

The Commoditization of Ecosystems within Chile's Mapuche Territory: A Violation of the Human Right to Health

MARCELA CASTRO GARRIDO AND ANA MARÍA ALARCÓN

Abstract

The Araucanía region of Chile is characterized by a significant rural Indigenous population—the Mapuche people—who preserve their cultural beliefs about the world around them. This region is also distinguished by the conflict between the Mapuche people and the Chilean government. The Chilean state has supported the development of extractive projects such as industrial plantations, hydroelectric plants, and aquaculture, using nature to generate profits. This has collided with the Mapuche's inextricable relationship with nature and territory, which they value as a spiritual and historical space. Our qualitative study, conducted between 2016 and 2019 in three Araucanía territories with large Mapuche populations, sought to explore Mapuche perceptions of nature, their right to health, Indigenous rights generally, and Indigenous communities' relationship with the state. The results show an overall perception among Mapuche communities of an extractive mentality at the heart of the Chilean state, regardless of the administration in power, as well as a belief that the industrial occupation of their territories represents a process of colonialism and the transgression of ancestral rights. This extractivist approach by the state has caused Mapuche communities to witness enormous changes to their ecosystem, with negative impacts on their well-being.

MARCELA CASTRO GARRIDO, MSc, is a professor in the Department of Public Health at the Universidad de La Frontera, Temuco, Chile.

ANA MARÍA ALARCÓN, PhD, is a professor in the Department of Public Health at the Universidad de La Frontera, Temuco, Chile.

Please address correspondence to Ana María Alarcón. Email: ana.alarcon@ufrontera.cl.

Competing interests: None declared.

Copyright © 2023 Castro and Alarcón. This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/bync/4.0/>), which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction

In 1948, the World Health Organization, an organ of the United Nations, declared health a fundamental human right.¹ Subsequent international treaties, declarations, conventions, and general norms have incorporated specific health guarantees for Indigenous and tribal peoples. Among them is Convention 169 of the International Labour Organization, which recognizes the Indigenous therapeutic practices of prevention and healing, along with the collective and territorial rights of Indigenous peoples, and demands that states adopt special measures for the protection and development of such practices.² In 2009, Chile ratified this convention and, in doing so, legally recognized the existence of nine Indigenous peoples and their particular notion of territory and cosmovision. This acknowledgment was strengthened by the international agreement known as the Indigenous Peoples' Health Initiative, which emphasizes the need to adopt a holistic approach to Indigenous health treatment, including the need to adopt an integral and intercultural health perspective.³

These international agreements concerning Indigenous peoples and health are further complemented by the United Nations Declaration on the Rights of Indigenous Peoples.⁴ This declaration protects Indigenous peoples' rights to conserve and strengthen their institutions; to physical and mental integrity; not to be subjected to forced assimilation; not to be displaced from their native lands or territories; to preserve their spiritual relationship with the ecosystem; to protect their traditional medicines and health practices; and to live in a healthy environment. The declaration further notes that states should recognize Indigenous ecosystems and provide resources for the reparation, restitution, and legal protection of Indigenous territories.

The Economic Commission for Latin America and the Caribbean stipulates that states must guarantee the self-determination of Indigenous peoples over their ancestral lands, territories, and natural resources because they represent the fundamental bases for Indigenous well-being.⁵

In 1993, Chile passed Law 19253, which establishes norms for protecting and developing the life

of native peoples residing in the country. The purpose of this law is to protect the cultural and health patrimony of Indigenous peoples. Furthermore, the law regulates the participation of Indigenous peoples in decisions regarding development projects that stand to affect them. In 2008, the government created the Historic Truth and New Deal Commission and rolled out new policies on the relationship between the state and Indigenous peoples.⁶ In this context, an Indigenous health policy was created, along with certain regulations to implement it. The regulations concern the rights and duties of health users and establish that in territories whose populations consist of more than 20% Indigenous people, the Chilean state must guarantee intercultural initiatives.⁷ As a result, the health rights of Indigenous people became associated with the concepts of the ecosystem and territory. Different authors have studied this issue, analyzing development, identity, health, and territory as rights of Indigenous peoples.⁸ Despite this progress in public policies, there are still critical structural gaps in recognizing the relationship between the natural environment and Indigenous peoples' well-being and healing.⁹

