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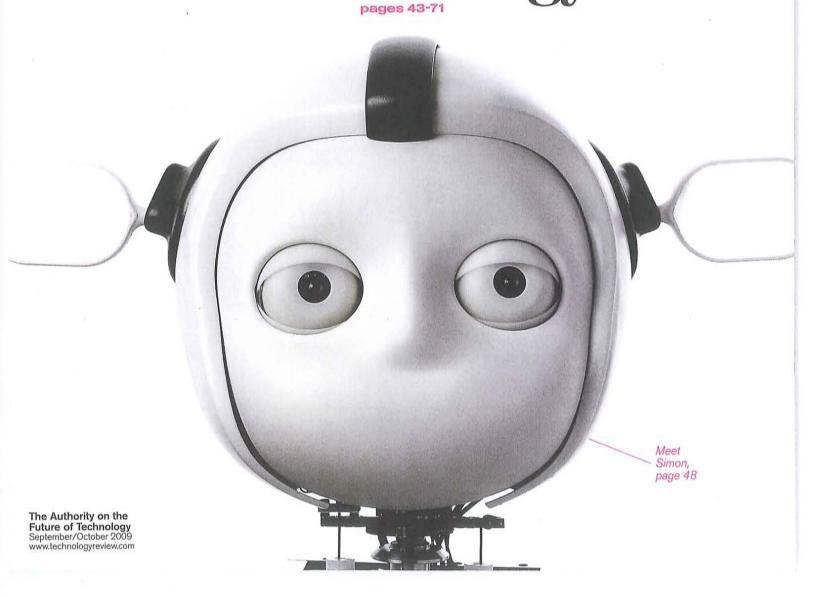
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## Review

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## REVIEWS

WINE

## In Vino Veritas

WINEMAKERS DISAPPOINTED BY ORGANIC METHODS HAVE TURNED TO BIODYNAMICS AS THE PUREST ROUTE TO WINE THAT'S TRUE TO SOIL, GRAPE, AND CLIMATE.

BENZIGER ESTATE

Sonoma Mountain 14.5% alcohol

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By CORBY KUMMER

For years the question in winemaking was how technology could make wine better. This was especially true if the wine was Californian. When California cabernet sauvignon bested the best of Bordeaux—in a legendary blind tasting, the "Judgment

of Paris," convened by the English wine merchant Steven Spurrier—it was a moment of great national pride at the time of America's Bicentennial, and it was achieved in part because

California winemakers had used technology in ways tradition-bound French winemakers would not. As California wine became respectable, Silicon Valley millionaires bought vineyards in Napa and Sonoma counties. California wine and tech soon enjoyed a happy marriage.

Two generations of winemakers came out of the University of California at Davis armed with the latest knowledge of clones, viticulture, and gas chromatography. With their chemical toolbox, they could fix any flaw—a dry year, overripe grapes left on the vine a day or two toolong, sour wine. The descendants of the original Hungarian and Italian immigrants who first planted grapes in Napa and Sonoma may have been slow to sign on to the new methods, but not the high-tech grandees

who were living the California dream by buying land and putting their names on bottles of wine. New money is always attracted to old vineyards (even if California's vineyards aren't really that old).

Like most activities the very rich are

drawn to, winemaking is highly subject to fashions. The current fashion is a practice that was far on the fringes even 10 years ago: biodynamic farming, ever so much more authentic and true

to nature than plain old organic. It's the realization of what an increasingly vocal minority of winemakers, particularly in France, began calling for in the 1980s—utterly unmanipulated wines, with no corrections, no adjustments, no filtering, and no chance to compensate for a mistake made during the growing season.

That true reflection of the air, rain, sun, and soil of a place is what's meant by terroir, the cachet-laden term being slapped on every local food these days. Biodynamic farming, says the studiedly eccentric, preternaturally persuasive California winemaker Randall Grahm, "is the royal road to terroir."

This approach sounds completely in tune with Slow Food, the movement (about which I wrote a book) that since the 1980s

has called for a return to growing and production methods dictated by nature, place, and subsistence economics. These are the methods that gave rise to the world's great artisan foods and wines in the centuries before artisan was needed to indicate "non-industrial," when organic was the default.

Biodynamic principles in fact predate organic farming, although both were reactions to the rise of nitrogen-laced fertilizers in the early 20th century. In 1924, the Austrian-born philosopher Rudolf Steiner gave a series of lectures on farming as it related to anthroposophy, the movement he founded upon Goethe's scientific works. Anthroposophy attempts to unite science, the arts, and the spiritual and invariably views the part in the context of the whole, up to and including the cosmos. It survives in applied "daughter forms" that include the Waldorf schools—and biodynamic farming.

