

Deductive Tasting



Deductive Tasting

Why We Use a Deductive Tasting Method?

- ▶ To improve the ability to taste and accurately describe a wine.
- ▶ Form valuable taste references (or markers) leading to logical conclusions.
- ▶ Increasing overall wine knowledge by tying theory to what you taste.
- ▶ Improve your ability to sell wine using customer friendly phrases and descriptors.

We Recommend

- ▶ Tasting hundreds (even thousands) of wines a year using the same technique.
- ▶ Learning the elements of the 'Grid' so they are second nature – repetition is key.
- ▶ Using blind tasting to increase skill level and perception of the wine in your glass.
- ▶ Consistent study to supplement tasting – strong theory and successful tasting are closely connected.

Court of Master Sommeliers - Deductive Tasting Grid

Sight		Palate - Structure	
Clarity	Clear, Slightly Cloudy, Cloudy	Sweetness	Bone Dry, Dry, Off Dry, Sweet, Dessert
Brightness	Dull, Bright, Brilliant	Tannin	Low, Med-, Medium, Med+, High
Concentration	Pale / Translucent, Medium, Deep, Opaque	Acid	Low, Med-, Medium, Med+, High
Gas Evidence	Yes, No	Alcohol	Low, Med-, Medium, Med+, High
Sediment / Particles	Yes, No	Body / Texture	Tart, Light, Medium, Full, Creamy, Round
Colour	White: Straw, Yellow, Gold, Amber	Palate - Flavour	
	Red: Purple, Ruby, Garnet		
	Rosé: Pink, Salmon, Onion Skin		
Hue	Silver, Green, Purple, Ruby, Garnet, Orange,Brown	Primary Fruit	(see left)
Rim Variation	Colour change from centre to edge	Primary Non Fruit	(see left)
Extract / Stain	None, Light, Medium, Heavy	Secondary	(see left)
Viscosity / Tears	Low, Med-, Medium, Med+, High	Tertiary	(see left)
Nose - Aroma		Balance	Does any element dominate
Clean / Faulty	TCA, H2S, VA, Brett, Oxidation, Other	Length / Finish	Short, Med-, Medium, Med+, Long
Intensity	Delicate, Moderate, Powerful	Complexity	Low, Moderate, Complex
Fruit Condition	Tart/unripe, Ripe, Tropical, Overripe, Jammy, Baked	Initial Conclusion	
Age Assessment	Youthful, Vinous	Climate	Cool, Cool - Mod, Moderate, Mod - Warm, Warm
Primary - Fruit Aromas (see descriptor sheet)	White: Citrus, Orchard, Stone, Tropical, Berry, Other	Grape Variety / Blend	
	Red: Red, Black, Blue, Berry	Possible Countries	
Primary - Non-Fruit	Floral, Herb, Vegetal, Mineral, Spice, Organic	Age Range	1-3 yrs, 3-5 yrs, 5-10 yrs, 10 yrs+
Secondary (winemaking)	Oak (Old, New, American), MLF, Carbonic Maceration, Chocolate, Coffee, Toast, Caramel, Vanilla, Butter, Cream	Final Conclusion	
Organic	Forest Floor, Compost, White Mushroom, Fresh Soil, Farmyard, Liquorice, Olive, Other	Grape Variety / blend	
Mineral	Mineral, Limestone, Chalk, Slate / Petrol, Flint, Volcanic	Country of Origin	
Tertiary (Aged)	Meaty, Leather, Truffle, Mushroom, Prune, Game, Beetroot, Tobacco, Balsamic, Chinese Tea, Damp Earth, Petrol / Diesel, Straw / Hay, Chamomile	Region / Appellation	
		Quality Hierarchy	Eg. AOC/DOCG, Grand/Premier Cru, Gran Reserva,etc.
		Vintage	

The Deductive Tasting Method

- Breaks down into four criteria:
 - Sight
 - Nose
 - Palate
 - Conclusion: initial
 - Conclusion: final
- Using information from all these criteria to form the best possible conclusion about the wine.

Sight (suggest 10 - 15 seconds)

- ✦ **Clarity:**
Filtered vs. unfiltered wine. (most will be filtered)
- ✦ **Brightness:**
The capacity of a wine to reflect light.
Dull - bright - brilliant
- ✦ **Concentration:**
Pale - medium - translucent - opaque.
- ✦ **Gas Evidence:**
No need to mention if not present.
- ✦ **Particles/sediment:**
No need to mention if not present.

