ROBIN LarsimOnt 10 FacunDO MARTÍN 20 🖂

Original Article

Corporate disputes surrounding the creation of viticultural geographical indications in Mendoza, Argentina

Received: October 12, 2023 ▶ Evaluated: April 29, 2024 ▶ Accepted: May 15, 2024 ▶ Accepted: May 15, 2024

Suggested citation. Larsimont, R., & Martín, F. (2024). Corporate disputes surrounding the creation of wine geographical indications in Mendoza, Argentina. Perspectiva Geográfica, 29(3), 1-20. https://doi.org/10.19053/uptc.01233769.16670. https://doi.org/10.19053/uptc.01233769.16670

Summary. The current corporate and neoliberal agri-food regime is actively reconfiguring the global geography of winemaking as we have known it up to now. Growing international competition is exacerbating regional strategies of product distinction and their mechanisms of patrimonialization. This is evidenced by the proliferation of standardization and delimitation of production zones. Beyond the inter-continental disputes that have arisen in the past, conflicts and tensions between scales are currently revealed, rapidly and fragilely intertwining actors and territories in the conformation of winegrowing places that need to be delimited and institutionally recognized. In this paper we analyze the disputes over the definition of the geographical indication of Paraje Altamira in the oasis of the Uco Valley in Mendoza, Argentina, in order to unravel the legitimization strategies deployed by business, scientific and state actors, and the power relations established between them in the framework of corporate wine territorialization. The diagnosis of this case study will allow us to critically assess the emergence of other similar new initiatives that gave rise to a complex and hierarchical production of scales.

Key words: wine; terroir; Mendoza; place; scale.



Complutense University of Madrid. roblarsi@ucm.es. https://orcid.org/0000-0001-8095-1399

² Universidad Nacional de Cuyo, Consejo Nacional de Investigaciones Científicas y Técnicas (Conicet). fdmartín@gmail.com. https://orcid.org/0000-0003-0709-249X

Corporate disputes around the creation of wine geographical indications in Mendoza, Argentina

Abstract. The current corporate and neoliberal agri-food regime is actively reconfiguring the global geography of winemaking as we have known it up to now. Growing international competition is exacerbating regional strategies for distinguishing products and their patrimonialization mechanisms. This, evidenced by the proliferation of standardization and delimitation of production zones. Beyond the intercontinental quarrels that have arisen in the past, conflicts and tensions between scales are revealed, rapidly and fragilely intertwining actors and territories in the conformation of winegrowing places that need delimitation and institutionally recognized. In this paper we analyze the disputes over the definition of the Geographical Indication of Paraje Altamira in the oasis of the Uco Valley in Mendoza, Argentina in order to unravel the legitimization strategies deployed by business, scientific and state actors, and the power relations established between them in the framework of corporate wine territorialization. The analysis of this case study will allow us to critically assess the emergence of other similar initiatives that gave rise to a complex and hierarchical production of scales.

Keywords: Wine, Terroir, Mendoza, Place, Scale.

Corporate disputes around the creation of geographical indications of wines in Mendoza, Argentina

Abstract. The current corporate and neoliberal agri-food regime is actively reshaping the global geography of wine production as we know it today. The growing international competition is exacerbating the regional strategies of product distinction and its patrimonialization mechanisms. This is demonstrated by the proliferation of standardization mechanisms and the delimitation of production zones. In addition to the intercontinental disputes that arose in the past, the conflicts and tensions between scales are now revealed, rapidly and fragilely intertwining actors and territories in the formation of wine production sites that need to be delimited and institutionally recognized. In this article, we analyze the disputes over the definition of the Geographical Indication of Paraje Altamira, in the Uco Valley, Mendoza, Argentina, with the aim of uncovering the legitimization strategies used by business, scientific and state actors, subduing the power relations established between them, in the context of the territorialization of corporate wine. The diagnosis of this case study allows us to critically evaluate the emergence of other new similar initiatives that give rise to a complex and hierarchical production of scales.

Palavras-chave: Wine, Terroir, Mendoza, Local, Scale.

Introduction

The wine industry presents itself as an extremely interesting object of study to diagnose the productionconsumption dialectic that characterizes globalization processes (Harvey, 2007; Banks & Overton, 2010; Rainer, 2021), as well as the power relations between multiple and varied actors in the sector (Jones, 2003; Di Méo & Buléon, 2005). As Harvey (2007) rightly synthesizes, it is a matter of "culture in all senses (from the culture of the product to the cultural practices surrounding its consumption and the cultural capital that can develop between producers and consumers)" (p. 425). Now more than ever, both for producers who are committed to technology and for those who defend traditional methods, it is necessary to work on the "image" and authenticity of the wine produced. This process of wine differentiation was historically led by "the European wine sector, led by the French" by highlighting and defending the specific virtues of the land, climate and tradition (brought together under the French term terroir) and "the specificity of its product certified by a name" and a controlled origin (Harvey, 2007, p. 423). However, as the commercial weight of exporting countries outside the European core increased, the usual patrimonial discourse around the search for distinguishing marks for wines also began to change. Due to the dissemination of a new oenological promoted by influential international winecritics and the resignification of the French term terroir, worldwide proliferation of standardization/singularization and delimitation of wine production zones was obtained (Schirmer & Velasco-Graciet, 2010; Rainer, 2021; Overton & Murray, 2016). The ancient tradition of valuing winegrowing territories in Europe, well anchored since the beginning of the 20th century - with the appellation d'origine controlée (AOC), denominazione di origine controllata (DOC) or denomination of origin (do) - is faced with the multiplication around the world of new and varied categories of

distinction, such as protected geographical indications (pgi). In Argentina, more than 100 wine production delimitations have been recognized since 1990. If for some this new global wine geography accounts for a "cacophony and territorial uncertainty" (Schirmer & Velasco-Graciet, 2010, p. 56), for others it reflects the propensity on the part of actors in the wine sector to know how to create "fictitious places" (Overton & Murray, 2016).

Wine has proven to be a highly conflictive and disputed territorial product, and this on different scales. Indeed, beyond international disputes related to the adoption of a "culture of imitation, copying and counterfeiting" of reputed wines (Lacoste, 2019, p. 84) or the tensions that crystallize around the opposition of the differentiated production models of the Old and New World. 84) or the tensions that crystallize around the opposition of the differentiated production models of the Old and New World (Banks & Overton, 2010), there are also conflicts and tensions on a regional and local scale between actors involved in delimited or bordering geographical areas (Larsimont, 2020; Rainer, 2021). In these scenarios, what is usually at stake is the questioning of agricultural production practices that "distort" the image and reputation of a production area or product and the difficult adaptation to specific production criteria, as well as the lack of representativeness and decisionmaking of a group of producers (Di Méo & Buléon, 2005). These disputes can also be established in relation to the weight of political-administrative delimitation criteria established edaphicclimatological criteria (Banks & Sharpe, 2006). Generally, behind the tension that arises in the heat of the conformation of this type of zoning lies the possibility of enjoying or not a portion of the potential monopoly rent that the zone generates (Harvey, 2007; Unwin, 2012). Such rent, as Harvey (2007) argues, "arises because social actors can obtain a larger income stream, over an extended period of time, through their exclusive control of a directly or indirectly marketable commodity that is in some respects unique and irreproducible" (p.

418). In short, this problem, which is "articulated around the triptych rent/terroir/territory" and is the result of a complex interlocking of scales (Di Méo & Buléon, 2005, p. 175), leads us in this paper to be interested in and highlight the processes of cooperation and corporate conflicts that may arise when creating the delimitation of wine-producing zones.

