

INTRODUCTION



The (Bio)Archaeology of Adolescence

Creighton Avery and Dana Thacher

Almost every review of the anthropological study of childhood or adolescence will invariably include a discussion of the research by Philippe Ariès (1962), Kathryn Kamp (2001), and Grete Lillehammer (1989), which first opened the conversation regarding childhood within the discipline. While Ariès questioned if a concept of childhood existed in the past (receiving vocal opposition to his ideas, see Wilson [1980] for discussion), the seminal works by Kamp and Lillehammer called for anthropologists to explore the roles and impact children may have had on anthropological landscapes in the past. Since then, decades of rich and vibrant work have been published across the globe, identifying experiences of childhood and how children influence the world around them. Today, studies incorporating children and non-adults employ questions that are socially driven, attempting to understand how children were viewed and socially treated in the past, and how they interacted with—and related to—their own world (Halcrow and Tayles 2008). As a result, children are being included in a wider range of studies, ones that use a diverse set of methodological and theoretical approaches.

In a way, it is easy to differentiate between a child and an adult: based on physical development, cognitive abilities, size, sexual fertility, and so much more. The line becomes blurred, however, when we look at adolescents. How do you differentiate an adolescent from a child or from an adult? Are they simply small adults, or are they big kids? Are they both? Are they something entirely different? From our own lived experiences, to exploring those in the past, defining adolescence is a convoluted process.

At its core, adolescence is a period of biological, social, and cognitive development. Biologically, adolescence is associated with puberty and pubertal development, during which young people can gain 50 percent of their adult weight and 20 percent of their adult height, while also developing pubic and facial hair, changes in voice, and sexual fertility (Marshall and Tanner 1969, 1970; Rogol et al. 2002).

Small Adults or Big Kids?

Exploring Archaeological and Bioarchaeological Approaches to Adolescence

Edited by Creighton Avery and Dana Thacher

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Second to infancy, it is the period of human ontogeny with the greatest degree of physical changes (Viner et al. 2015). Neurologically, adolescence is the period in which the brain develops and forms new neural connections, constructing how the brain will work for the rest of the individual's life (National Academies of Science, Engineering, and Medicine 2019). As a result, adolescents are often rash and impulsive, participating in risk-taking and reward-seeking behaviors (see Crone and van Duijvenvoorde [2021] for discussion). Socially, however, it is the period in which young people take on adult roles within their communities, with increasing responsibilities and freedoms (World Health Organization [WHO] 2014). When these changes occur varies among individuals, communities, societies, and across space and time; there is no universal experience—or definition—of “adolescence.”

Adolescence is not simply an aging process; experiences of adolescence can be intertwined with other cross-cutting variables of identity, including gender, sex, social status, geographical position, religious beliefs, community connections, and more. Thus, studying adolescence in one context does not provide all the answers. Rather, adolescence must be examined in each unique context, identifying similarities and differences that can speak to the process of aging and becoming an adult.

Today, bioarchaeologists and archaeologists have begun to investigate adolescents in their own context. In doing so, they are working towards identifying how the study of adolescence might ultimately transform our understandings of societies in the past more broadly. While both subdisciplines engage with the topic of adolescence, they come to the table with different histories that have led them to this moment.

The Bioarchaeology of Adolescence

In biological anthropology, Avery and Lewis (2023) suggest that the study of adolescence has been limited due to small sample sizes, unreliable sex estimations, and issues conceptualizing adolescence within the life course. For example, most bioarchaeological methods divide skeletal remains into two large groups: adults and non-adults. However, adolescents do not fit neatly into these categories. Perhaps because they fall into this liminal or undefined space, they are overlooked, divided, or ignored due to their complexity (Lewis 2006, 2022; Avery et al. 2022; Avery and Lewis 2023). Yet, with new methodological developments and an intentional focus on this period of the life course, we can move beyond current limitations and find new and innovative ways to study those that fall between adult and non-adult groups.

Bioarchaeological interest in the topic of adolescence was ignited following the publication of the pubertal timing methods by Shapland and Lewis (2013, 2014). With the application of adolescent specific methods, the floodgates opened, and researchers began to consciously consider those transitional individuals, using

the pubertal timing methods (e.g., Arthur et al. 2016; Avery, Prowse, et al. 2023; Bareggi et al. 2022; Blom et al. 2020; Dabbs 2023; DeWitte and Lewis 2021; Doe et al. 2019; Henderson and Padez 2017; Lewis et al. 2016). However, beyond simply studying puberty, these methods forced researchers to consider the lives of adolescents and incorporate other methods to better understand their lived experiences, including changes in diet (Avery et al. 2021; Avery, Brickley, et al. 2023) and mobility (Lewis and Montgomery 2023; French and Nowell 2022), patterns of disease and “health” (Ham and DeWitte 2023; Scott et al. 2023; Lockau et al. 2019), and combinations therein (Castro et al. 2017). We are now starting to see a more nuanced picture of bioarchaeological contributions on the lives of adolescents. Together, these individual pieces demonstrate how researchers from across the subdiscipline are consciously considering adolescence and how we might best study this period of the life course within biological anthropology.

