

Great grandfather one of the initial 9 Barbaresco landowners - together in 1914 established the 1st Cantina Sociale - the 1st wine coop in town in the castle which closed in 1920s, thanks to the vision of Domizio Cavazza (father of Barbaresco).

Both grandfathers were among the original 19 founders of Produttori del Barbaresco started in 1958. Father of Barbaresco, Domizio Cavazza, viticulturist and agronomist, brilliant mind, from Emilia-Romagna near Bologna, moved to Barbaresco in 1888 because hired to be the 1st director of wine school of Alba (1888). He bought a castle and started to run the wine school and also took interest in wine in this village and saw its potential. Back then Barbaresco wasn't anywhere near what it is now - Barolo though was already on the map. In Barbaresco, Nebbiolo was also grown but mostly sold to make Barolo, no designated appellation then. He started to lobby that the Barolo region be enlarged to include Barbaresco, Roero, etc. Barolo was 15 miles away, dirty roads, no railway, its like a world apart but he wanted to put Barbaresco on the map. But Barolo was not interested in including Barbaresco as part of the township. So he decided to make it Barbaresco instead, which makes the start of Barbaresco 1894, when he founded his winery in the castle of Barbaresco. He did not start making own wines but convinced 9 landowners including my great grandfather, bishop of Alba and gentlemen from the royal army who had land in Barbaresco to deliver the Nebbiolo grapes to the castle to make wine together and sell it under the name of Cantina Sociale de Castello. He made very good wine and gained reputation for it. He drew a knight holding the baller?? which we still use in our single vineyard labels. He drew a map of Barbaresco with red dots indicating best vineyards, some of which are Rio Dordo, Porra, Montestefano. To identify the best vineyards in 19th century in Italy he was ahead of time. Died in 1913. WWI. Depression. Fascism. WWII. Winery was closed in 1920s. Castle sold to Manzo family kept the logo and released wine from their own family...

1958 when Produttori was reborn. The 1st part of the century there's not much happening in Barbaresco except Gaja family established reputation, but in 1950s Barbaresco was still a village of small farmers growing several crops not just grapes, selling out to open markets to make a living. In 1954 a young priest Don Fiorino was appointed by the bishop to run the Barbaresco Parish heard about Domizio Cavazza and convinced 19 farmers to resuscitate Cavazza's vision. They bought a piece of land, built the 1st part of winery, stopped selling grapes and started to make wine. Wine coops were common in Europe everywhere most of which produce everyday wine. But PdB was exception from day 1 thanks to vision of Don Fiorino and crucial decisions they took: focus on one grape only Nebbiolo and one wine only Barbaresco. They followed what Cavazza did in 19th century in Barbaresco calling the wine the village instead of the grapes despite the fact that then it was much easier to sell Dolcetto and Barbera. In 70s a ton of Dolcetto grapes was more expensive than that of Nebbiolo grapes in the open market but the finished wine its Barbaresco that's more expensive. Because of the decision to focus, they walked away from the stereotype of coop cheap wine which is the demand of the market, and defined the reputation of the winery. My family is very much linked - both great grandfather joined Don Fiorino since my father was the only college graduate so he was tasked to run the winery as the secretary 1957-1984, part time until 1972 because there were not enough business to support full time. 1958-1974 Gio Giroca was the cellar master winemaker - making the wine very unprofessionally - because he was limping and couldn't work in the vineyards. In early 70s an oenologist consultant was hired to check the malo/pH to make sure things are ok. But it was only in 1984 a fulltime winemaker was hired. But things move fast in Barbaresco. In 1961 a turning point of modern history of Barbaresco, as 1960s bad vintage and earlier vintages were sold in bulk, 1961 an exceptional vintage when we started to release more wine in bottles with a label more consistently. Also in 1961 Gaja family decided to become 100% estate bottling. Gaja was an established winery based in Barbaresco but they had been making Barolo, Barbera, Dolcetto, Asti Spumante mainly from bought grapes. But Gaja was ahead of his own time and realized the importance of owning own vineyards, so he started to purchase a lot of land in 1950s and the story goes that the young Angelo Gaja in 1961 told his father Giovanni that now we have enough land we can stop buying grapes and make own wines like a Bordeaux chateaux, thus stop making Barolo - a bold move. Thus Barbaresco became of the flagship of Gaja. Gaja made the world talk about Barbaresco, and Produttori made the world drink Barbaresco due to price level.