In this article, we unravel the legitimization strategies deployed by business actors and legitimized by scientific and institutional actors, thus describing the power relations established in the production of these territories. We focus, in particular, on the dispute that arose in the creation of the geographical indication of Paraje de Altamira in the oasis of Valle de Uco in Mendo- za, a growing region known worldwide for its wines. We organize this paper as follows: first, we will present our theoretical and methodological framework, considering geo- graphic indications (GI) as a privileged object to question the ontological status of land, place and scales. Therefore, before presenting our sources of information and methodological tools, we make some clarifications on the volumetric turn (Elden, 2021) and the production of fictitious places (Overton & Murray, 2016) and scales (Swyngedouw, 2004). Second, we will review some aspects of the globalization of wine, such as the usual "New vs. Old World" dichotomy, highlighting in turn the increasing terroirization and conformation of de-limited productive zones. Third, after briefly contextualizing the insertion of the province of Mendoza, and in particular the Uco Valley in the global wine scene, we will present the case of Paraje de Altamira. The analysis of the conformation of this geographical indication shows that the power relations between corporate, scientific-technical-legal and biophysical (edaphological and climatological) actors show that the scales are not fixed but continually redefined, contested and restructured.

in terms of its extensions and contents. As a preliminary step to our conclusion, we will show how the creation of this GI has inspired other initiatives in the region, which require us to take stock of the territorial anchorage that they seek to valorize.

Necessary theoretical and methodological considerations

A vertical and volumetric view of the earth

Land, far from being a mere biophysical and static factor of production, can be conceptualized from a broad viewpoint articulated to the production of space and place (Lefebvre, 2014; Overton & Murray, 2016). Lefebvre early on pointed out the importance of having a vertical view on land distinguishing three levels: "the ground, the subsoil and the aboveground" (Lefebvre, 2014, p. 360). This vertical view of the capitalist valorization of land not only directs our attention to its (soil), agro-climatic, architectural landscape (subsoil) characteristics, but also - and particularly in a semi-arid area such as the province of Mendoza - to the control of groundwater (subsoil). These three levels, once "integrated [...] are affirmed as specific elements or functions of capitalist expansion" (Lefebvre, 2014, p. 360). This view has been echoed in works of political geography that view space in terms of volumes rather than areas, that is, in three rather than two dimensions (Elden, 2021; Jackman & Squire, 2021). Although this vertical or volumetric perspective mobilized been essentially to contemporary geopolitical, military and urban issues, it also offers a lens for analyzing rural dynamics. In particular, approaching the shaping of a viticultural geographical indication from this perspective urges us to diagnose the ways in which actors produce geographic knowledge about the land and - as we shall see - the *terroir*.

Inventing places

In the current terrain of global competitiveness, what Milton Santos calls a war of places is taking place (Santos, 2000). In this framework, "each place seeks to enhance its virtues through its inherited or recently elaborated symbols, as a way of using the image of the place as a magnet" (Santos, 2000, p. 227). These places are socially constructed (Lefebvre, 2014) both by economic processes and by emotions, genealogies and imaginations and mainly by discourses that give them their social validation and meaning (Overton & Murray, 2016). In this context, in conceptualizing the shaping of geographical indications, Overton and Murray (2016) speak of "fictitious places," that is, "conscious inventions of place in order to create new posi- bilities for capital to accumulate surplus" (p. 795). As Michel Rolland, the famous winemaker, ironically emphasizes, "A powerful phenomenon has appeared in our time: communication. A story must be told, if necessary, invented" (Bidalon, 2022). In short, land, in addition to its biophysical resources, contains socially produced values, in this case, deliberately created and shaped by economic agents in order to generate higher profits. In this scheme, the fictitious place would itself conform as a factor of production (Over- ton & Murray, 2016). As we shall see, the mobilization of the term terroir, beyond its semantic complexity, illustrates particularly well this "production of place" by encompassing concrete and material dimensions of physical space, but also ideals, referring to the actors' representations.

Produce scales

The processes of standardization and delimitation of productive zones such as GIs show that scales are not static, but socially constructed (Herod, 2011; Overton & Murray, 2011; Rainer, 2021). They emerge from everchanging and dynamic processes that are shaped by the socially constructed.

social conflicts and political-economic struggles, shaping the politics of scale (Swyngedouw, 2004). Although this perspective considers scales mainly as separate and distinguishable entities within a hierarchy of spatial divisions (following a topographic approach), it also invites to consider their extensions not only in areal terms, but also by appreciating the relative length of lines connecting certain nodes (forming a topological approach) (Herod, 2011, pp. 23-24). By highlighting heterogeneous elements (human and nonhuman) and their relationship, this approach conceptualizes scale as "internally related to ecological processes and interactions" (Sayre, 2005). Seeking to make visible the fluidity and dynamism of volumetric biogeophysical materialities is especially important when contemplating the factors taken into account to form a GI (edaphic and climatic criteria, etc.). Swyngedouw (following Harvey) proposes combining the topographic and topological approaches to scale to diagnose the tensions between the rhizomatic character of economic networks and flows with the territorialadministrative framework of the scales of government (Swyngedouw, 2004). In this scheme, the molecular accumulation of capital operates according to network scales that are always dependent on parallel political and institutional arrangements that regulate markets, money and property, and that form political-administrative scales (Swyngedouw, 2004). This is not to say that there is not a certain scalar hierarchy, both in relation to the extensions and actors included in these networks, but also in terms of the embeddedness of the politicaladministrative scales.

Sources and methodological tools

In order to maintain a close relationship between object, theory, method and technique, our theoretical-methodological strategy is inspired by relational economic geography (Jones, 2003). This emphasizes the unfolding and dynamics of socio-economic relationships.

The study of globalization is based on a "bottom-up perspective based on the networks of globalization" and puts "the agents involved in these processes, as well as their contradictions, in the foreground" (Jones, 2003, p. 367) and pays special attention to the discusive dimension of globalization. Thus, shaping itself as a "bottom-up perspective based on the networks of globalization", it puts "in the foreground the agents involved in these processes, as well as their contradictory and competing motivations for involvement" (Coe & Yeung, 2001, p. 375). This relational approach also recognizes that power is consubstantial to any social-natural relationship or assemblage of actors (human, but also non-human or hybrid), thus shaping dynamic geometries of power (Swyngedouw, 2004; Gregory, 2009). To reconstruct the processes of territorial production and these underlying relational geometries of power, we resorted to methodological triangulation (direct, instrumental and documentary observation) and data triangulation (primary and secondary). The monitoring of the conflict over the Altamira GI was carried out based on fieldwork conducted (between 2013-2016) in the Uco Valley (with interviews with businessmen, politicians and agricultural technicians), as well as through the analysis of secondary sources, business reports, websites, promotional videos, cadastral ma- pas and censuses of the National Institute of Vi-tiviniculture. this Fundamentally, methodological triangulation allows us to apprehend different meanings given by certain actors and to analyze how the knowledge mobilized functions when justifying territorial appropriation. At the same time, due to the difficulty of obtaining public and updated information to identify the companies and the location of their plots, we combined differentiated sources to construct our data ad hoc. This implied triangulating information about cadastral titles (mainly groundwater wells and agricultural plots) available in the Cadastral and Registry Information System (Sicar) of the General Department of Irrigation (DGI) and in the Official Gazette of the Government of Mendoza, with the help of a number of sources.

satellite images and information gathered from local press and business websites.

