



TASTING NOTES

The next revolution in winemaking may well involve serenading the grapes with Schubert, thanks to the pioneering techniques of vintners across the globe

ILLUSTRATION • PETER PICHLER

Modern viticulture is the culmination of 7,000 years of experimentation, and yet the winemaking avant-garde has regularly proven that the possibilities for further refining the art are far from exhausted. Whether it's Domaine Leflaive in Puligny-Montrachet abandoning pesticides and converting to biodynamic winemaking, or Château Pontet-Canet in Pauillac foregoing oak to begin maturing their bordeaux in amphorae, it seems every few years the world's most creative vintners, in their

obsession to cultivate the finest fruit and produce the most transcendent wines possible, find another way to raise the bar a little higher. Today, a handful of men and women around the world think they've done it again, by coddling their vines and wines with the sound of music.

As the founder of one of the most renowned wineries in Montalcino, Tuscany – Tenuta Caparzo – and a former *éminence grise* to such estates as Altesino and Case Basse, Giancarlo Cignozzi figures among the architects of brunello's rise to become one of the world's most sought-after wines. Yet with the emergence of industrial-scale wineries producing international-style cuvées with bordeaux grape varieties,



Cignozzi worried Montalcino's wines were losing their spirit. In 1999, he sold his majority shareholding in the Caparzo winery. "I had too many partners, too many managers, too many bottles," he recalls. "I wanted to be alone, free to dream and experiment."

In 2000, he set about creating his ideal winery, *Il Paradiso di Frassina* (alparadisodifrassina.it), settling on an abandoned, 1,000-year-old farmstead north of Montalcino, and planting four hectares of sangiovese di brunello. In his viticultural research, he came across studies by Japanese and North American scientists on the effects of sound waves on barley crops and classical music on onions that led to the same conclusion: sound, and especially music, can positively influence plant growth. "Given these stunning discoveries," he recalls, "I wondered why no one in the Western world had thought to employ sound in the cultivation of fruit, and more importantly, grapevines?" And so, Cignozzi equipped himself with speakers and began nursing his infant sangiovese vines, night and day, with a constant flow of Mozart.

"I chose Mozart because it's the most complete, the most elegant, the most mysterious music – and the most used in human music therapy," he says. "What matters in music are the frequencies. A single 300 hertz tone all day might be as effective, but I couldn't stand it. I prefer to use music, and Mozart's are the finest frequencies created in the history of humankind."

Such experiments might have turned a grower with less impressive bona fides into a laughing stock, but soon Cignozzi's Mozart vineyard became the subject of serious inquiry from University of Florence plant neurobiologists and entomologists. When the late founder of the Bose Corporation learned of the project in 2006, he made a generous research grant donation and provided dozens of all-weather Bose speakers for Cignozzi's best plot of Brunello di Montalcino.

The researchers observed surprising changes. "It turns out music can be a natural, powerful means to protect the vine," says Cignozzi. "The leaves have become more resistant, increasing in number and thickness. When fungal diseases attack, it lasts a few days and then disappears. But that's not all: insects

