Chapters of the book in press

“Mastering the art of enjoying wine, from Enology to Enosophy”

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2. Systematic tasting score sheets

The harmonized method for consolidating different sensory aspects that contribute to wine quality can be traced back to the score sheets, with punctuations up to 100, used in American wine shows by the mid-nineteenth century.[1] The first academic tasting sheets appeared at the beginning of the twentieth century. The scientific interchange was already common, as demonstrated by a leaflet on two lessons on wine tasting, given in 1948 by Maynard Amerine at the Port Wine Institute in Portugal. Table I.1 shows the characteristics emphasized by different authors as drivers of wine quality. It is interesting to compare these approaches with those used today.

Table I.1 Earliest systematic 100-point tasting sheets and respective authors, adapted from Amerine (1949)

		Blaha	**Prostoserdov**	**Cruess**			**Brunet**	**Amerine**
				Dry red	Dry white	Sweet		
Appearance		12	20	15	20	10	15	10
Color		12	20	10	10	10	-	10
Bouquet		12	20	15	10	15	35	15
	Varietal character	20	20	-	-	-	-	-
	Volatile acidity	-	-	15	15	10	-	10
Taste		20	20	15	20	15	50	15
	Total acidity	-	-	10	10	10	-	8
	Sweetness	-	-	10	10	20	-	8
	Body	12	-	-	-	-	-	6
	Astringency	-	-	10	5	-	-	10
Global quality		12	-	-	-	10	-	8

Source: Maynard Amerine (1949), The organoleptic wine assessment, a summary of a lesson given at the Port Wine Institute (in Portuguese).

The first score sheet popularized by Amerine was prepared by reducing the maximum score to 20, based on the observation that the variability of responses reached 30 points on the scale of 100. The so-called Davis score sheet evolved by modifying the weight given to the different attributes, keeping 20 as the maximum score (table I.2).

The form proposed by the International Organisation of Vine and Wine (OIV) and the International Union of Oenologists (UIOE), two of the most important international organizations related to the production, marketing, and regulation of wine, scores wines from 40 to 100, with different weights attributed to aspect, aroma, flavor, and overall assessment (table I.2).

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[1] A detailed description of these early quality evaluations in wine shows is found in Aaron Nix-Gomez, “ ‘That we may know the relative value of their own manufacture’: The spread of the 100-point wine scale in late 19th century America,” Hogshead (blog), January 6, 2015, https://hogsheadwine.wordpress.com/tag/historyof100pointscale/ (assessed on August 1, 2021).

In Australia, the Faculty of Oenology at the University of Adelaide adapted the Davis sheet to a system called 3-7-10, where 3 points are for appearance, 7 for smell, and 10 for palate and flavor, for a total of 20. It is possible to assign scores to one decimal place, expanding the range by ten times. The use of 100- or 20-point scales does not translate into statistically different evaluations of the same wine.[19]

Table I.2. University of California (Davis) and International Organisation of Vine and Wine (OIV) score sheets.

UC Davis[a]		**OIV[b]**		
Appearance	0 – 2	Visual	Limpidity	1 – 5
Colour	0 – 2		Aspect other than limpidity	2 – 10
Aroma	0 – 4	Nose	Genuineness	2 – 6
Aroma flaws	0 – 2		Positive intensity	2 – 8
Sugar, dryness	1 (Weak), 2 (Appropriate)		Quality	8 – 16
Body and mouthfeel	1 (Absent), 2 (Good)	Taste	Genuineness	2 – 6
Flavour, balance	1 – 2		Positive intensity	2 – 8
Astringency	0 - 2 (reds and rosés)		Harmonious persistence	4 – 8
	2 (whites)		Quality	10 – 22
Overall appreciation	0 – 2	Harmony	Overall judgment	7 – 11
Total	3 – 20	Total		40 – 100

[a] Camilo Peña, Annamma Joy, and Karine Lawrence, "Rebranding Wine Using Sensory Profiling Data: A Case Study" (retrieved on September 17, 2021, from https://www.siroccoconsulting.com/wp-content/uploads/2018/12/Rebranding-wine-using-sensory-profiling-data-A-case-study-2.pdf). Half points are possible, doubling the scale.
[b] "Resolution OIV/Concours 332a/2009: OIV Standard for International Wine and Spirituous Beverages of Vitivinicultural Origin Competitions" (retrieved on September 17, 2021, from http://www.oiv.int/public/medias/4661/oiv-concours-332a-2009-en.pdf).