In Chile, conflicts have arisen concerning the Mapuche people, the country's largest Indigenous group, particularly their claims to autonomy over their historical territories, which are currently being exploited by private and transnational companies for commercial purposes.¹⁰

Despite progress in regulations at the national level, the Chilean state exerts minimal oversight over the extractive activities of timber companies, and it does not recognize the inextricable relationship between Indigenous people, territory, and health.¹¹ The Mapuche, whose claims to territorial rights have been criminalized, have also experienced judicial persecution for struggling against extractive capitalism.¹² Consequently, the concern for ensuring the population's health from a perspective of law and interculturality has become subsumed into issues of territorial conflict.

For the Mapuche, territory has philosophical and cultural significance and represents more than a piece of land. It embodies a symbolic category that articulates the history of their ancestors,

nature, health, and reproduction and is therefore considered sacred.¹³ Likewise, health is understood as the relationship between human beings, nature, and ancestors.

Chile's extractive approach to nature, inherent to positivist thinking, collides with the cosmivision of the Mapuche and has been a source of constant conflict between the state and this Indigenous group.¹⁴ A vast area of the once pristine Mapuche territory has been exploited by the forestry (pulp and paper) industry. Although some Mapuche communities have benefited from forestry in terms of employment and income, most are against the advance of forestry.¹⁵

Regardless of the Chilean state's efforts to incorporate international standards concerning ancestral peoples, such attempts have been insufficient and limited.¹⁶ The positivist logic, which underpins the current Chilean Constitution, conceives of ecosystems as unlimited resources that can be exploited, while reducing the concept of health to an individual right associated with curative biomedical benefits.¹⁷ These principles contradict the Mapuche epistemology that links health to the natural ecosystem and promotes nature's protection and recognition as a subject of rights, which is thus opposed to the capitalist concept of commodities.¹⁸

Few empirical studies on Indigenous populations in Chile have involved a combined analysis on culture, ancestral territorial rights, and collective well-being.¹⁹ We analyze these changes and gaps in relation to health and rights from the framework of Collective Health in Latin America with special attention to Indigenous knowledge and experience in Chile.²⁰ This paper presents qualitative research on the perceptions of Mapuche people living in the Araucanía region about their ecosystem, health, and relationship with the Chilean state. It provides insights into how the Mapuche live and feel regarding the fulfillment of their Indigenous rights to land and health.

Methodology

We undertook a descriptive and qualitative study from 2016 to 2019 in La Araucanía, Chile, located

686 kilometers south of Santiago, the country's capital. This region is inhabited by the largest Indigenous community in Chile—the Mapuche—who make up 9.9% of the national population.²¹ In La Araucanía, 32.8% of the population belongs to the Mapuche people; and of these, 70% live in rural areas.²²

These rural Mapuche inhabitants live in small family communities far from urban areas; they are principally farmers who raise livestock and cultivate vegetables, and in some areas, they rely on handiwork as a means of subsistence. Many of these rural communities are surrounded by timber companies that have established forest monocultures and a network of roads designed for industrial plantations. Given the current unrest in these territories, most companies employ armed security guards to protect their extractive activities.

Thirty adults who self-identified as Mapuche, belonging to three ecological-cultural zones in the Araucanía region, participated in our study. The ecological-cultural zones are described as the coast (*lafkenche*), center or intermediate depression (*wen-teche*), and mountain range (*pewenche*).²³

The participants consisted of 21 men and 9 women, with an average age of 39 years and an average of seven years of formal education; 28 people were married with children, and 25 respondents participated in land rights organizations.

