world, light pollution has taken a toll on the celestial visibility for researchers and communities alike. The lack of regulation as population centers have expanded has impacted the ability for residents to connect to the night sky that their ancestors studied and loved. One elder noted that when his grandfather taught him the Indigenous constellations the sky looked different, even to the naked eye (Cruz et al. 2013).

While this context is critical to understanding the current dynamic between the Chilean people and foreign research, the presence of astronomical research in Chile is not completely extractive. The same conditions that make Chile ideal for research also mean that there is a storied and complex Indigenous astronomical practice and a community of passionate amateur astronomers within Chile. Moving forward, prioritizing collaboration as equal partners, or better, making space for Indigenous and local leadership, may allow Chilean astronomy to recover and revalue parts of vital Indigenous knowledge and to increase current community engagement. Writing a few months before the September 2022 plebiscite, science journalist Emiliano Rodríguez Mega argued that the proposed constitution, even if unsuccessful, could set a new tone for the relationship between Indigenous communities and academic or national researchers (Rodríguez Mega 2022). Articles 134 and 135, on the vital importance of diverse natural commons in general and of the night sky in particular, offered support for the expansion of community-led knowledge production, of the kind that was explored in the *El*

Universo de Nuestros Abuelos project and that exists in Calle Larga, discussed below.

SHARED INVESTMENT

The universal nature of the night sky could disrupt a pattern of inaccessibility to natural spaces that besets many Chileans. A study published by the British Ecological Society found that 20% of Chileans make 87% of visits to protected areas, as wealthier people can afford the travel and time off needed to enjoy recreation in remote areas (Martinez-Harms et al. 2021). Currently, light and air pollution exacerbate this pattern by impairing access to the night sky, while tourists pay to travel to remote regions in a growing economy of “astro-tourism.” Although Article 135 was part of the rejected constitutional text and its content appears unlikely to become law, the idea of equal access to the Chilean night sky remains a potent—and hitherto underexplored and under-theorized—dimension of environmental justice.

Experts agree that in most cases, environmental and scientific lighting requirements align closely; what protects the quality of an observatory image also protects the non-human species that may use star or moonlight to navigate, hunt, or reproduce (Green et al. 2022). On 16 May 2024, the Chilean Environmental Assessment Service [SEA: *Servicio de Evaluación Ambiental*] published new guidelines to evaluate when light pollution poses a risk to astronomical observation, demonstrating continued state support for astronomical research (SEA 2024). This regulatory change represents an integration of the night sky into existing environmental regulations, and thus a continuation of traditional discourses, rather than advancing the more expansive approach that was proposed by the 2022 constitutional text.

Efforts to conserve Chilean night skies benefit from an interdisciplinary and expansive approach. Pedro Sanhueza, a Chilean astronomer, heads the Oficina de Protección de la Calidad del Cielo del Norte de Chile (OPCC / Office for the Quality Protection of the sky of northern Chile), which seeks to develop technological and policy solutions to curb light pollution for the preservation of scientific research. The OPCC has begun to identify and analyze a more expansive view of the role and benefits of night sky preservation, beyond those directly linked to scientific research. For example, Sanhueza is one of 85 contributing experts to

a book-length report on “Dark and Quiet Skies for Science and Society” for the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), in coordination with the UN Office for Outer Space Affairs (UNOOSA). Focusing on the effects of artificial light at night on flora, fauna, and human health, the reporting team address the negative impacts of “excessive, ubiquitous and improperly directed illumination” not only on the quality of scientific observations but specifically on “the ability of our citizens to view a pristine, starry sky” (UNOOSA 2021, 14). This report mirrors the ethics of Article 135, positioning the night sky as a natural commons and thus calling for a more collectivist approach to environmental protection.

FRAMEWORKS OF COMMUNITY INVESTMENT

Calle Larga, a town in the central Valparaíso region, provides an example of community investment in astronomy and a clear night sky. On the grounds of the Calle Larga community center, you can explore the demonstration garden where local farmers experiment with and learn new methods of eco-friendly agriculture (see Bricca 2025, this volume), look into an art gallery where students make art with recycled materials, or step into a weekly Zumba class. You can also meet enthusiastic amateur astronomers who can guide you to a research-grade telescope and observatory owned and operated by locals. A plaque at the door of the telescope reads: “This telescope, a Boller and Chivens 61 cm Cassegrain model, was donated to the Institute of Physics and Astronomy in the Faculty of Sciences at the University of Valparaíso by the Institute of Astronomy at Bochum University, Germany. It was moved from the [foreign-run] La Silla Observatory to [its current site in] Pucuro in January 2016 as part of an agreement between the University of Valparaíso and the Municipality of Calle Larga.” Community members in Calle Larga organize use of the telescope and observatory for social, tourist, and community education events.

Additionally, residents use it for community-driven research, which enables them to contribute to university projects (in the mode of citizen science). This community-led observatory, and the efforts of voluntary citizen scientists underscore the fact that astronomy is not exclusively an interest of foreign researchers but, rather, has a deep presence and legacy among many Chilean communities. Since Article 135 declares state obligations toward space research, its content also engages with discourse on

the boundaries of science. More directly, Article 96 of the 2022 constitutional text, as discussed by Torralbo and Salazar (2025), addresses how science might be (re)defined to include more expansive forms of Indigenous knowledge and citizen research. Article 96 further outlines an ethics of science that protects the rights of diverse communities to systems of science and knowledge-making, specifically protecting Indigenous practices: “The State recognizes the right of Indigenous peoples and nations to preserve, revitalize, develop, and transmit traditional knowledge and ancestral knowledge and must, together with them, adopt effective measures to guarantee its exercise” (Article 96, Section 3).

Perhaps reflective of the community’s engagement with astronomy, Calle Larga also serves as an example of locally based political action to reduce light pollution. The municipality of Calle Larga recently implemented measures to reduce light pollution, demonstrating what can be achieved at the local level driven by community desires and investment in conservation.

THE UNIVERSITY AND KNOWLEDGE EXTRACTION

A parallel to the extractivist history of Chile’s astronomical research, the University of California (where many authors of this edited volume are based) is itself an institution based historically on violence toward and exploitation of local and Indigenous communities—a thread that extends from its founding as a system of land grant universities to our present day roles in knowledge extraction across the world. Indeed, our relationship as UC researchers bears notable history in the context of Chilean astronomy, as historian Barbara Silva has suggested, since the UC played a significant role in cementing Chile as a center for southern hemisphere astronomy (Silva 2019b).

As researchers within UC Santa Barbara (UCSB), we should pay special attention to the relationship between Atacama’s Indigenous and local communities and scientific researchers. UCSB is a lead investor in the Mauna Kea Thirty Meter Telescope (TMT) project, which seeks to site an observatory on mountaintop land sacred to native Hawaiians (Gilpin 2019). The site is considered by Western researchers to be uniquely positioned for deep-space imaging, and its development is accompanied by the rhetoric of need and pro-development politics, urging that any local opposition be overruled. The project, with an anticipated total construction cost in the region of \$3.9 billion (Isaacs and Rosenbaum 2024),

has attracted the enthusiasm and manufactured sense of urgency that accompanies other megaprojects.