Steiner's followers argue that Sir Albert Howard, the British botanist who pioneered organic agriculture after observing Indian farming practices, Lord Northbourne, the agronomist who coined the term organic farming in his 1940 book Look to the Land, and the publisher J. I. Rodale, who popularized it in the United States, were simply building on and codifying his ideas. As organic farming is now defined in government standards, however, the important things are what you don't do: apply chemical pesticides and fertilizers to crops and soil. But farmers can draw on a whole range of nonchemical surrogates for the chemical correctives they give up. It takes three years to gain full organic certification, as the land detoxes, and then it's relatively straightforward.



Biodynamic, though-that's really hard. Steiner, who gave his lectures on the home farm of a count who had an estate in what is now Poland, viewed farms as living, unified organisms that should be completely self-sustaining. Maintaining that standard means paying daily attention to exactly what's happening in your vineyard and your dirt. It means not buying the pest fighters and fertilizers that still get delivered every season to organic farms. It means constantly rebuilding soil for the future. It means not planting a good portion of your land at alland if you're in Sonoma or Napa, that's some of the most expensive farmland on earthand raising cows, sheep, goats, chickens, and the other animals that keep a farm thriving and independent.

A biodynamic label can differentiate a wine from the passel that are already organic. But the term hasn't quite reached the point of conferring bragging rights. Also standing in the way of status is the hippie image. Biodynamic farming involves using sprayed applications meant to encourage growth and keep pests in check, composts infused with various herbs in homeopathic quantities, and a bunch of shamanistic, ridiculous-sounding

"preparations" based on a too-literal reading of what Steiner, observing life on Central European farms, mentioned in his few writings on farming.

The Benziger Family Winery, in Glen Ellen, is a postcard-perfect biodynamic farm, and the people who run it speak with the air of calm longtime converts-unlike several winemakers I talked to on a recent visit to Sonoma and Napa, who were slightly scary. When it comes to hearing about some biodynamic practices-burying manure in a cow horn in autumn and digging it up in spring; burying oak bark in a goat's skull; using stags' bladders and cows' intestines as casings for herbs; planting and picking on "root, leaf, flower, and fruit days" shown on lunar farming calendars covered with zodiac symbols-it can be hard to tell the difference between calm and zealotry.

Glen Ellen is a relic of an era when a family of normal means could buy a beautiful piece of land and grow grapes. Mike and Mary Benziger bought the property in 1980 with the help of Mike's father, Bruno, a wine and spirits importer. Bruno and his wife moved there a year later, and other siblings followed. It was "quite mediocre" wine, Mike

INSECTARIES are natural habitats for beneficial insects that control pests. The Benziger Family Winery's main insectary is planted with more than 50 kinds of plants and flowers.

Benziger says, that made them change their farming ways: "We'd killed what would have been native yeasts"—the naturally occurring organisms long beloved of sourdough-bread bakers and now of winemakers—"through years of using herbicides, so we had to add lab yeasts." The soil was "very like dirt balls or talc," and was strangely quiet: "You just heard the wind in the vines. It was a green desert." Now, Mike says, the soil is "almost cakelike—like brownies."

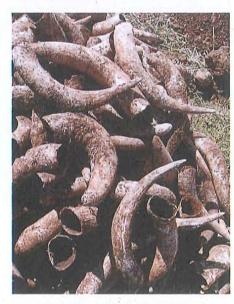
The view as Mike talks, from a hillside vineyard across to another hill, is a patchwork of zinfandel vines, lavender, rosemary, and olive trees. Demeter, the international certification program for biodynamic farming (it has branches in 43 countries), requires that 10 percent of a farm's land be uncultivated—not as much as the percentage that would have to be wild, or reserved for grazing, in a truly self-sufficient farm, but enough to scare off farmers who profit from a single crop, however much they dislike monocropping.

Although many biodynamic vineyards do not have enough cows to make all the manure they need (and are thus not the truly closed system that is the biodynamic ideal), the Benzigers' three cows are sufficient to their needs. They also raise sheep that clean fields by eating weeds, and grow vegetables that renew soil by providing cover crops-and provide beautiful purslane, lamb's-quarter lettuce, and fresh peas to be sold to Ubuntu, an organic vegetarian restaurant in downtown Napa that is the talk of the food world. And this being a postcard, the farmer who delivers those vegetables is a photogenic straw-hatted college grad married to a former cook at Chez Panisse (and who, by complete chance, tested recipes for my book on Slow Food).

