Michal Ernée. *Prag-Miškovice. Archäologische und naturwissenschaftliche Untersuchungen zu Grabbau, Bestattungssitten und Inventaren einer frühbronzezeitlichen Nekropole* (Römisch-Germanische Forschungen 72. Darmstadt: Von Zabern, 2015, 322 pp., 187 figs and 64 plates, 47 tables, ISBN-10 3805349696, ISBN-13 978-3805349697)

This book, written by Michal Ernée and no fewer than eighteen co-authors, appears in the monograph series Römisch-Germanische Forschungen, published by the German Archaeological Institute, which previously featured the early Bronze Age cemetery of Gemeinlebarn (Neugebauer, 1991). Prag-Miškovice is one of over 700 known early Bronze Age cemeteries of the Únětice Culture in Bohemia, located only about 12 km east of the eponymous site of Únětice in the Czech Republic.

Excavations at Prag-Miškovice were directed by the main author of this book and started in 1999 in the course of the development of c. 10 ha of land for family housing. The multi-period settlement and cemetery site included forty-four early Bronze Age graves, clustered in small groups named A to F. Excavations were limited to the building plots, so the actual extent and sizes of the grave groups remain unknown. The prehistoric micro-relief was reconstructed, but no geophysical prospection took place. Graves were excavated in arbitrary layers of 5–10 cm rather than stratigraphically, in order to better document the stone settings (p. 18).

The catalogue of grave contexts (pp. 20–47) includes detailed descriptions and classifications of grave pits, architectural elements such as coffins and stone settings, grave fills, basic data on the skeletons, and lists of finds. The next section discusses the form and dimensions of the grave pits in more depth (pp. 48–52). Perhaps surprisingly, the detailed analysis did not find any relationship between the depth and volume of the grave pit and the age or gender of the deceased; moreover, valuable grave goods were no more likely to be found in deeper graves.

The discussion of human remains is split into two chapters: one from an archaeological point of view, including the preservation and exact position of the human bones (pp. 53–61), and one from a natural science perspective (pp. 168–216). Of the thirty-nine recovered individuals, all but two were placed in a crouched position on their right side. They were oriented with their heads to the south, looking east. The positioning of the arms is highly variable. The position of bones in relation to each other is documented in detail, including their angles, but without further interpretation. A taphonomic and decompositional analysis (e.g. Knüsel & Robb, 2016; Duday, 2009) may lead to further insights.

Containers for the dead (pp. 62–68) include one ceramic storage vessel (*pithos*) for a 0–2-year-old infant and traces of wooden coffins documented in fourteen graves. Stone settings (pp. 69–72) range from single stones for stabilising wooden structures to complex stone architectures enclosing the body or the coffin from all sides (p. 69). Interestingly, the two most elaborate constructions contained the remains of girls buried with one simple bronze pin each: a 5–8-year-old and a 10-year-old. Their sex has been determined by DNA analysis (see more below).

The presentation of modes of deposition shows that the majority of bodies were placed in the graves before decomposition; some graves, however, contained bones that had decomposed elsewhere and

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were deposited in a skeletonised state. No human remains were found in six graves. Grave 6 is the most interesting of these, as high phosphate levels suggest that a human body did decompose in the grave, the skeleton having been removed at a later stage (p. 76). In Grave 44, a second, skeletonised body was deposited in an already occupied grave, without disturbing the body already buried. Michal Ernée's classification into twenty-one types of burials demonstrates that there is indeed a certain amount of variability in the funerary rite, but with only forty-four graves in total one might suspect a degree of emphasis on difference over similarity.

This is followed by the catalogue of finds, richly illustrated with beautiful drawings and colour photographs (pp. 81–142). Twenty-one pottery vessels were found in sixteen graves, with forms ranging from bowls to handled cups and jugs. Metal finds comprise around forty spiral beads, around twenty Noppenringe rings, fourteen dress pins, three daggers, one axe, and one chisel. The position of dress pins in relation to the body again shows considerable variability, so that four functions are suggested: as dress fastener, as jewellery ornament, as grave good without direct function, and as fastener of a funerary textile (p. 111). Amber beads and spacers have been found in twelve, mostly female, graves. Sea shells, a bone bead, chipped and ground stone tools, and animal bones found in four graves complete the range of grave goods. A discussion and interpretation of some find categories follows the catalogue. Dress pins, axes, chisels, daggers, ground stone tools, and amber finds are discussed in their regional context with ample mention of parallel finds.