Wine at the global crossroads

On the regional bipolarization of the wine world

The 1980s marked the milestone of a new world geography of viticulture (Banks & Overton, 2010). The consecrated, hierarchical order centered on the European continent was completely shaken by the consolidation of the so-called "new producing countries", a category often used in the media or among European researchers and which refers to the irruption in international markets of wines not originating from the he- gemonic core of production in the Old Continent. In 2006, the documentary *Mondovino* (Nossiter, 2006) already subtly exposed the formation of a true bipolar division of the wine world and the almost palpable tensions it entails.

This tendency to consider the global wine industry in terms of a simple dichotomy between the Old World and the New World also persists in the academic world (Unwin, 2012; Ander- son & Pinilla, 2018). Some French geographers take it up and complexify it by opposing, on the one hand, wines of *terroir*, of "supply", and, on the other hand, technological wines, of "demand" (Pitte, 2000; Bailly, 2000). Bailly (2000) proposes a spatial interpretation of this dichotomy and opposes the spatial Aoc (or *terroir*) model, which is rapidly limited by terroir constraints, to the *cépages* (grape varieties) model, which can, on the contrary, be extended to many regions of the world. To summarize, Schirmer and Velasco-Graciet (2010, p. 55) argue that

[on the one hand, supply wines [...], *terroir* wines, endowed with a quality offered by nature [and] a "savoir-faire", and on the other hand, demand wines, [...] technological, a-geographical, whose quality and quality are the result of the

The quality would be built to satisfy consumers [...], and produced by "businessmen".

This usual regional bipolarization of the wine world is not only confusing, but also misleading in terms of the long history of the globalization of wine and the multiple and diverse actors at play. We argue rather that the situation on a planetary scale is actually much more complex and dynamic as multiple wine "worlds" coexist and articulate (Overton & Murray, 2013). In particular, we highlight five points that destabilize the simple Old/New World dichotomy: 1) the processes of wine production, marketing and consumption are intimately linked to a global transformation of classes (Overton & Murray, 2013); 2) the capital invo-ved in the wine industry, very diverse and inter-connected through foreign direct investment or joint ventures-, conforms var- ious articulated forms of business (global/local corporations, businessmen/women, family businesses, etc.); 3) these forms of business have a certain degree of connection with long marketing and export circuits; 4) the degree of technological, organizational and productive innovation influences, in other words, the articulation of these business projects with the technical-scientific-informational environment (Santos, 2000); and 5) the growing exchange of ideas and professionals between regions and companies (agricultural technicians and engineers, oenologists, etc.) is important.

Although this new global geography of wine is clearly rooted in the global restructuring of the economy that characterizes the current corporate and neoliberal agro-food regime (McMichael, 2012), it is worth noting, in a sector such as the wine industry, some specific events and trends that may have also played a role in this global reconfiguration of the activity.

First, and in relation to point 5, it is worth mentioning the emergence and growing influence of *winecritics* and winemaking and enology consultants (*fl-ying winemakers*) in the international market (Anderson, et al.

& Pinilla, 2018). This is the case of the famous French winemaker Michel Rolland, who obsessively insists on promoting the motto that with technology "a good wine can be made anywhere" (Nossiter, 2006), as evidenced in his international interventions. For his part, the famous wine critic Robert Parker not only implemented a new oenological language, but has proven -through his scoring system- to be an influential agent in the international market. A phenomenon known as the *Parkerization* of wine.

Second, we refer to the 1976 Paris Jugement, a blind tasting of French and Californian wines where "the Americans won [and brought down] the myth of French wine being unbeatable", as a special technician interviewed in Mendoza (April 2016) commented. Indeed, this was received by some producers as an invitation to be inspired by the new Californian model. This is the case of Mendoza businessman Nicolás Catena Zapata, strongly influenced by his long stay in California in the 1980s and who decided to start a similar project in Mendoza. As he points out on his website:

A new generation of California winemakers aspired to produce wines of equal or superior quality to the best French wines [by focusing] on improving vine growing and winemaking techniques, stainless steel sanitation, clonal selection and oak quality (Catena Zapata, 2016).

Third, it is worth mentioning the so-called *french paradox*, based on a famous scientific study popula- rized and marketed in the early 1990s and which under the slogan "drink less, but better" included wine as an element of a healthy diet (Ander- son & Pinilla, 2018). For one of the interviewees, it was "an important turning point" that coincided with "a moment of a worldwide explosion of wine demand [...] and that's when the New World started to work" (Mendoza, April 2016). These deliberations on the New World/Old World dichotomy

and the need to contemplate multiple "wine worlds" come to mind to delve into the term *terroir* and the emergence of agro-productive devices of appellations.

Terroir: a geographical concept

Of particular relevance in geography, because of its focus on the interactions between humans and the physical environment that shape different places (Unwin, 2012), terroir is shaped as a "powerful geographical concept" (Dougherty, 2012, p. 22). As a "legitimate space of production of a typical and wellidentified product" (Di Méo & Buléon, 2005, p. 172), the terroir became a fundamental concept to understand the agricultural organization and imaginary in general, and especially the viticultural one. By encompassing the concrete and material dimensions of physical space, but also the ideal dimensions of representations, the term terroir has a complex semantic content that deserves to be addressed in its entirety. Generally used in an agronomic sense, the term terroir has a complex semantic content that deserves to be approached in its entirety.

-and usually complemented as a sociocultural object, terroir became a powerful theoretical and methodological tool for diagnosing the genesis and evolution of legitimization, delimitation and differentiation of agro-productive zones (Di Méo & Buléon, 2005). In other words, it is presented as an analytical lens for understanding the power relations between actors in territorial production (Elden, 2021).

However, to discuss its definition in depth is tantamount to opening Pandora's box (Dougherty, 2012, p. 22) and much ink has already been spilled on this issue (Dougherty, 2012; Unwin, 2012). Our purpose here is rather to interpret different interests underlying different definitions of *terroir* (Unwin, 2012). In this sense, Robert Parker's and Michel Rolland's respective visions of *terroir* converge by totally disregarding sociocultural dimensions and representations, contrary to the widespread definition developed by France's Institut National de l'Origine et de la Qualité (INAO) (Table 1).

TABLE 1. Some definitions of terroir						
Author	Definition of <i>terroir</i>		ns			
			Social Biophysics			
Robert Parker	It covers the soil itself, the subsoil and the rocks underneath, their physical and chemical properties and how they interact with the local climate, the microclimate of the region, to determine both the mesoclimate of a vineyard and the microclimate of a particular vine. This includes, for example, how fast a plot drains, whether it reflects sunlight or absorbs heat, its elevation, its degree of slope, its orientation to the sun, and whether it is near a forest that cools or protects, or a lake, river, or the sea that heats (Parker, 2008, p. 26, cited in Dougherty, 2012, p. 23).	+	-			
Michel Rolland	It can be said that wines are a reflection of their <i>terroir</i> , because the sun/climate/plant combination is in itself the definition of the term <i>terroir</i> (Le Petit Ballon, 2022).	+	-			
inao	The <i>terroir</i> is a delimited geographical space, in which a historical community builds a collective knowledge of production, based on a system of integration between the physical, biological and human environment. This interaction reveals an originality, a typicality, which generates the creation of a reputation for the product produced and originated in that geographical area (Unwin, 2012, p. 39).	+	+			

SOURCE: adapted from Dougherty (2012), Le Petit Ballon (2022) and Unwin (2012).

