

Geographical Indications in the Era of Climate Change: A Trans-Border Solution for a Transnational Challenge

Abstract

Global warming crosses borders, and the impact of climate change on the wine industry requires a transnational approach to geographical indications (GIs). The EU Regulations dealing with Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs) for wine allow the possibility of joint applications from adjacent Member States for trans-border GIs, such as the Belgian–Dutch “Maasvallei Limburg” PDO for varietally red and white wine. The Geneva Act of the Lisbon Agreement also allows the possibility of an appellation of origin (AO) or a GI for a cross-border geographical area, and article 23.3 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) leaves room for the homonymous use of a GI in several countries. In addition, the EU–China GI Agreement and the US–China Economic Trade Agreement “Phase One” allow the possibility of multi-component terms, which could be a useful tool, provided that they are used in a creative way, in the case of a GI partly shared by different regions. Most of the relevant provisions of these regional/international treaties are not tailored towards the flexibilities required for climate change, but they could still be used in such a way that vintners could better benefit from the opportunities of climate change or better withstand its challenges, in conjunction with more flexible approaches to the specifications of GIs, the sourcing of approved grapes, and the genetic engineering of vines so that they can resist climate change and concomitant pests.

Section 1 Introduction

The wine industry has successfully faced disruptive change before, and this has led to the AO system.¹ Climate change seems to provide, in slow motion, both opportunities and threats to wine regions around the world; some *terroirs* will yield more while others will yield less. The

The author thanks the reviewers very much for their insightful and useful comments.

¹ In the mid-nineteenth century, the French wine industry weathered a devastating storm in the form of the Great Wine Blight, when phylloxera wiped out many vineyards across Europe. In the aftermath of this disaster, protection against counterfeit wine took root, and the protection of *appellations d'origine contrôlées* was first established in France. Gangjee discusses France's laws of 1905, 1919, 1935 and 1947 (Dev Gangjee, *Relocating the Law of Geographical Indications* (Cambridge University Press 2012) 98-114). Equivalent protections were established around the Mediterranean Sea, and finally in the EU and beyond. Danny Friedmann, 'Geographical Indications in the EU, China and Australia, WTO Case Bottling up over Prosecco', in Julien Chaisse (ed), *Sixty Years of European Integration and Global Power Shifts, Perceptions, Interactions and Lessons* (Hart Publishing 2019) 415

impact of climate change on grapes, wine quality and production² poses important questions and challenges for some of the fundamentals of GI doctrine: the stability and the homogeneity of the *terroir*.

The provisions on GIs have been described³ as the most controversial provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs).⁴ The resulting articles 22-24 of TRIPs are a compromise between the Old and the New World,⁵ and set the norm in regard to GI protection for the 164 WTO members. However, since 11 December 2019 appointments to the Appellate Body of the WTO have been blocked.⁶ The dispute settlement system of the WTO, its crown jewel, has therefore been incapacitated.⁷ In addition, the EU became the fifth eligible party to the World Intellectual Property Organization's Geneva Act of the Lisbon Agreement, which came into effect on 26 February 2020. This stole some of the thunder of the GI provisions of TRIPs.

Regulation (EU) No 1308/2013⁸ and the complementing Regulation 2019/33⁹ provide the most comprehensive protection for wine, including flexibilities that can be used to counter or take advantage of the impact of climate change. In addition, the multi-component terms in the EU–

² Ramón Mira de Orduña, 'Climate Change Associated Effects on Grape and Wine Quality and Production', (2010) 43 Food Research International 1844

³ Thu-Lang Tran Wasescha, 'Negotiating for Switzerland' in Jayashree Watal and Antony Taubman (eds), *The Making of the TRIPS Agreement, Personal Insights from the Uruguay Round Negotiations* (WTO 2015) 182. <https://www.wto.org/english/res_e/booksp_e/trips_agree_e/history_of_trips_nego_e.pdf>

⁴ Articles 22-24 TRIPs provide minimum standards for the protection of GIs to all WTO members. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs), signed on 15 April 1994, effective on 1 January 1995, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, (1994) 31, 33 ILM. 81 (1994).

