Neolithisation – a Scanian Perspective

by KRISTINA JENNBERT

The division between the Ertebølle, as the last huntergatherer culture, and the Early Neolithic Funnelbeaker Culture, as the first agrarian community, has separated these prehistoric phases rather than presenting them as a sequence. This perception of the division has determined the modes of understanding and explaining neolithisation as reflected in the application of either diffusionist or ecological models.

With respect to the transition, two alternative hypotheses have been formulated. According to one of them, the Ertebølle and the Early Neolithic represent two different cultural and economic phenomena Becker 1947: 126 ff; 1955: 155 ff; Skaarup 1973: 141 ff; Salomonsson 1970: 94; 1973: 24 ff); the other hypothesis supposes that pre-conditions for the development of an agrarian economy were inherent in the late Ertebølle Culture (Troels-Smith 1953: 156 ff; Andersen 1973: 26 ff; Fischer 1982: 10).

A consideration of the different hypotheses should, in my view, be preceded by analysis of environment, subsistence strategies, settlement patterns, and social territories. First, however, we have to discuss shortly the definition of Ertebølle and Early Funnelbeaker Cultures.

Concepts such as culture and period are necessary abstractions for classification. However, the utilisation may constitute an obstruction when it comes to defining a transitional stage, as the neolithisation. This is reflected in the tendency to exclude »mixed« sites (containing both hunting and farming elements) from discussion. Consequently, the period of transition becomes exceedingly hard to grasp. The entire transitional stage can hence be explained away, because the finds from relevant sites are held to be »mixed« – i.e. incongruent with the adopted division, as defined by »pure« finds of either hunting or farming type (Ertebølle and Early Funnelbeaker Cultures respectively).

Therefore I would like to argue that the distinction between the Mesolithic and the Neolithic needs to be »softened«. In the subsequent discussion of the empirical material, the emphasis is on sites containing finds of an Ertebølle as well as an Early Neolithic character. Such sites, it is believed, may open up new perspectives for elucidating the introduction of farming. The basic material is from the Löddesborg site by the Öresund coast in Scania. This site is of »mixed« character, and so are also other sites in southern Sweden (Jennbert 1984).

At Löddesborg several culture layers could be discerned. As the order of the layers is essential, they were subjected to source-critical scrutiny, and it was assessed that the layers are cultural deposits and have not been disturbed.

There are no distinct differences between Ertebølle and Early Neolithic pottery that might be regarded as evidence of dissimilar manufacturing traditions. This is indicated by analyses of tempering material, sherd thickness, vessel-building technique, and firing methods. Nor do the different layers display any major divergences that might suggest abrupt breaks in the settlement history.

Two ceramic traditions are thus found in the same layer and the pottery could have been manufactured by the same population. There is nothing to suggest that the dissimilarity in the designs – that is, the difference between the Ertebølle vessels and the Funnel Beakers – has any functional significance, even if the pointed bases of the Ertebølle vessels imply a special practical function. Clay analysis and tempering materials, as well as analyses of food remains, show no functional differences. Both types have been used in cooking.

Instead, the design of the vessels might symbolise, and constitute an expression of, the peoples' conception of their world. Hence the dissimilarities with regard to shape and decor need not be due to the vessels having been manufactured by different population groups. For if the idea of life is altered in connection with the change in production, the appearance of the material culture will alter, too. Thus, the relationship between changes in material culture and mechanisms of social change is crucial for understanding the conditions for the beginning of agriculture (Jennbert 1984: 134 ff).

By the aid of a C-14 dating, Lu-1842, 3260±80 b.c. (conventional dating), and on the basic of the character of the flint and stone material, the Löddesborg site is dated as belonging to the Late Atlantic time.

A number of settlement sites along the Scanian coastline and in the inland areas, as well as in the westernmost part of the Blekinge coast, are comparable to the Löddesborg site both with respect to stratigraphy and the properties of the finds. They all suggest that previous subdivisions into culture groups, with concepts such as Ertebølle Culture and Early Neolithic Funnelbeaker Culture, should be modified, and that the Löddesborg site is not a unique phenomenon in the later Stone Age of southern Sweden.

