



On April 13, 2000, the Dutch-based Heineken group, the owner of the Adelshoffen brewery in Schiltigheim, near Strasbourg, announced that the plant was to close with the loss of 101 jobs. Employees organized a sit-in and threatened to blow up canisters of gas. **On July 24, the striking workers spilled 21,000 liters (over 178 bbl) of beer in the main street in Schiltigheim.** Talks convened the following day. Heineken offered FRF 88 million for redundancy compensation packages, ranging from FRF 75,000 for those transferred elsewhere in the company to FRF 330,000 for those to whom no firm offer of employment was made. The plant closed on September 1, 2000 as planned.

Source: <http://www.eurofound.europa.eu/observatories/eurwork/articles/social-terrorism-breaks-out-in-closure-disputes>



Beer Styles: *Bière de Garde*

BJCP Category 24C

presented by Doug Brown
Society of Barley Engineers
May 3, 2017



French Beer: My Qualifications

- **Not** French
 - American (U.S.A.!), born and raised in Carolinas
 - no known French ancestry
- **Never** been to France
 - or Montreal, or any other “Francey place”
 - I have visited New Orleans, though
- **Cannot** speak French
 - very poor at pronouncing French, too
- Born on **Bastille Day** (July 14)

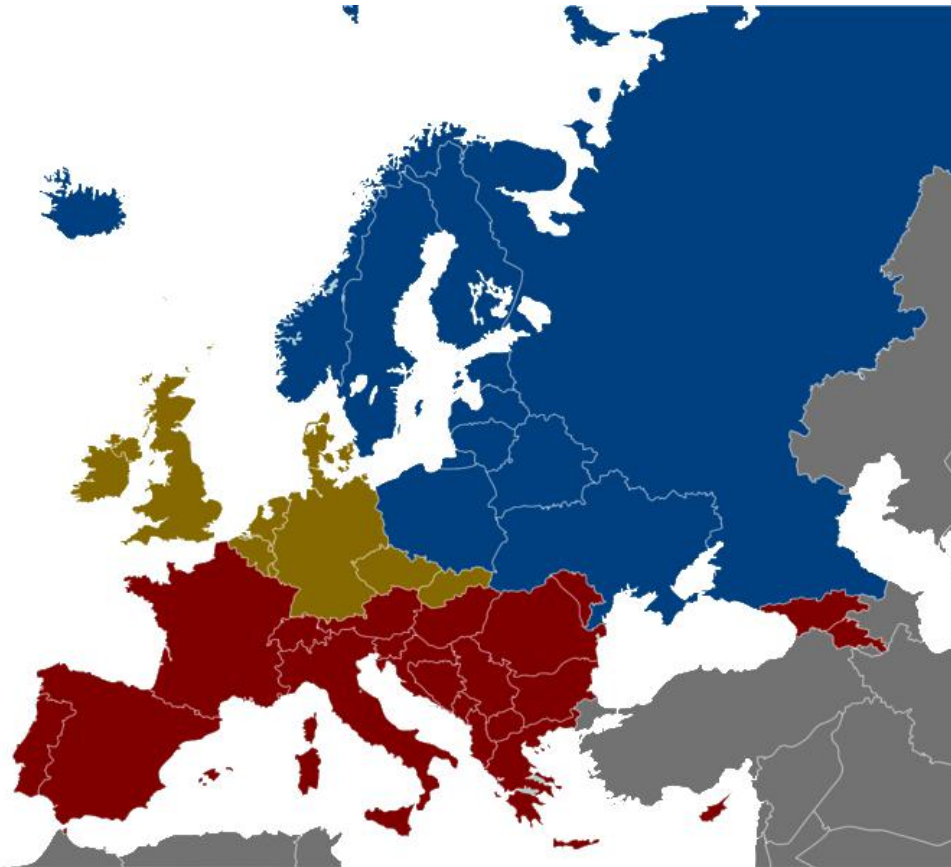
Bière de Garde in a Nutshell

- **Malt**-focused
 - upfront malt sweetness
 - balanced with paradoxical dryness
- Restrained use of **hops**
 - just enough bitterness to support the malt
 - optional late hopping is gentle (spicy, herbal)
- Minimal **yeast**-derived aromatics and flavors
- Beer to be stored ("**de garde**")
 - on the strong side (6.0 – 8.5% ABV)
 - smooth character all-around

