To Bring Back Some Eagleness to Eagles

On Bird Worldings in the Bronze Age

Joakim Goldhahn 🗅

This paper explores multispecies relations in the Bronze Age in northern Europe in general, and in particular some of the intra-actions between humans and eagles. The paper is a call to embrace eagles as co-actors in unfolding human worldings. It demonstrates that more than one relationship and intra-action unfolded between humans and eagles during the Bronze Age; some were male-gendered and others were revealed as significant for females and children. It is argued that to be able to detect these and similar complex relationships between humans and others-than-humans in the past, we need to try to seek more enmeshed ways to assemble data which combine, contrast, and explore the complexity of different strands of evidence.

Keywords: ornithoarchaeology, assemblage theory, burial archaeology, sympathetic magic, Bronze Age, eagles

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The eagles! The eagles! The eagles are coming!

J.R.R. Tolkien

In the wake of the secondary product revolution

In the last couple of years, I have been a birder in disguise. Inspired by Haraway (2008), Armstrong (2007, 2018) and other studies of multispecies intraactions (e.g. Taylor 2013; Pilaar Birch ed. 2018), I have gone underground, working clandestinely on a monograph about Birds in the Bronze Age; a study focusing on the intriguing relationships between humans and birds over the period 2350-530/520 BCE in today's Denmark and the southern parts of Norway and Sweden (Goldhahn 2019). This has been an enthralling experience. In the beginning, I learned about how humans had interacted with birds (Ericson & Tyrberg 2004; Serjeantson 2009; Dirrigl Jr et al. 2020). By the end, however, I was exploring how avian creatures had intra-acted with human beings (e.g. Barad 2007, see Winge 1904: Hollmann 2005; Overton & Hamilakis 2013; Johansson 2012, 2014); how birds' own being contributed to the unfolding of this-worldly grounded understandings of people's 'worldings'. This is a notion I adopt from Phillipe Descola (2010, 2013) to define, embrace and encompass people's everyday practices as well as their cultural beliefs, costumes, ritualized practices, cognitions, symbolism, ideologies, cosmologies, and ontologies. More than once, birds' own birdness dared me to explore the unknown, to walk a little further out on thin ice, dance a little, to challenge myself and the naturalism that I have been thought to harbour as an archaeologist (e.g. Thomas 2004; Descola 2013); taunting me to encounter my preconceptions about different bird beings, about myself and my perspectiveness (e.g. Viveiros de Castro 2012). It has been a humbling odyssey that changed my mind and heart into a quest to try to meet these other-than-humans on their terms; to be able to embrace the *crowness* of crows; the *owlness* of owls; the *ghostness* of goshawks, or, as in the present case study; to bring back some eagleness to eagles.

Not surprisingly, the more I learned about birds, the less I felt I knew about the Bronze Age. This exclusive research community has paid very little attention to avian creatures (Goldhahn 2019:Chapter 1). Viewed in the enticing light of domesticated fishers (Berntsson 2005), herders (Kveiborg 2017; Armstrong 2018) and farmers (Sjögren ed. 2006; Bech et al. 2018), smiths (Sörman 2018) and ritual specialists (Goldhahn 2007), warriors (Horn & Kristiansen 2018) and traveling chiefs (Kristiansen & Larsson 2005), or lately (sigh), 'Proto-Vikings' (Ling et al. 2018), birds seem to vanish from the air. The secondary products revolution seems not only

to have domesticated and refined farming communities in the Bronze Age (e.g. Sherratt 1981; Greenfield 2010; Tornberg 2018), it also seems to entangle the minds of concurrent Bronze Age researchers, like the old me, who tried to get a grip on this epoch. In short: the naturalism and structural Marxism which still seem to rule contemporaneous Bronze Age research (e.g. Kristiansen 1998; Earle 2002; Kristiansen & Larsson 2005; Earle & Kristiansen ed. 2010; Ling et al. 2018) have had very little, or close to nothing, to say about bird worldings in the Bronze Age. This has now started to change (Goldhahn 2019).

Assembling Bronze Age birds

One reason for the near non-existence of studies of Birds in the Bronze Age can be found in how researchers choose to assemble their material (e.g. Lucas 2012; Fowler 2013; Hamilakis & Jones 2017). The increasingly specialized field of research of today has a mounting tendency to rely on analyses of a single strand of evidence. The popular headline archaeology of aDNA springs to mind, which so far, despite solving riddle after riddle, has had very close to nothing to add to the cultural and archaeological contexts from which the data are gathered. The more we learn about the origin and spread of Haplogroup R1a or R-M420, the less we seem to care about the actual people and their peculiarities, such as, for example, their quest to take omens from birds and other other-than-human beings (Goldhahn 2019). That said, this also applies to related specialized fields of research where specialists present new studies of special rock art for other rock art specialists, settlement studies made by and for settlement specialists, and more of the same. Needless to state, similar in-depth studies have their value, of course, but they seldom let us learn new things about past worldings. To close in on the latter notion we need more enmeshed analyses of different strands of evidence (Figure 1). A way to phrase this is to say that if we want to say something new and exciting about the past, in general, we ought to try to assemble our source material and data in new and more exciting ways (Deleuze & Guttari 2004; Bennet 2010). This is especially true if we want to challenge our situated archaeological beings and the naturalism that constituted the foundation of our discipline and archaeological praxis (Thomas 2004; Goldhahn 2019, e.g. Viveiros de Castro 2012; Descola 2013). In this article, I will try to demonstrate the latter by analyses of eagleness, and how this can contribute to our understanding of Bronze Age worldings.

