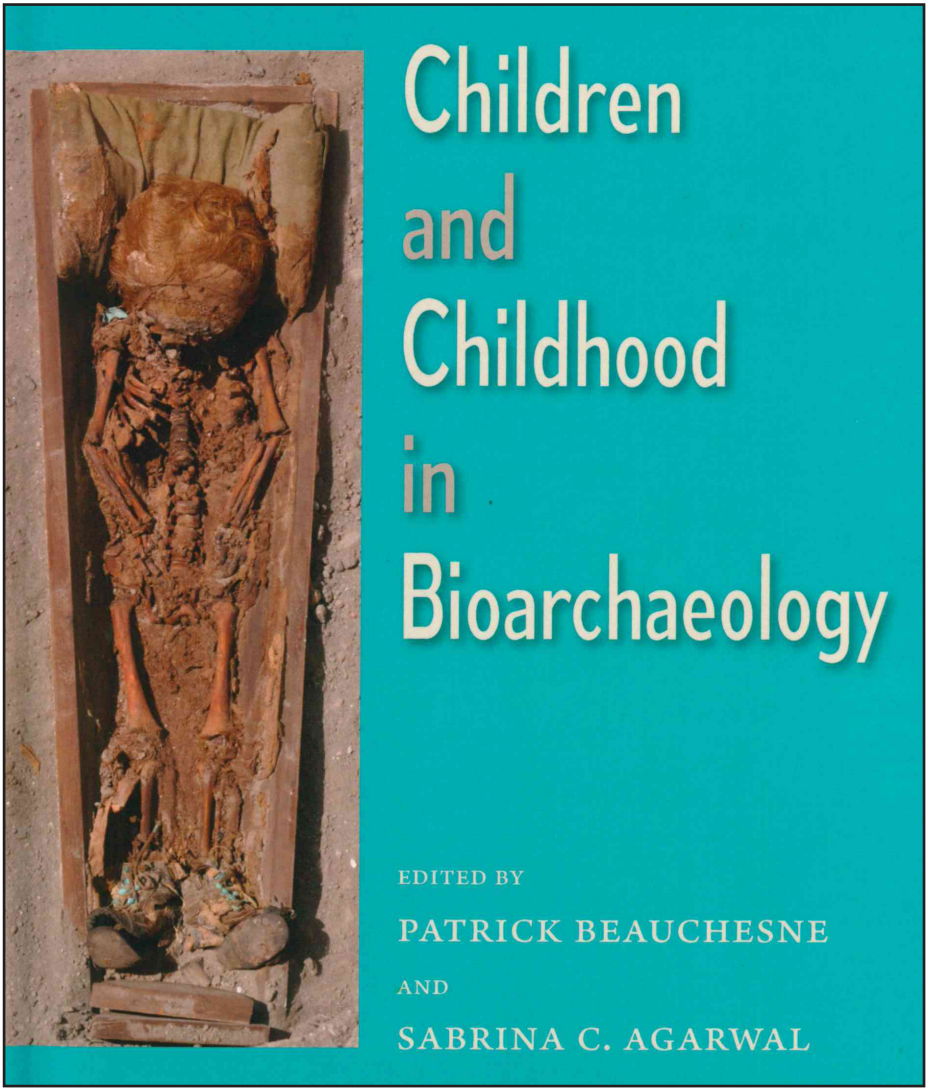

Contents

"Heralds a new direction in bioarchaeological research, showcasing a diverse array of studies from across the world that emphasize the importance of multidisciplinary analysis when seeking to understand the lives of past children."
—REBECCA C. REDFERN, author of *Injury and Trauma in Bioarchaeology: Interpreting Violence in Past Lives*

"Impressive and refreshing. Incorporates a diversity of contributions that provide novel or updated methodological and theoretical approaches and concepts under a biocultural and life course perspective."—HUGO CARDOSO, Simon Fraser University

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AS RESEARCHERS BECOME INCREASINGLY INTERESTED in studying the lives of children in antiquity and their place in the archaeological record, this volume argues for the importance of a collaborative biocultural approach. Contributors draw on fields including skeletal biology and physiology, archaeology, sociocultural anthropology, and pediatrics to show that a diversity of research methods is the best way to illuminate the complexities of childhood.

Wide-ranging case studies provide a rich global and temporal perspective on childhood in the past, including in prehistoric Peru, Colombia, and North America; in Roman Egypt; and in Industrial Revolution–era England. Applying analyses of stable isotope data, epigenetics, funerary patterns, skeletal trauma, bone microstructure, dietary histories, and breastfeeding and weaning trends of the past 10,000 years, this holistic study emphasizes the role of children in ancient societies not as accessories to their parents but as individuals with their own meanings, symbolisms, and identities.