Wine magazine and online classifications

The score sheets described above try to summarize the quality of the wine with a single score. These sheets were designed to help wine producers improve the quality of their wines. They were not intended for consumers without prior training or for retailers and distributors. But score sheets quickly became popular outside of wine-producing circles.[16,20]

There is no current shortage of tasting sheets; there is even one entitled the "perfect sheet." But all of these score sheets are nothing more than sophisticated versions of the initial score sheets. From the moment the first Anglophone wine magazines with global reach appeared, scores became the preferred means of concisely communicating the quality of wines (table I.3).

American magazines use the 100-point system pioneered by Robert Parker in *The Wine Advocate.* English magazines prefer the 20-point system. Interestingly, *Decanter* switched from Michael Broadbent's 1- to 5-star rating to a 100-point system.[21] Jancis Robinson prefers a 20-point scale (Jancis Robinson, "How We Score," https://www.jancisrobinson.com/how-we-score).

Wine critics stress that their scores reflect the preferences of individuals or a small group of tasters. Still, high scores have become synonymous with wine quality and are essential for commercial success.[22] Their dominance in the world of wine leaves little room for imagining other ways of conveying wine quality. The advent of social networks encouraged the creation of sites that compile tasting notes, using mathematical algorithms to create what is called *collective intelligence*.[22] It is important to keep in mind that the quality of the output produced by these algorithms depends on

the quality of the inputs. No algorithm, no matter how powerful, can change the fact that tasting notes are highly subjective, as explained in chapter IV.1.

Table I.3 Scores used in selected international wine magazines.

Wine Advocate[a]	Wine Spectator[a]	Wine Enthusiast[a]	Decanter[b]	World of Fine Wines[c]
96–100 Extraordinary	**95–100** Classic; a great wine	95–100 Superb. One of the greats	98–100/19.5–20 Exceptional	19–20 A great wine
90–95 Oustanding	**90–94** Outstanding; superior character and style	90–94 Excellent. Extremely well made and highly recommended	95–97/18.5–19.25 Outstanding	17–18.5 Highly recommended
80–89 Very Good	**80–89** Good to very good; wine with special qualities	85–89 Very good. May offer outstanding value if the price is right.	90–94/17.25–18.25 Highly recommended	14.5–16.5 Very Good
70– 79 Average, well done	70–79 Average; drinkable wine that may have minor flaws	80–84 Good. A solid wine, suitable for everyday consumption	86–89/16–16.75 Recommended	12.5–14 Good
60–69 Below the average, flawed	60–69 Below average; drinkable but not recommended	Only wines scoring 80 points or higher are published	83–-85/15–-15.75 Commended	10.5–12 Simple
50–59 Unacceptable	50–59 Poor; undrinkable, not recommended	-	76–82/13–14.75 Fair	7.5–10 Without flaws but tasteless
-	-	-	70–75/11–12.75 Poor	0–7 Flawed
-	-	-	50–69/10.75 Faulty	-

[a] Delmas et al. (2016).[23] Parker punctuation: minimum, 50 points; color and appearance, 5 points; aroma, 15 points; flavor and aftertaste, 20 points; overall quality and aging potential, 10 points.
[b] Chris Mercer, "How to Read Decanter Wine Scores: The 100 Point Scale," *Decanter*, February 20, 2016, https://www.decanter.com/learn/how-to-read-decanter-wine-scores-the-100-point-scale-294338/ (accessed August 2, 2021).
[c] Bywater and Burk (2008).[21]

Classification of wines without assigning scores

The ubiquitous use of wine scores gives the impression that there is no other way to tell consumers which wines they should buy. Is there another way to convey information about wine quality? Forty years ago, Patrick Dussert-Gerber, an independent journalist with a background in law, gave an eloquent answer to this question. He decided to share his experience in various editions of the *Wine Guide* (www.guideduvin.net). Dussert-Gerber based his work on a simple principle: "You cannot truly enjoy a wine without knowing who makes it." Instead of emphasizing wine scores and tasting notes, he put the spotlight on the *vignerons*, which are the artists in the wine world.

