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THE WINE TERROIR: LANDSCAPE AND QUALITY

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ARSTRACT

It is necessary to examine the diversity of the wine-growing terroir, a term with many variations, to better understand the challenges it represents. Indeed, it is a sign of quality farmers aims at, as a recognition of environmental and landscape values in their practices, as well as by consumers who find authenticity and proximity to the places of production, in a world where the disconnections with rurality are numerous and deep, but also by the territories for which the terroir becomes a factor of development. However, specialists in the field deal with the subject within a specific conceptual framework depending on the discipline (geographer, sociologist, ethnologist, geologist, agronomist, semiologist, economist, historian, linguist, etc.) or profession (wine merchant, winegrower, wine steward, agricultural consultant, etc.). Each and everyone in his discipline, his practices, has his own definitions, his own lexical patterns. But when it comes to building a convergent approach, this diversity of definitions and uses of words can be a pitfall. Our work, by analyzing the triptych Terroir-Landscape-Quality according to four main entries (the four parts of our essay), sets out a new approach. The wine-growing terroir and the qualitative dimension that it predefines in the imaginary of wine no longer see wine and the winegrower in an abstract, compartmentalized way, but analyze them as the result of a system, a kind of alchemy between men, their skills, the plant material, the environmental conditions, but also the norms and laws, the strategies of existence, the Cultures, etc..

Keywords: Wine-growing terroir, Landscape, Quality.

INTRODUCTION

When we speak about terroir, considered by geographers as "an expanse of land with certain characteristics that individualize it from an agronomic point of view" (Lebeau R, 1995), the vine and wine follow a few steps behind. Indeed, without reconducting the study of the evolution of the definition of terroir and its multiple meaningsby crossing disciplinary views, we can assert today that terroir is deeply rooted in the wine landscape. This landscape is above all cultural, that is to say that it was bornnot only from a land use marked by the omnipresence of the vine, but also and above all by the men who make the wine, with their know-how and their history.

The notion of wine-growing terroir has been highlighted by the quality management. It reveals in particular that the encounter between men and plant objects (we remain here in the case of the wine) makeproductscome out, which have their own identity: that of a territory and its inhabitants. The vine establishes its aim of quality by an AOC (Appellation d'Origine Contrôlée) system, as well as by a delimitation of the territory. The winegrower thus defines a space and defends its identity by using wine-making techniques and wine-making typicities. All these contributions introduce the spirit of the terroir.

In this paper, we aimed at exploring the notion of wine-growing terroir through one entry, quality. Indeed, the terroir is today one of the vectors to study and transmit the qualitative representation of a wine, through its heritage, natural and cultural foundations (Yengué, 2013). For this purpose, two types of disciplinary indicators are often used, intrinsic and extrinsic indicators (Aurier and Sirieix 2009). The first ones refer to the technical characteristics of the physical product and its environment. A change in the final product (type of winemaking, for example) leads to a change in one or more of these indicators of the terroir, but not for the geographical, geological, or agronomic aspect of the product. On the contrary, extrinsic indicators are independent of the physical aspect. One can change the name of the product or its packaging, without changing the wine itself, and still the consumer sees in it a notion of imaginary terroir (e.g. difference between Beaune and Hautes côtes de Beaune) (Stengel 2015a).

All these indicators, linked to the presence of the terroir, set up an imaginary quality of the wine (Stengel 2017). They influence expectations because they match a promise made to consumers. They also influence consumer perception through the brand, the information, the official or unofficial quality signs (Stengel, 2018), or through the scientific or technical discourse which are used as a guarantee. Other justifications meet the needs of the receiver of the information to establish a link between the product, its technique, and the place of production: environmental impacts, climate, quality representation, landscape representations, type of agriculture, etc. Therefore, the notion of terroir is at the crossroads between these concerns From the local to the global scale, it is at the center of the actual and future qualitative representation of wine and the wine-producing stakes, (Vaudour 2003). This is one of the reasons why it is a multifaceted object that has been studied by many subjects. Numerous works have been carried out in ecology, geography, human and social sciences, sociology, information and communication sciences, and earth sciences, but often without any cross study (Yengué and Stengel, 2020).

