

# Wine Tasting

The history of winemaking goes back some 8000 years, which means that the history of wine tasting, at least in a basic way, is just as old. References to the taste of wine abound in works through the centuries. On 10 April 1663, the diarist Samuel Pepys wrote that he drank at the Royal Oak Tavern 'a sort of French wine called *Ho Bryen*, that had a good and most particular taste I ever met with'. Pepys's note might not have been sufficient for a pass in today's wine trade examinations, but he had the disadvantage, or should that be benefit, of not have been inundated with press releases or the pronouncements of wine writers, critics and sommeliers. He tasted the wine, and gave his perceptions of it.

## 1.1 Wine tasting and laboratory analysis

There are two basic ways by which wines may be analysed: by scientific means using laboratory equipment and by the organoleptic method, i.e. tasting. A laboratory analysis can tell us a great deal about a wine, including its alcohol by volume, the levels of free and total sulfur dioxide, total acidity, residual sugar, the amount of dissolved oxygen, and whether the wine contains disastrous spoilage compounds such as 2,4,6-trichloroanisole or 2,4,6-tribromoanisole. It is highly desirable that producers carry out a comprehensive laboratory analysis both pre- and post-bottling. If another laboratory undertakes a duplicate analysis, the results should be replicated, allowing for any accepted margins of error. Scientific analysis can also give indications as to the wine's style, balance, flavours and quality. However, it is only by tasting a wine

that we can determine these completely and accurately. If a team of trained tasters assess the same wine, they will generally each reach broadly similar conclusions, although there may be dissension on some aspects, and occasionally out and out dispute.

Wine is, of course, a beverage made to be drunk and (hopefully) enjoyed. Low-priced wines are usually, at best, little more than pleasant, fruity, alcoholic drinks. As we move up the price and quality scale, wines can show remarkable diversity, individuality and imitable characteristics of their origin. Good quality wines excite and stimulate with their palettes of flavours and tones, their structure and complexity. Fine wine can send a shiver down the spine, fascinate, excite, move and maybe even penetrate the very soul of the taster. No amount of laboratory testing can reveal these qualities. Further, it is only by tasting that the complex intra- and interrelationship between all the components of the technical make-up of a range of wines and human interaction with these can be truly established. It can be argued that the perceptions of the taster are all that really matter – wine is not made to be tasted by machines, but by people.

## 1.2 What makes a good wine taster?

Developing wine-tasting skills is not as difficult as many would imagine. Whilst it is true that some people are born with natural talent (as with any art or craft), without practice and development such talent is wasted. People who believe that they will not make good wine tasters due to a lack of inborn ability should perhaps ask themselves some simple questions: Can I see, smell and taste the difference between oranges, lemons and grapefruit, or between blackcurrants, blackberries and raspberries? If the answer is yes, the door is open. There are a few people, known as anosmics, who have a poor or damaged sense of smell, and obviously they are unable to become proficient tasters, and a larger number of people who are specific anosmics, i.e. lacking the ability to detect certain individual aromas. It is also true that some people have on the tongue a high density of fungiform papillae, which contain the taste buds, making them particularly sensitive to bitter sensations.

It has been argued by Yale University Professor Linda Bartoshuk that this group of people are 'supertasters'. Ann Noble's group at UC Davis has also established that there are no 'supertasters in general', but that an individual who is a supertaster with one bitter compound, e.g. naringine, might be a non-taster with another, e.g. 6-N-propylthiouracil or caffeine. It should be noted that supertasters do not necessarily make the best wine tasters, for the intense sensations they perceive from bitterness and astringency impacts on other sensations and perceptions of the balance of the wine.

With practice and concentration, the senses needed for wine tasting can be developed and refined. Memory and organisational skills also need to be developed: it is not of much use having the sensory skills to distinguish between, say, an inexpensive young, Cabernet Sauvignon from Maule (Chile) and a fine mature Merlot-dominated wine from Pomerol (Bordeaux, France) if one cannot organise the characteristics in the brain and remember them. Thus the making of detailed and structured tasting notes is important – the very act of noting observations sharpens perceptions, and maintaining a consistent structure enables wines to be assessed, compared and contrasted. However, applying verbal descriptions to complex and possibly individual aroma and flavour perceptions poses many challenges. Learning too is important, for the taster needs to understand the reasons for the complex aromas and flavours and be able to accurately describe them. In short, there is no substitute for the widest possible tasting experience, encompassing wines of all types, styles, qualities, regions and countries of origin.

