The Global Invention of Lager Beer

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The Taproom

The Taproom is a monthly series that explores the rich history of all things beer. It is curated by **Pavla Šimková**.

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"Around the World in 80 Beers." It's an arresting image of the globalization of beer. This map on the PureTravel website depicts each country according to its bestselling or iconic national brand: from Budweiser in the United States and Corona in Mexico, to Tsingtao in China and Oettinger in Germany. What is so striking about the image is that, with the sole exception of Ireland's Guinness Stout, every label represents a single style: light, crisp, clear, Pilsner lager. The global spread of lager beer can be told as a story of Western cultural imperialism: A European product sails out in the hands of merchants, migrants, and imperialists to upend social patterns and transform landscapes around the world. But modern lager beer is just as much a product of globalization, invented and reinvented in locations around the world.

The story begins in Europe, when the British first employed steam-powered industrial brewing to make porter in the eighteenth century. By the nineteenth century, their strongly hopped India pale ales (IPAs) were not only shipped to the colonies but also marketed globally. In the 1830s, Munich brewer Gabriel Sedlmayr used this industrial technology to brew dark local malts with the unique Bavarian bottom-fermenting lager yeast. This yeast worked at lower temperatures and the resulting beer was therefore less likely to be contaminated by wild yeast or bacteria than top-fermented ales brewed elsewhere. Word of this hardy beer spread beyond Bavaria and caught the attention of the burghers of Pilsen, Bohemia. They invited a Bavarian brewmaster, Josef Groll, to craft a lager beer from the aromatic hops of Saaz and the palest of golden malts and, in 1842, the Pilsner style was born. Finally, in the 1880s, Danish brewing scientist Carl Emil Hansen, working at the Carlsberg brewing laboratory in Copenhagen, isolated pure yeast strains to minimize the risk of contamination in lager brewing.

But it was not just in Europe that the history of lager beer unfolded. Central European migrants were instrumental in introducing lager beer to North America in the nineteenth century. From giant factories in Milwaukee and St. Louis, Frederick Miller, Eberhard Anheuser, and Adolphus Busch shipped vast quantities of lager beer across the continent in refrigerated railroad cars. Land conquered from indigenous peoples was planted in barley, hops, and other grains for satisfying this new continental thirst for beer. Because of the distinctive market conditions of cheap grain and expensive labor, these brewers mechanized production still further and introduced new varieties of grain, especially maize and rice. These brewing adjuncts were not only cheaper than barley, they also proved ideal for creating light, clear lagers that held their stability at cold temperatures, as North Americans preferred to drink their beer.

Less familiar are the stories of lager beer in other lands. The Japanese were perhaps the most eager to adopt Western beer, beginning with the Meiji Restoration in 1868, when European culture was embraced as a tool to resist imperial domination. Japanese students went abroad to study brewing and other industrial modern technologies. While they scrupulously followed German brewing styles at first, over time, the Japanese adapted their beers to local tastes, creating even lighter, crisper lagers than the Pilsner original. The introduction of “dry beer” by Asahi in 1987 exemplified this trend toward a lighter flavor with minimal residual sugar.

The Chinese likewise created their own distinctive versions of lager beer on the foundations of colonial breweries such as Tsingtao, which was founded in 1903 in the German concession. The brewery passed into Japanese hands during World War I and was then nationalized at the end of World War II. Although the Chinese taste for beer is often considered to be a product of post-1978 economic reforms, the Mao-era brewmaster Zhu Mei, who had trained at the Pasteur Institute in the 1930s, was largely responsible for establishing the national industry, sourcing domestic ingredients and building breweries around the country. Beer production actually peaked during the Great Leap Forward, when microbreweries as well as backyard furnaces were seen as a path to national development. The resulting famine, which killed millions in the countryside, seems all the more tragic when party cadres were drinking beer in the cities.

Similar stories of colonialism, migration, and localization can be found throughout Africa and Latin America. South African Breweries, which began in 1895 by selling beer to white settlers, became an early leader in marketing Castle lager to black Africans, who had long been restricted by apartheid rules from buying Western beer. The Logos Brewery

of Rio de Janeiro, Brazil, was known among professional brewers in the early 1900s for having yeast with the highest known rates of fermentative energy as a result of a hybridization with creole yeasts from sugarcane fields. And decades before Corona and Dos Equis achieved global popularity, Mexican brewers were recognized for pioneering work in the industrial malting and brewing of sorghum, which now provides the basis for gluten-free beers. These beers do not fit the taste of all consumers, but they do have devoted local followings.

How, then, can we explain the global rise of lager beer? Price certainly mattered to consumers, especially among the working classes, but Pilsner also had cross-cultural appeal because it seemed to express the ideals of modernity. At the dawn of the twentieth century, its clean, hygienic taste provided a welcome relief in a world of strongly flavored, often sour beers that were rank with bacterial contamination or wild yeasts. Meanwhile, in contrast to the refreshing taste of Pilsner, the full-bodied Munich lagers, which nourished premodern laborers, were simply too heavy for many modern consumers. Only recently, after modern technology had made contamination rare, did the strong flavors of sour beers and IPAs gain nostalgic appeal.

In 1902, Dr. Carl Rach, a Bavarian brewmaster employed in the United States, lamented the shift in public taste towards cheap, light, mass-produced beers. He was deeply troubled: Did this point to people’s unreasoning and unsophisticated palates? What he didn’t consider is that, maybe, we just like the taste.