Generally, some value biophysical variables as the most important in shaping the character and identity of wine (including climate, microclimate, air drainage, perspective, climate and climate), while others value biophysical variables as the most important in shaping

the character and identity of the wine (including climate, microclimate, air drainage, perspective and climate).

The latter are those that weight them by emphasizing cultural variables (such as the type of grape planted, the techniques used to elaborate the grapes, the type of grape variety, the type of grape variety used, the type of grape variety used, the type of grape variety used and the type of soil used) and those that weight them by emphasizing cultural variables (such as the type of grape planted, the type of grape variety used and the type of soil used).

rationing and aging of wine, etc.) (Unwin, 2012). But in turn, these different approaches to *terroir* echo to some extent the two spatial models of production alluded to by the French geographers mentioned above (Bailly, 2000). Evidently, the business logic promoted by the aforementioned *wine critics/makers* fits particularly well with the *cépages* model, where the bio-physical dimension of *terroir* predominates.

The mechanisms that attribute the quality of certain products to their geographic origin are not common. France, Italy and Spain were pioneers since the first half of the 20th century in legally endorsing certain agricultural products in general and wine production in particular. However, in the last three decades we have witnessed a spectacular terroirization of wine regions and microregions on a global scale (Rainer, 2021), through the proliferation of devices for standardization and delimitation of productive zones of various kinds. A true "race to the place" (Overton & Murray, 2016, p. 8). A trigger occurred in 1994, with the World Trade Organization (wto) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) (Overton & Murray, 2016; Rainer, 2021). This agreement, endorsed by part of the wto, had significant normative consequences, although its implementation in different parts of the world was slow and sporadic (Overton & Murray, 2016).

In the case of Argentina, the insertion of the wine regions into the international market, starting in the 1990s, was accompanied by a process of differentiation of production areas. In 1999, National Law 25,163 was enacted¹ on wines and spirits of origin.

This law is enforced by the Secretariat of Agriculture, Livestock, Fishing and Food of the Ministry of Economy and Public Works and Services, through the National Institute of Viticulture (INV). This law establishes the general rules for the designation and presentation of geographical origin and denomination of origin for wine products in the country and aims to establish tangible and easily recognizable limits based on criteria of "quality and characteristics of the product [...] attributable fundamentally to its geographical origin" (INV, 2015, p. 2). In just two decades, a total of 105 geographical indications and two controlled designations of origin were recognized, of which approximately 73% emerged in 2002, and more than half in the two main wine-producing provinces, Mendoza (31%) and San Juan (24%). This process of staggering and standardization was predominantly due to politicaladministrative patterns, circumscribed by provincial, departmental and district boundaries. In other words, this "first wave" was not built from the bottom-up, valorizing biophysical and climatic characteristics, but rather reproducing a *top-down* political-administrative map. More recently, however, delimitations have appeared that were not driven or promoted by the INVand, therefore, did not coincide with politicaladministrative boundaries-, but rather took into account biophysical -basically pedogenetic and edaphological- and productive criteria. This is the case of Paraje Altamira, which we analyze below to show how this process of GI recognition, once requested and coveted by certain business actors, can teach us about the unstable, changing and political nature of scales.

Law 25,163 establishes the following designation categories: the indication of provenance (ip), that is, the geographical area of smaller scale than the Argentine territory that does not imply quality criteria; the geographical indication (ig), as a geographical area smaller than the provincial surface or interprovincial area already recognized and whose qualities and characteristics are not related to the quality of the product; the indication of origin (ip), that is, the geographical area of smaller scale than the Argentine territory that does not imply quality criteria.

The product's characteristics are attributable to its geographical origin; and, finally, the appellation of controlled origin (Doc), as a geographical area whose qualities are due exclusively or essentially to the geographical environment, which encompasses natural and human factors (inv, 2015).

The limits of quality

Production restructurings in Mendoza and the Uco Valley

By 1980, the Argentine wine model -which had been forged and oriented for almost a century to the production of "basic wines" for domestic market consumption- was entering a deep structural crisis. In this scenario, various actors began to propose the need to change the productive profile of the sector in order to make Argentine wine a more competitive product in the international market.

nal. This process was called "viticultural reconversion" and was based on the idea that viticulture had to change to producing "quality wines" in order to compete in a global market (Cerdá & Martín, 2021). This process of "accelerated" transition to the quality model led to changes and shifts in production frontiers in several winegrowing areas of Argentina, mainly in the province of Mendoza, which accounts for 70% of the country's vineyard area (Figure 1 and Table 2). In this context, the Uco Valley (central oasis) was reconfigured as the "new" territory for high quality wines (Figure 1).

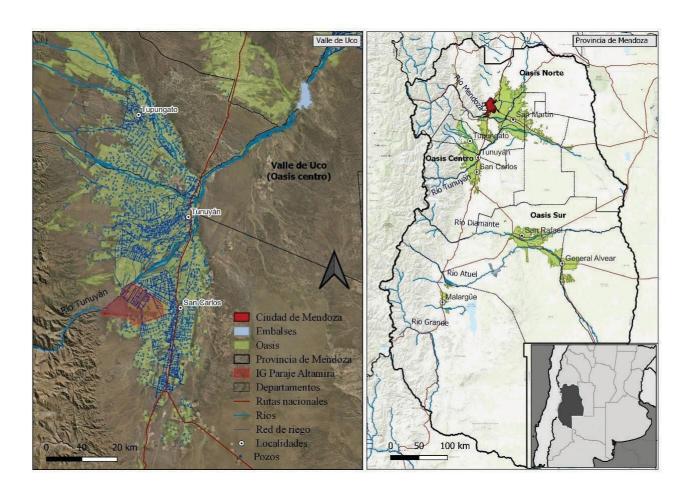


FIGURE 1. The oases of the province of Mendoza, the Uco Valley (central oasis) and the GI Paraje Altamira.

SOURCE: Prepared by the authors based on data from the DGi's Sicar viewer.

In some cases, these movements were oriented towards the search for new lands with certain characteristics that the agents promoting the change identified as the most important ones.

The following factors were identified as ideal for their development, such as sufficient and timely access to water, solar exposure, soil types and altitude above sea level, among others.

others (Cerdá & Martín, 2021). This was mediated, at the same time, by certain technical developments that allowed the implantation of varieties of "high oenological quality" where climatic rigor is high, even at the cost of the loss of some crops. Thus, the natural soil and climatic conditions, together with the possibility of using new technologies -especially irrigation- have made the Uco Valley in recent decades the most favorable and important territory for modern viticulture at the national level. This implied the reconfiguration of the landscape, as well as its inclusion as an explanatory variable of wine improvements. During this period, then, we witnessed a

expansion of the irrigated oasis frontier into particularly valuable agro-climatic and edaphic zones where agricultural production was impossible only a short time ago. Between 2000 and 2018, the vineyard area grew by 117%, adding 15,219 ha essentially westward (Table 2). Water extraction through drilling with electrically driven pumps and the implementation of modern irrigation systems, drip or sprinkler irrigation depending on the type of production, became two essential factors in this "conquest of the foothills" (Larsimont, 2020, p. 244). It is precisely in this area of expansion that the Paraje Altamira GI was created.