Do you think more people decided to join Produttori afterwards because they couldn't sell to Gaja any more? Possible but it was just as easy to sell to other wineries, and the price was set by the buyers and usually low - one important aspect of PdB was that there were suddenly much less grapes to buy in the market so the price went up a bit. Sadly Don Fiorino was removed to another village in 1964. It was not an easy decision for farmers to join as many would have preferred to sell Barbera, Dolcetto grapes etc. But PdB never budged and it is still the only winery in Langhe that's focused on one grape only, which is more reasonable now since Nebbiolo is the most planted in Langhe now but not the case back then. 1961 coincided with new cellar opening - the 1st commercial vintage of PdB, while when the cellar was under construction winemaking took place in Don Fiorino's basement not in church. Originally it was one wine for ~10 years. 1st single vineyard bottling started in 1967 (actually quite early), same year when Gaja started to release single vineyard bottling. First single vineyard bottling in Barolo 1961 (Alfredo and Luciana Currado made their 1st single vineyard

Barolo Rocche from hillside site in Castiglione Falletto). The early 60s was when we started to learn from Burgundy, the concept of vineyard had been clear even in Cavazza map red dots for best vineyards were already there. The fact that some vineyards deliver better/different grapes had been evident. But the idea was to get the grapes from the best vineyards and blend them to make the perfect Barbaresco/Barolo. It was also due to the fact that most were made by negociants buying grapes from best vineyards that are not famous - so that no premium next year. The focus had been the brand than the vineyard for negociants. 60s things changed when you make wine from your own land you want it to be a top and famous one, on a label. So putting the vineyard name on the label in a commercial way really started in the 60s in Langhe. We released 5 single vineyards in 1967, and added Nebbiolo Langhe in 1975.

What was the 70s like? It was cold rain, a lot of bad vintages - underripe grapes year after year, demand smaller than supply, tough days. Some wines always sold in bulk sometimes 50%, sometimes 30%, compared to now the last 20 years we bottle 100%, that's why Langhe Nebbiolo was born. A lot of grapes/wines are NOT suited for Barolo/Barbaresco, so a younger wine, started as a second label for Barolo/Barbaresco in 1970s. When Barolo/Barbaresco became DOCG in 1981 then Nebbiolo Langhe became DOC whereas before it was Vino de Tabla. Also those were the years when the fashion was lighter cuisine - lighter food, lighter wine, more fish than meat, so Barolo/Barbaresco went out of fashion, difficult to sell, niche market. Langhe Nebbiolo changed dramatically now its a wine of its own more and more rather than a second label. It was difficult to sell esp on export market, mostly drunk locally not even domestically. Made from second grade Nebbiolo grapes from Barolo/Barbaresco it tends to be more acidic, sour, not so ripe, kinda aggressive. It was a difficult wine, now with climate change riper grapes even from less exposed vineyards riper tannins more balanced so it became much more round and easy to vinify/appreciate in the last 20 years and the market for it is exploding - the fastest growing appellation in Piemonte. More and more on its own as fewer Barolo/Barbaresco producers are willing to downgrade Barolo/Barbaresco juice to Langhe Nebbiolo. Rather they plant Nebbiolo grapes outside the Barolo/Barbaresco appellation just to make Langhe Nebbiolo like in Dogliani/Roero, etc. BUT our Langhe Nebbiolo is STILL downgraded Barbaresco grapes. In some vintages 2015 2016 there was no technical reason to make it because every single grape was perfectly ripe perfect to be Barbaresco even from less exposed sites, which is becoming the norm gradually, which is kinda stressful because despite our desire to make more and better Barbaresco we can't simply not make Langhe Nebbiolo so its becoming an incredible steal. In Langhe you can add 15% Barbera into the blend but we don't do it and Langhe is much larger than Barbaresco so you can source from everywhere in Langhe but we don't do it either. So we are making a bit less to make more Barbaresco, theoretically we make Langhe Nebbiolo with young vineyard crops but we don't have many young vineyards so there's always some other vineyards that go into the blend.