Colour Scales

- ✦ **White wines:**

Watery – straw – yellow – gold – deep gold

- ✦ **Rosé wines:**

Pink – salmon – copper – onion skin

- ✦ **Red wines:**

Purple – ruby (red) – garnet (red/brown) – tawny

- ✦ **Colour/hue:**

Clues to age, storage conditions or variety.

eg. Green in young white wines.

Orange and brown in older red wines.

CHABLIS

NAPA CHARDONNAY

Pale Straw Core

Deep Gold Core

Oak fermentation / ageing
can affect colour



YOUNG CABERNET SAUVIGNON

OLD CABERNET SAUVIGNON

Rim Variation

Rim Variation

Opacity

Opacity

Ruby / Purple Core

Garnet Core

An indication of age
The difference in color
between wine at the
centre of the glass and
the wine at the edge



MERLOT
AGED 4 YEARS

2011

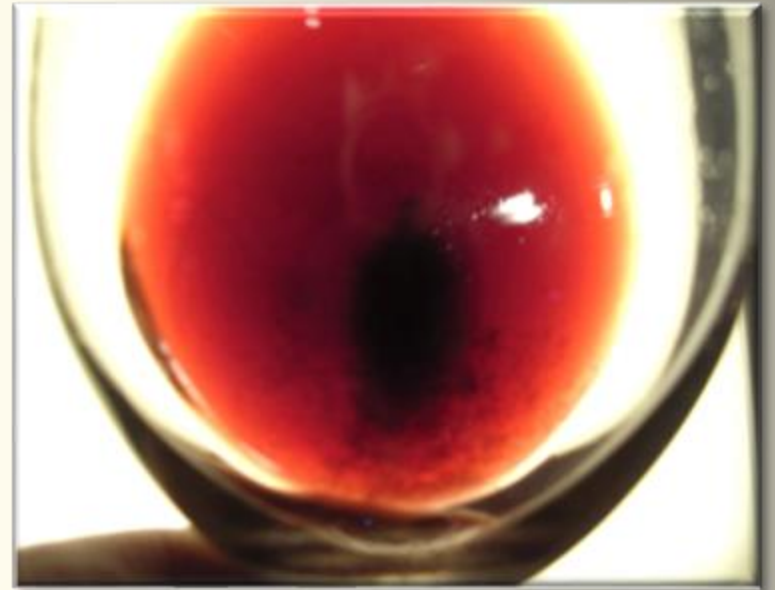
MERLOT
AGED 28 YEARS

1987

photographed
Nov 29, 2015

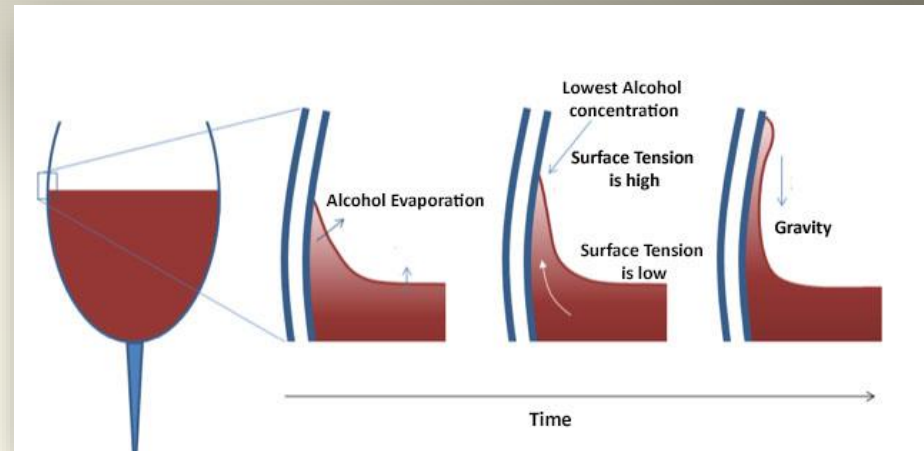
Sediment

- ✦ Pigment and tannins that precipitate out of solution as red wine ages.
- ✦ Anthocyanins (purple) fall out first, leaving Tannins. (orange)
- ✦ Sediment can also be found in young unfiltered red wines.
- ✦ Tartrate crystals may be found in red and white wines.



