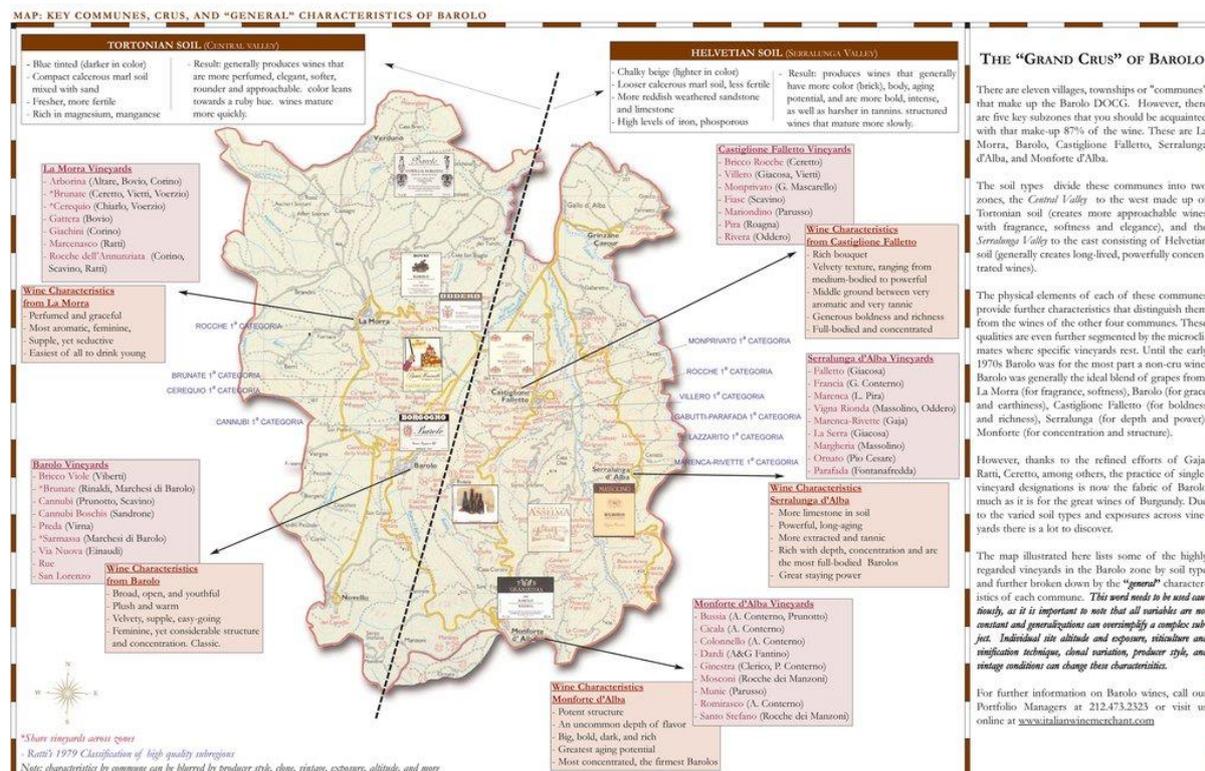


Technical Tasting 12 January 2017: Boela Gerber

BAROLO: Time and Place

The technical tastings kicked off on a high note in 2017 at Groot Constantia with a masterclass on **Barolo**. Boela presented 3 flights of 4 wines highlighting these sought-after Nebbiolo wines.



Piedmont is located in the Northern part of Italy at the foot of the Alps, bordering Switzerland and France. It is the most mountainous winegrowing region in Italy (43% of Piedmont surface, 30% hills). In addition, Piedmont is surrounded by mountains on three sides.

There are no ITG wines in Piedmont, only DOC (45) and DOCG (15). This is an indication of the quality expectation of this region.

Nebbiolo

- Name possibly from *Nebbia*, which means fog. Nebbiolo usually harvested towards the end of October when the characteristic thick fog covers the Langhe Hills.
- Nebbiolo is one of the oldest recorded varieties in Italy, with a few mentions in 13th century.
- The origin most popular varieties today can be pinpointed by establishing the parents via DNA fingerprinting. Researchers at the University of Turin have not been able to find the parents of Nebbiolo and are starting to doubt whether they ever will, guessing that the parents are either extinct or mutated.
- Nebbiolo is a very fickle variety and said to have the longest growing cycle of all varieties.
- Nebbiolo is a notoriously demanding variety. The vine is extremely site sensitive, susceptible to sunburn, yielding different results depending where it is grown.
- Nebbiolo is one of the least planted varieties in all of Italy and does not travel particularly well either: Of the 5992 ha of Nebbiolo in the world, 4477 ha (75%) are planted in Piedmont! Only bits and pieces are found in Lombardy (811 ha) and Sardinia. 456 ha of Nebbiolo is planted in the rest of the world (7,5%) (2010).