The Archaeology of Adolescence

It is difficult to define a formal starting point for the study of adolescence in archaeology. Whereas the archaeological study of childhood examines toys, pedagogic material, evidence of child fingerprints, miniaturization of material, or spaces occupied primarily by children, archaeological traces of adolescents are more difficult to define and identify without reference to other age categories (Baxter 2008). Archaeologists have compared the material associated with adolescent burials to those of children and adults (Joyce 2001; Sofaer Derevenski 2000; Stoodley 2000; Waterman and Thomas 2011) and have examined material, artistic depictions, and historical accounts associated with rites of passage into adulthood (Gilchrist 2012: 91–94; Joyce 2007; Melheim 2015; Owens and Hayden 1997; but see Meskell [2000] for a discussion where such evidence is lacking). In each case, adolescence is treated as a transitional phase between childhood and adulthood and is studied in reference to these age categories.

As a result, many of the archaeologists listed above utilize a life-course approach—also prominent in bioarchaeological study (Agarwal 2016; Gowland 2017; Temple 2019)—in which adolescence is understood on a continuum rather than as a distinct age category. (See Gilchrist [2012] for a discussion of this approach and a detailed application of it to multiple medieval sites across England.) The study of adolescence has therefore been present in archaeological investigation for some time, but there has not been a watershed moment to spark a renewed focus on this part of the life course in the same way that the publication of pubertal timing methods did in bioarchaeology. This makes it more difficult, when compared to both the study of adolescence in bioarchaeology as well as the archaeology of childhood, to define and formalize the study of adolescence in archaeology into a unique field. Still, the contributions that these archaeologists have made to theo-

riking adolescence as a liminal stage should not be overlooked, and it is because of their groundwork that we are able to dive further into what a (bio)archaeological study of adolescence looks like and the interpretive possibilities it offers.

Bridging the Divide

In both archaeology and bioarchaeology, the study of adolescence requires the incorporation of multiple lines of evidence. However, the engagement with other subdisciplines is often due to necessity. For example, the identification of adolescents in archaeology often requires accompanying human remains, due to the lack of adolescent-specific archaeological evidence. Little research, however, has worked to explicitly bridge the divide between archaeology and bioarchaeology or biological anthropology, building complementary lines of evidence. In this volume, we work to address this gap and bring forward collaborative, multidisciplinary work by researchers across the globe, demonstrating how work by archaeologists can be more consciously utilized by biological anthropologists, and vice versa.

In this book, the study of adolescence in the past is structured chronologically, exploring populations, samples, and individuals between the Upper Paleolithic (12,000 to 45,000 years ago) and early modern period (nineteenth century CE). Rather than separating the biological anthropological and archaeological approaches, the two are intertwined between chapters. In fact, contributors to this volume were encouraged and challenged to consider both archaeological and biological anthropological approaches, demonstrating how their research incorporates both. In doing so, we hope to reduce the divide between the two subdisciplines and build a more cohesive approach to studying adolescents in the past.

By the nature of the work engaged, researchers in this book use a wide range of methods: from developing theoretical models to studying changing spatial distributions or patterns of commemoration, to analyzing human remains or conducting biochemical analyses. Each method, approach, and theoretical framework helps to demonstrate the diversity through which we can study adolescents in the past, and how diverse and multidisciplinary approaches are needed if we want to begin to understand individuals in the past.

In Chapter 1, Jennifer French and April Nowell explore adolescence in the European Upper Paleolithic (12,000 to 45,000 years ago), utilizing a baseline model for adolescence in this context. Exploring geographical and temporal changes during the European Upper Paleolithic, they find that there is no consistent experience of “adolescence” during this time. Rather, changes in mortality risks are noted between early and late adolescence, across space throughout the European continent, and across time, possibly related to paleogenetic evidence for population turnover between the pre- and post-Late Glacial Maximum. These results clearly demonstrate that adolescence was a dynamic and malleable period of the life course.

In Chapter 2, Ana M. Herrero Corral explores the Bell Beaker graves from Iberia (third century BCE) to identify when the transition to adulthood may have occurred, and what mortuary patterns might identify a specific period of adolescence. By exploring burial patterns in childhood, and in adulthood, Herrero Corral then examines adolescents, identifying when their burial patterns transition. While these changes in patterns might hint at a social age change for Bell Beaker burials, similar transitions could not be identified in the non-Bell Beaker burials. Ultimately, Herrero Corral finds that there are more questions than answers and outlines a path forward for further exploration of adolescence in prehistoric periods.

While much is known about *adulescentia*, or “a period of youth,” in the Roman Empire (first to fifth centuries CE), Creighton Avery notes that descriptions of this life course stage are focused on the experiences of wealthy males, leaving the experiences of women and lower social status individuals unaccounted for in the literary record. In Chapter 3, Avery sets out to identify if a period of adolescence even existed for these underrepresented groups, and what it may have looked like. Using macroscopic and biochemical analysis of human remains, she investigates the biological changes and potential social changes encapsulated in human remains, incorporating literary sources and archaeological data to provide the context so desperately needed in bioarchaeological studies. Similar to French and Nowell, no single picture of adolescence emerges from the Roman Imperial period, but rather, Avery finds that the biological and social changes may be intricately linked, and challenges future researchers to explore the two in tandem rather than as discrete pieces of information.

