Chapter 6

A Short Historical Geography Of Beer

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"Primitive" beers

Beer is supposed to have appeared in Mesopotamia, though its accurate dating remains uneasy. The most reliable sources trace its origin back to over 6000 years. It was in Iraq that the first recipes for beer or "strong drinks" making were discovered on cuneiform clay tablets from the Sumerian age. But if beer, just like cereals, was "born" between the Tigris and the Euphrates, other alcoholic and fermented drinks probably developed simultaneously all over the world, with some variants bound to the local output of cereals or plants with similar properties: sorghum and millet in Africa, rice in China or manioc in pre-Columbian America (Toussaint-Samat, 1997).

From Babylon, barley- or spelt-based beer spread to Egypt. Beer could as well represent a gift to the gods, a salary for the workers and a remedy for the sick. The Egyptians developed large-scale brewing and improved the malting techniques, a fabrication process which consists in cooking the germinated grain partially. Imported in Greece, beer ("zythos") was gradually popularised in the Mediterranean area and in Europe.

In Northern Europe, beer spread with grain cultivation but could never really take root in the southern parts of Europe, where wine reigned supreme. In the Roman days, the Mediterranean position of wine was even reinforced at a given time by means of protectionist measures!, yet rapidly eased. The main wine-growing areas of southern France were already famous around 80 AD. However, vineyard extended only very slowly to the north. Vine does not seem to have been cultivated north of Lyon and in the Moselle area until the second half of the third century (Deman, 1990).

Due to different climatic conditions, even if partly modulated by the evolution of agriculture, a north-south rift arose: vine and wine in the south, wheat, barley and beer in the areas further to the north.

But if the climate determinism explains for a large part the vineyard distribution area, it does not in itself necessarily justify the weight of beer in Northern Europe. Indeed, one cannot ignore the substantial trade relationships that were built around wine. Moreover, until the 14th century in Brabant, wine was still much consumed, though not daily, among the most popular classes. The massive switch to beer consumption, also within the bourgeoisie, only took place in the second half of the 14th century. From that moment wine rapidly lost ground, notably because its price increased while the cereal price dropped. The transition from wine to beer would thus be due, in Brabant, and in the mercantilist framework of those days, to economic factors (Aerts, 2001) rather than
to cultural factors or to some climate determinism. But such a transition would probably not have had the same significance without the simultaneous influence of a technical innovation from the Germanic world, which allowed to make up for the prime defect of beer: a lack of flavour stability.

The emergence of controlled fermentation

Primitive "beer" presumably looked like a substance whose consistency was between "eatable beer" and "drinkable bread". Its name varied according to the regions and the grain used. The name "cervoise" appears with the Gauls. Like any "beer" production of those days, it results from spontaneous fermentation. It is really possible to name it beer in the current sense of the word from the middle of the 14th century, when top fermentation started (Box 6.1).

In the Middle Ages water was most of the time undrinkable, because of this beer represented more than a simple beverage. Indeed, the fermentation processes necessary to produce alcohol reduced the risks of infection and made beer quite successful. In those days of epidemics, wars, scarcity and invasions, the making of beer progressively fell into the hands of the abbeys, more preserved from such hazards. In addition, the abbeys owned enough land to ensure the crop rotations permitting a permanent grain production (Tous-saint-Samat, 1997). All along that period of time, the monks attempted to better the quality and the quantity of their "cervoise" and improved the art of brewing. Beer fermentation was always spontaneous. A mixture of spices (rosemary, coriander, cinnamon, clove, saffron, orange peel, etc.) was added to enhance the flavour and hide the unpleasant smells emanating from the sour beer (Glover, 1997). From the 14th century, the abbeys, essentially in Germany and Flanders, were the first to use hop in beer making. Hop prevents the proliferation of some undesirable bacteria and improves conservation. The emergence of hop in the beer making process gave rise to top fermented beers (CBB, 2001c).

From the 15th or 16th century, a second major contribution by Germanic monks was the introduction of a new technique: low fermentation. This innovation appeared in Bavaria in order to fight the heat damage to fermentation. In summer, the proliferation of bacteria periodically wrecked the fabrication processes. The monks of the Bavarian monasteries started to store the beer in cool cellars during long periods of time. Sometimes the yeast, in reaction, sank to the bottom instead of floating to the top of the vat. Fermentation was consequently much slower and conservation prolonged.

Outside the abbeys, beer was essentially a home production and, like other household duties, beer making fell on women. But from the moment brewing became profitable, some families devoted themselves to brewing and started to sell their beer production in taverns, although this kind of trade remained quite limited until the 15th or 16th century, when a real brewing proto-industry emerged. As beer was a bulky good, with a low market value, the brewers made it there where it was consumed. Inversely, since its ingredients were easier to handle dried up, it resulted in the emergence of barley, hop and malt trading on long distances. Hop was largely cultivated in Flanders, in north-eastern France and in Bavaria. It was probably in the 16th and 17th centuries that it began to be used by the British brewers, thanks to the relationships built around the wool and cloth trade.
**Box: HOW BEER IS MADE**

Beer making is a multiple stage process.