French Brewing Tradition



Alcohol Belts of Europe



Source: http://en.wikipedia.org/wiki/Alcohol_belts_of_Europe

Traditional Beer Regions of France



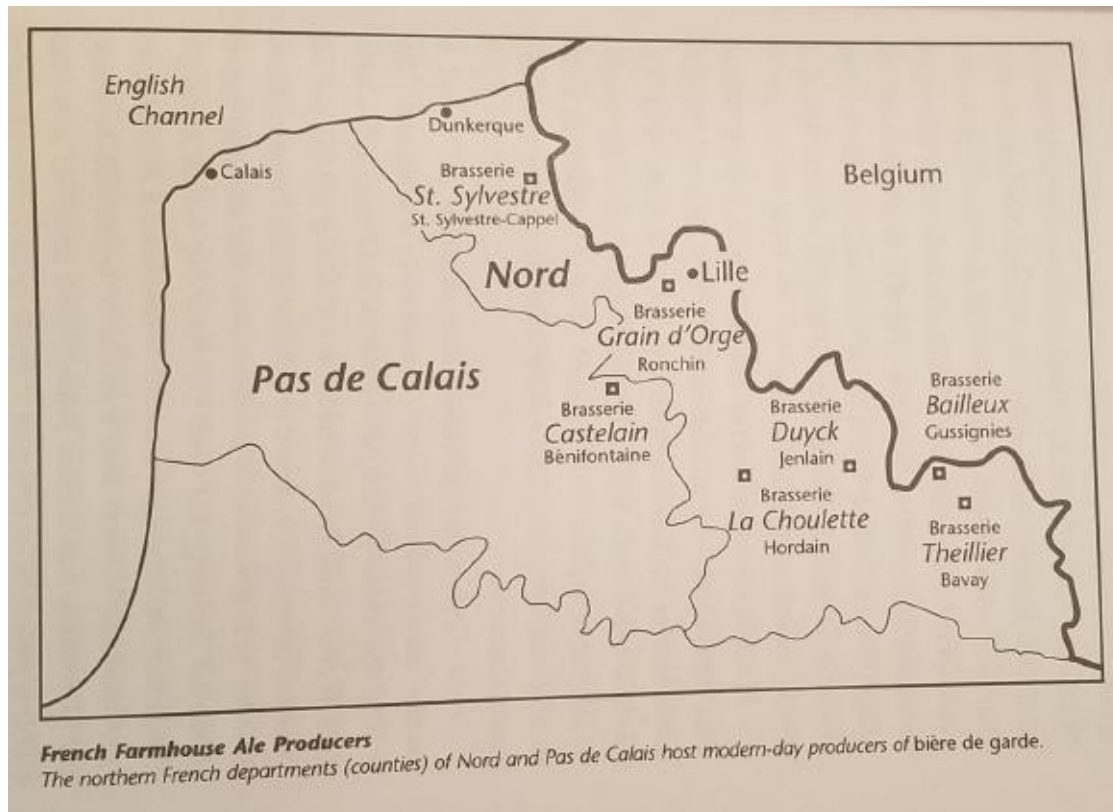
Per capita beer consumption (in liters)



Percentage of population having beer weekly



French Farmhouse Brewing



Source: Phil Markoswki, *Farmhouse Ales: Culture and Craftsmanship in the Belgian Tradition*, p. 45 (Brewers Publications, 2004).

Farmhouse Brewing

- provisional beers
 - relatively weak
 - intent was invigorating, quenching brews
- constrained by seasonal weather
 - *Bière de Mars (Printemps)*
 - Spring conditioning produced more stable beer
- beers for other seasons required storage
 - Belgian: drier, more hoppy versions
 - French: stronger, sweeter versions

French Brewing History

- French rustic farmhouse brewing
 - Alsace-Lorraine: top-fermented versions of blondes, *bières de mars* (*Märzens*), and bocks
 - Nord: top-fermented *brunes* and *blanches*, à la Flanders and Hainault
- original “*bières de garde*” combined these regional proclivities (“double” or stronger versions of basic beers)
- 1871: Germany annexes Alsace-Lorraine (Franco-Prussian war)
 - 1876: Louis Pasteur publishes *Études sur la Bière*
 - French government seeks to shore up Nord breweries
- by 1900, France had 2,300 breweries, but then:
 - World War I (1914-1918); World War II (1939-1945)
 - onslaught of pale industrial lager (e.g., Kronenbourg)
 - reduced interest in things rustic and “natural”

Source: Randy Mosher, *Tasting Beer: An Insider's Guide to the World's Greatest Drink*, pp. 19, 206 (Storey Publishing, 2009).