⁵ Danny Friedmann, 'Grafting the Old and New World: Towards a Universal Trademark Register that Cancels Generic IGO Terms' in Julien Chaisse, Fernando Dias Simões and Danny Friedmann (eds), *Wine Law and Policy: From National Terroirs to a Global Market* (Brill Nijhoff 2020) <<https://ssrn.com/abstract=358555>>

⁶ This blockage, when the Appellate Body is composed of fewer than three members, started on 11 December 2019 and continues (as of 12 December 2023); Report on the Appellate Body of the World Trade Organization, USTR (February 2020)

<https://ustr.gov/sites/default/files/Report_on_the_Appellate_Body_of_the_World_Trade_Organization.pdf>
A Framework for a Reformed WTO Appellate Body, G20/T20 Policy Brief, Task Force 7, May 2023 <https://t20ind.org/wp-content/uploads/2023/05/T20_PolicyBrief_TF7_WTO-Appellate.pdf>

⁷ 'United States Continues to Block New Appellate Body Members for the World Trade Organization, Risking the Collapse of the Appellate Process' [2019] 113(4) American Journal of International Law <<https://www.cambridge.org/core/journals/american-journal-of-international-law/article/united-states-continues-to-block-new-appellate-body-members-for-the-world-trade-organization-risking-the-collapse-of-the-appellate-process/EF3F564A66D3CDE698A9DFFF8FAEF77C#article>>

⁸ Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 [2013] OJ L 347/671

⁹ Commission Delegated Regulation (EU) 2019/33 of 17 October 2018 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards applications for protection of designations of origin, geographical indications and traditional terms in the wine sector, the objection procedure, restrictions of use, amendments to product specifications, cancellation of protection, and labelling and presentation C/2018/6622, [2019] OJ L 9

China GI Agreement¹⁰ and the US–China Economic and Trade Agreement “Phase One” might be a promising tool; these allow regions to partly share the distinctive parts of a GI, provided that the incumbent GI users are compensated for their know-how and reputation.¹¹

The following sections follow in this article:

Section 2 provides a brief overview of the impact of climate change on the wine industry and the need to use flexibilities in GI protection.

Section 3 deals with the paradox of stability: the basis of a GI is its stability of meaning, quality and reputation in regard to its link to the *terroir*. However, this prized stability is preventing some wine regions from benefiting from the positive effects of climate change, while others are unable to avoid its negative effects.

Section 4 explores the flexibilities within the regional/international GI system; the EU PDO and PGI system; the Geneva Act of the Lisbon Agreement and articles 22-24 TRIPs; and the multi-component term system introduced in the EU–China GI Agreement and the US–China Economic and Trade Agreement “Phase One”,¹² applied in a creative way.

Section 5 provides a conclusion, and suggests a creative solution in regard to the sharing of benefits between a new optimal geographical area and the incumbent geographical area that has built up the know-how and reputation.

Section 2 Impact of Climate Change on Wine Regions

Wine can be produced within the temperature range 12°C to 22°C. Certain winegrape cultivars are most suitable for cultivation in particular niches within that range.¹³ Climate change alters precipitation patterns, ambient temperatures, weed activity, disease outbreaks, pest infestations, and erosion rates.¹⁴ One needs to distinguish between the baseline climate, which defines the wine style, and climate variability, which determines the differences in vintage quality. The variability is caused by a complex interplay between multi-annual and multi-

¹⁰ Agreement between the European Union and the Government of the People’s Republic of China on cooperation on, and protection of, geographical indications, OJ L 408I , 4.12.2020, p. 3–43 <http://data.europa.eu/eli/agree_internation/2020/1832/oj>

¹¹ Economic and Trade Agreement between the Government of the USA and the Government of the PRC, signed on 15 January 2020, and entered into effect on 14 February 2020 <[https://ustr.gov/sites/default/files/files/agreements/phase%20one%20agreement/Economic And Trade Agreement Between The United States And China Text.pdf](https://ustr.gov/sites/default/files/files/agreements/phase%20one%20agreement/Economic%20And%20Trade%20Agreement%20Between%20The%20United%20States%20And%20China%20Text.pdf)>

¹² Ibid.

¹³ Gregory Jones, Ryan Reid and Aleksander Vilks ‘Climate, Grapes, and Wine: Structure and Suitability in a Variable and Changing Climate’ in Percy Dougherty (ed), *The Geography of Wine* (Springer Netherlands 2012) 123

¹⁴ Lisa F Clark and William A Kerr, ‘Climate Change and Terroir: The Challenge of Adapting Geographical Indications’ (2017) 20 *Journal of World Intellectual Property* 88, 89

decadal phenomena, which influence the sea surface temperature, precipitation, wind, and pest and disease pressure. In short, this will have an important impact on the *terroir*'s capacity to produce quality wine, and on whether certain cultivars can survive within a particular region.¹⁵ Greater variability and extreme weather events will bring formidable challenges to the wine regions. Vintners can anticipate these and make adaptations to the changes in grapevine phenology and soil water availability¹⁶ through late spur-pruning, increasing vine trunk height, trimming shoots or removing leaves to reduce the leaf area to fruit weight ratio,¹⁷ soil tillage techniques, cover cropping species, passive and active protection against frost risk,¹⁸ adjustments in harvest management practices and process grape composition,¹⁹ choice of rootstocks and clones,²⁰ and developing new cultivars via plant breeding or genetics, together with the concomitant regulation of these necessary adaptations. Climate change will also lead to devastating “freak weather” such as hailstorms, and higher temperatures can cause grapes to ripen prematurely, so that too much sugar is produced in the grapes, making the wines too alcoholic.²¹

