

Sucking Grapes

opinions against tunnel vision

Sun 17 Jun 2007



BREWING UP FOR THE VINEYARD

Posted by walter

MICHAEL SCHMELZER OF THE CHIANTI ESTATE "MONTE BERNARDI" GIVES HIS VERY CLEAR THOUGHTS ON BIODYNAMICS TO HELP CONVERT THE CYNICS

As not a day goes by with yet more bad news about the state of our planet (and therefore about us) caused by climate change, it seems, at least in my eyes, somewhat incredible when I hear people discredit alternative approaches, when it comes to producing wine. I must confess it irritates me even more when this comes out of the mouth of the so called wine experts, the revered „MW“s or Masters of Wine.

True, there is nothing against a healthy dosis of scepticism when yet another new panace for vineyards and wines is being introduced, but biodynamics, the approach, that I heard ridiculed again some time ago, has been with us for long enough now and practiced by top quality producers such as Domaine Leflaive, Bize-Leroy, Coulee de Serrant and Chapoutier, who leave no doubt in the critic's mind that BD plays a pivotal role in the quality of their wines, that to have no more than an inkling of an idea what it actually is about, is somewhat embarrassing.

This introduction to what threatens to become a somewhat tedious discussion was fuelled recently by a MW who presented a tasting on Hungarian dry wines I had organised. One of the producer's of the wines she was discussing was "biodynamic" and the MW offered voluntarily her observation, that the approach doesn't really matter, as she could understand the organic part of the philosophy ("I am a scientist myself" I heard her say) but felt strongly that the esoteric part is nothing short of, well, nonsense. Of course she was referring to the cow horn filled with manure and its subsequent „dynamization.“ Most other attendants of that tasting agreed with her, but I felt betrayed. her audience was so unanimously on her side, solely due to the fact that a) she did not really show any true knowledge of BD and b) made a caricature out of it, just so we can all sigh in relieve that we are not the only ones who think it is a lot of nonsense only because we don't understand it. What we really need is someone who can explain the basics of BD to us, instead of sneering at it.

This person for me is Michael Schmelzer from the tiny Chianti domaine of Monte Bernardi. Michael, who studied wine making and viticulture at the University of Adelaide's prestigious Roseworthy Agricultural College, suggested to his father that as a retirement investment he should buy a tiny estate in the Panzano region in the heart of Chianti. The young enologist didn't feel like ending up in Australia's Margaret River or any other upcoming cool climate regions, as he had become an admirer of European wines and the Sangiovese grape in particular.

The estate has currently three vineyards planted with very specific and distinct soils that create 3 very different styles. The soils show a very high rock content mixture so much so that you could be forgiven for thinking you are in Chateauneuf-du-Pape. These vineyards are truly Crus that turn out an extremely modest yield of biodynamically grown grapes. which are vinified in one of the smallest cellars I have ever come across. In the cellar, where vinification tanks competes for space with a huge rock coming out of the wall, you will not only find a basket press like the ones that are being used in Champagne, but also classic German oval oak casks, which, according to Michael, complement much better the elegance of Sangiovese than the ubiquitous barrique.

Michael is passionate about BD but refuses to mention this on the labels of his wine. According to him,

nowadays BD is seen as a trend and a selling point for wines, suggesting a superior quality. As this is not always the case, Michael wants to prevent to be associated with the less scrupulous using the BD label only for marketing reasons. Michael is extremely competent in talking about BD in a fashion that is clear and understandable. It was therefore that I asked him for his help and to explain the principles of this method. He immediately agreed and devoted considerable time in writing the article below, which I hope will counteract the ignorance I meet day after day when discussing wines in a biodynamic context.