UCSB Chancellor, Henry Yang, has endorsed the project consistently since 2009 (Luna 2020) and has served as the project's chair since 2007 (Ananthavel 2022), despite resistance from native Hawaiians, conservationists, and UC students. The discourse around TMT consistently obscures the colonial dynamics present in the undertaking, as well as in the dynamic between the USA and native Hawaiians. The annexation of Hawai'i into the United States in 1959 was a result of a coup by US businessmen in 1893, an illegal act which has now been formally recognized by the federal government in a Joint Resolution of the US Congress, adopted in 1993, known as the Apology Resolution (US Congress 1993). In their journalistic project, *Narrating Humanity*, Cynthia Franklin analyzes the dynamic between Mauna Kea Protectors and research institutions, noting that in pro-development media coverage Indigenous protestors were cast as "antiscience and atavistic" (Franklin 2023, 192). The characterization of Indigenous activism as a barrier to knowledge-making is also reflected in Chile, where Elisa Loncon, Indigenous linguist and head of the 2022 Constitutional Convention, clarified that in dynamics outlined in the 2022 constitutional text Indigenous people in Chile would no longer be the "guinea pigs" of researchers, nor would they be a "hindrance to knowledge" (Rodríguez Mega 2022, 1143). The fact that Loncon felt the need to qualify the protection of Indigenous rights with assurances that they would not "hinder" knowledge production speaks to enduring racism and the marginalization of Indigeneity in research.

The internalized dismissal of knowledge that Atacama elders experienced, recounted above, reflects the hierarchy of knowledge imposed and reinforced by Western research institutions. Mauna Kea, like the Atacama, is more than a mountain or landscape, as explained by Indigenous activist Pua Case. She explains Mauna Kea is "kupuna, our ancestor, our teacher, our protector, our corrector and our guide" (Franklin 2023, 190). To position research as a universalist (and universalizing) practice of curiosity or truth-making, as many Western researchers do, is to obscure violent histories that have erased multiple, diverse knowledge practices around the world and which enable the ongoing marginalization of local and Indigenous communities. In this chapter, rather than adopting top-down models of shared understanding, I have instead drawn on critical scholars to reframe the pursuit of clean and clear skies as a possible

shared priority between diverse groups of Chilean (and global) communities. In the shared tending of priorities may lay the groundwork for new coalitions and new challenges to colonial and hierarchical systems of knowledge-making.

CONCLUSION

Perhaps Article 135 of Chile's 2022 constitutional text provides a place from which to imagine alternative options to the separation of (and conflict between) supporting scientific advancement and respecting the life-ways and demands of Indigenous peoples and local interests. On the relationship between institutionalized research and indigeneity, Jones and Jenkins write:

Research in any colonized setting is a struggle between interests, and between ways of knowing and ways of resisting, and we attempt to create a research and writing relationship based on that tension, not on its erasure. Indeed, we seek to extend the tension and examine its possibilities. (Jones and Jenkins 2008, 475)

The night sky, which has always served as a social, religious, and scientific touchstone for humanity, may be a 'landscape' where diverse stakeholders can meet and begin to form coalitions which embrace the tension of Chile's past and present relationship to astronomical research.

Indigenous astronomy, recreational astronomy, and citizen research all engage with the night sky, and have historically been overlooked by extractivist research practices. This chapter has argued that analyzing astronomical research potential within a framework that views the night sky as a natural commons would allow for a broad group of stakeholders to form coalitions on shared goals of reducing light and air pollution.

The question of shared investment relates to the ethics of science as well as Indigenous political histories in Chile (v. Torralbo and Salazar 2025; Partridge 2025, both in this volume). I propose that a tending of shared priorities to reduce air and light pollution could support the ongoing social work undertaken through Chile's recent constitutional reform efforts, and beyond, to create structures of respect and collaboration between the Chilean state, foreign research, Indigenous Chileans, and everyday citizens. The 2022 constitutional text presented various means for creating a new type of relationship between researchers and

communities and respecting diverse ways of knowing. A relationship that could build on shared priorities of clean and clear night skies, which sees value in nature as natural commons, beyond the resources that can be extracted from it. Article 135 of Chile’s proposed 2022 constitution may provide a small window into where a balanced future could start—with stars to see, and stars to study.

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Knowledge Systems: Redefining Science and Bioethics for the Common Good

Camila Torralbo and Maité Salazar

Abstract Asking what role science has in creating changes to advance to a “good life” and “the common good,” this chapter reviews the CC’s efforts to redefine science. The Chilean social uprising (2019)—triggered by demands for social rights—resulted in a proposal for constitutional reform that included innovative articles on Knowledge Systems (Article 96) and Bioethics (Article 98); the causes and goals of these articles are explored in this chapter.

Keywords Knowledge systems · Bioethics · Social uprising · Chile · Subaltern studies

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Articles

Article 96

1. Everyone has the right to freely participate in the creation, development, conservation and innovation of diverse knowledge systems and the transfer of their applications, as well as to enjoy their benefits.
2. The State recognises and encourages the development of the various knowledge systems in the country, considering their different cultural, social, and territorial contexts. Likewise, it promotes equitable and open access, which includes the exchange and communication of knowledge to society in the broadest possible way.
3. The State recognises the right of Indigenous peoples and nations to preserve, revitalise, develop, and transmit traditional knowledge and ancestral knowledge and must, together with them, adopt effective measures to guarantee its exercise.

Article 98

Sciences and technologies, their applications, and research processes must be developed according to the bioethical principles of solidarity, cooperation, responsibility and with full respect for human dignity, the sentience of animals, the rights of nature and the other rights established in this Constitution and international human rights treaties ratified and in force in Chile.

INTRODUCTION

For the philosopher and sociologist Hartmut Rosa, “A good life... is a resonant life: a life that is based on stable axes of resonance with things and work, with people and politics, and, finally, with life... the world as such... is not a matter of individual choice, but of collective social conditions” (Rosa 2016, 258). Such an ideal view of resonance across society, however, implies a degree of stability found in very few places, perhaps in some settings in the global north. Elsewhere, particularly across the global south, the resonance metaphor could more accurately be seen in the physical process of ‘resonant frequencies.’ This process sees small periodic forces accumulate, become amplified, and then, once they coincide

with the natural frequency or state of a system, they cause it to fracture (Resnick and Halliday 1977).