We coordinated data collection with Mapuche cultural advisors (local Indigenous people), who facilitated our work with participants and accompanied us in the data collection process.

Data was collected through focus groups and interviews conducted in the communities. We obtained participants' informed consent prior to data collection. This study was authorized by the Scientific Ethics Committee of the Araucanía Health Service and Universidad de La Frontera.

The interviews and focus group conversations were transcribed and entered into a database in the Atlas.ti 10 program. We then segmented the stories into units of meaning; coded the text to compress information; grouped codes of similar meanings; designed a descriptive network or map to observe relationships among meanings; performed a nar-

rative interpretation of findings; and developed results and findings congruent with the discourses.

The reliability and rigor of our research process was ensured through data collection triangulation (i.e., groups and individuals) and the participation of various analysts in the process of determining results.

Results

Three themes emerged that reflect the Mapuche population's perception of the relationship between the ecosystem and their health rights. First, extractive policies have been encouraged and supported by the Chilean state. These policies are considered structural factors not modifiable in the short term. Second, ecosystemic changes have generated uncertainty and a lack of well-being in the population. These changes are perceived as a violation of the right to health. Third, state policies and regulations are considered forms of colonialism that violate Indigenous ancestral rights.

Extractive policies promoted by the Chilean state are independent of the administration in power

Interviewees consider that there is a lack of vision from the Chilean state concerning the importance of the Mapuche people in the country's history and development. Although various policies and laws regarding Indigenous peoples and institutions have been created to address global issues of Indigenous development, they are focused on compensating families for historical and recent economic damage. Several comments from participants illustrate this idea:

The state believes it is doing a favor to the Mapuche people by helping them, but no, it is our right. We always had the same problem, the importance of our community as a people is unknown, and our history, organization, language, education, and medicine are ignored. (interviewee 2)

In schools, students are taught that the Mapuche people are part of history; the Mapuche people are seen as having disappeared. That is not appreciating

that they are a living population, a nation, not isolated people in each community. (interviewee 10)

The policy has always been to corner us. They occupy our ancestral territory and hand it over to the companies that take everything, the native forest and the water, rendering everything useless. (interviewee 1)

In this context, the state has embraced a repeated policy of ignorance, which has become a structural factor threatening the life and developmental possibilities of the Mapuche people. For example:

There have been advances, but always because the Mapuche fight for their rights and continue fighting. There is CONADI [National Corporation for Indigenous Development], laws, and regulations that Chileans make for us, that have lived here before the arrival of the Spaniards. (interviewee 7)

They blame the Mapuche, and militarized our territories. This will not easily change until other laws reign ... our laws. The truth is that our existence as a Mapuche people-nation is ignored, and that ignorance is installed within Chilean society. (interviewee 10)

Changes affecting the ecosystem have generated uncertainty and a lack of well-being, which constitutes a violation of the right to health

As stated in the introduction, the Mapuche cosmology and people are inextricably bound to the territory and nature. For them, nature is not only a physical environment but also a spiritual space of interconnection where Mapuche beings coexist with their ancestors. This relationship of reciprocity, while hierarchical, is supported through mutual respect that generates a balance between being and nature. This balance is expressed in the concept of well-being (health) for humans and non-humans, present and past. Consequently, every element that disturbs nature affects all beings that make up this system.

All the people interviewed mentioned the presence of significant changes in nature that have affected the health and well-being of the Mapuche people.