But first, different strategies for assembling various source materials can best be unfolded in different readings of the notion of *assemblage*. In plain

English, following the Oxford English Dictionary, 'to assemble' means 'the joining or union of two things' or 'a bringing together'. Another way to understand this notion originates from the French word agencement. Following the Le Robert Collins Dictionary, this notion means 'to arrange, to lay out, to piece together'. Nail argues that the English notion suggests a passive harmonious entity, while the latter implies an active heterogeneous construction; the former connotes essentialism, and the latter suggests an event that is changeable and possible to arrange differently (Nail 2017:22). The various readings of the notion of assemblage can be compared with the differences between an organ and a machine.

An assemblage, put together as a harmonious unit, following the English notion of assemblage, functions like organs working together to constitute a homogeneous entity, like a human body. One part does not survive without the other: 'The unity of an organic whole is given in advance of the emergence of the parts and subordinates the parts to an organizing principle or spirit' (Nail 2017:23). This can be compared with archaeological analyses which start and stop with an already-defined corpus of materiality, like rock art, or aDNA. This way of defining an assemblage can be compared to a jigsaw, a commonly used metaphor for the archaeological practice, which may consist of ten or a million pieces. It may or may not be hard to solve, but its final result is already a given. A piece from a jigsaw does not necessarily fit into another, because a jigsaw can only be put together and solved in a predicted way. The past, however, is unpredictable. Put simply, an assemblage put together as an already-defined body or corpus is restricted by our modern definitions and associated limitations; in the worst-case scenario, it is built on illusive similarities between entities gathered and unfolded by our worlding: naturalism.

The French notion implies that an assemblage is more heterogeneous, non-hierarchical, and relational, allowing us to assemble, dismantle, and reassemble a machine, or the specific materialities we study, in different fashions and directions. Different parts of a machine are not restricted to a specific entity, single function, or aim; they can be altered and changed into different machines, serving different things and purposes in different contexts (Nail 2017:22–24). Parts from one machine can be used to fix another. These assemblages are also transient because they are never fixed in time and space, always in flux, in a process of becoming (Crellin 2017:113, e.g. Barad 2007). An assemblage then constitutes what Deleuze and Guattari (1994:16) – paradoxically – have labelled 'a fragmentary whole'. It can be compared to a drystone wall where 'everything holds together only along diverging lines' (Deleuze & Guttari 1994:23). Stones can be assembled into a stone wall but also dismantled and reassembled in different forms and shapes, over and over again, forming new and different entities. Deleuze

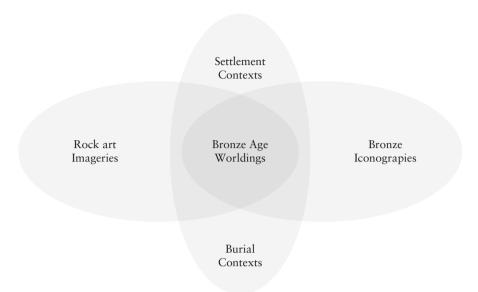


Figure 1. A tentative model of how to assemble source materials in more challenging ways to try to capture possible Bronze Age worldings. From Goldhahn 2019.

and Guattari (2004:98) define these processes as 'territorialization' and 'deterritorialization'. *Differentiation* is the key because 'new things happen as elements are assembled and brought into relation' (Jones 2017:87). These processes do not only enable different stone walls or entities to appear, but they also allow us to move between multiple nested scales in approaching the past as well as the present (Delanda 2017:17, see also Nail 2017:28–30; Jones 2017:87). Each component in an assemblage then possesses the ability to be a part of different assemblages, conjoining, and enmeshing different analytical scales with each other (Crellin 2017:113–114). An assemblage then carries the possibility of being recombined in different ways. It might even beg to be dismantled and reassembled in another way, and by doing so, it also helps us to challenge our perceptions and worldings. To quote Jane Bennett (2010:23, cited in Crellin 2017:113), an assemblage then becomes: 'ad hoc groupings of diverse elements, of vibrant material of all sorts. Assemblages are living, throbbing confederations'.

An often overlooked advantage to approaching an assemblage from the French vantage point is that it highlights the necessity to rethink the acts and processes we have employed to assemble material to understand the past (Figure 1). The action of assembling explicitly allows us to create, explore, and search for alternative ways to approach how different materialities might have been knotted or nested together differently in different contexts, as well as the similarities *and* differences in and *between* assemblages.

What counts then is not the entities *per se*, like 'rock art' and 'settlement archaeology', but the way these components and assemblages *relate* and *intra-act*. A jigsaw is a jigsaw, and a stone is a stone, but a drystone wall can be dismantled and reassembled in many different ways.

A more dynamic understanding of assemblages provides us with the opportunity to explore how heterogeneous coexisting and relational fragments of the past might have intra-acted in unfolding many altered meanings and worldings in the past – as well as how they partake in unfolding different worldings in the present. As I hope to demonstrate in the following, this encourages an active search for bringing together an assemblage in different ways to highlight diversity, contradictions, contrasts, variations, and complexity.