A more challenging problem might be the shift in baseline climates for wine regions, which one could call “a shift in *terroir*”. The greatest warming is expected in Portugal (2.9°C in 50 years). For the Burgundy, Rhine Valley, Barolo, and Bordeaux regions, decadal trends are modelled at 0.3–0.5°C while the overall trends are predicted to be 1.5–2.4°C. The 12°C and 22°C isotherms will move 150–300 km towards the respective poles, depending on the emissions scenario, by 2050.²²

Section 3 The Paradox of Stability of Meaning, Quality and Reputation

To avoid the commodification trap, product differentiation may be achieved for individual farms or cooperatives of farms that are able to produce wines originating in their territory, region or locality, where a given quality, reputation or other characteristic of the good is

¹⁵ *Supra* n 13, 123.

¹⁶ Etienne Neethling and others, ‘Adapting Viticulture to Climate Change. Guidance Manual to Support Winegrowers’ Decision-Making’, ADVICLIM 2016 <<https://www.adviclim.eu/wp-content/uploads/2015/06/B1-deliverable.pdf>> 19, 20

¹⁷ *Ibid*, 22

¹⁸ *Ibid*, 24

¹⁹ *Ibid*, 21

²⁰ *Ibid*, 25

²¹ Ethan Bilby, ‘Wine Connoisseurs Face Testing Times as Climate Change Alters Flavours, Global Warming is Affecting Vineyards and the Taste of Wines’, *Horizon, EU Research & Innovation Magazine* (17 February 2023) <<https://ec.europa.eu/research-and-innovation/en/horizon-magazine/wine-connoisseurs-face-testing-times-climate-change-alters-flavours#:~:text=with%20the%20climate.-,and%20make%20wines%20too%20alcoholic>>

²² *Supra* n 13, 126.

essentially attributable to its geographical origin.²³ GIs have proved to be an effective way to stabilise the meaning of the name of a *terroir* that is linked to a wine and the know-how of the people who produce that particular wine. A GI includes a clear definition of what grapes and other ingredients constitute a particular wine, what percentage alcohol it has, where the grapes are harvested, what method is used to produce the wine, and where the procedure takes place. This certified set of information about the product and procedure, linked to a place, quality and human factors and protected and enforced by a committee, can prevent vintners and wine producers from using below-quality ingredients or procedures to produce their wine, which would lead to a race to the bottom, abuse the asymmetry of information between producers and consumers, and degrade the market for the GI, so that consumers could not rely on the quality of a certain GI. Akerlof has described this mechanism in regard to so-called credence goods, for which consumers can judge their actual quality neither before purchase (*ex ante*) nor after purchase (*ex post*).²⁴

If the country of origin of a non-European product name has a bilateral or regional agreement with the EU that provides for the mutual protection of that product name, then the non-European product name may also be registered as a GI. While both EU and non-EU GIs protected by agreements may be viewed on the GIview site, GIs applied for and formally included in the EU registers can be consulted on the official database of EU GI registrations, eAmbrosia.

Instability

Even though a wine may be protected under a GI, there can still be some degree of variety caused by prolonged exposure to artificial lighting through the wine bottle,²⁵ temperature changes,²⁶ or the oxidation process (browning),²⁷ which can change the quality of the wine. In contrast to the preferences within industry for homogeneity, since it makes commodification and scalability possible and enables stability in the meaning of GIs, it can be advantageous that there is a certain degree of biodiversity among vines, so that at least some selection can survive

²³ Article 22.1 TRIPs

²⁴ George A Akerlof, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84(3) Quarterly Journal of Economics 488

²⁵ Maurizio D'Auria, Lucia Emanuele and Rocco Racioppi, 'The Effect of Heat and Light on the Composition of Some Volatile Compounds in Wine' (2009) 117(1) Food Chemistry 9

²⁶ Carlos Díaz and others, 'Volatile Compounds of Bottled Wines with Denomination of Origin from the Canary Islands (Spain)' (2003) 81(3) Food Chemistry 447

²⁷ A Escudero and others, 'Sensory and Chemical Changes of Young White Wines Stored Under Oxygen. An Assessment of the Role Played by Aldehydes and some other Important Odorants' (2002) 77(3) Food Chemistry 325

pests or indeed climate change. However, in the case of “Chataîgne d’Ardèche”, a GI application that comprised a list of 65 traditional varieties was held by the European Commission to be insufficiently homogenous.²⁸ Changing the specifications of a GI can be a way to innovate or to adapt to external circumstances, such as market forces²⁹ or climate change, but only to a limited extent. If the modification of the specifications is too radical, this would destabilise the meaning of the GI, cause consumer confusion and lead to dilution by blurring. Genetic engineering tools for the hybridisation of viticulture are being developed³⁰ so that they can deal with a change in the *terroir*. This is an interesting technical solution that falls outside of the scope of this article. Instead, the next section will focus on two possible legal ways: to be flexible in regard to the requirements of GIs, and to use the flexibilities within the GI regulation. For the latter, relevant provisions of TRIPs, the EU’s PDO/PGI system and the Geneva Act of the Lisbon Agreement will be addressed.