These changes are the result not only of human settlement but also of the interventions of monoculture forestry plantations and water extraction companies. Some excerpts exemplify this idea:

If you enter a place and you ravage the spirituality of the space, there will be a shock, a disturbance from that encounter, and it will disrupt your spirituality. This disruption is the origin of the imbalance. As your spirituality and body are one, it will have repercussions, it will affect you, and you will see it later reflected in the body. (interviewee 1)

The business enterprises come to take everything away from you, and you are left with nothing; they leave you hopeless, and for sure, that emotional part of you will trigger an illness. Your mind, your thoughts at night, being unable to sleep or eat because your mind cannot organize itself. If everything is taken away from you, you cannot properly nourish yourself and sleep well. In other words, it affects my body because I am a whole, do you understand? (interviewee 12)

All Mapuche people come with a role in the community: to take care of our surroundings, to protect and take care of the land, to take care of nature, to be watchful of what is happening with the water sources, what is happening with the herbs, with the trees, the medicinal resources. It is a whole; to live, we have a whole set of elements. We cannot isolate ourselves and say: I can live alone without these elements. If these elements are missing, you have lost your life and who you are and are no longer human. You are already a machine, you are mechanized in the system. (interviewee 17)

A community leader told us:

Everything is related to us, not only the issue of health but also the issue of roads, the issue of bridges, the issue of education, and different issues with the communities. All areas of development, especially in fundamental rights, health, education, and roads, mean having good accessibility to the city, right? Those are the rights of the communities. (interviewee 5)

Another said:

The companies take everything away: that makes us sick, it does not allow us to prosper, it is like taking away the community's right to exist. (interviewee 10)

Some people stated that even Mapuche medicine and its agents had been affected by changes in nature:

It is harder to go to look for remedies [medicinal herbs], the menoco [places with vegetation and water] are getting farther and farther away from where we used to live, because they have been depleted, and so our machi [traditional healers] suffer ... they are becoming lost. Even to take plants from the mountain, we have to ask permission from the Chilean institutions. Can you see? We were the owners of that mountain. (interviewee 2)

Nature has also changed over time, the air that surrounds us, it is not like before, before there were all the natives, there was the river, there were waterfalls, the mañines [swamps], the river carried much water to the sea, everything was abundant. Now, it no longer exists. So, the air is different; it is not like before. Before, when you spoke, it echoed; now you speak, you speak again, and there is no echo. (interviewee 2)

There is a perception of colonialism and a transgression of Mapuche ancestral rights

The Mapuche people share a spiritual and cultural history related to the creation of the universe, people, and nature. As a nation, they are a civilization previous to the Spanish conquest, but one brought down by war and occupation and then forced to abandon their ancestral territories, thus transforming their political, economic, and social organization.

Many interviewees described this colonization and neocolonization as a severe loss and a trauma in their people's history. However, at the same time, they expressed their spirit of struggle to recover and validate their constitutional rights:

Colonialism is an issue if one follows history, starting with the defeat of the Mapuche people by the Chilean army when the fundamental rights of the Mapuche people were not respected. When the Chilean army in 1879 to 1880 came and overran the Mapuche people with weapons, they annihilated and won the war; they burned their houses, took their animals, and impoverished them in such a way. Then a problem started because they killed their families, and they cornered them. (interviewee 15)

Another participant pointed out that the Mapuche people's right to have their own organization has been transgressed. In their words:

How we are led, directed, and structured as a people or nation is different from the other customs. Today the longko [Mapuche political authority] is compared to the president of a community or an organization. The westerners brought those customs and implanted them here among us, and took what was ours. They made us vote in the community to elect someone, but the longko is not someone elected by the community. The longko is a spiritual being, whose gift and lineage is to serve as an authority. (interviewee 17)

They already brought you the school, the church, the post, everything. The state today places rules on you and forces you; obligations to fulfill and duties to do. Furthermore, you have very little right in the face of that. The rights for us Mapuche are very, very few. So, you have practically no rights, but you have many duties to fulfill toward the state. (interviewee 8)

For many interviewees, the Mapuche people are tied to territory, and this territory no longer has space to develop. Thus, alternatives must be sought for a new form of articulation between Chilean and Mapuche societies:

I am a farmer, but nowadays that is ending because there is no more space. Perhaps our grandparents had a decent amount of land, but then more and more people were born, the same land was divided so that everyone had enough, and the pie shrunk. Then you can no longer raise animals; you have no pasture or fodder for your animals or crops. You can't even grow crops. So, you must commit yourself to small vegetable gardens, small things, or cleaning the streets as I do now. (interviewee 14)

