This book by Juana Molina Salido inspires to deal with archaeological virtual reconstructions. The desideratum of computational archaeology is a foundational study that creates such a profound virtual reconstruction that new archaeological research can be based on it. The virtual reconstruction is then no longer the result but the data basis. This book prepares the ground for such a foundational study by presenting the broad basis of fused data. Unfortunately, the full scientific potential has not been exhausted because her virtual reconstructions do not consistently visualise and verify archaeological hypotheses.

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JENNIFER KERNER, Manipulations post-mortem du corps humain. Implications archéologiques et anthropologiques. Sidestone Press, Leiden 2018. € 135.00. ISBN 978-9-08890-544-5 (Hardback). € 44.95. ISBN 978-9-08890-543-8 (Paperback). € 9.95. ISBN 978-90-8890-545-2 (EBook). 380 pages with 88 illustrations.

From feet preserved in jars on museum shelves to jewelled skeletons on display in Baroque churches or commingled remains in Neolithic deposits, humanity displays a wide variety of modes of engaging with the dead body. The treatment of the cadaver is part of ritual processes aimed at dealing with the specific 'ontological crisis' – death (L. NILSSON STUTZ, Embodied Rituals and Ritualized Bodies. Tracing ritual practices in late Mesolithic burials. Acta Arch. Lundensia Ser. in 8°, 46 [Stockholm 2003]). Capturing these processes at the cross-roads of their biologic, taphonomic, and cultural dimensions poses interesting challenges. John ROBB (Creating Death: An Archaeology of Dying. In: L. Nilsson Stutz / S. Tarlow [eds], The Oxford Handbook of the Archaeology of Death and Burial [Oxford 2013] 441–457) and Liv Nilsson Stutz (Building bridges between burial archaeology and the archaeology of death. Where is the archaeological study of the dead going? Current Swedish Arch. 24, 2016, 13–35) have rightly pointed out in recent years that death is a process and not a simple event. This calls for what they see as a need to theorise about death, dying, and the dead, and hence to move towards an 'archaeology of death' (see also A. Ion, The body of the martyr. Between an archival exercise and the recovery of his suffering. The need for a recovery of humanity in osteoarchaeology. Arch. Dialogues 23, 2016, 158–174). With this book, Jennifer Kerner moves precisely in this direction. Written at the intersection of archaeothanatology and ethnoarchaeology, this volume takes the reader on a comparative journey from the deep past to present day, from Paleolithic France to the Chinese Neolithic, or to contemporary relics sold at auctions. The guiding question throughout is: when is one dead for society ('quand le mort est-il mort pour la société?', p. 18). By looking at the ways in which people and cultures have manipulated the bodies post-mortem, J. Kerner ultimately aims to discuss the processes through which the dead (body) becomes the Other - 'creation d'un Autre' (p. 20).

Jennifer Kerner is Junior Professor in Prehistory at the Department of Anthropology, University Paris-Nanterre, and a specialist in funerary archaeology. She is also a public archaeologist through an active Twitter presence and dedicated YouTube channel, "Boneless Archéologie" (https://www.youtube.com/channel/UC7ktqoCpxEbP9TV-xQLTonQ), which 'distille le #macabre sur YouTube'. In this volume she brings together insights from ethnology, funerary archaeology, taphonomy, and osteology in a captivating read, moving between methodological reflections and interpretative insights. The book, which is written in French, is divided into seven sections – an

introduction and six chapters – with multiple sub-chapters, which look in turn at: methodological aspects (in chapter 1, pp. 21–38), definitions (chapter 2, pp. 39–78), the use of a whole body in a funerary ritual (chapter 3, pp. 79–176), the divided body (chapter 4, pp. 177–254), bodyparts: objects, relics, talismans (chapter 5, pp. 255–324), and conclusions. The framework in which J. Kerner chose to place her investigations led her to evaluate a broad set of case studies, from Prehistoric to ethnographic ones. The thread which runs throughout is a perspective which places the corpse at the heart of cultural practices that 'forget it or keep it in memory, hide it from view or expose it, reject it or integrate it' (p. 17).

The short introduction (pp. 17–20) presents the mission statement of the book: to explore in an anthropological key how populations, old and new, dealt with the human corpse. The central problem is the transformation of a living body into a dead one, the rites of passage that it traverses, and the apparition of a new 'body-object' as a result of these cultural (and sometimes taphonomic) transformations.