The first stage, **malting**, consists in turning germinated cereals into malt: the grains are first exposed to a variable humidity level so as to absorb the water required for germination, then dried at a variable temperature, depending on whether one wishes to obtain light or dark malt. The higher the temperature, the darker the colour of the malt will be (lighter malts feature in lager, caramel malts in amber beer, and darker malts in brown ales). The most commonly used grain is barley, but oats, wheat and rye can also be malted. After drying, the malt rootlets are removed and malt is turned into flour.

The second stage of the process is **brewing**. At this point, malt is mixed with water and gradually heated up and brought to the boil. The resulting mash, high in sugar, is then filtered to make wort. Wort is in turn boiled up to the proper density. Hops are added at this stage (more precisely, the unpollinated female flower). Hops, in addition to stabilising and purifying properties, impart beer its bitter taste and aroma. Wort is filtered, then cooled in order to start fermentation.

The third stage, during which yeast is added to the mixture, varies accordingly to the type of beer to be produced: in **bottom fermentation**, wort is brought up to temperatures from 5° to 10°C, making the liquid foaming. This method is used to produce lager. On the contrary, **top fermentation** generally results in darker beer with a higher alcoholic content. In this category, to which Trappist ales and the English stout belong, temperatures can vary from 15° to 20°C. There is also a third type of fermentation, **spontaneous fermentation**, in which, inversely, cooled wort is exposed to room temperature so that the micro-organisms present in the atmosphere cause fermentation without addition of yeast. Gueuze, cherry lambic and raspberry lambic belong to the category of spontaneously fermented beers.

The fourth stage, **lagering**, is the stage of secondary fermentation. It takes several weeks in the case of non-spontaneous fermentation beers (3 to 4 weeks for Pilsners). The conditioning of lambics can last one, two, or even three years in the cask so as to turn sugars into alcohol. It is during this period that beer gets maturity, flavour and sparkling.

The final stage, **filtering and drawing off**, is the moment when beer is filtered or pasteurised, which makes it shiny and limpid. Beer is then ready for bottling or barrelling.

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**The age of industry**

It was only with the development of transport and with the industrial revolution that the beer industry finally marked a turning point. On the one hand the development of water transport in the 18th century, then of rail transport in the 19th century, made moving much easier than before; on the other hand the appearance of new techniques such as steam engines, tempera-
ture-correcting hydrometers and mechanical bottle turners, led to the emergence of a genuine brewing industry in proximity to the innovation and industrialisation cores as soon as the second half of the 18th century. This is how, in 1796, the Whitbread brewery in London became the first brewery in the world, producing 200,000 barrels a year.

Although low fermentation was already in use, there were still some problems of temperature stability and fermentation. In Munich in 1836, brewer Seldmayr developed a method to produce more stable low fermented beers thanks to a variety of pure low yeast, hence the name given to that type of beer: lager, after the word “Lagering”, which means “preservation” in German.

Some time later, a mere change of colour modified the image of beer radically. It happened in Bohemia (today in Czechia), almost by accident. In 1842, a Bavarian brewer, Josef Groll, was entrusted with a new brewhouse to produce a low fermented beer. On October 5th the same year, the first lager was born. Limpid and sparkling, it had kept its light colour for two reasons: the first lied in the quality of the low-protein barley; the second was the low limestone grade of the water in the neighbourhood of Plzen where the brewery was situated. By a mere chance another famous industry in Bohemia was glasswork. As beer was formerly served in wooden, stone, porcelain or metal cans, its colour didn’t really matter, provided its flavour and aroma were satisfying. But as soon as a transparent glass enhanced the blond and sparkling colour of Plzen, that type of beer knew a considerable success. The “pilsner” type (from the city of Plzen, or Pilsen) was soon imitated throughout Germany, in Europe and all over the world: “pils” was born (Glover, 1997).

Another technological innovation took part in the emerging myth of the pale and icy lager: mechanical refrigeration. Since that process enabled them to produce beer in any season and any place, the brewers quickly realised what advantage they could draw from such an invention: whether in Dublin, Munich or in the United States, they soon purchased refrigeration appliances, bringing about a new progress in beer distribution in the second half of the 19th century. Simultaneously, the development of works in the field of yeasts allowed a better understanding of the brewing process. The fast improvement of the selection techniques favoured the concrete application of those biotechnologies in the brewing industry.

The mark of beer on rural landscapes

Barley...

Barley and hop used to be, and here and there still are, the malting plants that mark the landscape most. Barley, after malting, is one of the essential components of beer. Hop imparts beer its fresh flavour, bitterness and long-lasting conservation.

