

Sarah Olimpia
Professor Stephen Bell
Geography of South America: Agricultural Change

Tierra or Terroir?: Natural Wine and Agroecological Potentiality in Chile

If all the world is a commodity, how poor we grow. When all the world is a gift in motion, how wealthy we become

♀ Robin Wall Kimmerer

Introduction

Every anthropogenic landscape is a complex assemblage shaped by relations of power, labor, the human, and the more-than-human. In the case of industrial agricultural landscapes, justifications for their many ills often follow a Malthusian line of rhetoric: we cannot possibly feed so many human mouths unless we terraform away the savannah and replace it with soybeans, for example (Russo Lopes 2021). These sites of massive and abrupt shifts in land use are often grimly accepted as what Susanna Hecht calls “sacrifice zones”: biomes — and, of course, the rural human cultures that depend on them — that simply must be sacrificed in the name of food security (Oliveira 251). Upon closer inspection, however, many of these initiatives do little to satiate global hunger, and instead result in mass displacement of rural populations, ecosystem collapse, contamination of water supplies, and ample profits for investors. For as long as neoliberal terraforming has existed, modes of resistance have sprung up against it, sometimes within a larger decolonization movement, and other times under the umbrella of food sovereignty or agroecology.

Viticulture, though it makes no claims to solving global hunger, provides an interesting case study for how these modes of resistance function under neoliberal environmental governance, particularly in Chile. Originally introduced for ritual purposes under Spanish settler colonialism, Chilean wine production has evolved into a vast, technology-driven industry subject to the whims of the global market. Today, Chile is the world's fourth-largest exporter of wine by volume, and 80% of the wine it produces is exported (Karlsson 2020). As such, shifting global consumer preferences, like, perhaps, the millennial trend toward natural wine, have an exaggerated effect upon its economy and, by extension, its agricultural landscapes.

As wildfire smoke taints entire harvests, water resources become ever more contested, and soil quality deteriorates in the face of rampant agrochemical runoff, climate change and a growing movement around food sovereignty have given rise to increased conscious consumerism and a small but rapidly expanding natural wine phenomenon: “People who shopped at farmers’ markets, drank craft beer, and ate heirloom tomatoes at farm-to-table restaurants were alarmed by reports of lab-made yeasts, grapes doused in the weed killer glyphosate, and enormous corporate conglomerates... Natural wine fit in with the urban appetite for movements that evoked a slower, more earthbound past“ (Monroe 2019). Within the past decade, hundreds of natural wine shops, bars, fairs, and institutions have emerged across North America, Europe, and Latin America, even as overall wine consumption by millennials has decreased (Asimov 2021). Some Chilean winemakers are seizing on this increased demand for transparent, sustainable agriculture and attempting to effect policy changes on a larger scale. As Latin America's "'test case' of neoliberal environmental governance," Chile is an interesting case study in how macroeconomic policies and shifting global trends toward conscious consumerism shape land

use (Barandiaran 1015). This paper will analyze these tensions within the context of the natural wine movement: what can the "most geographically expressive" of crops tell us about the state of sustainable agriculture?

The Political Economy of Wine in Chile: A Brief History

Although grapes existed in the Americas prior to European colonization — there are approximately 35 grape species native to North America and just one native to Europe — the *Vitis* genus “could not cross [the tropics] to reach its second home in the south temperate zone until [the Spanish] helped it to do so” (Hyams 8). With its coastal, Mediterranean climate, Chile’s physical geography proved ideal for viticulture; its political context at the time, however, was that of unrelenting colonial violence:

The rate of viticultural expansion was extraordinary; Chile had become a land rich in vines by 1570, and five years later their number had trebled... It is at least possible that, having noted the religious importance of wine, the native Chileans thought that by striking at the sacred plant they would be making war on that merciless Christian God in whose name they were being massacred, enslaved and even burnt alive, an atrocity beyond their experience. It is, at all events, a fact that when the people of Concepción rose under their *cacique* Antecul, they destroyed every vineyard they could reach and clearly made a dead set at the grape-vines (Hyams 294).