The Benzigers are quick to point out that they use satellite imagery and sophisticated soil analysis and winemaking technology to verify their low-tech methods. The hightech-low-tech seesaw they boast aboutand also the high-tech money that finances low-tech methods all through Sonoma and Napa-is on equally scenic display at DaVero, a farm just outside Healdsburg, the Napafying but not completely Napafied main town of Sonoma County. DaVero is kept alive by the money its owner, Ridgely Evers, made developing QuickBooks software. Its chief product is olive oil, and it leaves much more than the required 10 percent of its land open-60 percent, Evers claims.

Evers gives at least one compelling reason for paying to be certified as biodynamic rather than organic: it's good marketing. Biodynamics can fulfill the promise that organics make but don't fulfill: as Evers succinctly summarizes it, food that's "sustainably and responsibly farmed near where you live." That, indeed, is the idea that started Slow Food in the 1980s and made it into an international movement in the '90s, and that made locavore the New Oxford American Dictionary's 2007 word of the year. And it's the promise that got buried in the years leading up to the USDA's National Organic Program (NOP), which finally set a single national standard for organic certification

after years of state-by-state definitions. "They didn't codify best practices," Evers says, in an undiplomatic summary of what many farmers think of the USDA's approach. "Lobbying organizations came in, and now the NOP is so far from what people think organic means as to be a joke."



COW HORNS are filled with manure and buried through the winter to create biodynamic preparation 500, which promotes root growth.

Many of the vineyard owners and farmers I talked to called biodynamic the new organic. And unlike early organic-farming associations, Demeter is taking no chances that the standards it's using will be watered down. It has registered a trademark in the United States on the word biodynamic itself. Now its work will be to make consumers understand the meaning of biodynamic farming and its stricter-than-organic rules.

Interest in biodynamic farming is growing, chiefly among winemakers. Disillusion with big industry's encroachment on organics and desire for a marketing edge have led Demeter's U.S. membership to triple in the past five years, according to Elizabeth Candelario, Demeter USA's marketing director.

One reason winemakers are more drawn to the biodynamic label than the organic is

that they outright reject organic winemaking methods (though not organic farming methods). "The organic law in the U.S. is not sustainable for winemaking," says Larry Stone, a legendary sommelier who is now pursuing his boyhood dream of winemaking as the general manager of the very successful Napa winery Rubicon, owned by Francis Ford Coppola. The problem, he explains, is that the standards for organic wine were written at the same time that high sulfite levels in salad bars were causing health problems. So the permitted levels of sulfites in wine-10 parts per million-are much lower than the European standard of about 50 parts per million. Good news for migraine sufferers who think sulfites are triggers. Bad news for red-wine makers: "It's almost impossible to make wines, especially red wines, that can withstand the ravages of oxidation after a year," Stone says. Thus the great disparity between the number of organic vineyards and the number of organic wines. Biodynamic standards for sulfites are in line with European ones for organic wine-which gives Demeter a big market opportunity.

But is it even possible to tell that a wine is biodynamic? In particular, does biodynamic wine taste any better?

You won't find reason to suppose so in the winemaking itself. Biodynamic certifiers dictate no loony methods for making wine, though the calendar for propitious times to make it—those leaf and fruit days—strikes many winemakers as superstitious. The winemaker's skill, or lack of it, determines the taste of any wine. And so, of course, does the quality of the vineyard.

But the argument that biodynamic farming produces better-tasting grapes is easy to make and easier to test. Chefs including Jeremy Fox, at Ubuntu, say that biodynamically grown fruits and vegetables are more likely than organic ones to taste of themselves—that elusively pure and focused flavor cooks always pursue. When Jim Fetzer, part of a family that has adopted the slogan "The Earth-Friendly Wine," converted its

160 acres to biodynamic practices to sell grapes to the Fetzer winery (now owned by a conglomerate), Benziger and others called them the most beautiful grapes they'd ever seen.