There are two varieties of barley: six-rowed winter barley and two-rowed summer barley (CBB, 2000) (figure 6.1a.). In Belgium, summer barley is almost exclusively used for brewing. It is sowed in March and harvested in July and August. Barley has been cultivated for centuries in Belgium, though not extensively. For long it has been imported from France, Germany, Czechia, the Netherlands, Denmark and Great Britain.
Figure 6.1  a. Barley & hop (original drawing by L. Lerire) b. Stakes used for the cultivation of hop ner Asse in 2002 (photography by R. Van den Steen) c. Building of the Wielemans Ceuppens brewey in Forest, an industrial suburb of Brussels (photographed in 1957 by G. Moreels).
Barley cultivation got a real significance in Belgium only when World War II impelled the Belgian malt mills to supply themselves locally. In 1947, 69,283 hectares of summer barley were cultivated. Such a production continued after the war as a consequence of the very high prices on the global market, and barley growing even extended, encouraged by an incentive bonus scheme (Louckx, Cools and Vandeperre, 1989). The peak was reached in 1966 with 135,081 hectares devoted to barley cultivation (figure 6.2). The bonus abolition in 1966 brought about a decline in summer barley growing as well as a reorientation towards a more productive variety, though few suitable for brewing: winter barley. Nowadays barley cultivation is essentially located in Wallonia (94%) and covers a surface of 4,868 hectares.

... and hop

Hop has been cultivated in Belgium for at least four centuries. Hopfields were situated, from the 16th century, mainly in two regions: on the one hand, the region of Asse and Alost in the western Flemish Brabant, and on the other hand, in the region of Poperinge, in Western Flanders. From the mid-nineteen century to the early 20th century, hop growing was essentially present in the region of Asse-Alost, near the many local breweries (De Rop, 1988). In those days, that region numbered 50 to 60% of the 4,000 hectares devoted to hop growing in Belgium. Hop cultivation started declining with the 20th century and affected mainly western Flemish Brabant. Around 1930, 1,060 hectares were cultivated in Belgium, out of which 260 in the region of Asse-Alost. Until 1950 the cultivated surfaces kept decreasing to a total of hardly 461 hectares in Belgium, out of which 25% in Brabant. As a result Poperinge became by default the first hop producing area in Belgium. The decrease in hop cultivation can be explained by the low quality of the Belgian hop and by the improvement of transport facilities which enabled the Belgian brewers to supply themselves in Eastern Europe (Czech Republic), where the hop quality was higher and its aroma richer (Louckx, Cools and Vandeperre, 1989).

From the late 1960s there was a relative revival of the cultivated areas, notably due to a diversification of the hop varieties and the progressive emergence of improved productions. A price increase on the international market was another reason for such a revival. However limited, that production (1,179 hectares in 1973), ended up in overproduction.

Since the late 1970s, hop cultivation has undergone a marked decline. It has present-ly disappeared from the region of Asse-Alost. Hardly a few hectares are still devoted to hop growing. From 1977 the decline was reinforced when the European Community offered a pulling up bonus. The simultaneous improvement of the brewing techniques and the emerging demand for less bitter beers (thus containing less hop) also led to a decline in demand. It should also be noticed that only 20% of the Belgian output are comercialised by means of preliminary agreements between brewers and farmers pricing the product for several years and so ensuring a certain income level. On the average, in the European Union, 75% of the output are sold by contract. Finally, it should also be kept in mind that hop cultivation remains much labour-intensive despite mechanisation, which, in a framework of growing globalisation, does not place Belgian producers favourably in front of Eastern Europe’s producers.
Figure 6.2  Key indicators of brewey industries and cultures in Belgium (sources: CBB, 2001b; agricultural productions censuses; LOUCKX M. et al, 1989.)
In May 1998 the Council of Europe took special temporary measures concerning hop. As the hop market is characterised by permanent overproduction, the aim was to restrict the cultivated areas in the European Union. Such measures being optional, only three countries declared having applied them: Germany, Belgium and Portugal. In Belgium they were concretised by leaving fallow ten or a dozen hectares and pulling up less demanded varieties (41 hectares from 1998 to 2000).

Following those multiple restrictions in hop cultivation, Belgium currently farms no more than 250 hop hectares, of which 229 in Western Flanders (Agricultural Policy Authority, 2002).

**Landscapes in danger**

Hop has always made part of the local culture of the areas where it was grown. Hop is present in the popular beliefs and the traditional festivals. But, above all, hop has left its mark on the landscape owing to its typical mode of production. Hop grows on 6 to 7 metres high stakes (figure 6.1b), giving rise to a characteristic landscape valued through "hop tourist routes". There are two of them, situated in the two production areas. The Poperinge hop route, near the French-Belgian border, is 43 kilometres long and includes several stops in local breweries. The western Flemish Brabant route for its part, created in 1975, has almost fallen into oblivion today due to the considerable decrease in hop cultivation in that region. The gradual urbanisation of those spaces close to Brussels and the decline in the connected rural practices have moreover reinforced the decline of hop growing.

The quasi-disappearance of hop growing in Brussels' periphery has recently aroused, within local political and associative circles, a will to re-plant hop so as to revive the region at the pace of hop growing. In practice, the communal authorities of Asse take part in that project by selling hop sprouts and re-creating the annual hop market (Milieudienst Asse, 2002). However, such an initiative had already been launched as soon as 1986... Allowing for the European agricultural context and the economic profitability, it is difficult to know how such steps could survive.

