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Bracteates and Runes

Review article by Nancy L. Wicker and Henrik Williams

Die Goldbrakteaten der Völkerwanderungszeit — Auswertung und Neufunde. Eds. Wilhelm Heizmann and Morten Axboe. Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 40. Berlin and New York: Walter de Gruyter, 2011. 1024 pp., 102 plates. ISBN 978-3-11-022411-5, e-ISBN 978-3-11-022411-2, ISSN 1866-7678. 199.95 €, $280.

From the Migration Period we now have more than a thousand stamped gold pendants known as bracteates. They have fascinated scholars since the late seventeenth century and continue to do so today. Although bracteates are fundamental sources for the art history of the period, and important archaeological artifacts, for runologists their inscriptions have played a minor role in comparison with other older-futhark texts. It is to be hoped that this will now change, however. If so, it will be thanks largely to those German runic scholars who during recent decades have dedicated themselves to studying inscriptions on bracteates.

Due to continual increase in the material, bracteate corpuses have been assembled repeatedly. In the first universal compilation of runic inscriptions, Johan Liljegren (1833, 255 note b) mentions that over twenty have been found but that their runelike symbols are of unknown character and content. This was, of course, before the decipherment of the older futhark. The most recent bracteate inventory is that of *Die Goldbrakteaten der Völkerwanderungszeit: Ikonographischer Katalog* (hereafter *IK*), parts 1–3, published in seven volumes 1985–89 under the auspices of the immensely productive Karl Hauck (1916–2007). The catalogue has been supplemented by a volume on production problems and chronology by Morten Axboe (*IK*, 4.1) in 2004, one by Alexandra Pesch on bracteate groupings in 2007 (*IK*, 4.2),

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and now the volume being reviewed,[1] which combines twelve independent contributions on bracteate matters with a catalogue and plates of new finds. Henceforth, we shall refer to the latest publication as *Auswertung*. As of December 2010 the total number of separate bracteate models is at least 622, representing no fewer than 1003 individual pieces (*Auswertung*, 893).

There is no doubt that the publication of *IK* is a tremendously valuable contribution to bracteate studies, not least through its careful descriptions and useful illustrations, the latter comprising photographs and drawings of every item. The volumes of *IK*, 1–3, are out of print, but they are available on the Internet (unfortunately not in OCR format, i.e. the text is only scanned as a picture, not searchable). The supplementary material presented in *Auswertung* forms a valuable addition, made more useful by the index of find-places included (pp. 1012–24), although a similar index of present repositories (usually museums), provided in previous volumes, is lacking.

In this review article we will concentrate on the iconography and archaeology of the bracteates (Nancy Wicker; pp. 152–82) and the texts thereon (Henrik Williams; pp. 183–207). Evaluation of the specific topics will be offered in each of the two sections.

Iconography and archaeology

Nancy L. Wicker

While this review, due to the nature of the journal in which it is published, focuses on the runic texts found on bracteates, one of the most important aspects of Hauck's project is its insistence that such texts should be considered as part of the artifacts on which they are located rather than being treated as independent entities — as has sometimes been the case. In addition, this corpus publication has underscored the importance of considering bracteates both with and without inscriptions, also in runic publications, which as a rule have ignored bracteates lacking texts. The larger context of bracteates embraces the iconography of pictorial details as well as the archaeological find circumstances of the pieces. Hauck was the leading figure in the iconographic analysis of bracteates and assembled an interdisciplinary team of scholars who shed light on aspects of bracteates that lay outside his own wide range of knowledge.

[1] Although the present volume is clearly identified as "IK 4,3" once in the bibliography (p. 808) the designation is evident nowhere else in the book itself.

The chapters of the volume that deal with iconography and archaeology cover the following:

1. Deeds of Óðinn: signs and codes of bracteate iconography and methods for their interpretation, by Karl Hauck (60 pp.),
2. The picture formulae of gold bracteates and their variants, also by Karl Hauck (92 pp.),
3. A history of bracteate research, by Charlotte Behr (77 pp.),
4. A network of "central places": elite contacts and cooperation between early medieval centers in the light of the gold bracteates, by Alexandra Pesch (47 pp.),
5. The chronology of bracteates with inscriptions, by Morten Axboe (18 pp.),
6. Iconography, social context and ideology: the meaning of animal-ornamented shields in Early Anglo-Saxon England, by Tania Dickinson (52 pp.),
7. Catalogue description of new finds, and the catalogue of new finds, by Morten Axboe with assistance from Charlotte Behr and Klaus Düwel (109 pp.).

Bracteate iconography: deeds of Óðinn

The work begins with two chapters by Karl Hauck, even though Charlotte Behr's history of bracteate research would provide a better pedagogical introduction. In fact, in both the English and German summaries (pp. 704 f., 687 f.), Behr's chapter is placed before Hauck's. Any reader unfamiliar with Hauck's theories and his academic style should read Behr's summary of bracteate research to gain some understanding of the field and obtain an overview of Hauck's work before tackling his own contributions. Here, however, we will begin with Hauck.

Hauck's first chapter in the volume, "Machttaten Odins: Die Chiffrenwelt der Brakteaten und die Methoden ihrer Auswertung" (pp. 1–60), is introduced by Pesch in the summaries where she explains that it was intended for inclusion in volume 12 of the *Reallexikon der Germanischen Altertumskunde* as a *Stand der Forschung* article, demonstrating his methodology for investigating bracteates; however, reasons unknown, it was never finished. Pesch completed the references and redid the plates (p. 705). The chapter is well illustrated with drawings so that the reader can follow Hauck's close argumentation about the imagery, although the order of plates is sometimes haphazard. Thus a great deal of flipping back and forth is required to find

the appropriate images. Furthermore, the reader must remember that the drawings sometimes explicitly accentuate features that Hauck wants to emphasize — and, of course, drawings are never "objective".

Hauck begins with three assumptions: (1) that bracteates have their origin in Late Antique Period images and texts, which are thus useful for interpreting bracteate iconography, (2) that in the absence of contemporary northern European sources, texts dating much later than bracteates, as well as other categories of material such as gold foils (Swedish *guldgubbar*), can be used to interpret bracteate images, and (3) that runic inscriptions on bracteates are connected to the images they bear. Although Hauck cites the importance of Northern aristocratic contacts with Late Antique culture and the background of bracteates in medallions and Germanic medallion imitations, he relies most heavily on the "Second Merseburg Charm" (see below) and Eddic sources to interpret specific imagery on bracteates. He maintains that the main themes of bracteates were healing, regeneration, and protection from evil, demonic forces. Their traditional material culturally linked the elite groups from the so-called central places of the North, and their images he considers to be "concretized" precursors of the later mythographic texts by Snorri Sturluson (p. 39). Whether one accepts Hauck's specific interpretations or not, the bracteate corpus is a valuable source for approaching the oral culture of the North.

Hauck maintains that the main figure on Type C bracteates is Óðinn, basing this on the pair of birds that are depicted on four of sixty-eight bracteates with aviforms (the number known in 1995), which he identifies as the ravens Huginn and Muninn. In the more numerous cases where only one bird is shown, Hauck explains that an "abbreviation principle" is in force necessitated by the difficulty of depicting many images within the small size of the picture field. One bird can thus represent the pair. The images are indeed tiny, but the size argument becomes a crutch on which Hauck leans whenever an image is not as complete or detailed as he might wish. In his discussion of the transfer of Mediterranean topoi of power to Northern iconography, Hauck argues that over half of the impressed gold foils from Sorte Muld on Bornholm include the scepter of Jupiter (p. 10); yet the images are miniscule and indistinct in form, and no specific attributes of the supposed scepter can be discerned. Hauck also turns to Late Antique iconography to maintain that the "hand of power" of the divine emperor portrait is repeated on bracteates and indicates that the figure is a god. However, we should also consider that the hand might belong to an earthly ruler, since the Roman emperor was a secular leader as well as divine.

After establishing (to his own satisfaction) that the main figure on Type C

bracteates is Óðinn, Hauck interprets the various images as a series of events that foreshadow the death of Baldr, based on his proposed association of bracteate images with the ninth-century Old High German text known as the "Second Merseburg Charm". Although this charm formed the basis for much of his early writing on bracteates, here (p. 4) he provides only a bare footnote to two of his earlier works (Hauck 1970 and 1992). In *Auswertung*, it is Charlotte Behr (p. 223) rather than Hauck who explains that the charm describes how Baldr's foal sprained its foot, fell, and was healed by Óðinn with a magic spell. Hauck returned to the charm in several installments of "Zur Ikonologie der Goldbrakteaten" (articles with this subtitle and a serial number) and assumes that the readers of this volume are familiar with both the charm and its importance for his interpretation of bracteate images. Hauck claims that many Type C bracteates show Óðinn carrying out the ritual attested in the Merseburg charm, which consisted of blowing his healing breath into the horse's ear and reciting words of healing, a practice that he traces to a fourth-century veterinary procedure for equine healing called subcutaneous air insufflation. Hauck's use of these sources to interpret bracteates is criticized in detail by Kathryn Starkey (1999, 387–89).

Hauck proposes that various bracteates show different key points in the Baldr narrative described by the Merseburg charm and that a bracteate hoard discovered in a posthole at Gudme on Fyn in Denmark relates the entire Baldr story (*Auswertung*, 12–16). He interprets the Gudme set of nine bracteates as a necklace or collar, even though there is no evidence that the pieces were all displayed together and in spite of the fact they were not discovered resting in place on a body in a grave (cf. Hauck 1998a). Even the Type D bracteates, which do not exhibit humanoid figures, are woven into Hauck's explication of the narrative. In summary, the parts of the myth common to bracteates and the "Second Merseburg Charm", in Hauck's interpretation, are:

1. the animal's bent leg, which indicates that the foal is injured, as seen on several bracteates, including IK 106 Lilla Istad;
2. Type D bracteates (such as IK 455.2 Gudme), which show the role of a demon in causing the fall of Baldr's foal;
3. the foal, which is shown falling (IK 392 Gudme) or even dead (IK 149 Skåne);
4. Frigg/Freyja (IK 391 Gudme), who arrives to assist the foal; this anomalous bracteate type, referred to as the Fürstenberg type by Mackeprang (1952, 103), depicts a woman *en face* and is otherwise found only further south, in Germany;

5. Óðinn, who carries out a ritual of blowing his healing breath into the horse's ear and recites words of healing, as depicted on many Type C bracteates.

I have challenged Hauck's interpretations on art historical grounds by pointing out that the so-called injured leg may be bent (or perhaps more accurately, gracefully curved) to fit into the available space of a round composition, and that likewise the mouth of the anthropomorphic head touches or is close to the animal's ear or neck for compositional reasons (Wicker 2003, 536). On a tiny bracteate, the man's mouth is necessarily placed near the horse's neck and the upswung leg is merely an elegant solution to the lack of space. Accepting all of the details as purposeful illustration of the Baldr story requires the reader to accept that each goldsmith making a bracteate knew exactly which part of the story of Baldr was to be depicted. In fact, Hauck does not really address the questions of how knowledge of specific iconography was disseminated and how artisans worked. Pesch (this volume, see below), however, deals to some extent with the way imagery as well as the actual dies for making images may have been spread.

To support further his belief in the existence of healing iconography on bracteates, Hauck focuses on a single example, IK 26 Börringe, that has the runic inscription **laukaʀ** 'leek' located along the foreleg of the animal (*Auswertung*, 5). Relying on Wilhelm Heizmann's research on Old Norse literature and folk knowledge of medicinal uses of the leek, Hauck combines the occurrence of the name of the plant with the notion of healing on bracteates. He assumes that the inscription itself is connected to the healing of the leg and subsequently uses this example as one of the lynch-pins of his argument that runic inscriptions are linked to the images on bracteates. While the use of the leek in healing is well known and the interpretation of **laukaʀ** as 'leek' universally accepted (cf. Starkey 1999, 390), I reject Hauck's insistence that the location of the inscription is related to the leek's medicinal efficacy. Besides appearing along the horse's leg, the inscription follows the perimeter of the gold disk, the typical location for inscriptions on coins and medallions, which were the models for bracteates. Thus, I would maintain that Hauck exaggerates the significance of the location of the **laukaʀ** inscription. The word *laukaʀ* appears on various bracteates in two places where Hauck claims that ravens (certainly birds, but are they necessarily ravens?) often occur (*Auswertung*, 6); yet these birds are also placed along the edge of the bracteate stamps — where inscriptions were typically placed. To substantiate his argument, Hauck further identifies a curious branched symbol on IK 571 Dannau as a leek plant that is placed

along the animal's leg (p. 5), even though it is highly stylized and most viewers would be hard pressed to recognize it as a plant. The reason Hauck focuses on **laukaʀ** is apparently that he cannot identify other inscriptions that bolster his belief in the connection between text and image.

Besides interpreting many Type C bracteates in the light of the "Second Merseburg Charm", Hauck connects certain Type B bracteates to the sacrifice of Baldr. These pieces depict three standing anthropomorphic figures, which Hauck calls "three gods". The Late Antique model for these pieces is an image of the emperor with Victoria and Mars. Hauck proposes that Baldr, rather than Óðinn, is the central figure in the Northern version of this composition (p. 18), although in his view Óðinn is the main figure in most other bracteate types with anthropomorphic images. Hauck identifies six closely related variants of this scene that display different phases of the myth of Baldr's sacrifice, but to do so he often needs to invoke his "abbreviation technique" (pp. 18–22). He proposes that Loki is shown in a "skirt" similar to the one worn by the figure on the Fürstenberg-type bracteates (cf. IK 391 Gudme) because he disguises himself as an old woman while tricking Frigg into revealing the vulnerability of Baldr to mistletoe. The six variants include details such as:

1. Óðinn's ravens (one or two) in different sizes and forms (IK 51.3 Gudme, IK 51.1 Fakse, IK 39 Denmark, and IK 165 Skovsborg),
2. Hǫðr holding a stone to throw at Baldr (IK 165 Skovsborg),
3. Loki carrying the mistletoe (IK 51.3 Gudme, IK 20 Zagórzyn [Beresina], IK 165 Skovsborg, and IK 39 Denmark),
4. the mistletoe striking Baldr (IK 51.1 Fakse),
5. a demon's head below Óðinn (IK 39 Denmark),
6. the skirted (or kilted) Loki with wings (IK 51.3 Gudme and IK 51.1 Fakse).

Even though Hauck traces the form of the wings to the Roman numismatic prototype with Victoria, he compares this portrayal of Loki to the Viking Age "death angel" or helper reported by Ibn Fadlan (p. 21).

Other bracteates purportedly contain scenes (pp. 18–21) related to additional points in Snorri's story of Baldr in *Gylfaginning*. Hauck maintains that a piece with two standing anthropomorphic figures and a small animal, IK 6 Års, depicts Baldr and Óðinn with the former's dead foal. He further interprets a tiny dot on IK 50 Esrom Sø as a bracteate held in the hand of Baldr, who is accompanied by a larger figure interpreted as Óðinn, thus connecting this bracteate to Óðinn's healing of the foal. In a scene depicted on IK 101 Kongsvad Å, which he relates to the sacrifice of Baldr,

Hauck identifies the preparation of the mistletoe, and the detail does indeed resemble a stylized branch with berries but no leaves. A scene showing a man and woman side-by-side on the medallion imitation IK 86 Inderøy is interpreted by Hauck as a representation of Baldr's trip to Hel. On IK 79 Hjørlunde, a small figure with arms and legs is identified as Baldr, who stands next to an enigmatic arrangement of three sets of lines placed at right angles to each other. These Hauck creatively identifies as the funeral pyre of Baldr. He then labels the ring held in the hand by several bracteate figures as Draupnir, which is placed upon the funeral pyre.

A detail Hauck returns to several times (pp. 7–9, 24 f., cf. also his second chapter, pp. 110–22), is a "small round object" that appears on various bracteates, sometimes large enough for Hauck to interpret it as a ring (IK 165 Skovsborg) and other times smaller so he sees it as a bracteate (IK 189 Trollhättan and IK 50 Esrom Sø). He maintains that the ring Draupnir was sometimes replaced in bracteate imagery by an amulet with a divine image (thus, a gold bracteate); there is, however, nothing to justify the assertion that this tiny dot specifically represents the image of a god. We should note that the "small round object" ranges from less that one millimeter in diameter to something as small as a dot, so any specific identification is purely speculative. Hauck presents the ring/bracteate as a symbol of regeneration.

Next Hauck attempts to demonstrate the existence of Ragnarǫk representations in bracteate imagery. He begins with the portrayal of the Fenris wolf on the obverse of the unusual two-sided bracteate from IK 190 Trollhättan, where the wolf is shown biting the hand of Týr (p. 29 f.). Examining details on other bracteates that help him interpret these images, he notes that the figure on IK 250 Fure sports the same kind of hairstyle as Trollhättan. He also compares the frontal image on Trollhättan to the Fürstenberg-type bracteates that seem to show females, but he maintains that the garment on Trollhättan is a "kilt" as worn by Mars, thereafter pointing out that the Trollhättan image is abbreviated since it omits the wolf's fetters, which are to be expected in a scene that portends Ragnarǫk. A second supposed Ragnarǫk representation, on IK 166 Skrydstrup, consists of a crowded scene of six creatures (an anthropomorphic figure identified by Hauck as Óðinn, a bird, a "dead" horse, a stag, and two snakes) and two runic formula words; the piece is somewhat smaller, and in Hauck's view omission and simplification of details should be expected. He connects the word **laukaʀ** here to the larger theme of regeneration (p. 31). In a final attempt to identify Ragnarǫk imagery, he identifies the *en face* figure on Fure IK 250 as Óðinn, which he asserts is two-eyed here because this bracteate depicts the rebirth of the world after Ragnarǫk (p. 33).

Hauck also tries to discover picture formula equivalents to the ritual and cultic names of Óðinn. He begins with IK 7 Års, where the anthropomorphic figure has a boomerang-like weapon and wears a double neck-ring (cf. *IK*, 3.1: 245 [pl. 129]), and the animal has a dotted horse-tail (*Auswertung*, 35). He points to the tail as characteristic of Óðinn's self-sacrifice (*Hávamál*, st. 138 f.) and part of his ritual costume. In his second chapter in *Auswertung*, Hauck reports that he has found a similar tail on the IK 66 Gummerup bracteates and has "corrected" the drawing printed in *IK*, 1.3, where the tail was not included (p. 81 f.). From the photographs published in *IK* and also some I have taken, it appears that there is a line of dots and a slight buckling of the thin golden disc — but no tail. Creative examples like the seemingly invented "tail" on IK 66 Gummerup do not inspire confidence in Hauck's methodology. Yet he uses the "tail" to make further assumptions, connecting it to what he calls Óðinn's "self-naming" as a horse in the runic *ek F[ā]kaʀ* on the IK 340 Sønderby/Femø bracteate (p. 36). Before making general comments about this chapter, I will continue to Hauck's second chapter.