Section 4 Using the Existing Flexibilities of the GI System

The EU’s Strategy on Adaptation to Climate Change requires EU and Member State policymaking to ensure that “EU regulation and funding take into account disaster risk to avoid creating new exposure; reduce existing risk by building up resilience, prevention and preparedness; manage residual risk.”³¹ Thus, using the existing flexibilities of the GI system to make the wine industry more climate-resilient arguably falls within the scope of this strategy. In the face of climate change, wine regions should be able to make full use of the flexibilities of the GI system, without destabilising the GI and leading it to oblivion. A PDO has more stringent production requirements than a PGI, but both are protected at the same high level.³²

²⁸ Delphine Marie-Vivien and Didier Chabrol, ‘Geographical Indications (GIs), Biodiversity and Poor Communities’ (2014), CIRAD, 11.

²⁹ Broude provides an example of a change in specification (in this case related to the method of production) for Chianti Classico, under the *denominazione di origine controllata e garantita*, the most prestigious GI of Italy. Tomer Broude, ‘Taking “Trade and Culture” Seriously: Geographical Indications and Cultural Protection in WTO Law’ (2005) 26(4) University of Pennsylvania Journal of International Law 623, 665-667. <<https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1220&context=jil>>

³⁰ Éric Gomès, Pascale Maillot and Éric Duchêne, ‘Molecular Tools for Adapting Viticulture to Climate Change’ (2021) 12 Frontiers in Plant Science 633846. doi: 10.3389/fpls.2021.633846.

³¹ Communication from the Commission to the European Parliament, the Council, the European Economic Social Committee and the Committee of the Regions. Forging a Climate-resilient Europe – The New EU Strategy on Adaptation to Climate Change. COM/2021/82 final. <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:82:FIN>>

³² Article 103 Regulation (EU) No 1308/2013, *supra* n 8. Article 93(1)(a) Regulation (EU) No 1308/2013 defines a protected designation of origin (PDO) as the name of a region, a specific place or, in exceptional and duly justifiable cases, a country used to describe a wine, under the following conditions:

(i) the quality and characteristics of the product are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors;

There are two main approaches to flexibility. First, one can permanently or temporarily loosen the product/process specifications of a PDO/PGI (see Section 4.1). Second, the EU PDO/PGI system makes trans-border designations of origin possible and, in the same way, the Geneva Act of the Lisbon Agreement makes cross-border AOs/GIs possible, so that GIs can be used in a more flexible way in times of climate change (see Section 4.2).

Section 4.1 Adapting GI Product Specifications to Shifts in *Terroir*

Products, including wine, from a certain delimited PDO/PGI or AO/GI are included in registers of the EU or Lisbon Agreement along with any pertinent data that may be used to pinpoint the location and details of the product's manufacture. Despite the mandate of TRIPs to negotiate a multilateral system of notification and registration for wines (and spirits), according to article 23.4 TRIPs, this has not yet been established.³³ If it were eventually to materialise, it could significantly enhance the transparency of the GI product specifications, or any modification thereof.

One could argue that the stability of these specifics, for example the delimitation of the geographical area, could be loosened in case of climate change and the concomitant shift in *terroir*, at least to a certain extent. Regulation (EU) 2019/33³⁴ supplements Regulation (EU) No 1308/2013, which establishes a common organisation of the markets in agricultural products, as regards applications for PDOs, PGIs and traditional terms in the wine sector, the objection procedure, restrictions of use, amendments to product specifications, cancellation of protection, and labelling and presentation.³⁵

Recital 6 of Regulation (EU) 2019/33 holds that where a wine sector product bearing a PDO or PGI must only be packaged within a demarcated geographical area according to the product specification, this constitutes a restriction on the free movement of goods and freedom to

(ii) the grapes from which the product is produced come exclusively from that geographical area;

(iii) the production takes place in that geographical area; and

(iv) the product is obtained from vine varieties belonging to *Vitis vinifera*;

Article 93(1)(b) Regulation (EU) No 1308/2013 defines a protected geographical indication (PGI) as a region, a specific place or, in exceptional and duly justifiable cases, a country, used to describe a wine, under the following conditions:

(i) it possesses a specific quality, reputation or other characteristics attributable to that geographical origin;

(ii) at least 85 % of the grapes used for its production come exclusively from that geographical area;

(iii) its production takes place in that geographical area; and

(iv) it is obtained from vine varieties belonging to *Vitis vinifera* or a cross between the *Vitis vinifera* species and other species of the genus *Vitis*.