The respondent also mentioned that it has been a great tragedy for the Mapuche people, generating significant pain and desolation, but that in the course of time the ideas of vindication of their condition as a people are still in force:

It is not a bad thing that the Chileans are next to us, but how do we balance this, how do we not run over each other, how do we not hit each other? That is the

problem; that is the way it is. So, we must keep on recovering and fighting for our people. (interviewee 14)

Another interviewee suggested some solutions:

The state must educate itself too. Resources and education must be sought for the implementation of new projects and new systems. We must search for a new world of true development, not pollution because it is the cheapest thing to do. For them, it is cheaper to destroy the forests, rivers, or streams that feed the rivers. However, the effects in the future will be catastrophic for the planet, not only for the Mapuche. (interviewee 2)

To summarize, the three themes discussed above interlink with one another, forming a remarkable unity of meaning that implies the presence of a people defeated by war, reduced, and colonized. However, their power lies in the right to be considered a society prior to discovery and colonization that, despite the ethnocidal processes, continues to be a people with a history, an identity, and a projection. Thus, "struggle" is the metaphor that has accompanied the history of the Mapuche people to this day.

Conclusion

Three themes repeatedly emerged from the analysis of the interviews, connecting the perception of the existing situation of the Mapuche people with processes of colonization and the transgression of their fundamental rights, particularly in terms of politics and health. These themes relate to the focus of Collective Health in Latin America on all aspects of social, political, and economic rights that allow the right to health and to the focus of Latin American interculturality in the health field to highlight the knowledge and priorities of Indigenous people. The first theme involves a perceived sense of plundering and extractivism of ancestral or pristine territories as a state policy has been present for centuries. Second, far-reaching changes in the ecosystem have generated transformations in the Mapuche way of life and their relationship with the environment.

The third theme is the Chilean state's colonialist approach, which does not assume the presence of this Indigenous nation in its territory.

Several issues determine the complexity of the interaction between the Mapuche people and the Chilean state with regard to their right to health. The Mapuche paradigm of health and well-being—whose principles differ radically from those of westernized Chilean society—is at the core of this interaction. The Mapuche people have a holistic and integral conception of the synergic coexistence between humans and nature, both of which have a spirituality and identity.²⁴

During the Spanish conquest in Chile, land was interpreted as an asset to be expropriated, capable of exploitation for the empire's benefit or for the benefit of individuals who assisted these aggressive strategies. It came to be valued only as a material asset or simply as a commodity to be traded on the international market. The persons inhabiting these territories were not regarded as people; therefore, they were killed or enslaved without rights.²⁵

This historical legacy of the exploitation of natural resources has endured, with different facades, up to the present day. Powerful economic interests continue to value Chilean territory (including that of the Mapuche), which is still depicted as pristine and abundant in natural resources, as a source of economic profit. Consequently, the Mapuche cosmivision of health, well-being, and territory collides with an economy-based and extractivist perspective of space, to the extent that Indigenous people are punished, suffer diseases, endure damage to their spiritual well-being, or are left in a state of poverty.

The results of our study suggest the presence of a profound extractive paradigm regardless of the administration in power, which indicates that this is a phenomenon rooted in the very essence of Chilean policies. Through our interviews with members of the Mapuche community, we can perceive the absence of their participation in the realms of policy. The Mapuche people demand recognition and respect as historical subjects because they are the natural owners of the territory in dispute.

In this context, we can see a historical policy

of extermination of the Mapuche cultural identity, especially because the state is not protecting the rights of the country's Indigenous population, as it is obliged to do under international human rights law. The changes generated by the state to Indigenous ecosystems have had a transcendental repercussion on the life of the Mapuche people, especially their health.