TABLE 2. Evolution of the vineyard area in Mendoza									
	Area in hectares (ha)			Variation (%)	Difference (ha)				
Oasis	2000	2010	2018	2018-2000	2018-2000				
North	106.137	111.327	107.646	1,4	1.509				
Uco Valley	13.024	24.146	28.243	116,9	15.219				
South	21.920	18.741	17.140	-21,8	-4.780				
Mendoza	141.081	154.214	153.029	8,5	11.948				
Argentina	201.113	217.750	218.233						

SOURCE: own elaboration based on data from inv (2019).

Paraje Altamira: an elastic geographical indication?

Paraje Altamira illustrates a particular case of geographic indi- cations in Latin America, precisely because it contrasts with the usual *top-down* model (Regi- nato, 2017; Lacoste, 2019). The main crop of the town of Altamira -located in the Uco Valley, in the department of San Carlos and within the district of La Consulta- is vines, with 1,800 ha representing approximately 80% of the cultivated area (Reginato, 2017). The particularity of its wines has been highlighted since the 1960s (Marianetti, 1965, cited in Lacoste, 2019), but its valorization as a wine-producing te- rritory is recent. The initiative arose in 2008 by three emblematic and important business groups: Catena Zapata (La Esmeralda S. A.), Zuccardi (La Agrícola S. A.) and Chandon (Bode-

gas Chandon S. A.). Backed by technical studies of the Faculty of Agricultural Sciences of the National University of Cuyo (UNCUYO) and the National Council for Scientific and Technical Research (Conicet), Paraje Altamira was defined and recognized as a geographical indication by the National Institute of Viticulture (INV) in 2013 through the re-solution C.44/13 (Figure 2). The demarcation of the GI was not based on a usual political-administrative delimitation, but, as anticipated, based on two main sets of biophysical criteria: the soils of the alluvial cone of the Tunuyán with calcium River (sandy-clayey carbonate encrustations and alluvial deposits) and its climate. As the director of the Catena Zapata winery points out, the process "was arduous and demanded a little over two and a half years with some 250 calicatas" (Entorno Económico, 2015). According to him, one of the main differences between Altamira and the neighboring areas

[...] is that they are outside the alluvial cone of the Tunuyán River, so that to the west of the river is the town of Campo Los Andes. On the other hand, to the north and east the properties have greater soil depth and to the south they differ first from the climate, with a colder area, known as El Cepillo, and geologically older than the Altamira site (Entorno Económico, 2015).

However, the formation and recognition process of Paraje Altamira was not going to be so easy. Indeed, while Resolution C.44/13 approved the application of these three companies, it disapproved at the same time an opposition filed by other neighboring companies² (Grupo Peñaflor S. A. Trapiche, La Ru- ral Viñedos y Bodegas S. A. Rutini, Pernod Ricard Argentina SRL and Agrícola Presidente S. A.). This complaint not only claimed that the "Paraje Altamira" had to be "larger in area than that presented by the applicant firms" and encompass the estates of these companies, but also necessarily called into question the delimitation criteria of the approved GI (res. C.44/13). Indeed, although resolution C.44/13 considers the boundary "perfectly delimited, from a scientific-technical point of view", some inconsistencies deserve to be pointed out. On the one hand, the fact of having delimited the official perimeter by means of four geographical coordinates generated some confusion, since it gave rise to a convenient polygonal geometric representation that was quickly disseminated in the press and on web pages, but which was hardly consistent with the originally proposed edaphological and climatic limits. On the other hand, if it is understood that the western boundary is formed by the course of the Tunuyán River, the justification for the southern boundary of the polygon is not so unobjectionable, since it crosses the alluvial cone in a straight line. In the words of one of the managers of the opposing company Peñaflor,

"a forced marking has been made with an alluvial cone without differences" (Entorno Económico, 2015). In response, this southern boundary is justified as "a dry riverbed of alluvial drainage" and a "cam- bio of slope in the terrain that generates a different solar exposure" (Reginato, 2017, p. 186). Now, the northern and eastern boundaries of the polygon are more debatable, as they coincide almost exactly with two roads (La Superiora, to the north, and Ghiraldi, to the east). Although the 2013 resolution momentarily rejected this opposition, it allowed for the presentation of complementary studies that could eventually be taken into account for an extension of the perimeter. Thus, while new reports were being prepared by the National Institute of Agricultural Technology and the Faculty of Agricultural Sciences of the uncuyo, the players in the game were defending their arguments in the press.

On the one hand, Zuccardi argued about the existence of "real estate interests" in the position defended by the supporters of the extension, warning that "if the use of the GI is extended, it must have a solid technical justification" and that such "extension may destroy its added value" (Entorno Económico, 2015). On the other hand, from the opposition, the INV was accused of lending itself to "a privatization of wine areas and brands in the Uco Valley" and the applicants were criticized for having a "short-sighted and completely selfish look, only with a commercial purpose", while it should be "a matter of good neighbors" (according to a representative of Trapiche) (Entorno Económico, 2015). Less than two years after the approval of the GI, two other actors came into play that further complicated the initial outline of the conflict. First, the municipality of San Carlos created an "Al-Tamira agricultural zone" as a "preliminary step" to an appellation of origin. This zoning, with an unclear delimitation around the perimeter of El Indio Street, was created with the idea of creating an economic development pole that would not only include vineyards, but also other crops, particularly walnut production. This

² Almost all of these corporations are positioned within the first 20 exporters in Argentina (González, 2018). Within the initial group, Catena and Zuccardi are national groups, while Chandon is a local subsidiary of the multinational conglomerate Lvmh. On the opposing side we find respectively two large Argentine business groups, a transnational conglomerate and the agribusiness subsidiary of a real estate holding company from Mendoza.

The latter activity is linked to a macro-project of the Presidente real estate business group. Somehow, the business organizations that were excluded from the GI (Presidente, Trapiche, Trivento, Finca La Amalia, Pernod Ricard, Doña Paula, O. Fournier, Angulo, Los Nativos and Finca La Gracia, among others) found in this de- partmental initiative a "plan B" and were therefore "en- columned behind the declaration" of this agricultural zone (Entorno Económico, 2015). In the words of the representative of the President group, "the fact that San Carlos has geopolitically delimited the Altamira agricultural zone should be considered as a very relevant element" (Entorno Económico, 2015).

The company did not delay in placing signs at the entrances to its farms with the words "Altamira agricultural zone" as its new commercial brand. As a response, Zuccardi stated that

[...] the agricultural zone from the wine point of view does not exist, since it includes other activities and areas such as El Cepillo and Eugenio Bustos, and is driven by other interests. Obviously, the technical aspects will be the basis for the commercial performance, but it cannot be said that it is the same as Paraje Altamira; the identity assigned to it by law must be respected. Otherwise, the appeal will end up being bastardized (Entorno Económico, 2015).

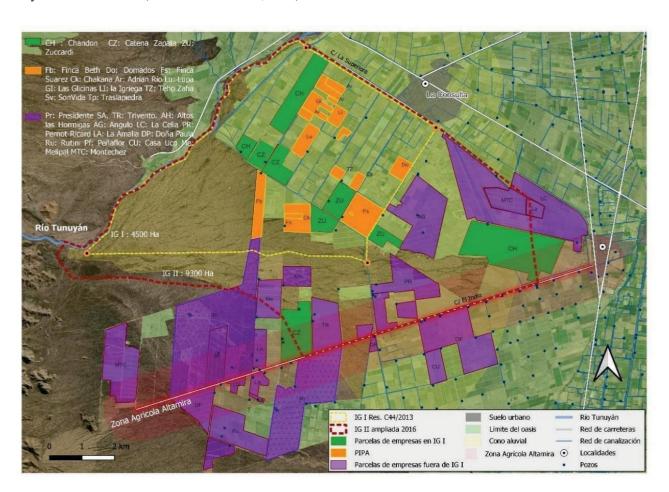


FIGURE 2. Evolution of the geographical indication Paraje Altamira Note: data collected in the field and using the Sicar viewer (DGi).