As Chile became independent from Spain and formed a unique national identity, its wine became less of a ritual beverage and more of a commodity. European technocrats began to promote a global trend toward galicization; as a result, the “french oenology paradigm” and its associated

grapes — Merlot, Carménère, and Syrah — gradually displaced traditional Hispanic strains such as País and Moscatel (Letelier 186, Troncoso-Valverde 2004). Following a 1973 coup, Chile’s military dictatorship implemented aggressively industrial, export-oriented agricultural policies, which “triggered a deep transformation of the industry as a whole, changing its focus toward the production of more competitive premium wine varieties... with the aim of reaching foreign markets” (Troncoso-Valverde 2004). As a result, prices increased and domestic Chilean wine consumption fell from approximately 60L per person per year in the 1960s to just 18L in 2000 (ibid). Today, Chile has the most export-oriented wine industry in world, and Chileans consume less wine per capita than residents of any other major wine-producing nation (ibid).

Natural Wine: Tradition Commodified or Catalyst for Ecological Reform?

A *New York Times* article opens with a riddle: "Natural wine is healthy and pure; natural wine is wretched and horrible. It’s the future of wine; it’s the death of wine" (Asimov 2020). Like many nascent trends in food and beverage, natural wine lacks a consistent definition or regulatory body, and is better thought of as a “social movement involving consumers and producers rather than a regulated form of agricultural production” (Vecchio 2). Its appeal is multi-faceted: because it eschews herbicides, pesticides, laboratory-grown yeasts, or preservatives, it is seen as healthier for the human body, less destructive to the ecosystem at-large, and supportive of local history and heritage (Fabbrizzi 2021). There is some truth to these notions — numerous studies have examined the physiologically and ecologically devastating effects of conventional pesticide use, for example, which has increased by more than 160% in the last twenty years within Chile alone (Climent 2019). Such practices have resulted in higher occurrences of Parkinson’s and

Alzheimer's diseases, neurological disorders in children, and the contamination of surrounding water bodies (Lucero 2019, *ibid*). Industrial viticulture, coupled with a reliance on lab-grown yeasts and sulfites for more homogenous and predictable fermentation, creates deterritorialized wines that are reliably similar to their European counterparts. By contrast, natural wine emphasizes a "sense of place" or *terroir*:

The issue of naturalness and authenticity is one of the key current debates in the world of wine... Why? Because wine is at a metaphorical fork in the road, and from here it can go one of two ways. The first is to continue down the road taken by New World branded wines: huge volumes, a reliance on technology and marketing... and a loss of *terroir* (the possession by wines of a sense of place)... The other road involves a retracing of steps and a celebration of what has made wine different and special: a respect for tradition, a sense of place, and an acknowledgement that diversity is valuable and not just an inconvenience. Wine is embedded in the deeper culture. (Goode 5).

Natural wines -- at least those deemed by the community at-large to be authentically "natural" -- indeed generate landscapes that are less destructive to surrounding ecosystems and the people who drink them. On restaurant menus and in specialized shops, they range in price from slightly more than the cheapest conventional alternative to obscenely expensive, and their very presence evokes an eco-conscious, casual-gourmet identity. Across most major Western cities, their reach is expanding to include techno clubs, music festivals, and art museums. As one culinary publication crows, "Natural wine has fast become an integral part of what it means to be young and cool in Berlin" (Kealy 2019). Whether this enthusiasm translates to significant ecological

change on a global scale, however, is unlikely given the size of the market and its inaccessibility to the vast majority of the global population. In an economy as dependent on global wine trends as Chile's, however, the emergent trend toward sustainably-grown wines carries more potential for policy change than perhaps anywhere else in the world.

Natural Wine in Chile

Although just three conventional wine behemoths represent 44% of its viticultural market, natural wine is steadily growing within Chile (Letelier 187, RAW Wine 2020). For its part, Chile has by far the most sustainable wine initiatives in Latin America: 19 of its 25 leading wineries are either experimenting with or actively adopting organic or biodynamic practices, compared to eight of Argentina's top 25 wineries (Farinelli 199). That being said, its deeply-entrenched "neoliberal sustainability governance" results in greenwashed policies that may be ultimately superfluous in the face of looming ecological crises (Barandiaran 1019).

