## CHRONOLOGY

La cronologia è l'occhio dell'istoria. C. Cattaneo (1849)

I am from the hunt Armed to the teeth Need I be alarmed or anxious When they say There is war! There is War! Dangme song, Ghana

## I. INTRODUCTION

The novel and revised dendro-chronological dates of the famous well-preserved oak-coffin graves from the Danish Early Bronze Age mainly represent more of the same and minor corrections, but the implications are quite interesting on a number of archaeological points, like contemporaneity of primary burials (cf. the dendro-scientific contribution by K. Christensen below in this volume and Tables I-II).<sup>1</sup> Furthermore, it is now possible to develop true micro-chronologies of artefact types on the base of observations on these finds; thus, even macro-chronology is under influence by the novel and revised dendro-dates. The oakcoffin dendro-data have now seen what almost looks like final scrutiny, while further studies are in need on other data and important points. The hollowedout oak trunks are floating on the sea of death and time with information on life in a distant age, which will continue to amaze, be the object of study, and discussed, as revealed in the long final sections of this contribution. In these, issues beyond chronology are also touched upon, such as biological and cultural life, identity and conflict, the urge to "embalm", and cosmology, under the rays of the Sun.

The oak-coffin graves are some of the most important archaeological finds from Northern Europe due to their wealth of preserved organic and inorganic remains in well-defined and detailed contexts (Jensen 1998). Certainly, the interpretations of oak-coffin graves are of great importance in very many respects, including personal staging, knowledge and beliefs in the Early Bronze Age. Sealed water behind an iron crust is the main factor of the preservation of organic and other materials from these graves, including world-famous full dresses, weapons, jewellery, accessories, furniture, etc. (Breuning-Madsen & Holst 1992-93). Upon excavation, water will spout from the burial mound, and, if not preserved, the organic materials will start to rot, the inorganic ones be coated with verdigris, and eventually disappear, too, in spite of having survived for more than three thousand years in the ground.

Interestingly, already the Danish High Medieval chronicle writer Saxo Grammaticus refers to a burial

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The present study originated as an archaeological comment to the revised and new dendro-dates of the oak-coffin graves. In the course of investigation, it grew in scope; thus, the collective format of a small monograph. The chronological discussion is extented and, in particular, other information and studies included. Some observations are several decades old, including social studies; most, however, stem from own studies in the 1990s, including physical anthropology, warfare, deposits, cosmology, etc. Nearly all studies are hitherto unpublished, though most have already been presented in lectures at the University of Copenhagen, and elsewhere.

mound from which spouted a lot of water upon its excavation, as indicated a phenomenon recorded from several Bronze Age mounds with oak-coffins in Jylland and elsewhere, when opened in recent times (Saxo 1200 III.3:7-8, edition Zeeberg of 2000, 116f.; present author's translation from Zeeberg):

"... And the prediction of the dreams was also fulfilled, for three days later, Balder [Nordic god of the light, the son of Odin] succumbed to the violent pain from the wound. The army gave him a royal funeral and erected a mound over his dead body.

This old tomb is still very famous, and in our own time some men headed by Harald [otherwise unknown, grave robber] once tried to open it by night in the hope to find money, but suddenly they panicked and gave up the attempt. For, when they had broken a hole, they at once saw a roaring stream of water emerging from the top of the mound, run with high speed across the surrounding fields and submerge everything in its way. It was so violent that the diggers were scared from their wits, threw the hoes and escaped in all directions, thinking that they would be carried away by the fierce stream if they continued with their task. Thus, the spirits guarding the place so scared the young men that they forgot their greedy plans to safe the life. But there is no doubt that this spring must have been an illusion and not a reality, and that it did not emerge from the inner earth but was created by magic since nowhere in nature can springs emerge from dry soil. Since that time, everyone knowing the story has left the mound in peace. Thus, no one can know if it contains a treasure, for after Harald no one has dared to penetrate its dark interior out of fear of the pending dangers."