The current constitutional process underway in Chile is of utmost importance for the country's Indigenous peoples, as it holds the promise of respect for plurinationality, interculturality, and the rights of nature. Nevertheless, the adoption of such a constitutional framework is still far from reality. The Mapuche people are participating in this constitutional process in order to promote a better understanding of their Indigenous rights.

Finally, to conceive health as a cultural right of Indigenous people implies an ethical and moral duty on the part of the Chilean state, and all strategies to accomplish this goal must be through participatory processes involving Mapuche authorities.²⁶

Acknowledgments

We would like to extend a special thanks to machi Jorge Quilaqueo, who served as a cultural advisor to this project. We are also grateful to the intercultural facilitators of the Mapuche Health Program of the Cautin and Malleco, in the Araucanía region, and the Mapuche community leaders and users of the health care centers. This research was funded by the National Fund for Research and Development in Health (grant number SA17I0199).

References

1. Constitution of the World Health Organization (1946).
2. International Labour Organization, *Indigenous and Tribal Peoples Convention* (1989).
3. Pan American Health Organization, *Health of the Indigenous Peoples, Resolution CD37/20* (1993).
4. United Nations Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295 (2007).
5. Economic Commission for Latin America and the Caribbean, *Los pueblos indígenas en América Latina: Avances en el último decenio y retos pendientes para la garantía de sus derechos* (Santiago: Economic Commission for Latin

America and the Caribbean, 2014).

6. Comisión Verdad Histórica y Nuevo Trato, *Reporte de la Comisión y Nuevo Trato con los Pueblos Indígenas* (2008).

7. Ministry of Health, Interculturalidad en los servicios de salud, Resolución 251 (2006); Ley de derechos y deberes en salud no. 20.584 (2012); Política de salud y pueblos indígenas (2006).

8. S. Quintriqueo, K. Arias-Ortega, G. Muñoz, et al., "Conocimientos geográficos y territoriales con base epistémica en la memoria social mapuche," *Revista Brasileira de Ciências Sociais* 36/106 (2021); R. Sánchez, "Derechos mapuche, territorialidades y proyectos de desarrollo: Proyectos de intervención, instituciones, organizaciones y comunidades," in R. Morales (ed), *Territorialidad mapuche en el siglo XX* (Concepción: Escaparate Press, 2002).

9. M. Castro, S. Millaman, J. Niccodemi, et al., "Los impactos en derechos humanos de los proyectos de inversión hidroeléctrica en el territorio Mapuche de la región de la Araucanía," Observatorio Ciudadano and Observatorio de Derechos de los Pueblos Indígenas y el Grupo de trabajo por los Derechos Colectivos (eds), (Temuco: Observatorio Ciudadano, 2016); G. Boccara, "Del buen gobierno en territorio Mapuche: Notas acerca de una experiencia complementaria," *Cuadernos de Antropología Social* 20/113 (2004); J. Ibacache, S. Mcfall, and J. Quidel, "Rume kagenmew ta az mapu: Epidemiología de la trasgresión en Makewe-Pelale," (2000), <http://www.estudiosindigenas.cl/trabajados/epidemiologia.pdf>; A. Cuyul, "La política de salud chilena y el pueblo Mapuche: Entre el multiculturalismo y la autonomía," *Salud Problema, Segunda Época* 7/14 (2013).

10. J. Aylwin, "El acceso de los indígenas a la tierra en los ordenamientos jurídicos de América Latina: Un estudio de caso," ECLAC Series No. 128 (2002), <https://www.cepal.org/es/publicaciones/4517-acceso-indigenas-la-tierra-ordenamientos-juridicos-america-latina-un-estudio>; "Los conflictos en el territorio mapuche antecedentes y perspectivas," Archivo Chile, Web del Centro Estudios Miguel Enríquez (2002), https://www.archivochile.com/Ideas_Autores/aylwino_j/aylwinoj0001.pdf; P. Mariman, "Recuperar lo propio será siempre fecundo," in R. Morales (ed), *Territorialidad mapuche en el siglo XX* (Concepción: Escaparate Press, 2002); M. Correa and E. Mella, *Las razones del illkun/enojo: Memoria, despojo y criminalización en el territorio mapuche de Malleco* (Santiago: LOM, 2010).