So now the trucks bearing grapes come into the square of Barbaresco, they go onto a scale so the grapes can be measured and you pay on a sliding scale from 2 Euros to 5 Euros based on the analyses of those grapes. In the beginning 1958-1998 we only measured the sugar level - high Brix more kilo per ton, it was good enough as before global warming sugar was never enough every farmer was struggling to ripen grapes, with sugar comes color, fragrance, etc. Grapes were never overripe then. By the end of 90s things changed so since then we are implementing more precise controls for every single batch of grapes we measure sugar, color intensity (strictly connected to aromatic complexity), phenolic ripeness (ripeness of tannins), based on these numbers we decided if it's gonna be Langhe Nebbiolo or Barbaresco. If it comes Ovello and good enough it goes to Ovello, if it's lesser might be downgraded to Barbaresco. So decisions are made there at the crushing station, but for the farmers the three numbers decide what they get paid. Farmers pick at different plots with different exposures, top/bottom/etc. at different times themselves but when they come to the winery with their grapes each single lot will be checked and paid in a different way. Public document as how much was paid to each grower - good competition, the same reason for the single vineyards we write the farmer's family whose grapes were used on the back label since 1967, giving credit to the farmer making them feel being a part of something special.

Vinification style is the same: smaller stainless steel fermentation tanks of 55 hL for single vineyards, larger 100 hL tanks for the biggest single vineyard like Ovello Montestefano Pora then for Barbaresco. For Nebbiolo we still use some of the original concrete vats in built in the building, that can't be removed and we keep them active - use for fermentation when out of space/storage. Most Langhe Nebbiolo are fermented in concrete while Barbaresco and single vineyards are fermented in stainless steel with automatic temperature control. All wines spend extensive time on skins - 20-30 days, pumping over twice or three times a day depending on the vintage, for the first week or so, then submerge the cap. We keep the temperature at ~28C constant throughout fermentation and start the fermentation ASAP rather than letting grapes sit on cold skins. When necessary after harvest we warm up a bit to let the fermentation start (usually not necessary if early harvest), once fermentation is over after a few weeks 20-30 days the skins are at the bottom of the tank but still bubbling we just let it go - so we go bone dry on the skins. By the time we rack the wine off skins the wine is completely dry, has been sitting on skins for 3-4 weeks. We like to extract as much as possible - soft tannins, harsh tannins, we don't care we'd like everything as we are confident in our terrior and our Nebbiolo grape. In 90s

there was inferior complexity in the region - too tannic/harsh/tight, so ways to \*improve\* the wines. But we never felt that way - it may require a few years to open up but we'd rather keep everything in and let time soften it out than taking something out and missing something in personality. So extensive time on skin, minimal intervention/manipulation.

1984-1985 wines spent less time on skins. The 1st winemaker hired in 1984 when the idea of lighter softer wine became more fashionable so he did shorter maceration and wines came out lighter, not good reception and bad vintage 84. 85 okay but missing something. 1st winemaker left and the new winemaker still working now stepped in in 1986 back to the more traditional styles. They never used new oak or small barrels but they tried to make lighter wines which didnt work.

Crushing machine used in 80s/90s was destemming but never perfect so some stems were left. Nebbiolo has green stems tannic bitter so no good. 20 years we got a much better crushing machine and destemming is much better and we don't care for any stem. So long time on skins but no stems.

Pneumatic presses for gentle pressure for the last 30 years. Used to have vertical pressers that press the skins really hard getting a lot of press wine, not good. Now the skins coming out are still wet and if you squeeze them they still have some juice. They go to the distillery much softer - Grappa is much better and vin de press quality is better. We keep them separate most of the time, but in weak vintage Nebbiolo needs more structure so we could use the press wine to give the light wines some backbone in weak vintages, which are a thing of the past these days.

