

Merryn Dineley: Barley, Malt and Ale in the Neolithic

Hywel Keen United Kingdom

• This book presents the results of the research into the possibilities of early beer production.

Alcohol is often in peoples thoughts and archaeologists are no exception. For how long though has the human race been indulging in this habit, and what has its role been within past societies. Alcohol itself does not appear in the archaeological record and most studies have relied heavily on anthropological models in order to make inferences. This study, although covering much the same ground starts from a different position to most.

The opening chapters are concerned with experiments carried out by the author to produce barley beer using the simplest possible techniques. The stated aim of the experiment being to investigate whether it is possible to produce beer with the technology available during the Neolithic period, when grain first became widely available. The author goes into great detail outlining the processes required for the malting of barley, its fermentation and the decanting of the final product. With regards to experimental technique the processes investigated by the author regarding the malting the barley are the most pertinent, where as the fermentation and decanting processes were carried out using modern equipment. The results of these experiments were used by the author to produce a check list which could be compared to archaeological remains to see if alcohol, or more precisely beer, was being produced. Within these chapters there is also a brief discussion of

additional ingredients which could be added to the beer as either flavouring, a means of clearing the beer or, in the case of Henbane and other such ingredients, a method of producing a product with a mind altering affect additional to that of alcoholic intoxication.

Using the check list produced in her opening chapters the author goes on to consider evidence from archaeological sites across Europe and the Near East covering cultures from the Late Mesolithic to the Late Neolithic, with the aim of identifying possible evidence of brewing or the consumption of beer. Although the checklist contains elements of material culture and physical structures the main type of evidence leaned on within this part of the study is environmental. Thus primacy is given to the presence of charred or heated grains, barley primarily but also other cereals and the traces of other plants, such as Henbane, especially when discussing material from Ertobolle Mesolithic sites. When considering material culture the author gives prominence to the presence of ovens which could be used for malting and pottery which could be utilised for producing or consuming alcohol. As was to be expected from a study of this sort all of the sites considered showed attributes which could indicate the possibility of brewing.

The third element of the study is to discussion of the possible social aspects of alcohol production and consumption within the societies covered. The author

concludes that as all the Neolithic cultures, the more sedentary Mesolithic cultures in Netherlands and Denmark had the technology available for the production of beer they therefore did so. In addition she speculates that alcohol would have played a central role within these societies both within religious/ritual aspects but also in the negotiation of personal status. In particular the author draws a parallel with English medieval society, where the brewing of beer was seen as the part of the province of widows or spinsters who lacked an extended family to fall back on and maintain their social status. This also alludes to the fact that such women were often connected with witchcraft and thus a link is forged with Henbane which was regarded with Deadly Nightshade as an adjunct to witchcraft. The author's central hypothesis though is that the spread of the Neolithic package throughout Europe was driven by a desire, or need, to produce alcohol rather than bread.

The work as a whole gives the impression of a work in progress rather than a completed study. This is most obvious within the part dedicated to the experimental work. The author herself says that in the future she intends to complete more of the brewing process using experimental methods. This would correct a clear failure in that the brewing method outlined is one familiar to anyone who has bought a home brewing kit, and even then of someone more familiar with home wine production as she uses glass jars, with airlocks, when home brew beer is more often completed with simple lidded buckets. There is also an emphasis on the cleaning of the equipment, which is again a part of modern rather than traditional brewing styles. As a result of these problems the checklist produced for identifying possible sites is both vague and partially based on false assumptions. Another failing is that having shown that the

heating of barley or grain is a central part of beer production, the author fails to produce any means of distinguishing between this and the heating required for the production of bread or in fact any other cereal based product. If this failing is admitted, then what the author is highlighting is a fact that the archaeological evidence proves only that cereals were being processed, but not the form of the final product. Another jarring note is the brief discussion on the central role of women in the production of beer, the problem here is not the concept *per se*, but that there is no evidence for or against the idea and that the main source of the idea seems to be only by comparison with cultures from different time periods. There have been many societies where women have retained or acquired social status through brewing but equally there have been others where brewing was the preserve of men. The model alluded to in the text being a case in point. In Medieval England the village based production of beer was the preserve of women and was used as part of the payment for farm labourers, in the towns with their specialist brewers the gender role was reversed, usually controlled by guilds. Thus as with the actual production of beer itself the gender of the brewers requires further evidence before any conclusions can be drawn. The central hypothesis that Beer and not Bread was the mainspring behind the spread of the Neolithic package again suffers from the studies inability to definitively distinguish between the archaeological evidence of alcohol production or the production of other food products. However, the concept of the spread of agrarian farming being spearheaded by Publicans is extremely attractive.

Book information

Dineley, Marnyn: *Barley, Malt and Ale in the Neolithic*, BAR International Series 1213, 2004, ISBN 1 84171 352 X, 84 pages.

Summary

Merryn Dineley: *Gerste, Malz und Bier im Neolithikum*

Das erklärte Ziel des Projektes war die Klärung der Frage, ob es mit der während des Neolithikums bekannten Technologie – aus der Zeit, in der zum ersten Mal Getreide allgemein verfügbar war – möglich ist, Bier herzustellen. Die Autorin beschreibt detailliert die dazu notwendigen Prozesse. Die experimentelle Untersuchung bezog sich auf das Mälzen der Gerste, während die Gärung und das Abfüllen mit Hilfe moderner Technik durchgeführt wurden. Die Ergebnisse wurden genutzt, um eine Checkliste zu erstellen, die mit archäologischen Hinterlassenschaften verglichen werden konnte, um festzustellen, ob bereits Alkohol (Bier) produziert wurde. Unter Anwendung der Checkliste geht die Autorin dann vor allem auf die Ergebnisse umwelthistorischer Forschung von archäologischen Plätzen aus Europa und aus dem Nahen Osten ein. Der dritte Teil der Studie ist eine Diskussion der möglichen sozialen Aspekte der Herstellung und des Konsums von Alkohol.

Merryn Dineley: *Orge, malt et bière au Néolithique*

Ce projet a eu pour objectif d'apprendre si l'on pouvait produire la bière en appliquant des technologies praticables au Néolithique où la culture des céréales a fait son apparition. L'auteur a décrit en détail le procédé de fabrication bien que la partie expérimentale n'ait touché que le maltage de l'orge; pour la fermentation et le soutirage, on a eu recours à un équipement moderne. Une liste a été dressée des résultats obtenus qui se prêtent à être comparés aux vestiges archéologiques afin d'apprendre si l'on a vraiment confectionné l'alcool (bière) à l'époque en question. Ensuite, en utilisant la liste, l'auteur examine la documentation archéologique provenant des sites européens et du Proche-Orient; elle s'appuie surtout sur le registre environnemental. Et enfin, dans la troisième partie, c'est une discussion sur des connexions éventuelles sociales de la production et la consommation de l'alcool.