

New Perspectives on Querns in Neolithic Societies

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Since the time of the first Neolithics, cereals were ground to flour by querns. Together with the domestication and breeding of animals, the cultivation and processing of plants was one of the basis of the new agrarian way of life. However, the concrete exploration of the basic aspects of cereals processing has only emerged in the last fifteen years. Today, the study of grinding tools contributes largely to our knowledge of neolithic economy and social organization. The multiplication of studies at a more or less regional scale has purchased new data concerning the circulation of raw materials, the status of the sites and the subsistence economy. The following papers aim at sharing and discussing the new perspectives of such studies on querns in neolithic societies from all over Europe. They were presented at a session of the 13th annual meeting of the European Association of Archaeologists (EAA) in September 2007 in Zadar (Croatia).

The available studies generally integrate a global survey of the grinding tool aspects and their context of discovery (settlements, pits, cemeteries, hoards, etc.). The purchasing and use of raw materials, the form and size of the tools, their technological and even functional characteristics are now better, yet unequally, documented. The following presentations demonstrate how a global survey of grinding tool aspects can bring further elements for the interpretation of the status and function of a site. They also point out the importance of the context of quern discovery and the necessity of a pluridisciplinary approach in which quern study must be involved. The session was organized in more or less four thematic blocks.

Adopting a regional or cultural point of view, grinding tools can help define the cultural background of a settlement, like pottery, lithic artefacts or ornament. The morphologies and dimensions of querns are taken into account by I. PAVLU as a basis for a large comparison of different chrono-cultural contexts from Western Europe to Anatolia, in order to underline the great tendencies of tools' morphological evolution.

Despite a large range of local resources (sandstones, basalts, granites, limestones), some rocks

were chosen on purpose for grinding activities. Therefore, in some cases the material from other regions was imported. The reasons of these importations may be diverse: cultural, economic, symbolic, etc... This aspect is discussed by J. GRAEFE for neolithic querns in north-western Germany and by B. RAMMINGER for Linearbandkeramik querns in Hesse (Germany).

The technological and functional studies of querns have stressed the surprising complexity of the cycles of reuse and a real diversity in the grinding tasks (temper, colouring, cereals...). The shaping and technological features of querns are examined, focusing on the maintenance and recycling of grinding stone implements. The functional analysis of querns is also discussed, and included a reflexion on use-wear analysis and contextual elements. New tools and methods of use-wear analysis have been developed in order to make querns speak. The techniques of grinding cereals, in terms of gesture and efficiency, have benefited from solid ethnographic comparisons and experimental references. Moreover, the comparisons of the tools and environmental data can help understand the evolution of the grinding techniques together with the diet of neolithic populations. C. HAMON presents in her paper the technological and functional analysis of Linearbandkeramik grinding tools from north-western Europe. A similar approach is developed in A. CIRIACO ET AL. presentation about the excavations at the south Italian settlement of "Masseria Candelaro".

Discoveries of querns in funeral ceremonies or ritual contexts may be linked to diet symbolic and to the new agricultural economical and social order. This last thematic block, illustrated by two papers, explains the role and status of querns in the ritual life of different European regions. The implication of querns in varied ritual contexts together with their economic and social meanings is discussed. Recent studies reveal that the status of neolithic querns is not only profane, reduced to domestic use in the households, but also ritual. Querns are often found in funeral ceremonies such as in cemeteries or megalithic monuments and in ritual contexts such as hoards. A real sym-

bolic seems associated to querns, probably in link with their connection with the agricultural economical and social order. C. LIDSTRÖM HOLMBERG connects quern technology and social relations because some Funeral Beaker Culture settlements and finding places in Scandinavia demonstrate rites of separation. S. WATTS explain the structured deposition of querns in neolithic Britain.

Within this international meeting a basis for future research strategies for quern study was discussed. One of the main question is still the use of different terminologies applying to querns and depending on the chronological, epistemological or regional context they come from. The upper stone and the lower stone which constitute the two parts of the neolithic mill have different names according to the language and the chronological and regional contexts of discovery. The upper part is labelled "runner, hand stone or grinders" in English, "Läufer or Kornquetscher" in German and "molette or broyeur" in French. The lower part is labelled under the generic term "quern", with different names for "saddle querns or grinding slabs". In German, you will find the term "Mahlstein or Unterlieger", with specific "Sattelmahlstein" name or the French term "meule". The homogenisation of the terminology and definition of grinding tools among the great family of macrolithic tools should be improved in the next years thanks to a collective reflexion of the specialists of these implements.

This meeting has set, we hope, the conditions for a real exchange of information between specialists of neolithic querns throughout Europe.

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