Chile's *estallido social* exemplifies this type of process, understood as a rupture or the manifestation of a long process of social erosion. The growing pressures of 'resonant social frequencies' in Chile, and elsewhere in the Global South, are persistent enough to become their own form of 'stable axes of resonance' (Rosa 2016). In Chile, a territory of survival, the *longue durée* of resistance and growing social pressures were symbolized in a phrase that adorned banners across the protests: 'it is not 30 pesos, it is 30 years' / *No son 30 pesos, son 30 años* (clarifying that collective anger was fueled not only by a particular hike in public transit fares but by the decades of growing economic inequality that preceded that policy change) (Suazo 2020). The evidence speaks for itself: Chile is one of the most unequal of the OECD countries (OECD 2023), and this is despite a decrease of almost 10 points on the Gini income inequality index since the return to democracy—this coefficient shows unequal distributions; 0 corresponds to perfect equality and 100 represents perfect inequality. The most recent value of the Gini coefficient for Chile was for 2020, showing a value of 47, in 1990 this value correspond to 57.3 (OECD 2020). The gap between rich and poor remains stark: "the richest quintile concentrates around 72% of the wealth" (Banco Central 2017).

The protests and social movements of the *estallido* were met with state violence and repression (ACNUDH 2019; Defensoría de la niñez 2022). If anything, these violent responses further clarified what was already a unifying ethical principle across multiple popular demands: people were protesting for dignity (Gómez 2022). At the same time, democratic innovations (Somma 2022) and new forms of popular organization emerged throughout the *estallido*, fostering an active return to community public life characterised by hundreds of "local-based and largely improvised instances of direct citizen participation" (Ureta 2021, 1). These self-convened citizen assemblies and councils met to address particular themes and issues throughout the country (Zambrano and Huaiqui 2020).

One such issue of concern, among many others raised and debated by those participating in the social uprising, was science. Activists, defenders, students, and scientists themselves discussed a necessary redefinition of science in public squares and universities. In these public fora, Chilean scientists reported years of poor working conditions, gender inequality, ethical misconduct, and conflicts of interest surrounding environmental science, among other issues (Universidad de Chile 2012). As they were

not exempt from the troubles revealed by the *estallido*, scientists joined the demonstrations and assemblies as private citizens, workers, members of environmental organizations or science collectives; scientists too felt their demands aligned with the *estallido* as a whole and the demand for dignity (Rodríguez 2019). The authors, as participants in these assemblies, observed discussions on the disconnect between traditional scientific practices and communities, the relationship between extractive or non-inclusive scientific practices, and the need to integrate, respect, and work with different forms of knowledge.

Amid the *estallido*, science—particularly academic science—was both questioned as an institution that replicated inequality and also looked upon as a source of answers and critical understanding. During one of many citizen meetings, the ecologist and National Science Award recipient Fabian Jaksic denounced the co-option of academic scientists related to environmental impact studies: “Most universities are in turn co-opted by companies” (El Mostrador 2020). Even though he later tempered his statement, the words fueled debate (Emol 2020)—proposing a critical examination of the relationship between private interests, the common good, and universities. As Barandiaran (2021) points out, in most modern democracies science is the agent in charge of neutralizing decision-making; on the contrary, in Chile the State is the intermediary agent, and as such, does not speak for the “common good.” In parallel to assemblies and councils, other scientists turned their expertise specifically toward the defense of social justice. Outraged by the ongoing human rights violations and in response to concerns from ER doctors who were treating an alarming number of eye traumas among protestors, physicists conducted ballistic studies to characterize the bullets recovered from these patients—and were able to conclude that, indeed, the bullets that were blinding hundreds of civilians belonged to the police force (Universidad de Chile 2020).

Seeking to put an end to demonstrations, the government sought modifications to Law 21,200 (SEGPRES 2019). This allowed for reform of the 1980 Constitution, imposed during the Pinochet military dictatorship, and analyzed since then as the institutionalization of the “most extreme capitalist transformation... ever carried out anywhere” (Klein 2007). As has been widely documented, voter support for this move was significant: the option to ‘approve’ constitutional change won 78.31% of the vote, specifically through a Constitutional Convention (79.18% of the vote) (SERVEL 2020) (see also introduction, this volume).

KNOWLEDGE SYSTEMS: VINDICATION OF KNOWLEDGE FOR A GOOD LIFE AND THE COMMON GOOD

In this context, we turn critical attention to science and ask, what role does science have in creating changes for a good life, the common good, and positive futures? We review two Articles in Chapter II of the 2022 constitutional text. Its position in the text itself warrants comment since, in most constitutional texts, these early chapters correspond to ‘fundamental rights and guarantees,’ considered essential. We review Article 96 on Knowledge Systems and Article 98 on Bioethics. These innovative Articles emerged from Commission 7, ‘Knowledge Systems, Science and Technology, Culture, Art and Heritage.’ As its name indicates, this commission covered a wide range of topics, where the inclusion of ‘Knowledge Systems’ for the first time in a constitutional debate stands out. Initially, this space of debate was not considered, but CC member Cristina Dorador and other scientists successfully pushed for its creation (El Mostrador 2021). Cristina Dorador is a microbiologist who has dedicated her work to environmental concerns, specifically the microbial world of the Atacama Desert (BCN 2021). Today, that region faces increasing environmental threats due to growing global interest in extracting lithium found in desert brines.

Article 96 attempts to redress inequity and injustice within Chilean science. Spivak (1988a, 1988b) describes this phenomenon of the marginalization of knowledge as ‘epistemic violence’—the discrediting of ways of life or knowledge as markers of inferiority (by groups who assume positions of superiority). In this way, the West—seen as a subject—imposes a particular world vision, denying the relevance of other forms of knowledge and experiences (Spivak 1988a, 1988b). In this sense, traditional science represents the West and—for example—the ancestral knowledge of Indigenous women, represents subalternity. While subaltern voices can speak, it remains difficult to find platforms for representation, power, or agency (Spivak 1988b). For many activists and communities, the *estallido* became a political space that allowed the expression of those many other forms of life and of knowledge. The 2022 constitutional text proposed ways to institutionalize such knowledge and subaltern experiences in normative terms.

Academic and scientific systems and institutions face perennial challenges, among them: (i) to value, develop, and integrate other ways of knowing the world beyond the domains of established, modern

science; and (ii) to remain open to including diverse, pluralistic forms of knowledge and scientific practices, including community, citizen, and open-source science practices. Such an expansive view more fully acknowledges how knowledge systems are a form of epistemic justice—and an ethical imperative for the institutions and individuals involved in research (Anderson 2012). Checkoway describes ‘engaged scholars’ as those who “develop knowledge for a public purpose” and who “think and act as members of society... developing knowledge with the well-being of society” (2013, 8) and not themselves in mind. Models already exist that chart ways for science and systems of knowledge to be oriented to the good life and the common good.