History of Nebbiolo in Barolo

- Most historians agree that a dry version of Barolo has been around since mid-19th century, before that Nebbiolo based wines made in the Langhe were sweet or sparkling.
- The jury is still out over who was responsible for changing the style of Barolo from sweet to dry. Some light has been shed by recent Italian research showing that Italian General and winemaker, **Paolo Francesco Staglieno**, wrote a winemaking handbook in 1835 and stressed the importance of cellar hygiene to finish fermentation at that time already.
- The 20th century:
For most small farmers in the Langhe, the poverty and deprivation of post WWII continued to the 1970's; compounded by a scarcity of water. Pumping water up steep hills from the Tanaro River was prohibitively expensive, most farmers in the Langhe relied on well water, which often dried up towards the end of summer. Many homes and cellars had no

running water. The lack of constant water supply in most rural areas lasted until the mid-1980's, until water was carried down from the surrounding Alps via a complex pipe system that relies on gravity. Veteran winemaker and politician **Oddero** was a key player in bringing a constant supply of fresh water to the Langhe.

- The lack of accessible water had a huge impact on cellar hygiene and the mentality of previous generations who obsessively conserved water: winemaker **Veglio** stated that “using any water at all in cellars was not only unheard of, it was sacrilegious.
- Until the 1980's wine production was divided between grape growers and wine makers. Most Barolo Houses were large scale operations that made wine from grapes they purchased from local farmers - very few growers had their own cellars. Besides the unsuitable cellars and poor equipment, the majority of growers in Langhe had to grow other crops in order to survive. These included wheat, fruit and hazelnuts.

Barolo Wars

- The mid 1970's was a turning point in Barolo history.
- **Elio Altare** and **Angelo Gaja** worked hard at changes, from vineyard management to barrel ageing. Altare and Scavino went to Burgundy and returned with lot of ambition to overhaul their vineyards and update their cellars.
- Gaja and a few others in Barolo started to bottle single vineyard wines. Until the 1970's, Barolo and Barbaresco were produced exclusively by blending from different vineyards and villages. The philosophy behind blending was that each vineyard and village added distinct characteristics to the wine: La Morra for perfume, Monforte for body and Serralunga for structure.
- In 1983 Elio Altare had a dispute with his father, presumably over chemicals sprayed in the orchards. He took a chain saw and chopped the trees down, and while he was at it, he also chopped up his father's old *botte*, large Slovenian casks. He was disinherited. Altare rented cellar space, bought his first new barriques and made his own wines with success.
- Changes also took place in the vineyards: a handful of growers, including Gaja in Barbaresco, began green harvest and bunch thinning (sacrilegious at the time in Piedmont) to reduce yield in increase sugar and quality.
- By the early 1990's, more and more growers started producing their own wines. Many opted for increasing lower yields, rotary fermenters and new

small oak. There was a big difference in what was called the modernists and traditionalists. Modernists were aiming for power and concentration, while traditionalists aimed for complexity and elegance - not unlike many other regions in the world.

- From the mid-1990's to early 2000's (similar to their fellow countrymen in Brunello di Montalcino in the infamous Brunello Gate of 2008) there were rumours of winemakers illegally using Cabernet Sauvignon & Merlot to add colour and soften tannin. Only difference is that the Piedmont winemakers never got caught!
- Since 2007/8 the lines between the different styles have started to fade: the staunch traditionalists cleaned up their cellars, while the modernists are toning down the new oak on their Barolo's. Most producers now see a protocol where grapes finish fermentation in about 10 days, leaving it on the skins for another two weeks. The wines then spend a few months, up to a year in barrel before being transferred to large Slovenian casks for a year.