Emphasizing a life course approach and developmental perspective, this volume's interdisciplinary nature marks a paradigm shift in the way children of the past are studied. It points the way forward to a better understanding of childhood as a dynamic lived experience both physically and socially.

PATRICK BEAUCHESNE is assistant professor of anthropology at the University of Michigan-Dearborn. SABRINA C. AGARWAL, associate professor of anthropology at the University of California, Berkeley, is coeditor of *Social Bioarchaeology*. She is also coeditor-in-chief of the journal *Bioarchaeology International*.

A volume in the series Bioarchaeological Interpretations of the Human Past: Local, Regional, and Global Perspectives, edited by Clark Spencer Larsen

Front: CNS U3-2 was an intrusive Late Colonial or 19th-century (Republican-era) burial in Eten. Photo by Haagen Klaus.

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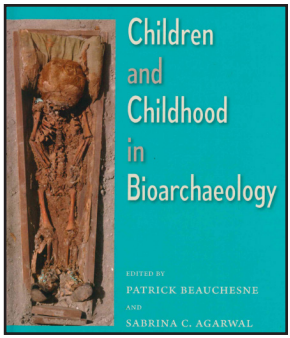

Children and Childhood in Bioarchaeology

Edited by Patrick Beauchesne and Sabrina C. Agarwal. 2018. University Press of Florida. 416 pp., 54 figures, 15 tables, references. $110.00 (Hardcover).

Reviewed by Anne Marie E. Snoddy, Department of Anatomy, University of Otago, Dunedin, New Zealand.

Infants and children in the archaeological record, particularly their physical remains, have been a subject of increasing interest over the last decade. Long ignored or dismissed by the larger discipline, the potential of these individuals to provide key biosocial context for their societies is beginning to be recognized (e.g. Halcrow and Tayles 2011; Lewis 2007, 2018). Their unique physical and social vulnerability means that children can provide important information about the population to which they belong. Additionally, there is an increasing focus on the child as an active agent within their community and shaper of their culture, which has profound implications for the social reconstruction of ancient human groups. This two-part volume, which calls on the expertise of a wide-range of scholars from within bioarchaeology, is a timely contribution to the field, deftly integrating socio-cultural, archaeological, and biological lines of evidence to create a holistic body of work on the child and childhood in the archaeological record.

The first half of the volume focuses on the biocultural aspects of the concept of "childhood" in bioarchaeology. This is particularly useful for researchers like myself who are better versed in the biology of development than in the sociocultural aspects of childhood. Raelene M. Inglis and Siân E. Halcrow open this section with a comprehensive review of the theoretical development of childhood bioarchaeology and provide solid foundation for the following chapters. The authors draw from social anthropology and sociology and highlight the roles of these disciplines in fostering the study of children and childhood in ancient human groups. The unique contribution of children to the biocultural approach to biologi-cal anthropology, particularly in terms of environmental plasticity and life-course theory, is explored and greater focus on the union of life-course and life-history approaches in future theoretical frameworks is advocated.

Chapters two and three focus on the behavioural ecology of infant feeding and the maternal-infant nexus. Jessica Pearson conducts an impressive meta-analysis of isotopic studies of breastfeeding and weaning across the last 10,000 years of the Asian and European archaeological records with the aim of exploring the cultural plasticity of the the weaning period. She sets up this analysis with a comprehensive overview of the biology of human lactation and its effects on fertility and a summary of the science of isotopic analysis of weaning which are accessible to a non-specialist reader. Tina Moffat and Tracy Prowse provide an articulate and exhaustive overview of the biocultural aspects of breastfeeding and weaning in past societies. They draw on medical anthropological, clinical, historical, and archaeological bodies of knowledge to create an inclusive framework through which infant and child feeding practices, and the effects of these practices on larger communities, can be considered.

Chapters four and five use non-adult remains from the archaeological record of Peru to explore the social concept of the "child." In chapter four, Haagen D. Klaus combines mortuary and osteological analyses of stress markers to consider how the perception of non-adult individuals may have changed following European colonization. This chapter provides a vital discussion of the child and "personhood" in the past and challenges us to reassess our own perceptions of what these terms mean. My only criticism of this (and to some extent the following chapter) is the use of the term "Andean" synonymously with the archaeological context of Northern Peru. Although I do not believe this was the author's intent, it dismisses the Andean cultural complexes to the South, some of which appear to have had a radically different social perception of non-adults (see Arriaza 1995, 2005). In the following chapter, J. Marla Toyne continues the Andean childhood theme with comparative analysis of non-adult trauma in three very different types of catastrophic assemblages in northern Peru (possible ritual sacrifice, possible political execution, and massacre). The author discusses her findings in the context of Inka social-age classifications and argues that the evidence from these three particular assemblages indicates that children at these sites were not liminal to their society at large, but considered active individuals within it. This work illustrates how analysis of skeletal assemblages can further our understanding of childhood agency in the past and is an appropriate close to the first half of the volume.