As these calls for pluralistic approaches to science illustrate, ‘knowledge’ is not limited to the realms of higher education, research, or science. Indeed, in recent surveys, when Chileans were asked which word they associate with the concept of *knowledge*, only 1.6% responded with *science/research*—the most frequently mentioned answer (29.7%) was *wisdom* (Ministerio de Ciencia 2023). Globally, widespread (and in some places growing) denial of the reality of climate change also suggests a weakness in the position of general authority that science once occupied. We live in a time when “the Earth system is close to a high-risk level of transgression” (Richardson et al. 2023, 11) this means that several tipping points have already been—or are close to being—transgressed, causing a fall in the planetary resilience. Consequently, urgent and powerful scientific and policy tools are needed to analyze the Earth’s system to guide the political processes that prevent altering it beyond levels tolerable for today’s societies. And yet scientists are increasingly at a loss for what else to do in order to combat a broad indifference to the always-worsening impacts of climate change—in addition to adding further evidence and creating new political and epistemic objectives when practicing science (Ureta et al. 2023). In countries like Chile, “science and knowledge systems can contribute enormously to understanding and enriching our vision of the world. But for this to happen, conditions must exist that favor the development of research and that this benefit be based on principles of gender equity, territorial equity, decentralisation, and with an inter- and transdisciplinary approach” (Dorador and Costa 2022, 94).

There are forms of “knowledge related to resilience in the territories... that should serve as a basis for adaptation measures” (Dorador and Costa, 2022, 95). A clear example of the integration of knowledge systems in Chile is Primary Health Care (PHC), where despite implementation

challenges (Torri 2010), users positively perceive the Mapuche health service and its efforts toward incorporating interculturality (Sanhueza et al. 2020). Ongoing histories of colonialism deepen the position of subalternity of marginalized knowledge practices across global south. Continuing to commit the violent error of privileging one knowledge system over another both perpetuates injustice and closes off valuable sources of insight. In this way, when faced with complex, dynamic, and global problems, broader integration of questions, evidence, solutions, and diverse populations provides a stronger base for developing necessary responses to global crises—giving societies a better chance, for a longer time and for a more significant number of humans and non-humans, of a good life in support of the common good.

BIOETHICS

Loreto Vidal, a constitutional convention constituent of District 20 and member of Commission 7, is a nurse and lawyer with a Master's degree in Bioethics and is the executive director of the NGO Sempiterno which, among other projects engaged with marginalized populations, works to support people experiencing homelessness (BCN 2021). Throughout the 2021–2022 constitutional process, Vidal explained to the public on several occasions the significance and importance of bioethics; she promoted Articles 98 and 99 related to this topic. Her approach was to explain her reasons, one by one, so that other CC members could vote on the initiative with a more complete understanding of the matter's relevance (Decidimos Podcast 2022).

Chile subscribes to the UNESCO principles of bioethics, which state: “Due account must be taken of the interconnection between human beings and other forms of life, the importance of appropriate access to biological and genetic resources and their use, respect for traditional knowledge, and the role of human beings in the protection of the environment, the biosphere and biodiversity” (UNESCO 2005a, 2005b). This declaration is binding, and its internal effectiveness will depend on the legal system of signatory states (Bergel 2015). Thus, in Chile, Law 20.120 establishes limits for scientific research on humans and their genomes, prohibits human cloning, and establishes a National Bioethics Commission (Congreso Nacional República de Chile 2006). The law also establishes a rights and responsibilities framework for research,

including consent and data management guidelines—yet it has never been operational in practice.

In the context of modern utopianism of technology-driven transformations, nuclear threats, ecological havoc, and genetic engineering, among others, Hans Jonas asked how human beings should live. While Jonas's work originates in technological challenges in medicine, it expands to ethical considerations that include all forms of life. Advocating a symbiotic relationship between humanity—nature, he structured the 'principles of responsibility' (Jonas 1985; Burgui 2015), which have since influenced the configuration of legal and ethical frameworks, environmental regulations, the precautionary principle, the sustainable development concept, the Bundtland Commission and Agenda 21, among others (Naves and Bastianetto 2018). Despite this broad influence, the principles of responsibility have also since been critiqued, not least by deep ecology which considers this approach to be anthropocentric and philosophically limited (Larraín, 2021).

Chile subscribes to the principles of bioethics proposed by UNESCO (2005) and created the National Bioethics Commission with a focus on scientific research, the genome and the prohibition of cloning in human beings (Congreso Nacional República de Chile 2006). However, this commission is not operational. For Loreto Vidal, then, including bioethical principles (Article 98) at the constitutional level was essential because they provide guiding principles that extend beyond human care to also include the Rights of Nature (Article 18 and Barandiaran 2025, in this volume) and carry the stipulation that they will be institutionalized (Article 99).

During the *estallido*, the COVID-19 pandemic began. Subsequently, much of the political debate and campaign messaging around the Constitutional Convention and its members' elections focused on sanitary restrictions. As a research team based at the Universidad Católica in Santiago, we created the Decidimos Podcast as a space for reflection for women related to science and knowledge practices in Chile. We interviewed Loreto Vidal, and she explained that faced with an everyday bioethical problem, such as stray dogs, there would be diverse opinions and solutions, from lethal injections to municipal kennels. For this type of dilemma, the community would request the National Bioethics Council to give its recommendations, pointing out that "the possibility of giving life to this body depends on us as a community... we have a tool for

peace” (Decidimos Podcast 2022). Regarding their inclusion as a constitutional matter, Vidal added “From a strictly legal point of view, I am certain that, of course, it has to be a matter of law” (UC 2022)—highlighting how the current regulatory framework has been inoperative for 16 years, hence the need to include these issues in any constitutional change.

Another critical issue related to bioethics and the Rights of Nature is the extreme privatization of nature. In Chile, water sources can be bought, sold, or leased. Despite a recent reform to the Water Code (Congreso Nacional 2022), many citizens, scholars, and experts consider this to be insufficient (Universidad de Chile 2022). Fundamentally, the repeal of Article #19 no. 24 in the 1980 Constitution on private property is necessary (Senado 2019); the constitutional debate introduced Rights of Nature (Article 18 and Barandiaran 2025, in this volume), bioethical principles (Article 98) and the establishment of a National Bioethics Council (Article 99), all aligned to ensure the treatment of water as a fundamental right and as an essential element to be guaranteed to last for future generations. Furthermore, related knowledge systems have revealed complexity in bioethical terms: environmental sciences have shown that Chile is in a state of high climatic vulnerability where drought is one of the highest-risk factors (IPCC 2022). The humanities and social sciences have contributed to highlighting the multiple forms of relevance of water sources for Indigenous peoples (Aigo 2020). Social movements have denounced bad business practices regarding this scarce and essential resource for life (Rojas 2021). Multiple knowledge practices have contributed to highlighting the critical need not only for water law reform in Chile, but also for a broader reconfiguration of relations between science, nature, and the law.

