

## THE YEAR 536 AND THE SCANDINAVIAN GOLD HOARDS

In recent years archaeologists and scientists have been discussing the problems of correlating volcanic eruptions, ice-core acid layers, dendrochronology and archaeological data.<sup>1</sup> Though the difficulties in linking events such as the volcanic eruption of Thera/Santorini in the Aegean with datable evidence from ice-cores or dendrochronological curves have been made quite clear, I would like to discuss another such phenomenon, the 'dust veil' of A.D. 536. I will not, however, focus on its cause (which is also a matter of controversy), but rather on the impact it may have had on the archaeological record in Scandinavia.

The A.D. 536 dust veil is recorded by various contemporary Mediterranean sources, describing how the sun and moon were blurred for about a year, the sun giving only a feeble light even at noon. As a result crops were destroyed by the cold, and an unusually strong winter gave heavy snowfalls in Mesopotamia.<sup>2</sup> Similarly, dimmed stars and summer frosts resulting in famines are recorded in Chinese annals, and dendrochronology indicates cold summers in both North America and northern Europe.<sup>3</sup> The dust-veil seems to have covered the sky of the whole northern hemisphere.

In Scandinavia, A.D. 536 falls within the Migration Period, the beginning of which is dated around or before A.D. 400. The dating of the transition to the following Vendel Period is a subject of debate with proposals ranging from c. 520/30 to 560/70.<sup>4</sup>

An important aspect of the archaeology of the Scandinavian Migration Period is the gold finds, especially the large gold hoards. Some of these must be dated to the 5th century, such as the Bostorp hoard from Öland, where early C-bracteates are combined with a collection of solidi which indicate that the hoard was deposited soon after 475. Hoards with late A-C-bracteates or D-bracteates, however, must have been deposited in the 6th century.<sup>5</sup> This later group includes important finds like those from Darum and Skonager in southern Jutland, Gudme II and Killerup on Fyn, Madla, Sletner and Stavijordet in Norway, and Söderby in eastern Sweden.<sup>6</sup> Several of these include golden scabbard mounts, similarly indicating a late date in the Migration Period and linking them to the Swedish Tureholm hoard, which with more than 12 kg of gold is the largest gold find known from Scandinavia. We may thus speak of a reasonably distinct group of late hoards, although archaeologically their deposition can be dated no more precisely than to the first half or middle of the 6th century.

<sup>1</sup> P. C. Buckland, A. J. Dugmore and K. J. Edwards, 'Bronze Age myths? Volcanic activity and human response in the Mediterranean and North Atlantic regions', *Antiquity* 71 (1997), 581-93; M. G. L. Baillie, 'Bronze Age myths expose archaeological shortcomings? a reply to Buckland *et al.* 1997', *Antiquity* 72 (1998), 425-27; D. J. Lowe and T. F. G. Higham, 'Hit-or-myth? Linking a 1259 AD acid spike with an Okataina eruption', *Antiquity* 72 (1998), 427-31.

<sup>2</sup> For quotations from the actual sources and detailed references, see R. B. Stothers and M. R. Rampino, 'Volcanic eruptions in the Mediterranean before A.D. 630 from written and archaeological sources', *J. Geophysical Res.* 88 No. B8 (1983), 6357-71 p. 6362; M. Axboe, 'The function of medallion imitations and gold bracteates in Scandinavia, with some thoughts on the background for the deposition of the large gold hoards', in B. Magnus (ed.), *Roman Gold and the Development of the Early Germanic Kingdoms* (Stockholm, in press).

<sup>3</sup> M. G. L. Baillie, *A Slice through Time: Dendrochronology and Precision Dating* (London, 1995), 81 and 89.

<sup>4</sup> M. Axboe, 'The chronology of the Scandinavian gold bracteates', 126-47 in J. Hines, K. Høilund Nielsen and F. Siegmund (eds.), *The Pace of Change: Studies in Early-Medieval Chronology* (Oxford, 1999), p. 139.

<sup>5</sup> M. Axboe, *ibid.*; *id.*, op. cit. in note 2.

<sup>6</sup> M. B. Mackeprang, *De nordiske Guldbrakteater* (Århus, 1952), cat. Nos. 54 (Killerup), 99 (Darum), 101 (Skonager), 125 (Sletner), 127 (Stavijordet), 157 (Madla), 299 (Söderby); M. Axboe, 'Die Brakteaten von Gudme II', *Frühmittelalterliche Stud.*, 21 (1987), 76-81; J. P. Lamm, H. Hydman and M. Axboe, "'Århundredets brakteat" — kring fyndet av en unik tionde brakteat från Söderby i Danmarks socken, Uppland', *Formvannen*, 1999.