Viticulture

- Because of the steep incline of the majority of the vineyards in Barolo and Barbaresco, most of the vineyard management is performed by hand, including pruning, shoot positioning and harvesting.
- Tractors used for spraying, mowing cover crop as well as tipping.
- Permanent cover crop is very common – to reduce vigour as well as limit erosion – one of the biggest challenges in the Langhe.
- Producers have a healthy respect for old vines with a surprising number of producers producing wine from 30, 40 and 50 year old vines, and in certain cases, even older.
- Nebbiolo is extraordinarily vigorous and produces incredibly long canes. This is managed by regular topping; reducing fertiliser; permanent cover crop OR for new plantings: using less vigorous rootstocks and clones.
- The canes are trained upward and create a very high, leafy canopy – 2,5 – 3 m.
- The internode spaces are very long (15 – 20 cm) – that, coupled with the fact that the basal bud (according to some growers the first 3 or 4 buds) are sterile, it means that one needs to leave 8 – 10 buds to have adequate production and balance. For this reason most growers use long pruning systems like Guyot.
- Canopy management seems to be critical:
 - vertical training of shoots is used to avoid overshadowing.

- Removal of lateral shoots.
- Leaf removal is not uncommon for certain styles (modernist).
- Bunch removal/green harvest is also crucial, leaving one bunch per shoot, 4 – 6 bunches per vine. This was unheard of in the 1980's - thought of as a waste. Some producers reduce crop dramatically today to get high extraction and high alcohol.
- Optimal planting density is 4000 vines per hectare.
- Disease: Nebbiolo seems to be susceptible to several fungus diseases, like downy and powdery mildew, and botrytis to a lesser extent. The latest danger in the Langhe is *flavescence doree*, known here as aster yellow or grapevine yellow, caused by phytoplasma and spread by leaf hoppers (arrived in about 2009).
- Disease management mostly with copper sulphate mixtures against fungal disease, but with the arrival of aster yellow, aggressive insecticides against leaf hopper is used. Some producers are trying organic alternatives like pyrethrin to combat the disease. Pyrethrin is not that effective as sunlight breaks it down and can only be sprayed in the evening.
- Being dependent on a grape that is slow to ripen, global warming has had a beneficial influence on the Barolo zone.
- Theoretically, the increased temperatures of summer followed by mild autumns has helped to increase sugar levels and led to riper tannins.
- To empirically link this to global warming is speculative. More likely, better vineyard management and winemaking techniques have contributed to a string of successful vintages for Barolo in the last 20 years.

Langhe soils

- Within the Barolo zone there are two major soil types separated by the Alba-Barolo road. In the communes of Serralunga d'Alba and Monforte d'Alba there are compact, sandstone based soils dating from the Helvetian/Serravallian epoch. In the Barolo and La Morra zone, the soils are similar to those found in the Barbaresco zone, dating from the Tortonian period. These are composed of calcareous marl (mud or mudstone which contains variable amounts of clays and silt) that is more compact and fertile.
- Higher sandstone content means better drainage in normal and wet years – better quality, but the vines suffer in drought years.

- Higher calcium carbonate/limestone content in the soil produced more structured, tannic wines.
- Serralunga has highest calcium carbonate in soil and also most powerfully structured wines, while La Morra has the least amount of calcium carbonate and produce the most elegant wines.
- Tortonian: Blue tinted, calcareous marl mixed with sand - more fertile, richer in magnesium and manganese. Here wines are more perfumed, elegant, soft, round and approachable. The colour leans towards a ruby hue and wines mature more quickly.
- Serravallian/Helvetian: Chalky, beige, lighter in colour – loose, calcareous marl, less fertile. The more reddish, weathered sandstone and limestone contain high levels of phosphor. The wines generally have more colour (brick), body, ageing potential and are more bold and intense as well as harsher in tannins - structured wines that mature more slowly.

Climate/rainfall

- The climate is continental with hot summers and cold winters. Both Barolo and Barbaresco benefit from great diurnal range in summer.
- Even though a lot is said about the influence of the soils, the slope is also critical. Nebbiolo is said to be the grape variety with the longest ripening cycle of any grape - with vineyards at 200 – 450 m above sea level at 45°N, one needs warm slopes to ripen Nebbiolo. All the great cru's/vineyards in Barolo face south.
- Long term average rainfall is 700 mm per year, with 60 mm in September, and the month they harvest October, the wettest month in Piedmont at 88 mm per year with a long term average of 6 days of rain.
- Temperatures: Average MAX in July is 26,8 °C (ave 19,4 °C), Sept 22,5 °C (ave 18,6 °C) and October 13,4 °C (ave 16,9 °C) (Constantia average MAX in Jan 26 - 27°C).