CONCLUSION

From a theoretical point of view, the *estallido* in Chile stands out as a social manifestation that moves away from classic theories that describe a scale of priorities based on demands for rights or basic needs. Contrary to this theory, the Chilean *estallido* demanded justice in health, education, pensions, and transportation, all the while generating a sophisticated range of proposed improvements and redefinitions. The redefinitions introduced by the Commission on Systems of Knowledge, Science, Technology, Culture, Art, and Heritage are a good example. According to

our analysis, of the 1,354 popular initiatives that citizens submitted to the Constitutional Convention (using the online platform), 148 were related to Commission 7. The two articles reviewed in this chapter reflect the collective importance of recognizing subaltern knowledge systems and subjects as an ethical issue. In Article 96, dedicated to Knowledge Systems, we observe the need to revalue, connect with, and foster the country's knowledge diversity, considering cultural, social, and territorial contexts, and promoting access, equitable respect, preservation, and integration. Article 98 shows how essential ethical reflection of science and technology is, while also highlighting how corresponding norms and regulations in Chile are still lagging. Although these articles and changes were not approved, they remain essential for ongoing public discussion of science and bioethics.

The *estallido* and the 2021–2022 Constitutional Convention were platforms for expressing multiple forms of knowledge and diverse experiences of long-marginalized subaltern groups in a highly neoliberal country. For those long silenced, maybe “the law by itself... does not change anything,” but at least “trust in the law is, in some way, the confidence that organised society is itself capable of change” (Costa 2021). Thus, as this chapter has argued, including novel articles in a new proposed constitution—articles which correspond with a range of popular and subaltern demand—is another way to deliver social recognition. We are writing at a moment that feels like the end of one phase of social mobilization in favor constitutional change: after months of intense protests which began in October 2019 and were curbed by COVID quarantine in March 2020, including the largest march with 1.2 million people (BBC News Mundo 2019), after cabildos and assemblies, and after not one but two new constitutional texts have been rejected at the ballot box. These experiences all point to the articulation of new and complex demands that go beyond fundamental rights. We see in these demands signs of political and social maturity and collective thinking, all the more remarkable in a context marked by setbacks and daily experiences of deep inequality. We have witnessed the Chilean population as a whole discuss and demand clear definitions of a good life and the common good, even while these demands have yet to be unified and implemented across society.

Facing the evidence of today's complex, dynamic, and global problems, the hierarchies of knowledge and traditional science need to stand aside, acknowledging (with some humility) the impossibility of ever providing complete answers or universal solutions. The redefinition of science brings

to the fore the critical need for an ethical turn: to organize knowledge systems around valid, context-responsive information that can support future communities and the preservation of ecosystems. This chapter has touched upon some of global society's most intractable problems—such as extreme and growing inequality, and the drastic impacts of climate change—and it may seem that the need for urgent action to address these issues is at odds with extant systems of politics and knowledge production. Nonetheless, there are steps that can be taken, as illustrated by the efforts of diverse scientists and citizens in Chile to push for constitutional reform. To achieve a good life and to support the common good, scholars must embrace diversity and accelerate the integration of more inclusive knowledge systems.

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Rural Education, Agroecology, and Environmental Know-How

Lucas Bricca

Abstract This chapter details the environmental education articles of the 2022 constitutional text in relation to a community garden initiative in the Province of Los Andes in central Chile. I explore how the text's educational framework aimed to institutionalize local knowledge networks by supporting diverse learning environments, participatory education, and tying education to holistic social outcomes. I examine the kinds of education and knowledge that the constitutional text articulates, and the relevance of these notions for agroecology.

Keywords Participatory education · Agroecology · Innovation · Knowledge transfer · Rural change

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Articles

Article 35

1. Every person has the right to education. Education is a primary and unavoidable duty of the State.
2. Education is a process of training and lifelong learning, indispensable for the exercise of other rights and for the country's scientific, technological, economic and cultural activity.
3. Its goals are the construction of the common good, social justice, respect for human rights and nature, ecological awareness, democratic coexistence among peoples, prevention of violence and discrimination, as well as the acquisition of knowledge, critical thinking, creative capacity and the integral development of people, considering their cognitive, physical, social and emotional dimensions.
4. Education is governed by the principles of cooperation, non-discrimination, inclusion, justice, participation, solidarity, interculturality, gender focus, pluralism and other principles enshrined in this Constitution. It has a non-sexist character and is developed in a contextualized manner, considering territorial, cultural and linguistic relevance.
5. Education is oriented towards quality, understood as the fulfillment of its purposes and principles.
6. The law shall establish the way these purposes and principles shall be materialized, under conditions of equity, in the educational institutions and in the teaching processes.
7. Education is universally accessible at all levels and compulsory from elementary through high school.

Article 38

It is the duty of the State to promote the right to lifelong education through multiple training opportunities, within and outside the National Education System, fostering diverse spaces for development and comprehensive learning for all people.

Article 42

The members of the educational communities have the right to participate in the definitions of the educational project and in the decisions of each establishment, as well as in the design, implementation and evaluation of

local and national educational policy. The law shall specify the conditions, bodies and procedures that ensure their binding participation.

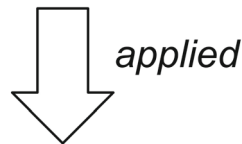
INTRODUCTION

In the last 50 years, industrial agricultural technologies have largely failed to meet the needs of resource-poor farmers. Transgenic seeds and artificial fertilizers, for instance, have greatly decreased biodiversity and resilience to climate hazards while making smallholders' livelihoods dependent on a handful of expensive, mass-produced inputs (Holt-Giménez and Patel 2009; Desmarais 2002). This relationship is partially the result of a system in which scientific knowledge, monopolized by multinational R&D sectors, is applied to agricultural products and sold to small farmers (Fig. 9.1).

For decades, farmer movements like *Vía Campesina* and *Movimiento Campesino a Campesino* (MCAC) have called attention to the fact that a transition to low-input planting, fertilizing, and irrigation techniques implies not just new applications of science, but different social practices through which knowledge is created and validated (Holt-Giménez et al. 2010; Pimbert 2006) (Fig. 9.2). Agroecology positions farmers as producers of scientific knowledge, especially since “given the chance to generate and share agroecological knowledge freely amongst themselves, smallholders are perfectly capable of developing sustainable agriculture, even under highly adverse conditions” (Holt-Giménez 2006, 2). These experiences support Michel Pimbert’s (2006) claim that governments, researchers, and NGOs should develop institutional mechanisms that

Fig. 9.1 Positivist conception of innovation

Scientific knowledge



Agricultural methods & technology

allow farmers to take responsibility for their learning process, have unrestricted access to learning tools, and participate in direct forms of democracy. Crucially, institutions are not responsible for giving farmers new tools or technology, but creating conditions in which agroecological food systems “evolve from the social structures and cultures in which the system itself is embedded” (Holt-Giménez 2006, 2).