In a 2020 analysis of small-scale viticulture cooperatives as alternative food networks (AFNs), Eduardo Letelier describe various "food system reconfiguration strategies" characterized by their relationships to labor, local communities, and spatial resources. In the Itata Valley's "traditional zone of peasant viticulture," three-hundred-year-old País vines from the colonial period continue to bear fruit. Within this region, natural viticulture exists in resistance to "Big Wine", and generations of small farmers have worked together to influence state agricultural policies and bolster their bargaining power as a cooperative. By contrast, the Marga Marga collective in Valparaíso is relatively new, and much more connected to global movements around food sovereignty and socio-ecological justice. By transforming existing industrial vineyards into low-

impact natural alternatives, theirs is a “retro-innovative” strategy: “an exercise to recompose practices and trades that have been lost, fostering spaces of reterritorialisation... the vintners [cultivate] a wine that embodies the biological diversity of its territory” (Letelier 191).

As demand for "reterritorialized" wine grows, farmers and cooperatives who cultivate low-intervention, ecologically-sound landscapes are able to sustain themselves and convert more areas of previously industrial agriculture. Though the scale might be small now, perhaps it will be useful as a model going forward for other non-grape crops, assuming global consumer preferences toward sustainable agriculture continue. However, within a highly neoliberal context, agency is demand-side rather than supply-side; alternative food networks "cannot really build completely autonomous economic practices, but rather depend (more or less) on the rules set by structural socio-material contexts" (Letelier 195). Indeed, the Marga Marga collective exports 75% of its product to Europe and the United States, where it faces stiff competition from a growing number of sustainable and biodynamic vineyards worldwide.

Conclusion

If the stated goals of the agroecological movement are to “support the peasantry their new role in the resistance against the advancement of the corporate food system, industrial agriculture and neoliberal policies,” it may seem superfluous to focus on a non-essential beverage like wine (Altieri 1). However, the seeds of agroecological change can be seen in winemakers repurposing conventionally-farmed land with more ecologically sound practices, and natural wine cooperatives successfully lobbying for policy changes. These efforts are made more challenging by the export-oriented nature of Chile’s agricultural sector -- when the success of any vineyard

depends so dramatically on global consumer trends, agroecological agency is severely constrained by the demands of the global market. While the natural wine movement is certainly having an effect on the wine industry as a whole, its longevity remains to be seen. For the champions of Chile's alternative food networks, it may be more impactful to galvanize local communities toward socio-ecological transformation than rely on the whims of upscale urban elites in the Global North (Letelier 188).

Works Cited

- Altieri, Miguel, et al. "Technological Approaches to Sustainable Agriculture at a Crossroads: An Agroecological Perspective." *Sustainability* (Basel, Switzerland), vol. 9, no. 3, MDPI AG, 2017, p. 349–, <https://doi.org/10.3390/su9030349>.
- Asimov, Eric. "The Wine Business Sees a Problem: Millennials Aren't Drinking Enough". *New York Times*. 7 February 2021. <https://www.nytimes.com/2022/02/07/dining/drinks/wine-millennials.html>
- Asimov, Eric. "France Defines Natural Wine, but Is That Enough?". *New York Times*. 16 April 2020. <https://www.nytimes.com/2020/04/16/dining/drinks/natural-wines-vin-methode-nature.html>
- Barandiaran, Javiera. "The Authority of Rules in Chile's Contentious Environmental Politics." *Environmental Politics*, vol. 25, no. 6, Nov. 2016, pp. 1013–33, <https://doi.org/10.1080/09644016.2016.1218156>.
- Climent, María José, et al. "Residues of Pesticides and Some Metabolites in Dissolved and Particulate Phase in Surface Stream Water of Cachapoal River Basin, Central Chile." *Environmental Pollution* (1987), vol. 251, Elsevier Ltd, 2019, pp. 90–101, <https://doi.org/10.1016/j.envpol.2019.04.117>.
- de Blij, Harm. *Wine: A Geographical Appreciation*. Rowan and Allanheld, 1983.
- Dickenson, John P., and P. T. H. Unwin. *Viticulture in Colonial Latin America: Essays on Alcohol, the Vine and Wine in Spanish America and Brazil*. Liverpool: University of Liverpool, Institute of Latin American Studies, 1992. Print.