Oral tradition and picture formulae

Hauck's second chapter, "Die Bildformel der Goldbrakteaten in ihren Leitvarianten" (pp. 61–152), was written specifically for *Auswertung*, essentially completed in 1995, long before this volume appeared.[2] The contribution repeats a great deal of information from the previous chapter, referring to and illustrating many of the same examples and adding little that is substantially new. Rather than going over old ground, I will here focus on the additional data. Taken together, the two chapters are valuable as a distillation of Hauck's seminal works, which are not easily accessible (both hard to find and to read), but due to the myriad references to his own publications, those earlier works are still necessary if the reader wishes to see the first-hand evidence.

One of the few new aspects here is the insistence that early medieval illuminated manuscripts, especially the Carolingian Period (early-ninth-century) Stuttgart Psalter and Utrecht Psalter, preserve earlier pictorial traditions and can help us to interpret bracteate imagery, since both were borrowed from Late Antique iconography. In particular, the iconography of rulers, representations of lions and snakes, and flattened, non-illusionistic depictions of attributes and details are highlighted as a "picture reservoir"

[2] The subtitle of this piece is "(Zur Ikonologie der Goldbrakteaten, LV)". However, an article with this designation was already published in 1998 (Hauck 1998a).

of the oral culture of the North (p. 64). For example, Hauck maintains that the Late Antique *topos* of a horse lying on its back, intended to indicate that it is dead, was used in Carolingian psalters as well as on bracteates (p. 103). It is true that figures and objects are sometimes placed up against the edge — but not necessarily the "bottom" edge — on the small, round face of bracteates; it is, however, impossible to be certain whether a horse with its back along the side of a bracteate represents a dead animal or simply follows the curved edge of the piece. Drawing attention to the close connection between pictures and texts in the two psalters, Hauck suggests that bracteate images and inscriptions show a similar correlation (p. 65).

Hauck admits that Type A bracteates imitate Roman medallions and solidi closely but points out that they, in addition to being imitative, include details that can be connected to the larger themes of healing and regeneration. Here, and on other types of bracteates, he tries to tease out which picture details were borrowed from the South and which come from the North. For instance, in his view the Roman numismatic motif "Victoria crowning the Victor" (p. 76) provides a formal model for Type B bracteates showing "three gods", yet the picture details are Northern. Further connections between the Roman world and the North are demonstrated by the use of the leek, which was employed for healing horses in the Roman Empire and about which Óðinn also had medicinal knowledge (p. 78). Furthermore, Hauck insists that — in emulation of the Roman numismatic practice of inscriptions that relate to images — the words and pictures on bracteates are also connected, as on the bracteate IK 26 Börringe discussed above, which has **laukaʀ** written along the horse's injured leg.

As in the previous chapter, the bracteates showing "three gods" are examined in great detail, and here reference is made to Late Antique gestures. Hauck discusses the importance of the Gudme/Lundeborg area for contact with the South and exposure to the idea that Roman coins showed images of gods and of the divine emperor (p. 80). The figure that Hauck identifies as Óðinn on this group of bracteates is connected formally and iconographically to numismatic and sculptural images of Mars, the war god (p. 83). In his view, this clinches the argument that Óðinn was the war god of the North (p. 89).

One of the details not discussed in great detail in the previous chapter is a scene from the final phase of Baldr's sacrifice in which he stands on a stage or altar (IK 51.1 Fakse, IK 165 Skovsborg, IK 66 Gummerup, IK 39 Denmark), similar to the manner in which Mars stands on a platform on Roman coins. When the figure that Hauck identifies as Loki stands on the same kind of platform (IK 20 Zagórzyn), he proposes that it indicates a place

for a speaker (p. 106). Yet the "platform" on which Roman figures often stand is not an altar or specific structure but merely a ground line. It also separates the pictorial scene from the mintmark or *officina*, which indicates the place where the coin was minted.[3]

Hauck returns to the "small, round object" in this chapter and states that it is the iconographic equivalent of the gold ring Draupnir, which he considers a core symbol of the sacrifice of Baldr (p. 110). He proposes (pp. 121 f.) that the ring as a symbol of regeneration, as shown on medallion imitations during the Late Roman Iron Age in Scandinavia, was replaced on Migration Period bracteates with an image of the gold bracteate itself (IK 51.3 Gudme and IK 189 Trollhättan, for instance), yet he conjectures that the ring and its symbolism returned after the bracteates' relatively short span of popularity.

Summing up: Hauck's contributions in these two chapters show a remarkable mind that was both creative and imaginative. It is unfortunate Hauck was not able to finish the text as he intended, but we do have the version that Alexandra Pesch has made available. These contributions condense a great many of his detailed proposals for the understanding bracteate iconography, but the chapters repeat one another extensively. Each is well illustrated, in fact, with many of the same illustrations. In a book of over 1100 pages, it is difficult to comprehend why the decision was made to include both.

Hauck's detailed analyses exhibit impressive knowledge and deft control of the material. His arguments may impress many readers, but accepting his proposals requires great leaps of faith. There are major flaws in his work — in the assumptions made, the occasionally arbitrary handling of the material, the lack of concern with physical aspects of bracteates, and the unwillingness to consider contrary views. Here are some of my concerns:

1. One of the most surprising things for anyone who has read Hauck's earlier work is that the "Second Merseburg Charm" is barely mentioned in *Auswertung*. Perhaps Hauck assumed that "everyone" knows about and accepts his claims that bracteates present visually what is preserved in this Old High German account (which was, as far as we otherwise know, totally unknown in the North). He does not even try to defend his premise here, and the assumption that his recognition of details of the charm in bracteate imagery is water-tight allows him to make further suppositions based thereupon. Hauck would like to use the bracteates to posit an early dating for the charm, but he also uses an early dating of the charm as evidence for Baldr in the fifth century, thus employing circular reasoning

[3] For instance, browse *Roman Coins* (Kent 1978).

(1971, 142). In the early years of his research on bracteates (Hauck 1970, 403), he was apparently swayed by the proximity of Merseburg to Obermöllern (40 km distance) in his attempts to explain the anomalous imagery on the bracteate IK 132 Obermöllern, which he interprets as the horse falling after being injured (*Auswertung*, 4). Once Hauck had identified the supposed significance of the Merseburg charm for the story of Baldr, he attempted to correlate every dot and squiggle on bracteates with the text.

2. In his analysis of details Hauck sometimes mishandles the material. I have already discussed how he "improved" the drawing of IK 66 Gummerup to show a horse-tail, and he also mentions how improvement of the drawings for *Auswertung* allows him to emphasize certain details by depicting them individually beside or around the perimeter of the drawing of the bracteates themselves (pp. 81f.). These details include a spear, a sword, a bracteate in a hand, the ring Draupnir, an altar platform, whole and broken mistletoe, a woodpile, a dragon's head, a small beast, a snake, a demonic reptile, and the god's foot (pp. 51–58 and 133–52). Hauck may interpret the smallest mark as representing some element in a key Eddic passage. However, identifying a simple curve as an abbreviated bird makes a mockery of the "abbreviation principle" (p. 141, fig. 9.4). Hauck relishes the minute specificity of details, but either ignores the lack of substantive evidence or explains away as "abbreviations" any omission of details (such as one bird instead of two ravens).

Hauck admits that hoofs show great variation and can be mainly ornamental (p. 69), as on IK 147 Rynkebygård; yet at other times he insists that a particular hoof is "bent" (thus, injured), as on IK 106 Lilla Istad. Sometimes the vague features are built up into crucial elements of his analysis, as when a simple dot can become a bracteate with a "divine" image (see above). Determining which minor variations are iconographically significant and which are not can seem an arbitrary exercise. One of the objections I have to Hauck's interpretations is that his readings are so fluid. Sometimes he identifies a bird as Óðinn's raven but at other times he proposes that it is Loki in disguise as a bird obtaining the fateful mistletoe (p. 23); sometimes Óðinn is shown in a healing role (Type C bracteates) and sometimes as the war god (IK 7 Års). The critical reader begins to wonder whether Hauck's unified interpretation of bracteate iconography can be relied on at all. To a certain extent, he undermines himself with forced attempts to make everything fit together and by insisting on the tiniest of details; if those elements in reality are absent, his argument collapses.

3. Hauck's insistence that medallion imitations, bracteates, and gold foils all show divine pictures (p. 77) allows him for the most part to ignore

uses of bracteates in society other than as amulets focusing on healing and regeneration. What, for example, of ostentation, gifts, tribute, or wealth/inheritance? Even Michael J. Enright, a follower of Hauck, wonders (1988, 405) whether some consideration might not "be given to the social as well as to the religious reasons for wearing bracteates? … an amulet not only says something about the religious beliefs of the wearer but may also say something noteworthy about social status and concepts of aristocratic display". I would suggest that a closer investigation of the Late Antique tradition of wearing looped medallions might reveal more about how bracteates were used.

4. At times, Hauck ignores the practicalities of bracteate manufacture, for example by disregarding Axboe's assessment (p. 82) that the "mark" Hauck interprets as a horse's tail on IK 66 Gummerup is simply "residue" from the manufacturing process. Unlike Axboe (and the author of this part of the review), Hauck did not personally examine many bracteates, and he seems unaware or unable to accept that there are technical properties limiting how specific some details can be. Although he occasionally mentions the wearers or makers of bracteates, his work generally reflects an inward-looking world of ideas that has little connection to external factors.

5. Hauck's insistence that all bracteates, Types A, B, C, and D, deal with a unified subject matter revolving around Óðinn and Baldr and a unified theme of healing and regeneration has stood largely unchallenged. He posits the codification of a belief system controlled by leaders based in central places that is not verifiable. Thomas DuBois (1999, 42) is adamant that "the non-Christian belief systems of the Nordic region seldom if ever underwent the processes of open codification that characterized Christianity" and maintains it is "clear that Nordic paganism was subject to extensive local variation". Fredrik Svanberg (2003, 102) questions the idea that there was a homogeneous culture during the Viking Age, noting that "manifestations of 'religion' vary a great deal between different parts of Scandinavia, different gods seemingly being favored, different kinds of monuments made, different religious rituals applied". If this was the situation during the Viking Age, it is implausible that there was a codified, dogmatic religion during the Migration Period revolving around Óðinn and Baldr as Hauck propounds. Indeed, Mats Malmer (1977) argued that the gods on bracteates could be Ullr or Njǫrðr, as well as Óðinn or Þórr.

I can entertain the idea that the bracteates showing "three gods" might have something to do with Baldr and that IK 190 Trollhättan shows the Fenris wolf biting the hand of Týr, but I cannot accept the specificity of all the details that Hauck identifies. It sometimes seems as if he tries to find

elements on bracteates corresponding to every detail that Snorri mentions. In particular, I simply cannot support the thesis that most of the Type C bracteates have connections with the "Second Merseburg Charm", which is separated from them by 400 years and has left no trace in Nordic mythology.

6. In these two chapters, references to more detailed argumentation are often to Hauck's own works. The reader seeking to follow up such references will need to obtain access to the various numbers of Hauck's "Zur Ikonologie der Goldbrakteaten", but these were published in scattered proceedings, *Festschriften*, journals, and the like over the years. Those who lack access to these works must take his pronouncements on trust. While Hauck's interpretations are fully documented by reference to his own works, and other references listed are almost without exception supportive of his views, Hauck rarely acknowledges interpretations that are contrary to his own and apparently assumes that his are the only ones that are valid.

7. The lack of critical weighing of others' views is indicative of a larger problem. Readers unaware of the existence of opposing voices will have difficulty finding the apparatus that would enable them to delve more deeply. Hauck impresses many scholars with his immense learning, and they rely on him as the authority on all matters pertaining to bracteates, sometimes perhaps even suspending their own critical faculties. Hauck himself changed his mind many times throughout his thirty-five years of bracteate research, and it is commendable that he was not too proud to revise his opinions, although he was not one to renounce publicly his earlier beliefs. For instance, he began by writing a great deal about the 'breath symbol' (*Atemchiffre*) in which Óðinn blows on Baldr's foal (Hauck 1970, 1971, 1972, 1980); later, however, he began to refer to the 'speech symbol' (*Sprechchiffre*) in which Óðinn whispers into the ear of the animal (Hauck 1998b, 48). It is not clear whether he rejects the earlier idea or whether he has already told that story and does not need to return to it. It is interesting that he discusses neither *Atemchiffre* nor *Sprechchiffre* in this volume — a fact as surprising as that he barely mentions the "Second Merseburg Charm" here. In her chapter, Charlotte Behr points to Hauck´s admission that his research went through growing pains in the early years (p. 221, note 386), which is a way of accounting for the various revisions found in the course of publication of the sixty-one parts of the series "Zur Ikonologie der Goldbrakteaten" lasting from 1971 through 2003.

Many people have accepted Hauck's Óðinn-Baldr thesis uncritically, believing that since his writings dominate scholarly discussion, his interpretations must be correct. Those who are swayed by his massive erudition and the difficulty of his syntax sometimes fall prey to another fallacy. Finding

his scholarship difficult, they blame themselves for lack of understanding, and that leads them to accept his theories unquestioningly. Hauck's two chapters can be mined for details of his method and ideas, but they offer only a short-hand version of his position in 1995. This is not a reference work and certainly not the final word on bracteates.

Bracteate research history

While Charlotte Behr states that the goal of her chapter, "Forschungsgeschichte" (pp. 153–229), is not a complete presentation of the history of bracteate research, she does in fact come very close to accomplishing this daunting task. Her contribution to the volume puts bracteate studies into context, and this seventy-seven-page historical assessment assists the reader who is not intimately familiar with Hauck's writings to become well enough informed to read his later works that depend so heavily on previous publications (his own and those by others). Behr's research as part of the Hauckian team was on the minor symbols on bracteates (Behr 1991), and her meticulous detail in that publication is characteristic of her work. Since that time, she has become the primary representative of the Hauck group in England, publishing the new finds discovered there (Behr 2010).

Behr does not simply sum up over 300 years of bracteate studies chronologically but organizes her discussion according to changing paradigms of research. She begins with the earliest antiquarian interest in the late 1600s, moves through the blossoming of a more scientific approach to typology beginning with Christian Jürgensen Thomsen in 1855, continues with a veritable "who's who" of Scandinavian archaeology in the nineteenth and twentieth centuries (p. 160), leading to an excellent discussion of the 1960s controversy between Mats Malmer and Egil Bakka about artifact types in archaeology (pp. 191–95) and a brief mention of contextual archaeology. She acknowledges the continuing and overarching concerns with the pictorial elements and runic inscriptions on bracteates (p. 153), and distinguishes the desire to classify and date the objects from interests in their religious, political, and social use (p. 154). Also highlighted are the advances made by archaeologists, runologists, art historians, historians of religion, and place-name specialists through interdisciplinary research into the understanding of central places and the ritual functions of bracteates.

Since this review deals primarily with runes and bracteates, I will focus on Behr's synopsis of the investigation of runic inscriptions on these objects and on Hauck's iconological interpretations, although questions of chronology (pp. 165–69, 189–91, 195 f.), of who wore bracteates — men or women? (pp.

204–10), of production and central places (pp. 210–14), and of the function of bracteates (pp. 217 f.) are also of vital importance to runologists. In a very short section on "bracteates and runes" (pp. 169 f.), Behr points out that Wilhelm Grimm, who identified the major figure on bracteates as Þórr, saw already the connection between text and pictures on bracteates that Hauck later recognized. While most of Behr's writings are reasonably objective, she here uncritically gives credence to the Hauck team's assessment that inscriptions and images are indeed connected (pp. 389 f.), an assertion that is by no means universally accepted (see below under Williams's general comments). Behr highlights the bracteate from Tjurkö (IK 184), with its text *Wurtē rūnōʀ an walhakurnē Heldaʀ Kunimundiu* 'Heldaʀ wrought runes on "the Welsh corn (= the golden bracteate?)" for Kunimunduʀ' (p. 404), as crucial to the debate about whether bracteate inscriptions and images are not only connected but also self-referential. She finishes this section on bracteates and runes by mentioning the systematic treatment of the runic material by George Stephens in *The Old-Northern Runic Monuments of Scandinavia and England* (1866–1901), which, despite the many problems with Stephens's runic interpretations, set the stage for later research on the function of bracteates and runic literacy, or illiteracy, at the relevant period (p. 170).

Behr summarizes nearly every interpretation of bracteate iconography. While a number of scholars examine the relationship between bracteates and their Roman prototypes — both the Imperial imagery and the Latin inscriptions on medallions seem to have been imitated in the North — most interpretations of bracteate images and texts (pp. 182–85) depend upon later sources, especially Eddic literature. Behr traces the evolution of early twentieth-century ideas that laid the groundwork for Hauck's later interdisciplinary research on iconography. Key among these studies are Knut Stjerna's investigation into the connections between bracteate imagery and *Beowulf*, Axel Oxenstierna's identification of the image of a man with his hand in the mouth of an animal on the Trollhättan bracteate (IK 190) as a representation of Týr and the Fenris wolf (cf. *Gylfaginning*, 33), and Detlev Ellmers's determination that the anthropomorphic bracteates of Types A, B, and C all deal with Óðinn, and that the horse accompanying Óðinn on Type C is a sacrificial animal, which then appears by itself on Type D (*Auswertung*, 183–86). Also important for the iconographic interpretation of bracteates is Bernhard Salin's observation that small symbols such as the swastika and triskele did not have a fixed meaning on bracteates. Behr notes (p. 206) that Hauck (as discussed above) identifies the "small, round object" in the hand of the figure on the Type A Trollhättan piece (IK 189) as

a bracteate, whereas the same sort of circle located in other places did not have the same correlation. In light of this variation, it is curious that Behr and the Hauck team insist that the figural images (unlike the symbols) did indeed have a stable reference. Behr's assertion that bracteate images were understood in the same way in all the areas where they were current (p. 176) is unsupported and apparently uncritically taken by her on trust. It is difficult to assume such constancy across vast distances and over a long time, and it would seem more likely that there was regional and chronological variation in the understanding of bracteates, particularly since there is little or no evidence that there was one consistent Óðinn cult in Scandinavia during the Migration Period, as mentioned above.

Behr speculates that Hauck's interest in the interpretation and social function of Type D animal-style bracteates was influenced by the theoretical focus of the 1980s on contextual archaeology, although Ian Hodder, who initiated that branch of study, would hardly recognize Hauck's methods as akin to his. Hauck used sources in different ways and interpreted them differently from the manner scholars in disciplines such as archaeology and runology would do. His concept of placing bracteates in context was to insist that Type D pieces were part of the same mythological context as Types A through C. Other researchers have focused instead on trying to understand the social function of the animal ornamentation of the Migration Period rather than the anthropomorphic figures (e.g. Kristoffersen 2000).