11. J. Aguas and H. Nahuelpan, "Los límites del reconocimiento indígena en Chile neoliberal: La implementación del Convenio 169 de la OIT desde la perspectiva de dirigentes Mapuche Williche," *Cultura-Hombre-Sociedad* 29/1 (2019).

12. Correa and Mella (see note 10); P. Mariman, "Territorio, propiedad y derechos colectivos de los pueblos indígenas," in X. Erazo, M. Aleuy, and E. Ganuza (eds), *Políticas públicas: Exigibilidad y realización de derechos* (Santiago: LOM, 2013); H. Nahuelpán, "Las zonas grises de las historias Mapuche: Colonialismo internalizado, margin-

alidad y políticas de la memoria," *Revista de Historia Social y de las Mentalidades* 17/1(2013); "Micro políticas Mapuche contra el despojo en el Chile neoliberal: La disputa por el lafkenmapu (territorio costero) en Mehuín," *Izquierdas* 30/89 (2016); T. Tricot, "Lumako: Punto de inflexión en el desarrollo del nuevo movimiento Mapuche," *Revista de Historia Actual* 19/77 (2009).

13. Boccara (see note 9); E. Borde and M. Torres-Tovar, "El territorio como categoría fundamental para el campo de la salud pública," *Saúde em Debate* 41/2 (2017); M. Grebe, S. Pacheco, and J. Segura, "Cosmovisión mapuche," Archivo Maria Ester Grebe (1972), <https://archivomariaestergrebe.cl/publicaciones>; M. Melin, M. Royo, and P. Mansilla, *Cartografía cultural del Wallmapu* (Santiago: LOM, 2019); Ibacache et al. (see note 9); Quintriqueo et al. (see note 8).

14. R. Quilaqueo and S. Quintriqueo, *Métodos educativos Mapuches: Retos de la doble racionalidad educativa, aportes para un enfoque educativo intercultural* (Temuco: Universidad Católica de Temuco, 2017); N. Martínez, "Tierra, territorio y territorialidad mapuche: Producción de espacio y formación de subjetividades," *Revista Geográfica del Sur* 3/1 (2012); Grebe et al. (see note 13); Z. Neira, A. Alarcón, I. Jelves, et al., "Espacios ecológico-culturales en un territorio mapuche de la región de la Araucanía en Chile," *Revista Chungará* 44/2 (2012); Borde and Torres-Tovar (see note 13); B. De Sousa Santos, *Epistemologías del sur* (Mexico City: Siglo XXI, 2010); M. Meza-Lopehandía, "El racismo ambiental en Chile," *Revista de Historia Social y de las Mentalidades* 11/1 (2007); S. Millaleo, "Migración y la construcción de sujetos políticos: Colonialismo, racismo ambiental y pueblo Mapuche," *Migrantes: Anales de la Universidad de Chile* 16/7 (2019); Coordinación de Comunidades en Conflicto Socioambiental and Red de Acción por los Derechos Ambientales, "Informe paralelo de los denunciantes, racismo ambiental en la región de La Araucanía, Chile, por los casos de vertederos y plantas de tratamiento de aguas servidas localizadas en comunidades Mapuche" (2009), <https://xdoc.mx/preview/racismo-ambiental-en-la-region-de-la-araucania-chile-por-los-5e75274dcod21>; Corporación Observatorio Latinoamericano de Conflictos Ambientales, "Justicia ambiental, un derecho irrenunciable" (2004), <https://olca.cl/oca/informes/justicia.pdf>; P. Huenchumil, "El mapa que muestra cómo la expansión forestal presiona a los Mapuche en la provincia de Arauco" (2020), <https://interferencia.cl/articulos/el-mapa-que-muestra-como-la-expansion-forestal-presiona-los-Mapuche-en-la-provincia-de>; Colectivo Editorial Mapuexpress, "Resistencias Mapuche al extractivismo" (2016), <https://www.mapuexpress.org/wp-content/uploads/2017/10/Libro-Mapuexpress-Resistencia-Mapuche-al-extractivismo.pdf>; A. Seguel, "Basurales en comunidades Mapuche: Un conflicto latente en la región de la Araucanía" (2003), <https://www.olca.cl/oca/informes/basurales.pdf>.

