Z, R both have similar parentage, Gruner is one distinct parent, something close to Savagnin is another. As such they are sibling varieties or at least half siblings. Both are most likely indigenous to Thermen, and are found a few other places in the world. Both are bases of the greatest wines of Thermen, sometimes vinified on their own, sometimes blended together. Style-wise: sweet botrytized, dry. R means red tip, refers to the red edges around the leaves at harvest time. They are not new to the American market or the global market even though not particularly popular. Both, R in particular was put on display at the landmark world fare the -Paris?? exposition in 1855 - the special worlds fare where Nepolean III was determined to put French products including French wines in the global spotlight. This fare was recognized in the wine world as the catalyst of the genesis of the 1855 Bordeaux Classification. But if you notice a rather interesting detail about the immediate results of the fare on wine sales: in the back of the catalogue for the 1855 fare, an inoculous entry for an A Schwartzer from Vienna Austria might easily be looked over but Shwartzer's white wine won first placed at the exposition it was most likely R. And soon importers around the world were trying to get it. In New York Cozens?? General Wine Merchant, acquired some of the award winning wines in 1857 and advertised some in their June newsletter, fittingly title the Wine Press: the gold medal of the Paris exposition of 1855 was awarded to the A Shwartzer company. These pure wholesome and economical wines are on sale at larger quantities at 7 Warrens Street. Farther down, you will see Mosel wines, wines from St Julien but the feature wine at the top of the announcement was Schwartzer's white wine. The 1855 put these unique wines in the global spotlight and the design flaws at the exposition hall may have stacked the decks against the white wines on display: it was extremely hot in the hall and perhaps the mineral driven whites which may have been vinified slightly sweet may have been the good quencher in the sweaty environments. As we rediscover the Thermenregion gems our pre-prohibition ancestors in US may have enjoyed the wines far back in the 1850s.

Thermenregion - pretty central in the Austrian wine growing area, 20min drive out of Vienna. From the vineyard you can see into the city center.

In terms of topography it's like Burgundy: soft hills facing to the eastern site of Austria, our vineyards all on limestone - part of the Alps - eastern end of the Alps. Another part of the limestone comes from seashells from the former times. Limestone and bedrock, historical connection to Burgundy as well: Cistercian monks came in the 12th century to found wineries in the neighboring town and brought Burgundy grapes - Pinot Blanc. Now most known for Z & R unique to the region, not common in Austria either because esp Z is difficult to grow, yet clusters are compact and at the same time the skin of the berries are thin, both make viticulture challenging. We need a long ripening period too as they are late ripening varieties. Thus rare to be seen elsewhere even within Thermen you need to find specific spots. They are sensitive to terrior, bring low yields naturally. Commercially they don't make sense for producers in other regions where you have to fight more with pest control etc. to grow them that bring little. Late ripening, sensitive to rot: window is short, need to wait till ripen but keep an eye on rain. We have dry warm summers long growing season into Autumn and every day cooling wind from eastern end of the Alps that dries out moisture on grape vine. Rain shadow shelters from the rainy and stormy western part of Austria. R is very different: looks like a Chardonnay type of grape: not so compact itself and the skins are not so thin but you have to work carefully as well - you have to control the yields unlike Z before certain stage of ripening then you get beautiful aromatic wines of the varietal but it was not spread to other areas in Austria. Rot refers to the shoots of the vine - they are colored deep red in spring and it's similar to the synonym of Gruner Veltliner which is Weissgipfler as the shoots of Gruner are very white. Roter Veltliner etc. Most varieties whose names contain "rot" are actually white, whereas red grapes like Blaufrankisch Blauburgunder contain "blau" (blue) that stands for red wines. Our region produces  $\sim$ 150 hectares of Z and  $\sim$ 150 hectares of R - small production of this indigenous grapes. 7th generation winegrower with generations experience with these two grapes, at the same time they give really distinctive wines that people appreciate, also great for aging.

Challenges in promoting wines from Thermen: many Gruner Vetliner grown in Austria - more budge for its promotion, taking up more prominent spots in prints, digital marketplaces, etc. Also Austrian consumers tend to drink more young wines, R and Z need some time in the bottle to show their qualities. So I think today wines from R and Z are doing a bit better on international markets where we can work with sommeliers and consumers open to drink wines with some age.

Differences between three Z: we make classic styles of Z, from several vineyards around Yanin?? hill with vines of different ages ranging between 5-35 years. Classic style as in the range of Kabinett level. We have Z made from single vineyards (Ried) too - one called Egon where vine age averaged 45 years old, another Mandel-Hö (in village Traiskirchen) where vines averaged 50 years old. These two vineyards are close, similar soils: high concentration of limestone, sediments from seashells, in the Mandel-Ho vineyard the top layer of ground earth is only 15 centimeters whereas whereas Egon down the slope has topsoil 1 meter deep, which makes quite the difference in the vine and later on in the winery. Mandel-Ho higher up - 600 meters?-