Bracteates discovered outside Scandinavia (*Auswertung*, 196–204), especially in Anglo-Saxon and Continental burials, are crucial to the overall chronology of bracteates and to the determination of how they were worn and used. Behr notes that few Nordic researchers have paid adequate attention to these outliers. Elisabeth Barfod Carlsen, however, relies on them in her reworking of the dating of Type D bracteates, which turns the generally accepted chronology upside down by considering the most "degenerate" ones to be the earliest. Her chronology has not been accepted by Morten Axboe (2007, 62–64), but it has been given some credence by John Hines (2005, 477).

Among the positive side-effects of the research by Hauck's team is the growth of interest in bracteates discovered outside of Scandinavia as well as the expansion of studies beyond individual researchers' modern political boundaries, which I have suggested have sometimes been a deterrent to such research (Wicker 2010, 68). Anders Andrén considers that bracteates found in Kent and Pannonia, as well as serving as an identity link to Scandinavia, played a political role; Behr acknowledges the importance of the Scandinavian connection but matter-of-factly states that bracteates were

of moment for the Óðinn cult in Kent (*Auswertung*, 200) — expressing not a trace of doubt about the existence of such a cult at the time. The focus of bracteate studies in England has indeed been on Kent, but a bracteate from Undley, Suffolk, breaks the mold with its apparently meaningful inscription (though the meaning is disputed; pp. 201 f.). The probable importance of bracteates from other areas of England has recently been underscored through numerous metal-detector finds (Behr 2010).

An interesting connection with the Continent is through the Fürstenberg-type bracteates, which exhibit an *en face* female figure (*Auswertung*, 202–04). Although one example of the type was found at Gudme (IK 391), the rest were discovered to the south, in Germany, and all seem to have originated on the Continent. Interpretations of the figure range from the Virgin Mary (Ellmers; with connections to a Byzantine numismatic image) via a woman "weaving" prophecy with textile utensils (Enright) to a seeress (*vǫlva*) connected to Frigg/Freyja (Pesch). The skirt worn by this figure resembles the "kilt" that Hauck identifies on some of the bracteates showing "three gods" (e.g. IK 51.3 Gudme and IK 51.1 Fakse). Pesch's identification is thus consistent with Hauck's comprehensive interpretation of all bracteates as connected in one way or another to Baldr and Óðinn, and thus also to Frigg.

Hauck makes only a few claims about how bracteates were used and who wore them. He declares that men used and wore bracteates, just as medallions were worn by Roman men. In support of this assertion, he cites both IK 189 Trollhättan, which he believes is self-referential, showing a male figure holding a bracteate, and other pieces, which he says show bracteates borne at the neck (*Auswertung*, 206). He also claims that the supposed Gudme necklace mentioned above was worn by a man since no fibulae or beads were found with it. However, it should be recalled that the Gudme bracteates were not found in a burial, and it is simply hypothetical to assert they comprised a necklace. The very few bracteates known from men's graves were found either in the mouth as Charon's coins or alongside the body, not lying in place on the chest as if worn as a pendant (Wicker 2010, 74). In fact, nearly all bracteates from burials have come from women's graves. Behr (*Auswertung*, 208 f.) cites several authors who have discussed women or feminine factors and bracteates. Among them are Marta Lindeberg, who identifies female elements in both runic inscriptions and iconography, and Brit Solli, who discusses the androgynous ambivalence of Óðinn as shaman in terms of queer theory; in contrast, Morten Axboe (2007, 111), in a rather forced argument, maintains that a "skirt" and long hair are not female. Hauck and some members of his team appear determined to assert that bracteates

were of, by, and for men. It seems symptomatic that only female researchers have considered the use of bracteates by women.

A major question concerning bracteates is whether their main function was religious or political (*Auswertung*, 218). One approach to understanding how bracteates were used is to examine the relationship between bracteates and their Roman prototypes since both the Imperial imagery and the Latin inscriptions on the medallions seem to have been imitated in the North. Behr (pp. 218 f.) points to Näsman's suggestion that local elites in central places gave away bracteates to demonstrate their power, in emulation of the way Roman medallions were used. The Roman use of medallions also lends credence to the Hauckian idea that men wore bracteates. Overall, however, the Roman connection has been insufficiently examined and under-theorized. Looking backwards in time has not been as common as fast-forwarding to medieval texts separated from bracteates by hundreds of years.

Behr devotes a generous section to Karl Hauck and the iconology of the gold bracteates (pp. 220–29), which she begins with an explanation of the need for an iconographic catalogue and for an interdisciplinary project to examine bracteates thoroughly. She discusses how Hauck in his work employed Aby Warburg's distinction between "iconology" and "iconography", whereby the former deals with the interpretation of subject matter, the latter more directly with the identification of formal aspects of images (pp. 221 f.). Behr admits that Hauck's work is "not unchallenged" (*nicht unwidersprochen*, pp. 220 f. and note 385), referring in particular to challenges from Kathryn Starkey, Edgar Polomé, and me (Wicker 2003) from the viewpoints of literary studies, the history of religion, and art history respectively. It seems curious that the only three critics Behr mentions are Americans (Polomé was Belgian, but his entire scholarly career was in the U.S.). Is it that outsiders are able to think more freely, or that they have less at stake politically and academically by questioning the canon? Another dissenter, Wolfgang Beck (2011 [2003], 267–75), questions Hauck's interpretation of the "Second Merseburg Charm", but Klaus Düwel and Wilhelm Heizmann (2009) criticize Beck and defend Hauck (see Williams below).

Many of Hauck's ideas are explained by Behr, who even discusses some of his earlier works not cited in his own contributions in this volume. In early writings, Hauck referred to Óðinn on Type C bracteates as the "wind god" (Hauck 1972). He first proposed this interpretation in 1969 and elaborated on it in several subsequent works, including a short article from 1971, which is not cited in the extensive bibliography of *Auswertung*. It is curious that the term *Windgott* is not used by Hauck in this volume nor by Behr,

although she summarizes (p. 223) Hauck's related conjectures about the "Second Merseburg Charm" and his discussion of Late Antique knowledge of Asclepius (the Greek god of healing) and Christ as *medicus salvator*, referring though to one of his later works (Hauck 1980).

Behr discusses Óðinn's possible role as a shaman on medallion imitations and various bracteates, including IK 132 Obermöllern (p. 224), and lays out Hauck's argument that the images on Type D pieces belong to the same overall mythological scheme as those on the other bracteates (Hauck 1977). Detached human legs and ears depicted on Type D pieces are interpreted by Hauck as the result of dismemberment as part of a shamanistic initiation ritual (*Auswertung*, 225), and he relates some Type B bracteates (e.g. Allesø, Bolbro and Vedby, IK 13.1–3) — not mentioned in his two contributions in *Auswertung* — to shamanism as a representation of self-regeneration in divine ecstasy. Behr also cites Hauck's assertion that IK 184 Tjurkö shows a shaman as a visionary communicator (Hauck 1988). Edgar Polomé (1994) criticized Hauck's interpretations of Óðinn as a shaman on bracteates, and a larger question is whether shamanism even existed in the Migration Period. Finally, Behr returns to Hauck's insistence that his identification of Óðinn on bracteates is based not only on iconographic details but also on the self-naming of the god in their runic inscriptions (p. 228). He claims that Óðinn's officiating at the sacrifice of Baldr was a legitimating ritual of Migration Period aristocracy (p. 229). Ultimately, it was very important for Hauck to demonstrate that all bracteates were part of the same mythological worldview revolving around Óðinn.

In the last paragraph of her history of research on bracteates, Behr notes that current ideas may or may not stand the test of time, especially as fresh discoveries inspire new interpretations. In addition, changes in research paradigms may also direct attention to different interpretations (as contextual archaeology has moved the emphasis in bracteate studies toward the social function of bracteates). Although she evinces due respect for Hauck's enormous contribution to bracteate studies, Behr exhibits — for a member of Hauck's research team — a healthy dose of skepticism, and puts his ideas into context. In a work published since *Auswertung*, Behr (2011) has propounded an entirely secular interpretation of a newly found bracteate that depicts a man with a drinking horn (Scalford IK 635).

Behr's work is a first-rate history of bracteate research incorporating a thorough survey of all the relevant literature. The length of the volume's composite bibliography (170 pp.) is largely due the comprehensiveness of her contribution. Behr has digested an enormous amount of material and has done a great service to bracteate research by compiling this thorough

interdisciplinary synopsis of changing paradigms of bracteate research through the years.

Network of central places

Alexandra Pesch's chapter, "Netzwerk der Zentralplätze: Elitenkontakte und Zusammenarbeit frühmittelalterlicher Reichtumszentren im Spiegel der Goldbrakteaten" (*Auswertung*, 231–77), builds upon her previous contribution to Hauck's project, namely her monograph (2007) on the groupings of bracteates into "formula families" based on similarities of basic picture forms. That work is a solid and sensible improvement over attempts by others (such as Malmer 1963) who created typological classifications of bracteates that tell us more about the researchers than bracteate typology. After completion of her earlier work on smaller groupings, Pesch can here consider the larger context of bracteates. In the long initial part of the chapter, she reviews archaeological evidence for so-called central places, and in the final section, she proposes understanding Nordic Animal Style I as a "corporate design" or "brand" and reflects on possible contacts between centers as illuminated by bracteates.

"Central places" (also known as "productive sites") served many purposes — *inter alia* economic, political-administrative, military, religious-ideological, and residential. Central places are locations where people exchanged ideas and goods. Thus it is assumed that these places served as distribution centers for bracteates and also for the dies used to make them. At the simplest level, the discovery of concentrations of bracteates may allow the detection of central places; yet central places may also indicate where bracteates are likely to be found, thus risking a circular argument, as Pesch admits. However, it is not merely the discovery of bracteates that has permitted the identification of central places; there is copious archaeological, place-name, and historical evidence, too. Interdisciplinary research, in part carried out by Hauck's bracteate team, has led to the recognition of these sites. Pesch notes that most central places disappeared and were forgotten (*Auswertung*, 233). In many cases, those that have been identified have been suggested by sacral names and corroborated by metal-detector finds that have then led to the discovery of other archaeological traces such as large hall structures. Finds of large (≥50 mm in diameter) bracteates and also numbers of bracteates greater than the personal jewelry of an individual (which might indicate a private hoard) are particularly indicative of central places (p. 236).

Before discussing individual sites, Pesch sets the stage by proposing that bracteate styles were the expression of a group rather than an individual, and

she considers how images were created and copied from a pool of possible imagery, with variants reflecting differing capabilities of goldsmiths (pp. 238 f.). An important point Pesch makes is that bracteates were not produced in less expensive silver (other than a few examples in England) or bronze, as fibulae were (p. 240). Thus it must have been crucial that bracteates were made of gold, and they must have been made in secure places under the protection of a political-military leadership that could guarantee the safe-keeping of gold, and also control the imagery. Yet it is not clear how craft workers moved around and spread bracteate designs or actual dies (see Wicker 1994b). In her 2007 work, Pesch examines bracteates with related designs that reflect a decentralized copying process, and in *Auswertung* she asserts that bracteates made with the same die reflect individuals in direct contact with each other (p. 241). It follows that these people could have been cult specialists or elite leaders who delivered authorized iconographic scenes on dies, runemasters who produced inscriptions to order, or even itinerant craftsmen working independently.

Pesch discusses five central places that are relevant for the study of bracteates, each with a slightly different "flavor": Gudme/Lundeborg, Uppåkra, Sorte Muld, Ravlunda, and Sievern. She also tentatively mentions other sites that exhibit certain qualities characteristic of central places but are inadequately investigated at the present time. Many of these sites have been discovered in recent decades, after Hauck began his research on bracteates. In particular, discoveries initiated by metal detectorists are rapidly changing the landscape of bracteate studies. Pesch provides a map (p. 244) marking conjectural central places with suggestions as to where many "formula families" may have originated. There is a great deal of information embedded in this very useful graphic. Even without familiarity with her groupings, the viewer can at a glance visualize where Types A, B, C, and D are most commonly found, noting for instance the preponderance of Type D in Norway and Jutland.

The neighboring sites of Gudme and Lundeborg on Fyn in Denmark are paired, with each serving a different purpose. *Gudme*, meaning 'home of the gods', indicated a sacral place and had a large ceremonial hall, whereas Lundeborg was a production site for gold objects. An extremely high-quality, large Type B bracteate found at Gudme, IK 51.3, is a typical indicator of a central place. Among the twenty-two bracteates found at this site are the earliest in Axboe's seriation (2004) as well as many early types in Pesch's "formula families", so it has been suggested it was possibly the place where the first bracteates were created and produced (p. 246; there are, however, later Type D examples found here, too).

All of the administrative, religious, economic, etc. functions seen at the paired sites of Gudme and Lundeborg are found together in one location at Uppåkra in Skåne, Sweden. This was an important trading site going back to the Roman Iron Age and continuing into the early Viking Age, yet of the eleven bracteates found there none belong to the later Type D. To explain this, Pesch (p. 250, citing Margrethe Watt) proposes that a later cult replaced the use of bracteates here with gold foils (*guldgubbar*). Although bracteate production at Uppåkra seems to have begun later than at Gudme/Lundeborg, a Type A bracteate (IK 610) with a previously unknown runic inscription was found at the former site, and Pesch suggests that it was created there (p. 250) — an exciting yet completely speculative proposal.

Like Uppåkra, Sorte Muld on Bornholm, Denmark, had a long existence from Roman through Viking times, and here too gold foils in great quantities eventually replaced bracteates. There are no Type A or Type D bracteates among the twelve pieces found at Sorte Muld, but Pesch claims that the presence of three examples of a Type B bracteate showing "three gods" (IK 595 Fuglsang/Sorte Muld) and supposedly depicting the sacrifice of Baldr indicate that this was a cult site (p. 252). Pesch suggests that Bornholm examples of her C12 "formula family" (2007, 210–15) reflect contact with Poland and Bornholm's status as a "bridge to the Continent" (*Auswertung*, 253). In addition, she proposes that the bracteates with the inscription **ota** known from Skåne, Blekinge, and Bornholm could have been created at Sorte Muld.

At Ravlunda, Skåne, on the Baltic coast, the recovery of evidence of metalworking has been going on over a long period. A bracteate from Ravlunda (IK 144.1) has an intriguing punch identity with another bracteate with a different central stamp from Öland (IK 279 Holmetorp), a relationship that has led to some hand-wringing and thoughts about how tools such as punches and dies were produced and shared (Axboe 1994, 74; Wicker 1994c, 147). The bracteates from Ravlunda exhibit ties to the Danish islands as well as Öland and the Swedish mainland. Pesch suggests that all of the bracteates found at Ravlunda were imported rather than being produced there (*Auswertung*, 256).

Sievern on the Elbe-Weser delta came to the fore with Hauck's 1970 monograph, *Goldbrakteaten aus Sievern*, which elaborates on a hoard find from this location. Near the site are cemeteries, walls, and a palisade (p. 256). Pesch suggests that Sievern was an intermediate station where Danish bracteates were copied in preparation for distribution as far away as Frisia and England. Among the fourteen bracteates found at Sievern is IK 156, with a runic inscription, which Pesch links in a "formula family" with IK 76 Wurt Hitsum and IK 323 St. Giles Field (p. 258).

Pesch suggests possible sites of additional central places and also general areas within which such sites might in the course of further research be located — in Scandinavia, and also in England and on the Continent (pp. 261–67). In particular, Pesch points to Uppsala and Helgö as likely places for the production of bracteates, especially since gold fragments have been discovered at Helgö (p. 265). Besides numerous sites in Scandinavia, other likely places include the Dutch coast and Nebenstedt in Lower Saxony, which is suggested as an intermediary link to Thuringia where the Fürstenberg-type bracteates are centered (p. 267). Other possibilities are along the Elbe and Saale to the south, the Danubian area, and Kent in England (where twenty-six bracteates had been found when Pesch wrote her chapter). The situation is changing rapidly and unevenly with metal detecting regulated differently in various jurisdictions. In particular, the number of English bracteates has mushroomed during the past decade, and Pesch appropriately cautions that our concept of central places could change radically with further discoveries (p. 269). I would like to add that metal detecting in Poland is rapidly changing our understanding of bracteates there.

According to Pesch, one of the key functions of central places from the fourth century onwards was to serve as a forum where members of the elite could come into contact with each other, where Roman luxury goods were distributed, and where the imitation of Roman images and ideas could take place. Although central places have not been dated to earlier than the third century, she mentions that common burial customs indicate contacts among the elite during the preceding two centuries; she envisages at least passive knowledge of Latin at embryonic central places (p. 270), and that the runic script arose in these precursors. Bracteates that both imitate Roman imagery and show a Northern pictorial vocabulary were also created in this milieu, regardless of whether the Scandinavians saw themselves as followers of the Romans or as adversaries (p. 271). Pesch suggests that Nordic Animal Style I could be considered the equivalent of today's corporate branding with a common identity expressed across a vast area via a simplified and standardized pictorial code (p. 272). This is a thought-provoking approach to "identity", a much-invoked buzzword of the past decades (see e.g. Pohl and Mehofer 2010).

Finally, Pesch considers the bigger question of how Animal Style I spread. She proposes that high-level control over imagery and inscriptions was exerted during cultural contacts at, for example, assembly (thing) gatherings, and that such dealings were peaceful since none of central places discussed earlier are fortified (*Auswertung*, 274 f.). She insists that the images on bracteates were divine and did not depict individual persons as on Roman

coins, but she does not substantiate this assertion, instead suggesting that elite cult specialists or "priests" similar to Celtic druids regulated the imagery (p. 275). However, it seems just as likely that high-level control over pictorial and runic details could have been exercised by political leaders who wanted to depict themselves, as Roman emperors did. Despite the cultic overseeing that Pesch envisages, she admits that bracteates changed, albeit gradually, mirroring local religious and political circumstances. Not all pictorial types have surfaced at all central places that have been identified, whether because of the accidents of preservation or because different images predominated in various locations. Thus we may question how tight the supervision by so-called priests and runemasters really was, and whether bracteates were perhaps venerated as much for their gold as for their specific images. Despite the apparent importance of Gudme/Lundeborg, the leaders at this site may not have had cultural dominance over the vast network of central places. Connections between central places provided a means of communicating iconographic details, but variation in imagery indicates that artisans did not follow models dogmatically.

Pesch's solid and accessible investigation of central places and their role in the spread of bracteate motifs showcases some of the best work that has come out of the interdisciplinary bracteate team. Her contribution should make it possible both to extend her concept of formula families to more bracteates (and new finds) and to place future research on additional central places in the context of cultural and political networks in northern Europe.