³³ Danny Friedmann 'The Rational Construction of a Universal Register for Distinctive Wines and Spirits GIs Against Dilution' (2021) 25 Journal of World Intellectual Property 106. <<https://ssrn.com/abstract=3982805>>

³⁴ *Supra* n 9.

³⁵ *Supra* n 8.

provide services. In light of the *Cassis de Dijon* case³⁶ of the then ECJ, such restrictions may be imposed only if they are necessary and proportionate to safeguard quality, to certify the origin of the product or to ensure control. The competent authorities of Member States are best placed for making an assessment of whether an application concerning a PDO or PGI fulfils the requirements for protection,³⁷ since they have the knowledge and expertise and access to the relevant data and facts.³⁸

Recital 15 of Regulation (EU) 2019/33 makes it clear that producers of grapevine products bearing a PDO or PGI name have to adapt swiftly to changing market demands. In the same vein as the EU Strategy on Adaptation to Climate Change,³⁹ the Recital holds that producers “should be allowed to take account of developments in scientific and technical knowledge and of environmental changes”.⁴⁰ This clearly suggests that the impact of climate change is germane and falls within this permission. “In order to reduce the steps of such procedures and to give effect in this area to the principle of subsidiarity, decisions on amendments which do not concern essential elements of the product specification should be approved at Member State’s level”.⁴¹ The amendment to the specification can be made immediately. The Recital emphasises that the decision is an exclusively national procedure for which there is no requirement for a re-examination of the application for approval at the Union level.⁴²

Temporary amendments should be introduced to allow grapevine products bearing a PDO or PGI to continue to be marketed under the protected name in cases of natural disaster or adverse weather conditions or the adoption of sanitary or phytosanitary measures which temporarily prevent operators from complying with the product specification.⁴³ Because of their emergency nature, temporary amendments should apply immediately following the approval by the Member State.⁴⁴ Even though the list of emergency grounds for temporary amendments is exhaustive, because of the exceptional character of temporary amendments, one could argue that climate change could clearly cause a natural disaster or adverse weather conditions. In

³⁶ Case C-120/78, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein*, Judgment of the Court of 20 February 1979, ECR 1979-00649, ECLI:EU:C:1979:42.

³⁷ Recital 9 Regulation (EU) 2019/33, *supra* n 9.

³⁸ In *Belgium v Spain*, Spain maintained that the quality and reputation of Rioja wine justifies the requirement that it be bottled in the region of production, despite the fact that this restricts trade in the sense of *Delhaize*. Case C-388/95, *Belgium v Spain*, Judgment of the Court, 16 May 2000, ECLI:EU:C:2000:244, 57, 77. Case C-47/90, *Delhaize Frères v Promalvin and Others*, Judgment of the Court, 9 June 1992, ECLI:EU:C:1992:250.

³⁹ *Supra* n 31

⁴⁰ Recital 15 Regulation (EU) 2019/33, *supra* n 9.

⁴¹ *Supra* n 40

⁴² *Ibid.*

⁴³ Recital 17 Regulation (EU) 2019/33, *supra* n 9

⁴⁴ *Ibid.*

such cases, the temporary labelling and presentation of grapevine products should take into account the principle of fair competition and appropriate consumer information.⁴⁵

Article 18(1) Regulation (EU) 2019/33 points out that temporary amendments must be approved and made public by the Member State to which the geographical area of the PDO or PGI relates. They are to be communicated to the European Commission, together with the reasons supporting the temporary amendment, not later than one month following the date on which the national decision of approval is made public. Once the temporary amendment has been made public it is applicable in the Member State. Article 18(2) Regulation (EU) 2019/33 deals with a geographical area that covers more than one Member State. The procedure for temporary amendment applies separately in each Member State concerned for the part of the area that falls within its territory. Temporary amendments are applicable only when the last national decision of approval becomes applicable.⁴⁶ The Member State or third country last approving the temporary amendment must communicate it to the European Commission within one month following the date upon which its decision of approval is made public.

Article 22 Regulation (EU) 2019/33 covers temporary labelling and presentation: after an application for a PDO or PGI has been forwarded to the European Commission, producers may indicate it in their labelling and presentation, and use national logos and indications, in compliance with EU law, particularly Regulation (EU) No 1169/2011 on the provision of food information to consumers. If the application is rejected, any grapevine products labelled in accordance with the first subparagraph of article 22 may be marketed until the stocks are exhausted.