- Fabbrizzi, Sara, et al. "Sustainability and Natural Wines: An Exploratory Analysis on Consumers." *Sustainability* (Basel, Switzerland), vol. 13, no. 14, MDPI AG, 2021, p. 7645–, <https://doi.org/10.3390/su13147645>.
- Farinelli, F. (2012). Natural resources, innovation and export growth: the wine industry in Chile and Argentina. *Datawyse / Universitaire Pers Maastricht*, <https://doi.org/10.26481/dis.20121218ff>.
- Feira Naturebas 2021*. <https://www.feiranaturebas.com.br/>. Accessed 7 Dec. 2021.
- Goode, Jamie, and Sam Harrop. *Authentic Wine: Toward Natural and Sustainable Winemaking*. University of California Press, 2011.
- Hyams, Edward. *Dionysus: A Social History of the Wine Vine*. Thames and Hudson, 1965.
- Karlsson, Per and Britt. *The World Trade in Wine: Exports in 2020 Were Weak*. Forbes. <https://www.forbes.com/sites/karlsson/2022/03/17/the-world-trade-in-wine-exports-in-2020-are-weak>
- Letelier, Eduardo et al. "Territoriality, Environment and Hybrid Governance Tensions in Alternative Food Networks: Cases of Small-scale Viticulture in Chile." *Environmental policy and governance* 31.3 (2021): 186–198. Web.
- Lucero, Boris, et al. "Validity and Reliability of an Assessment Tool for the Screening of Neurotoxic Effects in Agricultural Workers in Chile", *BioMed Research International*, vol. 2019, Article ID 7901760, 11 pages, 2019, <https://doi.org/10.1155/2019/7901760>.
- Monroe, Rachel. "How Natural Wine Became a Symbol of Virtuous Consumption." *The New Yorker*, 13 Nov. 2019.

<https://www.newyorker.com/magazine/2019/11/25/how-natural-wine-became-a-symbol-of-virtuous-consumption>.

Oliveira, Gustavo, and Susanna Hecht. "Sacred Groves, Sacrifice Zones and Soy Production: Globalization, Intensification and Neo-Nature in South America." *The Journal of Peasant Studies*, vol. 43, no. 2, Routledge, 2016, pp. 251–85, <https://doi.org/10.1080/03066150.2016.1146705>.

"RAW WINE TALKS... Chile." *RAW WINE*, 10 Dec. 2020, <https://www.rawwine.com/learn/raw-wine-talks-chile/>

Russo Lopes, Gabriela, et al. "Maldevelopment Revisited: Inclusiveness and Social Impacts of Soy Expansion over Brazil's Cerrado in Matopiba." *World Development*, vol. 139, Elsevier Ltd, 2021, <https://doi.org/10.1016/j.worlddev.2020.105316>.

Tecklin, David, et al. "Making Environmental Law for the Market: The Emergence, Character, and Implications of Chile's Environmental Regime." *Environmental Politics*, vol. 20, no. 6, Nov. 2011, pp. 879–98, <https://doi.org/10.1080/09644016.2011.617172>.

Troncoso-Valverde, Cristián. "Preference Shifts, Structural Breaks and the Domestic Demand for Chilean Wine." *Revista de Economía e Sociología Rural*, vol. 42, no. 3, Sept. 2004, pp. 487–506, <https://doi.org/10.1590/S0103-20032004000300005>.

Vecchio, Riccardo, et al. "Why Consumers Drink Natural Wine? Consumer Perception and Information About Natural Wine." *Agricultural and Food Economics*, vol. 9, no. 1, Springer Berlin Heidelberg, 2021, pp. 1–16, <https://doi.org/10.1186/s40100-021-00197-1>.