Through a meta-analysis and case study, Sarah I. Baitzel, Bridget C. Bey and Allisen C. Dahlstedt, incorporate the concept of *camay*, a state of being and transformation, to understand the social and physiological process of maturation in Andean society (700–1100 CE) in Chapter 4. Using sacrificial burials to first identify the limits of “adolescence,” they then incorporate pubertal timing and mortuary data to understand when adolescence may have occurred, and how it may have been perceived or understood within their communities. What they find is that the period of adolescence was a liminal and unstable phase of life. Rather than a clear picture of change, Andean adolescence seems to depict an “un-becoming messiness” (Baitzel et al., Chapter 4), a conclusion that may resonate with many other authors in this volume.

While Baitzel, Bey, and Dahlstedt incorporate the concept of *camay* into their work in Andean society, and Avery incorporates the Roman Imperial definition of *adulescentia*, Marieke Ivarsson-Aalders highlights that there is no word for the period of adolescence in the Old Norse language during the Viking Age (750–1050 CE). However, literary sources do hint at some sort of transitional period between the ages of twelve and sixteen (Ivarsson-Aalders, Chapter 5). Building archaeological and bioarchaeological data together in Chapter 5, Ivarsson-Aalders analyzes patterns of pubertal timing, and mortuary patterns by age and sex-based groups.

Ultimately, she tests the boundaries of the period of adolescence in the Viking world and investigates if a period of the life course even existed, and if so, what it might mean to the individuals and societies around them.

While definitions of adolescence may be unclear in some contexts, Dawn Hadley points out that in the early medieval (eighth to eleventh centuries CE) legal system in England, a category of adolescence was well defined, but perhaps not well understood. In Chapter 6, Hadley bridges this divide, exploring the social significance of adolescence during this period. In particular, she examines the lack of adolescent burials within community cemeteries compared to other age groups, but their frequent appearance in so-called “execution cemeteries,” and what this might tell us about the perceived relationships between life stage, criminality, and punishment.

In Chapter 7, Dana Thacher studies commemoration of children and adolescents in Victorian and Edwardian England (1845–1925 CE), and in doing so, explores the perception or conceptualization of adolescence and impending adulthood by adults within the communities. Exploring differences across time and by gender, Thacher connects patterns in commemorative rates to changes in the social relevance ascribed to the adolescent period and the biological changes that alter the physical appearance of adolescent girls and boys. Through her work, Thacher also emphasizes that studying adolescence is beneficial to better understand not only the small adults or big kids in the past but also the population as a whole.

While most authors in this book examine archaeological samples, populations, or cemeteries, Meredith Ellis takes a different approach in Chapter 8. She explores the remains of two individuals: a fourteen-year-old with evidence of pipe-smoking, and a sixteen-year-old daughter who lived as a dependent. As Ellis points out, these two individuals straddle the line between non-adult and adult, according to common biological anthropological divisions of age. One encapsulates a small adult, while the second represents a big kid, reminding us that adolescents are not one or another, but often move across the divisions we create, or establish their own limits within these transient boundaries. Through a reflective process on her own work, Ellis delivers this cautionary tale reminding us to define adolescence in meaningful ways and be wary of oversimplifying experiences based on available data.

Lastly, in the Conclusion, Kathryn Kamp acknowledges that the term “adolescence” is a construct that helps us make sense of the past but should not limit us in our explorations of aging in the past. Kamp also explores four typological challenges associated with studying adolescence, including: 1) adolescence as a biological, cultural, and social experience; 2) the asynchronistic attributes of adolescence; 3) the limitations of applying categorical variables to continuous data; and 4) the importance of considering intersectionality and cross-cutting variables of identities. Ultimately, Kamp recognizes the complexity and ambiguity of studying adolescence in the past and cautions researchers to avoid simplistic or unilateral definitions of adolescence. Rather, we should aim to embrace the nuances of aging

and diversity of experiences for big kids, small adults, and those who do not fit into neat boxes.

Creighton Avery is Assistant Professor (Teaching Stream, LTA) at the University of Toronto Mississauga, and an Osteoarchaeologist with Stantec Consulting Ltd. Recent publications include the field guide *Bioarchaeology of Infants and Children* (in *Elements of Current Archaeological Tools and Techniques*, Cotsen Institute of Archaeology at UCLA and Cambridge University Press, 2025).

Dana Thacher is Postdoctoral Fellow at McMaster University in Canada. Her most recent work uses historical cemetery data combined with primary historical sources to explore why some children and adolescents received a gravestone following their death when others did not. She specializes in historical archaeology, statistical methods, and mortuary archaeology and has previously published in *Arctic* (2018) as well as the *Journal of Archaeological Science: Reports* (2017).

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