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Seizing Wind, Wielding Power

The dissertation *Grasping Technology, Assessing Craft: a Research-Method for the Study of Craft-Tradition* (Zagal-Mach Wolfe 2013) is concerned with the subject of craft and technology and the intricate connection between man, his objects and society. The aim of the research has been to achieve a comprehensive understanding of the inherently social phenomena of craft and technology and subsequently how to study them through the limited empirical record of archaeological material.

When archaeologists claim to study social and cultural structures and phenomena, patterns of social engagement and human interaction in general, the study is always based on the material culture of the past. It is understood that these objects have been created and crafted by people of the past, but the weight of this fact is not always recognized; the fact that no matter what phenomenon we might focus on, we are always studying the material expression of past manufactures and productions. This acknowledgement leads to the question of how and to what degree craft and technology can be said to be inherently human and to what degree they shape and mirror societies.

These questions brought about the topic of the doctorial research project, namely an attempt to discern the complex of craft and production, and to understand the degree to which we can answer questions concerning the technological choices of the past. If we accept archaeological material culture as being a creation, then the artefact, or a structure, becomes not only *form* but also contains the idea of the form, the choices that were made and the ideas about the function in the mind's eye, as well as the social relations and interaction of the craftsmen all culminating in the *gestalt* that is the artefact we see

today. The manufacture and objects of human beings will also be what shape the societies, minds and bodies of the people involved.

The thesis proposes a research-method that puts attention on craft-tradition, understood to mean the comprehensive complex of manufacture, the social relations and context, *actants*, and *habitus* of the craftsman. The research method is general in its design as it outlines the different levels of study necessary when studying a craft-tradition. The aim of the research strategy is to enable the researcher to get an insight into the structure and process of craft.

I discuss and define a theoretical framework using the concepts; technology, craft, technique and tool. I established the concept of craft-tradition as fundamental for my study and research methodology as it includes both the aspect of construction and use of an object as embedded in the practice of technology, craft, technique and the shape of the object. The aspiration is to establish as generalized a model as possible, in the attempt to see the action of craft and production and the social role as a craftsman as a general human phenomenon.

The research method is tested on one of the "black-box" conundrums of prehistoric archaeology: My case-study focuses on the textile craft-tradition during a change that is presumed to have brought about the production and use of textile sails on Scandinavian boats. The population of prehistoric Scandinavia maintained a longstanding tradition of oar-driven boats (e.g. Crumlin-Pedersen 1986; Andersen et al. 1989; Andersen et al. 1989; Andersen and Andersen 1998; Bender Jørgensen 2005; 2012; Bender Jørgensen and Damgaard Sørensen 1999). The archaeological record of south Scandinavia does not give us any remains of textiles that can be presumed to be sails until the beginning of the Scandinavian Viking Age, around 800 AD in the Oseberg burial. Nevertheless, depictions on, for instance, the Gotlantic picture stones and the remains of a developed rig found in the Oseberg ship and later finds, do show us that a development took place in Scandinavia during the late Iron Age, presumably during AD 500-800 (see Christiansen 1974, 167; Varenius 1992; 2006, 255-256; Westedahl 1995; Andersen and Andersen 1998; Bender Jørgensen and Damgaard-Sørensen 1999; Englert 2000, 37; Ingstad 2006; Bender Jørgensen 2005; 2012; Arthursson 2013). This development eventually changed and combined the longstanding tradition of oar-driven boats with the blossoming of a skilled use of rig and sail.

It is safe at this point to rule out the Scandinavian sails as being a completely isolated invention. The ships are a result of a specifically Scandinavian shipbuilding tradition and displayed a long-standing resistance to the sail. The conceptualization of the social function of the sail seems to be securely embedded in the existing maritime and social structure as seen in the etymological and iconographical evidence. The stringent conceptual boundaries of the social hierarchy, the maritime display of this structure, as well as the craft-tradition of textiles and arguably of boatbuilding, speak against the mere import of an object. It possibly started as a copy and quickly developed into a specifically Scandinavian *object-group*, through the combination of techniques and tools.

In the social and political context of early urbanization processes during the 7th century AD the change in craft-tradition that introduced the use of textile sails in Scandinavia takes on a wider relevance. The economic and political developments in Western Europe and the largely simultaneous establishment of the Caliphate as the leading economic and political power in the Old World are of significance. The north was connected with these powers in a complicated, mainly indirect, center-periphery relationship that gave a general frame- work for the beginning of the process (Callmer 1994, 79).

The process of urbanization made its mark on the maritime technology in several respects. Specialized landing places in Denmark increased during the 7th and 8th centuries AD, and Ulriksen speculates that this must be a result of a change in the prestige-object trade as well (Ulriksen, 1997, 122). He is of the opinion that the relationship between England and Scandinavia was one of alliances consolidated through gifts and family ties during this period, creating a map of communication routes which Hines describes as used for "migration, trade and the diffusion of craftsmen skills" (Hines 1984, 278). It might be within this context that the fusion of techniques and/or the copying of the *object-group* sail occurred in Scandinavia. After all, the gift of technology, technique, tools, which facilitated the introduction of the sail, must have been one of considerable dimensions, that is to say, when the receiving Scandinavian textile craft-tradition was ready for it, which it appears it was during the 8th century AD: "From a Western European perspective it was the decades around the year 700 that the growing tendencies towards a fundamental rearrangement of the perception of the economic and external political relations were clearly expressed" (Ulriksen 1997, 222, author's translation).

In other words, the sail did more than adorn the mast of ships or project the aspirations of powerful men. It was part of a fundamental change, both political and economic, binding together lands and people

in new social constellations. I maintain that it is within the framework of the urbanization processes of Scandinavia that the changes within the textile craft- tradition must be seen, and subsequently the introduction of the sail in Scandinavia. Consequently, there is a need for further studies of this relationship that forever shaped not only the socio-political landscape but also the horizons of Scandinavia.

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