Inscriptions and bracteate chronology

Although Morten Axboe is an archaeologist, his chapter "Die Chronologie der Inschriften-Brakteaten" (pp. 279–96) is obviously of great importance for the study of runic inscriptions and as such will also be commented on by Henrik Williams (see below). Axboe's (2004) detailed work on the production and chronology of bracteates was presented as a monograph in the same series as *Auswertung* and Pesch's monograph. The short contribution in *Auswertung*, with a list of inscriptions in seriation order (pp. 290–95), focuses only on pieces with inscriptions. However, it does not deal with all runic bracteates but merely with those discovered before November 1988, which is most disappointing for a work published in 2011. Since he uses details of the anthropomorphic head, Axboe is limited to those depicting humanoids and those with relatively large heads. Thus he excludes the Type F bracteates with inscriptions (IK 241.1 Väsby and IK 241.2 Äskatorp) and the Type B examples, with inscriptions, of the sort that Hauck refers to as

the bracteates showing "three gods" (IK 51.3 Gudme, IK 165 Skovsborg, and IK 39 Denmark), since the heads on these examples are too small to see the details that he considers significant (p. 281). In his monograph he investigated a total of 342 different dies (models) of bracteates, of which 125 have inscriptions, including both imitations of Roman capitals and runes; the latter subset is the material presented in the *Auswertung* chapter.

By means of correspondence analysis, Axboe in his monograph organized the bracteates he investigated into four groups, H1 through H4. His seriation is based on typological details of the ears, eyes, and hairstyles of Type A, B, and C pieces. He then arranged them in an internal chronology, which should not be confused with an external chronology calibrated to absolute dates. It is important to point out that his sets are ambiguous rather than mutually exclusive since H3 and H4 overlap and cannot be clearly separated. Martin Rundkvist (2006) has criticized Axboe's methodology on this point while also commending him on the basic tenets of his research. Axboe explains that one of the difficulties in dating bracteates is that a Roman coin available in the North might inspire an earlier as well as a later bracteate, thus reflecting continuing input from Mediterranean formal iconography (*Auswertung*, 279).

From his internal chronology, combined with analyses of closed finds and use-wear, Axboe estimates an external chronology, with group H1 dating to the third and H2 to the last quarter of the fifth century (p. 281). He places the end of bracteate production shortly after the month-long darkness that occurred A.D. 536–37. (Unfortunately, there is a typographical error on p. 281 so that the darkening of the sun is listed as happening in 336–37.)

Axboe's datings depend only on details of the male heads and are completely independent of the inscriptions. Almost all of the twenty-two bracteates in his group H1 have some kind of inscription, with many imitations of Roman capitals. There are only four bracteates from three dies that imitate specific, traceable Roman coins, two different ones of Constans (337–50) and one of Valens (364–78). Inscriptions within a runic band that ends in a bird's head (IK 110 Lindkær, IK 140 Overhornbæk, IK 312.1 Overhornbæk, and IK 312.2 Vendsyssel) appear early in his seriation because they emulate Roman models in the placement of the inscription around the perimeter (p. 285). Bracteates from group H1 contain no lexical runic inscriptions; inscriptions that are semantically interpretable begin in group H2 and continue through H3 (p. 289). It is revealing that formula words appear across bracteates of all groups except H4 (p. 286, fig. 3; they are garbled in H1). Axboe places one bracteate with an inscription at the transition from H3 to H4 (IK 44 Djupbrunns), and one in his H4 group (IK

158 Sigerslev, non-lexical). He dates the end of bracteate runic inscriptions to around A.D. 540 (p. 289). It will be interesting to see how the discovery of the first Type D bracteate with an inscription found at Stavnsager in Denmark in the summer of 2012 will affect our interpretation of the corpus (http://runer-moenter.natmus.dk/nye-guldbrakteater-med-runer/).

Axboe mentions the possible use of abbreviations in formula words (p. 285), which to some extent mirrors the use of the "abbreviation principle" that Hauck invokes when a bracteate does not display details he expects. For both images and inscriptions, there is disagreement about how much a researcher should be allowed to "correct" what he perceives as mistakes. Both Axboe and I (Wicker 1994a, 77) have cautioned that some apparent mistakes in bracteate inscriptions may have occurred due to the difficulty of executing bracteate dies in mirror-image of the intended outcome, not simply due to the illiteracy of those designing or producing the runic inscriptions.

Axboe's concise contribution summarizes findings about a subset of bracteates (a total of 125 with inscriptions) extracted from his analysis of a larger set of the bracteate corpus (342 examples with large heads), nearly one-half of the total number (622) of known bracteate models (*Auswertung*, 902). Axboe cautions readers adequately that his illustration of lexical runic inscriptions in seriation order (p. 288, fig. 4), as also his seriated list of all inscriptions according to groups H1 through H4, should not be construed as giving an absolute chronology of bracteate inscriptions. However, it is very tempting to ignore the warning and take the list at face value. Axboe's chronological investigations are meticulous and provide a great deal of information for further research. It is to be hoped that he will continue his work to include all bracteates — not just those found by 1988 that display clear humanoid heads.

Anglo-Saxon animal-ornamented shields

Tania Dickinson draws attention to an interesting but little-known category of material in her chapter "Iconography, Social Context and Ideology: The Meaning of Animal-Ornamented Shields in Early Anglo-Saxon England" (pp. 635–86). Hers is the only contribution in *Auswertung* other than that by von Padberg that does not deal explicitly with bracteates, and it is difficult to understand why this outlier was included, beyond the fact that the author was a member of the interdisciplinary bracteate team. Dickinson has already published this body of material, in 2005, and with the exception of minor revisions made in 2008 completed her *Auswertung* manuscript in the same year (p. 635, note 1).

Metal mounts with animal ornamentation attached to twenty-one Anglo-Saxon shields found in burials do have some parallels with bracteate imagery. However, other sorts of material, namely gold foils, Vendel Period dies and pressed plates on helmets — perhaps Gotlandic picture stones too — can also be compared to bracteates. Yet there are no chapters in *Auswertung* on these subjects, even though we learn from the foreword (p. viii) that Hauck left an unfinished manuscript on gold foils intended for inclusion in the final volume. Dickinson compares the imagery on shields to that on bracteates, making a case for a shared iconography based on Hauck's interpretation of bracteates. The iconographic comparison that merits the most discussion is whether a creature on the shields is a fish and if so, whether it is a pike (pp. 644–48). Dickinson compares the "pike-like" beings on the shields to Hauck's discussion of reptiles and snakes on Type B and C bracteates, suggesting that all these creatures represent opposition to the gods (p. 646). To make such an appraisal, one must first presume a shared visual vocabulary and then establish a compatible chronology.

Dickinson admits it is problematic to assume "that similar images have the same meaning even when in different contexts" (p. 636); thus we can question whether the designs on Anglo-Saxon shields are relevant to our understanding of bracteates and vice versa. She expresses some doubts herself and refers to Jane Hawkes's (1997, 314) warning that images are "malleable; they can express things in ways which allow for their common form to be retained and shared among members of more than one community, whilst not imposing upon them the constraints of uniform meaning". To admit the possibility of variable meanings is to repudiate Hauck's very insistence that bracteates present a unified, coherent body of material representing the same religious content even through widely distributed and varying pictorial images. Dickinson herself seems hesitant, finding in her comparison of the materials only "striking analogies … which might open a route to interpretation" (*Auswertung*, 636).

Dickinson's (p. 641) dating of the shields depends upon Barfod Carlsen's (2002) chronology of bracteates, which turns the traditional dating of the Type D examples upside down. Barfod Carlsen's dating has not been accepted by other members of Hauck's bracteate team, neither by Behr (*Auswertung*, 196 note 239) nor by Axboe, as mentioned above. Dickinson rather tortuously argues that the alternative dating of certain Type D bracteates as the earliest "need not invalidate Karl Hauck's arguments" for their connection with open-jawed animals on a group of Type B bracteates (p. 641). The fact that Dickinson employs Barfod Carlsen's chronology for bracteates instead of Axboe's is curious, since the latter was part of the

bracteate team and his work is included in this volume. The impression is reinforced that *Auswertung* has been treated more as the proceedings of a conference, consisting of diverse contributions, than as an integrated summation of bracteate research.

One of the most thought-provoking observations by Dickinson is advanced in her discussion of the public display of shields. She notes that the animal ornamentation on metal mounts would have been visible only at close range and suggests that the images were perhaps used to identify warriors (p. 651) during the heat of battle, as an aid while distinguishing the dead after a battle, or in "protecting" a grave chamber after death (p. 653), ultimately pointing to the apotropaic function of animal ornamentation on shields as defensive weapons. One can similarly question how visible bracteates were — whether worn by men or women — and what role the imagery on them played in recognition of group and individual identity. This is an issue I have previously discussed (Wicker 2005), but the subject has received little attention in bracteate studies.

Catalogue of newly found bracteates

As an introduction to the "Katalog der Neufunde" (*Auswertung*, 891–999), Morten Axboe summarizes some of their highlights and some quirks of the earlier volumes. Among the latter is the fact that certain pieces were included due only to the special interests of Hauck, even some that fall outside the technical and chronological constraints of the corpus, such as the IK 232 Daxlanden fibula (p. 895). Axboe notes that three bracteate dies have now been found (IK 572 Postgården, IK 609 Essex, and IK 637 Morley), yet the short English summary (pp. 718 f.) mentions only the first two. There are inscriptions on twenty-six of the new bracteates from twenty-one different stamps (including five stamps that were known previously). Completely new inscriptions are found on eighteen bracteates from thirteen different stamps. At the end of 2010, a total of 1003 bracteates were known from at least 622 dies, plus seventeen unique medallion imitations. It is very fitting that culmination of this project occurred just when the number of pieces crossed the 1000-mark!

The catalogue itself (pp. 905–99) follows the pattern of the previous volumes, but Morten Axboe and Charlotte Behr have made a few changes, mainly to simplify its use and shorten it (p. 898). The description of the quadruped, for instance, is now summarized concisely in narrative fashion, rather than in sixteen formatted lines. Most of the new entries include a reference to Pesch's formula families (abbreviated as "FF") at the beginning

of the catalogue entry. The descriptions of the head of the anthropomorphic figure as defined by Axboe for his correspondence analysis of details are now used, and Axboe helpfully points us to the English translations of these type descriptions in one of his earlier publications (Axboe 1998, 141–43).

The catalogue numbering continues according to the system established in the first volume so that new examples from already-known stamps (models) have the same number with a decimal subspecification. Bracteates from new stamps are given numbers running from IK 570 onwards. Stamp-identical pieces from differing find-places are distinguished through the use of a decimal subspecification, whereas "identical" examples from the same site are not differentiated. Lumping die-identical pieces together is not a problem for Hauck's iconographical descriptions of bracteates, but it is problematic when concerns turn to technical issues about the manufacture of individual pieces. From this standpoint, it would be preferable if each exemplar had a unique identifier. Occasionally there are discrepancies such as IK 51.1 Fakse and IK 51.3 Gudme, which were not stamped from the same die even though the same initial number would indicate that they were, had the system been applied consistently. Similarly inconsistent, the stamp for the bracteate with inscription IK 47.1 Elmelund was not the same as for the die-duplicates IK 47.2 Broholm and IK 47.3 Enemærket. In the case of two new die-identical bracteates from the central place Uppåkra, IK 591.1 and IK 591.2, the use of the decimal subspecification indicates that these pieces were found at two distinct localities within the large settlement site (*Auswertung*, 897).

The original numbering system followed the alphabetical order of find-places, starting at "A" in each of the *IK* volumes. Volumes 1 and 2 thus contain bracteates of Types A, B, C, and F and also medallion imitations arranged alphabetically in each; when looking for a particular example, it is therefore unclear in which of the first two volumes one should search. Volume 3, on the other hand, presents all Type D bracteates in clear alphabetical order, plus an appendix of new finds up to 1988. *Auswertung* presents near on 100 new bracteates more or less in the order in which they were discovered, so inevitably any semblance of alphabetical order is lost.

Nearly all the bracteates in the first three volumes were autopsied by a bracteate specialist (usually Lutz von Padberg or Morten Axboe), whereas some of the newly found pieces have not been examined by any member of the bracteate team (p. 899). Physical inspection of artifacts is essential, yet most scholars studying different aspects of bracteates cannot examine every bracteate in person. Instead, they must rely on descriptions by those who autopsied them as well as drawings and photographs. I trust the hands-

on examination by an expert such as Axboe, but Hauck did not always agree with his findings, for example considering what Axboe recognized as manufacturing residue to be an iconographic detail, a "horse-tail" (see above), and then "improving" the *IK* drawing to match his interpretation.

Bracteates in the first three *IK* volumes were published at a scale of 4:1 (or 3:1 if exceptionally large), which is an enormous improvement over the 1:1 illustrations by Mogens Mackeprang (1952). Since the format of the *Auswertung* volume is smaller than that of the *IK* volumes, illustrations here are at 3:1. Drawings for the first three volumes of the catalogue were uniform, all executed by Herbert Lange, but more variability is apparent in the new illustrations, which are made by different draftsmen. It is a fallacy that photographs are more objective than drawings; they are dependent upon light source and direction and can be as misleading as drawings. Photographs for this volume are of variable quality, in many cases provided by museums and individuals, in particular for the new finds from England. It is commendable that the decision was made to include as many new bracteates as possible, even if no photographs could be obtained.

Physical autopsy of the artifacts is crucial for understanding the production of bracteates and workshop connections. Hauck did not originally plan to include technical details, but after Axboe — who had personally examined most of the bracteates — joined the team (*IK*, 2.2: viii.), he was invited to add his comments about technical details as part of the artifact description. An addendum lists that information for the first volume (*IK*, 3.1: 241–302) and adds photographs for particularly interesting details on the reverse of bracteates (*IK*, 3.2: pl. 128–31). In *Auswertung*, such comments are also incorporated. However, given the huge resources devoted to this entire project, it is unfortunate that reverse images of all bracteates in *Auswertung* were not provided, as is standard with numismatic material. In fact, all of the over 1000 pieces in the corpus should have been thus illustrated. In addition, examples stamped with the same die and found at the same site have not been uniquely documented, and there are indeed differences in details of the punched borders, loops, and wire edges. I understand that *IK*, 1–3, and *Auswertung* constitute an iconographic catalogue and not a technical catalogue, but I believe that this was a missed opportunity. Not in our lifetime will a project document all of the bracteates again, and we may never see another such catalogue in printed form. It took twenty-two years following the completion of volume 3 of *IK* in 1989 for *Auswertung* to appear. The question now is how long will it be before the entire catalogue becomes available on the Internet — not just as scans of the printed pages but as a searchable database updated with each new bracteate that is found.

This is a solution John Hines has called for (2005, 477), so that we do not have to wait another quarter of a century for the next installment.

Iconological conclusion

The foreword to *Auswertung* introduces the eleven members of the interdisciplinary team (Hauck plus Axboe, Beck, Behr, Dickinson, Düwel, Heizmann, Müller, Nowak, von Padberg, and Pesch), and the reader understands that they were each allotted a chapter to supplement the final installment of the catalogue. (As noted above, Axboe and Pesch have already published monographs as the culmination of their efforts with the team.) Yet the contributions are of varying relevance to an overall evaluation of bracteates and give the work as a whole the idiosyncratic character of an odd collection of articles put together by a committee.

It is unfortunate that the catalogue supplement could not have been published as a separate, smaller work, with the history of research by Charlotte Behr and the massive bibliography. A smaller volume would have been more affordable and more accessible, besides being physically easier to use. The other contributions could then have been published as another *Festschrift* to Professor Hauck (cf. earlier ones in 1982 and 1994), this time by the interdisciplinary team that he had assembled. I can imagine that the decision to send the volume out in its existing form was difficult and most probably driven by the constraints of publishing economics.

Despite problems that I perceive in Hauck's vision of bracteate iconology and the unrealized nature of what Hauck wanted the *Auswertung* to be — a catalogue plus a distillation of his iconology of bracteates that would have updated and superseded his published installments of "Zur Ikonologie der Goldbrakteaten" — the tome that has been produced is extremely useful if only in gathering together all of the divergent material it contains. All in all, perhaps the most positive aspect of Hauck's bracteate project was that it provided the opportunity for individuals to work as a multidisciplinary team and become more aware of the impact of each other's disciplines — archaeology, runology, iconology, name research, history of religion — so that they could carry out genuinely interdisciplinary research. I hope that there will never again be runologists who ignore all bracteates without inscriptions nor archaeologists who know nothing of runic inscriptions, as has been the case in the past.

Texts[4]

Henrik Williams

Of all bracteates known at the end of 2010, no fewer than 222 from 153 distinct dies bear texts, predominantly with runes or runelike characters, according to a calculation by Klaus Düwel and Sigmund Oehrl (*Auswertung,* 296). Latin or Latin-like characters occur chiefly on Type A bracteates whereas runic legends appear most often on Type C. Altogether there are 143 distinct runic inscriptions. Thus runes on bracteates constitute nearly one-third of the some 450 inscriptions with the older futhark[5] (excluding the so-called Anglo-Frisian material), even if this proportion decreases somewhat when one considers the number of preserved individual runes.

Not only is the runic corpus on bracteates of considerable dimension, it is relatively well dated. Even though the suggested chronology of rune-bearing bracteates has varied with different proponents, the timespan is no more than 150 years, and Axboe (see Wicker above) has proposed an even narrower dating, to A.D. 450–540. Many other older runic inscriptions are no more closely dated than to within a timespan of several centuries.

Despite the magnitude and relatively exact dating of bracteate runes, this corpus has received too little attention and is sometimes ignored altogether. Bengt Odenstedt, for example, in his study on the typology of and graphic variation among the older runes (1990) chose to exclude all inscriptions on bracteates not consisting simply of the rune row "because they are frequently impossible to interpret and often contain a number of highly individual or distorted runic forms" (p. 17; he did, in fact, include some bracteate inscriptions without justifying their inclusion).

It is true that a disproportionate number of (seemingly) non-lexical inscriptions and aberrant graphs appear on bracteates. Why this should lead to the rejection of the "not so few interpretable inscriptions and the number of clear, and hence usable, rune forms in the unintelligible inscriptions" (Williams 1992, 194) is a mystery, one which Odenstedt (1993) made no effort to dispel; instead he abjured the responsibility to deal with the "scribblings of a monkey" (p. 7). It is also unclear why "highly individual or distorted runic forms" should be exempt from examination. Here, in the margin of runicity, there may be important discoveries to be

[4] I would like to thank Klaus Düwel, whose generous gifts over the years of off-prints from his rich *oevre* have facilitated my work on this review article significantly.

[5] See http://www.runenprojekt.uni-kiel.de/beschreibung/9/fundliste.pdf.

made. As I have pointed out (Williams 1992, 194): "The existing corpus of inscriptions is so small that one should only exclude a part of it for very good reasons."

Odenstedt is by no means alone in his contempt for bracteate inscriptions, nor is he the first to consider them to be inferior products. Erik Moltke distrusted deeply all runic work by metalsmiths, whom he by definition considered to be illiterate (e.g. 1985, 114, 124). Why this particular category of craftsmen should lack reading and writing skills more than their contemporaries in other trades is unclear to me. There are, after all, some well-executed runic texts on bracteates, which must ultimately have been produced by metalsmiths. The many badly executed runic legends may certainly be accounted for by the existence of illiterate smiths, but there are perhaps other avenues of explanation to be explored.