Production

Very steep growth in volume on DOCG Barolo and Barbaresco produced from mid-1990

	1996	2013
Barolo:	6 192 267	13 902 404
Barbaresco:	2 406 800	4 681 737

Possible reasons for this growth:

- Grape growers stopped selling grapes to large companies by own production and bottling.
- Farmers replaced woods, fruit trees and hazel nut groves, as well as uprooted other varieties to replant with Nebbiolo.
- Piedmont has long recognised the value of special cru's.
- Certain vineyards (like Barbaresco's Rio Sordo) was classified as "first rate" as far back as 1895 in Lorenzo Fatini's *Monograph of Viticulture and Enology*.
- In 1980's producers started to use vineyard names on labels.
- Cru's (or vineyards) were unofficial until 2007 (in Barbaresco and 2009 in Barolo).
- Producers outside cru's claimed to be inside.
- Complicating matters even further, some producers made up names on labels.
- The result of the above is that historical cru names started to lose significance.
- There are currently 170 cru's in Barolo and 66 in Barbaresco.

Not without scandal

Austria had an anti-freeze scandal in 1985. The Italians didn't learn from their neighbours and had their own methanol scandal the following year in 1986 when a winery in Piedmont added methanol to his wine to increase the alcohol content, killing 23 people and left dozens more blind. This scandal caused exports to plummet for a few years.

For further reading: Kerin O'Keefe "Barolo & Barbaresco: The king & queen of Italian wine"

THE TASTING:

Flight 1

Styles and interpretations of Brunate 2011

One vineyard, one vintage, four producers

Wine 1.1

Oddero Brunate 2011

Variety : 100% Nebbiolo

Vineyard

Location: La Morra, Plot 11, Sub-plot 414 Characteristics: 300 meters above sea level, southeastern exposure, 2.7 x 0.9 meters spacing, 4,500 vines/hectare density, Guyot upward-trained vertical-trellised training system. Age: 50-60 years. The Soil is called Tortonian Miocene epoch. It is a blue-grey marl rich in calcium carbonates and manganese, with a mixture of fine sand and clay as well as limestone called Sant'Agata marl. Size: 0.4 hectares. Production: 2,000 bottles

Vinification: Scrupulous vine growing, done through the organic method since 2010. Careful manual selection of grapes, both in the vineyards and in the cellar with a conveyor belt, gentle de-stemming and pressing. Fermentation and maceration for approximately 25 days, at a constant temperature of 28° C.

Ageing : Ageing in 20 Hl oak barrels for about 30 months. Bottling takes place at the end of the summer, with a further year of bottle ageing before release on the market.

Tasting Note:

Plums and dried flowers on the nose, quite harsh, sour plum skin astringency with tight, brusk tannins and bitter finish. Needs time and/or food

Wine 1.2

Marengo Brunate 2011

Appellation: BAROLO DOCG

Vineyard size: 1.5Ha

Blend: 100% Nebbiolo

Vineyard age 67. Year of planting 1950 with average yield of 5t/ha

Soil Type: Mixed clay and silt tending to calcareous

Exposure: South

Average no. bottles/year: 6,000

The philosophy of Marco Marengo (son of Mario) is to respect what the vineyards give him, as much as possible. The work in the vines is more important to him than the work in the cellar. In fact, he follows natural agricultural practices: spontaneous grass cover is left on the aisles, only sulphur and copper base products are sprayed, the vineyards are tended by hand (except for topping of the vines which is done with a machine). In the cellar only SO₂, and very little of it, is added to the wines, wild yeasts are responsible for the alcoholic fermentation, no selected strains of bacteria are used to start up malolactic, the wines are not clarified nor filtered. The wines age in French oak barriques of which only 15-20% are new so as to maintain the fruit.

Tasting note:

Dark plums, violet, cured meat perfume. Intense dark fruit on the palate, cured meat, saline quality – grippy tannin with length and breadth. A lovely modern take on the variety.

Wine 1.3

Cerretto Brunate 2011

Appellation: BAROLO D.O.C.G.

