Joakim Goldhahn. *Birds in the Bronze Age: A North European Perspective* (Cambridge: Cambridge University Press, 2019, 419 pp., several illustr., hbk, ISBN 9781108499095, and paper, ISBN 9781108713139)

This is an extraordinarily provocative book, arguing for careful attention to birds in religions, rituals, and cosmologies. It is part of increasing interests in nature-culture systems of meaning and interactions. Goldhahn approaches his topic comprehensively and creatively, challenging prehistorians and anthropological archaeologists to look at cultural conceptions expressed in the archaeological record.

I declare personal interest in the topic. Since the 1990s, my field research has focused on the Scandinavian Bronze Age. I also grew up birding with my father and went to university hoping to be an ornithologist. During freshman year, however, I was led astray by the archaeologist Jim Deetz. I connected immediately with Goldhahn's description of dramatic birds around Canberra, Australia. Like him, I am not a professional zooarchaeologist but a bird enthusiast.

Birds in the Bronze Age is organized into four sections, each with lively titles. Part I, 'Lift-Off', introduces the book, describing briefly the broad importance of birds to humans for food, protective technology, general interest, and symbolic representations. Goldhahn uses concepts of 'worldings,' borrowed from the French anthropologist Philippe Descola (2013), to describe 'modes of identification' between humans and their encompassing environments. These modes recognize variants of animism vs. an Axial Age conceptual divide between nature and culture. He draws from Tim Ingold's analysis of traditional art as mediating people's worldings and discusses bird divination in the ancient world, as described in the Iliad and various Roman sources.

Goldhahn asks, did bird divination characterize Northern Europe in the

Bronze Age? Perhaps, but the evidence presented, although suggestive, is not strong. Among sacrificial horses from the bone-rich Iron Age site of Sketemosse, on the Baltic island of Oland, remains of thirty-nine bird species exist, primarily water birds, but also some raptors, including ten white-tailed sea eagles. Goldhahn suggests that these finds represent divination with raptor entrails. Although a provocative hypothesis, a simple test would be to see if the raptors' diet reasonably represented the associated species recovered there. Fish eagles have a mixed diet, primarily fish with less than a one third sea birds. But no fish are noted among the faunal remains, and the eagle's favored eider duck is missing. A chapter-length description of an unusual Middle Bronze Age III Hvidegård burial, on Zealand in Denmark, then documents a large barrow containing wonderful metal items, a possible cloak, and small pebbles, interpreted as gizzard stones, as found in groundeating birds like grouse or doves. His interpretation is that this unique find was ritual paraphernalia comparable to those found in North American medicine bundles.

'Birdscapes' (Part II) presents the book's substantial arguments, considering Scandinavian archaeology for Bronze Age bird remains and representations. Birds remains are rare and irregularly distributed there and then. Goldhahn believes that these low numbers resulted often from poor preservation and little interest among faunal analysts, but the scarcity seems real, when compared to more common fish remains with similar difficulties to be preserved and recorded. He mentions that no bird remains exist for the Early Bronze Age, which might have been considered in more depth. In the household excavations of Bronze Age Bjerre (Thy, Denmark), where I excavated, faunal remains were not common, because of preservation problems, although well documented domesticates and some wild mammals and fish were recovered, but no birds (Nyegaard, 2018). In Nyegaard's doctoral study of faunal remains across the Danish domesticated Bronze Age, although mammals were routine and several wild species occasional, bird remains were negligible. In this book, Table 3 presents avifaunal data from fifteen Bronze Age northern European settlement sites; the vast majority of bird remains, however, are from one Late Bronze Age settlement (Apalle, in Sweden), for which the abundant faunal assemblage was 'truly exceptional and unique' (p. 148). Even here, birds represent just one per cent of the assemblage in comparison to twenty-nine per cent for fish. Goldhahn suggests, reasonably, that people at this site, and perhaps others in the Baltic, engaged in seasonal fowling.