The first chapter, 'Corpus de l'étude et principes méthodologiques généraux' (pp. 21–38), is methodological, comprising a presentation of the case studies and the kinds of methods employed: on the one hand, osteology, taphonomy, use-wear analysis, and on the other, contextual archaeological information. The narrative is based on data derived from direct analyses of human remains from three archaeological sites, which were then compared with the reference collection of the Musée de l'Homme, and a second kind of data obtained from primary and secondary literature (excavation reports, photographs, travel reports of 350 sites, and ethnographic data from 68 populations) (p. 21). This interdisciplinary methodology places the manipulations of dead bodies within both a chaîne opératoire and as part of cultural traditions, thus bringing together scientific archaeology and anthropology. Therefore, the mortuary gestures ('gestes mortuaires') and the resulting deposits are analysed both in their material dimension and also in their aesthetic and cultural dimension. Furthermore, the author explains that the aim of bringing together archaeology and ethnography is not that of offering a comparative perspective. Rather, she sees the two disciplines as two sides of the same coin: archaeology is nothing but an anthropology of disappeared societies, 'que l'archéologue, cet anthropologue des sociétés disparues' (p. 25). In this she places her work alongside other authors, such as Alain Testart and Bruno Boulestin. This approach reminds me of a series of relevant observations raised by members of the historical anthropology school in the second half of the 20th century regarding the points of convergence between the two disciplines. J. Kerner doesn't delve more into the discussion as her focus throughout is on the treatment of human remains and not on their wider cultural context. Nevertheless, I think this can be a fruitful place to start further reflections.

Chapter 2, 'Définitions' (pp. 39–78), elaborates on the methodology and explains the conceptual framework within which Jennifer Kerner works. This extended chapter discusses: funerary rituals, graves and mortuary gestures, primary / seconday / tertiary deposits (here drawing mainly on authors such as Bruno Boulestin, Henri Duday, Mark Guillon, or Joachim Wahl), ossuaries, relics, and double funerals. Given its importance, I will dwell a little more on it. Through the terminological panorama presented, this chapter opens an important discussion on the concepts we use in our interpretation of human remains. However, there is a difference between approaches within the field, which partly overlap with academic traditions. Not only that the study of dead bodies is divided between osteoarchaeology / bioarchaeology, funerary archaeology, and anthropology, with variations depending on authors, but even within the same sub-discipline there is a difference in the ways in which different authors define the studied deposits. J. Kerner does not discuss the first aspect but dwells extensively on the second. The discussion around secondary or tertiary deposits is illuminating in this respect. As she shows, in some cases the same / similar terms can denote a

process, a mode of disposal, or even a temporal dimension. E. g., 'tertiary deposits' can be seen as parts of a multi-stage funerary process, while for other authors, for example Joachim Wahl (cited on p. 53), the same term can be used when it is difficult to 'demonstrate the intentional character of a deposit in secondary position'.

I particularly enjoyed the discussion on the 'objet cadavre' (p. 40) as a result of specific actions but also part of an ontological transformation from human to object and into the Other. I also found important the critical reflection on the misuse of the 'chaîne opératoire' concept in funerary archaeology, as it implies that what we see as archaeologists is the intended final product of past practices. But in some cases it is not, instead other factors (natural, cultural) have led to the deposits appearing as they currently are. Especially for a prehistorian, I found the following observation important: when dealing with fragmentary deposits, where can we ascribe human agency or intentionality, and what is the result of other factors? Another important discussion raised by this chapter is the one around what constitutes a grave, and what is funerary (or non-funerary?) deposition. In this respect the concept of 'positive intentionality' (honouring the deceased, p. 45) versus discard of 'denied funerals' can be useful, as it places the interpretation under the concept of intentionality.

However, while going through all the distinctions in the chapter, it can become confusing after a while. Taxonomy and precision are important, but maybe it would have been easier for the reader had the concepts been organised under some themes brought into view by the study of funerary processes, e. g. temporality (multi-stage processes), intentional versus taphonomic, deposition / retrieval / curation. Even so, the text makes a useful read for terminological clarifications.