Commune: La Morra

Variety: 100% Nebbiolo

Hectares: 5.60 ha

First year of production: 1978

It is one of the most representative vineyards of the Commune of La Morra and has always been considered one of points of reference for the entire appellation. It is an inter-commune vineyard, the plot comprising a total of 28 hectares is shared, from an administrative point of view, between the towns of Barolo and La Morra. As regards the soil profile, the two sides of the two Communes are not particularly different, and even the exposure (South / Southeast) is substantially Homogeneous; the only variable the altitude: in fact, it ranges from 230 meters above sea level to more than 400 meters. The soils, from the Tortonian period, feature marle of S. Agata Fossils, with a good presence of sand, particularly in the highest part of the hill. The Ceretto family owns, in Brunate, just over five and a half hectares. 4,600 cases were made.

Alcohol: 14%

Tasting Note:

Highly perfumed, strange green melon, cream soda nose. Lightfooted but with some depth. Fresh with good acid backbone, length and balance. Individualistic wine.

Wine 1.4

Roberto Voerzio Brunate 2011 vintage

First Harvest: 1988

Density of implant: 4000 - 6000 plant/ha

Exposure: east - south-east

Variety: 100% Nebbiolo

Bottles produced: 3000/3500

Vineyard: After each harvests is done, organic fertilisation is done with cow manure. Winter pruning is very short with between 5 and 8 buds left per vine. The firsts thinning begins in middle July and we removed almost 50% of grapes, leaving 5 clusters per vine. Middle August the second thinning is done and decreases the size of every clusters cutting the lower part off. Leaving only the top most rich and focused bunches to ripen optimally.

Fermentation: steel tanks

Aging: 24 months in used barriques and 15hl casks, 8 months in steel, 8 months in bottle.

Tasting Note:

Inky ruby colour; dried flower, gentle herb and ripe plums on the nose; dark plum, biltong and herb flavours wrapped around a firm core of chalky tannins – grippy and present. Superb balance and texture, with a mineral edge. Needs 10+ years.

OVERALL IMPRESSION OF THE FLIGHT

Good example of the individual personalities of the different winemakers and their winemaking techniques, different styles and expression by each winemaker.

Flight 2

Diversity of Barolo

One producer Vietti, one vintage 2012, four vineyards from four different communes

Wine 2.1

Brunate from La Morra 2012

Designation: Barolo D.O.C.G

Grapes: 100% Nebbiolo,

Winemaking: The grapes are selected from the historical cru Brunate, located in La Morra, on the south side towards Barolo, with 4,600 plants per hectare. The vines are 43 years old and cultivated with gouyot system. Calcareous-clayey soil. Grapes are gently crushed and fermented in stainless steel for 23 days at 30-32° C. Daily open air pumping-over using the old system of the “submerged cap.” Malolactic fermentation in oak barrels.

Aging: The wine is aged for 32 months between French oak barrels and Slovenian oak casks, Bottled unfiltered on July 2015.

Alcohol: 14.37 Alc.

Total Acidity: 5.77 g/L

Total dry extract: 31 g/L

Tasting Note:

Broody dark colour, plums, spice cake, violet, vanilla and fennel on the nose. Savoury plums combine with fine, grippy tannins – good texture and mouthfeel. Meaty, balanced with persistent, savoury length. Modern take on variety.

Wine 2.2

Ravera from Novello 2012

Designation: Barolo DOCG

Grapes: 100% Nebbiolo

Winemaking: From the single vineyard Ravera in Novello with 4.900 plants per hectare and between 5 and 60 years old. Ravera in Novello is a fabulous hill facing south-west, with a calcareous-clay ground. Total surface of 2.7 hectares. The production is of 20 hectoliters per hectare. 35 days in stainless steel vats, 5 of which are in cold pre-fermentation maceration, alcoholic fermentation, and then a long post-fermentation maceration at a temperature between 30-32 ° C. Daily air pumping-over using the old system called “submerged cap.” Slow malolactic fermentation in large casks almost until the end of the spring.

The wine then stays more than a year on the lees and the Co₂ produced during the malolactic fermentation in a reductive environment without sulfur.

Aging: The wine is aged for 32 months in Slovenian oak casks. Bottled unfiltered on July 2015.

Alcohol: 14.34% Alc.

Total Acidity: 6.01 g/L

Total dry extract: 31.30 g/L

Tasting Note:

Dark plum colour. Fruity plums and cherries, dried herbs on the nose. Densely packed fruit with great depth and dusty, firm tannin structure. Sweet/sour cherry on the finish.