When tasting wines we are using the senses of sight, smell, taste and touch. The sense that requires the most development is that of smell. Smells create memory. You can walk into a room and, in an instant, you are reminded of another time and place – perhaps back in your infants' school classroom or in grandma's house. In the briefest of moments your nose has detected the constituents, analysed them and passed the information to the brain which has immediately related them to a point in the memory bank.

For most people it is not difficult to develop the sense of smell. We live in a world in which we are conditioned to believe that many

everyday smells are unpleasant and thus we try to ignore them. Walking in a city centre we may be subjected to a melange of traffic fumes, yesterday's takeaways and detritus of humankind and are tempted, even programmed by the media and society, to try and ignore the onslaught. Smells may be attractive or repulsive, and an attractive smell to one person may not be to another. The smells of the human body are a key component of attraction, sexual or general, or of rejection. Animal smells in particular are offensive to many – to say that somebody smells like a dog, horse or mouse would hardly be considered a compliment!

A simple way to help develop the sense of smell is to use it. When walking into a room smell it, smell the newly washed laundry, the material of clothes on a shop rail, the hedgerow blossom, even the person standing next to you. And, most importantly, commit these to memory. Expert wine tasters structure and organise a memory bank of smell and taste profiles and thus can relate current experiences to similar ones they have encountered. Interestingly, research by Castrioto-Scanderberg *et al.* (2005) using brain monitoring by means of functional magnetic resonance imaging shows that experienced tasters have additional areas of the brain activated during the tasting process, namely the front of the amygdala-hippocampal area, activated during the actual tasting and the left side of the same area during the aftertaste (finish) phase.

### 1.3 Where and when to taste – suitable conditions

The places that wines may be tasted are perhaps as diverse as wines themselves, and even less than technically ideal situations can have advantages. There is something magical about a tasting conducted in the vineyard, and moving from barrel to barrel in a producer's cellar can fill one with a real sense of time and place. On the other hand, exhibitions and trade shows, in spite of all the discomfort, noise and other distractions, can present a good opportunity to compare and contrast a large number of wines in a very short space of time.

However, for a detailed organoleptical analysis of wines an appropriate tasting environment is required, and the ideal tasting room will have the following characteristics:

*Large:* Plenty of room is necessary to give the taster his or her personal space and help concentrate on the tasting.

*Light:* Good daylight is ideal, and the room (if situated in the northern hemisphere) should have large, north-facing windows. If artificial light is required the tubes/bulbs should be colour corrected in order that the true appearance of the wines may be ascertained.

*White tables/surfaces:* Holding the glasses over a white background is necessary to assess the appearance and show the true colour of the wine, uncorrupted by surrounding surfaces.

*Free from distractions:* Extraneous noises are undesirable and smells can severely impact on the perceived nose of the wines. Tasting rooms should not be sited near kitchens or restaurants – an amazing number of New World wineries fail to have regard for this. Tasters should avoid wearing aftershaves or perfumes, and obviously smoking should not take place in the vicinity. There is no doubt that building materials, decorations furnishings and people all exude smells. Indeed, identical wines can be perceived differently according to the surroundings in which they are assessed.

*Sinks and spittoons:* Spittoons are essential (see below) and sinks for emptying and rinsing glasses are desirable.

As to when to taste, the decision is unfortunately often dictated by matters beyond the taster's control. However, the ideal time is when the taster is most alert and the appetite stimulated – namely in the late morning. After a meal is certainly not the best time, for not only is the taster replete and perhaps drowsier (as all early-afternoon seminar presenters know), but the palate too is jaded and confused after the tastes of the food.

## 1.4 Appropriate equipment

Having appropriate equipment for the tasting is most important. This includes an adequate supply of tasting glasses, water,

spittoons, tasting sheets for recording notes and, at a formal sit-down event, tasting mats.

### 1.4.1 Tasting glasses

It is important to taste wines using appropriate glasses. Experts do not universally agree as to the detailed design of the ideal tasting glass, but certain criteria are essential. These are listed in Table 1.1.