Recent decades have seen important contributions to bracteate runology by Klaus Düwel, Gunter Müller, and not least Sean Nowak in his 920-page dissertation (2003). The last has not received the attention it deserves even though it is available on the Internet. Like much German bracteate runology it is not an easy read, but it contains enormous amounts of hard data and valuable observations, and cannot be overlooked when discussing early runic inscriptions.

For runologists interested in the older material, it is a great pleasure to welcome yet another substantial contribution to the study of runic bracteates and especially of their inscriptions. In the volume being reviewed there are no fewer than five chapters devoted to runic texts on bracteates, covering more than 300 pages, not counting relevant parts of the bibliography and catalogue nor the discussion of writing in the iconographic sections of the volume. Among the last is a most useful overview by Morten Axboe of bracteate texts, grouped chronologically (pp. 290–96).

The five runic contributions deal with:

1. Problems of reading and interpreting the name stock of the bracteate corpus, by Heinrich Beck (19 pp.),
2. The transition from letter magic to name magic in bracteate inscriptions, by Gunter Müller (58 pp.),
3. Semantically interpretable inscriptions on the gold bracteates, by Klaus Düwel and Sean Nowak (99 pp.),
4. Letter magic and alphabet sorcery in the inscriptions on gold bracteates and their function as amulets, by Klaus Düwel (49 pp.),
5. Formulaic words on gold bracteates, by Wilhelm Heizmann (77 pp.).

I will also comment on:

6. Forms of reaction by polytheism in the North to the expansion of Christianity as reflected by the gold bracteates, by Lutz von Padberg (32 pp.).

In such a book, one would have expected a different form of organization: first an overview of all bracteate inscriptions, interpretable or not, and then chapters on names, formulaic words, and magic, in that order.[6] For an introduction one must instead turn to Morten Axboe's short contribution on the chronology of bracteates with inscriptions. It is, however, important to remember that Axboe's list is incomplete. The reason is not just that new bracteates keep being found (see below) but also that he did not include all known bracteates with runes in his seriation (see Wicker above). For these reasons, at least five semantically meaningful inscriptions are left out of his list (cf. p. 287).

There is much in the present volume that is impressive and of great interest, as I hope to show. I will also, however, offer extensive critical commentary after an initial survey of each contribution, as well as in my conclusion. Since the chapters have been authored independently I shall review them separately and offer my assessment consecutively.

Names on bracteates

Heinrich Beck's chapter, "Lese- und Deutungsprobleme im Namenschatz des Brakteatencorpus" (pp. 297–315) starts with three assumptions (p. 298), firstly that iconographic expression and runic message are related, secondly that since runic items are found on only one-fifth of all bracteates the inscriptions contribute an extra dimension to the iconographic/iconological interpretation (by Hauck, and on which the linguistic interpretations are dependent), and thirdly that the bracteate corpus constitutes its own genre which is to be understood as a unified whole.

The delimitation of the onomasticon or name stock investigated by Beck seems to be derived from what have been interpreted as names in *IK*, complemented with specific additions by Gunter Müller and Ottar Grønvik. Unfortunately, there is no list of the names Beck accepts and why. He refers (*Auswertung*, 297) to Düwel and Nowak's contribution where

[6] In the German and English summaries (pp. 694–99 and 710–15, respectively) the order more logically starts with the Düwel and Nowak and Düwel chapters. Why this differs from that of the actual disposition in the book I do not know.

ten meaningful inscriptions are included, and presumably all or most of Beck's names should be found therein. He does mention IK 163 Skonager 3 *Niuwila* and the related IK 43 Darum 5 *Niujil*, IK 42 Darum 1 *Frohila*, IK 161 Skodborg *Alawinir*[7] and *Alawidir*, IK 149.1 Skåne *Gakar* (following Ottar Grønvik's interpretation of this as a byname, which would make it an addition to the onomasticon), and IK 184 Tjurkö 1 *Kunimundur* and *Heldar*. It should, however, be pointed out that the ten inscriptions studied by Düwel and Nowak are those of interest for the history of religion (cf. *Auswertung,* 396) and thus do not encompass all runic texts on bracteates containing names; in his contribution, Gunter Müller (p. 325) lists no fewer than eighteen names or namelike personal designations.

Beck's conclusions concerning runic charms on bracteates are three (pp. 314 f.):

1. Runic sequences identified as names should be interpreted as bynames. This means that *Kunimundur* is probably not a given or "first" name but a designation for the 'protector of the family'.
2. The iterations in bracteate runic inscriptions, as well as bynames of the type *Gakar*, onomatopoetically 'cackle', speak in favor of a ritual element.
3. Inscriptional contents move between the poles of threatening statements (with iconographic back-up) and invocations for averting danger.

It is extremely difficult to get a grip on names in the bracteate corpus using Beck's study — much recent onomastic work has been ignored, most sensationally Lena Peterson's lexicon (2004), which includes all names in the oldest runic inscriptions (including four probable and four possible names on bracteates mentioned by neither Beck nor Düwel and Nowak). The fact that Beck does not state explicitly which names are included and which excluded makes it even harder. Since lists of newly found names and of now discarded names posited in previously published *IK* volumes are nowhere to be found, there is no way of knowing which names are actually thought to exist. In addition, the picture of the onomasticon is muddled by Beck's inclusion of topics not related to the *Namenschatz* ('name hoard') in the sense a name scholar would understand. One example is the lengthy

[7] In this review, I consistently use *w* instead of *v* even where the author(s) may have used the latter. On the other hand, I have chosen *ʀ*, **ʀ**, and **ï**, in accordance with the usage in *Auswertung*, although I personally prefer *z*, **z**, and **ç**, respectively.

discussion (*Auswertung*, 308–11) of the Undley bracteate, which contains no names at all.

Beck in his title promises to discuss problems of reading in addition to those of interpretation, but as far as I can see he mentions only one, **gḷola** versus **guoba** on IK 76 Hitsum, and here Beck (p. 311) simply notes the alternative readings. Klaus Düwel (1970, 286, and in *IK*, 1.2: 149) interprets the former sequence as *Glōla*, a diminutive of the nominalized verb *glōa*, which he sees as the name of a runemaster. The latter reading emanates from Morten Axboe (cf. Müller 1986, 460 note 41), but is given no interpretation, neither by Axboe nor by Beck. Elmar Seebold (1996, 195 f.), who is not mentioned in this context, suggests the reading **groba** 'that which belongs to a grave or burial'. My point here is threefold: firstly that we are not given a definitive reading, secondly that we are not told if any of the readings result in credible words, and thirdly, if the latter is the case, whether such a word or such words might constitute names. This is indeed primarily a "problem of reading" but Beck does not enter into it and thus I cannot see what "Lese[probleme]" is doing in the title of his contribution. Maybe that is why it has been translated "The Problem of Names in Pictorial Codes and Runes on the Gold Bracteates" in the English summary (*Auswertung,* 712), with no mention of reading problems. That labels the actual contribution well but is not a very accurate rendering of the heading in German.

Names and bracteate magic

Another chapter dealing with names on bracteates is by Gunter Müller, "Von der Buchstabenmagie zur Namenmagie in den Brakteateninschriften" (pp. 317–74). Surprisingly, it is not written for the present volume, but is a reprint of a twenty-three-year-old journal article (1988), with some insignificant additions. The original article is in many ways excellent, and whoever has not read it already should take the opportunity to do so now. But it stands to reason that more than two decades of runology and other scholarship has changed the basis of knowledge significantly and rendered Müller's study partly out of date.

In the introduction (pp. vii f.) we learn that it was Müller who was originally recruited to deal with the names on runic bracteates, but that his scholarly career took a different turn and Heinrich Beck was drafted in to revise the treatment of the onomastic material. One would have expected this to be mentioned in Beck's contribution and reflected in its structure, which it is not; it should have been an updated version of Müller's earlier

work, and Müller's own chapter should perhaps have preceded Beck's rather than following it as is now the case.

It would be unfair to review Müller's chapter on an equal footing with the other contributions, and one wonders why the editors included it without correlating it to the rest. I shall, however, make occasional references to it in the following.

Interpretable bracteate inscriptions

The chapter by Klaus Düwel and Sean Nowak, "Die semantisch lesbaren Inschriften auf Goldbrakteaten" (pp. 375–473), is not only the longest of the runic contributions but also the most valuable since it deals with semantically interpretable inscriptions (which they term 'semantically readable'). In my opinion, it could have been published on its own as a separate booklet. It is well written and with few exceptions well structured and up to date.

Düwel and Nowak (p. 380) rightly reject Elmar Seebold's (1991, 460–91) chronology of bracteate runic forms, and they discuss intelligently problems of how to come to grips with the more difficult bracteate texts (*Auswertung*, 382–88). They also debate (pp. 388–96) the communicative situation of bracteate inscriptions: Who is communicating and what is the relationship between text and picture? Traditionally, the first question has been answered by positing a runemaster, a runic magician, or just a plain magician as the "sender" of the message. But Düwel and Nowak assert (p. 389) that new interpretational perspectives have opened up since the images on bracteates have been shown to depict deities. They claim (pp. 389 f.) that Karl Hauck has made it seem more and more probable that bracteate pictures present Óðinn in various mythic and ritual constellations, and consequently that an attempt may be made to interpret the accompanying inscriptions as designations of that divine ruler or to understand him as speaker or recipient of such messages. Only from this point of view can a connection between text and image be established according to Düwel and Nowak. (Concerning reservations as to Hauck's iconographic interpretations, see Wicker above.)

On pp. 394–96 there is an enlightening demonstration of just how difficult it is to reach consensus on what a certain word means, even when the reading is clear. The sequence **farauisa** on IK 98 Køge/Sjælland 2 is taken as an example, interpreted as either *Fārawīsa* 'who knows the dangerous' or *Farawīsa* 'travel-wise'. These names can be made to fit either the runic magician or Óðinn (cf. the Odinic name *Gangráðr* '[literally] pace-clever'). It is good to keep in mind the complications of interpreting even the

seemingly most straight-forward runic bracteate inscription (as is also most always the case with other types of older-futhark inscriptions).

According to Düwel and Nowak (p. 401), the use of a verb in the preterite is typical of statements by secular runographers in other older runic inscriptions whereas the use of present tense verbs demonstrates the elevated, priestly function of the writer. The bracteates the authors study (pp. 398 f.) seem to conform to such a division. IK 184 Tjurkö 1 and IK 241 Äskatorp/Väsby use "practical" verbs in the preterite: *wurtē* 'wrought' and *fāhidō* 'I colored (wrote)'. The present tense of verbs on other bracteates suggests that their texts — on the basis of the iconographic interpretational perspective and in combination with the particular placement of the inscription on the piece — may be understood as statements made by the god being depicted (p. 401). There are, however complications with this theory (see below).

Düwel and Nowak present (pp. 402–57) ten bracteates with runic inscriptions that are readable, interpretable, and syntactically comprehensible, although some fulfill these criteria better than others. It should be remembered that the list contains only texts of relevance to the history of religion (p. 396). Additionally included is IK 374 Undley (pp. 452–57, as an appendix to the "actually" semantically comprehensible inscriptions), as well as some ten bracteates, such as IK 260 Grumpan, with the rune row or parts thereof (pp. 457–66). The presentations are throughout excellent and solid, with heavy emphasis on Odinic aspects. Most interpretations will not be commented on here. Although the number of linguistically valid texts is greater than those presented, all of the longer texts are indeed found on the list.

IK 184 Tjurkö 1 with its thirty-seven runes belongs to the longest, as well as to the readable and semantically least problematic bracteate inscriptions (p. 403 f.). Its text is an exception in many ways and is by consensus taken to be *Wurtē rūnōʀ an walhakurnē Heldaʀ Kunimundiu* 'Heldaʀ wrought runes on "the Welsh corn (= the golden bracteate?)" for Kunimunduʀ'. It is probably cast in verse (p. 404; cf. Marold 2012, 80), and also otherwise has a unique position in the corpus (*Auswertung*, 405). Even though it appears we have a workman's formula on the piece, Düwel and Nowak question whether Heldaʀ made the actual runes, and consider it more likely (pp. 406–08) that he is the runemaster and Odinic priest, and that his name (etymologically related to both Old Norse *hjaldr* 'warrior' and *hildr* 'combat') may be compared with names of Óðinn containing elements dealing with battle. Kunimunduʀ may then be Óðinn himself, 'the protector of the family'.

The IK 11 Åsum and IK 340 Sønderby/Femø bracteates are iconographically very close and their inscriptions also partly similar. The latter has been read

ekfakaʀf and the former **e͡heiakaʀfahi**. Düwel and Nowak (pp. 430 f.) accept the proposal that these texts stem from a common original and that the name should be interpreted as *Fākaʀ*, since *akaʀ/ākaʀ* is meaningless. *Fākaʀ* is taken to be the etymon of Old Norse *fákr*, a poetic word meaning 'horse', and is compared to Odinic designations referring to the equine world (p. 433). An Odinic connotation is also accepted for **glïaugiʀu ïurᛦl** *Glīaugiʀ wīu r[ū]n[ō]ʀ l[aukaʀ]*(?) on IK 128 Nebenstedt 1, but other possibilities are also discussed (p. 438): the word may refer to the supernatural powers of the runemaster; to his performance in a priestly function during a magic cult act; to his cultic imitative representation of a god; to his bearing of an Odinic designation; and, finally, it may represent a divine self-revelation. Düwel and Nowak claim that the iconographic understanding of the figure with oversized eyes as an image of Óðinn allows for a new interpretation: *Glīaugiʀ* is the name under which the god depicted on the bracteate carries out the consecration of the runes, which are meant to work as protective and curative defense against demons.

On IK 189 the full text is *Tawō laþōdu* 'I prepare an invitation'. This short message may be explained in an almost unlimited number of ways. Düwel and Nowak (p. 442) agree with Gunter Müller's interpretation of the image on the bracteate as representing "bracteate magic", something instituted by the god himself, and that the text means that the depicted god makes an invitation; linguistically nothing contradicts this and iconographically much speaks in favor of it, according to the authors.

Inscriptions containing the rune row have traditionally been interpreted as having a magical context (cf. pp. 462–66). Düwel and Nowak take a different approach and see the complete rune row (as well as parts thereof, as *pars pro toto*) as containing every sound and character of all imaginable lexical items, including the healing words of the "Second Merseburg Charm" (see Wicker above).

In the concluding section the authors are concerned with the philological reconstruction of the original texts (*Vorlagen*) underlying two small groups of perhaps semantically interpretable inscriptions, but that will be considered in my general discussion below.

Düwel and Nowak (p. 375) justly point out the puzzle-like quality of bracteate texts; the parts of an inscription should not be interpreted in isolation but rather incorporated in the overall picture. This is an excellent principle, if applicable. Readability is defined by them as the successful identification of bracteate characters with individual runes, from whose "ideal" form the characters may deviate to a greater or lesser extent. In certain cases Düwel and Nowak (pp. 377–79) claim that runes may be positively identified even

when defective, viz. when not conforming well enough to any form-typical shape. In some cases, such as IK 156 Sievern **ṛwrilu**, the interpretation (in this case as *r[ūnōʀ] wrītu*) is said to be undisputed (p. 377). That may be so, but it is still only guesswork. It is even more problematic when readings are changed to fit with the presupposed interpretation, as when, for example, the first rune in IK 392 Gudme 2 **kuþar** (with older ᚲ **k** placed on a vertical, thus with the form ᚴ) is read as ᚠ **f**, with a missing branch, because that is what it was "meant" to be (p. 377) and the inscription presented without reservation as **fuþar** (e.g., p. 460). This confuses transliteration with normalized transcription. If the interpretation were certain, **ḟuþar** would perhaps have been acceptable, but since the suggestion that this sequence represents the beginning of the rune row is no more than a possibility, a strict transliteration is called for.

There are other "words" on bracteates for which no satisfactory meaning has been suggested, such as IK 386 Wapno **sabar**. Perhaps here we find the *incantationes*, the magic formulas, Hrabanus Maurus claims that contemporary pagans in the North used their letters to record (cf. Grønvik 1996, 6). Or maybe we are dealing with the war chant Tacitus called *barditus* and that Frands Herschend (2005, 96–103) suggests that we find in non-lexical sequences in older runic inscriptions. I am certainly not saying that either of these hypotheses is correct, only that all possibilities must be taken into account before deciding on what we choose to proclaim as the most plausible interpretation.

As noted above, Düwel and Nowak rely heavily on the iconographic analysis of Karl Hauck. There are arguments in favor of such an approach. Even if bracteate texts could very well perform other functions than that of healing or protecting amulets, there is limited positive evidence of what those might be. In other older runic inscriptions we frequently find functionaries such as the *þewaʀ*, *gudija*, and *erilaʀ*. Only the last, however, appears in bracteate inscriptions, and then only once in the published material, on IK 241 Äskatorp[8]/Väsby, *Fāhidō wīlald Wīgaʀ ek erilaʀ*. But here we have reason to pause. In 2009 two bracteates were found at Trollhättan, one with Roman letters (IK 638) and one with runes (IK 639), making the latter the second runic bracteate known so far from this locality (cf. IK 189). The inscription on IK 639 has not been fully interpreted yet, but is read **·e͡ęḳrilaʀ·mariþeubaʀh aitewraitalaþo** and tentatively interpreted by Magnus Källström (2011) as

[8] Throughout *Auswertung* the antiquated form *Eskatorp* appears (Pesch 2007, 435, has the correct form). This is understandable — who can keep track of every changing place-name form? — but in this case unfortunate since there is an Eskatorp in the province of Skåne which may be confused with the proper find-place in the province of Halland.

Ek erilaʀ Mari-/Māriþeuþaʀ haitē, wrait alaþō. Obviously, we have here a second example of *erilaʀ*. It is clear we cannot assume that the types and contents of inscriptions we know today in any way preclude the existence of other types of text with completely different contents.

The new find IK 639 also complicates the hypothesis that verbs in the preterite are typical of runemasters performing a secular function whereas present tense verbs demonstrate their elevated, priestly function. On IK 639, verbs are used in both the present and preterite tense. Looking again at some of the present-tense verbs on bracteates, particularly IK 340 Sønderby/Femø *f[āhi]* 'I color (write)' (cf. IK 11 Åsum **fahi**), IK 189 Trollhättan (1) *tawō* 'I prepare', and possibly (see above) IK 156 Sievern *wrītu* 'I write', it is hard not to conclude — at least initially — that they too are rather "practical".