To appreciate painting, cinema, or music, it is key to understand the style, passions, and feelings of the artist. The wine world is no different.

Avoiding scores, Dussert-Gerber devised a Table of Honor in which he mentions the producers who impressed him when he visited their wineries, strolled through their vineyards, and tasted wines from different harvests. He uses a five-level evaluation: "Honor Award," "Excellence Award," "Satisfactions," "Winners," and "Hope." This scale encourages producers and is useful for consumers.

The vocabulary used in these synthetic score sheets is often incomprehensible to the layperson. The score sheets include a lot of technical jargon as well as words and meanings that are difficult to translate from one language into another. Analytical tasting sheets, in which each tasting parameter is broken down into different gradations, are even more hermetic. Therefore, the next chapters briefly explain how the conventional tasting methodologies work and how to interpret sensorial descriptions.

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1. The evolution of the style of wines throughout history

[W]ine is probably as old as civilization; I prefer to say it is civilization.

—Roger Scruton

A well-recognized observation is that people's tastes are very unstable. So it is not surprising that both food and wine have had to adapt to the trends that have emerged throughout history. The historical evolution of wine styles has yet to be systematized and is highly complex. As Gilbert Garrier, a well-known French historian, said, there were wines for priests and princes, peasants and masters, bourgeois and workers.[1] Even so, it is possible to envision how styles have evolved since antiquity and to recognize the role they played in Mediterranean societies.

Wine in antiquity

Since the most ancient days of antiquity, wine has always had a marked relevance in the social hierarchy, its consumption being a privilege of the political, religious, and wealthy elites. The less favored social classes consumed beer and other fermented beverages. In the distant past, wine production was ensured or controlled by the elite—namely, religious—not only for the mystical status of wine but also for its fabulous source of tax revenue.

Although imagining the style of the most remote wines is not easy, the old ampelography and iconography provide some answers and allow us to affirm that they were made from red grapes, with little or no contact of the film with the grape juice.[2] Therefore, they would have been rosé or red wines of a light color, with more or less alcohol, depending on the location or production techniques. The frescoes of the oldest Egyptian tombs confirm this, as they represent blue grapes and the vinification of free-run juice. White grapes, which are rare mutants of red grapes, would have appeared later and therefore would have deserved special veneration. Some scholars claim that white grapes appeared in Egypt in the third millennium before Christ, certainly as a result of spontaneous mutations, thereby allowing white wine to enter the scene.[2] In view of the rarity and intense aromatic characteristics of white wine, such as those of Muscat and Malvasia, the wine, not surprisingly, immediately merited the preference of the elite and gained a superior status, as happened in Egypt of the Pharaohs, in Hellenistic Greece, in the Roman Empire, and, during the Middle Ages, in the Europe of Christianity, which lasted until the middle of the twentieth century.

A wine with a status even higher than that of dry white wine was sweet white wine, made with raisins or must that was concentrated by boiling. Raisin wine—*vinum passum*—was a favorite of Roman ladies, who were forbidden to drink other wines. Romans designated this cooked grape must as *defrutum*, *carenum*, or *sapa*, depending on the degree of concentration. It has been produced throughout the Mediterranean world since ancient times in order to obtain more alcoholic wines, as is still done today, or sweet wines. The famous "Greek wine" and "Cyprus wine,"

especially those made with Muscat grapes, delighted the Mediterranean and European elites until the modern age. If we take into account that sugar was a rare "spice," we understand the status of this style of wine, within the reach of only the privileged few.

