



**June 2012**

This month's selections show off the important character of fermentation has on a beer. Many people tout a beer's quality on its malted barley or hops, but the fermentation part of the process plays an extremely important role in the character of beer. Hanssens' Oude Gueuze is one of the wild, feral granddaddies of all beers, showing off the ancient wild side of fermentation, and Mahr's Ungespündet is a lager whose fermentation flavors show the raw side of lagerbier.

*Cheers,  
Rich Higgins, Master Cicerone*

**Oude Gueuze**  
**Hanssens Artisaanaal, Dworp, Flemish Brabant, Belgium**  
**6.0% ABV \$/375 mL**

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First of all, what's in a name? Gueuze (sometimes spelled geuze) for a blend of young and old lambics; lambics, made from malted barley, unmated wheat, and aged hops, are beers that have spontaneously fermented in wooden barrels. Quite a mouthful, in more ways than one. Scholars and brewers aren't entirely sure of the origin of the names, but they hail from an old dialect of Flemish spoken in the Payottenland just to the south and west of Brussels, exactly where these beers must be brewed to apply the protected-name status. Not to be confused with the tart eastern German beer called Gose (pronounced go-zuh), for gueuze, you can try pronouncing it *heu-zuh* as the Flemish do, but you're better off in the US with the more recognizable and Gallic *geu-zuh*. (The late beer writer Michael Jackson likened its pronunciation to the English word "cursor," which came out of left field until I remembered that he would have been saying cursor with his London accent.)

Second of all, what's in a beer? (That is to say, what is beer?) Beer is a beverage that is fermented from grain sugars. When the sugars are from barley, and when the critters that ferment those barley sugars are brewers yeasts, you're probably going to end up with a beverage that tastes like what we think of when we think of beer. But if the critters that ferment those barley sugars are not typical brewers yeasts, and are a combination of whatever is floating around in the air, living in the wooden rafters of the brewery ceiling, residing in the barrels destined to hold the beer during fermentation, then the beer probably will end up tasting sour, earthy, funky, and winy. This sort of natural, spontaneous fermentation has been going on for eons, and is what has allowed humans to preserve the harvest -- basically, letting crops and foods "spoil" in tasty, not-going-to-kill you ways. When life gives you cucumbers and cabbage, make pickles, sauerkraut, and kimchi. When life gives you barley, wheat, apples, and grapes, make beer, cider, and wine.

Keep in mind that it took millennia for humans to cultivate and refine brewers yeasts. The clean, predictable beers of today owe debts of gratitude to many technological and scientific advances like microscopes and artificial refrigeration, which allowed brewers and scientists to weed out the scores of bacteria and wild yeasts that lived in symbiotic cultures in every brewery's house yeast up until a century ago. Before the age of commercially available, single-strain brewers yeasts, brewers would save and reuse the sludgy slurry that would overflow from their barrels and settle at the bottom of their vats. This slurry contained billions and billions of cells of different yeasts and bacteria, and defined house flavor and local terroir. Brewers could borrow this magical, misunderstood goop from other breweries, but there was no guarantee that it would act the same in a new place with different weather, brewing water, and opportunistic endemic microflora. When life gives you milk, the decision of whether to make yogurt, kefir, mozzarella, or Roquefort may not be up to you.

In the case of the Payottenland, in what is now the nation of Belgium, what started as preserving the grain harvest has, over the years, developed into the fine art of fermenting and blending lambics. These beers, neither ales nor lagers, showcase a wealth of acidity, earth, fruit, and wine. These flavors in a lambic come from the interplay of yeasts and bacteria during the complex, long fermentation. Among the cast of characters are *Saccharomyces* yeasts which create



alcohols and fruity esters, Lactobacillus and Pediococcus bacteria that produce lactic acid and fruity, earthy flavors, and Brettanomyces yeasts that clean up all the residual sugar to create acids, and leathery, tropical, dusty, barnyardy flavors. The fermentation has several phases, all of which begin with a microorganism or two "waking up" in beery environment that is perfect for them, and ends when those organisms have metabolized all the various sugars, acids, and other nutrients that are available to them, in so creating an environment that is no longer so appealing to them, but which is very appealing to another yeast or bacterium. Inside the oak barrels of a lambic cellar, one yeast's trash is another's treasure, and the barrels lie in wait among the cobwebs and rustic equipment for as much as three years, developing a sourness, earthiness, and funky-barnyardy-ness that can be elegant or that can be overpowering.

