

Gripping Boundaries

Animal Style Contingencies in c.AD 600-800 Scandinavia

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ABSTRACT

This article examines the role of Scandinavian animal styles in the early Viking Age. It first assesses several strands of relevant discourse in the research history. One line of argument suggests a link between early and late animal styles. That postulate serves as the article's next point of departure. By focusing on the timespan of c.AD 600–800, the connection between 'Gripping Beast Style', Style III/E, Style 2.5/D, and Style II is sought. Building on pioneering formulations, the styles' respective definitions are amended. The styles' iconographic contents are then explored through their respective archaeological-historical backdrops. Ontological models serve as the analysis' next consideration. It is argued that the material mainly reveals animistic and/or totemistic worldly understandings. Accordingly, the active use of, and shifts in, Scandinavian animal styles, may be related to an increasing politico-religious divide between the Nordic sphere and the rest of the continent. This could constitute one of many facets 'vikings' applied in their alienation of others, thereby justifying extreme violence.

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This article surveys animal styles in c.AD 600-800 northwestern Europe. By highlighting the styles' contingencies, it argues that some of the shifts could reflect major socio-political transformations. Many of these likely constituted interlinked catalysts for what scholars consider the Viking Age. The topic is approached through three intertwined research questions:

- 1) What role does animal style play in the archaeological understanding of the early Viking Age?
- 2) How do 'Gripping Beast Style' and Style III relate to Style II?
- 3) What can these aspects reveal about the expressions' symbolic, ontological, and socio-political significance?

Preceding research related to animal style and North Sea activity in the 8th century AD is reviewed and amended to frame the paper's emphasized argument. This proposes a link between animal styles and ontology, in turn offering interlinked hypotheses of the expressions' ideological components and potential role in separating Scandinavia as a distinct politico-religious sphere. The animal styles are reviewed in reverse chronological order. They are then brought together in subsequent sections dealing with their symbolic, ideological, and onto-

logical content. These aspects are then discussed in light of the earliest viking incursions.

Background – 'Viking Revaluations'

The scholarly construct of the Viking Age (c.AD 750/800-1066/1100) was already well in place before the advent of archaeology. It was largely established on the bases of Old Norse poems and sagas. Moreover, these resulted in a highly interdisciplinary field comprised of, *inter alia*, history, linguistics, philology, runology, and studies of religion. Archaeology continues to face certain challenges in this convergence. For one, many of the traditionally accepted criteria to delineate the Viking Age as a chronological period are based on non-archaeological sources. In turn, archaeologically motivated adjustment is met with some reluctance and scepticism in the grand scheme of realignment (*e.g.* Lund and Sindbæk 2022, 172-174). The period's many circumstantial and complex factors ultimately led to a rigid scholarly construct. Vikings were raiders; thus, the period is primarily defined by this activity. In turn, *The Anglo-Saxon Chronicles* and *The Annals of Inisfallen*'s descriptions



of late 8th century AD attacks by ‘vikings’ on insular monasteries remain pivotal to chronological endeavours and academic interpretation.

As archaeology struggled to rid itself of these traditionalist chains, Bjørn Myhre (1993) proposed several independent empirical indicators. One highlighted factor was the many imported artefacts from contexts preceding *c.*AD 800 by more than a century. This could indicate longer lasting ties between the Scandinavian and other North Sea horizons than what was typically accentuated in research. Furthermore, the emphasized contexts appeared at sites with continuity from the 7th, and 8th centuries AD, into the 11th and later. Their layouts, and dates, indicate relatively stable political cohesiveness within their respective regions. Accordingly, Myhre sought to demonstrate how all these facets could be linked to the viking phenomenon. They thus warrant inclusion in the scholarly construct of the Viking Age.

Myhre (1993, 186-188) also stressed the introduction of so-called gripping-beast elements on Viking-Age artefacts as a tangibly archaeological signifier. Typochronological studies of Viking-Age artefacts were already well established through the work of archaeologists such as Oluf Rygh (1885) and Oscar Montelius (1895; 1896; 1897). Among the most influential contributions are Jan Petersen’s (1919; 1928; 1951) treatises on weaponry, jewellery, and tools. Gripping-beast elements appear on a considerable repertoire of these implements. Early results from excavations at Ribe suggested that this expression was already manufactured around the middle of the 8th century AD (*e.g.* Feveile 2002), thereby justifying chronological emendation. Perhaps there was merit to changing the Viking Age’s onset from AD 800 to 750 or earlier.

Later research has since moved Ribe’s gripping beast production to around the last quarter of the 8th century AD (*e.g.* Feveile and Jensen 2006; Sindbæk 2011; 2012; 2023, Fig. 1.3). Despite this, many of Myhre’s observations and arguments for redressing the scholarly understanding of the beginning of the Viking Age still stand. While the author glosses over several significant aspects about animal style production and use, the overarching presentation of an increasingly active North Sea horizon with frequent contacts between the

various coastal areas present an alluring backdrop (*cf. e.g.* Sindbæk 2005; 2007). This is also perceptible in the horizon’s animal style developments. At an early stage, these reveal overarching affinities; however, at different intervals, they shift and move along different trajectories to form new expressions.

These considerations all serve as significant pieces in a bigger puzzle and may provide some clues about the relation between animal style production and use in the 7th-9th centuries AD. Furthermore, the outlined links may reveal some less frequently addressed aspects about the period’s Norse-speaking communities in the geographical area of Scandinavia. That includes their ontological concepts, and how these may have figured into their ‘viking’ endeavours.

Animal Styles in Archaeology – ‘Pre-Viking’ and ‘Viking-Age’ Animal Styles

Sophus Müller (1880) and Bernhard Salin (1904) remain the great grandfathers of animal style research in Scandinavia. A lot has happened since their seminal contributions; at the same time, the perceptible divide in their framings has had an immense impact on current research. Hence, scholars tend to focus on animal styles in either *c.*AD 400-800 (*e.g.* Arwidsson 1942a; 1942b; 1954; 1977; Haseloff 1981; Høiland Nielsen 1987; 1991; 1997; 1998; 2002; Kristoffersen 1995; 2000; 2010; Ørsnes 1966) or 800-1100 (*e.g.* Christiansson 1959; Fuglesang 1980; 1981; 1982; Gjedssø Bertelsen 1992; 1994; Graham-Campbell 2013; Klindt-Jensen and Wilson 1965; Neiß 2022; Wilson 1995; 2008; Wilson and Klindt-Jensen 1966; Skibsted Klæsøe 1999; 2002). A few exceptions include very brief accounts of transitional styles in some of the cited Viking-Age studies. Similar tendencies are present in studies focusing on early Viking-Age art (*e.g.* Shetelig 1920).

This means that bridging the gap between research on 7th-9th century AD animal styles remains challenging. Salin’s (1904) criteria and descriptions for Style I (*c.*AD 475-550), II (*c.*AD 550-700), and III (*c.*AD 700-820) are quite different from those that are typical of the considerably more faceted Viking-Age style formulations. This is

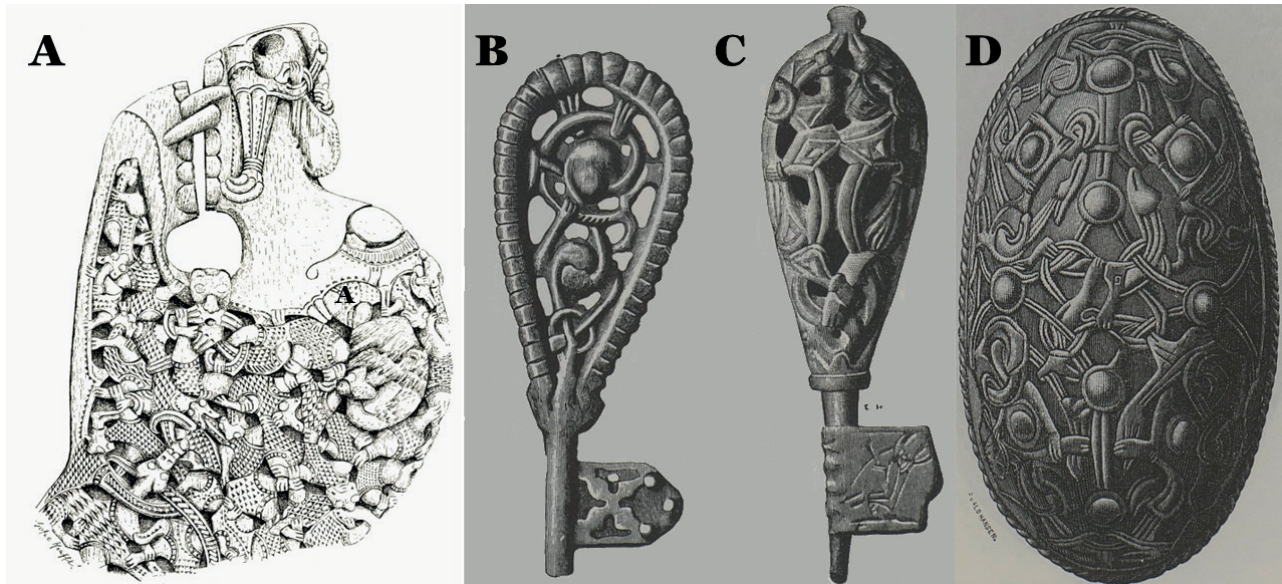


Figure 1. Gripping beast motifs on various artefacts found in Norway. A) On one of the wooden figureheads from Oseberg (after Shetelig 1920, Fig. 106). B-C) On AD 8th century keys (after Rygh 1885, Figs 454-455). D) On an oval brooch (after Rygh 1885, Fig. 648).