In this scenario, a similar approach to past worldings should not only be perceived as a pursuit for a more 'holistic' approach to the past, since these tend to start and end in already defined preconceptions and representations that are grounded in our situated beings. It might be true, as in the famous saying, that the sum is greater than the parts, but in this article, the process of assembling also involves a clear shift from studies of how humans used material culture (see Armstrong Oma and Goldhahn, this volume), to try to unfold how other-than-human beings participated in unfolding different Bronze Age worldings. Examples are different human-dog-sheep-worldings (Armstrong Oma 2018) or human-bird-worldings (Goldhahn 2019). The aim is to embrace a relational ontological study that decentres human actions in the past in a way which allows us to reveal how other-than-human beings might have contributed and intra-acted with humans in unfolding their worldings. Such analysis urges us to focus on other-than-humans and try to reveal how different aspects of their beings are unfolded in different social and cultural contexts (Figure 1). Assembling birds from the Bronze Age through such a perception of form then becomes an ongoing open-ended project – a process of becoming (e.g. Barad 2007) – with the potential to unfold both new past worldings as well as new present worldings (Goldhahn 2019). This brings us to the subject of this paper: eagles and how we can bring back some of their eagleness.

Eagles in the Bronze Age

Eagles are majestic cunning beings (Figure 2), famous for their splendid sight. They are powerful, daring, skilful hunters placed at the top of the food chain. Yet they are playful. They are graceful and evocative but also valiant and bold; this is why eagles are often symbols of warriors and male authorities, and associated with prominent gods such as Zeus, Odin, and



Figure 2. Eagle: Majestic: Bold: Daring: Powerful: Playful: Graceful: Deadly. Drawing of a white-tailed eagle by Nils Friberg, published with kind permission of Ami Friberg.

other key deities (Tillhagen 1978; Collar et al. 2007; Johansson 2012, 2014; Cocker 2013). But how did this play out in the Bronze Age?

To try to capture how Bronze Age people related to eagles and their eagleness, I started to assemble depictions of bird iconography in bronze media (Figure 3). Here, some naturalists have argued that bird figures depicted with beaks turned downwards represent eagles or some other kind of raptors (e.g. Althin 1945; Kaul 1998). Almost all similar depictions in bronze media are found on razors (Goldhahn 2019:97–134). I then turned to faunal material from excavated settlements, but here eagles seem to be quite rare findings (Goldhahn 2019: 135–152). The exception which confirms the rule is the fascinating Apalle settlement in Uppland, where eagles of various



Figure 3. Depictions of possible eagles in bronze and stone media. From Kaul 1998 and www. hallristning.se, published with kind permission of Flemming Kaul, and Andreas Toreld and Tommy Andersson.

kinds have been discovered together with a total of 36 avian species (Ullén 2003; Ericson & Tyrberg 2004). I also found that eagles are quite elusive in stone media, which seem to be dominated by depictions of big waders, ducks, and woodland birds (Goldhahn 2019:192–234). One fascinating exception is rock art panel Tanum 446, where three engraved eagles seem to rest on antlers of phallic stags, identified as red deer (Figure 3).

All eagles depicted in bronze and stone media are associated with male-attributed objects and imagery (Figure 3). The presence of bronze razors, for example, is often taken as solid evidence of a male-attributed burial (e.g. Thrane 1986; Draiby 1989; Kaul 1998; Kristiansen 1998; Bergerbrant 2007, cf. Thedéen 2005; Goldhahn 2019), sometimes associated with the beautification of warriors and chiefs (Frieman et al. 2017). This engendered

context has also been suggested to be true for figurative rock engravings in northern Europe, where depicted anthropomorphic beings attributed with weapons and male genitals are far more common than female-attributed figures (e.g. Goldhahn & Fuglestvedt 2012; Horn 2017). This is manifested on Tanum 446, the only rock art panel in North Europe where we find well-defined engravings of eagles (Figure 3). This panel is dominated by depictions of warriors and boats. Some of the former seem to walk in processions, maybe depicting some kind of initiation practices (Coles 2003). The depictions of eagles in bronze and stone seem to confirm an association between eagles and male engendered symbols that many naturalists have been known to embrace (Figure 3). However, this engendering can be disputed and even contested if we follow Figure 1 and assemble our material in more challenging ways, which, in this case, also includes the presence of birds from Bronze Age burial contexts.

Eagles for the dead

Eagles are among the most commonly identified bird species in Bronze Age burials in northern Europe (Table 1); or more specifically in this case, Denmark and the southern parts of Sweden and Norway (e.g. Goldhahn 2019). A curious thing with these burials, as we will see in the following, is that only one of the deceased deposited with eagle remains could be assessed as male: Brandstrup at Tilst from Jutland. However, this attribution is based on analogical reasoning in relation to objects found in burials (e.g. Thrane 1986; Draiby 1989; Bergerbrant 2007), rather than on osteological analysis (Tables 1 & 2). Similar analogies are always tenuous (e.g. Thedéen 2005), particularly in this case, though many burials with finds of birds from the Bronze Age show the presence of both male and female-attributed objects. This is the case, for example, in the famous Hvidegård I and Maglehøj burials in Zealand, Denmark (Goldhahn 2009, 2012, 2019). Caution is prescribed. With this caveat, here follows a short presentation of known burials with eagle bones from North European Bronze Age contexts.

ABBEKÅS IN SCANIA

A remarkable find of eagle talons comes from a burial at Abbekås, situated on the southern shore of Scania in Sweden, where Folke Hansen (1890–1951) excavated a damaged mound in the early 1920s (Hansen 1938). At the time, it had a diameter of 12m and was 1m in height (Figure 4). Despite the modest size of the mound, it covered no less than nine different burials, containing at least eighteen individuals. The barrow revealed a gallery grave which probably dates to the Early Bronze Age (EBA), here

2350–1600 BCE. It was 2.4m long and 1m wide and was dug down into the original ground surface. Inside, Hansen found traces of at least five inhumation burials, one with traces of corroded bronze objects, suggesting that the cist was used for burials during the last phase of EBA and/or the Middle Bronze Age (MBA), here 1600–1100 BCE (see Bergerbrant et al. 2017; Tornberg 2014:12).