SOURCE: own elaboration.

On the other hand, the Paraje Altami- ra Independent Producers' Collective (PIPA), an association of eleven projects in total, intervened in this dispute,

already located within the Paraje Altamira GI. They consider an independent producer to be "a winegrower who resides in the territory where he or she grows and to the

that links it to an affective and historical commitment to the place" (PIPA, 2016) and position themselves against the trend towards the "concentration of economic power in large corporations", "standardized taste" and the "'commoditization' of wine" (PIPA, 2016). Thus, they shape and position themselves collectively as an actor within the Paraje Altamira GI, but at the same time they differentiate themselves from the profile of their founders by highlighting an independent profile that is more "anchored to the territory". Fi- nally, in 2016 the debate was enhanced with the decision by the INV to expand the initial 4,500 ha of the core zone to 9,300 ha (González, 2016) (Figure 2). Although enlargement was criticized by the initial applicants (Catena Zapata, Zuccar- di and Chandon) as a threat to "value added" and to the "image of Mendoza", it should be noted that the three companies managed to include totally or partially in this new delimitation other estates of their own. No

Nevertheless, this new frontier continues to fuel the dissatisfaction of some business groups that, despite this scalar elasticity, have remained outside, such as O. Fournier and Presidente. In view of the announced new zoning, the representative of the Spanish-owned winery O. Fournier said:

[...] it is an incongruous decision. If it is said that objective soil criteria are taken to approve the extension, and I imagine it means taking into account the morphology of the soil, it seems strange that the cut coincides with a straight line and not with the morphology of the site (Adi, 2016).

Indeed, although they seem to have rectified the southern boundary of the core zone by making it coincide with the alluvial cone, they did not do so completely, but again used roads as demarcation criteria, this time, El Indio Street.

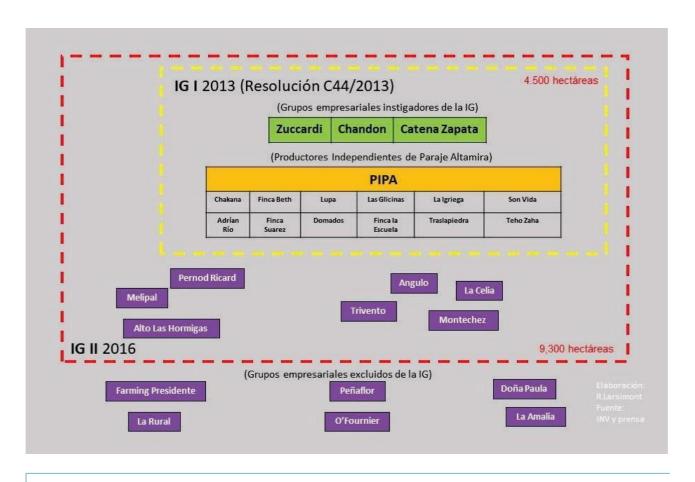


FIGURE 3. Diagram of the evolution of the GI Paraje Altamira (2013-2016). SOURCE: Prepared by the authors based on data collected from inv (2022) and press reports.

An inspiring initiative

The Paraje Altamira GI was undoubtedly a pioneering initiative in the Uco Valley because it did not take into account political-administrative factors in its delimitation. However, it was another initiative that established an initial milestone in the subdivision of the Uco Valley into smaller units than the departmental ones established by the Uco Valley GIs (resolution INV

C.37/2002), and those of San Carlos, Tunuyán and Tupungato (Resolution INV C.32/2002 and Resolution INV C.20/2006). Indeed, in 2012, the Vista Flores GI, promoted by the business group Al- tos las Hormigas S. A., an association of European and Argentine businessmen, had been approved by resolution INV C.11/2012 and covered an area "limited according to the administrative limits corresponding to the District of the same name" (Figure 4).

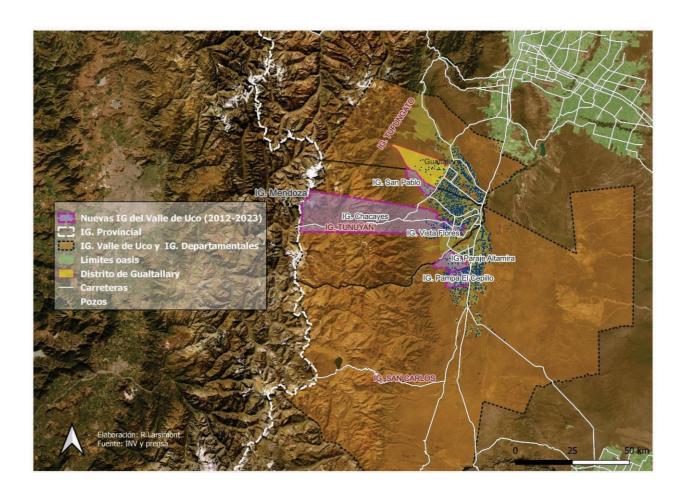


FIGURE 4. Appearance of new GIs in the Uco Valley and the resulting scalar wedging. SOURCE: Prepared by the authors based on inv (2022).

However, there is no doubt that the corporate strategy of self-interested cooperation (or *coopera-tion*, according to the jargon of business administration) among the three competing groups, but instigators of the PAraje Altamira GI (Zuccardi, Catena Zapata and Chan-don), as well as the methodology they applied to limit it, served as a model in the development of the recent Pampa El Cepillo and San Pablo GIs. The GI

Pampa El Cepillo arose from the initiative of the Catena Zapata group (through its subsidiary Bodega Esmeralda S. A.) and was managed by one of its agronomists (Luis Reginato) (RESOL-2019-1-APN-INV#MAGYP). If

Although the zoning, carried out through studies by the Faculty of Agricultural Sciences of the National University of Cuyo and the National Institute of Agricultural Technology (INTA), was intended to enhance the value of the characteristics of the land.

In addition to the bioclimatic conditions (being a colder area), it retakes previous rectilinear delimitations such as El Indio street, adjacent to Paraje Altamira GI. It is also worth mentioning the tendentious inclusion of a part of a parcel located to the north of this same street, which belongs to the group of origin of the initiative. As for the San Pablo GI, it arises from a proposal, this time by Zuccardi, in association with Tapiz and Salentein (of Dutch capital), and was approved in 2019 by the INV. It is more of a hydrographic zoning (taking as its limits the mouth of the Villegas and Cuevas streams and the Las Tunas River) (RESOL-2019-10-APN-INV#MA-

GYP). Los Chacayes GI and its recent expansion attempt should also be mentioned in this register. It was initially created in 2017 by the private initiative of Bodega Piedra Negra S. A., a subsidiary of the French group Lurton, based on a district delimitation. Based on the political-administrative delimitation of the large and elongated district of the same name, it could be evidence to some extent of the prospective will of the latter business group to territorialize its territory.

a potential new wine expansion corridor in the Uco Valley (RESOL-2017-249-APN-INV#-MA). However, in 2023, through the Civil Association of Producers of the Los Chacayes GI, of which the French group is a member along with 15 other companies in the area, the INV was asked to expand the original perimeter based on criteria that transcend the politicaladministrative delimitation. Finally, it is worth noting the request, stalled for the moment, to form a Gualtallary GI due to a dispute between companies. This district, which has gained international fame over the last two decades for its wines, has also proved to be the focus of rural tensions between corporate actors linked to the wine and wine tourism sector, and between producers and local inhabitants (Larsimont, 2020). The dispute is due to the opposition to the registration of the Gualtallary GI by a company (linked to the interests of a large landowner and entrepreneur in the area) whose name already identifies this terroir. This case is also evidence of clear corporate speculative strategies in this wine subzone, which has shown spectacular increases in income.