Two of the key characteristics are as follows:

*Fine rim:* A fine rim glass will roll the wine over the tip of the tongue, whilst an inexpensive glass with a beaded rim will throw the wine more to the centre. The tip of the tongue is the part of the mouth where we most detect sweetness.

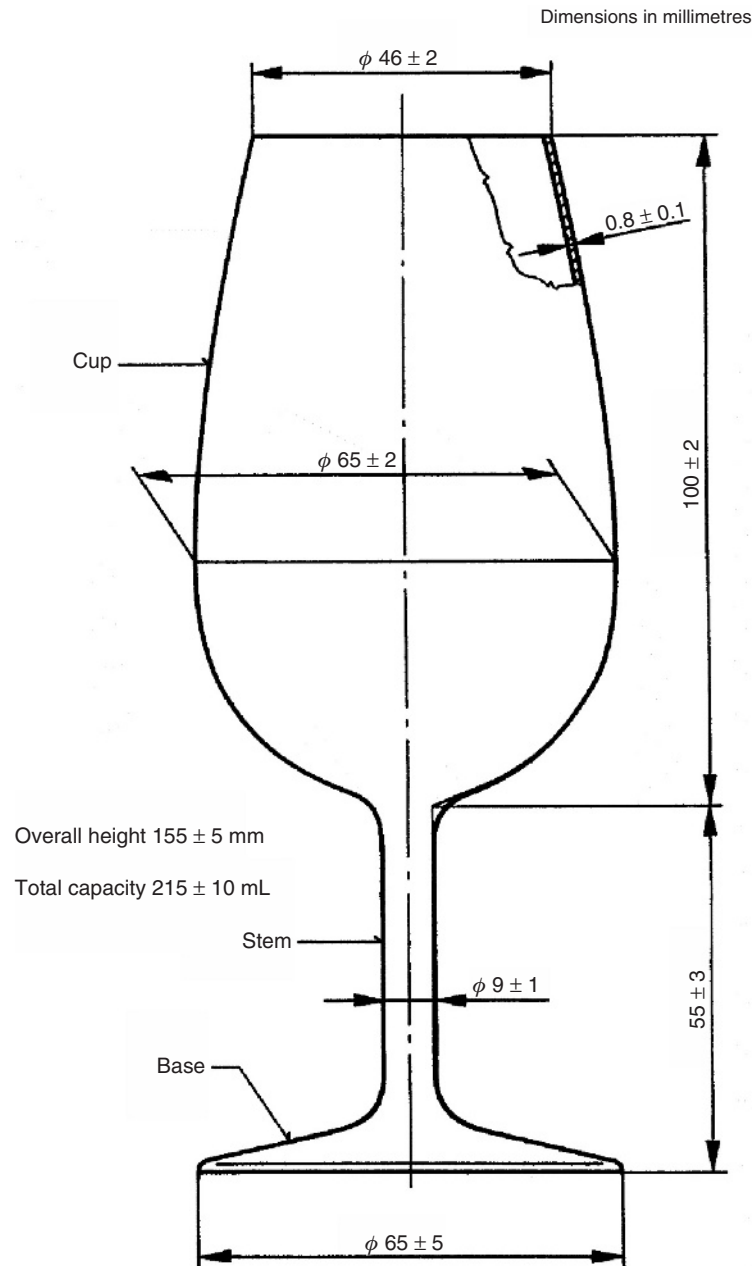
*Cup tapering inwards:* The cup of the glass must taper inwards towards to top. This will develop, concentrate and retain the nose of the wine, and also facilitate tilting the glass and swirling the wine. It should be noted that cut glass is not appropriate for wine tasting, as it is impossible to ascertain the true depth of colour.

Glasses manufactured to the ISO tasting glass specification (ISO 3591) are very popular amongst many serious wine tasters, both professional and amateur. The specification of the ISO glass is shown in Fig. 1.1 and a photograph is shown in Fig. 1.2.