These settlement sites are chronologically placed between the »pure« Ertebølle period and the »pure« Early Neolithic period. The special characteristics of the material culture, particularly with respect to the two pottery traditions is thought to reflect a society where change is discernible in material culture. This stage with »mixed« finds can hypothetically have lasted about one hundred years. It indicates local continuity between the Mesolithic and the Neolithic.

The Löddesborg site was located in a favourable ecological setting, where marine as well as mainland-based resources could be utilised. Bone remains throw some light on hunting and fishing. Grains of wheat and barley have been found both in Ertebølle- and Early Neolithic sherds. Also from the Vik settlement, in southeastern Scania, a grain of wheat has been found in an Ertebølle sherd.

The Löddesborg site and other sites from the Late Atlantic period are considered to be permanent settlements. Such settlements have been found from earlier periods, too, although the examples are few (ex. Larsson 1982: 39). The occurence of permanent settlements thus forms one of the prerequisites for the introduction of agrarian production, as it implies a more complex social organization.

After this archaeological definition of a transitional stage

between the Late Ertebølle and the Early Funnelbeaker Cultures I will discuss some of the possible explanations of this transformation.

One of the hypotheses concerning the introduction of farming has been that a need for altered living conditions developed as a result of population pressure combined with insufficient natural resources (Fischer 1984: 91; Zwelebil & Rowley-Conwy 1984: 104 ff). The Löddesborg site belongs to a regression phase. So far, however, there is no reason to assume that a regression during the Late Atlantic time had repercussions on the marine resources, at least not in such open coastal settings as the position of the Löddesborg site represents. Nor do current climatological investigations supply any evidence for a climatic change affecting the ecology and the available resources that could be exploited. We should then rather consider the social and economic environment of complex hunter-gatherers and early farmers.

Recent anthropological research suggests that there need not be any major differences with regard to social structure between the Late Ertebølle and the Early Neolithic periods respectively, as both settled hunter-gatherers and the first farmers can be characterised by a delayed-return system (Woodburn 1980: 98 ff). Anthropological studies have also shown that there need not be any major differences in subsistence strategies and land use (Woodburn 1980: 98 ff) or in material culture (Orme 1981: 70 ff) in hunter-gatherers societies and in farming communities respectively.

These general considerations imply that the Late Ertebølle Culture should exhibit some social complexity – e.g. clearly defined social territories – and eventually also some contact with neighbouring farming communities.

The regional variation within the Ertebølle area can be looked upon with regard to distribution of T-shaped red deer antler axes, Limhamn axes, bone combs, bird-bone points, different types af harpoons, scapulae with circular cuts, bone rings, discs made from scapulae (Vang Petersen 1984: 15; Andersen 1973: 33 ff; Becker 1939; Jennbert 1984: 139), flake axes (Vang Petersen 1982: 188, 1984: 17), the Scanian group of Ertebølle pottery (Jennbert 1984: 139), different types of bases of the Ertebølle pottery (Hulthén 1977: 39), and the Early Neolithic pointed butted axes (Becker 1939; Jennbert 1984: 109).

Within the Ertebølle area there are tendencies in the spatial distribution of artefacts to a western and an eastern variety. But there are also local variations (Vang Petersen 1984: 13 ff). Thus, regional and local networks can be defined, just as the material culture in several aspects indicates strong influences from the farming cultures of the Late Linear pottery tradition.

The introduction of farming may thus be a consequence of tradition and innovation in connexion with contact networks and exchange relationships between local Ertebølle groups and the fully Neolithic groups in Continental Europe.

According to this hypothesis agricultural products are regarded as a luxury good. Foodstuffs as well as prestige objects, for example shaft hole axes (Fischer 1982: 10) may have formed part of an exchange pattern between complex hunter-fishing groups and primitive farmers. Marital alliances may also have constituted a vital component in the exchange relationships. Thus, corn and cattle came to Scandinavia in the course of gifts being exchanged, and matrimonial alliances being formed.

Such a hypothesis confirms both with the regional variation in the Late Ertebølle Culture and the archaeological composition of settlement sites of Löddesborg type. According to this there is no hiatus in the settlement history of southern Scandinavia at the transition between the Mesolithic and the Neolithic.

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