thinner soils as soils are right below, same exposure. Vine age and top soils are are major differences. Egon wines open earlier, can start drinking after 2-3 years when they show fruity characters already whereas at 2-3 years wines from Mandel-Ho vineyards would be closed - more time to open up to more complexity more concentration of Egon vineyard wines. All the wines from single vineyards are treated in the same way in the winery. All whole cluster press, 2000L large neutral old (30/40-years old) wood barrels (traditional all over the region and across Austria) for fermentation. Then one racking off gross lees, keep with fine lees for 10-11 months. We use the large wood barrels, the strucutre of the wood has much wider surface compared to stainless steel so natural sedimentation is much better in these barrels. So we don't need to filter until we bottle. So only one filtration process when we bottle the wine. In between we let the wine clarify itself, rest on lees, no batonnage since high concentration from old vines from low yields, we don't feel like it (batonnage) brings addition good from the autolysis from the yeast into the wine as we don't like the oily notes. Filtering is done just with fine lees. The oak we use is from the local area - Viennase wood we source the oak for our barrels. So not filtered much and time on fine lees, probably not so common in Austria? Today I think a lot of producers to coming back to these old methods. Lots switched to stainless steel tanks but when we talked to colleagues we tend to bring in large wood barrels again and see that it does help the majority of the wine - it helps with terrior expression/character as with stainless steel you have to filter very early to clarify the wines as they don't clear them selves as well as in large wood barrels. We don't treat the juice in a very reductive way as it has become more popular over the last few years but its not so important for us as our wines don't live from these primary fruit flavors its not big oxidation happening but some oxidation is fine for us before we clarify the juice. Pressing takes a while for us during which the juice is exposed to oxygen. We don't look for malo and we don't inoculate so ~95% our white wines do not see malo but when it starts we do not interfere but every winemaker should be aware that otherwise you get off flavors. We don't interfere very much during the maturation of the wine either - of course we look after the wine and very careful with sulfur usage. Since we work with natural yeast, its always a question of how far the fermentation goes through esp with high sugar levels of harvested grapes. But Z and R always have a little bit of residual sugar - they are classified as dry but probably more than 4 g/L RS, fine for us as wines are stable, have good acidity to balance it out.

Could have bottled multiple Pradikat categories for one vineyard but only one bottling for one vineyard. Why? We only do one bottling every year for single vineyards. From one vineyard we don't do selections, some other producers in Austria do that - you will see from the same producers different selections. My ancestors did not do that and I do not want to change it. Want to get a whole picture of the vineyard and the vintage so other than sorting out moldy or rotten or unripe grapes during harvest, we do only one harvest and bring in the grapes from this vineyard - I learnt in Burgundy when we made one bottling for Montrachet and one bottling for Chevalier-Montrachet there were no differences - I think it was the same idea of expressing the characteristics of the vineyards rather than always the richest wine or sweetest wine from this vineyard. One pass only during harvest? Usually yes but when we experienced Botrytis, we made a special selection that's an exception when we get Botrytis, we make TBA and BA from these grapes but everything else for dry single vineyard wines we use only one selection of grapes.

Aging curve for Z? Klassik version of Z, Z Anninger, we usually drink within 4 years, maybe 5 years but the single vineyard wines we drink in 4-10 years even if a difficult or warm vintage not a problem but it can go much further as well. Like the very warm vintage 2000, we should drink this wine now but 1998 MandelHo we can hold back for another 10 years. Anything beyond 10 years, it depends on the vintage. Z gets more spicy characters with aging, with the rich fruit flavors - quince, ripe apple, pear, a bit tropical notes too but always this spicy notes which are like grapefruits? The acidity of Z is citric lively long aging. For R we do a classic style too from several vineyards around the Yanin hill then we produce a single vineyard Tagelsteiner R which is cf Mandel-Ho higher elevation, interesting for R as when you get later ripening R you have to be careful not to loose acidity (as it looses quickly at certain stage) as opposed to Z which retains high acidity later into ripening. With the higher elevation of the vineyard we can go into later ripening without loosing acidity, topsoils is again weathered ground earth, richer clay and limestone is more of the type of gravel rather than sedimental. R is not as delicate to work with in the cellar, skins thicker, clusters not as compact like Z but you have to control the yield as R can produce a lot of fruit - gotta control from the begining, down to 4/5/6k kg per hectare a bit lower than other varieties like Gruner. Handled exactly the same way in the winery as Z, R tends to have less acidity compared to Z so when compare two young wines, R tend to be more open from the begining, a slightly more aromatic varietal by nature and feels a bit richer and more creamy in style. There's a tradition of blending Z and R. But it comes more out of time in 1960s or 1970s when winemakers try to adjust/blend for the style sought after: balance, more RS, but if we look back hundreds years there were just field blends including other grapes than Z and R in the wines, like Riesling, Gruner, Pinot Blanc etc. Also makes a Gruner on limestone which brings more of a salty chalky minerality into the wine whereas Gruner from loess - more fertile - are rounder and softer, richer in fruit, ripe fruit characteristics, so Gruner from our area tends to be more like Chablis.

Vintages: 2006 very good, very dry summer long good autumn, grapes in perfect conditions to harvest, rich

wines good balance

2007: difficult, lots of rain, in 2006 we signed a contract for organic production so started difficult but learnt a lot, beautiful vintage but closed for a long time, just opened a few years ago, shows beautiful classic style 2008: beautiful vintage, richer classic style again

2009: difficult, lots of rain, hardly any sun, volcano outbreak in iceland that affected the whole vintage - no sun

2011 dealt with above

2012: exceptional warm vintage, dry, deep strong wines still nice balance

Even if we experience more often warm vintages, due to the qualities of Z and R we can maintain the acidity on a good level, our yields on the soil in our region are comparatively low so always a good backbone in a warm vintage

Organic viticulture? Fermentation starts easier since working organically probably most obvious effect.