Nowadays use moslt gumba and gamba lotto but never French suppliers. Some gumba barrels made with French wood, so we have some French oak barrels too. Our wines spend extensive time in oak but all large barrels 25hL 50hL 75hL used for 20-30 years so impact is minimal. We have Slovenian and French oak as well but all made in Italy. The last 20 years we have been replacing all the old barrels: 20 years old to new in our winery. Not much oak character in our wine at all but newer barrels help to keep a clean wine too.

Riserva Speciale Barbaresco single cru: one extra year

Riserva Barbaresco single cru

Riserva: longer time not necessarily in wood

Riserva: 2-3 years, 4 years after release; Riserva Speciale: 5 years after release but cancelled by DOCG in 80s. We felt our wine needed longer aging. The big problem with Barolo/Barbaresco is that we release them too soon, our single vineyard are still released as riserva because they need at least one more year after release. Considered "gross"/impolite to put a Barolo/Barbaresco less than 10 years old on a wine list. But now you find it there not only because they are more drinkable when young but also difficult for restaurants to invest in storage

In the old days, were there multiple releases of the same wine or were they all bottled at the same time?

Usually at least a couple of bottling 12 month period apart due to the size of winery. Stored in concrete or stainless steel containers so there's not much variation between bottles. Unless bad vintage small production then only one bottling. Just logistics.

Are there people behind the scenes of PdB? Winemaker Johnny Tasties?? not very visible but has been here since 1976, responsible for the wines, hired out of wine school as new grad, focused on one grape so very knowledgeable about Nebbiolo. The winery is run by a board formed by 9 farmers elected by the other 54 once every 3 years. 1 of the 9 is selected president, with the board they make all the decisions. I meet with them and the winemakers at least once a month to decide to release a single vineyard or not, or to change price, buy new barrels, usu either my or winemaker's suggestion but decided by the board. Its a community effort.

You have 9 crus but you don't always release them. You have holdings that aren't in Barbaresco commune of Barbaresco, but in other communes but you don't single crus from those. We like our wines from the village because the company is a Barbaresco startup/village winery in the center of the village. Most historical vineyards are in the village itself but we do have holdings in Cotta Basarin, San Cristoforro. Potentially we could add another 1 or 2 single vineyards to the 9 now. We have been making 9 since 1978, started with 5 in 1967, in the 70s we made 4, 5, occasionally 9 in 78. Since then we either release 9 single vineyards or none. Adding new vineyards take good grapes away from the basic wine so it always a balance - the more single vineyard you make, the less good quality grapes left for non single vineyard wines. We thought 9 was a balance. In 2008 PdB turned 50 and I proposed to the board to add another vineyard to make it 10 to celebrate, but was rejected. 9 single vineyards made identically when tasted together is like a walk through the vineyards. Commercially its easy to sell unlike when I started in 1991 not all were easy to sell.

In Barbaresco your vineyards are laid out on two different ridges and Rabaja is where they meet. From Rabaja, you look west you will see a ridge going through the river you will see Martinenga, Asili, Faset, Pora, and Rio Sordo just south. From the same point at Rabaja if you look north, you see the other ridge, as you go north you meet Muncagota, Montestefano, Montefico, Ovello. West ridge going southeast to northwest starting from Rabaja ending in Pora has slightly softer soils less calcium - more delicate taninins, more gentle wines whereas the eastern part of the village the south to north ridge starting from Rabaja ending with Ovello has more calcium concentration more robust tannic wines: 3Ms of our wines - Montestefano, Montefico,

Muncagota are the more tannic. Rabaja is where the two characteristics meet so its the quintessential Barbaresco - not as tannic as 3Ms but is more powerful than Asili or Rio Sordo, a perfect combination of the two terriors the village of Barbaresco

When you think of the wines that tend to drink earlier - Pora or Ovello - those are from soils with less calcium? Pora definitely, Ovello is tricky because Ovello has high calcium and high clay so its a different combination. Ovello's tannins are always aggressive but very youthful and bright attractive fruit. Easy to appreciate young but Ovello normally ages long. Pora is broad and open, more approachable; Rio Sordo is silky and soft. The most approachable wines are Pora and Rio Sordo, whereas the most backward being Montefico and Montestefano. Ovello is in the middle.