Goldhahn's primary documentation for birds in Bronze Age northern Europe comes from stylistic representations on bronze objects, especially razors and hanging bowls, the rich rock-art imagery from coastal Sweden, and a few unique ceramic forms and decoration. Some representations are definitely birds, some might be birds, and others could represent birds in highly abstract forms. How common and important are these bird representations? The dominant images considered are the bronze razors from Late Bronze Age burials. Likely part of distinctive warrior identities, razors are considered to have represented boats, which to warriors would suggest their distant raiding and trading activities. As seen in the rock art on coastal panels where boat representations dominate, the prows are shown as upward extension of the keel making boats sea-worthy. The 'prows' of these razors are typically decorated with an ornamental swirl that in some cases ends in a terminal head of a horse or bird. This decorative pattern of special boats has an analogy among elaborate war canoes of northwest coastal Native American groups. Their boats of war and trade were elaborately carved and painted with totemic figures, often eagles. A wonderful movie from the early twentieth century shows a ritual arrival of one canoe with a man in its bow dressed as an eagle with outstretched, flapping wings. But a striking difference exists between the arts of these two regions.

As Goldhahn states,

'the "prows" of the boat-shaped razors transform into the shape of a horse, a snake, or more often, a bird. Many times it is hard to classify the animal in question, or the bird taxa, which I interpret as an intentional ambiguity created by the artists' (p. 116).

He suggests that Bronze Age artists wished to represent the fluidity of species' boundaries, and that such taxonomies are not typical of traditional languages and iconographies. Nonetheless, if birds are important in a group's economy and/or cosmology, ethnoscientific research shows that bird taxonomies can be precise, much like the Linnaean system of classification (Boster et al., 1986). The same is true for traditional arts, where species' identification is often evident among Northwest Coast Native Americans, various groups of Borneo, Andean Moche, and the Hallstatt duck (rarely represented outside of central Europe). When I look at the dramatic rock-art panels of Tanum or the 'birds' on bronze decorations, I can see them, but they do not jump out as being dominant. Why should differences exist for the importance of bird representations among traditional people?

'Intra-Actions' (Part III) provides four additional chapters discussing humanenvironmental interactions in various contexts using the worldings concept. The animacy of nature and the landscape more generally is well documented cross-culturally, and probably existed in Bronze Age societies. Importantly, the book reminds researchers that conceptions, ritual, and behavior of Bronze Age people were probable highly elaborated. Learning how to recognize and document religion, ideology, and general iconographic significance in prehistory is, however, a trial that few anthropological archaeologists or prehistorians handle well. The exception perhaps is for rock art, the meaning of which has been studied across the world from Australia to South Africa to the Americas, and also in Bronze Age Scandinavia. My sense of this work is two-fold. It is done best, when a rich ethnographic record exists, describing well documented rockart and its symbolic and ritual significance. In other situations, contexts of finds are probably more relevant to prehistorians than trying to establish cultural meaning. We may well be able to understand functions of representations in different ritual contexts, if not their actual meaning.

Returning to Bronze Age Thy, in the well-preserved settlement of Bjerre that spans the Bronze Age, no evidence exists of bird use in the economic or symbolic spheres. In terms of everyday life, no bird bones have been recovered, despite systematic sieving and flotation sampling. The decorations of ceramics show no bird forms. Abundant Early Bronze Age funerary metal finds in Thy had no bird figures that jump out to me or were listed in Appendix 1 of Goldhahn's book. Rock art was not common and no bird images are known to me. My conclusion is that birds as food and symbols were insignificant in everyday and ritual life in Bronze Age Thy. Because social complexity in Thy developed primarily from the Early Bronze Age, could the interest on birds characterize only Late Bronze Age contexts when interactions with the south had increased?

Overall, the primary value and interest of *Bronze Age Birds* lies in calling attention to the natural world, and birds specifically. Nature-human relationships surely differ across traditional societies, but the nature and reasons for such variation need to be conceptualized. To expand on the specific consideration of worldings, I would emphasize the prehistory of groups for which strong ethnographies or histories exist. Approaching birds ethnographically and archaeologically is eminently possible, and I anticipate future careful attention in this regard.

## References

- Boster, J., Berlin, B. & O'Brien, J. 1986. The Correspondence of Jivaroan to Scientific Ornithology. *American Anthropologist*, 88 (3): 569–83.
- Descola, P. 2013. *Beyond Nature and Culture*. Chicago: University of Chicago Press.
- Nyegaard, G. 2018. Bronze Age Animal Husbandry: The Faunal Remains from Bjerre Enge. In: J.H. Bech, B.V. Eriksen & K. Kristiansen, eds. Bronze Age Settlement and Land-Use in Thy, Northwest Denmark, Vol. II. Højbjerg: Jutland Archaeological Society, pp. 469–76.

TIMOTHY EARLE Northwestern University, USA

doi:10.1017/eaa.2022.9