This paper aims at trying to break down barriers by focusing on two dimensions of the valorization of the wine terroir: the importance that a cross-definition of terroir can take in the conservation and enrichment of the tangible and intangible capital associated with the wine heritage; the impact and success of its dissemination to peoplewho can't understand the complexity of the word terroir. Interdisciplinarity can therefore be a major asset, highlighting the geography and history of the product as well as places, cultivation (Stengel 2015b) and territorialization of its tangible (vineyard landscape, plant objects, ...) and intangible (winemaking process, sensory, ...) heritage. We propose here a rewriting of the images, perceptions, paradigms and scientific representations from which wine and its terroir benefit.

The concept of wine-growing terroir and the resulting qualitative dimension appear to be a much more complex data, that we will discuss in four parts

THE TERROIR LANSCAPE

Although the terroir is considered as a contextual, objective and perceptual contract, it is still composed of physical and social elements that interfere with cultural data specific to the context (Fischer and Fousse, 2002). These elements (territory, soil, subsoil, sunshine, slope, climate, surrounding vegetation, iodized air, etc.) prevent or make the viticultural management easier. Men will only compose with them to create landscapes. This ecological and environment - winegrowers dependance (or the triangulation Natural environment - Cultural practices - Expectations and imagination of the winegrowers) shows that the environment takes action on the viticultural method. Compelling the winegrower to deal with what is proposed to him. Is actually the major function of the environment.

It is generally accepted that the origin of the vine and wine is relatively old, dating back to the second century AD. (Dion, R. 1934). Gradually, they experienced a boom to reach their golden age around the 18th century, mostly in France. AT The end of the 18th century, a period of crisis for wines started in France, under the combined effects of the French Revolution and later diseases that repeatedly affected the vineyards, notably phylloxera. To fight against this aphid, grafting was generalized (American rootstock resistant to phylloxera and graft taken from local species). This solution saved and transformed the identity of the vineyard, but also led to the spread of mildew. It wasn't until the beginning of the 20th century, with the massive use of Bordeaux mixture, that French vines emerged from this tunnel and created a new national wine terroir.

This rebirth of the vineyard coincided with major upheavals that would lead to its reorganization: (1) the development of means of distribution (in particular the railways) which put wines from different regions of France in direct competition with one another (Dieudonné F, 2007); (2) the spread of the use of wires, which marked the disappearance of the stilted pipes replaced by trellising; (3) the considerable demographic losses of the First World War which led to a lack of manpower. All these elements ledviticulture to new forms, less constraining and more adapted the techniques used at that time (Yengué et al., 2008). Suddenly, a whole aspect of the very "archaic" viticultural landscape disappeared, i.e. a polyculture where the vines share the space with other crops locally called "jouelles" (Clamouse de la Touche, 1925). We go from a landscape which looked disordered to a much more rational, unified and geometric space: the vines are lined, every 3 or 4 rows a larger width (2.50 to 3 m) is preserved to let carts pass.

Nethertheless, profitability was still not up to that of the Golden Age. So, the French wine growers chose to move towards a production of quality. This will impose to find a good adequacy between the soil and the grape variety. In the Loire Valley, for example, large enclosed plots of land favor a precise implantation, slopes, edges of plateau, etc.. (Dion R, 1991), leaving the alluvial plain, occupied by tree plantations, cultivated land, swamps and uncultivated wasteland. This specialization, which began in a very insidious way in the 18th century, became systematic in the 1925s with two major consequences. On the one hand, it concretized the notion of terroir, a geographically delimited territory with aptitudes (nature of the land, geographical configuration and climate) and collectively valorized by an original product. On the other hand, it generated the main features of the viticultural landscape that we know today with itsuniform rows of vines, its atmospheres, tits buildings (lodges, cellars, wine storehouses, beautiful residences) (Yengué et al, 2003).

The notion of landscape attached to the terroir became a determining factor in the quality of the wine. It lays in the principle of interdependence between the winegrower and his vineyard, a principle that serves as a basis for the interpretation of quality.