Did Dimizio Cavazzo provide any ranking or notes? NO just red dots - where the best sites are most famous probably also where he and his fellow partners had their vineyards. But they didnt rank them. Another book Bardini written in 1880s they listed the most prestigious vineyards of Barolo/Barbaresco and all the single vineyards we are making now are in the list plus others. So I dont think there were very specific records. Again the idea of the best vineyards is always there but the actual work of rating them was never done until recently. And even when we started to do that with Consorzio it was too late to rate the quality. All the vineyards now are all officially mapped registered in Barolo/Barbaresco, so if I want to write Ovello on my label I do have to prove I have 2 acres to make 4000 bottles if not more. Each vineyard is a mini DOCG but the next step the rating of the vineyards it takes a lot work a long time and difficult to do in democracy. Among 9 vineyards historically famous are Rabaja, Asili but over time others like Montefico has become more famous. In fact when Cavazza started his vineyards were in Porra (not Pora), a prime site for Barbaresco. Asili and Rabaja became famous in the 60s when ?? was a wheat field. Those vineyards became famous when winemakers started making serious precise wines and estate bottles more and more then quality of certain area became obvious so very soon Asili/Rabaja became prime sites. Montefico for many years was a hidden treasure of Barbaresco because in the 70s/80s you ask about Montefico among farmers every body would tell you its a great site for Nebbiolo it was clear it was a great vineyard but for some reason it was never promoted as such perhaps because there weren't enough famous producers making wine there or just by chance it didnt get its claim to fame until more recently.

You work with 51 different families... with unique insights of differents sites in terms of soils:

In Ovello - large site - similar soils but multiple exposures we work with 12 farmers

Asili is southwest exposed but is a bowl so a full south part of Asili a bit of southwest and southeast. Rabaja and Rio Sordo are more like slopes with one single exposure but in general you have multiple exposure then you have different altitude - top/bottom of the hill. We have multiple farmers and multiple plots which allows us to source best grapes in difficult vintages. In hot vintage, perhaps the southeast side of Asili is better than the full south or bottom Rabaja is better than top Rabaja which is too hot. We can play with that to our advantage. Some holdings are small like Paje we dont have much holding there so most of the Paje grapes are going into Paje single vineyard. Asili at least 80% goes into the Asili vineyard because we don't have a lot there. But some of the other villages we have bigger holdings like Rabaja, Montestefano, Ovello so we can cherry pick the best of the best for the vineyards and the grapes going into standard Barbaresco. In a standard Barbaresco you will find grapes mostly from Rabaja, Montestefano, Muntagota, Rio Sordo and the best from those vineyards go into single vineyard bottling.

You decide to make all 9 or none when theoretically you could have perhaps a strong Asili one year or a weak Ovello when you could release a handful single vineyards: we don't do that to keep everyone happy because in the long term it creates tension among farmers. Honestly the village of Barbaresco is small so its rather rare that Asili is good Ovello is not in one year though it may happen. Our main focus is to have an outstanding standard Barbaresco. We want to make sure if we make single vineyards we are also having very good Barbaresco. If not - aka Barbaresco becomes too weak uninteresting we just give single vineyards up. So 2010 would be an example. It was a good vintage but better in Barolo than Barbaresco. Rain in Sep, one rainy per week first three weeks of Sep and a lot of sunshine between rainy days. No issue with Botrytis but the soil didnt dry out stayed a bit too wet throughout. Last rain sep 18 after which berries started to lose tension and it was too risky to wait longer as another rain would be fatal. We in a rush started picking on Sep 23 and finished by Oct 4. In Barolo it was the same rain but the skin was more resistant there in Nebbiolo (Barolo terrior gives more rough skins) so they were able to wait longer and picked much later (usually they pick a bit later) and benefited from the sunny dry conditions at the end of Sep early Oct. So 2010 Barolo are outstanding - classic vintage not big - medium body, extremely aromatic. Barbaresco is almost there but not quite so we decided to give up single vineyard to make sure standard Barbaresco are good. Sometimes we make mistakes - 2006 we made a mistake not releasing single vineyard. It was a hot short season - a lot of unripe tannins, quite aggressive, but the wine was strong the juice was intense but we felt tannins were too aggressive and wine too unbalanced so we blended to make a nicer rounder wine but maybe if we made single vineyard it would be tough to drink young but potential was there. Normally the decision is made in spring after harvest. When a vintage is terrible we do vinify the potential single vineyards separate and in the spring decide to blend or keep separate.