especially true for the ‘Berdal’ (e.g. Petersen 1928, 12-22), ‘Broa’ (e.g. Salin 1922), and ‘Oseberg’ styles (Shetelig 1920). As Bertil Almgren (1955, 88-97) argued, these type-sites do not display different styles, but different motifs in unmistakably related styles. In turn, some of their components were eventually rebranded as ‘Gripping Beast Style’ (e.g. Marstrander 1964), but with little to no concession in current research. In other words, while most researchers working on animal styles from these periods acknowledge the expressions’ joint backdrop, there are likely as many different scholarly concepts of exactly what constitutes an example of ‘Oseberg’ as opposed to ‘Gripping Beast Style’. Often, clear definitions in animal style research are entirely absent (e.g. Malmer 1963, 222-223, 243-244; Karlsson 1983, 92-101).

This tangled and downright messy circumstance stems from too many cooks working with disparate criteria for the Viking-Age material. Müller (1880) addressed both early and late examples of animal styles, covering the full span of c.AD 400-1100. However, his concern mostly centred on the later styles’ position in a bustling North Sea environment. As such, he explicated on non-Nordic influence in Nordic expressions. This opened the sluice for subjective style understandings, thereby avoiding the comparatively stricter confines of Salin’s scheme.

Lotte Hedeager (e.g. 1999; 2000; 2004; 2011, 61-98) argues that the different animal styles’ similar aesthetics and material premises could indicate a common backdrop throughout AD 400-1100. In turn, there is reason to suspect shared ontological framings and familial links. However, until each sequential link is studied more thoroughly, for example by bridging the discordant understandings of AD 7th-9th century animal styles, this hypothesis remains embryonic. On a related tangent, it is worth considering that stylistic shifts do not necessarily develop linearly, or in vacuums. Forms can eschew, retain, and/or develop certain features, leading to concurrent, variously diverging expressions. Some of these can be labelled hybrids, whereas others traverse entirely new terrain. It is therefore optimistic to expect complete scholarly congruence in classificatory and chronological endeavours.

‘Gripping Beast Style’

The identification of gripping beasts in early Viking-Age research is not new. Neither is the attempt to frame them as an analytical group in archaeological publications (e.g. Marstrander 1964; Sindbæk 2011; 2012; Steuer 1994; Wamers 1999; Wilson 2001). Michaela Helmbrecht’s (2004-2005) study makes up the most recent elaborate synthesis. This



Figure 2. Gripping beast in amber found at Råde in east Norway (C4033) (Photo: Eirik Irgens Johnsen - CC BY-SA 4.0 © Museum of Cultural History, Oslo).

collates 116 artefacts, with only 11 found outside Scandinavia. Ten additional artefacts later surfaced in Marquartstein, Traunstein, Germany (Helmbrecht 2008). As Helmbrecht's (2004-2005, 274-279) 11 different subcategories reveal, classifying these under a coherent 'style' warrants scrutiny. It is more accurate to refer to a recurring but diverse gripping motif. This comprises a meshwork of paws and fretwork elements, in which said paws, usually featuring three, rarely four, phalanges, grab onto the nearest compositional element. The paws are typically placed at the end of limbs, but only sometimes attached to otherwise full-bodied zoomorphs (Figure 1). During the 9th century AD, said gripping elements are increasingly found with *en face* zoomorphic heads, traditionally linked with the Borre style. Style historically, the latter designation is therefore preferred when gripping elements are found with heads and knots of the Borre type (cf. e.g. Fuglesang 1982; Klindt-Jensen and Wilson 1965; Skibsted Klæsøe 1999; 2002; Wilson 1995; 2008; Wilson and Klindt-Jensen 1966).

Anton Brøgger (1916-1917) collated a conspicuous group of gripping beast figurines made in amber (Figure 2), likening these to parallels in

metalwork. Analogous representations are present on keys (e.g. Almgren 1955), brooches (e.g. Jansson 1985; Petersen 1928), the Oseberg ship (Shetelig 1920), as well as miscellaneous jewellery and fittings. Moreover, the well-documented contexts of Ribe (Feveile and Jensen 2006; Philippsen et. al. 2022, Fig. 2; Sindbæk 2023, Fig. 1.3), and Oseberg (Bonde 1997; Bonde and Christensen 1993), yield the three absolute dates of c. AD 780-790, 820, and 834. Establishing the tail-end of 'Gripping Beast Style' is therefore unproblematic, with AD 820-834 marking the end for variants without Borre elements.

Determining its beginning is more difficult. Historically, the Lindau Gospels are afforded an unwarranted emphasis in gripping beast research (Figure 3). The variants on the oldest cover are frequently considered the motif's progenitors (e.g. Wamers 1999, 207-210). This discourse introduces a range of complex problems in intra-North-Sea art-historical discourse, with frequent reference to the Tassilo Chalice (e.g. Bakka 1983; Haseloff 1951; Pesch 2021; Wamers 2019). While that tangent is best circumvented here, the discussion's perplexities are neatly captured in Signe Horn Fuglesang's



Figure 3. Illustration of gripping beasts on the Lindau Gospels (Drawing: Mats Skare, based on Elbern 2000, Fig. 26.1).



Figure 4. Style 2.5/D on one of the pommels from the Salme II mass grave (Drawing: Mats Skare, based on Lõugas and Luik 2023, Pl. 71.290).

(2013) rebuttal. She simply flips the common hypothesis. Instead of gripping beasts originating on the continent, they may have developed through the frequent exchange between people in the Anglo-Saxon and Scandinavian spheres. Accordingly, the gripping beasts on the Lindau Gospels may have been produced in Scandinavia, and then gifted to a Carolingian aristocrat. They were then ultimately incorporated into its cover. Helmbrecht (2005, 214-217; 2008, 377-380) also references the Lindau Gospels. She suggests that the oldest cover was made by a continental artisan with an excellent comprehension of several fashionable coeval styles. Accordingly, its gripping beasts could be modelled after Scandinavian antecedents.

These examples demonstrate some of the many difficulties when dealing with iconographical lacunae and relative dates; the Lindau Gospels' oldest cover is only loosely dated to the mid-8th century AD (e.g. Elbern 2000, 331-334). Absolute dates are also absent for most other artefacts featuring gripping beasts. Private metal detecting in Denmark and Norway continually introduces new examples in these areas. However, most lack archaeologically accessible contexts. Only through subjective art historical intuition is it possible to conjecture some type of chronological sequence for the early variants. This could propose that the most idiosyncratic variants are of earlier dates than the more streamlined and analogous types. The former

were thus initial pieces; the latter, such as the examples from Ribe, on the other hand, entail mass production in a sphere where gripping beasts belong to an established movement and/or trend.

Another possible line of investigation considers the links to overlapping and preceding animal styles.

Gripping Beasts in Light of Style III

Salin's (1904, 270-290) description and examples of Style III have caused some confusion. The author includes examples of the same variant for both late/early Style II/III. It is therefore unclear if and how he understood this type's differentiation. Hence, Greta Arwidsson's (1942b) endeavour to rectify this fault deserves commendation. On the one hand, she successfully conveys the deficiencies of Salin's tripartite classification; on the other, her own system to replace Salin's II-III scheme with an A-E-lettering results in similar confusion. This mainly applies to her A-C variants. Arwidsson's only elaborately developed group is D. This comprises the transitional variant mentioned above. It is most easily positioned between Style II and Style III as a sort of Style 2.5 (henceforth '2.5/D'). Its main characteristics are sleek zoomorphs, with drawn out ribbon-shaped limbs; their contour lines are emphasized, frequently in relief; a singular or

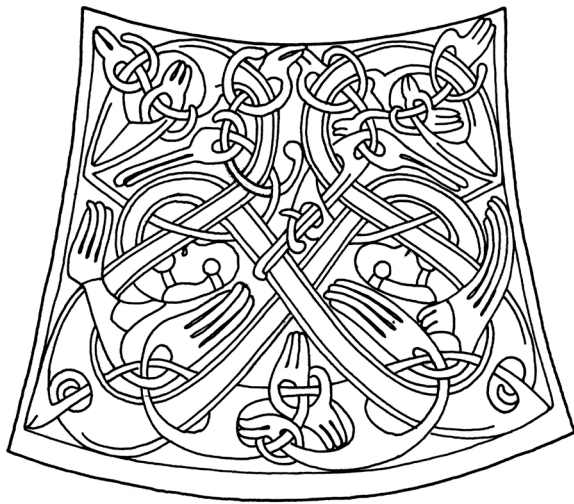


Figure 5. Style III from a disc-on-bow brooch found in Stavanger, west Norway (C488) (Drawing: Lars Tangedal - CC BY-SA 4.0 © the University Museum of Bergen).

two central longitudinal lines often run parallel between these, for a total of three or four (Figure 4). There are also variants where these central features take other forms, such as continuous rows of triangles or lozenges. The zoomorphs' heads are quite heterogeneous and often feature clamp-like maws; that type lasts into the more typical Style III variant, referred to by Arwidsson as Style E. Style 'III/E' is aptly captured by Salin's description of an increasing tendency towards busier, *horror vacui*, compositions, with more tendril-like, slithering, implements; limbs are cleaved and perforated, with various parts looping through and knotting

around them. Ultimately, the style's intricacies led to what Salin describes as a misunderstanding and thereby degeneration of the zoomorphs. He also notes Style III/E's perhaps most emblematic feature: the limbs' flame-shaped extremities (Salin 1904, 284-286). Many of these feature three or four prongs (Figure 5).