Whites aged in clay amphorae and hermetically closed, sometimes for decades, were also especially appreciated by the Romans, who used them as a form of ostentation and economic power. The famous Falerno was recognized for his ability to age, and the not-less-known Sorrentino needed to age a quarter of a century to be properly valued.

Roman wine was almost always mixed with *aromatas* (herbs, spices, and other substances), providing a great diversity of styles, different occasions for consumption, and, particularly, many medicinal uses; until the nineteenth century, wine was somewhat in between a drink and a medicine. Wine was diluted with water since both the Greeks and Romans considered undiluted wine suitable for barbarians.

Another technique that the Romans used to exalt the aroma of wines was smoking—placing the pots full of wine and without a lid in the *fumarium*, as is the case today with cured meats.

With the democratization of consumption throughout the Roman Empire, the quality of the wine consumed fell into accordance with social status. The vast majority of the population consumed claret wine (*vinum claretum*), *posca* and *lora*, two derivatives of claret that had a low alcohol content and were generally vinegary. The soldiers drank about a liter a day of *posca*, a mixture of water and vinegar that would have had both acetic acid and alcohol; in order to maintain public order, they could not consume intoxicating wines. The *lora*, which we know as the French *piquette* or Portuguese *água-pé*, was recommended by Cato and Varro for their slaves and widely consumed in the rural world alongside the claret (“palhete”), as still happens in Portugal among rural workers.

With the fall of the Roman Empire, consumption habits did not change much. The barbarians, accustomed to drinking water, milk, and beer, loved wine, emptying all the cellars they found but still respecting the vineyards so they could produce the following year. The drinks most consumed by the majority of the population would continue to be *posca*, *lora*, and *claret*, while whites, both dry and sweet, would remain exclusive to the elite.

Wine in the Middle Ages

In the High Middle Ages, wine took on a strong symbolic meaning in the eyes of the Christian clergy, who essentially controlled production. Bishops and, later, monks took a prominent role in society, and they needed a lot of wine in order to fulfill their duties. Until the eleventh century, the communion of the faithful involved bread and wine, and most of them received communion daily, apparently with the belief that it would make them immune to epidemics, leading to a significant consumption of wine and water. The bishops also assisted and welcomed pilgrims, travelers, and the sick and hosted kings, princes, and the nobility in the episcopal palaces, and for this they required a wide variety of wines—white, claret, or *água-pé*—served according to strict criteria.

The monks also played a decisive role in spreading the consumption of Christian wine, especially from the twelfth century onward, when the Cistercian Benedictines, originally from Burgundy, settled throughout Europe. In Portugal, they disseminated new viticulture and winemaking techniques, teaching others how to make red wine, which was the wine most consumed by the population until the middle of the nineteenth century. Red wine had already been well-known and produced, but it was not consumed, its purpose only to tint white wine in order to make red wine,

which was the color of the blood of Christ. Instead of red, it was called “tint” (*tinta*) and “tincture” in Spain. It is likely that the medieval claret, especially in the cold and humid regions, had a low alcohol content, perhaps below 10 percent (v/v), soured easily, and had frequent off-flavors, since the porous structure of barrels prevented adequate hygienization. This wine is still produced today near the town of Ourém, according to the Cistercian technique of the Monastery of Alcobaça, which probably dates back to the twelfth century.[3]

White wine remained a strong social indicator, like white bread, and exclusive to the elite and bourgeoisie.[4] The famous *La Bataille des Vins* (*Battle of the Wines*), a poem written by the Norman poet Henri d'Andeli in 1225 in honor of Philip II of France, testifies to the status of white wines at the time, particularly sweets, including that of Cyprus, made with raisins, which was the most revered. White wine was also preferred for the Eucharist, although it could not be sour. It therefore had a high alcohol content and was often sweet, as is still the case today.