In 2010 it was a challenge since Barbaresco usually harvest earlier but in 2005 vintage it in turn helped because it was a rare vintage of a lot of rain in Oct (no longer any more usually dry long at the end of the season) but a week of rain coming Oct 2, we experienced the classic foggy rainy week and the grapes couldn't really dry but thanks to the accuracy of weather report we knew it coming so we started harvest on Sep 23 and the fastest harvest ever - 8 days till Sep 30, then Oct 2 rain came and stayed, when Barbaresco harvest was finished but Barolo harvest was half way through or at the beginning. So in Barolo 2005 there were more up/down quality depending if they picked before rain (unripe grapes) or after the rain (rain was a problem). Barbaresco 2005 was solid. Bright ripe intense cherry fruit good acidity medium body but showing beautifully now. Another vintage Barbaresco outperforming Barolo was 2014, which is another great vintage throughout Europe but Barbaresco did very well because a very wet first part of the season and a very dry end of the season. Aug-Sep no rain in Barbaresco. Grapes were late in ripening but we were able to wait and pick very late - harvested on Oct 12 (very late in millennium standard) finished Oct 22. Very good grapes good aromatics, medium body but very interesting. While in Barolo there were some extra rain in September but we didn't. Its one of the rare case where weather pattern is different normally the difference in Barolo/Barbaresco quality lies in harvest/ripening time. but in 2014, Barbaresco had no rain in Sep Barolo had at least 2 rainy days added to the cold rainy beginning of the season and made it light less than ideal. 2014 good for single cru to be released in 2019. 2015 PdB B released in 2017 with good reception. 2014 is very similar to 2005, a bit more aromatic/intense but that kinda vintage. We don't have bad vintages any more. In old days we have vintages that are not ripe or just ripe, now we have ripe or super ripe. Climate change changes vineyard management and vinification styles. There were times everything in the vineyards is to expose grapes to sun as much as possible now suddenly not important any more, extra leaves needed for shade. Green harvest still important but not dramatically important as in 90s because even a couple of extra grapes can ripen more easily. So we don't do extreme low yields but a balanced yield is more of the norm now. The hail nets were not really used in the past because they cast shadows on the grapes and at the expense of protection from crop loss from hails you lose Brix but now you see more of those because shading is less of a concern now.

When did you first dawn on you climate is changing? 1997 was an unusually warm ripe vintage easy to drink. 2000 was another 97 - so soft so ripe we discussed maybe release single vineyards not as riserva because they don't need much time so drinkable. 2003 super hot too hot - the last bad vintage too hot. We never reached that point any more but we have more and more super ripe vintages. In reality the overall quality of Barolo/Barbaresco is much higher now you don't have unripe tannins lean characters in the wines. Great vintages/vineyards are always great but average vineyards are of much better quality now than 30 years ago because warmer. More Nebbiolo planted now also because you can plant it due east tricky in the old days but its sometimes even better than full south. More Nebbiolo planted in Barolo/Barbaresco because more grapes can ripen and outside Barolo/Barbaresco to make Langhe Nebbiolo. So the trend is to plant more Nebbiolo...