Beneath the gallery grave, an inhumation burial was found. It was partly destroyed – or defaced – when the former monument was built (Hansen

Table 1. Taxa and number of identified bird bones from a selection of Bronze Age burial contexts from North Europe. An X marks identified taxa, a smaller x marks uncertain or alternative taxa. Burials with eagle bones or talons are marked with grey. Source: Goldhahn 2019.

Taxa Accipiter gentilis (Northern goshawk) Accipitridae (Eagle sp.) Anas platyrhynchos (Mallard) Anser sp. (Goose) Aquila chrysaetos (Golden eagle) Aythya fuligula (Tufted duck) Branta bernicla (Brant) Caprimulginae sp. (Nightjar) Circus cyaneus (Hen harrier) Circus cyaneus (Hen harrier) Circus cyaneus (Hen harrier) Circus cyaneus (White-throated dipper) Corvus sp. (Crow) Corvus sp. (Crow) Corvus corax (Raven) Corvus corax (Raven) Corvus monedula (Jackdaw) Alaieetus albicilla (White-tailed eagle) Are godinary (SwE) Are g	tive taxa. Duriais with eagle bolies of ta	10115	arcı	inai	KCU	witi	11 51	. y . 0	Our		3010	iiiai	111 2	219.
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	Surnia ulula (Northern hawk owl)				Χ									
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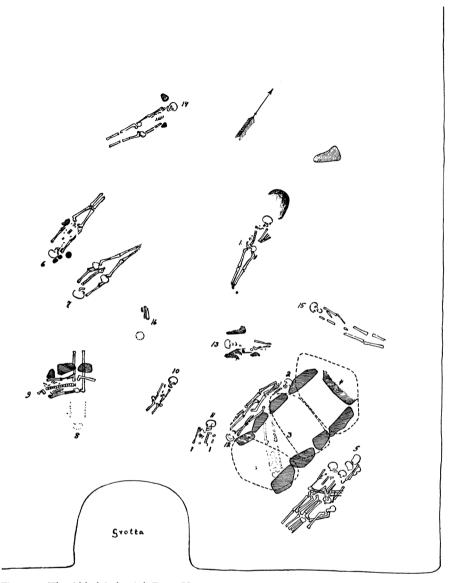


Figure 4. The Abbekås burial. From Hansen 1938.

1938:58); a practice that is very rare in this part of the world (Goldhahn 2015, 2019). The deceased individual, assessed as an adult woman, was buried in a wooden cist. Near her right shoulder, an 11.2cm long bone pin was found together with four talons from an eagle (Figure 5) – either a golden eagle or a white-tailed eagle. The pin might indicate that the talons were kept in a bundle like the more famous examples from Hvidegård I and Maglehøj (Goldhahn 2009, 2012, 2019).

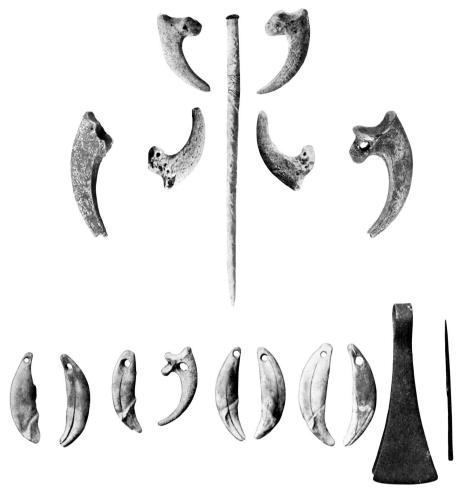


Figure 5. Above, the eagle talons from Tåby in Östergötland (left), Abbekås in Scania (middle) and Kildehuse II on Fuen (right); below: the bronze objects, dog or wolf teeth, and an eagle talon from Brandstrup at Tilst on Jutland. After Goldhahn 2019. Not to scale.

BRANDSTRUP IN TILST, JUTLAND

The talons of eagles from Abbekås have not been altered in a way that would clearly suggest their use as ornaments, ritual paraphernalia, or talismans. Consequently, it is difficult to discern their intended use. An example that illuminates this point originates from a Late Bronze Age (LBA, here 1100–530/20 BCE) cremation burial from Brandstrup in Tilst sogn on Jutland in Denmark, dated to 1100–950/920 BCE (Broholm 1946:69–70, Burial No 800). The burial was discovered in the late nineteenth century and the information concerning the context is very limited. We know that

the urn was 23cm in height and contained bronze tweezers and an awl. These objects usually indicate male gender, but, as already argued above, such assessment is not reliable in the present context (see Goldhahn 2019). Among the cremated bones, a perforated talon from an eagle and seven perforated dog or wolf teeth were found (Figure 5). As usual during the LBA, the bronze objects had not been cremated with the deceased. The same applies to animal remains. This suggests that the talons and teeth were placed on a string and used as a talisman, perhaps to protect the deceased from evil forces that were thought to have caused her death.

BREDARÖR ON KIVIK IN SCANIA

A bone assessed as a possible eagle was found in Bredarör on Kivik (Table 1), but it has not been analysed with the radiocarbon method, so its age is uncertain (Goldhahn 2013, 2019).

