

LITHIC TECHNOLOGY AT THE TRANSITION TO FARMING:



Analysis of the Later Mesolithic and Early Neolithic stone tool technology in eastern lowland Ireland

Outline

Our current understanding of the Mesolithic-Neolithic transition in Ireland is fairly generalised and no consensus has been reached on whether agriculture was adopted by indigenous inhabitants or whether new subsistence strategies, rituals and symbols were brought to the island by migrant farmers. The principal objective of this doctoral research, currently undertaken at the UCD School of Archaeology, is to analyse the nature and change of lithic technologies during the Late Mesolithic and Early Neolithic in lowland eastern Ireland. Detailed attribute analyses of key lithic assemblages provide the basis for the reconstruction of the technical developments and constraints of societies at the transition from foraging to farming.

Aims and objectives

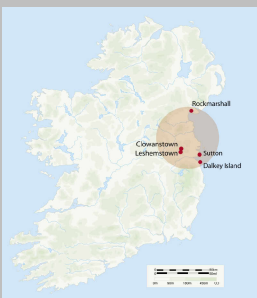
Major questions of this project focus on chipped stone tool production strategies and changes during the transition from foraging to farming. Multivariate analysis of the resulting data sets (assemblages dating from circa 6500–3200 BC), placed into wider archaeological contexts, will relate lithic technology to aspects of human behaviour including raw material availability, exploitation, trade and exchange, technical skills, tool function, artefact longevity and modes of discarding. Fundamental goals are the assessment of how technological patterns relate to the adoption of Neolithic life-ways and how quickly any observed changes in manufacture within this critical period in prehistory took place.

Methodology

All relevant lithic assemblages are subject to macroscopic attribute analysis as a sound basis for reconstructions of the chaîne opératoires. The investigation of these operational sequences enables the analysis and interpretation of technical choices made at certain stages of tool manufacture. Small-scale refitting programmes of appropriate assemblages will inform on the spatial distribution of artefacts and the organization of the tool production on site.

Case studies

The study area is the eastern Irish lowlands. Assemblages from sites for which radiocarbon dates and/or clear stratigraphic sequences are available form the focus of detailed attribute analysis. Key sites include recent excavations at Clowanstown and Leshemstown in Co. Meath (additional sites still to be confirmed) as well as assemblages from old excavations at Rockmarshall in Co. Louth, Sutton and Dalkey in Co. Dublin.



Lithics from Clowanstown, Co. Meath

Investigations of the raw material used will contribute to issues relating to the extent of seasonal mobility as well as the preference of local or non-local rock sources. Most importantly, these investigation methods offer the opportunity to gain information about the social structure and the interrelationships between hunter-gatherers and early farmer societies in the research area. It is hoped to filter out possible reasons for foragers giving up their traditional subsistence mode in favour of farming and to examine the commitment to an agricultural way of life in the tool kits.

Research demands

In Ireland, the study of lithic assemblages from the Mesolithic-Neolithic transition is restricted and the chosen study area in particular has been given comparatively little attention in research. This research project directly addresses questions related to the shift in subsistence mode. Through the examination of chipped stone tool technologies, a body of evidence abundant on both Mesolithic and Neolithic sites, the disputed models of the adoption of agriculture will be enlightened from a lithic perspective.

Additional information

For additional information and project updates, please write your e-mail address in the space provided:

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