

# TOOLS OF WINE APPRECIATION



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## THE NOSE KNOWS.

The nose is probably the most powerful and sophisticated tool of wine appreciation. Just consider one thing: when you fill the glass (no more than  $\frac{1}{4}$  of its capacity and at room temperature), there are approximately odorous substances trapped in the glass one thousand times more than in the surrounding environment! Odours result from the diffusion of the volatile molecules (and, contrary to intuition, the lightest molecules are the least volatile, the heaviest, like alcohol, the most). In a liquid the volatility increases with heat and motion and it is more or less constrained or enhanced by the surface exposed to the air, the surface tension, the ratio between the liquid volume and the surface exposed to the air in the glass and by the so called 'vapour tension'. That's why, for example, filling the glass too much disperses the aromas too quickly or why swirling increases the rate of their release. Like any thing else, however, too much is too much: excessive swirling or excessive heat over trigger volatility stripping away the wine of its 'body' with the result of mixing the delicate aromas and bouquet with other heavier off-odours compounds. The odour extraction must be gentle and gradual: gradualism is particularly important when we consider that wine odours exist in 'layers' of volatility: the 'primary aroma', derived from the grapes skin themselves, is about 'fruitiness'; the 'secondary aroma', imparted and enhanced during the fermentation process by the action of the yeast cells and bacteria on the must, is about many different aromatic compounds, seeded deeper in the grape cells, like Alcohols, Aldehydes, Ketones, Acids, Esters and Terpenes.



Finally the 'tertiary aroma' derives from wine ageing, either in barrels or in the bottle. Numerous compounds are, for example, extracted from wood: when 'lignin' enters in contact with wine, it oxidizes to four basic aromatic elements, the most famous of which is the Vanillin, so much appreciated in the wine's bouquet. The wine evolves in the bottle as well, thanks to a series of aromatic transformations: some odours fade and others blossom; the tannins polymerize and become sweeter. In total it is calculated that bottle ageing 'creates' more than 600 new aromatic configuration for us to smell and enjoy (this is sometimes called the 'bouquet of age'). Talking of 'Bouquet' we should underline that the term 'Bouquet' is a French word usually indicating the complex and profound interplay between the Secondary and Tertiary aromas. Unfortunately the development of the aromas could some times take unpleasant turns: if the wine oxygenation is not gradual enough (as it should be when the wine ages in the barrel, for example), wine could become oxidized; the cork could impart a 'corky' taste to the wine if the cork gives unduly refuge to a certain bacteria called TCA or an excess of Sulphur dioxide (a naturally present disinfectant that helps wine preservation) could impart an unpleasant smell of a 'burning match'. The appreciation of the wine aromas is an exciting journey that requires a good nose, practice and the right conditions. It is almost obvious to say that you should avoid smoking, deodorants, perfumes and flowers, when you taste wine. It is less obvious to point out that wine should be tasted at room temperature (not too warm or cold) and following certain steps that may some how vary depending on the wine and its vintage year. Decanting in advance may be necessary and the wine may need to rest to allow a slow aeration, so that the primary aromas can develop. The degree of appropriate swirling may be different, depending on how much aroma extraction is necessary: first try to agitate the liquid very gently, and then try to swirl more, slowly 'peeling away' the different layers of the wine's aroma. Almost 'dip' (only figuratively, of course!) your nose in to the goblet and capture as much as you can of the Bouquet. The nose is the most sophisticated sense that we have: we can distinguish more than 10,000 different odours, way exceeding the capacity of any laboratory instrument. Wine is the perfect medium for enhancing and magnifying our senses: no language or verbal description can fully render the olfactory complexity and deepness of the wine's bouquet., and this despite the very suggestive and rich 'lingo' developed through many centuries by the wine experts to describe the magic scents of wine.



