

GRAVITAS:

WHAT MIGHT BREWING LEARN FROM THE WORLD OF WINE?

The irascible *Charlie Bamforth* returns with the first instalment of a new series, with the good professor stepping outside the box to consider the relationship between beer and other long drinks. When it comes to wine, beer is well ahead on technical issues but in the realm of marketing – well, it'd be best to take notes

I was walking across campus a decade ago when I bumped into Andy, from the Department of Viticulture and Enology.

"Could you help me?" I implored.

"Sure" replied Andy. "What can I do?"

"Well" I replied "I have been asked to write an article about what the brewer can learn from the winemaker and, frankly, I can't think of anything."

It was of course trite and a tad unfair. The reality is, though, that when it comes to matters technical I think the answer really is "very little". It is the brewing industry that has long since informed wine makers (and beyond) and not the other way round. Think of stainless steel fermenters. Think of cleaning in place systems. Think of yeast handling. And much more besides.

A case in point: A little bird tells me that in one of the most prominent wine companies in the United States, 40% of their fermentations do not go to completion – i.e. they "stick". Not far short of half of them. What do they do as a consequence? Panic seems to be the immediate response, followed by blending away if they can't get things moving again.

Enter the winemaker, a person who seems to be (in many locales) winemaking's very own Gordon Ramsay. A man or woman that you do not screw with, but who dances to their own tune, subscribes wholeheartedly to their own dogma, boasts in their blending to bring bouquets in to being – and demands the fancy price tag slapped on a product whose provenance speaks to technical failure yet marketing genius.

I, of course, exaggerate. But not by much, methinks. And so I was witness to a presentation

on a major project to unravel the mysteries of sticking fermentations, and a research program that would address all the variables that (to a brewer) would be obvious and yet still contrived to omit oxygen from the list of factors worth exploring.

When it comes to matters fermentative, however, surely oenologists are somewhat slapdash? In the first instance they are all too frequently unfussy – there is nowhere near the same obsession with yeast strain or health that a brewer would insist upon. Source of nitrogen? Why DAP (diammonium phosphate) works just fine and dandy, thank you – what do you mean, the amino acid spectrum can influence flavour?

No, it is pretty much all about the grape: the cultivar, the terroir. There is absolutely no way that one could claim that this is unimportant. Of course it is. But it is surely not the be-all-and-end-all of wine quality. What it most certainly is, however, is the root of main difference between the perceived plonk and the awfully ostentatious and obscenely priced.

Celebrating raw materials

Cultivation and processing of crops, though, is perhaps the best place to start if we are to take a detached look at how winemaking may inform brewing.

And so winemakers talk about varietals, vineyard location, time of picking, and so forth. For barley (and other grist components) we just get on with it. And, in truth, I don't see that there is much to fix here – but surely there are opportunities that we are passing up?

Should we not make much more of celebrating the different barley varieties? What more might we discover about the relationship of barley variety and growth location to the flavour of malt when produced under defined steeping, germination and kilning conditions? We certainly won't see quite the differences that exist in the world of the grape – but at the very least we could do what the winemaker does very well, and that is build things up to the borders of bullshit.

As it is, we know really rather little still about the flavour of different malts. Nigel Davies at the then BRF International made sizeable inroads into developing a lexicon of flavour descriptors for malt and made a start on understanding how process variables (I recall variation in air recycling on the kiln being one) can influence perceived flavour of the malt and the ensuing beer.

But a wine guy would pontificate about the nuances of flavour of different grapes. There is no earthly reason why we could not do that with different malts and speak of those differences in the context of variety, growth location and malting conditions. And then we should boast of those differences as we discuss our beer portfolios.

Even more so, this goes for hops. Indeed, my student Bryan Donaldson has made a start in this area recently. The hurdle we run into is the died-in-the-wool intransigence of so many to think outside the box. And so when funding was sought for this work, the response was "a waste of time – everyone knows that the aroma of a





hop and the aroma of the beer made from it are not necessarily similar”.

Of course that is (though not entirely) so – but it misses the point. As presented here, we need to be much better at articulating the beauty of our raw materials. Surely we can do better than describe a wonderful hop genre such as Hallertau as being “mild and pleasant.”