In Portugal, wines are still made with characteristics similar to those of medieval times (figure IV.1). They are niche wines, produced in small quantities, with an ancestral viticulture, which marks the viticultural landscape in a unique way (table IV.1). There are other cases, after the medieval period, in which the viticultural landscape is decisive, such as that of the Calum de Oleiros wine or the urban vineyard of the Fazendas de Almeirim, whose survival depends on the willpower of its population. In Almeirim, the “Fernão Pirão,” made from the variety Fernão Pires and vinified with maceration, is nothing more than an archetype of the orange wines so fashionable in the sophisticated markets of London, New York, and Tokyo.

Alentejo clay jar wines, direct heirs of Roman wines, are also in fashion, taking advantage of the trend for amphorae wines all over the world. (Let us hope that the current enthusiasm is not cheapened by the vulgarization of selling the wines at a low price.)The landscapes of Port and Madeira are also unique, but the definition of historic wine, according to the Association of the Historical Wines of Portugal, only considered those produced according to a family and subsistence viticulture. However, both are excellent examples of the evolution of the style of wine throughout history, going from simple medieval claret wines to the most famous dessert wines in the world.[5,6]

Figure IV.1. Examples of historical wines and their distribution across Portuguese territory. Toponyms refer to district capitals or islands. Reprinted under the Creative Commons Attribution License. Source: Costa, A.A., Marano-Marcolini, C., Malfeito-Ferreira, M., Loureiro, V. (2021). "Historical Wines of Portugal: The Classification, Consumer Associations and Marketing Implications". *Foods* 10, 5, 979.

Table IV.1. Portuguese Historic Wines according to the Association of the Historical Wines of Portugal

Wine	Viticulture	Characteristics	Aptitudes
"Enforcado" wine from Vinho Verde region	Climbing vines on trees	Deep reds, astringent, acid, and low ethanol	Local gastronomia based on pork, poultry, codfish, and lamprey)
Medieval claret of Ourém	Low medieval vines	White grapes fermented with red grapes, rosé color, high ethanol	Similar to a rosé with higher gastronomic potential
Colares	Crawling vines planted on clay beds covered with sand	Whites from the variety Malvasia de Colares Reds from Ramisco Low etanol, austere	Aging and gastronomical potential
"Talha" from Alentejo	Low vines, pied-franc	White skin fermentation and storage, mixture red and white grapes (petrol color), long skin contact reds	Local gastronomy based on pork meat, codfish, and fried fish
Pico from Azores Islands	Low vines on slabs of basalt	White wines, fortified wines	Aging and gastronomical potential

Source: Adapted from Loureiro, V. (2009) "Historical Wines of Portugal," *Chronica Horticultaurae* 49, 4, 13–14.

The origins of the present fashion

According to some experts, the fashion of red wine consumption only asserted itself in the modern age, when the British aristocrats had already become enchanted with a "black wine" produced in the Bordeaux region at the end of the seventeenth century, after the civil war known as the Puritan and Glorious Revolution. The aristocracy, which until then had enjoyed feudal benefits, was stripped of its power, feeling the need to continue being different in order to assert its superiority. And one of the ways to achieve this superiority was through wine, making the traditional Aquitaine claret, consumed by a large part of the population for many centuries, the Andalusian and Canarian sack (dry white), and the German hock (acidic and dry Riesling)[7] give way to the exotic and exorbitantly priced red from Médoc.

Two characters were celebrated in the triumph of the Bordeaux red: an Englishman, Samuel Pepys, and a Frenchman, Arnaud de Pontac. The first, a young secretary of the prestigious Admiralty in London, accustomed to the last cry of fashion, expressed in his newspaper, on April 30, 1663, that he had tasted a black wine with "extraordinary taste, the most special I have ever known," sent to a London merchant by Marquis Arnaud de Pontac. This president of the Parliament of Bordeaux, with a fortune made from importing fabrics and exporting wines beyond the Channel, owned the now-famous Château Haut Brion, which Pepys, in his unmistakable British style, dubbed "Ho Brion."