Fig.1. The bottles, a concentrate of terroir with the values of sharing [Author: Kilien Stengel; Place: Chinon, France: Year 2020]

THE NORMALIZED TERROIR

The terroir also refers to standards, laid down in specifications and guarantees, controlled by sworn bodies to guarantee quality. The notion of quality has always existed (Stengel, 2018). In ancient times, travelers already pointed out places of reference concerning wines (Pompeii, for example). In 1395, the Duke of Burgundy Philippe le Hardi produced an ordinance for the selection of good and bad grape varieties for the Burgundian terroir. The qualitative classification of Alsatian wines, for example, originated, in the 13th century, through the terminology "vinum nobile", which essentially aimed at observing the grape varieties as a vector of distinction. From the 15th century onwards, the "noble grape varieties" were the rare grapes benefiting from the administrative authorization to be planted. We can see then that the notion of quality was sometimes carried by its origins, sometimes by its raw material, sometimes by its technique and always with ordinances, decrees, administrative or commercial authorizations.

When in 1905, the state had to face the dissatisfaction of some winegrowers, it produced a first administrative recognition of "appellations" which is generally considered as the first nomenclature of wines defined by French law.

Today, it is the INAO (National Institute of Origin and Quality) which is in charge of implementing French policy concerning products under official signs of identification of origin and quality (SIQO). It is a public administration under the supervision of the Ministry of Agriculture. This body defines the terroir as a delimited geographical space in which a human community, over the course of its history, has built a collective knowledge of production, based on a system of interactions between a physical and biological environment and a set of human factors. The sociotechnical itineraries thus achieved reveal originality, confer a typicity and lead to a reputation, for a product originating from this geographical space.

The INAO is in charge of several label in which the terroir is found.

The Appellation d'Origine Contrôlée (AOC). This is a French appellation and regulation that designates a product that draws its authenticity and typicality from its geographical origin. Implemented in the -law of July 30, 1935, aiming at supporting the wine sector damaged by numerous wine crises (phylloxera, counterfeiting of names and revolts of winegrowers ...) of the late nineteenth century, the Appellation d'Origine Contrôlée aims at ensuring the origin of a wine. It creates the conditions for fair competition for producers and the guarantee of a certified origin for consumers. The success of the AOC concept was extended in 1990 to all agricultural or food products, both raw and processed. The AOC is governed by a decree that approves the product specifications and the delimitation of its geographical area. In order to be marketed, a product under Appellation d'Origine Contrôlée is subject to a control system that includes field checks and chemical and organoleptic analyses.

By Community regulation $n^{\circ}510\text{-}2006$, Europe adopted and adapted the same system for all the countries of the European Union (1992). The PDO is the transposition at the European level of the French AOC. To be eligible to the PDO, the name of a product previously recognized as an AOC by the state member must be registered by the European Commission in the register of protected designations of origin and protected geographical indications.

With the Protected Geographical Indication (PGI), like the PDO, the European countries were willing to extend the system of identification of products by origin. Initially attributed to specific food products bearing a geographical name and linked to their geographical origin, it has been extended to wines since 2009 (spirits excluded). Governed by regulation 510-2006, the PGI distinguishes a product whose all phases of production do not necessarily originate from the eponymous geographical area but which benefits from a link to a territory and a reputation. The relationship between the product and its origin is not as strong as the AOC one, but is sufficient to confer a characteristic or reputation to a product and thus make it benefit from the PGI. The geographical area of a PGI is delimited.

Another labeling, directed by the INAO, in which the productions and the terroir can be included has to be mentioned: the Organic Agriculture is a specific mode of agricultural production ensuring that a set of agricultural practices are respectful of ecological balances as well as of the autonomy of farmers. Aiming at the preservation of soils, natural resources, the environment and the maintenance of farmers, the Organic Agriculture is often considered as a cornerstone of sustainable agriculture. Here, the terroir is the bearer of values that make it a vector of development.