Certain PDOs that cannot meet the standards of a PDO specification can benefit from derogations from the obligation to use the term “protected designation of origin” on their labels. In order to maintain this historical concession, it is appropriate to confirm the existence of this derogation for such names.⁴⁷ The indication on the label of the name of a geographical area which is smaller or larger than the area of a PDO or PGI should be permitted for grapevine products bearing a PDO or PGI, in order to give the consumer better information about the place where the grapevine product was produced, particularly where such places are well-known to consumers.⁴⁸ In times of climate change it might be helpful to provide a bigger area

⁴⁵ Recital 21 Regulation (EU) 2019/33, *supra* n 9

⁴⁶ Article 18(2) Regulation (EU) 2019/33, *supra* n 9

⁴⁷ Recital 22 Regulation (EU) 2019/33, *supra* n 9

⁴⁸ Recital 49 Regulation (EU) 2019/33, *supra* n 9

for a PDO, and to provide further labels about where the grapes are from and where exactly the grapevine product was produced, so that these further labels could be changed.

Section 4.2 Joint GI Applications

Terroirs are the linkages between products, places and people, which are the foundation of the protection of GIs, AOs and PDOs/PGIs.

One could argue that *terroirs* do not necessarily stop precisely at a border, since they are social constructs. Then again, article 3(b) Regulation (EU) 2019/33 contains the condition that “the demarcated geographical area possesses characteristics which differ appreciably from those of neighbouring areas or the characteristics of the product are different from those produced in neighbouring areas”. Whether this is feasible or not, the Westphalian concept of the sovereignty of nation states is unthinkable without borders. However, for most jurisdictions, this sovereignty in regard to GIs is limited, since most wine-producing states are members of the World Trade Organization, and TRIPs is an integral part of the Agreement Establishing the World Trade Organization.⁴⁹ Article 23.1 TRIPs states that wine and spirits GIs enjoy enhanced protection in comparison to other GIs.

The Member States of the EU are obliged to protect PDOs and PGIs for wine, and third states can apply for the registration of PDOs or PGIs with the EU.⁵⁰ Although PDO applicants have to meet stricter criteria than PGI applicants, both PDOs and PGIs are protected at the same high level. In addition, the members of the Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications protect both AOs and GIs, including wines and spirits at the same level.

Climate change will cause certain *terroirs* to be more or less suitable for producing certain grapes. In order to make full use of shifts in *terroir*, one could argue that an adjacent geographical area (the new *terroir*) has acquired a better position for the production of certain grapes than the incumbent *terroir*.

Both the EU Regulations and the Geneva Act of the Lisbon Agreement explicitly take joint applications from adjacent regions into account for trans-border PDOs/PGIs or cross-border AOs/GIs.

Article 5(1) Regulation (EU) 2019/33:

⁴⁹ TRIPs, *supra* n 3

⁵⁰ WT/DS290 – European Communities – Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs, Panel Report 20 April 2005.

By way of derogation from points (a)(iii) and (b)(iii) of Article 93(1) of Regulation (EU) No 1308/2013, and on condition that the product specification so provides, a product which has a protected designation of origin or geographical indication may be made into wine in any of the following locations:

(c) in the case of a trans-border designation of origin or geographical indication, or where an agreement on control measures exists between two or more Member States or between one or more Member States and one or more third countries, in an area situated in the immediate proximity of the demarcated area in question.

Article 7 Regulation (EU) 2019/33 holds that where there are joint applications for a PDO or PGI, the related preliminary national procedures, including the objection stage, shall be carried out in all the Member States concerned.

PDOs of Multiple Countries

In 2011, the European Commission accepted a joint application for the “Miód z Sejneńszczyzny” PDO for honey from Poland and Lithuania,⁵¹ in 2015 a joint application for the “Istarski pršut” PDO for dry-cured meat from Croatia and Slovenia,⁵² in 2017 the joint application for the “Maasvallei Limburg” PDO for wine from Belgium and the Netherlands,⁵³ and in 2018 the joint application for the “Istra” PDO for extra virgin olive oil from Croatia and Slovenia.⁵⁴ Trans-border PDOs or PGIs could to a certain extent be a modest remedy for the problems of shifting *terroirs*.

The south of England happens to have a kind of chalk soil that is similar to that of the Champagne region in France and has benefited from increased hours of sunshine to make sparkling wine. Prestigious French Champagne houses have invested in the south of England.