**From local breweries to multinationals**

**Belgian brewers at the dawn of the 21st century**

In 1998 Belgium numbered a bit more than a hundred breweries, producing from 400 to 600 different beers for a total amount of 15,000,000 hectolitres. In terms of production volume, a high economic concentration can be observed. The biggest 10 breweries, generally controlled by large groups such as Interbrew or Alken-Maes, account for more than 86% of the output. Concentration is also geographical (fig. 6.3). The Interbrew sites in Leuven and Jupille (Liège) alone produce almost 50% of the output. Most of the other large breweries are situated within a quadrilateral formed by Alost, Antwerp, Leuven and Brussels. Plenty of small and medium breweries are also located in the same area. Some other large production sites, more isolated, are in Hoegaarden (south-west of
Figure 6.3 Geographical breakdown of the output of Belgian brewers in 1998 (source: WEBB T., 1999, adjusted) and geographical breakdown of breweries in the Province of Western Flanders (source: MOREELS G., 1958).
Leuven) and Bree (north-east of Kempen). A secondary concentration of small and medium breweries can be found in the south-western part of Flanders, precisely between Roulers and Oudenaarde. Outside Liège, the sole significant production sites of Wallonia are located in Charleroi, Yvoir (Bocq brewery, near Dinant), Chimay and Orval. The latter two sites produce Trappist beers brewed under the control of monks.

The geographical location of the main breweries in relation to the market is central. In Belgium it is consequently the north of Brabant. Such a spatial distribution seems largely dependent on the weight of the distribution costs of the end product. The secondary concentration observed in Western Flanders seems less coherent from that point of view, at least if we consider only the national market. The relatively dense network of small and medium breweries can be seen as a partial survival of very old enterprises due to the dynamism of local producers in a region long characterised by high population densities and a strong proportion of small and medium enterprises in the industrial fabric. That former textile area also shows a real dynamism in the field of agribusiness streams (Colard, Marissal, Vandermotten and Van Hamme, 1997: 97).

**Chronology and geography of an industrial concentration**

Today the geography of Belgium's brewing production differs a lot from what it used to be before World War I° (figure 6.3). By the end of the 19th century, each locality had one or more breweries", whose geographical distribution reflected faithfully the population density. The only areas with few breweries were situated south of the Sambre-Meuse axis, still few populated today, and in the Kempen region. The production of top or spontaneously fermented beer was sold on the local market, as transport costs were high and the means of conservation few efficient. In 1907, the country numbered 3,387 breweries, a large part of which employed 10 workers at the most. In rural areas brewing belonged to the traditional village activities. Older breweries adopted the local architecture while the more recent ones were inspired by the urban building style. Breweries can still be traced today in some cities (about 50 in Brussels) but most of the buildings having survived the many demolitions of the last 40 years no longer fulfil brewing functions today. The oldest date back to the mid-19th century and are situated west of the pentagon, near the canal (figure 6.4). In the late 19th and the early 20th century, the abolition of city tolls favoured the setting up of breweries in the booming industrial suburbs of Molenbeek, Anderlecht, Koekelberg and Forest. The most recent breweries, often of imposing size, have privileged the proximity of major road axes (figure 6.1.c).

From World War I, the number of breweries has kept decreasing to 118 in 1998. Jobs have also decreased, switching from almost 24,000 workers in 1910 to a little less than 10,000 in 1986. Such a drop was especially true in the enterprises employing less than 50 workers. On the contrary, in the enterprises of 200 workers or more, employment has grown until the early 1950s and has stabilised since then. The employment increase in smaller-sized enterprises had stopped as soon as 1930. From 1920 a break had appeared between the evolution of the breweries number and employment on the one hand, and the evolution of production on the other hand (figure 6.2). As the number of protagonists has dropped and production clearly risen up, at least since 1960, we can actually talk of a very intense concentration and productivity-raise process. Concentration is as
Beer-related landscapes in Brussels

- Brewery building still remaining in the 1980s
- Bar, café (in 1997)

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Region of Brussels
Main roads
Canal
30 m contour line delimiting the bottom of the Senne Valley

1. Main touristic area (Grand Place)
2. Main concentration of retailers & leisure activities
3. University
4. South station
5. Old town gate to Halle

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Figure 6.4 Beer related landscapes in Brussels (sources: IGEAT, 2002; Archives d'Architecture Moderne, 1982).
much economic as geographical: a very limited number of enterprises and production sites increase their output while, subsidiarily, a great number of small producers currently produce small quantities.

After World War I, a cut in the number of breweries started as a result of the progressive switch to low fermentation in the 1920s, a technique requiring a strict control over temperatures and thus over very expensive refrigeration systems. This technological shift reinforced the process of reducing the number of breweries which had been under way since the war. The requisitioning of copper and the concentration of production by the Germans in view of limiting fuel consumption had led to the closing of many small breweries. The ones that reopened after the conflict, proportionately few numerous, adapted rapidly to the new output. At the same time, the gradual improvement of road transport allowed the large breweries to compete more and more with the other producers on local markets. In the aftermath of World War II, the emergence of bottling instead of barrelling resulted in mass investments in bottling facilities. The fact that such investments could only be justified by a high output level contributed to the extension of concentration within that more and more capital-intensive sector. The reduction of the number of breweries did not only affect the smallest of them. Medium- or even large-sized breweries disappeared as well. This was the case of the Wielens brewery in Forest, Belgium’s eighth largest brewery in 1958 (Moreels, 1958), which was gradually incorporated by Artois (presently Interbrew) and finally closed down.

