

A NOTE ON THE ESSENCE OF GRUIT

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In the larger Low Countries area, beer brewing was connected with gruit in ancient times. Brewers were required to buy and use this mysterious substance and paid a type of tax that way. It was supposed to contain various herbs, but there were also grains and malt and even wax delivered to the *gruithuis* (in Latin *domus fermenti*) according to old invoices from a *gruithuis* in Deventer, a city that is today in the Dutch province of Overijssel. For centuries and up to the present day what kind of substance gruit exactly was is still something of a mystery. Generally gruit was thought to be some mixture of herbs, despite an alternative presented by the Dutch historian Hans Ebbing in 1994. Ebbing presented a very thorough study into the nature of gruit that was almost totally neglected.¹

Infusion of malt

First we need look into the brewing techniques of those old days, in particular the fact that there was more than just one infusion of the malt, because not everything could be drawn from it in one cycle as we do today with our modern equipment. These secondary or third infusions could be treated in all kinds of ways. The simplest way was to make lesser beers out of them. But there were many instances of continental professional brewers that were not allowed to make more than just one beer. The amount of barrels that could be filled out of one batch could also have been regulated and limited. Both were common measures to ensure a certain quality of the resulting beer. There the mash, grist or *gruetsoppe* could perhaps be exchanged with the *gruithuis*. Over at the *gruithuis* they would have had the time to draw everything from the malt, concentrate the resulting wort into a thick paste and mix it with herbs. That is what I

have come to think is what the old gruit was. How I arrived at that idea I will try to explain below.

Gruithuis

Many believe nowadays that gruit was a mixture of herbs, but that was only partially true. One of the activities in the *gruithuis* was done by a machine that could crush things. Basically that is the meaning of the word gruit (or grut): small fragments of things. The *gruithuis* could have been a kind of service centre for brewers and there is evidence for a range of activities from the Cameraars, (or financial Chamber) of Deventer. Collecting and preparing ingredients was one of them, making malt out of grains, followed by crushing herbs and malt and making and concentrating wort in a large kettle. The resulting thick porridge could then be mixed with the herbs. In at least one case ‘Gruyt and Cruyt’ were named separately. In the Dutch town of Arnhem it was forbidden to get these two from anywhere else than the municipal *Stat Gruythuys*.²

Novus modus

Things change over time, and Emperor Charles IV of the Holy Roman Empire mentioned the ‘*novus modus fermentandi cervisiam*’ in 1357. For this ‘new method of brewing’ it was needed to separate the herbs from gruit. The new herb was hops and those had to be cooked with the wort, at least partially, whereas gruit was added at a later stage, at fermentation, or maybe even later. Generally if herbs are used in beer today they are not cooked with the wort. Gruit was adapted to the new way of brewing and stayed around, and we have

examples of ‘gruit’ beers made in a very plain way; with only water, malt, hops and yeast. The first clues are given by Matthias de l’Obel in his 16th century *Kruidtboek* (*Book of Herbs*):

English Ale

To make the best English beer called Ale, which has a sweet and wine-like taste, and is drunk most in the winter, for it does not keep well: One takes soaked malt, that is, Wort, 200 pounds, hops 2 handfuls to change the sweet and bland taste of the Wort, and as that has boiled together well and has filtered through soo shall one next mix together, yeast of Beer or Ael, 3 pounds, and English Graut (what we call Naerbier) 6 to 8 pounds.

Graut is made like this:

One takes 6 or 8 pounds of crushed malt, boiling hot water 12 or 15 pounds, which mixed together and well stirred 6 times in a day, and with blankets and straw very well covered so long together in a clean barrel shall soak that it becomes thick as syrup. After that it shall be fired and boiled, and stirred very well to keep it from burning, till it is thick as porridge.³

The extraction method De L’Obel describes above is a kind of general practice among physicians and pharmacists of the time.⁴ In his *Kruidtboek* he mentions English Graut (what we call Naerbier) and describes various medicines made with this Naerbier. Naerbier was the carrier of the herbs and perhaps also a way to sweeten the intake of it. It can be safely assumed to have been intensely sweet and could very well help with fermentation when mixed with wort and yeast as De L’Obel suggests above. On page 285 of the *Kruidtboek* he mentions slight differences in the old way of making Naerbier and ‘the Graut of the English’, but continues that ‘today’ (hedens-daegs) it is still useful to make various medicines and is even used as a food and eaten with bread.