One might think that IK 184 Tjurkö 1 with its text *Wurtē rūnōʀ an walhakurnē Heldaʀ Kunimundiu* would be the pattern by which other, more "corrupt" texts would be judged, since here for once we are dealing with a complete sentence consisting of six words in a variety of syntactic relationships. This metalsmith, at least, was not incompetent (cf. above). Superficially the text seems to have nothing to do with Óðinn or the healing of Baldr's horse. And as the only almost unproblematic text it might suggest it would be unwise to press such an interpretation on other, more problematic texts. This is not the approach taken by Düwel and Nowak. Instead of accepting that we are dealing with a person of high status in society, which even Karl Hauck thought, they propose (*Auswertung*, 406) that we should consider interpreting the names on IK 184 as referring to priests or to Óðinn (or possibly Baldr), given that other bracteates have been construed this way. Düwel and Nowak (p. 405) remind us that Gunter Müller once pointed out that the serial production of bracteates would make unlikely the appearance of a commissioner's name in an inscription.[9]

Letter and alphabet magic

Klaus Düwel also has a chapter of his own, "Buchstabenmagie und Alphabetzauber: Zu den Inschriften der Goldbrakteaten und ihrer Funktion als Amulette" (pp. 475–523). However, it too (cf. Müller above) is a reprint of a twenty-three-year-old article (1988, with a brief postscript), and the same

[9] This is also a strong counter-argument against the interpretations by Ottar Grønvik which involve the assumption that the bracteate message deals with very individual cultic events. For example, he takes IK 1 Ågedal to mean 'Bondwoman, ruddy, in yuletide strength, may lead the horse to pasture', supposedly part of a longer poem recited as a preparation for a sacrifice and burial at Ågedal (1996, 96).

reasons offered for not reviewing Müller apply here. Nevertheless, since this work on letter magic and alphabet sorcery is more relevant to runologists some important points must be mentioned.

Düwel challenges Erik Moltke's assertion that bracteate runographers were mostly illiterate (cf. above). Düwel (pp. 477 f.) asks if bracteate inscriptions really are corrupt and consist of meaningless character sequences, and wonders if the question of their intelligibility is at all appropriate. To answer these questions he investigates how Roman letters on medallions were adapted to bracteate inscriptions and replaced by runes, the function of medallions and bracteates, and the background of amulets in Late Antiquity. He also makes a structural comparison between the iconographic principles of Late Antique magic objects with inscriptions and Migration Period runic bracteates. The gradual shift from/of letters to runes is of particular importance (pp. 484–87) and is traced in detail, as well as ordered chronologically. The results, however, are affected by Morten Axboe's new datings, as Düwel points out in his postscript (p. 523).

Düwel also discusses (p. 513) the characteristics of magic words and names: (1) the obscure word as an adequate, "comprehensible" form of the desired result, thus the search for the suitable word in a glossolalic process, and (2) the obscure word as a protective disguise of the effective force in magic. The formal principle of making something arcane involves many regular methods of formation, which are also partly applicable to the process of glossolalia (i.e. the production of ecstatic, unintelligible utterances; cf. p. 519, note 181). Düwel (pp. 513 f.) lists fourteen such ways: acrostics, alphabets, anagrams, variation of initial sounds, insertion of alien letters, contractions, *notarikon* (making a new word by using another word's letters), palindromes, squares, *Schwindeschema* (arrangements of gradually disappearing sequences), suspension, substitution of syllable and letters, vowel variation, prefixed or otherwise added syllables. These phenomena are well established in classical cultures. Düwel (pp. 514–19) tries to demonstrate that most of the methods are also exemplified in bracteate runic inscriptions, although some procedural categories are only represented by one example, some by none. A seemingly certain example of the *Schwindeschema* is to be found in the varying writing of *laukaʀ* (p. 518): **laukaʀ**, **lakʀ**, **lkaʀ**, **lauʀ**, **luʀ**, **lʀ**, **l**.

But Düwel (p. 519) also wisely warns us against abusing the rules. Not every runic sequence may be subdivided into examples of arcane practices; such an interpretational procedure should be attempted only when the arcane character is evidenced by its systematic use within a limited set of objects and when the elements stand in a convincing relationship to iconographic elements.

Finally, Düwel (pp. 519–21) discusses glossolalia and tentatively designates as such meaningless sequences of vowels and consonants, for example **iiaeiau** on IK 70 Halsskov Overdrev and **ʁmḷhþ** on IK 148 Sædding/Slotsgården. He rejects (p. 521) suggestions of the use of number magic on bracteates but finds that a structural comparison between magic inscriptions in Late Antiquity and texts on runic bracteates demonstrates that the latter too had the function of magical communication with superhuman powers in order to procure protection or to defend against harm. This would unambiguously confirm the amulet function of bracteates.

Düwel's survey is exemplary, and although I cannot agree with all of his results, this contribution to the subject will surely stand for a long time.

I would pose the question, nevertheless, of whether runes might be an "interpretation" of the Roman letter forms, rather than a representation of their linguistic contents. Recent work by Morten Axboe on chronology (see above) shows that there is no continuous development from Roman gold coins and medallions over Germanic imitation medallions to bracteates. This makes it doubtful whether the Roman letters were really understood or only copied, which would explain the very few meaningful sequences and the many garbled forms. It also makes it questionable whether runic words such as *laþu*, *laukaʁ*, and *alu* are really parallels of Latin *dominus*, *pius*, and *felix*, respectively, as claimed by Anders Andrén (1991, 256). We have after all no evidence of Latin literacy among the smiths making imitation medallions and bracteates. Wilhelm Heizmann (*Auswertung*, 529 f., cf. 589) suggests that certain runic words, such as **salusalu**/**alu**, **ehwu**/**ehu**, **ota**, and the sequence **aug**, may be phonetic equivalents of *SALUS*, *EQVUS*/*EQVIS*, *VOTA*, and *AUG(ustus)*, respectively, but equivalents lacking a semantic connection. Even this is doubtful in my view, as is the assumption of any Latin literacy among those in the medallion and bracteate audience (cf. Nowak 2003, 671 note 11).

As for the *Schwindeschema*, I note that it is never recorded in one and the same inscription, as would be expected from its classical predecessor, nor is the disappearance really gradual: one would then have expected **laukaʁ**, **lauka**, **lauk**, **lau**, **la**, **l**, of which only the first and last forms are (presumably) attested.

Finally, a word on amulets: Düwel's unequivocal determination of bracteates as amulets is hard to falsify since so much depends on what is meant by an "amulet". Would a rabbit's foot, a crucifix, a relic, or a club badge all be amulets? They are each carried with the objective of obtaining some sort of boon, but with very different motives and mental justifications. These artifacts represent everything from sheer superstition and magic

manipulation of natural or supernatural forces to religious symbols and aids or emblems of loyalty and group membership. Let us also not forget that things may be multifunctional.

Bracteate formulas

The last chapter devoted to bracteate inscriptions is written by Wilhelm Heizmann, and deals with "Die Formelwörter der Goldbrakteaten" (*Auswertung*, 525–601). He, too, stresses (pp. 525 f. and note 5) the relationship between pictures and words when interpreting the latter, and asserts that bracteate inscriptions are unlikely to be purely secular, given that the objects are made of gold, produced in series, and seldom mention names of (human) individuals; in any case their possible function as jewelry is secondary. The bracteate concept is taken from Late Antique medallions and coins, which in the North were often worn as amulets. The names and epithets of individual emperors on medallions and coins are replaced on bracteates by various appellations for gods, primarily Óðinn. Heizmann also discusses the gradual replacement of coin and medallion letters by runes (cf. above).

The fact that only some bracteate inscriptions are semantically interpretable is also pointed out (p. 530), and it is stressed that the explanation of the lack of interpretability cannot solely be faulty copying by illiterate goldsmiths. The originator of the complex and mystical iconography on bracteates possessed great artistic creativity combined with an enormous speculative, religious talent. Heizmann (p. 531 and note 32) claims that formulaic healing words constitute the largest group within semantically interpretable inscriptions. He prefers the term *Formelwort* ('formulaic word') to *Einzelwort* since the latter is empty of meaning. In making this change he claims to be in opposition to Einar Lundeby and me, as well as Sean Nowak. The scholars in question, however, use the concept 'single word' merely to denote their object of study. Heizmann is, though, correct in championing *Formelwort* since words of this kind frequently do recur and *Einzelwort* gives the impression of a word that occurs in isolation, which is often not the case.

Heizmann (p. 532) notes that formulaic words have the following features: they consist of a small number of appellatives; their meaning is ascertainable through etymology and reflexes in later forms of the languages; they may appear alone or in groups, but commonly in the nominative singular and without syntactic context; they appear predominantly in connection with pictures of gods, which justifies assuming their content to be close to that of magic formulas and interpreting them as one-word abbreviations of such

formulas. He then goes on to discuss a number of formulaic words, **alu** (pp. 533–44), **laþu** (pp. 544–50), **laukaʀ** (pp. 550–73), **ota** (pp. 574–77), as well as runic sequences that have been connected to formulaic words: **anoana** (p. 578), **auja** (pp. 578–81), **eh**(**w**)**u** (pp. 582–87), **salusalu** (pp. 588 f.), and **tuwatuwa** (pp. 589–93).

Heizmann (p. 544) interprets *alu* as primarily meaning 'protection', *laþu* (p. 550) as a coded word (*Wortchiffre*) for the summoning of helpers in animal form, and *laukaʀ* (p. 573) as representing Óðinn's powers of healing and regeneration. Most interesting, perhaps, is **ota**, which Heizmann (p. 576) following Düwel convincingly renders as *ōtta* 'fear, horror'. Ottar Grønvik (1987, 155 f.) also concurred with Düwel, but further identified the word as a name for the deity depicted, which he took to be Baldr (although he also mentioned Óðinn, who in Old Norse literature is given a name of similar meaning, *Yggr*). Grønvik concluded that we have here an example of a runic inscription giving the name of the god depicted on the bracteate. I agree this is the most plausible interpretation, and Heizmann (*Auswertung*, 577) reminds us that Othinus is described as the horrendous husband of Frigga by Saxo, while Óðinn is said to cause his enemies to become *óttafullir* 'full of fear' in *Ynglinga saga*, ch. 6. For all that, there is no discussion in Beck, Müller, or Düwel and Nowak of the inscription as a possible name or even as semantically meaningful.

Bracteates and Christianity

The final chapter to be considered is the contribution by Lutz E. von Padberg, "Reaktionsformen des Polytheismus im Norden auf die Expansion des Christentums im Spiegel der Goldbrakteaten" (pp. 603–34). Von Padberg readily admits (p. 606) that there are no contemporary sources indicating that Christianity was known in the area under investigation, yet he discusses at length the reaction of polytheism in the North to the advance of Christianity. The contribution has little if any relevance to runic studies. The only really concrete discussion concerns the cruciform elements found on some bracteates (pp. 612–18), which von Padberg uncritically accepts as representing Christian crosses, even though the symbol also occurs in pre-Christian iconology and thus does not necessarily indicate Christian influence.

A cruciform element appears on IK 51.1 Fakse (p. 613), for example. On this Type B bracteate three humanoids are seen, all having something in their hands or in extensions of their arms. The figure farthest to the right has a spear in his(?) left hand and a strange object proceeding from his

right, if indeed it is a hand. The object consists of three arms in a cross formation (i.e. at 90° angles to one another), each ending in a crossbar, and is connected to the "hand" by a wavering line, possibly depicting the shaft of the cross. In my view, this is a very uncertain cross. The identification is further weakened by comparison with IK 51.3 Gudme 2 of similar design (which to me seems like the "better" version); drawings of the two bracteates for easy comparison are found in Hauck's first chapter (*Auswertung*, 46 f.). On IK 51.3, there is a proper hand in the place discussed, instead of an uncertain object. Alexandra Pesch (2007, 100) makes no mention of a cross on any of these bracteates.

According to von Padberg (*Auswertung*, 617) the first two runes in the sequence **foslau** on IK 101 Kongsvad Å — as the first and last items in the rune row — are to be equated with the *A* and *O* of the Greek alphabet as a symbolization of Christ. But, as Heizmann points out in his contribution to *Auswertung* (p. 588 note 286), the complete bracteate rune rows both end with **d**, not **o**. In addition, von Padberg (p. 618–27) wants to connect Christ the healer with the corresponding healing iconography and healing words on bracteates. All in all, this is a most speculative contribution.

Runic conclusion

Commenting on the runic contributions in a wider perspective, I would like to emphasize that the words in the older runic inscriptions, not least those on bracteates, are notoriously difficult to explain. Therefore no serious attempt to do so should be ridiculed. However, most of the runic scholars in *Auswertung* rely explicitly on the iconographic interpretations of Karl Hauck, which are referenced concisely but not evaluated critically. Whether the runologists are right thus depends on whether Hauck is.

It is quite possible, perhaps even likely, that bracteate inscriptions should be seen in a religious or ritual light. But it seems to me that this should be the result rather than the starting point of any investigation. The assumption in *Auswertung* appears to be that Hauck has proved the cultic function of bracteates and that their pictures and words must be connected. Criticism of Hauck's understanding has been offered by various scholars, Scandinavians and Americans, as well as German-speaking writers. Critical comments have not been received constructively. At best, counter-arguments have been presented, as by Düwel and Heizmann (2009, 347–55) in a reply to criticism by Wolfgang Beck and by Robert Nedoma. Sometimes, however, defense consists solely of rejection, as when Wilhelm Heizmann (*Auswertung*, 540 note 49) calls attempts to criticize Karl Hauck's bracteate iconography totally

unqualified, lacking professional competence, and lacking in substance, without offering any counter-arguments whatsoever.

What I think we need is an open-minded discussion of Karl Hauck's bracteate theories, acknowledging his great contributions but recognizing also the need for testing them in a scholarly manner. As for the interpretation of names and other words based on their relationship to pictures, I am not convinced that Hauck has been proved correct. Moreover, if you posit axiomatically that all names had meaning, then it is always possible to come up with some kind of cultic interpretation, no matter what the nature of the name. Even non-semantic names could be seen as onomatopoetic or cult-related in some other way. The problem here is that there is simply no way of falsifying any of the theories propounded.

To me, it is a disturbing fact that not a single name of any Scandinavian god is found on bracteates, as Heinrich Beck readily admits (*Auswertung,* 299). The explanation given is that these names were taboo and that characterizing bynames were substituted. That is, of course, entirely possible, but involves various methodological problems. Let me illustrate this complexity with discussion of just one word, the sequence **ho?ar** on IK 58 Fyn 1, a bracteate mentioned on no fewer than forty-six pages of *Auswertung*.

IK 58 is a Type C bracteate with typical ornamentation, consisting of a four-legged animal and a rider with a huge mop of hair, and also a bird. There are two other runic sequences on the bracteate, but I will disregard those for the present. Clearly separated from the other runes, placed between the head and foreleg of the animal, stands the legend **ho?ar**. The consensus reading in *Auswertung* is apparently **houar**. There seem to be two certain *u*-runes with the shape ᚢ on IK 58 (one of which is reversed); the putative *u*-rune in **houar**, however, has the shape ᛇ, which looks at first glance more like an **r**. It was originally read as such by Adolf Noreen and Sophus Bugge, although the latter, and following him the former, changed his mind in favor of **u** (see *DR, Text*, col. 522). *Danmarks runeindskrifter* (*Text*, col. 523) states that the rune in question can only be regarded as a **u**, but admits (col. 669) that the interpretation 'high' introduces phonological problems and suggests the sequence may be miswritten. Elmer Antonsen (1975, 62) is credited with the reintroduction of the reading **horar** (or rather **horaz**), and there are scholars who have followed his lead, for example Elmar Seebold (1991, 466). Lena Peterson (1994, 137) considers the reading uncertain and that the rune concerned "might very well be an **r**". One would expect the different contributors to *Auswertung* to have followed the runological expertise of Klaus Düwel and agreed on a common stance. This is not the case.

Gunter Müller (*Auswertung,* 336) adheres to the once common opinion

(Krause and Jankuhn 1966, 255) that **houaʀ** could be a reflex of **Hauhaʀ* 'the high (one)' and the etymon of the Odinic names *Hár* and *Hávi* (expressed more positively in the summaries, *Auswertung,* 698, 714).[10] At one of his altogether eight citations of the transliteration, however, "[/**horaʀ**]" is added.

Morten Axboe (p. 291) transliterates "**houaʀ** oder **horaʀ**", and similarly Wilhelm Heizmann (p. 534) "**hoụaʀ** oder **hoṛaʀ**". Heizmann's vacillation is unexpected since he firmly ruled in favor of the latter alternative more than a decade ago (2001, 329), following the lead of Heinrich Beck (2001, 67), who decided that because of its position on the bracteate the inscription had to refer to the horse, not the god (according to this interpretation we are dealing with a byname for Baldr's horse: 'the esteemed, the beloved'[11]). That the related bracteate IK 300 Maglemose has the legend **ho·ʀ** in the same position is taken by Beck (op. cit., 68) as evidence that it "without doubt" represents the same name, the dot signaling an abbreviation (no parallel to such a method of contraction is given or seems to exist; see also Nowak 2003, 305).

Karl Hauck (2002, 111) concurred with Beck's new reading and interpretation. Klaus Düwel and Sean Nowak do not, however. They agree (*Auswertung,* 448 note 368) that the shape of the third rune alone cannot rule out the reading **horaʀ**. Nevertheless, they (p. 376 note 6 and p. 469) opt for **hoụaʀ**. The motivation is provided in a section dealing with reconstructed models of semantically interpretable inscriptions belonging to the same formula families, and is based on Alexandra Pesch's (2007, 44)[12] groupings of

[10] Grønvik (1987, 141) convincingly rejected such an etymology, although his own proposal (op. cit., 144) of a development from *Hō-warʀ* meaning 'the high (noble) protector' and designating Baldr is equally improbable since *-rʀ* should not be represented by **-ʀ** alone. Later (1996, 232) he believed this to be a word /houhaʀ/ referring to the progenitor of the family, though recognizing the unsatisfactory spelling on the bracteate. Finally (2005, 13) he abandoned the reading **houaʀ** in favor of **horaʀ**, acknowledging that the development of Germanic **hauha-z* via Proto-Norse **houaʀ** to Old Norse *hár-r* or *hór-r* is extremely problematic. I do not understand why we should insist on interpretations that do not match the runic record.

[11] Unfortunately, we do not know the name of Baldr's horse. In *Gylfaginning* (p. 17) eleven out of the twelve horses of the *æsir* are named, but of Baldr's steed we are only told that it was cremated with him. None of the gods' mounts have names that are semantically parallel to *Hóraʀ*, however, nor do the many horses mentioned in *Þorgrímsþula* or *Alsvínnsmál*/*Alvíssmál* (*Skáldskaparmál,* 88 f.).

[12] Although in one respect I share the scepticism expressed by Svante Fischer (2009) towards Pesch's study — in so far as it is uncritically dependent on Hauck's "Kontextikonographie" (cf. Pesch 2007, 40) — I cannot condone his censure of the work as a whole. Pesch's investigation into the groupings of bracteates on the basis of shared motifs is most welcome, and I have

bracteates with similar basic picture forms, although the same clustering is mentioned by Elmar Seebold (1996, 466 f.) and the group as such already by Herje Öberg (1942, 105–08). Comparing IK 58 **hoụar**, IK 300 **ho·r** (mentioned above), and IK 142 Randers **ṛahsẉia**, Düwel and Nowak (*Auswertung,* 472) conclude that all three emanate from a common original written **hohar**, supposedly a name for Óðinn, cf. *Hár* (see also Nowak 2003, 280 f. and note 5, 286). Since they consider that only **houar** can be graphically connected with **hohar**, the transliteration with **u** takes precedence.