⁵¹ ‘Miód z Sejneńszczyzny’/‘Łódzieszczyzny’/‘Seinų/Lazdijų krašto medus’ Publication of an application pursuant to Article 6(2) of Council Regulation (EC) No 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs OJ C 116, 14.4.2011, 15

⁵² Commission Implementing Regulation (EU) 2015/1840 of 7 October 2015 entering a name in the register of protected designations of origin and protected geographical indications (Istarski pršut/Istrski pršut (PDO)) OJ L 267, 14.10.2015, 1

⁵³ Commission Implementing Decision of 21 August 2017 on the publication in the Official Journal of the European Union of the single document referred to in Article 94(1)(d) of Regulation (EU) No 1308/2013 of the European Parliament and of the Council and of the reference to the publication of the product specification for a name in the wine sector (Maasvallei Limburg (PDO)) C/2017/5695, OJ C 278, 22.8.2017, 4

⁵⁴ Commission Implementing Decision of 12 September 2018 on the publication in the Official Journal of the European Union of the application for registration of a name referred to in Article 49 of Regulation (EU) No 1151/2012 of the European Parliament and of the Council ‘Istra’ (PDO) (2018/C 327/05).

Taittinger, founded in 1734, has invested in Kent.⁵⁵ Vranken-Pommery, founded in 1836, uses grapes from Hampshire, Essex and Sussex.⁵⁶ Of course, the *terroir* constitutes not only natural elements such as the soil, precipitation and temperature but arguably also human factors such as know-how and reputation. The question is whether this English region could be used as a supplier of grapes to French Champagne houses that sell the result as Champagne PDO, and whether the English region could apply for its own English PDO or even for the right to use the Champagne PDO. Technically, France and the UK share a maritime border, so trans-border joint applications are at least theoretically possible. Another solution that the EU has already used for the same geographical designation is to use different labels. In the case of Pisco (a fruit spirit) from Peru, the EU granted the PDO label, and it granted the PGI label for Pisco from Chile.⁵⁷ This could, for example, mean that the sparkling wine produced with grapes from the south of England by French wine houses, and thus using French know-how and reputation, could apply for a PGI but not a PDO, since the reputation of Champagne is inseparable from the Champagne region in France. Another option could be that the French wine houses could use the Champagne PDO for wine sourced from English grapes and produced in the south of England, but must share the benefits with the Champagne region in France for the use of the French know-how and reputation. This would mean a *de facto* extension of the Champagne *terroir* to the south of England.

Geneva Act of the Lisbon Agreement

The Geneva Act⁵⁸ not only expanded the Lisbon Agreement protection of AOs to GIs, but, in article 2.2, also provides for the possibility of trans-border geographical areas for AOs and GIs,⁵⁹ in the same vein as the EU PDO/PGI system. Article 1(xiii) Geneva Act provides a definition of a trans-border geographical area: “a geographical area situated in, or covering,

⁵⁵ Jillian Kramer, ‘English Sparkling Wines Challenge the Supremacy of Champagne, France – Thanks to Climate Change’, *Smithsonian Magazine*, 27 January 2020. <https://www.smithsonianmag.com/science-nature/english-sparkling-wines-challenge-supremacy-champagne-francethanks-climate-change-180974057/>.

Bruce Schoenfeld, ‘Raise a Glass to the British Version of Champagne’, *National Geographic*, 29 December 2018. <https://www.nationalgeographic.com/travel/article/england-things-to-do-sparkling-wine-tasting-vineyards>

⁵⁶ Lauren Eads, ‘Pommery First Champagne House to Release English Fizz’, *The Drinks Business*, 27 March 2018. <https://www.thedrinksbusiness.com/2018/03/pommery-first-champagne-house-to-release-english-fizz/>

⁵⁷ Ayşe Kübra Özreisoğlu, ‘Who Owns the Geographical Indication Pisco, Peru or Chile?’ IGIR, *Maastricht University Blog*, 29 March 2019. <https://www.maastrichtuniversity.nl/blog/2019/03/who-owns-geographical-indication-pisco-peru-or-chile>

⁵⁸ Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications and Regulations Under the Geneva Act of the Lisbon Agreement, 20 May 2015.

⁵⁹ Article 2.2 Geneva Act, *ibid*.

adjacent Contracting Parties”. Article 5(4) Geneva Act provides for the possibility of a joint application by adjacent contracting parties.

TRIPs

The direct influence of the GATT 1947 on the development of GIs is modest. However, with its innovative provisions regarding national treatment, most-favoured-nation and the dispute settlement mechanism, GATT’s influence on TRIPs is very strong. Nevertheless, until the blockage of appointments to the Appellate Body is lifted, the dispute settlement mechanism is incapacitated. TRIPs was arguably the multilateral agreement with the greatest impact on the protection of GIs, since the WTO has 164 members. Articles 22-24 TRIPs do not seem very apt for climate change. The definition of a GI in article 22.1 TRIPs could be extended to make joint applications and the recognition of cross-/trans-border GIs possible. However, article 23.3 TRIPs provides a useful provision in times of climate change: in the case of homonymous geographical indications for wines, protection shall be accorded to each indication, subject to the provisions of paragraph 4 of article 22. “Each Member shall determine the practical conditions under which the homonymous indications in question will be differentiated from each other, taking into account the need to ensure equitable treatment of the producers concerned and that consumers are not misled”.⁶⁰

Multi-component Terms in Combination with GI Licensing

When multi-component terms that are not generic are combined with GI licensing, this could lead to benefits for both a region that starts using the GI because of the impact of climate change and the incumbent region where the GI originated. First, the conventional approach to multi-component terms is introduced, and this is followed by a creative approach which combines distinctive multi-component terms with GI licensing.