Later sources confirm this way of making Ale with graut or grout as concentrated wort.⁵ Devonshire White Ale is a well known example that even survived into modern times.⁶

Gruit = Graut = Grout

Generally we should keep in mind a fixed spelling of words is a modern concept. The Dutch ‘ui’ cannot be



Figure 1. General practice among physicians and pharmacists.

pronounced by most other speakers and is generally changed a little bit. Later Graut and Naebier are mentioned in the book *Liber de Cervisia*, written by the scholar Martin Schoock, who was professor at the University of Groningen in the 17th century.⁷ Additionally we find a very plain entry in *A dictionary, English-Latin, and Latin-English*, by Elisha Coles in 1679: ‘Grout [wort] Condimentum cerevisiae’. Many later etymological publications have a largely similar entry.⁸

Re-fermentation

The Dordrecht, South Holland brewer Adriaen Mels wrote in his notebook about what happened in his brewery in the last four decades of the 17th century,⁹ but his story on the drink known as Mol started in the past tense; it ‘used to be’ made of white barley without any

other grain. Nimweeghse Mol, from Nijmegen, in the modern Dutch province of Gelderland, was an export product in the 16th century. It was exported in particular to Antwerp. Mol had had a special status in the big city that Antwerp was around 1537¹⁰ and could be imported, whereas most other beers were banned. The brewer slowly boiled down part of the wort he had kept separate, while at the same time the main brew was fermenting. After the main fermentation, the thick beer was mixed in and the beer was barreled. The intense sweet syrup will have meant a re-fermentation in the barrel to see it through till opened at its ultimate destination. This fermentation must have been the reason for the Latin name of gruit being a *fermentum* in the old days or of *levarentur cerevisiae*; 'levitating' the beer.¹¹

Conclusion

Boiling down and concentrating wort could very well have been one of the mysterious activities in the gruihuis. Details as which (and whether) herbs were mixed in have differed over time and region. De l'Obel located what is essentially an old brewing technique in 16th century 's Hertogenbosch, the province of Holland and England, but it is also encountered in the Nordic countries.¹² Basically graut, grout or gruit was an auxiliary that could be used for beer, like in Nimweeghse Mol and ale, but also was a food product and was eaten with bread in Delft. Unlike the grøt we find in the Nordic countries today the bulky spent grains will have been separated and could have served as food for cattle, leaving the concentrated paste for human consumption, compact, durable and handy for travel. Mixed with herbs it was a medicine like De l'Obel described. The essence of gruit probably never was herbs, but was the intense sweet substance causing (re-)fermentation; a *fermentum*.

References

1. Ebbing, H. (1994) *Gruytgeld ende hoppenbier: Een onderzoek naar de samenstelling van de gruit*. Amsterdam, 'However the soppa or soppe is the residue of a substance called gruit or fermentum. That implies wort and gruit can be considered equal', p.25; 'It is called polenta cervisie, which means as much as 'the porridge or semolina for the beer'. In 1668 England the word polentarium was used to point out a

brewery and in 1367 the word polenta was used for indicating porridge. At DuCange polenta was meant as a porridge of milk and flour, but polentarii are those controlling, grinding and preparing the malt, for making beer. In the Dictionnaire Français-Latin polenta is explained as a 'boullie faite avec de l'orge ou du maïs'. Classic Latin knew the term polenta meaning 'dehusked barley', p.27; 'It is hard to tell what the exact composition of gruit was. It was supposed to "change another substance into its own nature". It is therefore likely that the porridge consisted of some amount of highly concentrated soaked (wheat) grain', p.30.