When scrutinizing the position of these pronged extremities around the respective compositions, it is tempting to interpret them as gripping paws. The impression of that connection is bolstered when considering the panels of a select few disc-on-bow brooches featuring both Style III/E and 'Gripping Beast Style' (Figure 6). This also applies to some of the fittings, and box-shaped brooches, found on Gotland, Sweden (*e.g.* Helmbrecht 2004-2005, 279; Wilson 2001, 135-137).

The hypothesis presented here is thus: Gripping beasts are already present in some of the highly stylized Style III/E representations; along with another slew of influences, these develop over the course of the 8th century AD. Towards the century's latter half, artefacts are now adorned with flurries of gripping paws presented on artefacts of the above-mentioned types (Figure 1).

Animal Style Continuity and Ideology

By establishing a connection between 'Gripping Beast Style' and Style III/E, Hedeager's (1999;

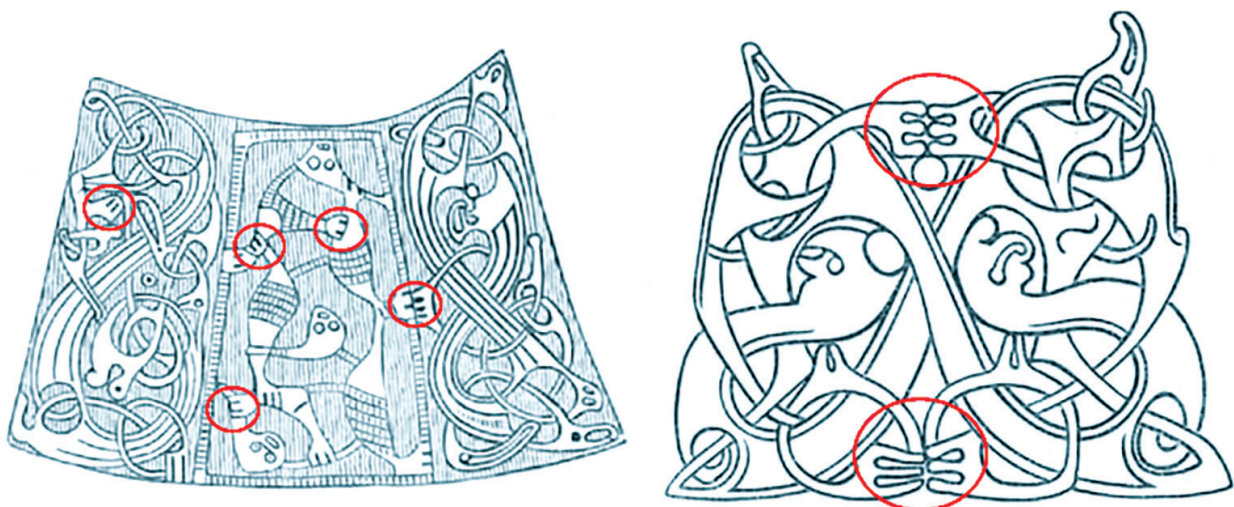


Figure 6. Side-by-side comparison of Style III and "Gripping Beast Style" phalanxes from disc-on-bow brooches found in Gotland, Sweden, and Trondheim, Norway. Left: Style III in the side panels; Gripping Beast Style in the center. Right: Style-III motif (after Salin 1904, Figs 620-621).



Figure 7. Style-II motifs from Sutton Hoo. A) Shows three classes of zoomorphs on the Sutton Hoo buckle (British Museum 1939,1010.1). Red fill = quadrupeds; green fill = serpents; blue fill = avians; most of the animals create a link by biting each other. B) A self-biting quadruped on the shield mount from Sutton Hoo (British Museum 1939,1010.94.B.1, Drawing: Mats Skare).

2000; 2004; 2011, 61-98) proposed hypothesis of a functional and/or symbolic animal style continuity serves as a convenient point of departure. If there is a link between ‘Gripping Beast Style’ and Style III/E, there could also be a link between Style III/E, 2.5/D, and II. At the same time, it is worth noting how the styles differ. Even though certain features are shared, others are not. Certain shifts in style and motif could therefore represent deliberate change.

The common denominator for all animal styles is that they feature zoomorphic representations and are presented on artefacts. Style II presents three clear classes of zoomorphs: quadrupeds, serpents, and avians (Figure 7; *cf. e.g.* Behrens 2023, 180-183). Ambiguity becomes increasingly more common in the subsequent styles. Quadrupeds and serpents persist, but do not follow clear conventions.

The frequency of animal style fluctuates throughout the 7th-9th centuries AD, but the type of artefact it is presented on largely remains the same. For metal implements, these are: brooches, buckles, figurines, fittings, helmets, horse tack, keys, pendants, shield bosses, spears, spurs, and swords (in-

cluding sheaths). Until recently, helmets and shield bosses were only known to feature Style II (*cf. e.g.* Arwidsson 1942a; 1954; 1977; Bruce-Mitford 1978; Grieg 1924; Nerman 1969-1975; Stolpe and Arne 1912). However, a metal-detector discovery at Lejre, Denmark, unveiled a helmet brow featuring Style 2.5/D, along with parts of a crest terminal (Ljungkvist, Price and Christensen 2024, Fig. 7). For now, only one complete helmet is known from Viking-Age Scandinavia (Grieg 1947), with another few fragments (*e.g.* Christensen 2024, Fig. 1). None of these feature animal styles, but that picture may change with future discoveries. Meanwhile, keys with animal style first appear in the 8th century AD (Almgren 1955); the only known spur featuring Nordic animal style from the period was found at Rød, in Moss, Norway (C5905; Fuglesang 1981, Fig. 2.32). It is made of gold and presents profile zoomorphs along with a sculptural head. It is best described as a mixture of 9th century AD Borre and Jelling styles.

Based on the current archaeological record, animal style is numerically more present during the Viking Age than the preceding centuries. This may represent a shift in availability, with mass

production perhaps granting animal-style access to further individuals; the expression could therefore be considered more egalitarian in this phase (Neið 2022, 152). Meanwhile, Style II's considerably more uniform expression and larger spread across Europe could be linked to deliberate rulership strategies, indicating affiliation and socio-political significance. As Karen Høilund Nielsen (1997; 1998) suggests, Style II could therefore constitute a politico-religious insignia. This can be augmented with Hedeager's (1999, 224-225; 2011, 57-58) observation that Style II ceases in the Anglo-Saxon and continental areas once a primarily Christian faith is consolidated by the end of the 7th century AD. In this climate, Style II's potential politico-religious connotations would no longer be significant, thus leading to its demise. Meanwhile, Egon Wamers (2009) refutes Style II's possible religious undercurrents on account of its appearance on gold foil crosses, as well as some vaguely analogous Style II traits appearing on other Christian artefacts. Despite this discordance, it is worth noting Style 2.5/D and III/E's clear relation to Style II, and how these expressions are currently only known on artefacts found in the Nordic region (see below). This could indicate the animal styles' non-Christian, but politico-religious significance in this area.

Animal Style as Ontology

If the above argument is accepted, it is also necessary to make a connection between the iconography on the one hand, and its ontological significance on the other. Among others, Maria Domeij Lundborg (2004; 2006; 2009), and Michael Neið (2022, 252-279) picked up the age-old thread suggesting a relation between the periods' *kennings* and animal style (e.g. Söderberg 1905, 54; Salin 1922, 194). Domeij Lundborg's titles consistently reference 'boundedness' or the act of weaving, drawing on the skaldic poem *Darraðarljóð*. Other highlighted correlating aspects are some of the written sources' emphasis on the described human and non-human agents' actions. There appears to be a semblance of symmetry between both, signifying a link. This link could thus be tacit in the animal styles' compositions, emphasising examples with

interlace. Humans are thus bound to animals, and vice versa. These descriptors neatly capture the appearances and acts that many of the animal representations convey. However, instead of fixating on the direct link between *kennings* and animal styles, it seems prudent to move a few steps back to get a better look at the full picture. Accordingly, it is here suggested that the people creating and using these expressions made sense of their surroundings through analogies. In turn, *kennings* and animal style may reflect their crafters' and users' ontologies.