The deep modification of the brewing industry landscape described above has involved a very strong polarisation between producers. Two very large companies (Interbrew and Alken-Maes) produce more than 70% of the beer volume “made in Belgium”, while the smallest companies (two thirds of the active brewers) produce hardly 10% of that volume, but offer the consumer more than the half of the labels. The two giants for their part propose barely more than 15 to 25% of the Belgian beer varieties.

*The late mutations of the Belgian market*

With an annual consumption of almost 100 litres of beer per inhabitant, Belgium ranks among the biggest beer-drinking countries, just behind Germany (128 l), Ireland (126 l), Luxembourg (110 l), Austria (109 l) and Denmark (105 l). Belgium, closely followed by the United Kingdom (99 l), makes thus undeniably part of the Europe of beer. At the bottom of the classification, Italy (27 l), France (39 l), Greece (43 l), Portugal (65 l) and Spain (69 l) consume a much lower quantity of beer, which is probably due to a strongly marked wine tradition. Nevertheless, in this optic Sweden’s position (59 l) can seem strange. In fact, the Swedish State has adopted, for the sake of public health, very strict rules in the field of alcohol consumption and controls alcohol sales directly, a question that was not re-negotiated when Sweden joined the European Union (Swedish Ministry of Health and Social Affairs, 2001).

Despite Belgium’s relatively favourable position at European level, a clear drop in beer consumption has been discernible in Belgium since World War II. Beer undergoes more and more the competition of bottled water and lemonade. Wine consumption is also on the increase. On the average each Belgian consumed 49 litres of cold drinks (excluding beer) in 1980. In 2000, that volume amounted to 113 litres. The type of beer
correspond to former village cores progressively incorporated into the city. Within those generally less favoured clusters, as in the very popular neighbourhoods of the canal axis, pubs are the worthy descendants of the “estaminets”, even if with the North-African immigration, beer had to give ground selectively to non-alcoholic drinks. But the “estaminet” spirit is still alive: such pubs are a place of quasi inevitable sociability and vicinity by reason of the poor housing conditions of their customers, quite different from those frequenting the pubs of the town centre.

Survival and development strategies

Given the drop in beer consumption, hence in sales, three different options are conceivable for brewers to maintain or develop production. The first, clearly observable in the statistics, consists in extending outlets by means of increased exportation. In 2000, Belgium exported almost 40% of its output. Since beer exports were practically nil 50 years ago and current imports represent only 15% of the exports, the trade balance is thus largely positive. The second option is based upon the relatively simple idea that if the customer does not drink more, he should be encouraged to consume a product with a higher unit value. From this perspective, upgrading consists in orienting the market toward products of superior quality or looking so. This happened notably with the French wine market: guaranteed vintage (“AOC”) represents a growing part of the sales while the consumed volume per inhabitant is declining (Moati, 2001). The third option, not necessarily distinct from the second, consists in enlarging the range and segmenting the market by means of a subtle adjustment of the product features to the consumers’ expectations. The last two commercial strategies are based upon some kind of rejection of mass consumption and highlight the quality, variety and specificity of the product.

At first glance the small breweries seem well positioned within the logics of qualitative switch and segmentation. The large groups for their part have long aimed at extensive growth (buy-outs, joint ventures, take-overs...) and their image is largely associated with the massive consumption of current beer. The segmentation efforts might appear at first sight less comfortable to them. Yet, as we shall see, they segment their ranges all the same.

Strength and weakness of the small and medium breweries

Undeniably the small producers who have been surviving in front of giants like Interbrew or Alken-Maes are largely accountable for the diversity of Belgian beers available on the market. Some of the latter, quite specific, are peculiar to Belgium, or even to one region. White (“blanche”), Trappist and abbey beers are typically Belgian, even if not all of them are craft productions. Gueuze, faro or fruit beers are based upon lambic, which results from spontaneous fermentation and is exclusively produced in the surroundings of Brussels, in the Senne River valley (figure 6.3). The mixed fermentation reddish-brown ales (“Rodenbach” type) are strongly connected to the south of Western Flanders. The fact that those “primitive” beers are produced in that particular region
might be due to the later introduction of hop, which selectively inhibits bacteria growth and allows top fermentation. The former practice consisted in spicing the sour beer resulting from that spontaneous fermentation, which was not countered by the bacteriostatic properties of hop, in order to improve and enhance its flavour. In the 14th century, Brabant was united to the German empire. Hop was introduced into the brewing techniques when Emperor Charles IV promulgated the “Novus Modus Fermentandi Cervisiae”. Inversely, Flanders was then under French domination and the old techniques seem to have lasted a bit longer there. As the local authorities imposed a tax on spices, they were more reluctant to hop introduction. Nevertheless, the transition to hopped beer seems to have occurred gradually, sometimes over several decades. This is why the the attitude of the local nobility does not explain this evolution. It might as well have been a mere combination of circumstances. But doesn’t a geographical fact resulting from chance often owe its persistence or expansion to some objective environmental conditions? (Brunet, Ferras and Thery, 1993: 251; Annaert, 1995). And what conditions indeed? We lack concrete elements to provide answers here.