The ISO tasting glass is particularly good at revealing those faults perceptible on the nose, as detailed in Chapter 6. Whether they are the best glass for tasting particular wine types is very much

**Table 1.1** Criteria for a suitable tasting glass

Clear glass
Minimum 10% 'crystal' content
Stem
Fine rim
Cup tapering inwards towards top
Minimum total capacity = 21 cL (approximately 7 fl oz)



**Fig. 1.1** ISO tasting glass specification



**Fig. 1.2** ISO tasting glass

open to discussion. The nose of full-bodied and complex red wines develops more in a larger glass; the Pinot Noir variety is more expressive in a rounder-shaped cup. Wine glass manufacturers, particularly *Riedel*, have designs to bring out the best of individual wine types, so perhaps the real advantage of the ISO glass is that it is a standard reference. However, the reader should be aware that some glasses marketed as ISO specification are definitely not having such deviations as beaded rims, larger cups or inferior soda lime manufacture.

An appropriate tasting sample is 3–4 cL, which will be sufficient for three or four tastes. At a formal sit-down tasting of a number of wines, pouring 5 cL into the glasses gives an opportunity to return for a further taste of the wine to see if there has been



development in the glass and to compare and contrast with the other wines tasted. If glasses larger than the standard ISO glass are used, it is appropriate to pour correspondingly more wine.

## Flutes – the ideal glasses for sparkling wines

Tall flutes are ideal for assessing sparkling wines. They should be fine rimmed and preferably with a crystal content. A tasting sample comprises a quarter or third of the capacity of the flute. The quality of the mousse (sparkle) is most clearly seen, and even the most delicate nose of the wine is enhanced. Interestingly, the method of manufacture of the glass makes a considerable difference to the size, consistency and longevity of the mousse (bubbles) in a sparkling wine. Handmade glasses give the most consistent bubbles of all, but any flute can be prepared to give a livelier mousse by rubbing some fine glasspaper on the inside of the bottom of the cup, immediately above the stem.

## Glass washing and storage

Ideally, wine glasses should be washed by hand just in hot water. If the glasses show signs of grease or lipstick a little detergent may be used. The glasses should be well rinsed with hot water, briefly drained then dried using a clean, dry, glass cloth that has been previously washed without the use of rinse aid in the washing cycle. Glass cloths should be changed regularly – perhaps after drying as few as six glasses. The odour of a damp or dirty glass cloth will be retained in the glass and impact on the content. At an exhibition or trade tasting where the participants collect a glass from a collection on a table, the empty glass should always be nosed to check for basic cleanliness and absence of ‘off’ aromas.

Glasses should not be stored bowl down on shelves, for they may pick up the smell of the shelf and develop mustiness. Obviously, standing glasses upright on shelves may lead them to collecting dust, so a rack in which glasses are held upside down by the base on pegs is perhaps ideal.

In order to be sure that no taint from the glass is transmitted to the wine, it is a good idea to rinse the glass with a little of the wine to be tasted. This is also useful if tasting a number of wines from the same glass.

### 1.4.2 *Water*

There should be a supply of pure, still mineral or spring water for the taster to refresh the palate between wines, if necessary, for drinking and perhaps rinsing glasses. The variable amount of chlorine contained in tap water usually makes this unsuitable. Plain biscuits such as water biscuits may also be provided, but some tasters believe that these corrupt the palate a little. Cheese, although sometimes provided at tasting events, should be avoided as the fat it contains will coat the tongue and the protein combines with and softens the perception of wine tannins.

### 1.4.3 *Spittoons*

Spittoons, placed within easy reach of the participants, are essential at any serious wine tasting. Depending on the number of attendees and the capacity required, there are many possibilities. The simplest improvised spittoons are simply wine-cooling buckets, perhaps lined with sawdust or shredded paper in order to reduce splashing. There are many designs of purpose-built spittoons suitable for placing on tables and larger units for standing on the floor. Consideration should be given to the construction material: plastic, stainless steel and aluminium are all good. Unlined galvanised metal should be avoided at all cost as wine acids can react and create disgusting aromas. The importance of spitting at wine tastings cannot be over-emphasised, not least because the taster needs to keep a clear head and generally avoid unnecessary ingestion of alcohol. Even when wines are spat out, a tiny amount will still make its way to the stomach, and indeed a minute amount will also enter the body via the act of nosing the wines.