The section 'Beigaben, Mitgaben und Tracht' (pp. 160–67) differentiates types of grave goods on the basis of their role in funerary ritual. Following Bertemes (1989), *Beigaben* are placed in the grave out of ritual or religious motivation, for example offerings of food and drink including their containers, whereas *Mitgaben* are possessions or other objects with a certain significance for the person in life, for instance, weapons or tools. This category is seen as most significant for the interpretation of social status (p. 160). *Tracht*, metal costume components, are classified as yet another category; at Prag-Miškovice, as at Gemeinlebarn, traces of use-wear suggest that the metal dress fittings were part of every-day attire as well as death costume. Finally, finds that may have found their way into the grave fill by chance are mentioned as a final possibility. This semantic classification of finds is an interesting thought exercise, but it is both difficult to translate into English and difficult to apply. Furthermore, its purpose remains unclear; it is another example of classification for classification's sake, a recurrent feature in this book. All categories, not just *Mitgaben*, may have a role in signalling access to resources, craftsmanship, and concern from the burying community; they all therefore also have the potential to encode and signal status and prestige.

Michal Ernée's greatest merit is to have brought a multi-disciplinary team together to undertake a panoply of scientific analyses on human bones and finds from Prag-Miškovice. It would have been nice, however, to spell out the full names of the authors of each section for full credit rather than merely indicating their initials in brackets. The scientific reports begin with the physical anthropology by Petra Stránská. It is a classic report on each individual, including skeletal preservation, morphology, metrics, as well as age and sex identification, limited by the poor bone preservation. Jaroslav Hlaváč presents evidence of palaeopathology and trauma; a histological analysis of thin sections of the

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femurs of twenty-four individuals by Bärbel Heußner largely supports the morphological age at death estimates.

Molecular sexing of the skeletal remains by Martin Hájek (pp. 201–04) obtained very exciting results. Seventy-five bone and tooth samples of twenty-five individuals were chosen for analysis. Nuclear DNA was targeted for the determination of sex. The presence of the Y-chromosome unequivocally proves male sex, whereas the identification of the X-chromosome may be ambiguous (as it is present in the XX and the XY genotypes). To control the risk of identifying 'false women' in cases where the Y-chromosome is insufficiently preserved, only results with three or more positive amplifications for X (from one sample) and the absence of Y has been taken as indicative of female sex. This led to the identification of nine women and four men within the cemetery of Prag-Miškovice. Only for Grave 14 is the morphological sexing (female) contradictory to the DNA evidence (male). Sexing via DNA is particularly important for sub-adult individuals, which are difficult to sex morphologically as sex-typical physical traits may not yet be sufficiently developed. Molecular sexing suggests the individuals in Graves 13 and 27 were female (11–13 and 8–12 years old), and probably female in Grave 34 (9–10 years old). For the child in Grave 41 (3–5 years old) and the juvenile/adult in Grave 20 (15–30 years old) the male sex was suggested.

In other sections of the book (e.g. table 17, p. 170), however, a lower threshold for the certainty of sex determination via DNA is accepted than that put forward by Martin Hájek. The indeterminate individual from Grave 25 (table 27, p. 203), for example, turns female in the section on grave architecture (p. 72) and physical anthropology (p. 183). This is of social and historical significance, as this individual, a 5–8-year-old, is buried in one of the two most elaborate grave constructions in the whole cemetery.

DNA-based sexing provides a fantastic new data category that has recently been added to the archaeological toolkit. The qualitative evaluation and integration of these data with other kinds of scientific data will lead to exciting and nuanced insights into sex and gender in the very near future. For example, at Hoštice, the largest Bell Beaker cemetery in the Czech Republic, DNA-based sexing has recently revealed that of fourteen sub-adult individuals oriented as customary for men, twelve were indeed chromosomal men, but two were women; of the seven sub-adults oriented as customary for women, only one was indeed a chromosomal female, whereas six were male (Turek, 2014; Vaňharová, 2011). For an interdisciplinary approach, it is important that we, as archaeologists, learn enough about the underlying methodology properly to evaluate and integrate genetic data in our research.

Sequences of mitochondrial DNA were isolated from two individuals only, falling into the U and H haplogroups. These appear to be ancient European lineages that are rare in modern contexts (p. 204).

Corinna Knipper undertook strontium and oxygen isotope analyses of tooth enamel samples from eleven individuals. The heterogeneous geological background of the site's immediate regional context explains most of the variability in the data; in addition, regional networks and local changes of residence upon marriage are models that fit. Since only two of the samples come from male burials, gendered mobility patterns could not be investigated (p. 215).