Here, a brief departure to Philippe Descola's (2013) four ontological models provides some useful heuristic concepts to think with. Based on ethnographic studies of societies around the world, Descola (2013, 101-121) presents the hypothesis that certain cognitive premises lay the foundation for worldly understanding (ontology). These are structured by an inner as opposed to an outer reality. When human beings perceive and process their outer realities, this is done on two levels: Through perception, and through physical navigation. Perception can be related to senses which are primarily processed internally, for example through rationale. Meanwhile, physical navigation establishes the body's outer components and how these relate to tangible matter more directly. Based on these patterns, any living agent forms *schemas*. Through identification and relation, order is structured. Conscious creatures make meaning of their environments through their senses; with these, they can relate themselves to the environment, and vice versa. Descola thus conceptualizes four possibilities of human worldly understanding. These are animism, totemism, naturalism, and analogism. Animism prescribes an ontology in which all its classes of subjects share the same interiority but have disparate physicalities (Descola 2013, 129-143); totemism, on the other hand, prescribes sameness on both fronts (Descola 2013, 144-171). Meanwhile, naturalism comprises the traditionally western doctrine of a firm dichotomy between nature and culture. This is best captured with the sentiment that both humans and animals consist of atoms, but only humans possess rationale (Descola 2013, 172-200). Analogism presupposes that all subjects are different on both counts, but that those who resemble each other most, may be

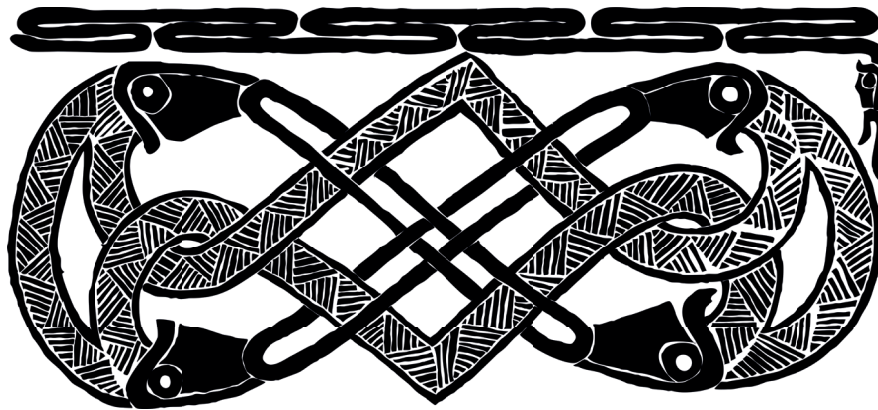


Figure 8. Reconstructed Style-II motif from Hornhausen (Drawing: Mats Skare, partially based on Hahne 1922, with corrections).

placed next to each other on a gradient scale. Accordingly, the slight differences and commonalities bridge the gaps and make up the whole (Descola 2013, 201-231).

Rather than understanding these as rigid categories, it could be useful to approach them as a spectrum. That entails how each model may be identifiable among a select group of people's worldly understandings, but that some are more present than others. Based on Old Norse sources, Simon Nygaard (2022) identifies a type of analogism in 'Chiefdom religion'. Similarly, the distinction in Old Norse vocabulary between *innangarðr* and *utmark* (in- and outfield) may indicate a type of naturalism (e.g. Steinsland 2005). At the same time, animism and totemism both seem more prevalent. This especially applies to the Old Norse concepts of shape-shifting and communicating with transcendental animal spirits, *fylgjur* (e.g. Aðalheiður Guðmundsdóttir 2007; Bryan 2021, 67-88; Hedeager 2011, 81-85; Mundal 1974). If a human being is thought capable of changing forms into a non-human animal, or communicate with non-human agents, this implies some form of shared cognizant precondition across all species.

Skipping the well-established source critical discourse related to the reliability of Old Norse sources, and how to best proceed (e.g. Hedeager 2011, 23-26; Meulengracht Sørensen 1991; Price 2019, 9-10; Schjødt 2020, 13-14), this opens several avenues to explore the animal styles of the 7th-9th centuries AD. The material appears to indicate an intricate connectedness between the world's various inhabitants, whether human or non-human.

Deciphering the Link and Meaning of 'Gripping Beast Style', Style III/E, and Style II

The perceived shifts in animal styles from Style II to III/E, and 'Gripping Beast Style', primarily concern the specifics of the respective variants' intertwined motifs. Style II has clear classes of zoomorphs. Its compositions generally allow the modern viewer more discernible individual elements than the later styles; at the same time, intermingling, repetitious, patterns, such as whirls, are also current (Behrens 2023, 86-107). The Hornhausen stones' Style II carvings may provide an important clue (Hahne 1922). Here, two sets of self-biting Style II heads take on the form of an infinity loop as their four maws converge in an interlocked X at the composition's centre (Figure 8). Exactly what the motif represents is difficult to assess. However, one tempting avenue of explanation may be found in the comparable Ouroboros motif. It is here worth noting that a self-biting serpent is represented on IK 327, a gold bracteate from the 5th century AD found in Lyngby, Denmark (Hauck et al. 1986, 126-127). Sigmund Oehrl (2013; 2019, 117-120) also identifies another few later parallels and variations found in northwestern Europe. The Ouroboros motif is mainly associated with alchemy and found throughout large parts of North Africa and Eurasia in Antiquity and the Medieval Period. It is generally perceived to symbolize *materia prima*, that is, the essence of things (e.g. Karlsson 1976, 172-175; Sheppard 1962, 84). Building on this theme, Style II and 2.5/D's menageries

of intertwined beasts may signify the relation between all things, whether human or non-human. By outfitting seemingly inanimate objects with animal style, the objects are afforded life (Kristoffersen 1995). The connection between each worldly subject is thus established. Their internal and potentially external likeness constitute the weaving threads of existence.

As Style III/E is developed, its zoomorphic representations' dispositions are literally cleaved and perforated for all elements to ultimately become reintegrated. Specific classes of zoomorphs are thence sidelined for the expressions' more conspicuous subtext: the inevitable reconciliation of things. This is mirrored by the materiality of the artefacts they are found on, whether metal, stone, bone, or wood. They are all wrought from nature and adapted by humans into tools, weaponry, jewellery, and so forth.

With 'Gripping Beast Style', the zoomorphs' classes are made even more ambiguous; meanwhile, the specific action of grasping onto whatever is near and dear holds significant emphasis. The blatant focus on this action signals urgency. Sæbjørg Walaker Nordeide (2015, 214–215) likens it to the literal binding of chaos. Chaos is thus kept in check by binding the volatile forces. However, rather than the beasts representing destructive agents, they could symbolize safeguarding. The gripping makes sure that things are held together; it upholds balance. By acknowledging this status quo, the expressions' crafters perhaps paid tribute to a perceived harmony between humans and nature. If but a single grip falters, that very balance is tipped. The threat of collapse is thus always present. This invites the Ouroboros analogy presented above. In the Old Norse sources, the Midgard Serpent, *Jormundgandr*, is what keeps the balance of the earth intact, buckling it by biting its own tail. Thor's temperament and rivalry with *Jormundgandr* is what ultimately wrests away harmony, causing the downfall and rebirth of life (cf. Snorri Sturluson 2005, Ch. 34, 48; *Húsdrápa*; *Hymiskviða*; *Lilja*; *Voluspá*).

Deliberate Change

The above interpretation thereby frames 7th–9th century AD animal styles through a largely coin-

ciding animistic/totemistic ontology. At the same time, minor and more evident shifts between the subsequent variants could signal deliberate change. Especially two circumstances can be proposed. As Style II's production continued in Christian environments, such as on Langobardic gold foil crosses (e.g. Roth 1973; Hübinger 1975; Terp-Schunter 2018), its potentially non-Christian connotations began to decline. In response, the non-Christian Nordic sphere decided to develop competing variants in the transitional Style 2.5/D, and eventually Style III/E. Instead of referencing Style II's tangible features, namely its clear classes of zoomorphs, the overarching premise 'reconciliation of things' was emphasized. With the subsequent 'Gripping Beast Style' this was made even more apparent; the expression now plainly conveyed the importance of gripping and connectedness. One possible rationale may have been to accentuate the expressions' encompassing significance.

In all things being interwoven, animal style would reasonably reflect several societal facets. Aesthetics and taste are two such aspects; at the same time, these are affected by less discernible elements, such as self-perception and communicated identity. Both are highly contingent on socio-political circumstances and values. This is where animal style may shed light on the earliest viking incursions.

The Beginning of the Viking Age

James Barrett's (2008) and Steven Ashby's (2015) deliberations on what incited the viking incursions present many reasonable possibilities. These are now augmented by Irene Baug and colleagues' (2019, 66–68) suggestion that Scandinavia's power constellations were too well established, and that certain outlier groups therefore sought fortune elsewhere. Neil Price (2014; 2016) and Christian Coijmans (2020) apply the concept of hydrarchies to the types of seafaring marauders presented in the written sources of the late 8th–9th centuries AD. This model outlines how bands of independents or smaller retainers could form flexible seafaring domains to control the North Sea. They were thus able to seize and capitalize on all passing or nearby mobile goods.