With all this wildness and hands-off fermentation, it's up to the lambic blender to blend the older lambics in the right proportions to ensure their palatability and elegance. With an eye toward softening the aged lambics' acidity, funk, and dryness, fruits are often added, and other times the old lambic is blended with softer, less tart, less barnyardy, younger lambics to create gueuze. The blending is an art and a hugely important part of producing a beer that is elegant, refined, and ethereally rustic all at once. Indeed, some lambic producers do not brew at all, but rather purchase other brewers' lambic in various stages of fermentation in order to age it and blend it themselves. Hanssens is one of these blending houses; during World War I, the German army seized their brewing equipment to melt it down for munitions, and Hanssens never replaced it. They've been aging and blending local breweries' lambics as their own ever since.

Gueuze was once the people's drink, but today in the US it's more of a special occasion beer (with a price tag to boot); feel free to pour the beer into a simple water glass, as the lambic brewers do, or use a more refined wine glass which will focus the bouquet. Hanssens' Oude Gueuze's golden color suggests a malty, honeyish body, but in reality the malt palate is crisp, clean, and simple. The nose is lemon, pineapple, wool, washed rind cheese, and white wine, with the lurking petrol and solventy notes of a Scotch whisky. On the palate, the beer shows off a bright sourness at the front, but the sourness does not overpower, and soon other flavors of lime, rhubarb, barnyard, and wet leaves show up. A faint, savory bitterness from aged hops reins in some of the fruitiness, and the carbonation offers some steely, mineral structure. The beer finishes with no residual sugar, but with a lactic softness all the same. Enjoy this beer as an aperitif, as you would Champagne or Campari, or pair it with shellfish, salads, and cheeses. It's amazing with mussels, scallops, and shrimp in all manners of preparation. It's also wonderful with a green salad with strawberries and parmesan. Or keep it simple with just a chunk of really stinky Red Hawk cheese.

### **Ungespündet**

**Mahr's Bräu, Bamberg, Bavaria, Germany**

**5.2% ABV \$/500 mL**

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Wild, sour beers are great, but they are expensive to make because they take so long to mature. Barrel tasting them can be disappointing, since it takes years for all the various yeasts and bacteria to add the necessary balance of flavors and to consume off-flavors. Over the centuries, drinkers grew to prize consistency of flavor, and brewers prized faster fermentations that allowed them to bring their beer to market sooner. Brewers were unwitting participants in economic and biological Darwinism, selling more of (and thus rebrewing) beers fermented by cleaner-tasting yeasts that were less reliant on mixed, symbiotic cultures. Furthermore, sanitation efforts in the brewery rewarded brewers with purer strains of yeast and more consistent beer flavor.

As the evolution process continued through the seventeenth century and later, German beers were prized for their clean flavors, and Bavarian brewers found that the beers they aged in the cold caves of Alpine foothills were the cleanest-tasting. Without an abundance of acids, esters, phenols, and other organic flavor compounds produced during fermentation, a beer will taste more simply of the grains and hops that it was brewed with. The fewer flavor compounds a beer



has, the “cleaner tasting” it is. Ale yeasts often produce those complex flavors, but the yeasts that branched off from ale yeasts -- the ones that ferment well at those cold, cave temperatures -- don’t produce much flavor and they leave the beers just a tad drier than ale yeasts do. By the end of the nineteenth century, the flavorful ale yeasts and these colder-fermenting, neutral yeasts had diverged so much that they were determined to be different species. Thus, in 1883 at a laboratory at the Carlsberg brewery, lager yeast was officially named and described.