Antonín Majer and Michal Ernée applied phosphate soil analysis within twenty-two grave pits to map anomalies in a small-scale grid. This method not only

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provided fine-grained data on how bodies were positioned in the graves, but also helped to identify graves in which already skeletonised bones were deposited. Two types of empty graves were differentiated: those in which no phosphate anomalies were found, and those in which a body had likely decomposed (p. 227).

Petrographic analysis of stones employed in grave construction and a grinding stone artefact suggest local sources, while infrared spectroscopy of fifty amber beads from eleven graves indicate a Baltic origin of this raw material. The analysis of metal artefacts includes the identification of organic material corroded onto the metals (by Miroslav Králík), X-ray fluorescence and neutron activation analyses, as well as lead and osmium isotope analyses (by Jaroslav Frána, Ernst Pernicka, Knut Rassmann, and Zofia Anna Stos-Gale). Four types of metal were identified: copper objects without tin, bronze alloys with a low tin content (0.5–2 per cent), bronze with a tin content between two and fifteen per cent plus other metals, and bronze with a tin content near ten per cent , but with a low proportion of other metals (p. 250). The majority of bronze objects from Prag-Miškovice were likely made from *Ösenringe* ingots (ring-ingots); the copper sources are heterogeneous and may include the Harz Mountains (central Germany) as well as Alpine sources (p. 266). The electron microscope scan of the surface of a ground stone tool surprisingly revealed traces of silver, indicating silver working (p. 285).

Pieter M. Grootes, John Meadows, and Marie-Josée Nadeau were responsible for radiocarbon-dating samples from twenty graves. The dates of the entire cemetery span from c. 2200 cal BC to 1800 cal BC; Grave Group A can be more narrowly dated within the century after 2000 cal BC (p. 282).

The book concludes with thoughts on the labour invested in grave construction, reflections on grave reopening and burial variability, and remarks on chronology and regional context. There is no summary in German, and—even more disappointingly—no summary in English or Czech. It is a pity that a book of such scientific value is not made more accessible to the international research community or indeed the local population that might be interested in the site. It is further surprising that the wealth of anthropological, archaeological, and material science data from this cemetery has not been utilised to develop a social interpretation of life-histories, identities, and social roles in the region during the early Bronze Age. It will certainly provide the basis for further studies in this direction.

Prag-Miškovice is a beautiful monograph. The high quality print and great illustrations, along with ample black and white as well as colour photographs make it a pleasure to look at. The plates include drawings of all graves, some at multiple levels, and photographs of grave contexts at various stages of recovery, as well as plates that duplicate the grave context drawings and place them with drawings of the finds. Sometimes the photos become repetitive, because the same image is used multiple times, and one must remember that Prag-Miškovice, after all, still only comprised forty-four graves. The wealth of data contained in these images, however, make their use invaluable. Michal Ernée is to be congratulated on bringing so many different analytical approaches together in this monograph, even if the interdisciplinary integration was at times clearly challenging.

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KATHARINA REBAY-SALISBURY
Austrian Academy of Sciences, Vienna, Austria

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Neil Christie and Hajnalka Herold, eds. *Fortified Settlements in Early Medieval Europe: Defended Communities of the 8th–10th Centuries* (Oxford & Philadelphia: Oxbow Books, 2016, 352pp., 85 colour and 98 b/w illustr., 4 tables, hbk, ISBN 978-1-78570-235-8)

Defining and understanding defended settlements and fortifications in post-Roman Europe has long been hampered by deeply entrenched notions about 'The Dark Ages'. Among scholars, there has sometimes been an idea that the centuries which are the focus for the discussion and articles in this volume, the eighth to tenth centuries AD, represented a period without defended settlements. That is, the centuries before the emergence and development of seigneurial systems and the erection of 'classical' feudal manors with stone walls and keeps. Although archaeological investigations have been carried out which have touched upon these centuries, such investigations have had a more local and regional focus in specific countries, for example in the former German Democratic Republic (GDR) and in Poland. The purpose of the volume—to compare and assess the archaeology of fortified settlements across Europe beyond the regional scale—is thus very welcome and needed. The work incorporates twenty-three chapters by twenty-seven authors, including established scholars and early career researchers, which is a sympathetic approach. These chapters deal both with well-established and recently started research programmes. Similarities and differences in the origins, forms, and functions of these settlements are discussed in the context of the development of European regions, mainly during the eighth to tenth centuries.

The volume is the result of two conferences in 2013. There is always a risk with conference volumes of publishing the