Sonoma Old Vines
Zinfandel – 15 years

Viscosity and Staining



- Called the Gibbs-Marangoni effect: caused by evaporation of ethanol effecting surface tension.
- Legs/tears can be clues to the relative amount of alcohol or of residual sugar.
- Thin, undefined tears or fast sheeting in the glass
= low alcohol (except those with residual sugar)
- Thick, well defined, slowly moving tears
= higher alcohol (and/or high residual sugar)
- Above 12.5% Alc. tears start to become defined.
- Staining** in the tears of red wines can give clues to extract, richness and concentration - possibly higher alcohol, warmer vintages and warmer climates.

Nose (suggest 40-60 seconds)

- ✦ The most important aspect of tasting.
- ✦ Smell accounts for some 85% of taste.
- ✦ Smelling techniques.
 - Several short sniffs vs. one long one.
 - Retro-nasal breathing and other techniques.
- ✦ Swirling the glass – Why? How?
 - Volatizing the esters - releasing the flavour elements attached to the alcohol molecules in the wine.
- ✦ Adaption – olfactory fatigue after prolonged exposure to an aroma.

Faults

Check the wine for faults:

- ✦ **TCA (corkiness)**
 - From tainted corks - wet mouldy cardboard and mustiness.
- ✦ **Oxidation**
 - From age or poor storage conditions – dull fruit and tertiary aromas and flavours (stewed fruit), flat finish.
- ✦ **Volatile Acidity (VA)**
 - Vinegar aromas (acetobacter) or varnish/fingernail polish aromas. (ethyl acetate)
- ✦ **Excess sulphur dioxide (SO₂)**
 - Added during the winemaking process - matchstick or wet wool.
- ✦ **Hydrogen sulphide (H₂S)**
 - Considerable reduction in the wine during fermentation – rotten eggs or sewer gas.
- ✦ **Mercaptan**
 - Extreme reduction in the wine during fermentation – strong garlic and onion or bad cheese aromas and flavours.

Intensity, Age and Fruit Condition

- ✦ **Cleanliness:**

- ✦ Clean or faulty

- ✦ **Intensity of flavour:**

- ✦ Weak or powerful

- ✦ **Fruit or Vinosity:**

- ✦ Young bright aromas or mature bottle age and controlled oxidation

- ✦ **Fruit Condition / Character:**

- ✦ tart- ripe - jammy – baked – stewed - dried

Primary Fruit Aromas and Flavour.

White Fruits

Citrus	Lemon, Lime, Grapefruit, Orange
Orchard	Apple, Quince, Pear
Stone	Peach, Nectarine, Apricot
Tropical	Banana, Passion Fruit, Mango, Guava, Lychee, Pineapple
Berry	Gooseberry, Grape

Red Fruits

Red	Strawberry, Cherry, Raspberry, Cranberry, Pomegranate
Black	Blackberry, Blackcurrant, Black Cherry, Plum, Black Olive
Blue	Blueberry
Dried	Dates, Figs, Raisin, Fruitcake

Non-Fruit

Flower	Apple Blossom, Acacia, Lily, Gardenia, Lilac, Iris, Jasmine
Herb	Rosemary, Thyme, Basil, Lemongrass, Eucalyptus, Lavender
Mineral	Slate, Chalk, River Pebble
Vegetal	Tomato leaf, Asparagus, Green Pepper, Celery, Radish

Secondary Aromas and Flavours:

Derived from Winemaking techniques or Vineyard practices.

■ **Oak:**

- Amount, Old, (oxidation) New, French, American.
- *vanilla, baking spices, toast, smoke, caramel, chocolate, coffee, cedar*

■ **Malolactic Fermentation:**

- Bacterial conversion of malic to lactic acid.
- *butter, cream, custard, nuts, honeysuckle, diacetyl, brioche*

■ **Lees ageing:**

- Extended ageing on lees with battonage.
- *yeasty, bread dough, stale beer, cheesy*

■ **Carbonic Maceration:**

- Fermented in non-oxygen high CO₂ environment.
- *banana, bubblegum, strawberry*

■ **Botrytis:**

- Slight botrytis infection of the grapes
- *ginger, saffron, pain d'épices, beeswax*

■ **Other:**

- Whole bunch fermentation vs destemming, acidification, autolysis.

Tertiary Aromas and Flavours.

- Mature aromas of aged wine, classically known as 'bouquet'.
- **White wines:**
 - Nutty, honeysuckle, Chamomile flower, Petrol/Diesel, Straw, Mushroom, White truffle, Olive oil.
- **Red wines:**
 - Damp earth, Forest floor, Truffle, Leather, Game, Prune, Dried fruits,
 - Beetroot, Tobacco, Sun dried Tomato, Balsamic, Chinese tea, Farmyard.