Düwel and Nowak claim that the inscriptions on these three bracteates belong together because of the placement of the runic sequences in question. This shows that they are not isolated instances, nor texts exhibiting arbitrary similarities, but constitute three variations of the same original. The three bracteates are indeed closely related iconographically (cf. Pesch 2007, 152–56), but this particular family encompasses an additional six bracteates. A further two have runic writing between the head and the foreleg of the animal, but neither sequence of runes is close to the posited original ***hohar**.[13] Furthermore, Düwel and Nowak have not accounted for the other inscriptions located elsewhere on the bracteates within the formula family. Only once are any of these even similar to one other, the exception being IK 58 and IK 300, where one of the three sequences on each piece is exactly the same, **all** (in addition to the similar sequences **ho?ar** and **ho·r**, respectively). In my view little if anything speaks in favor of a textual link between any of the other bracteates.

Instead of letting external factors decide which reading is to be preferred, the runologist can and should take a different approach. The understanding of a runic inscription can be arrived at by a systematic process of analysis, starting from the "bottom" with discrimination (of the individual graphemes), and proceeding to phonematization (of written characters into speech sounds), lexicalization (of phonemes into words), structuring (of the text), and finally the creation of propositions, i.e. how the text relates to reality (Palm 2001).

The discrimination of graphemes is not easy since the main problem in this exercise is what comparative material to use. At the very least, of course, the other graphs on the same object should be analyzed, and secondarily graphs from similar objects, in our case other bracteates. One should also consider runes in the wider corpus of the older-futhark inscriptions. In the case of

found her book immensely useful for my own purposes. She does not, perhaps, give the full credit due to her predecessors, but does nevertheless make a valuable contribution to bracteate studies.

[13] IK 75.3 has **lụrþa** and IK 163 **niuwila**.

IK 58 there is an obvious difference between what appear to be clear *u*-runes and the third rune in **ho?ar**, as well as the fourth rune in the sequence **aaḍ?aaaliuu** on the same bracteate. In a rather neglected contribution Elmer Antonsen discusses the distinctive features of **u** and **r** (1978, 294 f.; cf. 2002, 51–71, at 64). The difference resides in the fact that the former has a full-length branch (i.e. a long nonvertical line) while the latter has a "crook" (a sharply bent line, here from top to base), and he consequently — due to the bend — chooses the transliterations **horaz** and **aadraaaliuu**, respectively. He further points out that an *r*-rune of this shape is also found on the Aquincum clasp (KJ 7). Bengt Odenstedt (1990, 37) has found it in two further inscriptions. In my view this argues strongly in favor of the reading **hoṛar**. And it should be pointed out that Düwel and Nowak themselves (*Auswertung*, 410) read a similar graph on IK 98 Køge/Sjælland as an *r*-rune.

There are, however, also graphs of very similar shape (with perhaps less sharp bends) that have been read as *u*-runes. Odenstedt (1990, 26) mentions an example on the Bülach clasp; it is found in a sequence usually transliterated **du**, but the interpretation is uncertain and cannot be used to support the choice of solution to the uncertain reading (cf. KJ 165). Another example (and there may be more) is found on IK 128 Nebenstedt 1, where the established reading of the beginning of the inscription is **glïaugiR**.[14] However, in the sequence **rnR** on the same bracteate (for *rūnōR* — a doubtful interpretation in my view) the graph for *r* has a distinct bend and is thus kept separate in the context of this bracteate from the *u*-rune. Internal discrimination is of primary importance, and the sequence in question on IK 58 should be read **hoṛar**, if this is in any way amenable to interpretation.

As several scholars have already pointed out (cf. Antonsen 1978, 295), there are exact correspondences to a word *hōraR* in later Germanic languages: Gothic *hors* and Old Norse *hórr* m. (possibly attested in N 353), both meaning 'male adulterer'. This word is related to Latin *carus* 'dear, beloved' and has other Indo-European cognates, all with a positive connotation. Antonsen sees *hōraR* as "undoubtedly a term of endearment, or at least not a pejorative, in spite of the later development of this root to mean 'fornicator, prostitute'". This positive sense has been presupposed by all who accept the reading **hoṛar**. Nevertheless, it is semantically questionable to posit a favorable meaning of the kind, given that there are no traces of flattering connotations in Germanic languages. I think we need to accept the possibility of a pejorative. After all, bracteate inscriptions evidence words with a negative connotation, such as *ōtta* 'fear, terror' (cf. *Auswertung*, 576),

[14] A reading **glïargiR** is theoretically possible, of course, and interpretable too.

and the sexual sphere seems to be referred to in DR 357 Stentoften (KJ 96), DR 360 Björketorp (KJ 97, *argiu*), and perhaps in KJ 61 Kalleby (*þrawijan*).

I do not know if *hōraʀ* ties in with the bracteate mythology posited by Hauck and others, but it is not my task to settle this question. As a runic philologist I can only determine what is the most likely reading and whether any words exist that could be represented by such a sequence of runes. In this case I find that there is one. An indication that the interpretation *hōraʀ* may be correct is the sequence **ho·ʀ**[15] on IK 300 (with the dot being part of the ornamentation, as in IK 129.1 Nebenstedt 2 **llet卐oʀ·rï**, which is in the same formula family as IK 58 and IK 300). The sequence **hoʀ** corresponds to Old Norse *hór* m. (gen. *hós*, acc. *hó*), a twin to *hórr* and with the same meaning (von See et al. 1997, 241 f., 446), although it must have a different etymology.[16] Regardless of whether the parallel to **ho·ʀ** is valid, it is clear that the reading **hoṛaʀ** and the lexicalization *hōraʀ* present neither runological nor etymological problems; future research will determine how this understanding may relate to reality.

Müller (*Auswertung*, 342 f.) thinks that *Alawiniʀ* on IK 161 Skodborg is a further designation for Óðinn, arguing that the *Ala-* occurs in his Old Norse name *Alfǫðr* and likewise in North-West European names of female deities (*matrones*), that Óðinn and other gods described themselves as "friends" of their protectees, and finally that theophoric names such as *Answin* and *Gudwin* contain an element meaning 'friend'. Many objections might be raised against this reasoning: suffice it to say that this is another example of arriving at the designation of a god through simply trying to match some few pieces of the jigsaw puzzle. From Eddic and other sources we know of hundreds of epithets used for the pantheon of the North, perhaps even thousands if we add the lower echelons and the names of all mythic individuals. But as far as I know, not a single one of these words occurs in bracteate inscriptions. The would-be Odinic names, such as *Fākaʀ*, *Glīaugiʀ*, and *Hariūha* (further examples p. 353 with footnotes), are all thought to be derived from qualities associated with Óðinn, just as *Alawiniʀ*.

Even if we were to accept *Alawiniʀ* as an Odinic name, we would be left with **alawid** on the same bracteate, which does not seem to

[15] It is, however, also quite possible that this sequence has no more meaning than the **tlþ×lfhis** and **all** on the same bracteate seem to have (unless **all** is considered a corrupt form of **alu**).

[16] *Hōʀ* would appear to be a masculine monosyllabic consonant stem with an analogical genitive *-s* (cf. Noreen 1923 § 412), although other vowel-ending parallels are all feminine in Old Norse: *kýr*, *sýr*, and *ǽr* (op. cit., § 418). If the earlier form of the word was indeed *hōʀ*, it would be expected to appear in Old Norse as **hór* (§ 71.4), but analogical processes within the paradigm (cf. § 72) and influence from *hórr* could most probably explain the attested shape.

be another such alias, although Müller (*Auswertung,* 345) tentatively connects it with *Víðarr*, the name of Óðinn's son. If we are to accept the endingless forms of the personal designations in the IK 161 inscription **aujalawinaujalawinaujalawinjalawid** as vocatives, which Müller (p. 342) did, a straightforward translation might be: 'Luck, Alawiniʀ — luck, Alawiniʀ — luck, Alawiniʀ — good year (harvest), Alawidiʀ', i.e. in line with the interpretation of Elmer Antonsen (1975, 77). There is nothing necessarily theophoric in these names. The concept of 'luck' was after all tremendously important in ancient times, and so were the crops. But Müller (*Auswertung,* 342) is unwilling to accept the idea that bracteate inscriptions could be directed towards humans; they have to be an invocation of the gods. This is in line with his choice of the last two among the three possible interpretations of names on bracteates (p. 337): They may represent the owner or recipient, the runemaster, or the gods connected to the pictorial contents. He did not, in my view, provide sufficient proof that the third alternative is the most likely, or even probable, in longer inscriptions. For single-word inscriptions he favored runemasters (p. 351).

Whereas Wolfgang Krause clearly preferred magic connotations and an exclusive cast of runemasters, the dominating school of interpretation today (at least in Germany) sees almost everything in a cultic light. My view, however, is that there may well be alternative explanations for the onomasticon on bracteates. There could be other societal structures that would account for the names (and other words) found on these objects. One hypothetical explanation would be that these are texts emanating from sodalities of different kinds, for example groups of warriors, or perhaps allegiances of other types, which mention a leader of some sort and the followers or allies of such a person. Bracteate inscriptions could then contain names of a chieftain, the individual to whom the bracteate was presented, or of another being that it was for some reason important to mention (divinities would of course fall within this sphere). Particularly suggestive here is the word *gaganga* 'follower' which may occur on the Undley bracteate (see Bammesberger 1991, 398–400 with references), as well as on the Kragehul lance shaft. This suggestion is only meant to demonstrate that there are other possible approaches to the runic inscriptions on bracteates.

Any study of the older runic inscriptions will of necessity be extremely difficult and its outcomes uncertain due to the limited nature of the linguistic material, its ambiguity, and our limited understanding of the activities and mentalities of the period concerned. Since many runic sequences, usually written in *scriptio continua*, may be divided up in two or more ways and almost every one of them given multiple interpretations, and most

interpretations several implications, it is obvious that we are dealing with a jigsaw puzzle of such complexity that if you move a single piece the entire picture will change. It does not help that we are not entirely sure which pieces really belong to the puzzle and that a steady stream of new pieces keep appearing.

Herje Öberg ended his important book on the gold bracteates from Scandinavia's Migration Period with a pessimistic but at that time quite accurate footnote (1942, 271 note 1): "Ännu så länge synes dock runologien, i vad mån det gäller läsandet av brakteaternas runinskrifter, i mycket stå på trevandets stadium." ('So far, however, runology seems largely to be at the fumbling stage, where the reading of bracteate inscriptions is concerned.') Clearly bracteate runology has progressed far since then, but it is still not a fully mature discipline. To achieve such stature, it must first attain scholarly "independence", i.e. it cannot be too reliant on other disciplines. The task of runology is to present an independent analysis of what a certain runic text means, not merely to serve up interpretations that fit within a given framework. Once runologists have established the possible interpretations of inscriptions on bracteates there is nothing wrong, of course, with choosing those interpretations that harmonize with the theory external to runology that has the highest explanatory value and the fewest contradictions. I cannot see, however, that runologists have tried to subject Hauck's theories to such a systematic evaluation.

The Scylla and Charybdis of runic philology are "horse sense" on the one hand and lack of prejudgment on the other. To be guided by common sense is excellent, of course. If something looks too good to be true it usually is, as the saying goes, and the runologist must pay heed to the plausibility of every interpretation. On the other hand, not everything is as it seems at first glance, and common sense usually contains a fair proportion of prejudice.

Both the championing and rejection of Hauck's hypothesis of horse healing are therefore problematic. It does seem unlikely to me that a short poem preserved in only one Old High German manuscript would offer evidence of a central cultic practice so prevalent in Scandinavia many centuries earlier that it completely dominates bracteate iconography, but leaves no trace in later Scandinavian written sources. On the other hand this is not entirely impossible, and Hauck and others have presented some intriguing analyses of the pictorial contents of bracteates. However, his hypothesis has in my opinion been accepted (and sometimes rejected) uncritically, and though I regret to say it, it is clear that all of his work needs to be checked carefully by appropriate specialists.

I am not a specialist in iconography, and do not presume to decide whether

images on bracteates represent Óðinn and/or any other Northern god, other mythic beings, human dignitaries or cultic functionaries, or something else altogether. I do, however, question the necessity of believing there existed a close link between these images and the texts appearing on certain of the bracteates in question. Such a link certainly did exist in the case of the Roman medallions that bracteates originally emulated. But just as the images changed in form and presumably also in content, so the Latin language inscriptions were transformed — at first into something almost certainly without lexical meaning to judge from the twenty-six or so models with Roman letters or imitations thereof (*Auswertung*, 290–95), none of which seem to carry any clear linguistic message. It is perfectly conceivable that the lexically meaningful inscriptions in runes that start appearing on bracteates have no connection to the pictorial contents. The way to find out whether they do is to study their linguistic contents with an unprejudiced attitude in order to see if the texts add to the pictures or not. The runic scholars in *Auswertung* seem to be confident that such augmentation is present. I cannot agree. Every single assertion of a textual-pictorial connection requires the imagination to be stretched to a degree that seems unacceptable. Sometimes even the data itself has to be adjusted to reach a certain result, as when readings are "corrected" to come up with the desired solution.

The axiom that bracteate texts and pictures are of necessity connected has, in my opinion, not been demonstrated. Such a connection does not seem to manifest itself on Viking Age runestones, where figurative art often accompanies the inscriptions. The comparison is not entirely valid, however, since time and genre differ to such a degree. But if there were indeed a firm connection between image and text on bracteates, one would have expected to find at least some clear instances. Instead, the opposite seems to be true. When, for once, we have what seems to be a very clear message on a bracteate (IK 184 Tjurkö 1), we find absolutely no link between text and image. There we can read that Heldaʀ wrought the runes on the "Welsh corn" (the gold bracteate?) for Kunimundur. The piece shows a horned, four-legged horse(?) and the expected head with a fancy mop of hair above, and in addition a bird. It is not assigned to any family by Pesch (cf. 2007, 431), and by Öberg (1942, 76) only with doubt to his group C IV, the birdlike termination of the coiffure precluding a definite classification. But all the key elements of the iconography are there, elsewhere interpreted as Óðinn healing Baldr's horse (see IK 58 etc. above). Yet, in the inscription we find no mention of any of the gods thought to be found on so many similar bracteates (unless we accept Düwel and Nowak's daring interpretation of the names as referring to priests or to Óðinn, see above).

Another textual argument against the interpretation of bracteate inscriptions as supplementing the divine iconography is Karl Popper's falsifiability criterion. How would we show that bracteate pictures definitely do not represent Óðinn and his fellow gods? One method might be to bring in older runic inscriptions not on bracteates. On the possibly contemporary Möjbro stone (KJ 99), for example, there is a picture of a horse and rider, the latter equipped with a shieldlike object and brandishing an implement of some sort (spear or sword?) and accompanied by two canines. The inscription may be translated "Frawaradaʀ from Hå is killed" or (in my view less likely) "Frawaradaʀ is killed at Hå" (cf. Fridell 2009, 102). Now, the pictorial representation could very easily be taken to show Óðinn with his horse Sleipnir, his spear Gungnir and his wolves Geri and Freki. And the name *Frawaradaʀ* could equally easily be seen as a designation of Óðinn, cf. the first element in his *heiti* (poetic synonym) *Fráríðr* 'the fast rider' (Peterson 1994, 152 f.) and the last in his names *Gagnráðr*, *Gangráðr*, and *Hvatráðr* '[literally] quick-witted'. In my view no runic object has more Odinic overtones. Yet no one to my knowledge has suggested that the rider on the Möjbro stone represents Óðinn, nor has anyone proposed that *Frawaradaʀ* is a designation for him.

Paradoxically, the greater a scholarly achievement, the bigger a danger it is to its own discipline. The reason for this is that such a *magnum opus* will dominate for many years and, to some extent, preclude similar efforts. Any and all mistakes or bad calls of judgment in such a work will also be made more or less permanent. Scholars outside the field will tend to quote authoritative editions even when they are out of date. One example is Wolfgang Krause and Herbert Jankuhn's *Die Runeninschriften im älteren Futhark* (1966), the hitherto best edition of the older runic inscriptions. In the Scandinavian Runic Text Database there are 270 older inscriptions, of which only 95 are found in Krause and Jankuhn's book. As a corpus edition it is now very incomplete. The pictures were in some cases outdated even when it was published (Williams 1992, 194 f.) and many of the interpretations have been revised. Yet, the effort necessary to produce a new corpus edition has so far precluded its realization, although a project to do so is now under way (Zimmermann 2012, 220 f.).

When publishing such monumental works as *IK*, it is necessary to keep the above-mentioned paradox in mind and thus to ensure that whatever is published is of the highest quality attainable and as certain as possible, and thus likely to have staying power. When producing corpus editions, it is preferable to separate description and analysis from each other. Such a procedure makes the publication easier to use and ensures that the description

will have value even if or when the analysis is no longer considered valid. In this respect the volume under review could have been better organized. The catalogue and the plates alone total 238 pages. If published separately they would have been much more easy to use.

The individual contributions are too independent of each other for a volume claiming to be an "evaluation" (rather than, for example, a conference report). The main criticism to be leveled against *Auswertung*, however, is its lack of an unprejudiced systematic approach. In other words, there is still room for a structured, general overview of the gold bracteates and their inscriptions. That having been said, the sheer amount of effort that has gone into the present endeavor deserves respect. It would be a huge mistake to ignore the contributions made by the participating scholars.

A final word of caution: the bracteate corpus continues to grow and new finds may alter our concepts radically. Wilhelm Holmqvist estimated the total number of these objects once in existence to have been around 100,000 (Pesch 2007, 9 note 1). This is not an unlikely number and simply boggles the mind. The sheer quantity of the potential material should serve as a warning to tread carefully before making definitive claims about the bracteate phenomenon.

Bibliography

Andrén, Anders. 1991. "Guld och makt — en tolkning av de skandinaviska guldbrakteaternas funktion." In *Samfundsorganisation og regional variation: Norden i romersk jernalder og folkevandringstid; Beretning fra 1. nordiske jernaldersymposium på Sandbjerg Slot 11–15 april 1989*, ed. Charlotte Fabech and Jytte Ringtved, 245–56. Jysk Arkæologisk Selskab, Skrifter 27. Århus.

Antonsen, Elmer H. 1975. *A Concise Grammar of the Older Runic Inscriptions*. Sprachstrukturen, ser. A: Historische Sprachstrukturen 3. Tübingen.