15. Martínez (see note 14); Quilaqueo and Quintriqueo (see note 14).

16. M. Castro, *Principios constitucionales para una nueva salud: Sistematización de la VII Escuela Abierta de Salud Pública para Dirigentes Sociales* (Temuco: Universidad de la Frontera, 2021).

17. J. Breilh, "Informe alternativo sobre la salud en América Latina" (Quito: Global Health Watch, 2010); M. Báltica, A. Bernales, and V. Pedrero, *Vulnerabilidad social y su efecto en salud en Chile desde la comprensión del fenómeno hacia la implementación de soluciones* (Santiago: Universidad del Desarrollo, 2016); J. Breilh, "Hacia una construcción emancipadora del derecho a la salud," in *¿Estado constitucional de derechos?* (Quito: Universidad Andina Simón Bolívar, 2009); P. Farmer, "Challenging Orthodoxies: The Road ahead for Health and Human Rights," *Health and Human Rights Journal* 10/1 (2008); E. Menéndez, "Modelo médico hegemónico y atención primaria" (presentation at II Primary Health Care Conference Buenos Aires, 1988); E. Menéndez, "Modelos de atención de los padecimientos: De exclusiones teóricas y articulaciones prácticas," *Ciència e Saúde Coletiva* 8/1 (2003).

18. E. Gudynas, *Extractivismos: Ecología, economía y política de un modo de entender el desarrollo y la naturaleza* (Cochabamba: Centro de Documentación e Información Bolivia, 2015); *Derechos de la naturaleza: Ética biocéntrica y políticas ambientales* (Santiago: Quimantú, 2019); D. Harvey, "El 'nuevo' imperialismo: Sobre reajustes espacio-temporales y acumulación mediante desposesión," *Revista Viento Sur* 447 (2004).

19. Martínez (see note 14); Mariman (2002, see note 10); Sánchez (see note 7); Quintriqueo et al. (see note 8); Melin et al. (see note 13); Correa and Mella (see note 10).

20. N. Almeida Filho and J. Silva Paim, "La crisis de la salud pública y el movimiento de la salud colectiva en Latinoamérica," *Cuadernos Médico Sociales* 75 (1999).

21. National Institute of Statistics, *Censo 2017* (2018).

22. Ministry of Social Development and Family, *Encuesta de caracterización socio-económica nacional* (2017).

23. P. Mariman, S. Caniuqueo, J. Millalen, and R. Levil, ¡Escucha, Winka! (Santiago: LOM, 2006).

24. Grebe et al. (see note 13); Neira et al. (see note 14); D. Quilaqueo, S. Quintriqueo, H. Torres, et al., "Saberes educativos mapuches: Aportes epistémicos para un enfoque de educación intercultural," *Revista Chungará* 46/2 (2014); Melin et al. (see note 13); Quintriqueo et al. (see note 8); Borde and Torres-Tovar (see note 13).

25. J. Bengoa, *Historia de un conflicto: El estado y los mapuches en el siglo XX* (Santiago: Planeta, 2002).

26. Farmer (see note 17); "Desigualdades sociales y enfermedades infecciosas emergentes," *Papeles de Población* 6/23 (2000); E. Menéndez, "La salud como derecho humano: Acotaciones sobre la posibilidad de una práctica diferenciada," *Cuadernos Médicos Sociales de Rosario* 37 (1986).

