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FURTHER NOTES ON THE ESSENCE OF GRUIT: AN ALTERNATIVE VIEW

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Gruit was used in beer brewing in the Low Countries before the advent of hops. The use of hops in beer on a commercial scale started sometime before 1300 in Northern Germany, after which it spread to what is now the western part of The Netherlands. Subsequently, the nascent brewing industry enjoyed great commercial success in the southern Low Countries and England throughout the fifteenth century. In fact, it was from the Dutch that the Belgians and the English learned how to brew with hops.[1]

In the Low Countries this switch to hops was accompanied by the disappearance of gruit which, up until that time, was apparently an indispensable ingredient of beer. The rulers of the day - kings, bishops, counts and dukes - had a monopoly on gruit: anyone who wanted to brew beer had to buy it from the *gruiter* in the *gruithuis* and, its price being fixed at a level far above the actual cost of its production, it was in effect a tax on beer.

Over the last few decades, there has been a debate among Dutch beer historians over the actual nature of gruit, the most recent intervention appearing in issue 166 of *Brewery History*. Here follows a critique of that article and the proposal of an alternative viewpoint.

Historiography

What exactly was gruit? The sources are quite vague on this subject, not helped by the fact that gruit disappeared from the Low Countries during the fourteenth and fifteenth century, precisely because brewers started to use hops. Everywhere the gruit monopoly was somehow converted into a general tax on beer, which included the hopped beer. Confusingly enough, this tax was then sometimes called 'gruit' as well, without the act of actually supplying a substance of the same name. As a consequence, in later centuries, people didn't have a clue what sort of thing gruit had actually been.[2]

One of the most significant contributors to the debate, and at the same time a cause of more confusion, was the engineer Gerard Doorman (1878-1967). In 1955 he published *De Middeleeuwse brouwerij en de gruit* ('The Medieval brewery and the gruit'), in which he pulled together a wealth of source material. In his opinion, there was no room for doubt: gruit had been a mixture of herbs. He admitted that while gruit was often referred to as *fermentum* in Latin - implying that those living in Medieval times believed it had a function in fermentation - this could be dismissed because brewers then did not really understand the brewing process. Also, the fact that in the town of Deventer, apart from gruit, there were also two mysterious substances sold called *Medulla brasii* and *Soppa fermenti* or *gruetsoppe* (literally, 'gruit soup'), did not discourage Doorman. In his view, the kettle and the fuel bought for this purpose, simply implied that the Deventer gruit house also produced wort (unfermented beer), which people could ferment at home. The *gruetsoppe* would then have been the dregs, the residual grains sold off as animal fodder.[3]

Furthermore, Doorman was also convinced that *kuit* beer, a popular drink in Dutch cities such as Gouda and Delft during the fifteenth century, was an unhopped beer. At this time there were two types of beer in Holland, *hoppenbier* and *kuit*. Doorman surmised that if one of them was called hoppen beer, the other one would be a beer without hops. However, this is contradicted by the fact that a hop tax was levied on the 'koeyte' in Gouda in 1468 and that hops were used in Leuven *kuit*.[4]

For a long time, Doorman's conclusions went unchallenged. However, in 1994 a young college student, Hans Ebbing, examined Doorman's work in his thesis *Gruytgeld ende hoppenbier*. He concluded that Doorman had been bending his discourse towards his own ideas a bit too often and that a number of sources could have been looked at more critically. Ebbing formulated an alternative idea, that gruit was not just a mixture of herbs, but rather more like a porridge or liquid required for brewing beer, speculating that it was a 'powerful malt extract' that contained a lot of enzymes to convert the starch inside the oats (then the main ingredient for beer) into sugars.[5] Ebbing's ideas were challenging, a bit too much for his supervisor V.T. van Vilsteren, who diluted them for their joint contribution to the 1994 book *Beer! The story of Holland's favourite drink*.[6]

Two contradictory theories

So was gruit a mixture of herbs, as Doorman thought, or something more akin to what Ebbing suggests? In issue 166 of *Brewery History*, Frederik Ruis put forward his own arguments which were meant to support those of Ebbing.