THE TERROIR REMPART

Since the 1990s, the wine economy has once more been in turmoil, with a constant drop in alcohol consumption, falling sales, and above all fierce competition from the wines of the new world (Dieudonné, 2007). South Africa, Argentina, Bolivia, Brazil, Chile, Peru, Uruguay, Australia and New Zealand now account for more than 20% of the world's export volume, compared to less than 2% in the 1980s. These wines have a clear and simple "identity card". They are industrial reproducible wines (Dieudonné, 2007), what Raphaël Schirmer (2007) calls "a-geographical" wines. It is a radical transformation of the world of the wine industry, a shift from a craft activity to an industrial activity. A new model of viticulture is being set up, based on varietal wines (for the purposes of standardization and uniformity) offered by powerful international companies (as opposed to traditional wines) that gives an essential role to market rules. The large commercial groups seek to match their production with consumer tastes. These wines are generally the result of advanced techniques and deep research.

To face this competition, some French winegrowers, no longer focus only on quality, as they were at the beginning of the last century, but also and above all on the terroir. Indeed, in recent years, winegrowers have become aware of the notion of terroir, hence the studies on terroir carried out in Anjou (Morlat, 2001) and Touraine (Boutin, 2004), often commissioned by winegrowers' unions themselves. The terroir is then no longer considered only as a physical environment but is enriched by the men's skills. This component is already present in the law of 1919 which defines the Appellation d' Origine, but greatly disregarded in practice. The terroir thus becomes an association between a territory, one or several grape varieties and a know-how (France, 2002). Jean Claude Berrouet, an oenologist at the Domaine de Pétrus (Dieudonné 2007), goes in the same direction and defines terroir as "the sum of the aptitudes of the soil, the climatic hazards, the choice of grape varieties, all orchestrated by the winegrower and winemaker".

For the INAO, terroir is a system within which complex interactions are established between a set of human factors, an agricultural production and a physical environment. It is this original combination that gives wines characteristics that cannot be reproduced elsewhere because they cannot be transported to another area. Some unions (interloire, etc.) even speak of the "terroir effect", a relationship between a unique heritage, the composition of the harvest and the quality of the wines (Yengué et al, 2008). Tasting a wine would therefore be more than a pleasure but also the discovery of a territory, it would be to enrich oneself, to embrace new cultures and traditions nourished by the weight of history, a position diametrically opposed to that of "new wines". Would the latter be standardized and soulless?

From now on, the word terroir would guarantee authenticity, typicity as well as non-reproducibility. It becomes one of the sales arguments. The terroir, charged with these new values, allows us to reposition ourselves on a niche market without competition. If wine is linked to the terroir and the terroir participates in the landscape, the valorization and preservation of the landscape participate directly and indirectly in the promotion of wine production and the highlighting of the terroir (Maby 2003a and b). The international symposium "Landscapes of vines and wine" organized in 2003 by Interloire (wine producer of the Loire valley) showed the interest of the wine professionals for the landscape and if we look at the advertising campaigns, there again the landscape is an essential element to identify the wine.

The local authorities participate in the "staging" of the wine-growing area, for example through the creation or enhancement of circuits (Yengué et al, 2017). They also mobilize the landscape dimension that ensures the management and protection of a quality viticulture by limiting urban sprawl. This preserves both wine-growing land and the quality of the living environment (Yengué Chabalier, 2015). The vineyard is also at the heart of many environmental education programmes or heritage enhancement actions (restoration of vine lodges, for example).

Many works show the importance of the terroir for the enhancement of the viticultural landscape (Ambroise, 2005).

All these elements combined reinforce the idea that the landscape dimension must be a concern for the wine industry. The Fontevraud charter, (Asselin, Laidet, 2003) proves it. This charter encourages the participants of the wine-producing areas to integrate concerted approaches in favor of the quality of both products and landscapes. The landscape as well as the terroir has indeed become an unavoidable promotional tool for the wine industry and has a strong cultural dimension.



Fig.2. The cellar, place of construction and maturation of the terroir [Author: Jean louis Yengué; Place: Restigné, France: Year 2018]

THE CULTURAL TERROIR

In the Western culture, we can distinguish several discursive concepts of the wine terroir: the public concept, the social concept and the personal one, an intimate and emotional concept. The representations are always different. They allow to communicate or not with others. For the "intimate terroir", both the winegrower and the wine consumer establish a Proustian relationship with the object, creating a personal conceptualization and a cultural mirror where quality is attached to affect. The "social terroir" is established during transactions of an impersonal nature around wine (e.g. sharing a bottle of wine with an identity linked to a terroir). The "public terroir" appears when more formalized exchanges are organized. It is an disaffected form of the personal model which creates a global concept and a focal phenomenon within the framework of mass communication.