KILDEHUSE II FROM FUEN

An LBA urned cremation with a perforated talon from a white-tailed or golden eagle originates from Kildehuse II at Odense, situated on the island Fuen in Denmark (Runge 2008). Altogether, forty-two urn burials were discovered at the site, which was placed between two older burial mounds from MBA. Close to the northern mound, two rows of cooking pits were found, and the archaeologist in charge, Mads Runge, suggests that they were used for cooking and feasting as a component of burial ceremonies during LBA. A cult house, 4 by 1.5m, facing south, adjoined the southern mound; it may have been used for *lit de parade* of the deceased members of the lineage and/or extended family that used the burial place in LBA (Runge 2010).

The cremation burial of interest was found on the northern side of the southern burial mound and is dated to 800–530/520 BCE. It consists of a 17 x 12 cm sized urn decorated with cross markings. The urn was dug down into the remains of the pyre where the deceased had been cremated. The finds consist of some bronze objects that appear to have been on the pyre with the deceased – a rather uncommon practice for this era and area (see Thrane 2004). The objects, which were found both outside and inside the urn, consist of a 5cm long fragmented bronze bracelet, a fragmented ear spoon of bronze that was 8cm long, some small bronze fragments, and a raptor talon that had been perforated with a flint burin, producing a small hole with a diameter of 2mm, so that it could be worn as an amulet (Figure 5). Some of the objects appear to have been destroyed and fragmented intentionally (Runge 2008:164–165, 2010), which is a very uncommon practice in burial contexts from the Bronze Age. Once again, the strange assemblage of fragmented objects might suggest that they once belonged to

a bundle of ritual paraphernalia similar to the more famous cases from Hvidegård I and Maglehøj.

The cremated bones are thought to belong to a human somewhere between 10 and 15 years of age (Runge 2008:164). The talon of the raptor measures 3.5 x0.5cm and is slightly burnt (Figure 5), indicating that the youth was wearing it during her cremation.

TÅBY FROM ÖSTERGÖTLAND

Another find of an eagle talon comes from Tåby on Vikbolandet in the eastern part of Östergötland in Sweden; it is determined as a talon from a white-tailed eagle (Hörfors 2006). The talon (Figure 5) was found together with the cremated bones of a woman in an urn of rustic ware of Otterböte type. The excavator Olle Hörfors suggests that the urn dates to 950/920–800 BCE, which might be the case. However, there is little evidence that the ceramic chronology in this part of the world can be used for such secure dating. Therefore, it is here date it more generally to LBA.

The urn had been placed in a pit on top of some remains of the pyre, with a small stone forming the lid. The urn contained 243 g of cremated bones, and, according to the analyses, the buried woman was an adult between 18 and 44 years old when she died.

SKEDALA, HALLAND

Our last example of eagle remains found in a Bronze Age burial comes from a mound at Skedala in Snöstorp parish in Halland, southwest Sweden (Westergaard 1987). The mound, which was partly destroyed by agriculture, was 12m in diameter and 1m high when Bengt Westergaard excavated it in 1986. The mound covered four features: two boat-shaped geoglyphs, a round concentrically built stone arrangement, and a rectangular feature that resembles a house in shape (Figure 6). All features contained human remains, some from more than one individual. A minimum of eight individuals was documented, and the presence of human bones in the remaining soil of the mound indicates that farmers could have destroyed several other burials. The radiocarbon dating of the features shows that the site was used for burial rituals for at least 400 years. Through the dating of the specific features, it is clear that these were first created as freestanding monuments. Some of the burial structures were several hundred years old when the mound was raised to conceal them (Westergaard 1987).

The burial of interest here, A₃₅, was an urn burial found just northeast of the rectangular stone arrangement. In the middle of the latter a pit was found with the remains of a cremated adult woman aged between 40 and 60 years old (A₄). The urn burial with eagle bones (A₃₅) was placed on a layer of charcoal and burnt bones, which have been interpreted as the

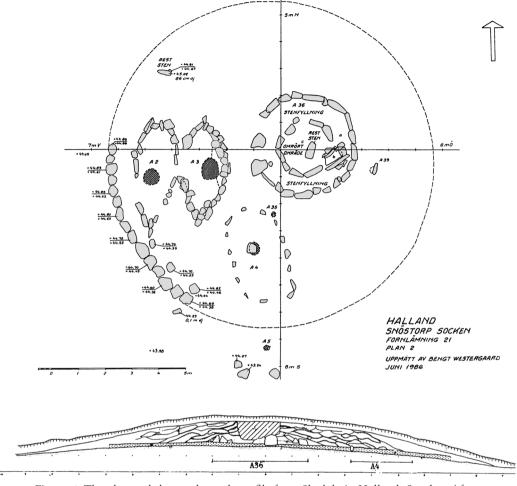


Figure 6. The plan and the north-south profile from Skedala in Halland, Sweden. After Westergaard 1987.

remnants of the pyre (Lundborg 2007:73). Inside and under the urn, bones from a young child were found. Based on the size of the bones, it appears that the child was between two and three years old at death. The identified bird bones were cremated and originate from a golden eagle (Table 1), and parts of the wings, legs, and phalanges from the feet were identified (Lundborg 2007:51).

From the available sources, it seems reasonable to view the death of the young child as triggering the final construction of the mound, sealing the other burial structures from the world (cf. Westergaard 1987; Lundborg 2007:69–84). It appears that the bird associated with the child might have acted as a psychopomp, intended to guide the young toddler to the far side.

Discussion

The presented burials with faunal remains of eagles have followed a research tradition with which any advocate of naturalism should feel familiar. But how do we add some eagleness to the picture? It is far too easy to interpret the presence of eagle bones and talons in Bronze Age burials as a symbolic representation of the magnificent bird (Figure 2; e.g. Hansen 1938; Westergaard 1987; Hörfors 2006; Runge 2008), but this would be to deprive these eagles of an agency of their own (cf. Winge 1904; Hollmann 2005; Overton & Hamilakis 2013; Johansson 2012, 2014; Goldhahn 2019). It is important to underline that eagle bones from Bronze Age burial contexts contest the common perception of eagles as a symbol of masculine powers (cf. Figure 3). Instead, these beings are almost without exception associated with women, young adults, and children (Table 2). How can we comprehend this? What should guide our searchlight?