Firstly, Ruis claims that gruit had everything to do with regulations and limitations issued by towns, because, as only a limited number of barrels was allowed to be drawn from a certain amount of malt, the brewers were left with dregs from which they had not yet extracted all the sugars. Brewers would then take these sugar-rich dregs to the gruit house, that did have the right to draw more (weak) beer from it. Then, this would be boiled down to a 'thick paste' (a kind of syrup) and be mixed with herbs. Next, the brewers would take the syrup back, and add it to the beer, as a kind of fermentation starter, or to get a nicely foaming secondary fermentation.

Yet this interpretation is open to question. It is true that from the fourteenth century onwards Dutch cities imposed all sorts of limitations on brewers, such as the byelaws in Delft (ca. 1326-1340), Gouda (1366) and Haarlem (1407). However, these restrictions mainly concerned hopped beer. For example, in Delft the brewing of hopped beer was initially limited from the first of October to the first of May.[7] The byelaw in Gouda and especially the one in Haarlem date from the time that brewing with hops had already become dominant. In fact, there are no known byelaws that limit the amount of gruit beer brewed. Gruit is mentioned in sources from 947 and 999 onwards, when no such regulations were in place.[8] Therefore, in the era of gruit use there was no reason at all for the brewers not to sparge the dregs themselves, and turn the result into small beer or to boil it down into something stronger. There was no need for a gruit house to do that.

Next, there is the question of the delivery of sugar-rich dregs to the gruit house. There appears to be little evidence to support this idea. The records of the gruit house in Deventer in the years 1339-1349 have been preserved and although they feature several entries of which the purpose is hard to understand (such as the purchase of malt, peat and a copper brewing kettle) there is one thing that was not purchased, sugar-rich dregs.[9] And yet the Deventer gruit house produced this mysterious *medulla brasii* and *gruetsoppe*. Whatever these were, they were not made from sugar-rich dregs.

The final argument made by Frederik Ruis revolves around 'nabier' (literally, 'after-beer'), extant in the sixteenth and seventeenth century. This term was often used for the last mash to be drawn from the malt, a small beer that could be sold to the poor, or be used to dilute the wort from the stronger first mash to the desired strength. The term 'nabier' was also sometimes used for a boiled-down wort, which was like a kind of syrup. This form of nabier features in the *Kruydtboek* ('Herb book') by the Flemish Matthias de l'Obel from 1581, and in a recipe for a beer called 'Nimweeghse mol' from Dordrecht, at the end of the seventeenth century. According to De l'Obel, nabier was called 'Graut' in English, a translation also given by the Dutch scholar Schoockius (1661) and one found in a dictionary dating from 1679. For Ruis, there is no need to look any further: what was called 'graut' or 'grout' in sixteenth- and seventeenth-century English (not Dutch), is the same substance that is indicated as 'gruit' in medieval sources in the Low Countries.

However, in the Low Countries, gruit had fallen out of use long before De l'Obel wrote his Kruydtboeck. In Leuven, gruit beer had disappeared by 1423.[10] In 1437, a Delft tax collector wrote that people had stopped brewing with gruit long ago, the same is stated in 1468 we read the same in Gouda, where the 'gruytebier' hadn't been made for ages at that point.[11] Whatever gruit was, there is no continuity to be found between the Medieval gruit and the nabier mentioned by De l'Obel and in the Nimweeghse mol recipe at Dordrecht.

A herb mixture after all

We don't have to look for ghosts everywhere. Although this understandably will not be the final word on the matter, it does appear that Doorman was correct: gruit was a mixture of herbs and nothing more. The Medieval sources are vague and there are references to gruit as a *fermentum* and sometimes even as a *polenta* (porridge).[12]

For some reason, however, the most important clue continues to be overlooked: the surprising ease with which gruit was supplanted by hops. From the very first moment that brewing with hops is mentioned in the Low Countries, in 1321 by the count of Holland, it is in a context of a diminished revenue from gruit. After all, the count forbade the import of Hamburg (hopped) beer, but granted permission to the brewers of Holland to brew hopped beer, on the condition that per quantity of malt they would pay the same amount of money 'as they would for other beers, for which they would use gruit ('als sijt gheven souden van anderen biere, die si mit grute gruten souden').[13] After that, in the sources there is a long litany of complaints and litigations by the owners of gruit rights, because they were faced with diminishing income from gruit due to hops. The deed by Emperor Charles IV to the bishop of Utrecht in 1364 leaves no room for doubt:

> Now however, in the past thirty or forty years the new method of brewing beer ('novus modus fermentandi cervisiam') has come to predominate so much with the inhabitants, namely by adding a certain herb called hops or 'hoppa', that the bishop of Utrecht is largely suffering a diminution in the revenues he was used to obtain from distributing the gruit.[14]

Also, this very same quotation provides a clue that the term *fermentare* in Medieval Latin does not simply mean 'to ferment', but can in certain contexts also mean 'to brew'. Here, for instance, *fermentandi* refers to 'fermenting', i.e. brewing, with hops. When in earlier texts gruit is called a *fermentum* it doesn't necessarily mean that gruit actually aided fermentation. *Fermentum* could also simply have meant 'brewing substance'.

Another well-known quotation on the replacement of gruit by hops is one by the bishop of Utrecht, who complained in 1404 about 'the hopped beer' because of which 'our gruit' hardly yielded anything anymore in the city of Zwolle.[15]

There is no sign of a transition phase, in which brewers started using hops, but also continued to add gruit, for instance to start fermentation or to have better sugar formation during mashing. Brewers switched to hops, and the revenues from gruit immediately collapsed. In the sources, the diminution of income from gruit is without exception attributed to hops. If gruit really was anything else, or anything more than some herbs of which brewers thought that they enhanced taste and durability, in short exactly what hops did, this transition would never have been so abrupt. I do not believe Ebbing's assumption that gruit was a malt extract either: he claims that it was used because there was not enough sugar formation in oats. However, oats initially continued to be the main brewing grain in the era of hops as well, without the use of any gruit.[16]

Conclusion

Although at the Deventer gruit house, and possibly elsewhere, there were more activities than just the collection, crushing and packaging herbs, the conclusion still seems justified that the essence of gruit itself was a mixture of herbs. Other functions of gruit could never have been replaced by hops so easily. The arguments put forward by Frederik Ruis are open to refutation: there were no bye-laws that would cause gruit brewers to be stuck with sugar-rich dregs, such dregs were not purchased by the gruit house, and the connection suggested between English 'grout' and Dutch 'grout' is a much too loose one.

References

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2. Doorman, G. (1955) *De Middeleeuwse brouwerij en de gruit*. Den Haag: Martinus Nijhoff, pp.20-22.

3. ibid. pp.32-37.

4. Pinkse, V.C.C.J. (1972) 'Het Goudse kuitbier. Gouda's welvaren in de late Middeleeuwen 1400-1658', *Gouda zeven eeuwen stad*. 19 July, pp.91-128; van Uytven, R. (1975) 'Haarlemmer hop, Goudse kuit en Leuvense Peterman', *Arca Lovaniensis. Artes atque historiae reserans documenta jaarboek*. 4, pp.334-351; Alberts, L. (2010) 'Bier drinken met maten. Dronkenschap en het alcoholgehalte van Stichtse en Hollandse bieren in de late middeleeuwen', *Jaarboek voor de Middeleeuwse geschiedenis*. Vol. 13, pp.113-166. Doorman's mistake was basis of the current Koyt beer brewed by the Jopen brewery in Haarlem, which was recreated in 1995 as a herb beer with very few hops.

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9. Doorman, G. (1955) op. cit. p.35.

10. van Uytven, R. (1975) op. cit. p.338.

11. Unger, R. (2001) op. cit. p.41-42.

12. Ebbing, H. (1994) op. cit. p.27.

13. Doorman, G. (1955) op. cit. p.76.

14. Beckmann, J. (1814) *A History of Inventions and Discoveries, Volume I*. London Henry G. Bohn, p.337. My translation from Latin.

15. Doorman, G. (1955) op. cit. p.83.

16. Alberts, L. (2010) op. cit. pp.135-136.