### 1.4.4 *Tasting sheets*

Without doubt, making notes about the wines tasted is essential. Depending on the circumstances the notes may be brief or detailed for personal use only or for sharing or publication. In order to facilitate note taking, tasting sheets should be prepared, listing

<b>Bodegas Trapiche S.A.</b> www.trapiche.com.ar	
1. 2005 Trapiche Oak Cask Chardonnay Mendoza (C) 9 Months in French & American oak barrels	6. 2004 Trapiche Malbec Single Vineyard Gei Berra Mendoza (E) 18 months in new French oak barrels
2. 2004 Trapiche Oak Cask Pinot Noir Mendoza (C) 9 Months in French & American oak barrels	7. 2004 Trapiche Malbec Single Vineyard Victoria Coletto Mendoza (E) 18 months in new French oak barrels
3. 2004 Trapiche Oak Cask Cabernet Sauvignon Mendoza (C) 12 Months in French & American oak barrels	8. 2004 Trapiche Malbec Single Vineyard Pedro Gonzalez Mendoza (E) 18 months in new French oak barrels
4. 2004 Trapiche Oak Cask Malbec Mendoza (C) 12 Months in French & American oak barrels	9. 2004 Trapiche Medalla (Cabernet Sauvignon) Mendoza (E) 18 months in new French oak barrels
5. 2004 Trapiche Broquel Cabernet Sauvignon Mendoza (D) 15 months in new French & American oak barrels	10. 2004 Trapiche Iscaay (Malbec & Merlot) Mendoza (E) 18 months in new French oak barrels
Retail Price Categories: A = £4.99 & under B = £5.00 - £5.99 C = £6.00 - £7.99 D = £8.00 - £9.99 E = £10.00+	

**Fig. 1.3** A simple tasting sheet

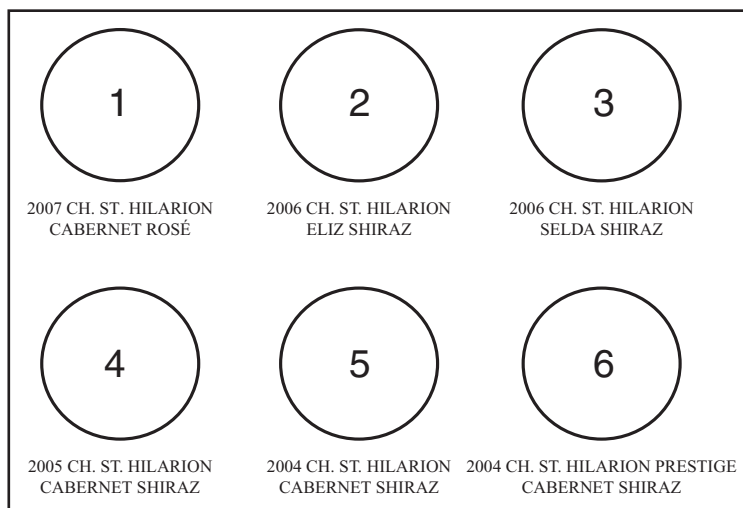
and detailing the wines to be tasted, with space for the participants to make notes. Background and technical analysis information can also be useful, either on the tasting sheet or as a separate handout. A simple tasting sheet as might be used at an exhibition tasting is shown in Fig. 1.3.

## Use of tasting software

Software has been developed that facilitates the making of tasting notes on a hand-held computer, mobile phone or BlackBerry® device. The programme allows for consistently structured and detailed records to be maintained on an online database, unique to each user. Organisers of major trade tastings can submit details of the wines to be tasted to the software provider who makes the information available for download to the mobile device.

### 1.4.5 Tasting mats

If a number of wines are to be assessed at a formal sit-down tasting, each wine should have its own glass, placed on a paper tasting mat printed with circles of a size similar to the bases of the tasting glasses, each circle numbered and corresponding to the listed order of the wines on the tasting sheets. A simple tasting mat is shown in Fig. 1.4.



**Fig. 1.4** Tasting mat

## 1.5 Tasting order

If there are many wines to be tasted, of varying styles and qualities, it is sensible to do so in a considered order. There are several guidelines, but unfortunately many of these conflict:

- Sparkling wines should be tasted before still
- White wines should be tasted before red (but see below)
- Dry white wines should be tasted before sweet
- Light-bodied wines should be tasted before full-bodied
- Wines light in tannin should be tasted before those with high levels of tannin
- Young wines should be tasted before old
- Modest quality wines should be tasted before high quality

It will easily be seen that trying to sort a sensible tasting order for a wide range of wine styles and qualities proves challenging, especially as the characteristics of each wine may not be as anticipated. At a trade exhibition, tasting well in excess of 100 wines is not uncommon and even the most experienced tasters can suffer fatigue. It can be particularly difficult to taste a large number of sparkling wines, as the high acidity numbs the palate. Also, challenging to a taster is a large volume of red wines that are high in palate-numbing tannins. Many Master of Wine tasters advocate tasting red before white. The acid attack of whites makes red tannins seem more aggressive. The aromas of white wines are easy to assess after red wines.