Modern *Bière de Garde*

- Brasserie Duyck (Jenlain, France)
 - farmhouse brewery, founded 1922 (Félix Duyck)
 - bottled *bière de garde* (c. 1945)
 - 1968: renamed **Jenlain Bière de Garde**
 - late 1970's: acquires cult status among students in Lille
 - 2002: 65,000 barrel production (65% was *Jenlain*)
- Early 1980's: revival of French **specialty brewing**
 - Brasserie La Coulette
 - Brasserie Thellier
 - Brasserie Castelain (Ch'Ti)
 - Brasserie St. Sylvestre
- Modern *bière de garde* can vary tremendously

Sources: Phil Markoswki, *Farmhouse Ales: Culture and Craftsmanship in the Belgian Tradition*, pp. 52-54 (Brewers Publications, 2004); *The Oxford Companion to Beer*, pp. 126-127 (Oxford University Press, 2012).



A Note on French “Style”

- The French are certainly very stylish...
 - but don't approach beer “styles” as we do.
- Beer Style Philosophies:
 - American: use style as a **yardstick**
 - British: **hedonistic** approach
 - French & Belgian: **hybrid** approach
 - style is associated with a region or brewery
 - brewers put a spin on these benchmarks to make them their own (focus is on artistry)

Drinking *Bière de Garde*



Tasting: Castelain Blond (Ch'Ti)



“The nose . . . Says bière de garde—earthy hops, fennel, licorice, hay, lavender, and herbs. . . . Light bitterness and pinpoint carbonation open onto a clean, dryish, full-bodied malt palate showing a subtle and complex swirl of earthy, herbal flavors. The finish is long and shows some sweetness until the hops sign off with a snap. A beautiful piece of work.”

Source: Garrett Oliver, *The Brewmaster's Table*, p. 230 (HarperCollins, 2005).

Tasting: Gavroche

“A distinct toasty malt aroma and flavor with licorice notes in the background. A noticeable alcohol presence that finishes with a nutty, toasty malt dryness.”

Malts: 80% Munich, 20% Pilsner

Adjunct: sucrose + brown sugar, 20%

Hops: German (24 IBU)

Yeast: ale strain, 67-69° F

Garding: 4-5 weeks @ 28° F



Bière de Garde by the Numbers

	IBU's	SRM	OG	FG	ABV
<i>BJCP 2015</i>	18-28	6-19	1.060 – 1.080	1.008 – 1.016	6.0-8.5%
Castelain (Ch'Ti) Blond	24	12	1.061	1.010	6.4%
St. Sylvestre Gavroche	20		1.072	1.009	8.5%
Lost Abbey Avant Garde	24	12	1.061	1.008	7.0%
Oui Frère (Homebrew)	20	14	1.074	1.014	7.9%

Bière de Garde: Overall Impression

A fairly strong, malt-accentuated, lagered artisanal beer with a range of malt flavors appropriate for the color. All are malty yet dry, with clean flavors and a smooth character.

- fairly strong (6.0 to 8.5% ABV)
- malt-accentuated
 - yet with a dry finish
- lagered
 - smooth character

Bière de Garde: Appearance

Three main variations exist (blond, amber and brown), so color can range from **golden-blonde** to **reddish-bronze** to **chestnut brown**. Clarity is brilliant to fair, although haze is not unexpected in this type of often unfiltered beer. Well-formed head, generally white to off-white (varies by beer color), average persistence.

- A note on clarity:
 - “*Bières de garde* are generally filtered and most are counter-pressure filled, giving them a bright, clear appearance. Bottle conditioning has become the exception to the rule.”

Bière de Garde: Aroma

Prominent malty sweetness, often with a complex, light to moderate intensity toasty-bready-rich malt character. **Low to moderate esters**. **Little to no hop** aroma (may be a bit spicy, peppery, or herbal). Paler versions will still be malty but will lack richer, deeper aromatics and may have a bit more hops. **Generally quite clean**, although stronger versions may have a light, spicy alcohol note as it warms.