TABLE 3. The scales of the Uco Valley GIs								
Scales	Delimitation	ig	Resolution					
	Provincial	IG Mendoza	INV C.32/2002					
	Departmental	GI Uco Valley	INV C.37/2002					
Political-administrative		IG San Carlos	INV C.32/2002					
		GI Tunuyán	INV C.32/2002					
		IG Tupungato	INV C.32/2002 and INV C.20/2006					
	District	IG Vista Flores	INV C.11/2012					
		IG Los Chacayes	RESOL-2017-249-APN-INV#MA					
In network		IG Paraje Altamira	INV C.44/2013					
	Biophysical (edaphoclimatological)	IG Pampa El Cepillo	RESOL-2019-1-APN-INV#MAGYP					
		IG San Pablo	RESOL-2019-10-APN-INV#MAGYP					

SOURCE: Prepared by the authors based on inv (2022).

Conclusions

The new world geography of wine and its differentiation mechanisms truly give the impression of a "territorial cacophony" (Schirmer & Velasco-Graciet, 2010, p. 56). This confusing situation

would result from the "increasing international competition and globalization of standardized wine consumption" (Harvey, 2007, p. 424). Likewise, it would evidence yet another aspect: the "standardization of uniqueness", i.e., as Overton and Murray (2016, p. 804) argue, "the oxymoronic outcome

of the process of regulating the creation of fictitious places through the creation of a global GI framework". Thus, the case of the Paraje Altamira GI presented in this paper shows how the disputes to define the uniqueness of a wine-producing area are closely linked to standardization mechanisms of normalization that, although they operate globally, have an impact locally. This territorial dispute teaches us that, in addition to "fictitious places", scales are also socially produced by various actors who continually redefine, contest and restructure them. In particular, the analysis of the strategies of self-interested cooperation between corporations (or coopetence), of the tensions between them and of their respective legitimation strategies shows that these scales, once redefined in terms of their extensions and contents, encompass complex relationships between human (corporate institutional) and non-human (biophysical) actors. In this sense, our relational approach, by considering power as consubstantial to any relationship, sought to trace and describe these complex social-natural assemblages of heterogeneous actors, both in their material and dissimilar dimensions. In the following, we review some key aspects of the relational geometry of power underlying this production of scales and territorial weft.

Three pioneering corporations succeeded, with scientific and institutional support, in shaping an area that theoretically should add "value added". But this scale produced "from below" quickly faced opposition from other business actors excluded from this first zoning and who pressured in various ways to make it more elastic. In this sense, having a vertical and volumetric view of the land allowed us to consider, beyond its absolute spatial dimensions, the meanings given by certain actors to the biogeophysical and climatic materialities that characterize the soil, subsoil and subsoil. In particular, the analysis of the process of "invention cons-

cient" of a place like Paraje Altamira (Overton & Murray, 2016, p. 795) revealed the contradiction caused by delimiting a productive perimeter based on dynamic and changing criteria, whether hydrographic, climatological. This edaphological or spatial contradiction was also highlighted by excluded business actors, as when referring to this "forced marking on an alluvial cone". In this regard, it should be noted that the conflict over the GI Paraje Al-Tamira was essentially discursive. For example, in the event of not being able to capture the potential income from the gi monopoly, what prevailed for the excluded actors was to benefit in some way from the mark of distinction offered by Altamira in such a "fictitious place". This is particularly illustrated by the repeated mentions of the name "Altamira" in the commercial narratives of companies in the area, but also by the creation - described as "geopolitics" - of the Altamira agricultural zone, or even of the collective of Independent Producers of Paraje Altamira (PIPA).

On the other hand, as we have seen, although the definition of the Paraje Altamira GI has aroused some controversy, it has served as a model for other biomedical grinitiatives. The result today is a complex interlocking of scales in the manner of makhka dolls (Herod, 2011). In addition to the collective brandscape offered by the international renown of the Uco Valley, the business strategies that gave rise to these new GIs clearly bet on micro-local appeals. However, it is worth whether these new initiatives asking patrimonialization and the production of fictitious places are committed to a durable local territorial anchoring or whether, on the contrary, they will join the innumerable list of mobile, precarious and peremptory territories that continually excavate and feed the processes of capital accumulation.

Two related observations deserve to be noted. First, with the notable exception of PIPA and its advocacy for a more social vision of *terroir*, the rest of the actors seem to value exclusively the terroir as a social product, and the rest of the actors seem to value exclusively the *terroir* as a social product.

the biophysical virtues of the places that make up the GIs of the Uco Valley (in the manner of Parker and Roland). If this localism based on biophysical singularity eclipses the profile and agro-productive practices of the actors, it is necessary to remember that, even in the most prestigious appellations on the planet, neither the actors nor the resources are exclusively local; if some are endogenous, many others are exogenous to the place. Indeed, if we were to consider the grape varieties, the machinery, the technical supervision, the forms of legal regulations, the destination of the products or the origin of the capital involved in a GI, we would quickly deconstruct this widely disseminated localist image. Accordingly, the above - as suggested by the denunciations of PIPA stakeholders - invites us to question the production modes underlying GI initiatives. Indeed, if for a small local entrepreneur the membership of his unique and singular viticultural project in a GI is a key anchor point for his insertion in the international market, for large national or transnational groups (such as some of the main corporations involved in the conflict) GIs can become mere "places of opportunity" and of capturing monopoly rents in the gearing complex of intercontinental business strategies.

Conflicts of interest. The authors have no conflicts of interest in the writing or publication of this article.

Funding. The authors received no funding for the writing or publication of this article.

Ethical implications. As this is a review, the present article has no ethical implications.

Contribution. *Robin Larsimont*: conceptualization, data curation, formal analysis, re-course acquisition, research, methodology, project management, resources, *software*, supervision, validation, visualization, writing (original draft), writing (draft review and revision/editing). *Facundo*

Martin: conceptualization, data curation, formal analysis, resource acquisition, research, methodology, project management, resources, *software*, supervision, validation, visualization, writing (original draft), writing (draft review and revision/editing).