The wines Benziger makes from grapes grown in its own biodynamic vineyards are highly regarded-particularly the Benziger Estate Sonoma Mountain V.2006 Tribute, a cabernet blend the winery introduced five years ago as a "tribute" to biodynamic farming. It has a surprisingly shy nose for a wine that, as is the California custom, is a high 14.5 percent alcohol. It is delicate on the palate, too, because it includes cabernet franc, merlot, and petit verdot, and far cleaner and less oaky than the California norm. Tribute is deceptively luscious; it's so clean in the nose and light on the tongue that only after a while does the deep fruit creep up on you and make you want more, much morevery unlike the usual brassy, heavy, overripe California cab. It's not cheap (about \$80 in retail stores), but the French style will appeal even to timid merlot drinkers. Is Tribute so good because of the sympathetic family's beautiful property and admirable farming methods? Maybe. It's certainly because they know how to make wine.

Many grape growers in both valleys are sold. David Bos, a young farmer with midwestern roots and the evangelical air of the religion major he once was, extols the advantages of biodynamics; all five of the vineyards owned by Grgich Hills, the Napa winery he works for, are Demeter-certified. "People ask if it makes economic sense," he said when he took me to one, near Yountville in Napa. (Several farmers said their initial changeover to biodynamics cost them a few thousand dollars an acre over several years.) "But we've seen biodynamics heal our vineyards." Using biodynamic methods, he rescued a blighted vineyard other growers would have torn up. Now, grapes from that vineyard are part of his esteemed Yountville cab. "We've been making 300 to 400 cases a year," he says. "We sell it only through our tasting room, and it sells out at \$135 a bottle."

Vintage '70s farmers move quickly from the realm of the practical to the spiritual. Michael Sipiora, for instance, farms at Quintessa, a spectacular property on the Silverado Trail. He knows wine; he farmed the vineyards at Stag's Leap before joining the conservation-minded couple who own Quintessa, Valeria and Agustin Huneeus. The difference between organic and biodynamic, he told me, lies in "energy." He went on to talk about Steiner's levels of consciousness: the "etheric" level of plant life, the "astral" level of the animal kingdom, the cosmic and telluric levels of energy we share with animals, the "eagle" level attained by humans.

Sipiora buries crystals and "puts intent" on them. Water—"the great messenger"—is his main theme. His pride is the "flow form," a cascading fountain with double bowls on each level that spins water in opposite "vortexes," charging it with energy; he pipes that water around the property. He makes many of Steiner's preparations himself—valerian, stinging nettle, and chamomile are basic components—and what he can't grow on the property, he buys from the Josephine Porter Institute in Virginia: stag's bladder, oak bark for burying in skulls.

This kind of cultishness drives Aaron Pott crazy. Pott is a winemaker and consultant (formerly for Quintessa) who is planting his own vineyard. He studied at both UC Davis and the University of Burgundy and worked at two chateaux in Bordeaux, so he is familiar with New World and Old. He first encountered biodynamic farming in France and learned more when Quintessa expanded its biodynamic program. He calls many biodynamic preparations "ludicrous" and "medieval."

The problem, he says, is that Steiner wrote little on grapes (just half a page in his agricultural lectures), and his knowledge of farming was based on his experiences in chilly Central Europe—entirely removed from the climate of Napa and Sonoma. Many of the preparations aim to encourage ripening of grapes, whereas in California, overripening is the concern.

Pott doesn't dismiss biodynamics altogether. "The tenets I like," he says, "are those things that say-the way Steiner actually said-'Look at everything that's around you. Use preparations that work. These are things and work for me in the middle of Germany. it's naturally occurring on your fara use those techniques." Pott crushed leaves of the agave plant, whose interior stays moist in the desert, and sprayed them on vines to prevent sunburn-and "lo and behold, it worked." Why don't others adapt Steiner's philosophy to such pragmatic effect, and discard what is clearly unsuitable to their own climate? He shrugs. "Why don't Christians follow the teachings of Christ?"

In the end, it comes down to faith. Scientific studies comparing organic and conventional farms have shown that organic farms have better soil quality, according to John Reganold, a soil scientist at Washington State University. But studies comparing the soil on biodynamic and organic farms show "mixed results," he says. He has compared soil from adjacent biodynamic and organic vineyards and seen no difference; and although a chemical analysis of grapes revealed some differences, in a blind tasting of merlot wines from those vineyards, wine tasters were stumped. Still, Reganold is an advocate: "Biodynamic farmers observe and are in contact with the crop more often than conventional growers." And, of course, he likes that biodynamic farmers care so much about the soil.

If biodynamic means only that the soil the grapes were grown in will be better for generations to come, that's all right. "There's no money in winemaking, let me tell you," says Jim Fetzer, whose family stayed in property development and grape growing after selling its winery. The money is in the land. Given the undisputed benefits biodynamic farming has for the life of soil, maybe it's a good investment after all.

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