Here I would like to present another model (Figure 7), which might be advantageous in our mounting quest to bring eagleness back to eagles. It rests upon a conviction that birds have agency; that these beings have a will-power and act on their own; that eagles possess their perspectivism, which allows them to exploit the world in a way that sanctions them to be greeted and acknowledged as meaningful moral beings (Goldhahn 2019).

This model (Figure 7), which aims to guide us to a deeper understanding of Bronze Age worldings, rests on three strands of evidence. The first of these I have termed *the birdness of birds*. This strand explores birds' 'biological' behaviour and argues that different avian creatures have an agency of their own and capacity to engage in meaningful relations with human beings. The second strand, *North European Birdlore*, is believed to be built and moulded on the first strand, the birdness of birds. It is easy to comprehend how strands 1 and 2 are enmeshed, though no birdlore can be formulated if it is not built on the agencies of particular bird species, their appearance, and *Geist* (a birder would say *giss*, Macfarlane 2017: 194). No one that has encountered a white-tailed eagle in real life would describe it

Table 2. Burials with identified eagle bones from northern Europe. Source: Goldhahn 2019.

Place	Sex and age assessments	Identified bird
Abbekås, Scania (SWE)	Adult female	Eagle
Bredarör on Kivik, Scania (SWE)	Adolescents	Eagle
Kildehuse II, Fuen (DK)	10-to-15-year-old child	Eagle
Tåby, Östergötland (SWE)	18-to-44-year-old woman	White-tailed-eagle
Tilst at Brandstrup, Jutland (DK)	'Tweezers and awl'	Eagle
Skedala, Halland (SWE)	2-to-3-year-old child	Golden Eagle

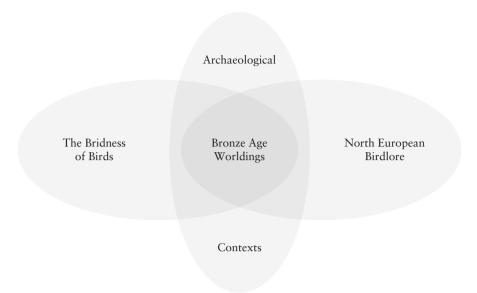


Figure 7. A tentative model of how to unfold bird worldings in the Bronze Age and beyond. From Goldhahn 2019.

as 'meek'. Birds are not only good to think with, they also intra-act (e.g. Barad 2007, see Winge 1904; Hollmann 2005; Overton & Hamilakis 2013; Johansson 2014; Goldhahn 2019), and their actions in the world are unfolded through human birdlore. The last strand is what makes the model momentous for archaeology – the importance of archaeological contexts. Archaeology will never be able to contribute to humanistic or social sciences without our craft and ability to explore the multiplicities in human expressions, and the results of multispecies intra-actions; a key position in our quest, imploding on our archaeological praxis and its *factfulness* (e.g. Rosling et al. 2018). Factful explorations of the find contexts of different material expressions and remains of other-than-human beings are therefore chief reasons to explore other ways to know the world in the past, other people's worldings.

From eagles to eagleness

According to north European birdlore, eagles were thought to be immortal. They are one of the few birds with documented *noa names*, which meant that it was taboo to call an eagle by its right name. In doing so, you would attract its attention, endangering your livestock and, as we will see in the following, the small inhabitants on the farm. Instead, eagles were ad-

dressed in euphemisms such as 'spännaren' – meaning 'the one that soars' (Svanberg 2013:161–162). Of course, you could use this to your benefit. By assembling eagle feathers and mixing them with those from other birds, an eagle would emerge and kill the owner of the specific feathers (Magnus 2010:870). Resting on eagle feathers could facilitate the birth of a child (Tillhagen 1978:221), but it would prolong the death-struggle of a dying person (Hagberg 2015:102).

Nevertheless, the unfolded relationship between deceased children, young adolescents, and females with eagle talons or bones in North European Bronze Age contexts is clear (Tables 1 & 2), which contests our predilection to associate eagles with warriors, male authorities and prominent male divinities (e.g. Tillhagen 1978; Collar et al. 2007; Johansson 2012, 2014; Cocker 2013). The relationship to women and children is strengthened and manifested through bones from other bird species found in contemporary Bronze Age burial contexts (Table 1), such as Skultorp in Västergötland, Bredarör on Kivik and Simris in Scania, Hvidegård I and Maglehøj on Zealand, Aalstrup Hede and Stagsrup from Jutland, and Molkhaug from Austre Bore from Rogaland (Goldhahn 2019:Chapter 6). The mentioned association to females and children is also reflected in birdlore from northern Europe, which is grounded in how eagles intra-act – their *eagleness*.

In the air, eagle couples often fly in pairs, playing in the wind and sometimes in free fall, hanging onto each other's talons. The bond of couples is usually lifelong. They are skilful predators. Bonded pairs often hunt together and – importantly in this context – eagles show great affection and care for their offspring (Magnus 2010:874–875; Nilsson 1858(I):48–53). For instance, Olaus Magnus (1490–1557) writes that eagles compassionately wrapped their eggs with fur from their prey, in this case, hares, rabbits, and foxes. He also claimed that 'eagles love their young so highly, that if you shoot at them with arrows, they use themselves as a shield against the shots' (Magnus 2010:874, transl. here).