References

- Adi, A. (2016, January 17). Polémica por la identificación geográfica Paraje Altamira. *Diario Uno*. https://www. diariouno.com.ar/mendoza/mendoza/polemicalaidentifica- laidentifica- cion-geografica-parajealtamira-20160117-n220264. html.
- Anderson, K., & Pinilla, V. (Eds.) (2018). Wine globalization: a new comparative history. Cambridge University Press.
 - Bailly, A. (2000). Le temps des cépages. Du terroir au système-monde. *Annales de Géographie*, 614-615, 516-524.
 Banks, G., & Overton, J. (2010) Old World, New World, Third World? Reconceptualising the Worlds of Wine. *Journal of Wine Research* 21(1), 57-75. doi: 10.1080/09571264.2010.495854.
- Banks, G., & Sharpe, S. (2006). Wine, Regions and the Geographic Imperative: The Coonawarra Example. *New Zealand Geographer*, 62(3),173-184. doi: 10.1111/j.1749-6632.1995.tb17405.x-i1.
- Bidalon, P. (2022, June 27). Michel Rolland: "Le monde du vin s'est métamorphosé". *L'Express*. https://www.lexpress.fr/styles/vin-alcool/michel-rolland-le-monde-du-vin-s-est-metamorphose_2175962.html.
- Catena Zapata (2016, August 4). *The three revolutions*. https://catenazapata.com/en/revolutions-en.php.
- Cerdá, J. M., & Martín, F. (2021). Domestication of the viticultural pai- sage in the Uco Valley, Mendoza. 1980 to the present. In A. M. Franca & M. Miraglia (eds.), Environmental history Argentina-Brazil. Landscape and heritage: impressions of history in natural environment (pp. 57-83). Teseo Press.
- Coe, M., & Yeung, H-W. (2001). Geographical perspectives on mapping globalisation. *Journal of Economic Geography*, *1*(4), 367-380.
- Di Méo, G., & Buléon, P (2005). L'espace social. Lecture géographique des sociétés. Armand Colin.
- differentiation of rural space in the Chilean wine indus- try. *Journal of Rural Studies*, 27(1), 63-72. https://doi.org/10.1016/j.jrurstud.2010.07.002.

- Dougherty, P. H. (Ed.) (2012). *The geography of wine: regions, terroir and techniques*. Springer.
- Elden, S. (2021). Terrain, politics, history. *Dialogues in Human Geography*, 11(2), 170-189. https://doi.org/10.1177/2043820620951353
- Entorno Económico (2015, November 23). Altamira, the most desired and disputed terroir. *Jornada Online*. http://jornadaonline.com/contenidos/146265-Al- tamira:-elterru%C3%83%C2%B1o-m%C3%83%83%-C2%A1s-deseado-y-disputado.
- Gonzáles, S. (2016, January 10). Complaints about the expansion of the Paraje Altamira GI. *Los Andes*. https://www.lo-sandes.com.ar/quejas-por-la-ampliacion-de-la-ig-pa- raje-altamira/.
- Gonzáles, S. (2018, December 23). De las 20 bodegas grandes, sólo seis son de mendocinos. *Los Andes*. https://www.losandes.com.ar/de-los-20-grandes-exportado-resde-vino-only-six-are-mendocinos/
- Gregory, D. (2009). Power geometry. In D. Gregory, R. Johnston, G. Pratt, M. Watts, & S. Whatmore (ed.), *The dictionary of human geography* (pp. 576-577). Wieland-Blackwell.
- Harvey, D. (2007). Spaces of capital. Towards a critical geography.

 Akal.
- Herod, A. (2011). Scale. Key Ideas in Geography. Routledge. Instituto Nacional de Vitivinicultura (INV) (2015). Indicación de Procedencia Geográfica y Denominación de Origen para productos vínicos en Argentina. Revista del Instituto Nacional de Vitivinicultura, 5(2).
- National Institute of Viticulture (INV) (2019, May). Evolución de superficie de vid en Mendoza por zona geográfi- ca, años 2000-2010-2018. https://www.argentina.gob.ar/sites/default/files/evolucion_de_superficie_x_oasis_mza_0.pdf.
- Instituto Nacional de Vitivinicultura (INV) (2022, August 19).

 Informe Indicación Geográfica y Denominación de Origen
 Controlada. https://www.argentina.gob.ar/
 noticias/informe-indicacion-geografica-y-denominacion-de-origen-controlada
- Jackman, A., & Squire, R. (2021). Forging volumetric methods. *Area*, *53*(3), 492-500. https://doi.org/10.1111/area.12712.
- Jones, A. (2003). "Power in Place": Viticultural Spatialities of Globalization and Community Empowerment in the Languedoc. *Transactions of the Institute of British Geo*graphers, 28(3), 367-382.

- Lacoste, P. (2019). *Grapevine and wine in the Southern Cone of America. Argentina and Chile (1545-2019)*. Inca Editorial.
- Larsimont, R. (2020). Model of agribusiness, water and rurality in the oases of Mendoza, 1990-2017: towards a territorial political ecology. Constellaciones Collection, University of Buenos Aires.
- Le Petit Ballon (2022, December 8). *Interview exclusive de Michel* Rolland. https://www.lepetitballon.com/blog/interview-exclusive-de-michel-rolland.html.
- Lefebvre, H. (2014). *The production of space*. Captain Swing. Law 25.163 of 1999 (September 15), establishing the general rules for the designation of wines and. Argentine wine-based spirits.
- McMichael, P. (2012). The land grab and corporate food regime restructuring. *The Journal of Peasant Studies*, 39(3-4), 681-701. https://doi.org/10.1080/0306615 0.2012.661369
- Nossiter, J. (2006). *Mondovino*. https://www.documaniatv.com/social/mondovino-video 2caef8fd6.html.
- Overton, J., & Murray, W. E. (2011). Playing the scales: Regional transformations and the differentiation of rural space in the Chilean wine industry. *Journal of Rural Studies*, 27(1), 63-72.
- Overton, J., & Murray, W. E. (2013). Class in a Glass: Capital, Neoliberalism and Social Space in the Global Wine Industry. *Antipode*, *45*(3), 702-718. https://doi.org/10.1111/j.1467-8330.2012.01042.x
- Overton, J., & Murray, W. E. (2016). Fictive place. *Progress in Human Geography*, 40(6), 794-809. https://doi.org/10.1177/0309132515625464
- Pitte, J. (2000). La nouvelle planète des vins. Annales de Géographie, 614-615, 340-344.
- Independent Producers of Paraje Altamira (PIPA) (2016). *Who we are*. http://www.parajealtamira.org/ en/who-we-are.
- Rainer, G. (2021). Geographies of qualification in the global fine wine market. *EPA: Economy and Space*, 53(1), 95-112. https://doi.org/10.1177/0308518X20934816
- Reginato, L. (2017). The geographical indication (GI) Paraje Altamira: general considerations. *Revista Iberoamerica- na de*
- *Viticultura, Agroindustria y Ruralidad, 4*(12), 179-188. Resolution C.44/13 (2013, December 6), of the Ministry of Agriculture,
 - Livestock and Fisheries and the National Institute. de Vitivinicultura. https://pinot.inv.gov.ar/web_inv/ pdf/ResolucionesC/2013/ResolucionC44-2013.pdf
- Santos, M. (2000). The nature of space. Technique and time. Reason and emotion. Ariel.

- Sayre, N. F. (2005). Ecological and geographical scale: parallels and potential for integration. *Progress in Human Geography*, 29(3), 276-290. https://doi.org/10.1191/0309132505ph546oa.
- Schirmer, R., & Velasco-Graciet, H. (2010). *Atlas mondial des vins. La fin d'un ordre consacré?* Éditions Autrement.
- Sistema de Información Catastral y Registral (Sicar) del Departamento General de Irrigación (DGI) (2022). http://www.irrigacion.gov.ar/mapserver. [Accessed on September 16].
- Swyngedouw, E. (2004). Globalisation or 'glocalisation'? Networks, territories and rescaling, *Cambridge Review of International Affairs*, *17*(1), 25-48. https://doi.org/10.1080/0955757042000203632
- Unwin, T. (2012). Terroir: At the heart of geography. In P. H. Dougherty (ed.), *The geography of wine: regions, terroir and techniques* (pp. 37-48). Springer.