Conventional approach to multi-component terms

GIs are becoming increasingly important for wine-producing jurisdictions around the world, including in China’s agricultural sector and for its rural development.⁶¹ This importance is evidenced by the bilateral agreement on GIs that China has recently concluded with the EU,

⁶⁰ Article 23.3 TRIPs.

⁶¹ ‘China Focuses on Geographical Indication Protection’, Xinhua, 23 January 2021. <http://english.www.gov.cn/statecouncil/ministries/202101/23/content_WS600b601bc6d0f725769445bb.html>

which entered into force on 1 March 2021,⁶² and the GI-relevant free trade agreement with the US.⁶³ Both treaties use multi-component terms so that they only protect those component terms that are distinctive. Article 1.17 Section F Geographical Indications Chapter 1 Intellectual Property, US–China Economic and Trade Agreement “Phase One”:

Each Party shall ensure that an individual component of a multi-component term that is protected as a geographical indication in the territory of a Party shall not be protected in that Party if that individual component is generic.

Regulation (EU) No 1308/2013 defines “generic terms” as “the names of products which, although relating to the place, region or country where the product was originally produced or marketed, have become the common name of a product in the Union”.⁶⁴ Based on the Regulation that covers the EU’s GI provisions for wine, to establish whether a name has become generic, the relevant factors must, in particular, be taken into account: the existing situation in the EU, notably in areas of consumption, and the relevant EU or national law. Generic terms cannot be protected. The EU–China Agreement on GIs⁶⁵ does not have explicit provisions on the treatment of generic terms as a ground for refusal of GI protection. However, from the Annexes and the footnotes of the Agreement, one can infer that if some terms of a multi-component GI are common terms, for example “vino nobile di” in “vino nobile di Montepulciano”, they are generic parts, for which “no protection is sought”.

Creative approach to multi-component terms

One could think of the use of distinctive multiple-component terms, in which one or more particular terms that are distinctive of the incumbent geographical area are substituted for other terms that are distinctive of the adjacent geographical area that has become the optimal area for the production of a certain wine.

To illustrate this approach, a hypothetical example is given. Let us assume that there is a particular mountain range, Grand Peak Mountain, located between two countries, Woodland and Pineland. Woodland is the incumbent producer of Grand Peak Mountain of Woodland GI wine. As a result of climate change, Woodland is no longer the optimal place to produce Grand Peak Mountain of Woodland GI wine, but Pineland is. Based on the Ricardo’s Comparative

⁶² Agreement between the European Union and the Government of the People’s Republic of China on cooperation on, and protection of, geographical indications OJ L 408I, 4.12.2020, 3. <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.LI.2020.408.01.0003.01.ENG>>

⁶³ Economic and Trade Agreement, *supra* n 11

⁶⁴ Article 101 Regulation (EU) No 1308/2013, *supra* n 8

⁶⁵ *Supra* n 62

Advantage economic theory, if the multi-component terms are all distinctive, one could imagine that it might be in the interests of both Woodland and Pineland for Pineland to start using a slightly modified GI (Grand Peak Mountain of Pineland), and to compensate Woodland for the use of the “Grand Peak Mountain” part of its GI, its reputation and the technology transferred by Woodland.

Section 5 Conclusion

Climate change provides opportunities and threats to wine-producing regions. To make full use of the flexibilities of the GI system, one could interpret the specifications of grapes, *terroir* and production methods in a less strict way, but not go so far as to destabilise the GI and lead it into oblivion. Another way to make use of the flexibilities within the GI system is through joint applications for trans-border/cross-border geographical areas. One could think of a scenario in which one wine region with the incumbent GI falls outside, and the adjacent region falls inside, the optimal climate (and *terroir*) for a certain wine. In such a situation, one could imagine a scheme to share the benefits between the two regions, with the owners of the incumbent GI licensing the use of the GI to the new optimal region and receiving compensation from the new optimal region for its expertise in production methods, marketing and reputation.

However, one important problem with these trans-border geographical areas is that the region in which climate change ameliorates production might not actually be adjacent to the region in which it impedes it. Thus, only if the flexibilities in the GI treaties are truly implemented and interpreted trans-nationally, flexibly and creatively can they help the wine industry to adapt to climate change and to continue to adequately inform consumers about geographical origin at the same time.