Since then, lager yeast and the clean-tasting beers it produces have pretty much taken over the brewing world (Budweiser, Miller, Coors, Stella Artois, Corona, Heineken, Sapporo, Tsing Tao, Singha, to name a few). But what makes many of the world’s best-selling beers relatively lifeless and characterless is not the lager yeast that ferments them, but, rather, the small amounts of barley malt and hops that they’re brewed with. Moreover, these beers are filtered to within an inch of their lives in the name of “shelf stability” -- making the beers unspoilable as they sit on warehouse floors and store shelves around the world. To make the beers change as little from the day they leave the brewery to the day they’re consumed, the beers are drastically changed between the day they leave the brewery and the day before. To polish them up and put them in kegs, cans, and bottles, they’re filtered to remove all the yeast, proteins, and flavor compounds that are in natural, real beer.

All this emphasis on clean-tasting, crystal-clear lagers misses the point, if you ask me. Lager yeast may offer a beer fewer flavors that most ale yeast does, but it’s not devoid of character, and to brew a beer with the aim of ignoring its yeasty, fermented transformation is a shame. A privilege of being a brewer is being able to drink fresh beer straight from the tanks. What German lager brewers enjoy in the cellars is unfiltered, alive, and full of flavor; it’s called *kellerbier* (cellar beer) or *zwicklbier* (sample valve beer). Kellerbier is still sold at breweries across Germany, where it’s sometimes called *ungespündet* (pronounced “oon-guh-SHPOON-det”), which is German for “un-bunged,” as if it is raw beer from a just-filled wooden keg. Nowadays, most beer is filtered and packaged in stainless steel, glass, or aluminum, but, traditionally, after the fermentation tanks, the next step for that beer was akin to beer finishing school: young, unfinished beer was put into wooden kegs, the bung was hammered in, and the beer was stored for a month or two, becoming fully carbonated and allowing the yeast to settle out of the beer. Drinking ungespündet is a tasty, sneak peek at the beer before it’s finished.

A handful of German breweries sell bottled kellerbier and ungespündet, including Bamberg’s Mahr’s Bräu. Ungespündet is all about primacy, so, unfortunately, sending it out into the marketplace in bottles can allow the beer to go past its prime. Sipping Mahr’s Ungespündet while sitting at a picnic table on the brewery’s patio is a sublime experience, but sipping a bottle of it in San Francisco is still a pretty amazing opportunity. This beer has traveled well and still shows off much of the spicy, phenolic side of Mahr’s lager yeast. It’s a reminder of how important the fermentation and yeast character can be in a lager, which most industrial lager breweries normally ignore.

Before pouring your Mahr’s Ungespündet, turn the bottle upside down and rotate it to stir all the yeast into suspension. Pour it as you would pour a bottle of hefeweizen -- pouring two-thirds of the beer into a tall glass, then stopping to swirl the remaining beer around in the bottle to rouse any last yeast before pouring it all into the glass. The aromas of this hazy orange beer are bready, yeasty, and softly spicy, offering hints of sulfur, pepper, clove, and nutty Emmental cheese. The beer tastes both complex and straightforward all at once. Its round, soft, almost milky body paints the flavors across the palate. The beer wastes most of its carbonation in building up a big, fluffy head of foam during the pour, leaving just a prickle of carbonation as you drink it. That carbonation, and the mouth-coating yeast, make the flavors of bread and spice linger. Flavors of toasty, caramelly malts and brown bread are laced with hints of green tea, chamomile, ginger, vanilla, and maple. The beer finishes with a goodbye kiss of herby, bitter hops (keep it out of the sunlight to keep the hops from skunking). Try pairing it with bready, salty, cheesy foods -- the meltier the better. It’d be heaven with a sausage pizza, or try it with grilled cheese sandwich on wheat bread (and maybe tuck in some sauteed onions and fennel, too).