Montefico benefitted from a change of climate towards those vintages, are there other vineyards that benefitted but not made into crus? We have a grower in area San Cristofro in Neive high elevation at least 10-12 years we have been getting phenomenal grapes there good for basic Barbaresco. Thought about releasing a San Cristofro bc concentration/color/aromatics. It wasn't a particular famous site but benefitting from warmer climate. Ovello is the northern tip of Barbaresco village, when you go even north you drop down to a valley from where you see Mount Blanc, etc. Ovello is more exposed to northern winds (mainly in the first part of the season) so its a cold/cool area - budbreak is later than Asili/Rabaja and Ovello normally is best in hot vintages because it retains more brightness and freshness in fruit. Paje is another vineyard with higher acidity and fresher fruit, does well in hot vintages. Famous vineyards Rabaja Asili may suffer when too hot because of warmer sites. In 50 years we may have to look at a different set of crus and move up in elevation... One thing is almost impossible to do in Italy is to change the border of DOCG the only exception is Prosecco... If the majority of wine producers want to change one rule, they submit to the national committee and usually its accepted if the change is to reduce time in oak, min acidity, max alcohol, type of cork, etc. but changing the border is always rejected...

Not true in Barbaresco but in Barolo some villages like Monforte only the lower part is included in the Barolo designation. The higher elevation in Monforte traditionally used for Barbera would be very good for Nebbiolo at this point.

Tanaro River's influences on Barbaresco?

TR is the reason why Barolo/Barbaresco are different: Barbaresco is open to the river on top of the hill, Barolo is surrounded by hills in the valley. Elevation are the same - 270m above sea level. For most of the Barolo vineyards you don't see the river - La Morra Novello ridges the blocks the river influences into Barolo but Barbaresco is open - more humid in growing season so grape skins are more fragile so at the end of the growing season when Barbaresco has to pick but Barolo might be able to wait. Barbaresco has warmer early spring mornings so budbreaks earlier. Midsummer days are less hot due to river breezes modulates the temperature. More foggy days in winter and fog/mist lingering on top of the hills for a few more hours in Barbaresco more so than Barolo.

Soil wise: our hills get mixed with the valley floor more than Barolo as La Morra ridge prevents that. So soil texture is the same - Calcium and clay but composition is different - Barbaresco has richer soils - more Nitrogen/Potassium things plants eat are at higher concentration in Barbaresco soils than Barolo so our wines are lighter on palate Barolo sturdier more mouth filling because Barbaresco is as tannic as Barolo, its the middle part of Barolo that's fuller. Vineyards closer to the river do feel more of the effect of river - Paje, Pora, Rio Sordo, even Asili: slightly softer tannin character because not as much calcium in soil as the richer soil. On the other side Montefico Montestefano poorer soil more compact more powerful tannins there because farther away from river.

Guidance for replanting? University of Turin in 1980s and early 1990s selected mother plants for quality to reproduce virus free clone made available to nurseries so any grower can go buy certified material/clone selected with quality minded ideas - less vigor, more color, good sugar accumulation so we are confident that new plantings are from good material. this is a golden age for Nebbiolo because vineyards planted in the last 25 years were with very good clones the old vineyards planted with mother clones are now old enough to produce good quality. never better time.

Drinking windows for different wines/vintages? 2000s, they peak between **8-12** years (you can go up to 20 years, but after 15 years it gets unpredictable depending on each vintage). earlier than past. true for both big vintages and medium body vintages - they show diff personalities but peak time. big vintages like 2011, 2015 show very young whereas medium body vintages are more restraint require more time

Different market receptions? Export market exploded in mid 80s. American market opened up and kept growing - wider and wider increase of Piemonte wines. 1st market - Swiss/German but they stayed where they were in 90s. But US, UK, Scandinavian markets grew fast. A lot has to do with the restaurant scene - PdB good for restaurants because of fair price. top wine in a simple osteria or a basic in michelin star. quality of italian restaurants in us/uk improved dramatically over time so good italian wines go together. Italian restaurant scene didnt evolve as much in Germany or Switzerland... In early 90s any Piemonte winery's top 3 market: US Switzerland Germany of any order. Now US is #1 always.

Pricing? Happened organically. Decision to focus on Barbaresco was a marketing suicide. Wine drunk not every day, second to Barolo. So a very good product at a fair price, which stuck and became a trademark. Under pressure now because wines sell fast, at least more selective of markets.