- Per Phil Markowski, *Farmhouse Ales*, p. 46
 - fruity esters are “generally minimal”
 - occasional “faint” hop, generally with “herbal and anise” notes
- Per Garrett Oliver, *The Brewmaster’s Table*, p. 227:
 - “The distinctive yeast shows itself in the aromatics, which are herbal and spicy, with an almost musty underpinning of damp earth, anise, and wood.”

Bière de Garde: Flavor

Medium to high malt flavor often with a toasty-rich, biscuity, toffee-like or light caramel-sweet character. Malt flavors and complexity tend to increase with beer color. **Low to moderate esters and alcohol** flavors. **Medium-low hop bitterness** provides some support, but the **balance is always tilted toward the malt**. Darker versions will have more of an initial malty-sweet impression than paler versions, but all should be malty in the palate and finish. The malt flavor lasts into the finish, which is **medium-dry to dry**, never cloying. **Low to no hop** flavor (spicy, peppery or herbal), although paler versions can have slightly higher levels of herbal or spicy hop flavor (which can also come from the yeast). **Smooth, well-lagered character**, even if made with ale yeast. **Aftertaste of malt** (character appropriate for the color) with some dryness and light alcohol.

Bière de Garde: Mouthfeel

Medium to medium-light (lean) body, often with a smooth, creamy-silky character. **Moderate to high carbonation.** Moderate alcohol warming, but **should be very smooth** and never hot.

- body usually described as “medium to lean”
 - varies by grist, mash temp, adjunct use, and yeast performance
 - typically higher than equivalent OG bock or doppelbock
- alcohol strength has increased in recent decades
 - elevated alcohol (and darker color) indicates specialty status

Bière de Garde: Related Styles

- vs. Saison(Cat. 25B)
 - rounder
 - richer
 - malt-focused:
 - malt aroma: “prominent malty sweetness” vs. “slightly grainy and low in intensity”
 - malt-flavor: “medium to high malt flavor” vs. “low to medium soft malt”
 - lacks spicy, bitter character of Saison
 - “medium-low hop bitterness provides some support” vs. “moderate to high” bitterness

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A Note on “Cellar Character”

- BJCP 2008: Commercial versions will often have a musty, woody, cellar-like character that is difficult to achieve in homebrew.
- BJCP 2015: The “cellar” character commonly described in literature is more of a feature of mishandled commercial exports than fresh, authentic products. The somewhat moldy character comes from the cords and/or oxidation in commercial versions, and is incorrectly identified as “musty” or “cellar-like.”

Tasting: Avant Garde

TASTING NOTES:

AROMA: An enticing blend of ripened orchard fresh fruit (green apples), and warm bread pulled just from the oven.

TASTE: The beer starts off with an initial malt sweetness that fades into a firm but subtle hop presence. The lager yeast and cold maturation ensure a crisp smooth finish.

STYLE REFERENCE:

Bière de Garde

PAIR WITH:

We feel this is an ideal match for a wide range of foods. We developed Avant Garde to pair with rustic cheeses and warm loaves of bread. It also is a match for most chicken and fish pairings as well.



Brewing *Bière de Garde*





French Brewing Ingredients

- **Malt** (typically French 2-row barley varieties)
 - exhibits toasty, husky character
- **Adjunct**
 - small to moderate amount (5-10%), usually sugar
- **Hops**
 - typically grown in Alsace, near Hallertauer
 - most common: Strisselspalt, Brewers Gold, Nugget
 - German hops also widely used
- **Water**
 - naturally alkaline due to chalk, calcium carbonate
- **Yeast** (neutral strains)
 - ale yeast or lager yeast used
 - French ale yeasts seem to share a common ancestry



French Brewing Process

- **Water treatment**
 - lactic acid used to reduce alkalinity
 - calcium chloride recommended for calcium additions
- **Mash**
 - intended to maximize fermentability
 - step-mash often performed out of tradition
- **Boil**
 - extended time, elevated temp may be used for flavor
- **Fermentation**
 - restrained fruitiness, higher-than-typical attenuation
 - ale yeast at cool temps, lager yeast at elevated temps
- **Conditioning** (i.e., “garding”)
 - long, cold aging is considered essential by most
 - 4 to 8 weeks at 32° F (as with altbier and kölsch)

Approach #1 (Large Brewery)