—. 1978. "The Graphemic System of the Germanic Fuþark." In *Linguistic Method: Essays in Honor of Herbert Penzl*, ed. Irmengard Rauch and Gerald F. Carr, 287–97. Janua Linguarum, ser. maior 79. The Hague.

—. 2002. *Runes and Germanic Linguistics*. Trends in Linguistics: Studies and Monographs 140. Berlin and New York.

Axboe, Morten. 1994. "Gudme and the Gold Bracteates." In *The Archaeology of Gudme and Lundeborg*, ed. Poul Otto Nielsen et al., 68–77. Arkæologiske studier 10. Copenhagen.

—. 1998. "The Chronology of the Scandinavian Gold Bracteates." In *The Pace of Change: Studies in Early-Medieval Chronology*, ed. John Hines et al., 126–47. Oxford.

—. 2004. *Die Goldbrakteaten der Völkerwanderungszeit — Herstellungsprobleme und Chronologie*. ERGA 38. (*IK*, 4.1.) Berlin and New York.
—. 2007. *Brakteatstudier*. Det Kongelige Nordiske Oldskriftselskab, Nordiske fortidsminder, ser. B, 25. Copenhagen.
Bammesberger, Alfred. 1991. "Ingvaeonic Sound Changes and the Anglo-Frisian Runes." In *Old English Runes and Their Continental Background*, ed. Alfred Bammesberger, 389–408. Anglistische Forschungen 217. Heidelberg.
Barford Carlsen, Elisabeth. 2002. "Fabeldyr i udvikling: En analyse af D-brakteaterne." *Hikuin* 29, 119–42.
Beck, Heinrich. 2001. "Zur Götter-Anrufung nach altnordischen Quellen (in Sonderheit der Brakteaten)." In *Kontinuitäten und Brüche in der Religionsgeschichte: Festschrift für Anders Hultgård zu seinem 65. Geburtstag am 23.12.2001*, ed. Michael Stausberg et al., 57–75. ERGA 31. Berlin and New York.
Beck, Wolfgang. 2011. *Die Merseburger Zaubersprüche*. 2nd ed. Imagines Medii Aevi: Interdisziplinäre Beiträge zur Mittelalterforschung 16. Wiesbaden; 1st ed. 2003.
Behr, Charlotte. 1991. *Die Beizeichen auf den völkerwanderungszeitlichen Goldbrakteaten*. Europäische Hochschulschriften, ser. 28: Archäologie 38. Berlin.
—. 2010. "New Bracteate Finds from Early Anglo-Saxon England." *Medieval Archaeology* 54, 34–88.
—. 2011. "An Unusual New Gold A-Bracteate Find from Scalford, Leicestershire." In *Studies in Early Anglo-Saxon Art and Archaeology: Papers in Honour of Martin G. Welch*, ed. Stuart Brookes et al., 1–6. BAR British Series 527. Oxford.
Dickinson, Tania. 2005. "Symbols of Protection: The Significance of Animal-Ornamented Shields in Early Anglo-Saxon England." *Medieval Archaeology* 49, 109–63.
DR + number = inscription published in *DR*.
DR = *Danmarks runeindskrifter*. By Lis Jacobsen and Erik Moltke. 3 vols.: *Text*; *Atlas*; *Registre*. Copenhagen 1941–42.
DuBois, Thomas A. 1999. *Nordic Religions in the Viking Age*. Philadelphia.
Düwel, Klaus. 1970. "Die Runen des Brakteaten von Hitsum." In Hauck 1970, 284–87.
—. 1988. "Buchstabenmagie und Alphabetzauber: Zu den Inschriften der Goldbrakteaten und ihrer Funktion als Amulette." *Frühmittelalterliche Studien* 22, 70–110.
Düwel, Klaus, and Wilhelm Heizmann. 2009. "Einige neuere Publikationen zu den Merseburger Zauberspüchen: Wolfgang Beck und andere." *Indogermanische Forschungen* 114, 337–56.
Enright, Michael J. 1988. Review of *Die Goldbrakteaten der Völkerwanderungszeit* [= *IK*, 1–2]. *Speculum* 63, 403–06.
ERGA = Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde.
Fischer, Svante. 2009. Review of Pesch 2007. *Namn och Bygd* 97, 215–17.
Fridell, Staffan. 2009. "*Hå*, *Håtuna* and the Interpretation of Möjbro **anahahai**." *NOWELE: North-Western European Language Evolution* 56/57, 89–106.
Grønvik, Ottar. 1987. *Fra Ågedal til Setre: Sentrale runeinnskrifter fra det 6. århundre*. Oslo.

—. 1996. *Fra Vimose til Ødemotland: Nye studier over runeinnskrifter fra førkristen tid i Norden*. Oslo.
—. 2005. "Runebrakteater fra folkevandringstida med lesbare og tydbare urnordiske ord." *Arkiv för nordisk filologi* 120, 5–22.
Gylfaginning = Snorri Sturluson. *Edda: Prologue and* Gylfaginning. Ed. Anthony Faulkes. London 1988; rpt. 2000.
Hauck, Karl. 1970. *Goldbrakteaten aus Sievern: Spätantike Amulett-Bilder der "Dania Saxonica" und die Sachsen-"Origo" bei Widukind von Corvey*. With contributions by K. Düwel, H. Tiefenbach and H. Vierck. Münstersche Mittelalter-Schriften 1. München.
—. 1971. "Zur Ikonologie der Brakteaten, II: Die missionsgeschichtliche Bedeutung des zweiten Merseburger Spruchs und seine völkerwanderungszeitlichen Bildentsprechungen." *Praehistorische Zeitschrift* 46, 139–42.
—. 1972. "Neue Windgott-Amulette (Zur Ikonologie der Goldbrakteaten, I)." In *Festschrift für Hermann Heimpel zum 70. Geburtstag am 19. September 1971*, vol. 3, 627–60. Veröffentlichungen des Max-Planck-Instituts für Geschichte 36.3. Göttingen.
—. 1977. "Schüsselstücke zur Entzifferung der Ikonographie der D-Brakteaten: Die Nordversion des Jonasmotivs und ihre geschichtliche Bedeutung (Zur Ikonologie der Goldbrakteaten, XIII)." *Studien zur Sachsenforschung* 1, 161–96.
—. 1980. "Gott als Arzt: Eine exemplarische Skizze mit Text- und Bildzeugnissen aus drei verschiedenen Religionen zu Phänomenen und Gebärden der Heilung (Zur Ikonologie der Goldbrakteaten, XVI)". In *Text und Bild: Aspekte des Zusammenwirkens zweier Künste in Mittelalter und früher Neuzeit*, ed. Christel Meier and Uwe Ruberg, 19–62. Wiesbaden.
—. 1988. "Zum Problem der Götter im Horizont der völkerwanderungszeitlichen Brakteaten (Zur Ikonologie der Goldbrakteaten, XLII)." In *Person und Gemeinschaft im Mittelalter: Karl Schmid zum fünfundsechzigsten Geburtstag*, ed. Gerd Althoff et al., 73–98. Sigmaringen.
—. 1992. "Frühmittelalterliche Bildüberlieferung und der organisierte Kult (Zur Ikonologie der Goldbrakteaten, XLIV)." In *Der historische Horizont der Götterbild-Amulette aus der Übergangsepoche von der Spätantike zum Frühmittelalter*, ed. Karl Hauck, 433–574. Göttingen.
—. 1998a. "Der Kollierfund vom fünischen Gudme und das Mythenwissen skandinavischer Führungsschichten in der Mitte des Ersten Jahrtausends: Mit zwei runologischen Beiträgen von Wilhelm Heizmann (Zur Ikonologie der Goldbrakteaten, LV)." In *Die Franken und die Alemannen bis zur "Schlacht bei Zülpich" (496/97)*, ed. Dieter Geuenich, 489–544. ERGA 19. Berlin and New York.
—. 1998b. "Die runenkundigen Erfinder von den Bildchiffren der Goldbrakteaten (Zur Ikonologie der Goldbrakteaten, LVII)." *Frühmittelalterliche Studien* 32, 28–56.

—. 2002. "Neues aus Uppåkra bei Lund, Südschweden: Zur Ikonographie der Goldbrakteaten, LXIV." In *Central Places in the Migration and Merovingian Periods: Papers from the 52nd Sachsensymposium, Lund, August 2001*, ed. Lars Larsson and Birgitta Hårdh, 79–95. Acta Archaeologica Lundensia, ser. in 8°, 39. Stockholm.

Hawkes, Jane. 1997. "Symbolic Lives: The Visual Evidence." In *The Anglo-Saxons from the Migration Period to the Eighth Century: An Ethnographic Perspective*, ed. John Hines, 311–38. Studies in Historical Archaeoethnology 2. Woodbridge.

Heizmann, Wilhelm. 2001. "Bildchiffren und Runen von Kommunikationsformen und Heilverfahren auf goldenen C-Brakteaten." In *Kontinuitäten und Brüche in der Religionsgeschichte: Festschrift für Anders Hultgård zu seinem 65. Geburtstag am 23.12.2001*, ed. Michael Stausberg et al., 326–51. ERGA 31. Berlin and New York.

Herschend, Frands. 2005. *Ackulturation och kulturkonflikt: Fyra essäer om järnåldersmentalitet*. Occasional Papers in Archaeology (OPIA) 38. Uppsala.

Hines, John. 2005. Review of Morten Axboe 2004. *Antiquity* 79 [no. 304], 476–77.

IK + number = bracteate published in *IK*.

IK = Die Goldbrakteaten der Völkerwanderungszeit: Ikonographischer Katalog. By Karl Hauck, Morten Axboe, Urs Clavadetscher, Klaus Düwel, Lutz von Padberg, Ulrike Smyra, Cajus Wypior, and Herbert Lange. 3 parts = 7 vols.: 1.1, *Einleitung*; 1.2, 2.1, 3.1, *Text*; 1.3, 2.2., 3.2, *Tafeln*. Münstersche Mittelalter-Schriften 24.1.1–24.3.2. München 1985–89. See also Axboe 2004, Pesch 2007, and the *Auswertung* volume under review.

Kent, J. P. C. 1978. *Roman Coins*. London.

KJ + number = inscription published in Krause and Jankuhn 1966.

Krause, Wolfgang, with contributions by Herbert Jankuhn. 1966. *Die Runeninschriften im älteren Futhark*. 2 vols. Abhandlungen der Akademie der Wissenschaften in Göttingen, philologisch-historische Klasse, 3rd ser. 65. Göttingen.

Kristoffersen, Siv. 2000. *Sverd og spenne: Dyreornamentikk og sosial kontekst*. Studia Humanitatis Bergensia 13. Kristiansand.

Källström, Magnus. 2011. "Brakteaten från Trollhättan (utkast)." Preliminary manuscript, to be published in *Fornvännen*.

Liljegren, Johan. 1833. *Run-Urkunder*. Stockholm.

Mackeprang, Mogens. 1952. *De nordiske Goldbrakteater: Brakteatstudiets Historie, Brakteattypernes Udvikling, geografiske Fordeling, Kronologi, Motiver og Prægningsteknik*. Jysk Arkæologisk Selskab, Skrifter 2. Århus.

Malmer, Mats P. 1963. *Metodproblem inom järnålderns konsthistoria*. Acta Archaeologica Lundensia, ser. in 8°, 3. Lund.

—. 1977. "Chronologie der Solidi und Goldbrakteaten." In *Archäologische Beiträge zur Chronologie der Völkerwanderungszeit*, ed. Georg Kossack and Joachim Reichstein, 107–11. Antiquitas, ser. 3: Abhandlungen zur Vor- und Frühgeschichte, zur klassischen und provinzial-römischen Archäologie und Geschichte des Altertums 20. Bonn.

Marold, Edith. 2012. "Vers oder nicht Vers? Zum metrischen Charakter von Runeninschriften im älteren Futhark." *Futhark* 2 (2011), 63–102.

Moltke, Erik. 1985. *Runes and Their Origin: Denmark and Elsewhere*. Copenhagen.

Müller, Gunter. 1986. "Runenzeichenfrequenz im älteren Futhark und die Überlieferungsbedingungen von Brakteateninschriften." *Frühmittelalterliche Studien* 20, 452–67.

—. 1988. "Von der Buchstabenmagie zur Namenmagie in den Brakteateninschriften." *Frühmittelalterliche Studien* 22, 111–57.

N + number = inscription published in *Norges innskrifter med de yngre runer*. By Magnus Olsen et al. 6 vols. to date. Oslo 1941 ff.

Noreen, Adolf. 1923. *Altnordische Grammatik*, vol. 1: *Altisländische und altnorwegische Grammatik (Laut- und Flexionslehre) unter Berücksichtigung des Urnordischen*. 4th ed. Sammlung kurzer Grammatiken germanischer Dialekte, A 4. Halle (Saale).

Nowak, Sean. 2003. *Schrift auf den Goldbrakteaten der Völkerwanderungszeit: Untersuchungen zu den Formen der Schriftzeichen und zu formalen und inhaltlichen Aspekten der Inschriften*. Unpublished doctoral dissertation at Georg-August-Universität, Göttingen. http://webdoc.sub.gwdg.de/diss/2003/nowak/index.html

Odenstedt, Bengt. 1990. *On the Origin and the Early History of the Runic Script: Typology and Graphic Variation in the Older* Futhark. Acta Academiae Regiae Gustavi Adolphi 59. Uppsala.

—. 1993. *On Graphic Variation in the Older* Futhark: *Reply to a Review by Henrik Williams of My Book* On the Origin and Early History of the Runic Script. Umeå Papers in English 16. Umeå.

Palm, Rune. 2001. "*Ráði drengr þaʀ rýnn sé*: Några tankar om 'runacy'." In *Nordiska språk — insikter och utsikter: Föredrag från det 5:e studentkollokviet i nordisk språkvetenskap, Berlin, 6.–7. mai 2000*, ed. Jurij Kusmenko and Sven Lange, 110–23. Berlin.

Pesch, Alexandra. 2007. *Die Goldbrakteaten der Völkerwanderungszeit — Thema und Variation*. ERGA 36. (*IK*, 4.2.) Berlin and New York.

Peterson, Lena. 1994. "On the Relationship between Proto-Scandinavian and Continental Germanic Personal Names." In *Runische Schriftkultur in kontinentalskandinavischer und -angelsächsischer Wechselbeziehung: Internationales Symposium in der Werner-Reimers-Stiftung vom 24.–27. Juni 1992 in Bad Homburg*, ed. Klaus Düwel, 128–75. ERGA 10. Berlin and New York.

—. 2004. *Lexikon över urnordiska personnamn*. http://www.sofi.se/images/NA/pdf/urnord.pdf

Pohl, Walter, and Mathias Mehofer, eds. 2010. *Archaeology of Identity — Archäologie der Identität*. Forschungen zur Geschichte des Mittelalters 17. Vienna.

Polomé, Edgar. 1994. "Brakteaten und die germanische Religionsgeschichte — Probleme einer wechselseitigen Interpretation." In *Iconologia Sacra*, ed. Hagen Keller and Nikolaus Staubach, 91–102. Berlin.

Rundkvist, Martin. 2006. "Notes on Axboe's and Malmer's Gold Bracteate Chronologies." *Fornvännen* 101, 348–55.

Scandinavian Runic Text Database, Department of Scandinavian Languages, Uppsala University (Samnordisk runtextdatabas, Institutionen för nordiska språk, Uppsala universitet). http://www.nordiska.uu.se/forskn/samnord.htm

von See, Klaus, Beatrice La Farge, Eve Picard, Ilona Priebe, and Katja Schultz. 1997. *Kommentar zu den Liedern der Edda.* Vol. 2, *Götterlieder (Skírnismál, Hárbarðsljóð, Hymiskviða, Lokasenna, Þrymskviða).* Heidelberg.

Seebold, Elmar. 1991. "Die Stellung der englischen Runen im Rahmen der Überlieferung des älteren Fuþark." In *Old English Runes and Their Continental Background*, ed. Alfred Bammesberger, 439–569. Anglistische Forschungen 217. Heidelberg.

—. 1996. "Wie friesisch ist der Brakteat von Wurt Hitsum?" In *Frisian Runes and Neighbouring Traditions: Proceedings of the First International Symposium on Frisian Runes at the Fries Museum, Leeuwarden, 26–29 January 1994*, ed. Tineke Looijenga and Arend Quak (Amsterdam) = *Amsterdamer Beiträge zur älteren Germanistik* 45, 181–98.

Skáldskaparmál = Snorri Sturluson. *Edda: Skáldskaparmál*, vol. 1: *Introduction, Text and Notes.* Ed. Anthony Faulkes. London 1998.

Starkey, Kathryn. 1999. "Imaging an Early Odin: Gold Bracteates as Visual Evidence?" *Scandinavian Studies* 71, 373–92.

Svanberg, Fredrik. 2003. *Decolonizing the Viking Age*, vol. 1. Acta Archaeologica Lundensia, ser. in 8º, 43. Stockholm.

Wicker, Nancy L. 1994a. "Bracteate Workshops and Runic Literacy: Testimony from the Distribution of Inscriptions." In *Proceedings of the Third International Symposium on Runes and Runic Inscriptions, Grindaheim, Norway, 8–12 August 1990*, ed. James E. Knirk, 59–81. Runrön 9. Uppsala.

—. 1994b. "On the Trail of the Elusive Goldsmith: Tracing Individual Style and Workshop Characteristics in Migration Period Metalwork." *Gesta* 33, 65–70.

—. 1994c. "The Organization of Crafts Production and the Social Status of the Migration Period Goldsmith." In *The Archaeology of Gudme and Lundeborg*, ed. Poul Otto Nielsen et al., 145–50. Copenhagen.

—. 2003. "The Scandinavian Animal Styles in Response to Mediterranean and Christian Narrative Art." In *The Cross Goes North: Processes of Conversion in Northern Europe, AD 300–1300*, ed. Martin Carver, 531–50. York.

—. 2005. "Display of Scandinavian Migration Period Bracteates and Other Pendant Jewelry as a Reflection of Prestige and Identity." In *De Re Metallica: The Uses of Metal in the Middle Ages*, ed. Robert Bork et al., 49–61. AVISTA Studies in the History of Medieval Technology, Science and Art 4. Aldershot and Burlington, Vermont.

—. 2010. "Situating Scandinavian Migration Period Bracteates: From Typology and Iconography to Gender, Agency, and Visual Culture." In *Situating Gender in European Archaeologies*, ed. Liv Helga Dommasnes et al., 67–81. Archaeolingua, ser. minor 29. Budapest.

Williams, Henrik. 1992. "Which Came First, ᛗ or ᚿ?" *Arkiv för nordisk filologi* 107, 192–205.

Zimmermann, Christiane. 2012. "The Research Project 'Runische Schriftlichkeit in den germanischen Sprachen'." *Futhark* 2 (2011), 219–22.

Öberg, Herje. 1942. *Guldbrakteaterna från Nordens folkvandringstid*. Kungl. Vitterhets Historie och Antikvitets Akademien, Handlingar 53. Stockholm.