A significant number of Migration-period gold hoards seem, to judge from their composition, to be 'official' offerings made by the elite on behalf of the community.<sup>7</sup> These finds include gold bracteates, massive arm- and neckrings, scabbard mounts and silver-gilt square-headed brooches: in other words heavily status-bearing objects, some of which can also be assumed to have had amuletic functions. It must have been a very serious matter to sacrifice such things: they were not only valuables, but also expressions of one's social role and status, as well as powerful protective amulets.

The persistent darkening of the heavenly bodies in 536 must have been perceived as a dreadful portent. The sources seem to give no details of Christian reactions to the dust veil in the Mediterranean. But one can assume them to have been similar to reactions to earthquakes, eclipses, comets and other manifestations of God's anger with mankind, that were recorded on many other occasions: processions, chanting of litanies, solemn promises, gifts to the churches and so on.

In Scandinavia, the blurring of the sun may have appeared even more ominous than in southern Europe, and summer frosts will have been devastating to the crops. In the late Viking Period, the darkening of sun and moon together with the 'Fimbulwinter' — three winters in succession with no summers in between — occur amongst the omens heralding Ragnarök.<sup>8</sup> Although important elements of Viking-age pagan religion can be traced back into the Migration Period,<sup>9</sup> we have no means of telling whether this myth was already in existence in the 6th century. If it were, it would have made the 536-event even more portentous; if not, one can speculate on whether this event may have provided some of the elements of the later eschatology.

Be that as it may, one can imagine that in Scandinavia, as in Mesopotamia, 'there was distress . . . among men . . . from the evil things'.<sup>10</sup> Here sacrifices, including some of gold, were an acknowledged way of addressing the gods. A constantly dimmed sky and spoilt harvests would truly have been calling for sacrifice of every sort, including even the most precious objects of gold available, to revive the dying sun and ward off the apparently imminent end of the world.

Unfortunately, we shall never be able to *prove* a causal relation between the dust veil and the Scandinavian gold hoards. Although A.D. 536 falls within the bracket of time when many large gold hoards were deposited, they can only be dated through traditional archaeological typology. It is thus an inherent property of both method and material that no sharp dating can be reached: even if all the hoards were deposited simultaneously we would never be able to demonstrate the fact, just like radiocarbon datings of specific events like the Thera/Santorini eruption (17th or 16th century B.C.) or the building of the Sweet Track (dendrochronologically dated to 3807 B.C.) are spread out over twelve and nine centuries respectively and thus 'smear out' the event in question.<sup>11</sup>

I am trying to approach this phenomenon from a social-psychological viewpoint: the constantly dimmed sun would be and would be perceived as a fundamental menace to human life. Something would have to be done. The 5th-century hoards show that

<sup>7</sup> L. Hedeager, 'Migration Period gold hoards — an attempt at interpretation', 203–12 in C. Fabech and J. Ringtved (eds.), *Samfundorganisation og Regional Variation: Norden i Romersk Jernalder og Folkevandringstid* (Århus, 1991); id., *Iron Age Societies: From Tribe to State in Northern Europe, 500 BC to AD 700* (Oxford, 1992), 75ff.; J. Hines, 'Ritual hoarding in Migration-period Scandinavia: A review of recent interpretations', *Proc. Prehistoric Soc.* 55 (1989), 193–205.

<sup>8</sup> R. Simek, *Dictionary of Northern Mythology* (Woodbridge, 1993), 259.

<sup>9</sup> *Ibid.*, 26ff., 43f., 371, all with further references.

<sup>10</sup> An expression used by the contemporary Syriac chronicle associated with the name of Zachariah of Mitylene in connection with the severe winter in Mesopotamia. See Stothers and Rampino, *op. cit.* in note 2, 6362.

<sup>11</sup> M. G. L. Baillie, 'Suck-in and smear. Two related chronological problems for the 90s', *J. Theoretical Archaeol.* 2 (1991), 12–16, diagram p. 13; on typological dating compare H. Steuer, 'Datierungsprobleme in der Archäologie', 129–49 in K. Düwel (ed.), *Runeninschriften als Quellen interdisziplinärer Forschung* (Berlin/New York, 1998).

sacrificing gold was a well-established Scandinavian religious custom, just like the singing of litanies etc. was in the Mediterranean. The 536-event would be an acute spur to religious activity, and thus offers a reasonable explanation of the many large deposits which must be dated to the late Migration Period anyway.

I am not arguing for some sort of general 'catastrophe horizon' caused by the events around 536. Though these may have been tough years, which could even have seen the collapse of unstable centres or polities, it was not the end of society or of the religion of the Migration Period. On the other hand, the massive hoarding we can observe may be part of the reason why gold became so scarce from the beginning of the Vendel Period onwards. For the situation had changed from that in the days when vast amounts of gold could be extorted from the Roman Empire. That golden age was only an episode, and no new supplies replaced the wealth which had been deposited in the large gold hoards.

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