Price (2020, 271-285) later aligned this model and the many written accounts of viking incursions with the excavated site at the Estonian island of Salme (Lõugas and Luik 2023). Here, 41 individuals with artefacts corresponding to those found in Upplandic Sweden were buried in two boats; their remains carried marks of violence; their grave goods largely featured weapons. Accordingly, one reasonable interpretation is that the Salme mass graves represent the outcome of a violent affair. The boats hint at a type of activity reminiscent of viking raids. Meanwhile, its c. AD 750 date and geographical position hint at these activities taking place earlier in the east than what the written sources report in the west.

Salme contained several sword hilts decorated in Style II and 2.5/D (Figure 4; Lõugas and Luik 2023, Pl. 67.531, 83.111, 93.412, 99.419, 111.890). Some may have been produced up to six decades before ending up as grave goods. These must constitute heirlooms. They therefore appear to have held significance as identity markers in an ambitious campaign. It is not known whether or how the Salme campaign succeeded.

Animal style likely played a similar role in the western campaigns. There is currently little archaeological evidence which can corroborate the earliest accounts, but sundry pieces of insular metalwork are found in early Scandinavian Viking-Age graves (*cf. e.g.* Heen-Pettersen 2020; Mikkelsen 2019; Wamers 1985; 1998). This material attests to some type of contact between the areas. Aina Heen-Pettersen (2019, 536-537) suggests that this commenced around the middle of the 8th century AD. If the rationale of looting and violent incursions is accepted, the insular metalwork forms a tangible contrast to the Nordic artefacts. Both are typically adorned with animal styles. However, their iconographic expressions are slightly disparate while also reflecting very different socio-religious environments. By the 8th century AD, Christianity was largely adopted throughout the geographical areas corresponding to current England, the Irish Sea, and most of Ireland (*e.g.* Heather 2022, 235-295). Much of the insular fine metalwork thus constitutes Christian, liturgical, artefacts, such as reliquaries and croziers.

In the North Sea area, *emporia* were becoming more numerous, allowing for an increase in the

flow and exchange of information (*e.g.* Costambeys, Innes and MacLean 2011, 338-347; Loveluck 2013, 180-212; Sindbæk 2005, 70-78, 163-163). John Hines (1984; 1992) frames a likely scenario in which affiliations between Anglo-Saxon England and the Nordic spheres were nourished following the post-Roman settlement and into the 700s. Similarly, the exchange of iconographic conventions and motifs is noticeable throughout large parts of Europe in the same time frame (*cf. e.g.* Holmqvist 1939; Åberg 1943; 1945; 1947).

These circumstances all present a backdrop in which the Nordic region was very aware of everything happening around the North Sea area, and, quite likely, vice versa. Once Christianity began to take hold in the continental and insular regions through the 6th and 7th centuries AD, however, religious discrepancy may have motivated the reframing of socio-political and -ideological signifiers, such as animal style. This could tie into a similar dynamic as that proposed by Anders Ögren and colleagues' (2022) 'New institutional economics', with established conventions for specific groups and/or societies. The continental abandonment of Style II appears to happen around the middle or last quarter of the 7th century AD. Roughly around the same time, Style 2.5/D was introduced in the Scandinavian area. This then spurred a sequence in which Style III/E and 'Gripping Beast Style' may have served to tangibly represent a non-Christian ontology. Meanwhile, insular and continental animal styles followed new trajectories, frequently including references to Christian doctrine. Building on these circumstances, it is here suggested that the people subscribing to the expressions' respective ideological connotations ultimately found themselves in an 'us' and 'them' opposition. The subsequent viking incursions may thus reflect a situation in which this act was justified on account of actively dehumanizing the 'other'. Such behaviour is well-documented in more recent, comparable, historical events (*e.g.* Kronfeldner 2021). Not only were the affluent monasteries unguarded, but its people were made different through their diverging beliefs. The respective horizons' discrepant iconographic expressions may have served as identity markers to the point where these were actively embroiled in justifying 'viking activity'.

Conclusion

This article began by framing Bjørn Myhre's proposed revision of the onset of the Viking Age. Several animal style shifts run parallel to the incumbent North Sea turbulence of the 8th century AD. Many archaeologists and historians today recognize the domino effect of early incursions triggering increased viking activity in the subsequent centuries. At the same time, written sources of the late 8th century AD are granted an imbalanced position amidst tangible archaeological data in the scholarly construct of the Viking Age. Hesitance still reigns supreme; however, closer scrutiny of the links between Myhre's highlighted 'Gripping Beast Style' and its progenitors may reveal their ontological commonalities. The hypothesis presented here is that Style II, 2.5/D, III/E, and 'Gripping Beast Style' signify worldly understandings in which the interconnectedness between all things is emphasized. As Christianity became current in many of the non-Nordic regions employing Style II, its significance appeared to wane. Accordingly, new animal styles framing similar sentiments were developed and used in the non-Christian Nordic region. One ambition may have been to resuscitate a dying expression; another may have been to create distance to what was becoming an entirely different politico-religious horizon. In turn, some of the expressions' users understood a clear dispari-

ty between themselves and the people inhabiting these Christian societies. This served as motivation to target them for material wealth, essentially functioning as dehumanizing rationale.

While the reviewed animal styles only make up part of this convoluted backdrop, they can shed light on some of the developments transpiring in the 8th century AD. They cannot be employed to explain exactly what happened or why, but they may offer some clues about the bustling North Sea climate. To that end, they indicate several chains of related events. In other words, the events scholars typically highlight to characterise the construct of a Viking Age did not just manifest out of thin air. They were related to many interlinked processes. Myhre's expressed proposition was to marry this consideration with certain perceptible archaeological indicators. Closer scrutiny of animal styles supports this line of reasoning. At the same time, consolidated revision of the Viking Age's onset to AD 750 or 700 remains a lofty, if not impossible, ambition.

Notes

- ¹ Thorkild Ramskou (1965) later introduced yet another style, 'F'. Mogens Ørsnes (1966) developed this and formed alternate descriptions of styles largely reflecting Arwidsson's B–E. This scheme is considerably more accessible than Arwidsson's; on the other hand, many of the styles' characteristics are too detailed to function well as broad groups.

References

Sources

- Darraðarljóð*. 1973. In: Finnur Jónsson, ed. *Den norske-islandske skjaldedigtning*. Vol. 1. Copenhagen: Rosenkilde & Bagger, 389-391.
- Húsdrápa*. 1929. In: Finnur Jónsson, ed. *Carmina Scaldica – Udvalg af Norske og Islandske Skjaldekvad*. Copenhagen: G. E. C. Gads Forlag, 29-30.
- Lilja*. 1929. In: Finnur Jónsson, ed. *Carmina Scaldica – Udvalg af Norske og Islandske Skjaldekvad*. Copenhagen: G. E. C. Gads Forlag, 92-111.
- Hymiskviða*. 1932. In: Finnur Jónsson, ed. *De gamle eddadigte*. Copenhagen: G. E. C. Gads Forlag, 91-99.
- Voluspá*. 1932. In: Finnur Jónsson, ed. *De gamle eddadigte*. Copenhagen: G.E.C. Gads Forlag, 1-20.

Snorri Sturluson. 2005. *The Prose Edda*. J.L. Byock (trans.). London: Penguin Books.

The Anglo-Saxon Chronicles. 2000. M. Swanton, ed. London: Phoenix.

The Annals of Inisfallen. 1951. S. Mac Airt, ed. Dublin: The Dublin Institute of Advanced Studies.

Literature

Aðalheiður Guðmundsdóttir. 2007. The Werewolf in Medieval Icelandic Literature. *The Journal of English and Germanic Philology* 106(3), 277-303. <http://www.jstor.org/stable/27712657>

Almgren, B. 1955. *Bronsnycklar och djurornamentik. Vid övergången från vendeltid till vikingatid*. Uppsala: Appelbergs boktryckeri.

Arwidsson, G. 1942a. *Valsgärde 6*. Die Gräberfunde von Valsgärde I. Uppsala: Almqvist & Wiksell.

Arwidsson, G. 1942b. *Vendelstile: Email und Glas im 7.-8. Jahrhundert*. Uppsala: Almqvist & Wiksell.

Arwidsson, G. 1954. *Valsgärde 8*. Die Gräberfunde von Valsgärde II. Uppsala: Almqvist & Wiksell.

Arwidsson, G. 1977. *Valsgärde 7*. Vol. III. Die Gräberfunde von Valsgärde 3. Uppsala: Almqvist & Wiksell.

Ashby, S.P. 2015. What really caused the Viking Age? The social content of raiding and exploration. *Archaeological dialogues* 22(1), 89-106. <https://doi.org/10.1017/S1380203815000112>

Bakka, E. 1983. Westeuropäische und nordische Tierornamentik des achten Jahrhunderts in überregionalem Stil III. In: *Studien zur Sachsenforschung 4*. Hildesheim: Verlag August Lax Hildesheim, 1-56.