Wine 2.3

Rocche di Castiglione from Castiglione Falletto 2012

Designation: Barolo DOCG

Grapes: 100% Nebbiolo

Winemaking: The grapes are selected from the 47 year old vineyards in Rocche of Castiglione, cultivated with 4.600 plants per hectare and with a yield of 29 hl/ha. After the harvest and gentle pressing, alcoholic fermentation takes place over 4 weeks in stainless steel tanks at 30-32°C, with frequent pumping of the wine over grape skins for flavor and color extraction. This wine is always pleasant and long-lived.

Aging: After 4 weeks of malolactic fermentation in barriques, the wine is aged in Slovenian oak casks for 31 months. Bottled unfiltered on September 2015.

Alcohol: 14.67 Alc.

Total Acidity: 6.0 g/L.

Total dry extract: 31.3 g/L.

Tasting Note:

Plums and spice abound with impeccable balance, beautiful oak integration, gentle tannic handshake. Savoury and unflagging finish.

Wine 2.4

Lazzarito from Serralunga d'Alba 2012

Designation: Barolo DOCG

Grapes: 100% Nebbiolo

Winemaking: the grapes are selected from the single vineyard Lazzarito in Serralunga d'Alba, which has 4.500 plants by hectare and with an age of 39 years. The surface is of 1.7 hectares with a low yields of 26 hl/ha. Calcareous-clay soil. The grapes are harvested and gently pressed; their juice ferments for 27 days in stainless steel tanks at 30-32° C.

Daily open air pumping-over using the old system of the “submerged cap.” Malolactic fermentation in oak barrels. Lazzarito vineyard is one of the most famous “crus” of Serralunga d'Alba. It's our most modern interpretation of Barolo.

Aging: The wine is aged for 7 months in French oak barrels and 25 in Slovenian oak casks. Bottled unfiltered on July 2015.

Alcohol: 14.63% Alc.

Total Acidity: 5.78 g/L

Total dry extract: 31.g/L

Tasting Note:

This is serious: deep flavours of plum and spice, vanilla & liquor-like intensity with texture, firm, but balanced tannin structure – backbone to a stunner. Rounded and persistent.

OVERALL IMPRESSION OF THE FLIGHT:

There is a thread of similarity running through this flight, highlighted by the handling of the individual parcels. Good interpretation by the winemaker with well-managed tannins, considerate oaking and expressing the various terroirs.

Flight 3.

Ageing potential of Barolo

2011

2009

2001

1996

Aldo Conterno Colonello

Location: Colonnello from the Bussia vineyard of the commune of Monforte d'Alba

Vineyard: South South-West location enhances the nobility of the clayey-calcareous soil, rich with calcium carbonate and iron. The vineyard is about 45-50 years old and, to maintain it, its vines are replanted from time to time.

Harvest: Hand harvested with grapes selection in the vineyard.

Fermentation: In stainless steel tanks with the must that stays on contact with the skins for 30 days. Fermenting temperatures vary, with highest peaks of 32 degrees centigrade.

Aging: The new wine is raked several times before transfer to large Slavonia oak casks where it is aged and refined for 28 months.

Tasting Notes:

2011: Sweet plums, cinnamon spice, clove, violet and dried flowers on the nose. Firmly extracted, rich fruit flavours with earthy undertones, pulled back by fine tannin balance.

2009: Sweet fruited, gentle tannins, beautiful balance, oak integration. Earthiness, fruit cake, sour cherries on more mature example. Opulent with a cleansing acid balance. My favourite of the evening!

2001: Evolved, creamy mouthfeel, plush fruit, bright and fresh acidity. Good structure, texture, mouthfeel and poise.

1996: Sadly all bottles faulty.

Conclusions:

Excellent masterclass in getting to grips with Barolo. Each flight demonstrated exactly what was planned, with good examples in each flight. I liked the methodical way the flight were put together to show allow specific comparison within each flight.

Norma Ratcliffe reminded the audience that this is an Alpine region and all the food here is rich (cream, olive oil, fatty pork etc.) and here acidity and tannins work well with the cuisine.

Kevin Arnold summed up the session perfectly: these wine show the footprint of the region, and are great food wines. What might be perceived as astringent on the South African palate is not aggressive in Piedmont. Overall the wines were lean, elegant with great mouthfeel. The tannin management was impressive and the balance in most cases, impeccable.