„It is easy to understand why there are a lot of skeptics when it comes to why or how biodynamics works. Often the spiritual or 'mystical' aspects are focused on by both by the producers/supports of BD and by journalists and skeptics. I started learning about biodynamics in Australia after being convinced that the best organic produce I was buying was biodynamic. I too initially was a skeptic, at least when it came to the astral/spiritual side. It has taken several years of working with biodynamics to convince me that there is an important connection to the astral and spiritual side that at very least makes one more aware of the rhythms and cycles of plants and earth which in turn makes one a more responsive, intuitive farmer. But let us put aside the astral/spiritual aspects of biodynamics for now as it doesn't readily resonate with newcomers to biodynamics. Here is my explanation of why it works from a soil biology perspective with a little intro to BD:

In 1924 Steiner presented his 'Biodynamic' lectures to farmers and landowners who had asked for his help as they saw that the introduction of chemical fertilizers, pesticides and fungicides were causing many undesirable effects to their land, crops and livestock. Steiner described practices of natural fertilization, pesticide and fungicide management that had been successfully utilized by farmers for many hundreds of years prior to the introduction of these shortcut chemical 'solutions'.

My view is that the way Steiner presented these practices and preparations is in a way that a pre-Industrial Revolution farmer would have presented to another farmer of his time, in a sort of a fable/anecdotal way that served to give significance to an essential practice or treatment without getting too technical.

I use the fundamental 500 cow horn manure prep to illustrate this point. The prep 500 is an essential soil life building preparation. This is the preparation for which cow manure is stuffed into a cow horn and buried in the earth on the autumn equinox and then harvested at the spring equinox. Why a cow horn? It is a natural, porous vessel that permits an exchange between the compost and the microorganisms of the soil without letting in too much water. The result is cow manure that has been composted by the microorganisms in the soil that is sweet-smelling, friable, and rich in humic acids, minerals and nutrients.

Why does Steiner recommend that less than 100 grams is required for one hectare in a thirty-liter solution of water (a quantity that perhaps makes 500 look like magic dust)? There is a simple explanation for this; with dynamization Steiner describes how to make a healthy aerobic-composted tea, a concentrated liquid brew that is full of positive minerals and nutrients. As with garden vegetable compost, if not managed properly the compost will go anaerobic and volatile, and all of the beneficial organisms, minerals and nutrients in the compost are destroyed, the nutrients are 'burned off' and the living organisms are killed. With a compost tea, problems arise if the quantity of compost is too high for the amount of water, because in that case the amount of dissolved oxygen in that water would be too low, leading to the negative result of a large growth in organisms that require more oxygen than what is available in the water. This would cause the tea to go anaerobic; the nutrients and minerals will all be consumed, and the positive aerobic fungi and bacteria will die due to the lack of oxygen. Higher concentrations of compost in water can be managed if dissolved oxygen levels and temperatures are monitored. This is why Steiner recommended a concentration that was effective but unlikely to create an anaerobic environment during the tea-extracting stage!

The next step is an explanation of why a compost tea such as 500 works. In the dynamization process we extract all of the positive acids, minerals, and nutrients from the compost. To put it simply, let us say that this is a 'food' sprayed onto the vineyard soils in large droplets, food in a readily available form for the lowest forms of microorganisms (fungi, bacteria and nematodes) in the soil. These microorganisms feed on the new food, then in turn their predators (arthropods, high nematodes, protozoa) feed on them, and then their higher predators eat them, and so on and so on, leading ultimately to a marked increase in soil life. This increase in soil life results in an increase in biomass (organic material excreted by all of this soil life; this leads to an increase in nutrients and minerals and healthier growth of plants), more decompaction of the soil (by earthworms), increased aeration, more rapid breakdown of heavy metals, and other benefits. The end

result is a healthy, aerated, fungal-dominated soil and plants that are better balanced in terms of vegetation and fruit production, and plants that are less prone to stress, disease, and pest pressure. Ultimately these plants will produce higher-quality fruit with elevated levels of dry extract, pigments, and flavors, and as an added bonus a longer shelf life – this may even lengthen the ageing potential of a wine!

The answers to why biodynamics works are there if one searches, I tend to simplify the above explanation for wine tastings for obvious reasons. For example, I describe the compost tea process as creating a “super-food” that we put on to the soil in a form highly available to the microorganisms in our soil, but in reality we are creating the initial beneficial population of microorganisms right in our tea, which are then sprayed out into our vineyards!”