No doubt, Saxo's story reflects real observations in the 12<sup>th</sup> century AD and earlier, although he himself is doubtful: as always open to supernatural phenomena (as no doubt his readers were), but also with a sound scepticism about such. The tale also reflects a common practice of digging in ancient burial mounds, in fact regulated by law in Jyske Lov (Law of Jylland/ Jutland) of 1241: costly items thus found being the property of the king. Actually, this is a crucial clause to archaeology, setting the legal stage for future state and public collections, as well as other archaeological activities.

A very large highly placed burial mound (65 metres above sea-level in a flat low landscape) at the district capital of Tune southeast of Roskilde - with certainty known to Saxo - is called "Balder's Mound", at least as early as the mid-18<sup>th</sup> century (Pontoppidan 1763f./VI, 106 no. 12, note m; cf. Thiele (1968/I), 276). Perhaps, Saxo's tale was linked to this particular monument, even though Pontoppidan in the above reference only mentions another tale related to the same monument. The original date of the link is obscure, since Saxo does not give the geographical location of the monument with a legend about emerging water. The risk of a Renaissance or other construction is serious. No Early Bronze Age finds are today known from the mound in question (cf. AK I, 189)<sup>.</sup>

Incidentally, to the East of Roskilde are four "Balder's Mounds" near the village of "Baldersbrønde", the original name of which is Baldorpsbrynnæ (first mentioned in 1321). This place-name does not refer to Balder the god, since Bal is a male personal name. Baldorp is thus the outlying village (torp) of Bal's; "brønde" means wells (Christensen & Kousgård Sørensen 1972; 1979/1, 73f.). Several of the burial mounds around Balderbrønde have yielded Early Bronze Age graves (AK I 321f.), including the "Balder's Mounds" (AK I 322).

Slightly confusing is the fact that Saxo mentions that, once after battle, Balder "dug deeply into the ground and found fresh springs" to provide water for "his thirsty warriors", and that these springs/wells(?) are forever remembered through their place-name (Saxo 1200, III.2:12, edition Zeeberg of 2000). The latter locality is not cited, but might well have been "Balder's Springs/Well" or "Army Springs/Well". This is doubtless the likely explanation for the speculative tale which occur in several contexts, that Baldersbrønde, with Balder's Mounds, is named after Balder, the god (e.g., Resen 1675ff./1994, 42, cf. 57; Thiele (1968/I), 12f.; Gravlund 1926, 82f., cf. 54). Incidentally, also O. Worm refers to Saxo's tale about water emerging from Balder's mound, as well as the one about water for Balder's thirsty warriors; Worm also cites the location of Balderbrønde (Worm 1643, 51f.; 319f.; cf. 317f.).<sup>2</sup>

Preserved oak-coffin graves are today restricted to Jylland, in particular the middle and southern part (including Schleswig/Slesvig) and the pertaining cultural environments. This may leave an impact on the

<sup>2</sup> Information kindly confirmed by Dr. D. Mahler, Kroppedal Museum, Taastrup.

chronological inferences. Nevertheless, oak-coffins are also recorded from the eastern and northern parts of Denmark. Just like U-shaped stone beds for wooden coffins of a man's length anywhere in the country indicate an oak-coffin long gone.

At Sorgenfri, Lyngby, København County<sup>3</sup>, a couple of burial mounds excavated by C.J. Thomsen and the future King Frederik VII in 1829 displayed the same just described phenomena - water spouting from the mound, which is holding preserved organic remains, in addition to a number of fine bronzes (AK I, 406-407). In fact, just by studying the classical, terse, and highly observant work by V. Boye on oak-coffin graves, documented examples of such have been excavated in several parts of Northern Europe outside Denmark, but unfortunately, these have not survived till modern times and potential dendro-chronological investigation (Boye 1896, 170f.; cf. contribution by K. Christensen, this volume).

<sup>3</sup> Throughout, the recently abolished "counties" in Denmark are used for reference. Also the older German Kreis (here rendered as "County") is used.