We need to be able to understand and speak of the different aroma notes in hops as they are and as hops when introduced into our beers in whatever way. Is it beyond imagination to conceive of something along the lines of “the rich grapefruit/lychee/lime notes of the hop will be seen to be mellowed into subtle but unmistakable mango-meets-marigold mellowness of this unique Pilsner-style product”? Total BS, of course, but the wine guys do it to tremendous effect.

All in the presentation

But, of course, they know all about employing user-friendly descriptors. Compare and contrast the flavour wheels for wine and beer. The wine wheel still has some oddities (e.g. “methyl anthranilate” which surely should be “foxy” if you have ever been intimate with a fox) but how much more descriptive is Bell Pepper and Cherry than Grainy and Hoppy? We need to break that Grainy and that Hoppy down into terms that really mean something. And we need to get rid of that word “odour” in the middle. Odour is for armpits.

Leading on from this, of course, is the opportunity that we have for revising the way in which beers are displayed. I will repeat my

perennial plea for beer to perhaps be marketed on a varietal basis. And so in the liquor store or off licence we would have pale ales clustered according to hop variety, or marzens according to malt types and so on.

The inescapable reality is that there is a vastly greater range of beers than there are wines. Again my tease to my adoring viticulture & enology students is that you have “red, white and pink and occasionally a few bubbles.” But for beer we have much more – so that there will inevitably be more opportunities for supermarket shelving for smoky beers, wood aged beers, fruit-containing beers, even the silly alcohol-level brews.

But there again is something that we might learn from the winemakers: there is no need to do bizarre things in search of marketing point-of-

But surely there is a lot more that our industry could do to promote beer diversity? And so in places like Lodi, which are hardly of themselves spectacularly lovely, there are wine tasting rooms. Is it beyond the wit of brewers to perhaps come together and open sensible tasting facilities (I am not speaking multi-tap sports bars) in which the nuances of beer styles and flavours can be articulated? Charge an arm and a leg for a nice glass and a plate of crackers. Though, of course, we could just as easily be celebrating the far greater opportunities for food pairings that exist for beer than for wine. This is happening, but so much more could be done.

Is it beyond our ken to have a genuine me-too Wine Spectator-style magazine, where the quality of beer as a part of a holistic and fulfilling lifestyle is described on quality paper with

“...at the very least we could do what the winemaker does very well, and that is build things up to the borders of bullshit”

difference. I can't foresee the day when a winery would slip a bottle inside the body of a dead animal. Gravitax was a word Bernard Atkinson, Director-General of BRF International used to use. There are those in the brewing industry who might take it to heart.

Prettiness & presentation

Here in California there are some pretty wineries. With one notable exception, there are not so many beautiful breweries in the state.

quality penmanship that avoids words like suds and session?

And surely we can wrestle back the moral high ground when it comes to wholesomeness issues? Whichever way you look at it, beer really is the more healthful of the two beverages: it's as effective as wine in countering atherosclerosis, more effective in addressing osteoporosis and kidney stones.

That wine drinkers are seemingly healthier than beer consumers speaks to the rest of the

“I contend that winemakers and wine making is perceived as being more sophisticated, challenging and downright difficult than making beer. We need to grab back the reality”

lifestyle. No brewer will seek to alienate the six pack, burger-and-fries, ballpark aficionado – but surely messages about beer as an interesting, flavourful, diverse and healthful beverage might just appeal to those who right now would splurge on a bottle of wine?