## 1.6 Temperature of wines for tasting

The temperature of wines presented for tasting analysis is not necessarily that at which we would wish to drink them. This is particularly true of white wines, which many people prefer to drink relatively cold, perhaps 8–12°C (46–54°F). Coldness numbs the palate and white, rosé and sparkling wines are best tasted cool at 12–15°C rather than cold. Conversely, many people drink red wines at a relatively warm temperature. The expression ‘room temperature’ does

not mean perhaps 22°C or more, the temperature of many a living room. The French language has an expression *chambré* which refers to bringing wines from cellar (storage) to serving temperature. Red wines are best tasted at 16–18°C, with the lighter reds and those made from Pinot Noir at the lower end of the scale. Some people might prefer to drink full-bodied reds a degree or two warmer than this, but tepid wines are distinctly unappetising.

## 1.7 Tasting for specific purposes

The way a tasting is approached and the type and detail of notes made may vary according to the purpose of the tasting and agenda of the taster. A supermarket or merchant buyer needs to consider marketability, consumer preferences, how a wine relates to others on the list and price point. An independent merchant selling fine wines may pay high regard to how true a wine is to its origin, often referred to in the wine world as *typicity*. A restaurateur particularly needs to have mind to match the wine with dishes on the menu. A winemaker choosing and preparing a blend looks beyond the taste of the component wine in the glass to the contribution it might make, in variable amounts, to a finished blend. This said, it is important for the taster to assess each wine as completely and objectively as possible by adopting a consistent and structured tasting technique as detailed below.

## 1.8 Structured tasting technique

Most people do not really taste wine, they simply drink it. But by undertaking a detailed and considered tasting ritual, all that the wine has to offer, good and bad, is assessed. Four headings should be considered in tasting each wine: **appearance, nose, palate** and **conclusions**. We examine our approach to these very briefly here, and in detail in Chapters 2–5.

### 1.8.1 Appearance

The appearance can tell much about a wine and give indications as to origin, style, quality and maturity as well as revealing some



**Fig. 1.5** Wine glass tilted to assess appearance. To see a colour version of this figure, please see Plate 1 in the colour plate section that falls between pages 28 and 29

possible faults. The appearance of the wine should be examined in several ways, particularly by holding the glass at an angle of approximately  $30^\circ$  from the horizontal over a white background – perhaps a tablecloth or sheet of white paper. Such an assessment is shown in Fig. 1.5. This will enable the **clarity**, the **intensity** of colour and the true **colour** of the wine to be seen, uncorrupted by other colours in the room. Looking straight down on a glass of wine standing on a white background is also useful for determining the intensity of colour. Other observations should be made: e.g. any

legs or tears that run down the surface of the glass, which are best seen by holding the glass at eye level and giving a gentle swirl to coat the wall of the cup.

### 1.8.2 Nose

A wine should be given a short sniff to check its **condition**. Most faults will show on the nose, and if the wine is clearly out of condition, we probably will not wish to continue past this point. Also, some of the more delicate volatile compounds are most easily ascertained by a short, gentle sniff or two. Further, the longer we are exposed to aromas, the less sensitive we become to them, so these first gentle sniffs are all important. Assuming the wine not to be faulty, it should now be aerated in order to help release the volatile aromas – i.e. putting air into the wine will make the nose more pronounced. The usual way of achieving this is by swirling the wine round the glass several times. This skill is quickly learned, but should you experience difficulty, the glass can be steadied on the side of a loosely clenched fist as you swirl. If the wine seems very dumb, the glass – appropriately covered – can be shaken vigorously for a second or two (this is seldom necessary other than for the very poorest of wines) and then the wine given several short sniffs. Try placing the nose at various points of the glass to see if the aromas are more pronounced or different. Very long sniffs should be avoided at this stage too, on account of the numbing effect. We should note the **intensity** of the nose – put very simply, how much smell do we get from the wine? The **development** of the nose, explained in detail in Chapter 3, will indicate the present stage of the wine in the maturity cycle. Most importantly we should analyse the **aroma characteristics**.