Court of Master Sommeliers - Aroma/Flavour Descriptors	
White Wine Fruits	
Citrus	Lemon, Lime, Grapefruit, Orange, Blood Orange, Tangerine, Peel / Rind, Pith
Orchard	Green Apple, Yellow Apple, Red Apple, Baked Apple, Quince, Unripe Pear, Overripe Pear, Fig
Stone	Peach, Nectarine, Apricot, Yellow Plum (Mirabelle)
Tropical	Banana, Passion Fruit, Mango, Guava, Lychee, Pineapple, Kiwi
Berry / Other	Gooseberry, Grape, Melon, Honeydew, Watermelon
Red Wine Fruits	
Red	Strawberry, Cherry, Raspberry, Cranberry, Redcurrant, Pomegranate, Red Plum, Cola
Black	Blackberry, Blackcurrant, Black Cherry, Black Plum
Blue	Blueberry
Dried	Dates, Figs, Raisin, Fruitcake
Rosé Wine Fruits	
	Wild Strawberry, Plum, Raspberry
Non-Fruit	
Flower	Apple Blossom, Citrus Blossom, Acacia, Lily, Gardenia, Lilac, Iris, Jasmine, Honeysuckle, Chamomile
Herb	Rosemary, Thyme, Basil, Lemongrass, Eucalyptus, Mint, Lavender, Dill, Chive, Parsley, Fennel, Oregano
Vegetal	Tomato Leaf, Asparagus, Green Pepper, Celery, Radish, Olive, Pea Shoot, Beetroot
Organic	Compost, Earth, Forest Floor, Dust, Soil, Truffle, Watercress, Tomato Leaf, Blackcurrant Leaf, Cabbage
Mineral	Slate, Chalk, Limestone, River Pebble, Seashell, Oyster Shell, Wet Rock
Spice	Celery Seed, Coriander, Juniper, Peppercorn
Baking Spices	Allspices, Cinnamon, Aniseed, Clove, Ginger, Nutmeg, Vanilla
Oak	Vanilla, Toast, Smoke, Caramel, Chocolate, Coffee, Cedar, Coconut
Malolactic Fermentation	Butter, Cream, Custard, Nuts, Honeysuckle, Diacetyl, Brioche, Yogurt
Lees ageing	Yeasty, Bread Dough, Stale Beer, Cheesy, Phenolic
Carbonic Maceration	Banana, Bubble-gum, Strawberry, Esters
Botrytis	Ginger, Saffron, Pain d’Epices, Beeswax, Honey
Tertiary (Whites)	Nutty, Honey, Chamomile, Petrol / Diesel, Straw / Hay, Mushroom, Truffle, Olive Oil
Tertiary (Reds)	Damp Earth, Forest Floor, Truffle, Leather, Game, Prune, Dried Fruits, Raisin, Beetroot, Tobacco, Sun Dried Tomato, Balsamic, Chinese Tea, Farmyard

Impact Aromas

- ✦ Powerful aromas that may be present in certain varieties or as a result of winemaking.
 - ✦ May be useful in identifying wines but not language to use with guests.
- ✦ **Pyrazine:** associated with Cabernet Sauvignon, Cabernet Franc, Sauvignon Blanc, Carmenère – gives a green asparagus bell pepper aroma which is quite stalky and vegetal.
- ✦ **Monoterpenes:** highly aromatic and floral – Muscat, Gewürz, Torrontés, Viognier and to a lesser extent Albariño and Riesling – located in the grapes skin.
- ✦ **Rotundone:** ground black pepper aromas found in Syrah, Grüner Veltliner, Mourvèdre and Blaufränkisch – found in the grapes skin.
- ✦ **Diacetyl:** produced during the primary fermentation but accentuated to perceivable levels by malolactic fermentation, more obvious in whites giving buttery and nutty notes, high levels are considered a fault.
- ✦ **Lactones:**
 - ✦ **Sotolon** - aromas of curry, turmeric, walnut or maple syrup often seen in the oxidative styles of Vin Jaune, Sherry or Madeira.
 - ✦ **Whiskey Lactone** - usually an oak derived character giving sweet coconut aromas found more in American oak barrels than French oak.