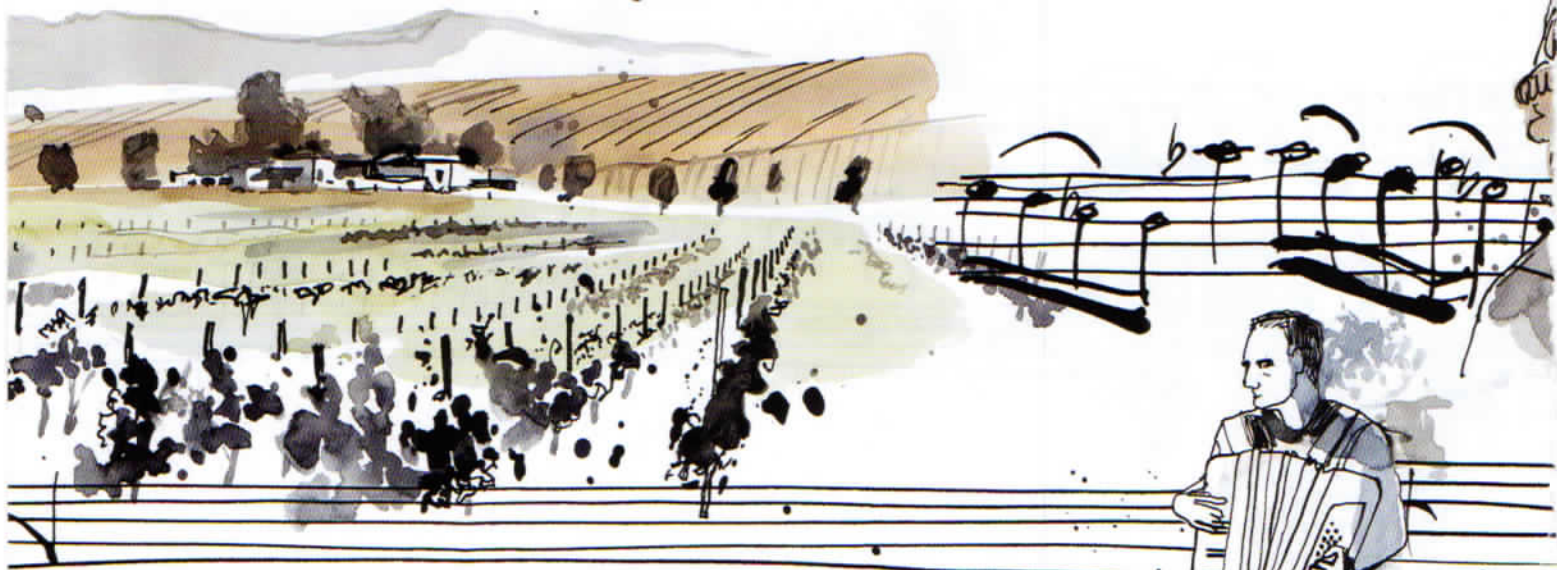
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like cicadas, which attack grapevines, flee when they meet that wall of sound, as do other predators like birds, deer and boar, which can easily destroy 20% of a harvest." As for the harvest itself: "We discovered that wherever there was music, the grapes had higher levels of anthocyanins and polyphenols [which give colour, aromas and body to the wine]."

So hardy have his grapes become, Cignozzi decided to abandon chemical treatments in the vineyard entirely, even eschewing copper sulphate "Bordeaux mixture", a natural fungicide particularly relied on by organic producers that unfortunately causes toxicity in soils when overused. "If music and sound frequencies can offer a path out of chemically intensive agriculture," he says, "that is a ground-breaking discovery indeed." The United Nations agrees. In 2011, it named the research into "phonobiology" by Giancarlo Cignozzi and the University of Florence's Stefano Mancuso one of the leading "100 initiatives that are greening the world".

Coincidentally, or not, that same year wine critic James Suckling declared Cignozzi's wine positively "decadent". "Full bodied, with a dense and beautiful palate", is how he described *Il Paradiso di Frassina's* Brunello di Montalcino. "Ripe black cherries, with flowers. Such pure fruit. Powerful tannins, yet polished and elegant. Beautiful length. This is phenomenal."

And as if this wasn't a lovely enough ode to the sangiovese grape, today Cignozzi has written an opera – *Barbatelle, ovvero Una di vino commedia* (*Vine Cuttings, or a Di-Vine Comedy*) – with the Oscar-winning composer Luis Bacalov. Premiered at Milan Expo 2015, it portrays indigenous grapes struggling against the →



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global spread of bordeaux varietals, livened, of course, by the music of Mozart.

A world away, in South Africa’s Stellenbosch wine region, another *paradiso*, named for the morning sun, is on the rise today. At **DeMorgenzon** (demorgenzon.co.za), a winery founded on the belief that a biodiverse and ecologically sensitive environment produces better grapes, wildflowers grow between the vine rows and ten per cent of the 91ha estate is set aside to restore endangered habitats of the Cape Floral Kingdom, one of the richest areas

of plant life in the world. Nestled among the Bottelary Hills, DeMorgenzon is a luxurious place to be a plant indeed: a natural amphitheatre where the vineyards are caressed 24/7 with the soothing melodies of Albinoni and Bach, Haydn and Handel.