### 1.8.3 Palate

A novice watching an accomplished and experienced taster at work will perhaps be unsure as to whether to view the ritual with laughter, derision or wonder. Observing the taster nose the wine in detail may already raise eyebrows, but watching the subsequent ritual of



slurping and chewing the liquid may seem like overacted theatre. However, a simple exercise will convince even the most sceptical of the value of a professional approach. A small sample of wine should be poured into a glass, drunk as one would normally drink and then reflected on for a moment. Then another mouthful, 1 cL is an appropriate amount, should be taken and assessed using the professional approach. It is important to take a suitable quantity of wine so it is not over-diluted by saliva and there is sufficient to assess it fully. The wine should be rolled over the tip of the tongue and air should be breathed into the wine. This is not difficult. The lips should be pursed with the head forward as air is drawn into the wine. The taster should not be concerned about the slurping noises made during this operation and forget the childhood scolding given by mother. Now the liquid should be thrown around the mouth – over the tongue, gums and teeth and into the cheeks. The wine should be chewed, making sure that the sides and back of the tongue are covered, and a little more air taken in. It will take 20 seconds or so to give a thorough assessment, but there is no point in retaining the wine in the mouth for longer than this as it will be diluted by saliva and the palate will have become numbed. Finally, the wine should be spat out and the taster should breathe out slowly and reflect. The huge number of sensations experienced during this exercise compared with simply drinking the wine will astound. The purpose of breathing air into the wine is to facilitate the vapourisation of the volatile compounds that travel via the retro-nasal passage to be sensed by the olfactory bulb.

The tip of the tongue will detect the level of **sweetness**, and the sides of the tongue and cheeks the **acidity**. Other areas of the tongue also detect these sensations, and this is discussed in Chapter 4. **Tannins**, normally only really relevant when tasting red wines, will be sensed particularly on the teeth and gums. The level of **alcohol** is felt as a warming sensation, especially on (but not limited to) the back of the mouth. The **body** of the wine is the weight of wine in the mouth. When tasting sparkling wines the entire mouth will also feel the sensations of the **mousse**. For the **flavour intensity** and **flavour characteristics**, it is not just the mouth at work but also the olfactory bulb which will receive volatile compounds via the retro-nasal passage. Finally, the all-important

**length** of the wine is the amount of time the flavours are retained on the palate after it has been spat out.

#### 1.8.4 *Conclusions*

Having thoroughly assessed the wine, judgements and conclusions may now be made. The key consideration is the **quality**. Assuming one is tasting finished wines, the **price** or at least the **price category** should be determined – of course, the relationship between quality and price is the key to assessing value. The **readiness for drinking** should also be decided upon. If the wine is being tasted totally blind, that is without the taster knowing previously what the wine is, the vintage, the district, region or even country of origin, now is the time to mentally collate the information obtained during the structured tasting and reach a conclusion on these points.

### 1.9 The importance of keeping notes

Making, organising and keeping structured tasting notes is essential to improving tasting technique, to enabling wines tasted over time to be compared and contrasted and to providing a source of reference. The amount of detail included in the notes will obviously depend on the circumstances of the tasting, the time available, and the taster's specific focus and requirements. It is important to avoid any possible subsequent ambiguity or misunderstanding. This is vital if the notes are not intended for the taster's private use or are to be made for later publication.

The following chapters cover in more detail the structured tasting technique, the headings under which we consider the wines and make notes and also detail some appropriate descriptors. The tasting structure and example tasting terms used herein are generally those of the Systematic Approach to Tasting of the diploma level of the *Wine & Spirit Education Trust*. There are, of course, many other tasting expressions that the taster will wish to use, and the terms detailed in the ranges that follow are far from exhaustive.

However, unless the notes are purely for their own use, the taster is cautioned against using terms that are particularly personal to him or her. A note that the nose of the wine is 'reminiscent of Aunt Edna's lounge' will mean nothing to the reader who has not visited her. The retention and subsequent review of at least a selection of one's tasting notes, perhaps transcribed into notebooks or inputted into a computer, not only helps to develop and refine technique but also provides a reference library of wines' aromas and flavours.

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