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Stone Age Companions: Humans and Animals in Hunter-Gatherer Burials in North-Eastern Europe

Doctoral dissertation in Archaeology

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Review by Charlotte Damm 

Macānes doctoral dissertation sets out to examine the diversity in human-animal relationships amongst hunter-gatherers in north-eastern Europe. The empirical basis for the investigation is the animal remains from burials in three different areas (Latvia, Sweden, and Russia) covering the eight to the third millennium BCE.

The main set of data derives from five cemeteries, Zvejnieki, Skateholm I–II and Sakhtysh II–IIa, all mostly excavated several decades ago. Macāne has re-evaluated and re-examined the data to provide a consistent presentation based on up-to-date osteological knowledge and contextual evidence. This means that not only was all available osteological remains examined, but a great deal of effort was involved in studying the documentation to determine their contexts. Only finds identified as directly associated with a

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burial was included (e.g. excluding finds with uncertain contexts or possibly from grave fill). Differences in preservation and documentation caused some limitations in data acquisition. Zvejnieki is not only by far the largest cemetery used across five millennia, but it also has overall better preservation and, in some respects, better documentation, providing secure associations between animal remains and individual burials, whereas relatively more data had to be excluded from the analyses of Skateholm and Sakhtysh. The study is based on material from 98 burials from Zvejnieki, 39 from Skateholm and 39 from Sakhtysh.

The osteological examination attempted to specify each find to taxon and anatomical element, and when possible, age, sex, tooth wear and other properties were noted. Appendices of all burials with details of the burial, and of the animal remains and their position in the grave are included.

The majority of the animal remains are teeth. They total 3100 included in the study while other animal remains only add up to 1024 (figure 1.5). More than two thirds of the teeth were recovered from Zvejnieki (2263), as were nearly half (450) of other remains. Since many of the teeth (and a few other finds) were modified, the type of modification was also noted and recorded in the appendices.

The core of the thesis presents the results of the analyses. It is divided into six chapters (carnivores, ungulates, rodents, birds, fish and reptiles and finally modified human remains), with subchapters for each species. The presentation of each is consistent, making it easy to look up any detail for a specific animal. There is a general introduction to the animal, its habitat and ecology, and a brief overview of the presence of the species in hunter-gatherer contexts in north-eastern Europe, followed by the presentation of the finds at each of the five cemeteries. This includes information on the human burials and the position of the animal remains in the grave. The last section for each species is a discussion summarizing the results, pointing out patterns and variations and reflecting on the composition of the finds and the human-animal relations for the species. Each of the six main chapters has a final subchapter summarizing the finds.

The systematic presentation of the animal remains from the five cemeteries, based on a thorough re-evaluation and re-examination, is a significant contribution to the study of north-eastern European hunter-gatherers. Much of the data has not been available previously and it is obviously of great importance to have secure identifications and contexts for all the species present, rather than for a few select ones. While remains from some species are rather numerous and often mentioned in publications on hunter-gatherers (such as red deer, elk, wild boar, bear, dog) a wide variety of other species are present (for example wild cat, badger, hedgehog, wild horse, tortoise, and marmot), and this study brings them to our awareness.

While some patterns in the data were confirmed (e.g. the numerous remains from red deer and elk) some interesting new discoveries were also made. For instance, the osteological re-examination resulted in the identification of numerous, previous unrecognized, badger teeth at Sakhtysh IIa (p. 126). Surprisingly beaver ankle bones were more common than beaver teeth at Zvejnieki, and it is suggested that the incisors and mandibles are tools rather than adornments (p. 235).

However, as duly noted by Macāne, the biases in the data must be borne in mind. Approximately 75% of the material are teeth, but both preservation issues and documentation practices may have led to the disappearance of other remains. This in itself leads to a bias towards larger mammals (as their teeth are best suited for pendants and other adornments), which does not necessarily reflect human-animal relations correctly, considering the assumed importance of furs, feathers and other easily degradable remains.

With the additional skewness of the dataset caused by difference in number of included burials and chronological span, Macāne wisely views the emerging patterns as tendencies rather than definitive results (p. 284).

As indicated in the title this study aims to depart from the traditional perspective of human exploitation of animals for economic purposes, arguing instead for a relational approach to human-animal interaction. The initial presentation of this perspective (chapter 2) is general, providing a brief overview of trends in human-animal relation studies and hunter-gatherer ontologies over the past couple of decades. No specifics of Macānes own approach are provided apart from the indication that a focus on the individual characteristics and life histories of the animals present in the burials may reveal information on human-animal relations (p. 27). This is followed up in the subchapters for each species where Macāne evaluates the importance of the animal in the past hunter-gatherer community. Here she typically considers regional variation in availability, the importance of meat, fur, feathers and possible cosmological significance. She also notes characteristic behaviours of some of the animals and how this may have impacted on human perception, but the emphasis is predominantly on human values and benefits rather than on human-animal relations.

The relational approach is better exemplified in the final chapter. There Macāne first explores the wider geographical and chronological tendencies in the material. The results from Zvejnieki show a clear dominance of ungulates in early burials with a shift to carnivores sometime in the fifth millennium BCE, a pattern that seems to be repeated at Skateholm and Sakhtysh. The significant shift in species preference from prey to predator is a highly interesting observation. The later period also shows a general increase in species variation, a relative decrease in animal teeth and an increase in non-animal and foreign items and materials in the burials. As

Macāne emphasizes, these changes from the late fifth and fourth millennium BCE coincides with many other changes in the north-eastern hunter-gatherer communities, including more extensive networks and arguably a different attitude and relation to the environment demonstrated in different extraction and production practices.

Macāne continues by discussing human-animal relations from several different angles. Only selected elements of the animals entered the burials. Most prominent were parts of the head (teeth, antler, mandible and skull) or limbs (leg or wing bones), which in many cases were still recognizable as deriving from a particular species and sex, and therefore could be associated with particular abilities and characteristics. In several instances several teeth from one individual not only occur in the same burial but is placed in anatomical order, suggesting that the human-animal relation was (at least in some cases) not just with a generic animal, but with a particular individual.

Interesting differences in human-animal relations also emerge. Both Skateholm and Sakhtysh have dog burials, but these are absent at Zvejnieki, where dog teeth on the other hand are fairly common. Zvejnieki also has many seal tooth pendants, while such are absent at Skateholm (and less surprising at Sakhtysh). The importance of wild boar in these communities is well known and the use of tusks pendants often linked to the ferocity of this animal. At Zvejnieki most tusks are from female animals and frequently found in child burials, which could be linked to the female sows' protection of their young. Macāne discusses many other aspects of human-animal relations. However, while she provides many noteworthy examples, she does not present a coherent relational approach.

To sum up, the thesis is highly valuable for anybody interested in the pre-history of north-eastern hunter-gatherers. The thorough re-evaluation of the animal remains from Zvejnieki, Skateholm and Sakhtysh significantly increases the data available for comparisons and overviews. The data and analyses will be crucial in studies of each of the three areas and beyond. The extensive and consistent presentation of individual species makes it very useful for both quick consultations and wider studies. The thesis indicates significant cross-regional shifts and local variations, that can be anticipated to be explored further in future studies of human-animal relations.