Can we not also come up with real expensive beers for sharing (six glasses from a 750ml bottle) with stories about raw materials, intricacies of processing, the preciousness of the yeast, heck, even the vintage? And do it without gimmicks and ludicrous aspirations as to abv and

Grapes versus hops: the linguistic impoverishment of beer

Common sensual descriptors for grape and hop varieties

Varietal	Characteristic of the grape
(a) white grapes	
Chardonnay	apple, pear, peach, apricot, lemon, lime, orange, tangerine, pineapple, banana, mango, guava, kiwi, acacia, hawthorn
Gewürztraminer	rose petal, gardenia, honeysuckle, lychee, linalool, peach, mango, spice, perfume
Muscat	Terpine, coriander, peach, orange
Pinot blanc	Almond, apple
Riesling	woodruff, rose petal, violet, apple, pear, peach, apricot,
Sauvignon Blanc	grass, weeds, lemon-grass, gooseberry, bell pepper, green olive, asparagus, capsicum, grapefruit, lime, melon, mineral, “catbox”
(b) black grapes	
Cabernet Sauvignon	blackcurrant, blackberry, black cherry, bell pepper, asparagus (methoxy-pyrazine), green olive, ginger, green peppercorn, pimento
Merlot	currant, black cherry, plum, violet, rose, caramel, clove, bay leaf, green peppercorn, bell pepper, green olive
Pinot Noir	cherry, strawberry, raspberry, ripe tomato, violet, rose petal, sassafras, rosemary, cinnamon, caraway, peppermint, rhubarb, beet, oregano, green tomato, green tea, black olive
Syrah	black currant, blackberry, grass, black pepper, licorice, clove, thyme, bay leaf, sandalwood, cedar
Zinfandel	Jammy (raspberry, blackberry, boysenberry, cranberry, black cherry), briar, licorice, nettle, cinnamon, black pepper

Hop	Aroma
Bramling Cross	Distinctive strong spicy/blackcurrant
Brewers Gold	Blackcurrant, fruity, spicy
Cascade	Flowery, citrus, grapefruit
Chinook	Spicy, piney, grapefruit
Fuggle	Delicate, minty, grassy slightly floral
Hallertau	Mild and pleasant
Hersbrucker	Mild to semi-strong, pleasant and hoppy
Millenium	Mild, herbal
Saaz	Very mild with pleasant earthy hoppy notes
Styrian Golding	Delicate, slightly spicy
Tettnang	Mild and pleasant, slightly spicy
Willamette	Mild and pleasant, slightly spicy; Delicate estery/blackcurrant/herbal

From Bamforth, C. (2008) *Grape versus Grain*. Cambridge University Press

the like. Perhaps for some beers we could learn to articulate the nuances of aging?

But I contend that all this is predicated on a platform of the brewer being seen as responsible, refined and renowned in the best possible way. The equivalent to a mystique of a Rothschild, a Mondavi or a Chateau – whoever, they should be cultured far more than it seems to be today.

I contend that winemakers and wine making is (no matter how erroneously) perceived as being more sophisticated, challenging and downright difficult than making beer. We need to grab back the reality.

Outside the box thoughts

We could consider more.

What might the beer equivalent of Botrytis be? A problem for most grapes – but turned to advantage in the context of ‘noble rot’ for the production of very sweet wines like the French Sauternes? It’s hard to imagine what it might be in the world of beer, but I am open to suggestions.

What would beer’s equivalent of Beaujolais Nouveau be? I guess the fresh hop beers (no drying of hops) are one version of the winemaker’s crush, but what more can we do to celebrate seasonality?

And how about our equivalent of a sherry or port? Our ice-driven brain-blowers are several steps too far but, legislation permitting, what can be achieved for products of real pre- or post-prandial possibility?

I realise that there are some in the brewing industry who have started to think and act in some of the areas that I have highlighted. I fully appreciate, too, that the fundamental economic basis of winemaking is somewhat at variance with that in brewing. They are very different drinks and vive la difference. And I say again that the technological gulf between the two is immense – beer is best.

But we sure could learn gravitas from those guys. Wikipedia defines it as “one of the Roman virtues, along with pietas, dignitas and virtus. It may be translated variously as weight, seriousness, dignity, or importance, and connotes a certain substance or depth of personality.” Let’s always have fun in brewing and let’s shun the pompous and presumptuous. But we sure could use a bit of calm and collectedness to reach those who don’t presently buy beer. 

Next issue: beer takes on whisky

Charlie Bamforth is the Anheuser-Busch endowed professor of malting & brewing science at the University of California, Davis. PDFs of this article and previous essays by the good professor can be downloaded from our website, www.brewersguardian.com