Barrett, J.H. 2008. What caused the Viking Age? *Antiquity* 82(317), 671-685. <https://doi.org/10.1017/S0003598X00097301>

Baug, I., Skre, D., Heldal, T. and Jansen, Ø.J. 2019. The Beginning of the Viking Age in the West. *Journal of Maritime Archaeology* 14, 43-80. <https://doi.org/10.1007/s11457-018-9221-3>

Behrens, F. 2023. *Der Tierstil II im Merowingerreich*. Berlin: De Gruyter.

Bonde, N. 1997. Dendrochronological Dating of the Viking Age Ship Burials at Oseberg, Gokstad and Tune, Norway. In: A. Sinclair, E. Slater and J. Gowlett, eds. *Archaeological Sciences. Proceedings of a conference on the application of scientific techniques to the study of archaeology. Liverpool, July 1995*. Oxbow Monograph 64. Oxford: Oxbow Books, 195-200.

Bonde, N. and Christensen A.E. 1993. Dendrochronological dating of the Viking Age ship burials at Oseberg, Gokstad and Tune, Norway. *Antiquity* 67, 575-583. <https://doi.org/10.1017/S0003598X00045774>

Bruce-Mitford, R. 1978. *The Sutton Hoo ship-burial: Arms, armour and regalia*. London: British Museum Publications.

- Brøgger, A.W. 1916-1917. Vikingetids karikaturer. *Kunst og kultur* 6, 57-60.
- Bryan, E.S. 2021. *Icelandic Folklore and the Cultural Memory of Religious Change*. Leeds: Arc Humanities Press.
- Carstens, L. 2018. Land of the hawk: Old Norse literary sources about the knowledge and practice of falconry. In: K.-H. Gersmann and O. Grimm, eds. *Raptor and human - falconry and bird symbolism throughout the millennia on a global scale. Publication in considerable extension of the workshop at the Centre for Baltic and Scandinavian Archaeology (ZBSA) in Schleswig, March 5th to 7th 2014*. Kiel/Hamburg: Wachholtz, 799-826.
- Christensen, T. 2024. Lejre and the rise of a dynasty. In: T. Christensen, J. Ljungkvist and N. Price, eds. *Viking Dynasties. The Royal Families of Lejre and Uppsala. Between Archaeology and Text*. Aarhus: Jutland Archaeological Society, 17-105.
- Christiansson, H. 1959. *Sydskandinavisk stil. Studier i ornamentiken på de senvikingatida runstenarna*. Uppsala: Almqvist & Wiksell.
- Cooijmans, C. 2020. *Monarchs and Hydrarchs – The Conceptual Development of Viking Activity across the Frankish Realm (c.750-940)*. London: Routledge. <https://doi.org/10.4324/9780429260209>
- Costambeys, M., Innes, M. and MacLean, S. 2011. *The Carolingian World*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511973987>
- Descola, P. 2013. *Beyond Nature and Culture*. Chicago: The University of Chicago Press.
- Domeij, M. 2004. Det bundna – djurornamentik och skaldediktning i övergången mellan förkristen och kristen tid”. In: G. Westholm, ed. *Gotland – Vikingaön*. Gotländskt arkiv 76. Visby: Länsmuseet på Gotland, 146-154.
- Domeij Lundborg, M. 2006. Bound animal bodies. Ornamentation and skaldic poetry in the process of Christianization. In: A. Andrén, K. Jennbert and C. Raudvere, eds. *Old Norse religion in long-term perspectives. Origins, changes, and interactions. An international conference in Lund, Sweden, June 3-7, 2004*. Vågar till Midgård 8. Lund: Nordic Academic Press, 39-44.
- Domeij Lundborg, M. 2009. Segerns väv – Djurornamentik och skaldediktning under yngre järnålder. In: M. Mogren, M. Roslund, B. Sundnér and J. Wienberg, eds. *Triangulering – Historisk arkeologi vidgar fälten*. Lund: Lunds Universitet, 69-84.
- Elbern, V.H. 2000. The “Earlier” Lindau Book Cover: An Integrated Analysis. In: K.R. Brown, D. Kidd and C.T. Little, eds. *From Attila to Charlemagne. Arts of the Early Medieval Period in The Metropolitan Museum of Art*. New York: The Metropolitan Museum of Art/Yale University Press, 322-335.
- Feveile, C. 2002. Støbning af ovale skålpænder i Ribe – type- og teknikvariation. In: M.B. Henriksen ed. *Metalhåndværk og håndværkspladser fra yngre germansk jernalder, vikingetid og tidlig middelalder. Rapport fra et seminar på Hollufgård den 22. oktober 2001*. Odense: Odense Bys Museer, 17-26.
- Feveile, C. and Jensen S. 2006. ASR 9 Posthuset. In: C. Feveile, ed. *Det ældste Ribe. Udgravninger på nordsiden af Ribe Å 1984-2000*. Ribe Studier 1.2. Aarhus: Jysk Arkæologisk Selskab, 119-191.

- Fuglesang, S.H. 1980. *Some aspects of the Ringerike style: a phase of 11th century Scandinavian art*. Medieval Scandinavia supplements 1. Odense: Odense University Press.
- Fuglesang, S.H. 1981. Vikingtidens kunst. In: K. Berg, P. Anker, P. Palme and S. Tschudi-Madsen, eds. *Norges kunsthistorie. Bind I: Fra Oseberg til Borgund*. Oslo: Gyldendal Norsk Forlag, 36-138.
- Fuglesang, S.H. 1982. Early Viking art. *Acta ad archaeologiam et artium historiam pertinentia* 2, 125-173.
- Fuglesang, S.H. 2013. Copying and Creativity in Early Viking Ornament. In: A. Reynolds and L. Webster, eds. *Early Medieval Art and Archaeology in the Northern World. Studies in Honour of James Graham-Campbell*. Leiden: Brill, 825-841.
- Gjedssø Bertelsen, L. 1992. Præsentation af Ålborg-gruppen – en gruppe dyrefibler uden dyreslyng. In: U. Lund Hansen, ed. *Aarbøger for Nordisk Oldkyndighed og Historie 1991*. Copenhagen: Det Kongelige nordiske Oldskriftselskab, 237-264.
- Gjedssø Bertelsen, L. 1994. Urnesfibler i Danmark. In: U. Lund Hansen and B. Storgaard, eds. *Aarbøger for Nordisk Oldkyndighed og Historie 1992*. Copenhagen: Det Kongelige nordiske Oldskriftselskab, 345-378.
- Graham-Campbell, J. 2013. *Viking Art*. London: Thames and Hudson.
- Grieg, S. 1924. Norske hjelmer fra folkevandringstiden. In: *Bergens Museums Aarbok 1922-1923*. Hist.-antikv. række 3. Bergen: Bergens Museum, 3-12.
- Grieg, S. 1947. *Gjermundbufunnet – En høvdingegrav fra 900-årene fra Ringerike*. Norske Oldfunn VIII. Oslo: Universitetets Oldsaksamling.
- Hahne, H. 1922. Der Reiterstein von Hornhausen. In: G. Kossinna, ed. *25 Jahre Siedlungsarchäologie. Arbeiten aus dem Kreise der Berliner Schule*. Mannus-Bibliothek 22. Leipzig: Verlag von Curt Kabitzsch, 171-180.
- Hauck, K., Axboe, M., Düwel, K., von Padberg, L., Smyra, U., Wypior, C. and Lange, H. 1986. *Die Goldbrakteaten der Völkerwanderungszeit*. Vol. 2.1. München: Wilhelm Fink Verlag.
- Haseloff, G. 1951. *Der Tassilokelch*. München: Beck'sche Verlagsbuchhandlung.
- Haseloff, G. 1981. *Die germanische Tierornamentik der Völkerwanderungszeit: Studien zu Salin's Stil I*. Berlin: De Gruyter.
- Heather, P. 2022. *Christendom: The Triumph of a Religion*. London: Allen Lane.
- Hedeager, L. 1999. Skandinavisk dyreornamentikk: Symbolsk repræsentation af en førkristen kosmologi. In: I. Fuglestad, T. Gansum and A. Opedal, eds. *Et hus med mange rom. Vennebok til Bjørn Myhre på 60-årsdagen*. Vol. A. Stavanger: Arkeologisk museum i Stavanger, 219-238.
- Hedeager, L. 2000. Skandinavisk dyreornamentik: Symbolsk repræsentation af en før-kristen kosmologi. In: *Old Norse Myths, Literature and Society. Proceedings of the 11th International Saga Conference 2-7 July 2000, University of Sydney*. Sydney: Centre for Medieval Studies, University of Sydney, 126-141.