In 1666, Arnaud de Pontac sent his son, François-Auguste, to London with the mission of opening the most luxurious tavern in the city—the New Eating House (or Pontack's House)— where the new French claret was sold at three times the price of sherry. The conditions were created for the new claret—much darker than the previous one—to succeed among the London aristocracy. It also sparked, in the eighteenth century, a race to plant vineyards and build wineries in the Médoc, which was until then an unhealthy area, an uncultivated and almost arid region of Bordeaux.[1] The success of the Bordeaux "black wine," whose archetype was a red produced in the Cahors region, sharpened the business sense of English traders based in Portugal, who, eager to share the gem of the new business, would soon have this style of wine produced in Douro. This, ironically, began to charm not the British aristocrats but the workers who frequented the taverns on London's docks. The sweet and alcoholic wine was the most sought after because it was the source of a decisive energy reserve for the working people.

Later, the black wine based on Vinhão, from Entre-Douro-e-Minho, also reached the height of fame, thanks to the French commissioners who sought it out when the French vines were destroyed by the *phylloxera*—because the more color it had, the more wine they would be able to make when they arrived at their destination.[8]

Do not think, however, that the so-called black wine arrived, was seen, and won. In almost all of Europe, and particularly in Portugal, the real claret only gave way to dark red in the twentieth century, particularly in urban centers. In the rural world, claret, *piquette*, and white remained, as in the Middle Ages, the chosen wines. With the advent of cooperative wineries, in the second half of the twentieth century, the red became the most produced, given the manufacturing process favoring the maceration time. It then began to slowly merit the preference of the rural world. At first it was not easy, probably because of religious convictions, because in the sixties of the last century, it was common to see customers at Dão taverns mix the "black" wine with water and bless themselves before drinking it.

The present globalization of tastes and scores

The "tyranny" of the red would come only after the historic CBS program *60 Minutes*, on November 7, 1991, when the famous "French paradox" was mediatized, in which the importance of red for health, particularly cardiovascular, was recognized. Sales of red wine increased by about 40 percent in the United States the following week, and, in the good American way, the fashion spread precipitously around the world. Perhaps, among us, the main exception is that of rural Alentejo, where the people of that area still placidly drink white wine, as has always been done since Roman times.

When only "fine wines" and common wines were available, fashions were rare or the fashionable wines were intended for only a few chosen ones. With the entry of wine as a global market product, we started to have very good quality wines, accessible to a large part of the population. Then, with the media coverage of wine, fashions began to be dictated, to a large extent, by international opinion leaders, where Robert Parker, now retired, took on a decisive role. His preference for deep, dense, alcoholic red wines, dominated by oak, which scored close to 100, contributed to the creation of a style that prevailed everywhere. His influence in changing the style of wines was almost planetary, with the reds of his preference becoming known as "fruit bombs" or "blockbuster wines," whose names say it all.

Scores as numerical metaphors

Tasting scores came to be used as a guarantee of the global quality of wines, under the appearance of objectivity, but which, like the aroma descriptions, are not more than numerical metaphors that reflect the preference of those who produce them.[9]

Authors may well warn of their limitations, but the market is no longer without them. Wines with no more than 92 to 94 points are common, reflecting an inflation in the notes that does not correspond to a real increase in quality.[2]

Taken together, the tasting notes and classifications openly became a stimulus to purchase, as the *Wine Spectator* tasting note for a Vintage Port eloquently demonstrates:

> Filled with delicious aromas of fresh red and black fruits, full of notes of spices and chocolate, with a vibrant sweetness. With 93 points and for only 25 dollars, there is no wine more seductive than this one to learn more about Porto.[10]

[2] For Michael Fridjhon's and Jamie Goode's critical comments, see Michael Fridjhon, "Wine Score Devaluation and Its Implications," Winemag.co.za, May 29, 2019, https://winemag.co.za/michael-fridjhon-wine-score-devaluation-and-its-implications/, and Jamie Goode, "Score Inflation Is Everywhere and It's Killing Wine Criticism" (*Jamie Goode's Wine Blog*), Wineanorak.com, October 4, 2017, https://www.wineanorak.com/wineblog/uncategorized/score-inflation-is-everywhere-and-its-killing-wine-criticism (both accessed September 23, 2021).