Logical Progression of Primary, Secondary and Tertiary Aromas in three wines

			Marlborough Sauvignon Blanc	5 yrs Meursault Blanc	12 yrs Barolo
Primary Flavours	Fruits	Citrus	Lemon / Lime	Lemon Zest	
		Orchard	Green Apple	Yellow Apple / Pear	
		Tropical	Passion Fruit / Guava	Unripe Pineapple	
		Berry	Gooseberry		
		Stone		Unripe Peach	
		Red			Cranberry
		Black			
		Blue			
		Dried			Dried Raspberry
	Flower		Apple Blossom	Yellow Acacia	Dried Red Flowers
	Herbs		Basil / Tarragon		Dried Thyme
	Mineral		River Pebbles	Limestone / Chalk	
	Vegetal		Asparagus / Cucumber		
Secondary Flavours	Oak			Vanilla, Toast, Baking Spices	Oak maturation (Old or New)
	Lees			Yeasty	
	Malolactic			Butter / Cream	
	Carbonic				
Tertiary Flavours				Hazelnut	Forest Floor, Dried Leaves

Palate (suggest 40-60 seconds)

Sweetness/Dryness:

- ✦ The presence (or lack of) residual sugar.
 - ✦ **Bone dry - dry - off-dry - medium sweet - dessert**

Body:

- ✦ The weight of the wine, from the amount of alcohol, tannins, glycerine and grape solids.
 - ✦ **Light - medium – full -creamy - round - lean**

Acidity:

- ✦ Focus on the salivary glands and the finish, it can be a delayed experience for many tasters.
 - ✦ **Low - medium minus - medium - medium plus - high**

Tannin:

- ✦ Grape vs. Wood tannins. (barrel or stems)
 - Grape tannins sensed in the front of the mouth on the teeth and gums.
 - Wood tannins sensed in the back and middle of the tongue and on the finish.
 - ✦ **Low - medium minus - medium - medium plus - high**

Palate

- ✦ **Primary Flavours:**

- ✦ Confirm the nose. Anything new?

Fruit – flower – herb – mineral – vegetal

- ✦ **Secondary Flavours:**

- ✦ Confirm the nose. Anything new?

Winemaking – vineyard – oak

- ✦ **Tertiary Flavours:**

- ✦ Confirm the nose. Anything new?

Aged characteristics.

Alcohol Levels

Sensed as heat in the nose, throat and chest.

Low	Below 10%
Medium -	10, 10.5, 11%
Medium	11.5, 12, 12.5%
Medium +	13, 13.5, 14%
High	Over 14%

Palate: the Finish

Balance:

- ✦ Does anything taste excessively high or low?
If not, the wine is balanced.

Finish:

- ✦ The longer the finish the better quality the wine.
 - ✦ Quality of the finish: astringent, silky, etc.
 - ✦ Short - medium minus – medium – medium plus – long

Complexity:

- ✦ The number of aromas and flavours in the wine.
 - ✦ Low – moderate – complex

The Conclusion

- ✦ Broken down into initial and final conclusions.
- ✦ Taking “evidence” gained from the sight, nose, and palate to form the best possible conclusion.
- ✦ Strong theoretical knowledge of grapes, winemaking and climate are essential to follow a logical path.
- ✦ **Conclusion keys:**
 - ✦ Listen to yourself. – Use a process of elimination.
 - ✦ Use benchmark wines tasted before as frames of taste reference.
 - ✦ Know markers for classical grape varieties and wine styles.

Initial Conclusion (suggest 60-90 seconds)

Cool, Moderate or Warm Climate:

- ID keys: acidity level and alcohol level.
- Intensity of fruit – Cool climate : Low. Warm climate : High

Grape Variety or Blend:

- ID keys: knowing markers for grape varieties and styles of wines.
- Give two possibilities if you think appropriate.

General Age Range:

- 1-3 years
- 3-5 years
- 5 + years
- ID keys: colour, rim, youth vs. vinosity, quality of texture and finish.

Final Conclusions (suggest 15-20 seconds)

- ✦ Grape variety or blend: final answer.
- ✦ Country
- ✦ Region
- ✦ Appellation
- ✦ Appellation quality level: (if appropriate)
 - ✦ German Riesling: - give the prädikat level
 - ✦ Burgundy: Village vs. 1er cru vs. Grand Cru level
- ✦ Quality level:
 - ✦ Village level, Prädikat, Cru etc.
- ✦ Vintage:
 - ✦ A final check of the colour of the wine.
 - ✦ Give vintage.
 - ✦ Add six months for southern hemisphere wines.