In the next chapters, each of these concepts and definitions are explained through several case studies. Chapter 3, 'L'utilisation du corps entire dans le ritual funeraire' (pp. 79–176), talks about gestures of dismemberment, relocations, double funerals, or selection of body parts. Here, an engrossing case study on dismembered bodies from the Neolithic Ding Si Shan site (China) is presented. This is an excellent didactic example showing the potential of the archaeothanatological method, including many illustrations and figures which depict the stages of body dismemberment and points of segmentation of cadavers. Throughout the chapter, Kerner advances her narrative by useful observations, mottos, or questions: 'why move a body in its integrity?' (p. 111), 'archaeologists are the primary exhumers of skeletons' ('les archéologues sont les premiers exhumateurs de squelettes', p. 116), the differential fate of the famous dead in our museums, like Richard III etc.

In chapter 4, 'Le corps divisé' (pp. 177–252), J. Kerner starts with the more familiar Medieval ossuaries, after which she moves to a Palaeolithic case study, the findings from the cave Mas d'Azil (France). This is a textbook model of how an analysis of fragmentary bones should proceed, from their taphonomy to contextual analysis, including comparison with the treatment of animal bones, and archaeological data. Following this, there is a descriptive overview of the post-mortem treatment of skulls, from the Levant and Anatolian Prehistory to Gallia and Mesoamerica. The breadth of examples is useful to see similarities and points of convergence but also the varieties of similar practices. It would have been good to dwell more on their interpretation though.

Following the logic of body parts getting smaller and smaller, chapter 5 takes us to 'Le corps rédiut à sa plus petite portion – L'objet, la relique, le talisman' (pp. 255–324). This chapter, which poetically starts with the observation that certain ancient beliefs had that 'the human bone preserves a piece of the soul' ('l'os human conserve "une parcelle d'âme', p. 255), discusses the reduction of dead bodies to objects in 'non ritual' contexts. Thus we learn about a set of interesting discoveries, from unusual skates / sledges from Bronze Age Moravia or the Iron Age site Marsal 'La Digue' (Lorraine, France), to bones turned into toiletry objects, medicines, musical instruments or masks.

This topic also opens a discussion on ethics and law, especially when we encounter commodified bodies sold at auctions (p. 272), but also on the body as heritage and its management. Very interesting is also the choice to include a discussion on absent bodies and their substitution through objects – see the miniature coffins associated with the infamous Burke and Hare body snatchers (p. 320). Finally, the conclusion (pp. 325–330) reviews the arguments presented throughout.

This is an important book through the avenues it opens, for students and specialists alike. Such an interdisciplinary read is particularly important for two reasons: it takes specialists outside the confines of specific case studies, placing them in a wider perspective. Furthermore, it brings together the social and the taphonomic, capturing the duality of the cadaver, 'a completely liminal category of cultural actor, as it simultaneously is and is not the person that died, and both is and is not a subject' (NILSSON STUTZ 2016, 58).

The strength of the volume resides in the identification of the so called 'mortuary gestures'. The narrative can lean more on the descriptive side in certain parts, but this makes it useful as an introduction to the topic. At the same time, the volume showcases what the archaeothanatological French method can contribute to the analysis of mortuary depositions, due to its strong methodological focus on a thorough recording and study of the position of the human remains in situ, aiming to reconstruct the initial funerary context; this method is probably the most thorough in studying the post-depositional history of the body, and unfortunately it has not seen a great success in other academic traditions (but see more recent discussions in L. NILSSON STUTZ / L. LARSSON, Disturbing the dead. Archaeothanatological analysis of the Stone Age burials at Zvejnieki, Latvia [excavated 2006–2009]. Journal Arch. Scien. Reports 10, 2016, 715–724; E. C. Green, What are we missing? An archaeothanatological approach to late Anglo-Saxon burials [PhD thesis, Sheffield 2018]; K. MANDL ET AL., The corpse in the Early Bronze Age. Results of histotaphonomic and archaeothanatological investigations of human remains from the cemetery of Franzhausen I, Lower Austria. Arch. Austriaca 102, 2018, 135-167). Alongside other titles, such as 'People of the Long Barrows. Life, Death and Burial in the Earlier Neolithic' (M. SMITH / M. BRICKLEY [Stroud 2009]), 'The Archaeology of the Dead. Lectures in Archaeothanatology' (H. Duday. Stud. Funerary Arch. 3 [Oxford 2009]), or 'A Taphonomic Approach to the Re-analysis of the Human Remains from the Neolithic Chamber Tomb of Quanterness, Orkney' (R. CROZIER. BAR British Ser. 635 [Oxford 2018]), this volume offers valuable methodological insights into the taphonomic study of archaeological deposits.