- **Vital Statistics**
 - OG: 1.064
- **Grist**
 - Pilsener Malt: 99.4%
 - Kiln Black Malt: 0.6%
 - (optional up to 5% brown sugar)
- **Hops**
 - bittering: 18-20 IBU, Brewers Gold or Fuggle
 - late hop: 7 g per 5 gal., Strisselspalt or Hallertauer, 20-30 mins.
- **Yeast and Fermentation**
 - Lager strain (German lager, Old Bavarian, SF Lager)
 - ferment at 58-62° F
- **Process**
 - extended (2-3 hour) boil
 - cellar for 3-4 weeks @ 32-35° F
 - suitable for long-term (6+ month) storage

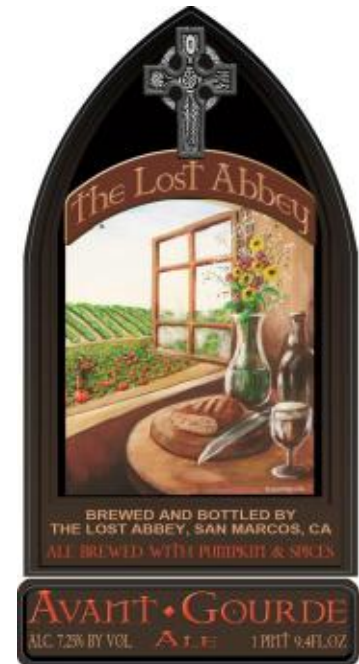
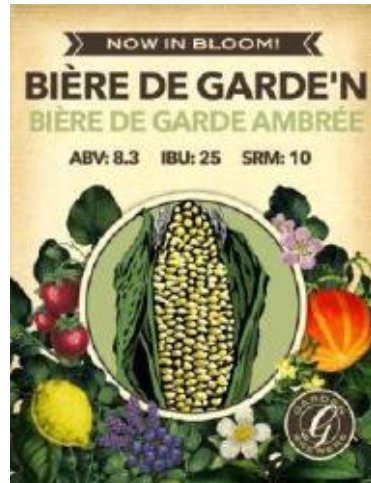
Approach #2 (Craft Brewery)

- **Vital Statistics**
 - OG: 1.072
- **Grist**
 - Pilsener Malt: 75.0%
 - Munich: 15.0%
 - Special Aromatic: 5.0%
 - Amber/Biscuit: 1.2%
 - Caramel Vienna: 3.5%
 - Kiln Black Malt: 0.3%
 - (optional up to 8% white sugar)
- **Hops**
 - bittering: 20-22 IBU, Brewers Gold or Fuggle
 - late hop: 9 g per 5 gal., Strisselspalt or Hallertauer, 20-30 mins.
- **Yeast and Fermentation**
 - Ale strain (German Ale II, German Ale/Kölsch, European Ale)
 - ferment at 66-68° F
- **Process**
 - cellar for 3-4 weeks @ 32-35° F

Approach #3 (Homebrew)

- **Vital Statistics:**
 - OG: 1.075, FG: 1.010, ABV: 8.6%
 - IBU: 26, SRM: 9
- **Grist**
 - Continental Pilsner Malt (2.3 L): 68.6%
 - Munich (9 L): 17.2%
 - Cane Sugar: 7.8%
 - CaraVienna (20L): 5.9%
 - Black Patent (525 L): 0.5%
- **Hops**
 - Fuggle (5% AA), 60 mins, ~26 IBU
- **Yeast and Fermentation**
 - White Labs (WLP011) or Wyeast (1338) European Ale
 - pitch at 66° F, raising 1° F per day to 70° once fermentation starts
- **Process**
 - 90-minute infusion mash @ 147° F
 - 60-minute boil
 - carbonate to 2.5 – 3 volumes
 - cellar for at least 3 months

Naming Your Bière de Garde



A new world of puns to explore!

Tasting: Oui Frère (Homebrew)

- Brewed May 28, 2016
- 100% Malt
- White Labs French Ale Yeast @ 67° F



- 2017 LA Belgian Brew Challenge, **Best of Show Runner-Up**
- 2017 Thousand Oaks Romancing the Beer, **Belgian Best of Show Runner-Up***
- 2016 LA Belgian Beer Challenge, **Best of Show Runner-Up**
- 2016 Thousand Oaks Romancing the Beer, **Belgian Best of Show Runner-Up**
- 2015 Thousand Oaks Romancing the Beer, **Belgian Best of Show**



Thank You!

Please spread the good word about *bière française*.