- Hedeager, L. 2004. Dyr og andre mennesker – mennesker og andre dyr. Dyreornamentikkens transcendentale realitet. In: A. Andrén, K. Jennbert and C. Raudvere, eds. *Ordning mot kaos – studier av nordisk førkristen kosmologi*. Lund: Nordic Academic Press, 219-252.
- Hedeager, L. 2011. *Iron Age Myth and Materiality – An Archaeology of Scandinavia AD 400-1000*. London: Routledge.
- Heen-Pettersen, A.M. 2019. The Earliest Wave of Viking Activity? The Norwegian Evidence Revisited. *European Journal of Archaeology* 22(4), 523-541. <https://doi.org/10.1017/ea.2019.19>
- Heen-Pettersen, A.M. 2020. Insular Metalwork in Viking-Age Norway: Updating the Corpus. In: A. Pedersen and S.M. Sindbæk, eds. *Viking Encounters. Proceedings of the Eighteenth Viking Congress, Denmark, August 6-12, 2017*. Aarhus: Aarhus University Press, 435-448.
- Helmbrecht, M. 2004-2005. Der frühe nordische Greiftierstil. Studien zu einer stilistischen, räumlichen und chronologischen Gliederung. *Offa* 61/62, 293-307.
- Helmbrecht, M. 2005. Der Greiftiere auf dem Lindauer Buchdeckel – Bemerkungen zu skandinavischem Tierstil in Süddeutschland. In: B. Päffgen, E. Phol and M. Schnauder, eds. *Cum grano salis. Beiträge zur europäischen Vor- und Frühgeschichte. Festschrift für Volker Bierbrauer zum 65. Geburtstag*. Friedberg: Likias, 209-218.
- Helmbrecht, M. 2008. Prachtvolle Zeugnisse weitreichender Verbindungen: Ein karolingerzeitlicher Neufund vom Aggbichl bei Marquartstein, Lkr. Traunstein. *Bericht der Bayerischen Bodendenkmalpflege* 49, 367-382.
- Hines, J. 1984. *The Scandinavian Character of Anglian England in the pre-Viking Period*. BAR British series 124. Oxford: B. A. R.
- Hines, J. 1992. The Scandinavian Character of Anglian England: An Update. In: M. Carver, ed. *The Age of Sutton Hoo: The Seventh Century in North-Western Europe*. Woodbridge: The Boydell Press, 315-329.
- Holmqvist, W. 1939. *Kunstprobleme der Merowingerzeit*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Hübener, W., ed. 1975. *Die Goldblattkreuze des frühen Mittelalters*. Bühl/Baden: Verlag Konkordia AG.
- Høilund Nielsen, K. 1987. Zur Chronologie der jüngeren germanischen Eisenzeit auf Bornholm – Untersuchungen zu Schmuckgarnituren. *Acta Archaeologica* 57, 47-86.
- Høilund Nielsen, K. 1991. Centrum og periferi i 6.-8. årh. Territoriale studier af dyrestil og kvindesmykker i yngre germansk jernalder i Syd- og Østskandinavien. In: P. Mortensen and B. Rasmussen, eds. *Fra Stammer til Stat i Danmark 2 Hovdingesamfund og Kongemagt*. Jysk Arkæologisk Selskabs Skrifter XXII:2. Aarhus: Jysk Arkæologisk Selskab, 127-154.
- Høilund Nielsen, K. 1997. Animal Art and the Weapon-Burial Rite – a Political Badge? In: C.K. Jensen and K. Høilund Nielsen, eds. *Burial & Society. The Chronological and Social Analysis of Archaeological Burial Data*. Aarhus: Aarhus University Press, 129-148.

- Høilund Nielsen, K. 1998. Animal Style – A Symbol of Might and Myth. Salin's Style II in a European Context. *Acta Archaeologica* 69, 1-52.
- Høilund Nielsen, K. 2002. Ulv, hest og drage – Ikonografisk analyse af dyrene I stil II–III. In: K. Høilund Nielsen and J. Vellev, eds. *Nordeuropæiske dyrestil 400-1100 e.Kr.* Hikuin 29. Hikuin: Moesgård, 187-218.
- Jansson, I. 1985. *Ovala spännbucklor – en studie av vikingatida standardsmycken med utgångspunkt från Björkö-fyndet*. Aun 7. Uppsala: Institutionen för arkeologi, Uppsala universitet.
- Karlsson, L. 1976. *Romansk träornamentik i Sverige. Decorative Romanesque Woodcarving in Sweden*. Acta Universitatis Stockholmsensis Stockholm Studies in History of Art 27. Stockholm: Almqvist & Wiksell.
- Karlsson, L. 1983. *Nordisk form – om djurornamentik*. Stockholm: Statens Historiska Museum.
- Klindt-Jensen, O. and Wilson, D.M. 1965. *Vikingetidens kunst*. Copenhagen: Nationalmuseet.
- Kristoffersen, S. 1995. Transformation in Migration Period Animal Art. *Norwegian Archaeological Review* 28(1), 1-17. <https://doi.org/10.1080/00293652.1995.9965581>
- Kristoffersen, S. 2000. *Sverd og spenne – Dyreornamentikk og sosial kontekst*. Studia Humanitatis Bergensia 13. Kristiansand: Høyskoleforlaget.
- Kristoffersen, S. 2010. Half beast-half man: hybrid figures in animal art. *World Archaeology* 42(2), 261-272. <https://doi.org/10.1080/00438241003672906>
- Kronfeldner, M. (ed.). 2021. *The Routledge Handbook of Dehumanization*. London: Routledge.
- Ljungkvist, J., Price, N. and Christensen, T. 2024. Lejre, Uppsala and their North Sea connections. In: T. Christensen, J. Ljungkvist and N. Price, eds. *Viking Dynasties. The Royal Families of Lejre and Uppsala. Between Archaeology and Text*. Aarhus: Jutland Archaeological Society, 531-543.
- Lõugas, L. and Luik H., eds. 2023. *The Salme Ship Burials. Two Eighth-Century Mass Graves on Saaremaa Island, Estonia. Fieldwork and Catalogue*. Tallinn: Archaeological Research Collection, Tallinn University.
- Loveluck, C. 2013. *Northwest Europe in the Early Middle Ages, c.AD 600-1150 – A Comparative Archaeology*. Cambridge: Cambridge University Press.
- Lund, J. and Sindbæk, S.M. 2022. Crossing the Maelstrom: New Departures in Viking Archaeology. *Journal of Archaeological Research* 30, 169-229. <https://doi.org/10.1007/s10814-021-09163-3>
- Malmer, M. 1963. *Metodproblem inom järnålderns konsthistoria*. Bonn/Lund: Rudolf Habelt Verlag/CWK Gleerups förlag.
- Marstrander, S. 1964. Om gripedyrstilen og dens opphav. *Viking* 28, 89-116.
- Meulengracht Sørensen, P. 1991. Om eddadigtenes alder. In: G. Steinsland, U. Drobin, J. Pentikäinen and P. Meulengracht Sørensen, eds. *Nordisk Hedendom – Et symposium*. Odense: Odense Universitetsforlag, 217-228.

- Mikkelsen, E. 2019. *Looting or Missioning: Insular and Continental Sacred Objects in Viking Age Contexts in Norway*. Oxford: Oxbow Books.
- Montelius, O. 1895. Den nordiska jernaldernes kronologi, I. *Svenska fornminnesföreningens tidskrift* 9(2), 155-214.
- Montelius, O. 1896. Den nordiska jernaldernes kronologi, II. *Svenska fornminnesföreningens tidskrift* 9(3), 215-274.
- Montelius, O. 1897. Den nordiska jernaldernes kronologi, III. Jernaldernes sjette period (från tiden omkr. år 400 efter Kr. föd till tiden omkr. år 600). *Svenska fornminnesföreningens tidskrift* 10(1), 55-130.
- Mundal, E. 1974. *Fylgjemotiva i norrøn litteratur*. Oslo: Universitetsforlaget.
- Müller, S. 1880. Dyreornamentikken i Norden. *Aarbøger for nordisk oldkyndighed og historie* 1880, 185-405.
- Myhre, B. 1993. The Beginning of the Viking Age – Some current archaeological problems. In: A. Faulkes and R. Perkins, eds. *Viking Revaluations – Viking Society Centenary Symposium. 14-15 May 1992*. London: Viking Society for Northern Research, University College London, 182-204.
- Neiß, M. 2022. *Förvandlingar i vikingatidens djurornamentik – En multiperspektivisk studie om figurknoppsännen av Birkatyp*. Uppsala: Institutionen för arkeologi och antikens historia vid Uppsala universitet.
- Nerman, B. 1969-1975. *Die Vendelzeit Gotlands*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Nordeide, S.W. 2015. Scener fra vikingtid som kilde til kosmologi. *Viking* 78, 207-219.
- Nygaard, S. 2022. Otherworldly Beings in the Pre-Christian North: Tribal, Chiefdom, and Archaic Religion and the Use of Cultural Evolutionary Theory. *Temenos* 58(1), 67-89.
<https://doi.org/10.33356/temenos.102495>
- Oehrl, S. 2013. Das Uroboros-Motiv im germanischen Altertum und seine Kontexte – Eine Übersicht. In: I. Heske, H.-J. Nüsse and J. Schneeweiss. „Landschaft, Besiedlung und Siedlung“. *Archäologische Studien im nordeuropäischen Kontext. Festschrift für Karl-Heinz Willroth zu seinem 65. Geburtstag*. Neumünster/Hamburg: Wachholtz Verlag, 455-468.
- Oehrl, S. 2019. *Die Bildsteine Gotlands. Probleme und neue Wege ihrer Dokumentation, Lesung und Deutung*. Friedberg: Likias.
- Pesch, A. 2021. Social Transformations and Resilience – The Example of Continental Animal Style III and the Tassilo-Liutpirch Chalice. *Current Swedish Archaeology* 29, 123-154.
<https://doi.org/10.37718/CSA.2021.11>
- Petersen, J. 1919. *De norske vikingesverd – En typologisk-kronologisk studie over vikingetidens vaaben*. Kristiania (Oslo): Jacob Dybwad.
- Petersen, J. 1928. *Vikingetidens smykker*. Stavanger: Stavanger Museum.