The second half of the volume focuses on how life-course theory, the convergence of environment, culture, and physiology across an individual's lifespan, can be explored via analysis of human remains. In chapter six, James H. Gosman and colleagues provide an integrated study of the relationship between skeletal microstructure and childhood behavioural development. Their focus is primarily on changes in trabecular and cortical bone architecture across developmental stages associated with changes in load bearing (e.g. walking). The aims of this chapter are worthy and much of the information contained within it is useful for researchers interested in bone microstructure and developmental osteology. However, the writing relies heavily on technical terms (e.g. "ontogenetic," "kinematics") which limits its audience. In chapter seven, Daniel H. Temple explores the timing of linear enamel hypoplastic defects in a sample of non-adults from three Jomon Period sites in Japan. The author attempts to link the timing of hypoplastic defects to "socially and ecologically defined phases" of childhood that have been identified in previous work from this archaeological context (p. 246). Despite an unavoidably small sample size, which limits meaningful statistical data, this chapter provides a very useful discussion of physiological stress and its relationship to the agency of children.

Melanie J. Miller and colleagues follow this chapter with an overview of stable isotope studies of food consumption throughout the life-course and a case study of the application of these methods in pre-Hispanic Columbia. Comparative stable isotopic analysis of bone and teeth is uniquely positioned to explore dietary changes throughout the life-course and address questions related to, for example, the onset of gendered food consumption or disparities in resource allocation. In their case study, the authors provide evidence that at the Muisca site of Tibanica gendered dietary practices were

adopted in childhood and continued throughout life. As such, this chapter is a particularly important contribution to the volume. In chapter ten, Rebecca Gowland and Sophie J. Newman consider how bioarchaeological data can contribute to the increasing body of work on the developmental origins of health and disease hypothesis (DOHaD). The authors do this through comparative analysis of longitudinal growth in four cemeteries dating to the industrial revolution in the UK, a period of rad-ical change in the economic duties and working environment of children. Their find-ings are intriguing and the strength of this chapter lies in its in-depth discussion of the DOHaD and epigenetics as they relate to the biocultural context of nineteenth-century industrial England.

In the final chapter, Sandra M. Wheeler and co-authors investigate how analysis of mortuary treatment and physical remains of non-adults can provide information about the evolution of ideological attitudes towards children in the past. I applaud their attempt to compare disease burden in non-survivors (children) and survivors (adults), which can theoretically inform our understanding of the life-course. However, I would argue that there are difficulties in comparing stress markers, other than enamel defects, in juveniles and adults. Juveniles are expected to exhibit a higher prevalence of most skeletal lesions due to the high cell turnover that occurs during growth. Nevertheless, this chapter remains an impressive integration of the spectrum of bioarchaeological techniques, from biochemical to macroscopic paleopathological analyses, with results placed in ethnohistorical context and is an appropriate close to this body of work.

Overall, Patrick Beauchesne and Sabrina Agarwal have assembled an impressive, multidisciplinary team of experts on biological, cultural, and psychosocial aspects childhood. This volume is a very useful contribution to the growing field of childhood bioachaeology and should be considered essential reading for upper level anthropology students and any scholar interested in the biocultural approach to biological anthropology. This work will appeal to biological anthropologists, archaeologists, and historians interested in childhood in the past.

References

Arriaza, T. Bernardo (1995). Chinchorro Bioarchaeology: Chronology and Mummy Seriation. *Latin American Antiquity* 6:35–55.

Arriaza, T. Bernardo (2005). Arseniasis as an Environmental Hypothetical Explanation for the Origin of the Oldest Artificial Mummification Practice in the World. *Chungara: Revista De Antropología Chilena* 37:255–260.

Halcrow, E. Siân and Nancy Tayles (2011). The Bioarchaeological Investigation of Children and Childhood. In *Social Bioarchaeology*, edited by Sabrina C. Agarwal and Bonnie A. Glencross, pp. 333–360. Chichester, Wiley-Blackwell.

Lewis, Mary (2007). *The Bioarchaeology of Children.* Cambridge: Cambridge University Press.

Lewis, Mary (2018). *Paleopathology of Children: Identification of Pathological Conditions in the Human Skeletal Remains of Non-Adults.* London: Academic Press.