This chapter examines three educational articles of Chile’s 2022 constitutional text in light of this ‘missing link’ between agroecological practices and institutional environments. One way to meet the needs of smallholder farmers for agroecological knowledge is to create a political framework that can sustain autonomous, horizontal networks of knowledge. This is not easy to do, however. Though grassroots organizers and policy advocates may have convergent interests, several authors highlight how gains achieved by local farmer-to-farmer networks are often undermined by a lack of institutional support and attention to the political conditions for developing sustainable agriculture (Holt-Giménez 2006; Holt-Giménez et al. 2010; Desmarais 2002; Pimbert 2006). Perhaps these kinds of institutional support and political conditions could exist under constitutional principles that, like those in the 2022 proposal analyzed here, clarify the role of the state in education, adopt a broad definition of education, and advance three core axes—that is, diversity of learning environments, the participatory character of education, and the relative subordination of education to holistic social outcomes. In this chapter I argue that these core axes matter for agroecology, and illustrate my argument with reflections from a visit to a rural community in central Chile.

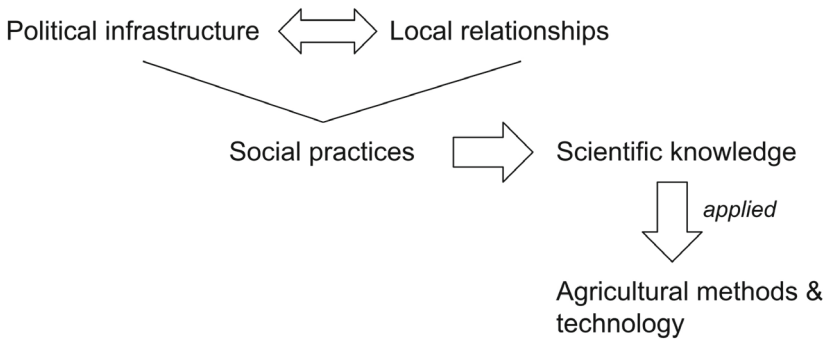


Fig. 9.2 Modeling the social formations that allow scientific knowledge to arise

I focus on three articles which together foreground social values in science and position state-led education as a driving force in the realization of those values. Specifically, Section 3 of Article 35 defines the main aim of education as “construction of the common good, social justice, respect for human rights and nature, ecological awareness, democratic coexistence between peoples, prevention of violence and discrimination, as well as the acquisition of knowledge, critical thinking, creative capacity and the comprehensive development of people, considering their cognitive, physical, social and emotional dimensions.” This article, in short, redefines education beyond the acquisition of knowledge to be also a means to protect and realize principles of care, coexistence, and participation. Next, Article 38 clarifies the role of the state in supporting “lifelong education... both within and outside the national education system, fostering diverse spaces...” In other words, this article charged the state with the duty to promote education within traditional and novel spaces, thus in my view creating conditions to support decentralized and autonomous forms of learning and teaching.

Crucially, autonomous education would not be outside the legal framework of the State, a situation which leaves the question of political legitimacy unresolved. Rather, the article obligates the State to both recognize and support these spaces, without imposing formal requirements on them. The need for decentralization and autonomy is further developed in Section 4 of Article 35, which states that education is “developed in a context-specific manner, considering territorial, cultural and linguistic relevance.” All this serves agroecology particularly well, since it is a highly local form of knowledge, and provides a framework based on principles which could be used to open much-needed political space for autonomous learning environments.

Importantly, these kinds of spaces and experiences have existed in Chile for some years already. For example, and as described by Rene Montalba and co-authors (2017), community gardens in Chile have had wide-ranging and documented impacts. In the Province of Bío Bío, one organization hosts approximately 7,000 people each year at its agroecological demonstration farm. Montalba explains that, in combination with courses, workshops, and teaching programs, this organization’s activities have “led to a large critical mass of professionals and extension workers linked to governmental agricultural and rural development institutions” (Montalba 2017, 425). These are highly ideal outcomes for horizontal

educational spaces and exemplify the potential role of non-governmental organizations (NGOs) in bridging the institutional gap.

Yet global experiences have not always been so positive. In the *Campesino a Campesino* movement, one of the most successful peasant movements in Latin America, NGOs helped the movement grow in terms of membership, but the same organizations “have generally not lobbied, pressured, or otherwise organized around policy issues in a significant way” (Holt-Gimenez 2006, 3). Other scholars have also described NGOs acting as gatekeepers against direct farmer participation in institutional spaces (Desmarais 2002). Together these accounts demonstrate that the participatory spaces opened by NGOs (and other institutional actors) must take a secondary role to farmers’ knowledge to be successful. They point also to the need to create organizations and legal conditions that help foster farmer-led educational spaces, and connect them to public policy. The remainder of this chapter explores some practices and possibilities in central Chile.

NOVEL EDUCATIONAL PRINCIPLES IN ACTION

During our June 2023 visit to Calle Larga, just south of the Aconcagua valley in the Valparaíso region of central Chile, I found that farmers who practiced agroecology were a small minority. Understanding farmers’ hesitancy toward adopting agroecological methods—and how autonomous educational spaces engage with that social terrain—became a personal point of inquiry. Given the 2022 constitutional proposal’s novel ideas about lifelong education beyond conventional school walls, I wanted to understand how these spaces were being linked to different political initiatives. During our visit to Calle Larga we had chance to meet farmers who provided insights into some of these connections.

Don Victor, one of Calle Larga’s most dedicated agroecologists, runs a farm of approximately 1.5 hectares, selling produce directly to local customers through a service he designed himself in the style of Community Supported Agriculture initiatives elsewhere. Don Victor runs his plot’s operations almost entirely on his own, including irrigation, seed selection, planting, fertilizing, and soil maintenance. But what made him particularly distinct was his willingness to revise, tweak, or even overhaul these operations in order to reduce water use and cut the use of chemicals, which he hadn’t used on his crops in four years. His search for inexpensive ecological solutions meant that he was constantly problem-solving:

“I study practically every week; searching for information, reading, downloading books, watching YouTube...” He contrasted this to other farmers in the area, who he said typically resort to using expensive chemicals and pesticides as a first line of defense.

While one might assume that the most resource-efficient practices would be replicated across the region in farmers’ own interests, Don Victor stood out for exploring these cost effective and drought-resistant practices. Admittedly, these were time-consuming practices. Don Victor spends every day making careful observations of his plants and soil, which can be hard to do for farmers without time or training, or for whom taking such risks is high stakes. For another farmer to adopt Don Victor’s home-grown fertilizer setup, for instance, would require not only more time but also investment into unfamiliar equipment and faith in a novel form of cultivation. Since losing a harvest as a small farmer can jeopardize household food supplies and the possibility of investing in seeds and equipment for the next season, pesticides and artificial fertilizers seem to provide more certainty.