Apart from the products whose geographical settlements are clearly perceptible even if unexplained, small producers have developed beer styles inspired by the English ales, luxury pils, strong blond beers, seasonal beers or regional beers. They offer thus a wide range of beers, benefit from a qualitative “craft” image and, for some of them, from a regional identity. They are often the initiators of new concepts such as microbreweries, in which small productions, regularly renewed, are coupled with on-the-spot consumption. Microbreweries, appeared in the late 1980s, experience a significant growth today in the cities but also in the more rural localities of Hainaut and of the south of the Sambre-Meuse axis. They are frequently in keeping with a logic of trendy leisure or touristic economy. This is why such small enterprises have lots of assets to reach a favourable position on a more and more demanding market in terms of quality and size of the supply. Beers without real equals in the world such as gueuze or “Rodenbach”, high quality pils or Trappists, all seem to be custom-made for the consumers avoiding industrially standardised products.

If we consider those innovations (regional and seasonal beers, microbreweries...) or re-discoveries (white beer, fruit beer...), we must recognise the true know-how and the adaptation capacity of some small producers, who are thus very well positioned within the logics of differentiation and upgrading. The market share the special beers have won back from the pils proves that those having chosen this strategy as a survival or development means are right.

Given the singular character of their production, small producers also seem to be ideal candidates for the exportation of quality products. However the export structure does not differ much from that of national consumption. In 2000, the only beer types that were clearly over-represented in the exportations were “luxury” pils and abbey beers, mainly produced by the large brewing groups. The sour, the regional and the fruit beers as well as gueuze were even much under-represented (CBB, 2001b). So, even if small independent producers’ exports are definitely on the increase, their market share in exportation is not significantly better than on the Belgian market. Those producers obviously have difficulty in selling their products abroad. But if we consider the Belgian institutional context, this might as well be due to the regionalisation of competencies in export promotion.
Even if they sometimes have difficulty in converting their potential into some real market share, the surviving small producers operate flexible and innovating enterprises, qualitatively positioned within a logic of market segmentation and diversifying a definitely unstandardized production. Inversely, should the large brewing groups be credited with a certain inertia in their expansion mode?

The significant rise in exportation, for which they are largely responsible, can be interpreted in this sense. Increased exportation is a way to widen the market in an extensive logic, which enables for a time to perpetuate “Fordist” logics based upon the optimisation of the making processes, the scale economies and, above all, the selling of standardized products on a mass market. Yet the answer to our question goes beyond a mere extensive logic and is clearly more nuanced.

First, it seems that a large group such as Interbrew has started diversifying and segmenting its supply, also at international level. Interbrew’s brand portfolio, in addition to the classic pils, now includes “Leffe” abbey beer, “Belle-Vue” gueuze and “Hoegaarden” white beer. Before it was taken over by Interbrew, we would have listed the “Belle-Vue” gueuze within the non standardized products which guarantee small and medium producers’ independence... In 1966, Pierre Celis broke new ground when he decided to revive a home production of white beer on the decline since the late 1950s. Who would have believed at that moment that his “Hoegaarden”, would become one of Interbrew’s spearheads on the international market today?

Obviously, Interbrew has realised the benefit it could get from widening and segmenting its range of products, even if it had to take control over some of the most promising small producers. Interbrew offers more and more specialities. The fact that the Trappist monastic orders today label their production is a further example of the increased competition on that market. Is it because abbey beers such as “Leffe” (Interbrew) or “Grimbergen” (Alken-Maes), quite present on the Belgian market but especially in the sphere of exportation, put them in the shade?

A second nuance to be introduced here relates to exportation opportunities. According to the map, Belgium first exports toward European countries, mainly France and the Netherlands. Germany and England are also major destinations, though with a clearly lesser market share allowing for local supplies (figure 6.5). Italy equally holds a good place within Belgian beer exports. The remainder (11 %) is distributed mainly in Europe, including the East-European countries and Russia. The only non-European countries to which Belgian beer exports are significant are Canada, the United States and Japan.

Seen the small size of the Belgian market and its tendency to narrow, it is not amazing that Interbrew has turned towards internationalisation, like the Dutch Heineken and the Irish Guinness long before. But, in the brewing sector, internationalisation does not go hand in hand with exportation. The most famous beers, the great world sold labels, hardly account for 10% of the overall market. Moreover they are not necessarily imported because they are often subject to licence. The map of Belgian exports speaks for itself: just like in the Flanders of the early 20th century, beer travels few. The largest part of its distribution is always local. But proximity today is defined on another scale.

Local brands are still quite present on the domestic markets. This is why the large brewing groups extend their activity by buying out nationwide breweries within the new
Belgian beer exports and global implantation of Interbrew

The area of each country is proportional to the population:

- 10,000,000 inhabitants

Significant presence of Interbrew in 2001 with subsidiary company, joint venture, production licence or shareholding

Belgian beer exports (hl)

- 2,270,000
- 500,000
- 40,000

Fig. 6.5 Geographical breakdown of Belgian beer exports (source: INTERBREW, 2001) and approximation of the market size.
markets they wish to capture. Interbrew owns national brands which represent a considerable volume in each of the countries concerned: “Labatt” in Canada, “Diekirch” in Luxembourg, “Bass” in the United Kingdom, “Staropramen” in Czechia, “Borsodi” in Hungary... The map of the countries in which Interbrew controls at least one brewery proves to which extent the opening of the East-European markets was a considerable expansion opportunity (figure 6.5). In 2000, 90% of the group's volume was produced outside Belgium (Interbrew, 2001).