- Petersen, J. 1951. *Vikingetidens redskaper*. Oslo: Dybwad.
- Philippsen, B., Feveile, C., Olsen, J. and Sindbæk, S.M. 2022. Single-year radiocarbon dating anchors Viking Age trade cycles in time. *Nature* 601, 392-396. <https://doi.org/10.1038/s41586-021-04240-5>
- Price, N. 2014. Ship-Men and Slaughter-Wolves. Pirate Politics in the Viking Age. In: S. Amirell and L. Müller, eds. *Persistent Piracy – Maritime Violence and State Formation in Global Historical Perspectives*. London: Palgrave Macmillan, 51-68.
- Price, N. 2016. Pirates of the North Sea? The Viking Ship as Political Space. In: L. Melheim, H. Glørstad and Z.T. Glørstad, eds. *Comparative Perspectives on Past Colonisation. Maritime Interaction and Cultural Integration*. Sheffield: Equinox, 149-176.
- Price, N. 2019. *The Viking Way – Magic and Mind in Late Iron Age Scandinavia*. 2nd edition. Oxford: Oxbow Books.
- Price, N. 2020. *The Children of Ash & Elm – A History of the Vikings*. London: Allen Lane.
- Ramskou, T. 1965. Stil F – En skitse. *Aarbøger for nordisk Oldkyndighed og Historie* 1963, 100-118.
- Roth, H. 1973. *Die Ornamentik der Langobarden in Italien – Eine Untersuchung zur Stilentwicklung anhand der Grabfunde*. Antiquitas 15. Bonn: Rudolf Habelt Verlag GmbH.
- Rygh, O. 1885. *Norske Oldsager*. Christiania (Oslo): Alb. Cammermeyer.
- Salin, B. 1904. *Die Altgermanische Thierornamentik*. Berlin: A. Asher & Co.
- Salin, B. 1922. Fyndet från Broa i Halla, Gotland. *Fornvännen* 17, 189-206.
- Schjødt, J.P. 2020. Theoretical Considerations. In: J.P. Schjødt, J. Lindow and A. Andrén, eds. *The Pre-Christian Religions of the north: History and Structures*. Turnhout: Brepols, 1-39.
- Sheppard, H.J. 1962. The Ouroboros and the Unity of Matter in Alchemy: A Study in Origins. *Ambix* 10(2), 83-96. <https://doi.org/10.1179/amb.1962.10.2.83>
- Shetelig, H. 1920. “Vestfoldskolen”. In: A.W. Brøgger, H. Falk and H. Shetelig, eds. *Osebergfundet*. Vol. 3. Kristiania (Oslo): Universitetets Oldsaksamling, 1-339.
- Sindbæk, S.M. 2005. *Ruter og rutinisering – vikingetidens fjernhandel i Nordeuropa*. Copenhagen: Multivers Academic.
- Sindbæk, S.M. 2007. Networks and nodal points: the emergence of towns in early Viking Age Scandinavia. *Antiquity* 81(311), 119-132. <https://doi.org/10.1017/S0003598X00094886>
- Sindbæk, S.M. 2011. Urban Crafts and Oval Brooches – Style, Innovation and Social Networks in Viking Age Towns. In: Svavar Sigmundsson, ed. *Viking Settlements and Viking Society – Papers from the Proceedings of the Sixteenth Viking Congress, Reykjavík and Reykholt, 16-23 August 2009*. Reykjavík: University of Iceland Press, 409-423.

- Sindbæk, S.M. 2012. Enter the Gripping Beast. Innovations and actor-networks in Viking Age towns. In: R. Berge, M.E. Jasinski and K. Sognnes, eds. *N-TAG Ten. Proceedings of the 10th Nordic TAG conference at Stiklestad, Norway 2009*. Oxford: Archaeopress, 129-135.
- Sindbæk, S.M. 2023. Excavating Ribe's networks. In: S.M. Sindbæk, ed. *Northern Emporium. Vol. 2. The networks of Viking-age Ribe*. Moesgård: Jutland Archaeological Society, 9-19.
- Skibsted Klæsøe, I. 1999. Vikingetidens kronologi. En nybearbejdning af det arkæologiske materiale. *Aarbøger for nordisk Oldkyndighed og Historie* 1997, 89-142.
- Skibsted Klæsøe, I. 2002. Hvordan de blev til. Vikingetidens stilgrupper fra Broa til Urnes. In: K. Høilund Nielsen and J. Vellev, eds. *Nordeuropæisk dyrestil 400-1100 e.Kr.* Hikuin 29. Moesgård: Hikuin, 75-104.
- Söderberg, S. 1905. Om djurornamentiken under folkvandringstiden. *Antikvarisk tidskrift för Sverige* 11(3), 1-93.
- Steinsland, G. 2005. The late Iron Age Worldview and the Concept of "Utmark". In: I. Holm, S.M. Innselset and I. Øye, eds. *'Utmark': The Outfield as Industry and Ideology in the Iron Age and the Middle Ages*. UBAS 1. Bergen: Department of Archaeology, University of Bergen, 137-146.
- Steuer, H. 1994. Zur Herleitung des nordischen Greiftierstils. In: H. Uecker, ed. *Studien zum Altgermanischen. Festschrift für Heinrich Beck*. Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 11. Berlin: De Gruyter, 648-676.
- Stolpe, H. and Arne, T.A.J. 1912. *Graffältet vid Vendel*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Terp-Schunter, M. 2018. *In signo crucis. Eine vergleichende Studie zu den alamannischen und langobardischen Goldblattkreuzen*. Tübinger Forschungen zur historischen Archäologie 8. Büchenbach: Dr. Faustus.
- Wamers, E. 1985. *Insularer Metallschmuck in wikingerzeitlichen Gräbern Nordeuropas. Untersuchungen zur skandinavischen Westexpansion*. Neumünster: Wachholtz Verlag.
- Wamers, E. 1998. Insular Finds in Viking Age Scandinavia and the State Formation of Norway. In: H.B. Clarke, M. Ní Mhaonaigh and R.Ó Floinn, eds. *Ireland and Scandinavia in the Early Viking Age*. Dublin: Four Courts Press, 37-72.
- Wamers, E. 1999. Zwischen Salzburg und Oseberg. Zu Ursprung und Ikonographie des nordischen Greiftierstils. In: U. von Freeden, U. Koch and A. Wiczorek, eds. *Völker an Nord- und Ostsee und die Franken. Akten des 48. Sachsensymposiums in Mannheim vom 7. bis 11. September 1997*. Bonn: Dr. Rudolf Habelt GmbH, 195-228.
- Wamers, E. 2009. Behind Animals, Plants and Interlace: Salin's Style II on Christian Objects. In: J. Graham-Campbell and M. Ryan, eds. *Anglo-Saxon/Irish Relations before the Vikings*. Proceedings of the British Academy 157. Oxford: Published for the British Academy by Oxford University Press, 151-204.

- Wamers, E., ed. 2019. *Der Tassilo-Liutpirc-Kelch im Stift Kremsmünster. Geschichte – Archäologie – Kunst*. Frankfurt: Schnell und Steiner.
- Wilson, D.M. 1995. *Vikingatidens konst*. Signums svenska konsthistoria 2. Lund: Signum.
- Wilson, D.M. 2001. The earliest animal styles of the Viking Age. In: L.O. Larsson and M. Müller-Wille, eds. *Tiere. Menschen. Götter. Wikingerzeitliche Kunststile und ihre neuzeitliche Rezeption*. Göttingen: Vandenhoeck & Ruprecht, 131-156.
- Wilson, D.M. 2008. The Development of Viking Art. In: S. Brink and N. Price, eds. *The Viking World*. London: Routledge, 323-338.
- Wilson, D.M. and O. Klindt-Jensen. 1966. *Viking Art*. London: Allen & Unwin.
- Ögren, A., Hedenstierna-Jonson, C., Ljungkvist, J., Raffield, B. and Price, N. 2022. New institutional economics in Viking studies. Visualising immaterial culture. *Archaeological Dialogues* 29, 172-187. <https://doi.org/10.1017/S138020382200023X>
- Ørsnes, M. 1966. *Form og stil i Sydskeandinaviens yngre germanske jernalder*. Copenhagen: Nationalmuseet.
- Åberg, N. 1943. *The Occident and the Orient in the Art of the Seventh Century – The British Isles*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Åberg, N. 1945. *The Occident and the Orient in the Art of the Seventh Century – Lombard Italy*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Åberg, N. 1947. *The Occident and the Orient in the Art of the Seventh Century – The Merovingian Empire*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.