Example of markers for Nebbiolo

- ✦ Evidence gathered:
- ✦ **Sight:**
Medium ruby-garnet with lots of rim variation. Orange and brown can be found at the rim/meniscus even in young wines.
- ✦ **Nose:**
Rose petal floral, tar, dried red cherry, vegetal-forest floor, mushroom-earth, and wood. Unique combination of sweet aromas and earthy-tangy aromas.
- ✦ **Palate:**
Medium-bodied and bone dry. High acid, very high tannins (both grape and barrel tannins), and medium + alcohol. Austere, tart and incredibly tannic when young.
- ✦ **ID Keys:**
Colour gradation (orange in the rim), high acidity, and very high tannins make Nebbiolo fairly easy to recognize. Also, dried fruits and floral qualities.
- ✦ Evidence logically points to Barolo or Barbaresco

Deductive Tasting: Sight

Clarity	Clear, Slightly Cloudy, Cloudy
Brightness	Dull - Bright - Brilliant
Concentration	Translucent, Pale, Medium, Deep, Opaque
Gas Evidence	Yes / No
Sediment / Particles	Yes / No
Colour	White: Straw, Yellow, Gold, Amber Red: Purple, Ruby, Garnet, Brown Rosé: Pink, Salmon, Onion Skin
Hue	White: Silver, Green, Red: Purple, Ruby Garnet, Orange, Brown
Rim Variation	Colour change from centre to edge
Extract / Stain	None, Light, Medium, Heavy
Viscosity / Tears	Low, Medium-, Medium, Medium+, High

Deductive Tasting: Nose - Aroma

Clean / Faulty	TCA, H ₂ S, Volatile Acidity, Brett, Oxidation, Other
Intensity	Delicate, Moderate, Powerful.
Fruit Condition	Tart / Unripe, Ripe, Tropical, Overripe, Jammy, Baked
Age Assessment	Youthful, Vinous
Primary - Fruit Aromas	White: Citrus, Orchard, Stone, Tropical, Berry, Other Red: Red, Blue, Black, Berry
Primary - Non-Fruit Aromas	Floral, Vegetal, Herbal, Mineral, Spice, Organic
Secondary (winemaking)	Oak, (Old, New, American) MLF, Carbonic Maceration, Chocolate, Coffee, Toast, Caramel, Vanilla, Butter, Cream
Organic	Forest Floor, Compost, Mushroom, Fresh Soil, Dried Leaves, Farmyard, Liquorice, Olive
Mineral	Mineral, Limestone, Chalk, Slate / Petrol, Flint, Volcanic
Tertiary / Aged	Meaty, Leather, Truffle, Mushroom, Prune, Game, Beetroot, Tobacco, Balsamic, Chinese Tea, Damp Earth, Petrol / Diesel, Straw / Hay, Chamomile

Palate (Structure)

Sweetness	Bone dry, Dry, Off Dry, Sweet, Dessert
Tannin	Low, Medium -, Medium, Medium +, High
Acid	Low, Medium -, Medium, Medium +, High
Alcohol	Low, Medium -, Medium, Medium +, High
Body / Texture	Light, Medium, Full, - Tart, Creamy, Round

Palate – Flavour Elements

Primary Fruit	White: Apple, Citric, Pitted, Stone, Tropical, Melon Red: Red, Black, Blue, Berry.
Primary - Non-Fruit	Floral, Vegetal, Herbal, Spice, Animal, Fermentation
Secondary	Oak, (Old, New, American) MLF, Carbonic Maceration, Chocolate, Coffee, Toast, Caramel, Vanilla, Butter, Cream
Tertiary	Meaty, Leather, Truffle, Mushroom, Prune, Game, Beetroot, Tobacco, Balsamic, Chinese Tea, Damp Earth, Petrol / Diesel, Straw / Hay, Chamomile
Organic	Forest Floor, Compost, Mushroom, Fresh Soil, Dried Leaves, Farmyard, Liquorice, Olive
Mineral	Mineral, Limestone, Chalk, Slate / Petrol, Flint, Volcanic
Balance	Does any element dominate?
Complexity	Low – Moderate – Complex
Length/ Finish	Short, Medium-, Medium, Medium+, Long

Conclusions

Initial Conclusion	
Climate	Cool, Cool-Moderate, Moderate Moderate-Warm, Warm
Single Grape Variety or Blend	?
Possible Countries	?
Age Range	1-3 yrs, 3-5 yrs, 5-10 yrs, 10yrs +

Final Conclusion	
Variety or Principal grape in blend	?
Country of Origin	?
Region / Appellation	?
Regional Quality hierarchy	AOP, DOCG, Prädikat, Reserva, Grand Cru
Vintage	?