During historical times, hunters allegedly used this devotion to their advantage. They would climb up to the eagle nest and block the rectums of the hatchlings so that they would stop eating and emaciate. The apprehensive parents would become so eager to feed their chicks that a hunter could collect a bounty from all the prey brought to the nest by the concerned parents, including deer, rabbits and hares, wood fowl, geese, ducks, pikes, and other fish. Magnus states that 'it is calculated that a hunter can earn more on two eagle hatchlings than a farmer can do on two homesteads' (Magnus 2010:875, transl. here). Whether or not this is true, disoriented individuals have survived by stealing food from nests of eagles.

Later birdlore from the eighteenth century and onwards asserts that eagles were a real threat to toddlers and young children (Figure 8, Table

3). The zoologist and archaeologist Sven Nilsson (1787–1883) gathered several accounts of children snatched and carried away by 'bold, cruel and greedy' eagles (Nilsson 1958(I):52–53, transl. here). One example originated from Orkney in the British Isles during 1839, where a mother was collecting wood and saw her infant being carried away by a white-tailed eagle. She alerted four men who rowed out to an island, where they knew eagles nested. Miraculously they found the baby alive and brought it back to her mother, probably a bit traumatized by the terrifying event. A similar story is reported from Denver in the USA in 1901:

Tony Giovanni, two years old, was seized and carried off by an immense gray eagle to-day while the child was in the yard of his home in a Denver suburb. The child's screams brought his father and two other men to the door in time to see the bird and child disappear over the bluff of the Platte River. The men gave chase and saw the eagle alight on a small island covered with underbrush, half a mile from the child's home. When the men arrived at the island, the bird attempted to rise with the boy, but his clothing caught in a brush, and the eagle, seeing the men close at hand, dropped his prey and flew away. The boy is not badly hurt (The Heartford Herald 1901).

The outcome of similar adventures was not always so fortunate. In 1737, an eagle captured a two-year-old boy when he was playing naked next to his working parents. Like a bolt from the blue, the eagle struck out of nowhere, sinking its talons into the boy and carrying him away in front of the petrified parents. The boy was never to be seen again (Nilsson 1858(I):52-53).

Admittedly, similar events are not likely to happen every day, year, or even every decade, but the presented examples demonstrate that golden or

Table 3. Some examples of children captured by eagles between 1737 and 2016.

1737	Two-year-old boy, no place mentioned	Nilsson 1858 (I), 52–53.		
1839	'Infant', Orkney, UK	Nilsson 1858 (I), 52–53.		
1836	'Children', no place mentioned	Family Magazine October 1836		
1838	Marie Delex, five years old, France	Pouchet 1871		
1868	'A crawling child', Meigsville, Tennessee, USA	Star (Issue 505) 31 December 1869		
1899	Four-year-old-girl, Connecticut, USA	New York Times 12 September 1899		
1901	Two-year-old Toni Giovanni, Denver, USA	The Hartford Herald, 6 February 1901		
1932	Three-and-a-half-year-old Svanhild Hartvigsen, Leka, Norway	Aftenposten 9 June 1932		
2001	Three-year-old Kayla Finn, New Hampshire, USA	BBC News 23 August 2001		
2012	Two-year-old boy, El Huecu, Argentina	Weekly World News 19 December 2012		
2016	Six-to-eight-year-old boy, Alice Spring, Australia BBC News 12 July 2016			
	·			

white-tailed eagles do have the capability and skill to pose a genuine threat to young children (Figure 8, Table 3).

A recent incident that is well documented in historical and biographical sources comes from the island Leka in Nordland in Norway. On the fifth of June 1932, the then three-and-a-half-year-old, Svanhild Hartvigsen (1928– 2010) disappeared at a social gathering after a baptism service (Figure 8). It was about four o'clock in the afternoon. Svanhild was briefly left playing outside on her own, and after about ten minutes she was declared missing (Aftenposten 1932; Hunnestad 1960; Roestad & Helgesen 2006; Svanhild Hartvigsen 2019). A full-scale search party, with up to two hundred persons, began to look for her without any delay. The girl was not to be found. After about five hours, one of her shoes and her handkerchief were found near a hill called Galten, about 1km away from where she was last seen. Thereafter the search was redirected to the neighbouring Hagafiellet; a prominent mountain top on Leka situated 1,7km from the place where Svanhild disappeared. Three young men climbed circa 300m up towards the summit where an eagle nest had been spotted. Importantly, some parts of the climbing were close to vertical, and it took them more than one hour to reach the nest, which was situated circa 180m higher in altitude than the area where she was snatched. Here they found Svanhild asleep, unblemished, on an inaccessible ledge close to the nest of a pair of white-tailed eagles. Her clothes were ripped and shredded, and showed distinct marks of eagle talons (Figure 8). Svanhild had no clear memories of the incident when the white-tailed eagle seized her, but she clearly remembered how it attacked her, over and over again, on the ledge. The eagle talons had left some faint scratches on her chin (Aftenposten 1932; Hunnestad 1960; Roestad & Helgesen 2006).