Founded in 2003 by Wendy Appelbaum, one of Africa’s wealthiest women, and her husband Hylton, the couple spared no expense in transforming this former bulk-wine-growing facility into one of the most renowned estates in South Africa. As founder of the country’s Classic FM radio station, Hylton is an authority on classical music and research into its positive effects on life, from babies in utero to milk production in cows. He was naturally curious to see if their 55 hectares of vines responded to music as

well, and chose the eminently melodic and rhythmically complex music of the Baroque period for his experiment.

“Plants have evolved between 15 and 20 distinct senses,” he recently wrote, “including equivalents to our five: smell and taste (they sense and respond to chemicals in the air or on their bodies); sight (they react differently to various wavelengths of light as well as to shadow); touch (a vine or a root ‘knows’ when it encounters a solid object); and, it has been discovered, sound.”

Today, Carl van der Merwe, DeMorgenzon’s general manager and winemaker, admits it’s extremely difficult to assess the outcome of their experiment. “We like to believe that the music has an effect, as we have seen a more even ripening and a better development of flavours, without excessive ripeness,” he says. “From a scientific point of view, it’s really difficult to quantify exactly, because you need a control, and what’s that ... our neighbour?”

Clearly, something is working. For two years in a row now, DeMorgenzon wines have been named South Africa’s White Wine of the Year by *Platter’s Guide* (the leading resource to South African wines) – its Reserve Chardonnay in 2015 and its roussanne-dominant Maestro blend in 2014, which was also awarded an International Trophy at this year’s Decanter World Wine Awards.

If Bach can influence the quality of DeMorgenzon’s grapes, can it also be beneficial after harvest? “The music not only plays in the



vineyards, it plays in the winery, it plays in the barrels, it plays in the offices, it plays in the tasting room," says Van der Merwe. "To see the difference, we'd have to turn the music off for five years at DeMorgenzon – and I can't take that risk now!"

Whether by conviction or curiosity, an increasing number of winemakers around the globe have taken to playing music for their fermenting and maturing wines. At the pioneering **Montes Winery** (monteswines.com) in Chile's Apalta Valley, Aurelio Montes has been playing Gregorian chants in his barrel room for more than a decade. In Murcia, Spain, the bodega **Barahonda** (barahonda.com) has created a cuvée named '59h 35' 3"', of monastrell, petit verdot and cabernet played a selection of music for 59 hours, 35 minutes and three seconds after bottling. In Hochstadt, Germany, winemaker **Christian Butz** (weingut-butz.de) exposes his maturing wine to everything from Brahms to Bizet.

For the past few years, Markus Bachmann, a professional French horn player and founder of **Sonor Wines** (sonorwines.com), has been, along with several Austrian winemakers, exposing wine to music in the most direct fashion imaginable: by submerging a 1.4kg saucer-shaped loudspeaker directly into the tank or barrel with the fermenting wine must. "Not only did tasting panels notice big differences between the 'sounded' wine and the 'unsounded' one, chemical analysis showed a totally different outcome." Bachmann theorises that the music boosts yeast activity, propelled by sound

waves throughout the vessel, resulting in dryer wines with higher levels of glycerol. "The taste is richer and smoother; it makes a young wine feel aged right away," says Bachmann, who has sold more than 30,000 bottles, including the pinot blanc of winemaker Hannelore Aschauer, fermented to Mozart's *Jupiter Symphony*, and the spicy red zweigelt wine by Stefan Ott, serenaded to Strauss arias.

Is musical – or phonobiological – winemaking the next leap forward for viticulture, or will it eventually be debunked? For many of these passionate winemakers, it might not matter. "I think music will always be used at DeMorgenzon," says Van der Merwe. "We are a creative winery in that we produce premium products – we have no interest in producing millions of litres of average wine – and I am convinced that music creates a very peaceful, happy environment, which is much more conducive to people's ability to work artistically. That has to affect the style and quality of our wines, if anything." It was the 17th-century playwright William Congreve who once wrote, "Music hath charms to soothe a savage breast, to soften rocks, or bend a knotted oak." And, we might add, it makes a very nice chenin blanc. ●

JEFFREY T IVERSON