Overall, Kerner accomplishes what she set to do, a study of post-mortem manipulations of cadavers across space and time. Her analysis takes a balanced approach which moves beyond the physical transformations of the body to cultural beliefs, between local observations and ethnographic / historical parallels. Such an approach offers an important counterpoint to the general trend which sees a split between disciplines when it comes to the study of human remains.

The volume also implicitly raises a point for reflection and debate: what is the value of a comparative perspective? Even though the author does not use it as a way towards interpreting particular deposits, through the juxtaposition of examples analogies are inherent. This is not a topic approached in the book per se, but it is worth discussing precisely because of these juxtapositions. The use of analogies is omnipresent in archaeology. When employed as 'good to think with' examples, they can help navigate between alternative hypotheses. But philosopher of science Rune Nyrup (Analogy and Pursuitworthiness. http://philsci-archive.pitt.edu/id/eprint/10987 [last access: 8 April 2019]) would say that they can do even more than simply testing the 'plausibility of the hypothesis': they can open new venues of research and 'justify pursuing hypotheses'. I think that Jennifer Kerner gives us plenty of material to work with, so it might be fruitful to see how this could work within R. Nyrup's framework.

Ultimately, this book provokes us, its readers, to contemplate ritual time, gestures, absences, and ruptures opened by the death of an individual. This is a journey towards confronting our own mortality, and the peoples' of the past. As the motto chosen for the conclusion highlights: Death that closes our eyes, opens our spirit ('La mort qui nous ferme les yeux, nous ouvre l'esprit', Malebranche, p. 325). So where do we want to take our explorations next?

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Frank Nikulka, Archäologische Demographie. Methoden, Daten und Bevölkerung der europäischen Bronze- und Eisenzeiten. Sidestone Press, Leiden 2016. € 120.00 (Hardback). ISBN 978-90-8890-394-6. € 39.95 (Paperback). ISBN 978-90-8890-393-9. € 9.95 (E-book). 430 pages, 53 figures, 44 tables.

Sidestone Press has become an important publisher of international archaeological literature in the last years. Interesting to note is the business model of a tiered pricing policy, which not only distinguishes between hard- and softcover as well as much cheaper e-books but also offers a free online version on the publisher's website. The publishing programme comprises a wide array of interesting publications, including the book reviewed here, which presents Frank Nikulka's habilitation thesis on archaeological demography. Nikulka submitted his habilitation at the University of Münster in 2003; more recent literature was only added cursory. As he points out in his foreword, his further professional career stood in the way of a timely publication. It should be mentioned in advance that the book is an important contribution to the general discussion of archaeological issues; thus, we can be grateful that Nikulka had the patience to finally publish this study. However, the rapid methodological development in prehistoric archaeology in recent years has surpassed Nikulka's work, and consequently some of its topics already rather belong in research history than in the current debate.

Broadly speaking, the subject of demographic research can be described as the analysis of the development of populations. Therefore, demography is a central issue of archaeological research. For German-language archaeology, however, Nikulka thankfully presents for the first time a monographic publication on the subject. Yet, as will be shown, it does not satisfy the requirements of a systematic reference book for demographic archaeology. The author includes a very wide range of demographic approaches in archaeology in his chapter on methodology, but the focus of his work is on the population development in the European Bronze Age and the pre-Roman Iron Age. With this focus, it seems perfectly legitimate to select various approaches and test their suitability for the study of Bronze and Iron Age societies, but this also leads to some flaws.

The book consists of five major chapters on Archaeological Demography and Palaeodemography (chapter 1, pp. 11–26), a History and Classification of Methods Developed in Europe and America (chapter 2, pp. 27–126), the Methodology of Local and Regional Studies (chapter 3, pp. 127–162), Demographic Data from the Neolithic to the Middle Ages (chapter 4, pp. 163–188), and on Demographic Developments in the Bronze and Iron Ages (chapter 5, pp. 189–260), followed by an Epilogue (pp. 261–264) and summaries in German and English (pp. 265–271). It concludes with 44 tables.

Nikulka explores the subject of archaeological demography, distinguishing it from other varieties of demographic research (chapter 1, pp. 11–26). On the one hand, all demographic disciplines