Eagles have been known to try to carry away children up until recent times (Table 3), some incidents are even captured on film and photographs (BBC News 12 July 2016), which shows that eagles might be a real threat to young kids. At the time when Syanhild was snatched, for instance, her weight was 19 kg (Aftenposten 1932). However, this modern birdlore is also known to be fabricated; such as the famous film sequence when a golden eagle snatches a toddler in Montreal that was published a few years ago on the internet and has now been viewed more than 45,795,465 times on Youtube (Golden Eagle Snatches Kid). Nevertheless, it is more than likely that events similar to what happened to Svanhild and others (Table 3), would be contemplated and memorialized by the affected people. Following the interpretative model introduced above (Figure 7), the eagleness of eagles and the presented birdlore can be used to unfold an altered and more diverse understanding about the tangible relationship between finds of eagle remains in female attributed burials or burials with youngsters or young children from the Bronze Age.

Barnet i ørnens klør.







Figure 8. Eagles possess the skill and power to pose a real threat to young children, here exemplified with a photo collage of Svanhild Hartvigsen in 1932 (above left); in the 1980s together with the dress she had on when she was snatched (below left); and together with an artistic interpretation of the capture of Marie Delex in 1838 (right). From Aftenposten 1932 and Wikipedia Commons.

The animated intra-action of eagles, their *eagleness*, could then augment a sympathetic magical practice that was built on a reverse analogous reasoning, where the real or imagined threat to children was used in a contraaction – something which Jacques Derrida has coined – 'in a defense that goes on the offensive' (Derrida 1994, cited in Nakamura 2010:321). The devoted care that eagles show towards their hatchlings, which they would fearlessly defend with their own life if necessary, could then be a vividly pictured metaphor that was moulded and re-enacted by compassionate parents during the Bronze Age. Merged, we find a prominent example of how the being and intra-action of an avian creature participated in unfolding Bronze Age worldings.

Conclusions

This paper has argued that we must be more observant and courageous about how we assemble material remains in our quest to unfold mundane and ritualised practices, myths, cosmologies, and ontologies in the past.

One strand of evidence is often thought to constitute satisfactory means of unfolding past worldings. However, as shown here, such an approach is insufficient if we wish to embrace the diversities, variations, and complexities of the agencies of other-than-human beings in our quest to unfold the worldings of past societies. The article presented two different but related models to achieve such a pursuit. The first model demonstrates how to assemble source materials from a range of archaeological contexts, to enmesh them, which enables us to unfold contrasts and complexities in relations between human and other-than-human beings. In this context, this is demonstrated by how eagles have been depicted in different media during the Bronze Age, as well as by an exploration of how faunal remains of eagles have been found in settlements and in burial contexts (Figure 1). The second model presents how to bring some eagleness back to eagles (Figure 7); how we can let the agencies of eagles contribute more actively to our interpretations of past worldings. The latter includes an exploration of the birds' 'biological' beings, known birdlore, and factful analyses of different archaeological contexts where traces of eagles have been detected. It is anticipated that the presented models (Figures 1 & 7) can help us develop more dynamic ways of assembling our source materials. This provides us with the opportunity to explore how heterogeneous coexisting relational fragments of different materialities intra-act, as well as how other-thanhuman beings have intra-acted in unfolding many altered meanings and worldings in the past.

The aim of this article has also been to embrace a relational ontological perspectivism which decentres human actions in the past in a way which allows us to reveal how other-than-human beings might have contributed and intra-acted with humans in unfolding their worldings. Such analysis urges us to focus on other-than-humans and try to reveal how different aspects of their beings are unfolded in different social and cultural contexts (Figures 1 & 7). By emphasizing eagles' agencies, we have detected how these cunning beings could be seen as co-creators, or co-actors, in unfolding different kinds of bird worldings in the Bronze Age, which we can reveal through our archaeological practices. Such an approach leads us away from already defined preconceptions, which often present firm and fixed semantic and symbolic representations of, for example, eagles. Instead, it can lead us towards a more open-minded relational flat ontological approach to past worldings, where the agencies of other-than-human beings are given a crucial, active, and more dynamic role (e.g. Winge 1904; Hollmann 2005; Overton & Hamilakis 2013; Johansson 2014; Goldhahn 2019).

The depictions and faunal remains of eagles that have been presented in this article show that their eagleness was revealed in various ways, in different directions, but also through different engendered materialities, spaces, fields, and contexts during the Bronze Age. Some aspects of eagleness were unfolded in relation to male-gendered practices, including male beautifications, maritime endeavours, and warriorhood (Figure 3), while others co-acted - 'in a defense that goes on the offensive' - in magical ritualized practices in relation to women, children, sickness and death (Figures 5, 6 & 8, Tables 1, 2 & 3). These differences show that an eagle was not only an eagle, but there was also no firm symbolic or semantic meaning attached to these or other avian creatures (e.g. Tillhagen 1978). Instead, we find many forms of birdness or eagleness unfolding during the Bronze Age (Goldhahn 2019). In a Baradian sense (e.g. Barad 2007; Johansson 2014; Goldhahn 2019), eagles must, therefore, be viewed as intra-active agents, partaking in unfolding different aspects or forms of bird worldings during the Bronze Age. By following these trains of thought, and by dismantling and reassembling other assemblages we might need to fulfil such pursuits (Figures 1 & 7), we might say that we have started a mounting process to bring back some eagleness to eagles.

Acknowledgments

This article is in various parts built on my monograph *Birds in the Bronze Age*, published by Cambridge University Press in 2019, where a more comprehensive discussion of these matters can be found. Mads Runge, Flemming Kaul, Lars Norr, Olle Hörfors, Andreas Toreld, and Tommy Andersson have generously lent photographs and figures to me, and Lisbeth Skogstrand helped me download Aftenposten. Kristin Armstrong Oma read and commented. Judith Crawford corrected my English. The editors Alison Klevnäs and Sophie Bergerbrant made many valuable comments which improved my article. Thanks! The remaining mistakes are mine.

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