## THE TONGUE.

The Mouth, tongue and palate, as well as the so called 'retro-nasal tract' contain millions of neuronal receptors, the taste buds, which can detect and convey to the brain a vast array of sensation. The 4 primary elements of taste are sweetness (from sugars and alcohol), mostly appreciated at the tip of the tongue, acidity (various acids compounds), better appreciated at the upper edge of the tongue, bitterness (tannins and polyphenols) and saltiness (various substances in small quantities). The array of sensations is almost endless but some of the most common ones can be described as 'Astringency' (tannin related), Vinosity (related to alcohol, giving a 'sense of warmth'), Effervescence (related to residual carbon dioxide), Freshness and Fruitness (to the extent the primary aroma of the grape is preserved), 'Oak & wood' (deriving from barrel ageing or fermenting). Language is limited in its capacity to express sensations, more so when taste, smell and the tasting environment, contribute and interact. The taste sensations evolve and develop throughout four distinct phases: 'attack', normally lasting 3 or 4 seconds when the sweet taste dominates, Evolution (5 to 12 seconds) when acid and bitter taste dominate, Finish (about 12 seconds) when the final impression comes together, and Persistence or length, the 'short term' memory of taste, almost a flash image of the wine soul.

This requires the tasting experience to be 'phased': first concentrate the wine around the tip of the tongue (tilting your face slightly downward) so that the sweet tones will be better detected; then swirl the wine around the median part of your tongue where in sequence, acid and saltiness will prevail; finally let the wine reach the rear papilla for the sense of bitterness to emerge. Finish and Persistence will then, almost magically, reassemble the multi-layered unit of the wine taste and structure. Some precautions must be followed, or at least some facts should be taken into consideration when tasting: different foods change the taste of wine, sometimes for the better, some others for the worse. For example meat (high protein content) and cheese will reduce the astringency of the tannins but exalt saltiness (explaining why highly tannic wines are perfect with roasts and other 'pieces de resistance'). Vegetables have the opposite effect. Even water (and human saliva) could affect the wine tasting by dilution and alteration of the chemical PH. The combination of wine and food has in fact become a sort of art! Another aspect that we should consider is the natural adjustment of our tongue taste buds to perception, that is sometimes called 'adaptation', a bit like we get adjusted to the astringency of lemon, after we bite on its pulp long enough. So, no surprise that we can taste, and like, the same wine differently with different foods and in different circumstances.



## **THE EYES.**

The appearance of wine can be looked at in three facets: colour, depth and clarity. The colour is of course different depending if the wine is red, white or rosé. For red wines the wheel of possible colours can be infinitely varied from purple to ruby, from red brown to mahogany and amber. Colour is somehow related to the wine's age, its state of conservation, the type of grape and the vinification process. White wines range from virtual colourlessness through palest yellow-green and deeper shades of yellow to gold and amber brown.

## **THE WINE TASTING.**

Wine tasting can be an amazing experience, complex and simple at the same time, a real learning moment for your tastes and discerning abilities. It is also a ceremony and a journey toward the deepest roots of the soul. It has been said that wine tasting is 'the magic triangle' of pleasure with the vertices being the color, the bouquet and the taste. Some 'tips' may help to make the journey memorable: 1. Pour a few drops of wine into the empty glass and swirl it gently around the glass walls: the bouquet will develop so that the nose can experience the immaculate aromas of vinous vapors. 2. Pour the wine in the glass to the point of maximum diameter and let the bouquet fully diffuse in the upper part of the glass and mix with the air. 3. Tilt, swirl and observe the 'wine legs', an indication of the alcohol content (the viscosity of the liquid is correlated with the alcohol content so that the slower the wine falls along the glass walls, the higher the content) 4. 'Lend your nose' to the glass and take the time to inhale the mist and vapours of alcohol, now fully formed. The olfactory sensations of wine's bouquet are truly among the most complex and unique ones a human being can experience.

## IN PRAISE OF WINE.

Wine can be seen as a metaphor of life: the vine's root must find the proper soil to grow and learn to become resistant to parasites and unfavourable climate conditions.

The soil nourishes the root to become a plant and the plant has to grow strong, guided by the patient and skilled hand of the farmer. The right amount of humidity, rain, sun and pruning, slowly blossom the grape, rich with sugar and energy. Only when ready to ferment, the grape is picked and squeezed: sugar changes into alcohol and tannins gradually balance out in a complex structure of colours, scents and texture.

Then wine is ready to age, and begins extracting nuances from the barrel's wood and from the atmosphere of the cellar; sometimes it even blends and shares its spirit and ambitions with others, to endow a new form, a new meaning.

From the bottle, with a name and a date to remind us of its past, it must be uncorked and poured in a crystal clear glass which will release a kaleidoscope of colours and aromas for us to taste and remember. That's really what life does with us: it nourishes our roots and allows them to grow into a unique 'vintage' being, to be discovered and remembered, a little sip at the time.