The winegrower, in order to make his area of production personal, familiar, and even identity-building, considers his terroir as endowed with a socio-emotional charge. This terroir represents an intimate and sensitive area (Stengel, 2015a) around the winegrower, in which his activity, his know-how, his seasonal movements and gestures, and his entire life encompassing his body and mind are inscribed. The vineyard, enclosed by walls for example (Stengel, 2017), cannot be "penetrated" or "objectified" by others without provoking a reaction of defense or conservation (specifications, classification of vintages, ...). Vineyards are areas that can only be visited in exceptional situations (organized tours, walks accompanied by a guide, oenotourism, ...) in order to preserve the identity of the place and preserve the intimacy that links the winemaker to his land. This form of aura helps to regulate the winemaking behavior and the process of personalization of the terroir.

The Labels, bottles, corks and wines then become portable and residual elements of the terroir, and in the end communication tools. Wine becomes a concept using an image: that of a terroir that surrounds the winemaker and within which he tries to model a type of qualitative paradigm. Terroir is seen as the very positive remaining part of the landscape expression, of human behavior, as well as dialectics and representations.

In this analysis, we can consider a typology of wine quality based on a phenomenological approach to wine terroirs. The winegrower, from his rows of vines, the cellar master facing his vats, the oenologist during the blending of the cuvées, the sommelier matching wine with the food, are all willing, sometimes temporarily, to organize and develop a particular approachin order to enhance the terroir, the wine and the quality. The winegrowing terroir is seen as a stage on which a way of life is held – a French-style savoir-vivre, as people say (Errad, 2016) - which can be found into talk about wines, the wine-growing regions, the parcel-based crus, their historical depth and hedonism. In our society we can see the importance of the symbolic and cultural value of wine and its roots, demonstrating the affective function of the wine-growing rural areas. The role of this terroir thus brings a strong added value, in the communication process, to the meaning of wine and its quality, via communication tools and the perception of the words created by society.

All these elements and points of view indicate how the wine-growing terroir, and the quality paradigm attributed to it, are filled with culture, how they can change dependending on societies, values and socialization systems. It is obvious that people 's perception of the "terroir" dimension of wine or the landscape image of a wine-growing terroir depends on their education. Thus, the experience of discovering wine and its culture only makes sense if it refers to personal feelings and notions. The values that society attaches to wine are therefore very diverse: we can appreciate wine according to the physiological and psychological enjoyment that it provides and that we appreciate. We can also be just as sensitive to the emotional feelings and memories that wine inspires as we are to the sense of cultural familiarity conveyed by wine and its terroir, both being ethnological elements: wine is then no longer appreciated for itself and its organoleptic qualities but for its social and symbolic value

CONCLUSION

Nowardays, the terroir has a definite positive connotation. It is a sign of quality farmers look for, seeing it as a recognition of environmental and landscape values in their practices, as well as consumers, who find authenticity and proximity to the places of production, in a world where the disconnections with rurality are numerous and deep also. The territories also need it, the terroir becoming a factor of development. However, research in the field of wine terroir deals with the issue within a specific conceptual framework depending on the subject.

Our work, by analyzing the triptych Terroir-Landscape-Quality according to four main entries (the four parts of our argument), deals with a new approach. The wine-growing terroir and the qualitative dimension that it predefines in the imaginary of wine, no longer consider wine and the winegrower in an abstract, compartmentalized way, but see them as the outcome of a system. It thus results in a kind of alchemy between men, their skills, the plant material, the environmental conditions, but also the norms and laws, the strategies of existence, the Cultures, etc. Moreover, the wine-growing landscape, in order to be understood as a terroir and the basis of quality, must benefit from a reading of its historical course as well as its spatial inscription, and must be observed in its economic considerations and in the representations we make of it.

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