The take-over of local breweries provides Interbrew with the necessary infrastructure and logistic basis for the diffusion of its own international labels (“Stella”, “Hoegaarden”, “Belle-Vue”, “Leffe”). Interbrew also tries to position “Stella” on a more qualitative market, in answer to the logic of upgrading. Yet in the Belgians' eyes, Stella is a pils like many others, which tends to lose ground in front of “Jupiler”, another brand of the group. Meanwhile, in the rest of the world, Interbrew, by means of intensive marketing, grants its “Stella” a high symbolic value... in order to raise its price.

The international expansion of large Belgian breweries is not only based upon industrial synergies. They also develop pub's networks, though not only in order to control new markets. In fact those “Belgian beer cafés” and other “Leffe cafés” are privileged advertising instruments. They are aimed at “educating” customers and making them discover the Belgian beers... or more precisely an oriented selection among them.

*Which place for small brewers?*

Our analysis shows how relative the small and medium brewers’ advantages are. If the specificity of their production is indispensable to their survival and represents the key of their success on the Belgian market, it is certainly no more a guarantee of independence. The large brewing groups have not been long before diversifying their products and taking control, at least on the global market, over the quality image of the “Belgian beer”.

It can hardly be denied that the rise in exportation and the markets capture by a company like Interbrew, in Europe or worldwide, have also had impulse effects. The big boys' efforts to promote Belgian beer have benefited the small companies. All of them or only those which have accepted a compromise with the giants? Lacking reliable data, we are unable to answer the question.

It seems that continuing combination in the brewing sector no longer results in multiple closures. The maintain of a high number of small brewers in Belgium goes together with a wide diversity of products. Compared with the Dutch, German or the English situations, this is a true Belgian particularity. Small producers are largely considered as a reservoir of tradition and innovation, which, paradoxically often go hand in hand in the brewing world.

Some brewers are geographically anchored in a region, without this being a real commercial argument, at least at present. Geography is of no help as long as the bottles do not cross a border. But abroad, the “Belgian beer” label is only useful for a minority of small and medium producers who try to protect their specificity with a label. In fact, in the labels jungle, more than regional or geographical belongings, it is the brewer's know-how, and still more marketing, that gradually become the determining factors of a brewer's success. The means to be brought into operation are of course completely different according to the target: Belgium or the international market.
The current structure should not be basically questioned in the long run, even if a growing number of small producers are bound to lose their independence, which however should not in the short term result in a physical vanishing of their production means. This loss of independence will benefit large brewing groups, or even the sector of large-scale food distribution. The geography of Belgian brewers will thus always have to compromise in future with the huge output of the Interbrew or Alken-Maes sites and pay a special attention to the range of microbreweries arising on the fringe of the “historical” small and medium productions.

Conclusion

If a geography of beer diffusion cannot be drawn with precision, some striking innovations are accurately identifiable as soon as the late Middle Ages which make it possible, in Europe, to complement a geography of vineyard. Those innovations have in the first place permitted the introduction of a dense proto-industrial brewing fabric, especially in Belgium. The industrial revolution, the emergence of biotechnologies and the control over refrigeration techniques, starting from the main industrialisation and innovation cores, will in turn strengthen the dichotomy between the Europe of beer and the Europe of wine. This dichotomy in alcoholic drinks consumption is still very present in the statistics, even if behaviours are changing. But since it is the increase in mineral water and lemonade that is most particularly significant, it does not structurally modify the geography of the beer/wine pair.

Malting plants have always been travelling a lot, contrary to the end product which essentially consists of water, a raw material available almost everywhere. Barley and hop, intensively cultivated in Belgium, were also imported on a large scale. In the 20th century, both cultivations declined considerably. The disappearing of hop has left an impressive mark on the minds. Given the growing internationalisation of supplies, notably in Eastern Europe, only the initiatives in the field of touristic valuing seem to be able to contribute significantly to the preservation of the beer-related rural landscapes. The latter have already almost completely disappeared from western Flemish Brabant. Today the only notable hop cultivation survives in the countryside around Poperinge, south of Western Flanders.

The 20th century has witnessed a marked economic and geographical concentration, which has involved a very strong polarisation between the producers of the brewing industry landscape. Two very large groups, Interbrew and Alken-Maes, now produce more than 70% of the “made in Belgium” beer volume. On the opposite, two thirds of the brewers produce hardly 10% of that volume but contribute the most to the supply diversity. The largest breweries situated in the north of Brabant hold a central position on the Belgian market. A secondary concentration can also be observed in the south of Western Flanders.