By contrast, two other farmers indicated that agroecology felt unfamiliar and viewed it as being untested and unconventional. Either because of old age—and many farmers in Calle Larga are indeed older—or tradition, for many agroecology seems to go against a lifetime of knowledge. For these conventional farmers, their specific irrigation, planting, and harvesting practices feel established, proven, and familiar. Calle Larga farmers often use the same cultivation methods as their parents or grandparents, many of whom became landowners during Chile’s land reform movement in the 1960s. The pull to do things ‘as they have always been done’ is strong.

PRODESAL, KNOWLEDGE SHARING, AND PARTICIPATORY EDUCATION

The State, through agencies that provided subsidies and led outreach programs, played a key role in defining what these historical practices were and continue to be. When families became landholders as beneficiaries of land reform in the 1960s, many new smallholders possessed little to no knowledge about growing crops or managing a farm. Although many of the new smallholders had worked as peasants in the former agricultural estates, there they held many jobs beyond farming (e.g., in animal husbandry, machinery) and grew cash crops rather than food crops

for local markets. The state agency PRODESAL—which today is one of the most important information and support networks for Calle Larga farmers—was founded in 1996 to provide farmers with day-to-day technical assistance and support to grow their businesses. Being a primary source of information for farmers, the organization has had a significant influence on the methods that farmers adopted and which many still practice today. The use of certain fertilizers and irrigation systems that farmers are now being told to cease or modify in the name of agroecology, for instance, were promoted by PRODESAL in the organization’s early years.

Today, the government’s grant system applies an industrial logic to small-scale farmers that shapes the structure and manner of their cultivation practices. The grant application forces farmers to declare a single crop, and subsidizes only that product for each farmer. This monocultural approach and cash-crop-reliant system is incongruent with most small farmers’ actual practices, since many farmers rotate a variety of crops, including those they use for subsistence. Patrick, a PRODESAL worker, explained that a large portion of the organization’s time is spent helping farmers navigate this complicated grant system that is overseen by PRODESAL’s parent organization, INDAP (Instituto de Desarrollo Agropecuario/Institute for Agricultural Development).

This institutional bind for Calle Larga farmers exemplifies Holt-Giménez’s argument that a transition to sustainable agriculture is “not simply farmers teaching other farmers to farm sustainably, but a political project that engages the power of [market, non/governmental, and research] institutions to permit, facilitate, and support sustainable farming” (Holt-Giménez 2006, 2). This was confirmed by our observations in Calle Larga, where small farmers’ attitudes toward incorporating diverse crops and natural inputs were partially informed by credit systems and incentives set up by the government. Certainly, as Don Victor’s auto-didacticism demonstrates, the small number of agroecological farmers is not due purely to a lack of information. Rather, scaling up agroecology requires creating institutional conditions to “experiment, take initiatives, and acknowledge errors as a way of learning-by-doing and engaging with the diverse local realities of citizen’s livelihoods” (Pimbert 2006, 22).

In the 2022 constitutional text, Article 38 provided state support for these experimental spaces, while Article 42 ensured their participatory character. Article 42 states, “Members of educational communities have the right to participate in defining the educational project... The law shall specify the conditions, bodies and procedures to ensure their

participation is made binding.” The principle of co-creating knowledge is centered on the conviction that students should be involved in defining their own educational outcomes. This requires democratic practices which allow students to collectively determine their goals for the space and the kinds of activities that will get them there. Given some Calle Larga farmers’ resistance to agroecology on the grounds that it was a risk for their own livelihoods, Article 42 projected participatory practices in education that could produce ways of knowing through engagement with farmers’ doubts, concerns, and material obstacles in their lives. Insofar as sustainable ecosystems must evolve from local social structures to be successful (Holt-Giménez 2006), Article 42 could have aligned education with the kinds of socially informed science that agroecology aims to create.

Pimbert (2006) also highlights the importance of participatory practices in their own right, irrespective of the ‘truth’ of their outcomes. He explains that diverse ways of knowing “cannot be assessed from the narrow standpoint of positivist science alone,” and argues for broader criteria of educational practices, such as “whether or not this social learning opens up new communicative spaces for democratic inquiry to take place, [and] whether it has contributed to the emergence of a wide community of inquiry among divergent actors” (Pimbert 2006, xi). Article 42 is not only relevant for the way it proposed to orientate educational spaces, but for redrawing the boundaries and social-evaluative mechanisms of science itself.

One space that exemplified the principle of participatory education was PRODESAL’s community garden, a space dedicated to growing plants from local seed varieties and minimizing non-renewable inputs. Among its offerings, the garden included raised beds, a small fenced plot, humus supplies, and composting projects. The garden was open to local farmers who could take advantage of different seed varieties, soil, and on-hand PRODESAL experts to experiment with planting, irrigation, and even creative bird-defense techniques. One main purpose of the garden is to allow farmers to try new methods of growing crops without jeopardizing their own harvest. Trial and error is an inevitable part of agroecology, and PRODESAL’s community garden extended the opportunity to engage with risk to even the most conservative farmers. In the community garden, farmers are able to engage with new methods on their own terms, tinkering with agroecology as fits their needs. Additionally, in a community garden, the outcomes a farmer pursues are directly informed by both their social environment and resource politics in their area. As

a space built on mutual reciprocity, when farmers share with each other new ways of knowing emerge from the relationships that arise in the space itself. And whereas imported knowledge in the form of drought-resistant seeds might blunt or displace local knowledge, the community garden integrates local ecosystems into the way farmers cultivate. It is important to note that local knowledge here extends to knowledge of water systems, soils, and local plant and insect life which affects crops.

Although the PRODESAL garden was designed *for* farmers, it wasn't clear to what extent local farmers actually managed the space. While Article 38 affirms that the state should continue to support 'alternative' learning environments like a community garden, the participatory construction of knowledge highlighted by Article 42 has potential for encouraging more directly farmer-managed educational spaces.

Finally, Section 3 of Article 35 articulates the intimate connection between knowledge as both conceptual and enacted; that is, education is not an instance of intellectual transfer, but an embodied, lifelong practice. Though these principles are present throughout the 2022 constitutional text, their expression in education has special implications for agroecology.

Binding education to principles of respect, ecological awareness, and comprehensive development disrupts the liberal-positivist notion of science, which tends to focus on knowledge as an individual good or source of competitive advantage (v. Torralbo and Salazar 2025, in this volume). While the PRODESAL grant system demonstrates the benefits of aligning market systems with conservation goals, there is also a fundamental antagonism between market-based notions of environmental protection and agroecological practices. Since the market framework always defines innovation in terms of profitability, agroecology is not seen as 'legitimate' innovation, despite being more resource-efficient, more sustainable over time, and increasing yields (Holt-Giménez and Patel 2009). In fact, agroecological and Indigenous practices are often characterized as outdated, backwards, and incongruent with the needs of global food production. Holt-Giménez and Patel (2009) demonstrate that the opposite is true—agroecology outpaces monoculture in terms of calories produced, and with far fewer inputs. Answers to the question of 'if that's true, why isn't everyone doing it?' are precisely linked to the structural conditions that reward and validate large-scale, homogeneous knowledge and outputs (Holt-Giménez 2006). The educational principles of the 2022 constitutional text provide an important basis for shifting

these political challenges based on the local necessities and horizontal structure of agroecological projects.