2. van Hasselt, G. (1804) *Arnhemse Oudheden*, Vol. 4. Arnhem: J.H. Moeleman Jr, p.25: 'Die Gruyt of Cruyt anderswaer haelde of dede haelen dan in der Stat Gruythuys, die verlore der Stat v. ff. toties quouties.' [Gruit and Herbs mentioned separately]

3. De l'Obel, M. (1581) *Kruydtboeck Oft Beschryvinghe van allerleye ghewassen, kuyderen, hesteren, ende gheboomten*. Christoffel Plantyn, p.35 - translation from old Dutch by the author.

4. Mathias de l'Obel, Mathijs de Lobel or Matthaeus Lobelius (1538 - 3 March 1616), physician to Prince William the Silent or William of Orange, leader of the Dutch revolt against the Spanish and James VI and I (19 June 1566 - 27 March 1625), King of Scotland as James VI from 24 July 1567 and King of England and Ireland as James I from the union of the Scottish and English crowns on 24 March 1603 until his death.

5. Vogel, M. (1874) *On Beer: A Statistical Sketch*. Trübner, p.12: It was also recorded how the English brewed their beer. They made a kind of extract of malt they called Graut, which was very thick, and a kind of common hopped beer called Ale.

6. Gray, S.F. (1828) *The Operative Chemist*. p.866. Devonshire White Ale. The grouts here mentioned are made by infusing 6 or 8 lb. of malt in a gallon and a half of water, covering it warm by the fire side, stirring it often: when in full fermentation it is to be boiled down to a thick paste.

7. Schoock, M. (1661) *Martini Schoockii liber de cervisia*. Bronchorstius, pp.95-101. 'De Ala Anglorum' ('The English Ale') 'apud Belgas vulgo vocatur Naebier, apud Anglos vero Grau' ('People of the Low Countries commonly speak of Naebier, but the English say Graut.') p.97.

8. Coles, E. (1679) *A dictionary, English-Latin, and Latin-English*, Second Edition enlarged. G. Sawbridge. 'Grout [wort] Condimentum cerevisiae'.

9. Adriaen & Melchior Mels, A. M. (1660-96) *Brewer's notebook*. Dordrecht: Nimweeghse Mol. 'The second infusion or Nabier, as it is out of the kettle, one pumps the 15 to 16

barrels (approx 2,250 litres) wort you kept apart in the kettle, add no hops, and boil down to 5 barrels (approx 750 litres), very slowly, till it is thick as syrup, and keep this, until upon filling the barrels, add the thick beer, and barrel it after half an hour. Note: The thick syrup sometimes boils for two whole days. The softer and gentler it cooks, the better. The third day the Mol was barreled. Five guilders were paid for one barrel. The first infusion should be two thirds of the total liquid and the second one third.'

10. Antwerpse brouwers tijdens het ancien régime: documenten Ivan Derycke, 1537.

12° Men moet de ordonnantie op de bieren van 1537 onderhouden, vooral art. 9 waardoor zonder toelating van de brouwers geen bieren van brouwers die 3 mijl of verder buiten de stad actief zijn zomaar verkocht kunnen worden in de stad.

13° 'Uitzondering hierop zijn de bieren van Leeuwen,

Hoegaarden en Nijmegen die op basis van de ordonnantie van 1537 wel vrij binnen mogen.' ('Exempt are the beers of Leeuwen, Hoegaarden and Nijmegen that can enter freely based upon the regulation of 1537.')

11. Sint-Truiden, A. (1064) *Bevestigings oorkonde bisschop Adalbert*. Miraeus, p.63. 'materiam faceret unde levarentur cerevisiae' ('substance for the rising [fermenting] of the beer').

12. Williams, M.W. (1920) *Social Scandinavia in the Viking Age*. London: Macmillan, p.158: 'Much of the home milled meal was used for porridge called graut, a favorite dish of the Northmen, for the cooking of which an unusually large kettle was provided'; O'Leary, M.H. (2010) *Barley, oats, rye, and wheat, were made into graut; Culture and Customs of Norway*. Santa Barbara, CA: ABC-CLIO, p.82: 'Traditional Food - In addition to flatbread, a staple of the diet in the medieval period was a porridge made of grain, called graut'.