Small and large breweries have had to face the evolution of the market and of the distribution channels. Although Belgium is one of the European countries with the highest beer consumption levels per inhabitant, consumption has been declining considerably since the Second World War. Also the type of beer sold has been changing. Pils has lost ground for three decades while the other brewing types (top and spontaneous fermentation) have been successfully revived. Distribution channels have also been reorganised. The share of food distribution is on the increase, to the detriment of pubs.
These moreover disappear at a constant rate.

Faced with the decrease in consumption and therefore in sales, brewers are offered three possibilities to maintain or develop production. The first consists in extending their markets by means of increased exportation. The second, upgrading, can be defined as trying to stimulate the consumption of a product with a higher unit value. The third option, possibly coupled with the second, consists in enlarging the line of products and segmenting the market with a view to adjust the product to the consumer’s expectations.

The small and medium producers who survive today have often created new products (regional beers, microbreweries) or rediscovered and revived old recipes (unfiltered white beer, fruit beer). Others have privileged the maintain of high quality or very specific products (Trappist beer, sour beer…). And finally, some have banked on the creation of a strong advertising image (Duvel, Palm…). On the Belgian market, the positioning of those small and medium producers, which is amazingly close to upgrading or segmentation, has enabled them to achieve a lot of success. But it was only lately that they turned towards exportation, with some difficulty.

This was not the case of the big Belgian brewing company, Interbrew, which has definitely opted for the international market. This however does not mean exporting only to the near foreign countries. All over the world, the local brands are still very present on each of the domestic markets. As a consequence, Interbrew first extends its activity by buying out nationwide breweries on the most promising markets in terms of growth. In such a perspective the opening of the East-European markets was an opportunity the group did not miss. In addition, the take-over of local brands provides Interbrew with the necessary infrastructure and logistic for the diffusion of its own international labels, among which some “special” beers. It is obvious that the multinational has realised the advantage of widening and segmenting its products line, even if it had to take over some promising small producers as a complement. Even though pils remains its prime production, the group also articulates its commercial strategy around abbey beers, white beers or lambic type beers. “The world’s local brewer” (Interbrew’s slogan) is thus positioned today as a major competitor in some market niches which used to be held by small and medium producers, in Belgium but especially in the field of exportation.

The dynamism of the small “historical” producers and the creation of microbreweries should however result in stopping the decrease in the number of active brewers in Belgium. Meanwhile, this does not mean that the most promising among the small producers will not lose their independence, but it should no more deeply alter the geography of breweries in Belgium, which already reflects a great concentration of the sector.

Notes

1. Prohibition of wine-growing to the Transalpine nations (the Gauls) under the Republic. Related by Cicero, quoted by DEMAN A. (1990); prohibition by Emperor Domitian of wine-growing in the areas of Gaul fit for cereals, quoted by TOUSSAINT-SAMAT M. (1997).
2. Early studies on yeasts, as Pasteur’s works in 1857 and Hansen’s research in 1883, allowed fast advances in yeast selection, notably for the benefit of brewers.
3. In 1880, 4185 hectares were recorded, of which 2594 in the region of Asse-Alost (DEJONGH G., 2001).
4. CCE (1999) and Agriculture Statistics of the National Institute for Statistics.
5. This number is not easy to determine. J. Troye (PALM Brewery) considers 400 labels a maximum (CBB, 2001c), but, according to T. WEBB’s guide (1999), this number amounts to almost 600, including microbreweries, regional and seasonal beers.
6. Unless differently mentioned, this chronology is largely based upon the synthesis by LOUCKX M., COOLS L. & VANDEPERRE M. (1989).
7. This assertion is based upon the (unpublished) mémoire by G. MOREELS (1958), who draws up an exhaustive cartography of the situation in 1900, 1938 and 1957.
8. Data quoted by the European Confederation of Brewers.
10. The term « special » has a relative character in time: the so-called special beers comprise many low or spontaneously fermented beers... which were the usual beer types before the emergence of pils!
11. 47% in France (LASSALE S., 2002).
12. Still today, brewers and bar keepers have complex relationships, largely beyond the mere customer/supplier relations.
14. It could consist of a single room of the owner’s housing, for whom bar tending was a lucrative secondary activity.
15. Today this denomination applies to pubs on the overall, whether middle-class or popular.
16. Such a policy is described by F. Vieillard, from Interbrew, as follows: « Our policy aims at segmenting the market. If we cast our net wide enough, we give ourselves the means to recruit new consumers and we create new opportunities to drink beer » (LASALLE S., 2002).
17. An abbey beer is brewed following a recipe inspired by a monastic tradition, without, however, any direct control or intervention by a religious institution during brewing, contrary to Trappist beers, whose production is controlled by monks. In practice, “abbey” beers are often bound to the large brewing groups, even if small independent producers survive in this market gap.
18. Inoculation by wild yeasts (Brettanomyxes Bruxellensis and Brettanomyxes Lambicus) is spontaneous and seasonal.
19. By means of a mixture called « gruit ».
20. Presumably in the 15th century (COUSIN et al., 1995).
21. In Germany there is still a very high number of local producers, but the beer types produced are less diversified.
22. If supermarket groups have long had their pils brewed and sold as no-name products, it is significant that some of them today commercialise own-labels specialities.

References