These debates are also important for education because they foreground the presence of social relations in the knowledge we produce, and even what we consider science. Scholars working in the area of Science and Technology Studies explore efforts to differentiate science and truth from their alternatives through a process called “boundary work,” defined as “the laborious and ongoing processes of demarcation, negotiation, and disruption of the boundaries between science and non-science” (Pereira 2019, 22). It can be useful to think about Article 35 in terms of boundary work, since it set out new criteria for evaluating knowledge—whose knowledge counts, and why. The benefits of formalizing Article 35’s principles—common good, social justice, respect for nature—in a national political framework are increasingly clear to those who, like me, see that farmers’ livelihoods are threatened by ecological crises that can only be addressed through collective social resistance and reconstruction. The aim of institutionalizing agroecology through environmental education is not to tell these farmers how to change, but to design education in a way that students see themselves as co-creators of knowledge and part of a global ecological community.

CONCLUSION

In this chapter, I have explored why the educational articles of the 2022 constitutional text had a special bearing on agroecology. I have argued that by placing education within three key principles, the constitution proposed a critical bridge between local sustainable farming practices and the structural conditions for supporting them. Those principles were: recognition of diverse learning environments, participatory construction of education, and a holistic, embodied, and ecological understanding of knowledge. While agroecological practices and networks are notoriously difficult to institutionalize (Holt-Giménez 2006), the 2022 constitutional text is worth studying for those interested in the political challenges of agroecology because of the horizons it envisioned between the local-technical and the global-political through a new social terrain of knowledge, education, and science.

Our group’s field visit in Chile left me with burning questions and ideas for future research. In retrospect, I would have liked to investigate the curriculum at the local agricultural school in Calle Larga. I

didn't have a chance to ask about possible relationships between the high school and local farmers, but it seemed like an intuitive place for initiatives and networking with the local farming community. Also, as opposed to 'alternative' education spaces, like community gardens at the present time, public schools have the advantage of institutional recognition and often greater access to resources. Scholars working in various Latin American contexts show encouraging results of incorporating environmental curriculum directly into schools (Velazquez Cigarroa et al. 2018). Future research could investigate how school organization and intended outcomes extend (or fail to extend) these learning processes into the local community.

In a more explicitly political context, research might follow Moore's (2017) proposition that organized agroecology movements provide "an opportunity to examine how movement pedagogy challenges existing structures of rural governance" (Moore 2017, 2). Investigating how practices within schools affect local political structures can complement research on how well a given political framework can support local democratic learning spaces. Finally, researchers interested in leveraging local educational spaces for institutional ends might consider investigating the organizational structure of demonstrative farms and other community teaching events explored by Montalba et al. (2017) in Chile. For instance, how many of these farms and events are organized by farmers? What are the decision-making processes involved in creating the space, and whose knowledge is validated? These boundary-work questions are central to understanding how social practices privilege certain forms of knowledge over others, and to exploring the potential for new pedagogies to create and institutionalize diverse ways of knowing.

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APPENDIX

Loncon, E. 2021. *Inaugural speech of the President of Chile's Constitutional Convention*. Santiago de Chile, 4 July. Spanish translated by Tristan Partridge. The original Mapuche language, Mapudungun, appears in italics.

SPEECH BY ELISA LONCON, NEWLY ELECTED PRESIDENT OF CHILE'S CONSTITUTIONAL CONVENTION

July 4, 2021

Feley. Mari mari pu lamngen, mari mari kom pu che, mari mari Chile mapu. Mari mari pu che ta tu lu ta pikum mapu püle. Mari mari pu che ta tu lu ta Patagonia püle. Mari Mari pu che ta tu lu ta dewiñ püle. Mari mari pu che ta tu lu ta lafken püle. Mari mari kom pu lamngen.

Heartfelt greetings to the people of Chile, from the very North to southern Patagonia, from *lafken*, the sea, to the mountains. To the islands, to all the people of Chile who are listening to us now. Here we are, *lamngen* [brothers and sisters], here we are, grateful for the support of the different coalitions who have given us their trust, who have placed their dreams in the Mapuche nation's call to elect a Mapuche person, a woman, to change the history of this country.

We, *lamngen*, are happy for this strength that you have given us, but this strength is for all the people of Chile, for all sectors of society, for all regions, for all the peoples and Indigenous nations that accompany us, for all *lamngen*, and organizations.

This greeting and gratitude also goes out to the LGBTQ + community; and this greeting is for the women who have persisted against all systems of domination. We are grateful that here, now, we are establishing a way of being plural, a way of being democratic, a way of being participative.

In these ways, the convention I am presiding over today will transform Chile into a plurinational Chile, an intercultural Chile, a Chile that does not violate the rights of women nor the rights of caregivers. Into a Chile that cares for Mother Earth, a Chile that cares for clean waters, that stands against all domination *pu lamngen*.

And so, brothers and sisters, all of you who are listening now, we send special greetings to the Mapuche *lamngen* of Wallmapu: this dream is a dream of our ancestors. This dream is coming true. It is possible, sisters and brothers, friends and allies, to re-found this Chile, to establish a new relationship between the Mapuche people, the Indigenous nations, and all nations that make up this country.

In this context, *pu lamngen*, this is the first sign of how this convention will be participatory, of how in this elected convention, we, as Indigenous peoples, established that it was going to be a rotating leadership, a collective leadership, that gives space to all groups represented here.

All of us *lamngen*, together, we are going to re-found this Chile. We must expand democracy, we must expand participation, we have to call on every corner of Chile to witness this process, to make it a transparent process, so that we are seen by people in every corner of the country, and in our native languages, which have been neglected throughout the entire history and reach of the Chilean nation-state.

For rights of Indigenous nations, for the rights of all regions of the country, for the rights of Mother Earth, for the rights of water, for the rights of women, for the rights of children. I also want to express my solidarity with other peoples who are suffering. We have heard on television what has happened to First Nations children in Canada; it is shameful how colonialism has attacked and threatened the future of Indigenous nations. We are a people in solidarity, that is why, sisters and brothers, we are committed.

I would like to profoundly thank here the leader of Mapuche leaders, *Machi* Francisca Linconao, for her support. Along with that gratitude, I too have a mother, a mother who is watching me in my community of Lefweluan, a mother who made it possible for this woman to be here.

Gratitude to all the women who fight for the future of their children *pu lamngen*.

Finally, I would like to send greetings to the children who are listening to us now. Let us build a new Chile that is plural, pluri-lingual, along with all cultures, with all peoples, with women, with all territories; that is our dream in writing a new constitution. *Mañum pu lamngen*, a hundred times we will win!

Marichiweu! Marichiweu! Marichiweu!

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