Ages and Abilities: The Stages of Childhood and their Social Recognition in Prehistoric Europe and Beyond

edited by

Katharina Rebay-Salisbury
and Doris Pany-Kucera

Archaeopress Publishing Ltd
Summertown Pavilion
18-24 Middle Way
Summertown
Oxford OX2 7LG
www.archaeopress.com

ISBN 978-1-78969-768-1
ISBN 978-1-78969-769-8 (e-Pdf)

© Archaeopress and the individual authors 2020

Cover image: Beginnings of life: terminology and stages. Illustration by Sarah Catlin, in Finlay, N. 2013. Archaeologies of the beginnings of life. *World Archaeology* 45, 2: 207–214.

We thank Nyree Finlay for the permission to reprint the image.

This book is available in print and as a free download direct from www.archaeopress.com

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

Contents

List of contributors iii

Childhood in the Past Monograph Series xi

Chapter 1 Katharina Rebay-Salisbury and Doris Pany-Kucera: Introduction. Children's developmental stages from biological, anthropological and archaeological perspectives 1

Chapter 2 Kathryn A. Kamp and John C. Whittaker: Weaponry and children: technological and social trajectories 11

Chapter 3 Ekaterina Alexandrova Stamboliyska-Petrova: How and when life is considered to have begun in past societies: child burials at the cemetery of Durankulak, north-east Bulgaria ...26

Chapter 4 Daniela Kern: Inherited rank and own abilities: children in Corded Ware and Bell Beaker communities of the Traisen Valley, Lower Austria 34

Chapter 5 Lucie Vélová, Katarína Hladíková and Klaudia Daňová: The little ones in the Early Bronze Age: foetuses, newborns and infants in the Únětice Culture in Bohemia, Moravia and Slovakia....................50

Chapter 6 Katharina Rebay-Salisbury, with contributions by Patrik Galeta, Walther Parson, Doris Pany-Kucera, Michaela Spannagl-Steiner and Christina Strobl: Ages and life stages at the Middle Bronze Age cemetery of Pitten, Lower Austria 69

Chapter 7 Eszter Melis, Tamás Hajdu, Kitti Köhler and Viktória Kiss: Children in the territory of Western Hungary during the Early and Middle Bronze Age: the recognition of developmental stages in the past....................84

Chapter 8 Daria Ložnjak Dizdar and Petra Rajić Šikanjić: Childhood in the Late Bronze and Early Iron Age in the southern Carpathian Basin 107

Chapter 9 Beata Kaczmarek: Mycenaean childhood: Linear B script set against archaeological artefacts....................122

Chapter 10 Nadia Pezzulla: Dumu.gaba, *ṣiḫru* e Guruš/sal.Tur.tur....................133

Chapter 11 Francesca Fulminante: Identifying social and cultural thresholds in sub-adult burials 151

Chapter 12 Elisa Perego, Veronica Tamorri and Rafael Scopacasa: Child personhood in Iron Age Veneto: insights from micro-scale contextual analysis and burial taphonomy....................174

Chapter 13 Anna Serra: The recognition of children and child-specific burial practices at the necropolis of Spina, Italy 193

Chapter 14 Hanna Ammar: Greek children and their wheel carts on Attic Vases....................209

Chapter 15 Alexandra Syrogianni: Teeny-tiny little coffins: from the embrace of the mother to the embrace of Hades in ancient Greek society 221

Chapter 16 Irene Mañas Romero and José Nicolás Saiz López: Pueri nascentes: rituals, birth and social recognition in Ancient Rome 235

List of contributors

Hanna Ammar
Department of Art History and Archaeology
University of Fribourg
Fribourg, Switzerland
hanna.ammar@unifr.ch

Hanna Ammar is a PhD student in classical archaeology and religious studies at the University of Fribourg (Switzerland) and at the École Pratique des Hautes Études (Paris). Her doctoral research focuses on depictions of children's games on Attic red-figured ceramics from the 5th and 4th centuries BC. Since October 2017, she has been a member of the ERC advanced grant team 'Locus Ludi: The Cultural Fabric of Play and Games in Antiquity', led by Véronique Dasen at the University of Fribourg.

Klaudia Daňová
Institute of Archaeology
Slovak Academy of Sciences
Nitra, Slovak Republic
klaudia.danova@savba.sk

Klaudia Daňová is an archaeologist with a research focus on the European Early Bronze Age and Underwater/River archaeology. After completing her PhD, she focused mainly on children and childhood in prehistoric societies. She is a member of the Kuwaiti-Slovak mission, which researches the settlement on the Kuwaiti island Failaka. In 2018, in cooperation with the University of Trnava, she laid the foundations for the research of underwater archaeology in Slovakia. She leads the Department of Prehistory at the Archaeological Institute of the Slovak Academy of Sciences in Nitra.

Francesca Fulminante
Department of Anthropology and Archaeology
University of Bristol
Bristol, United Kingdom
francesca.fulminante@bristol.ac.uk

After a PhD from Cambridge University (2008) and post-doctoral positions, including a Marie Curie Sklodowska Fellowship at the University of Roma Tre (2014-2016), Francesca Fulminante is now Senior Researcher and Lecturer at the universities of Bristol and Royal Holloway and the University Roma Tre. Her research investigates Mediterranean urbanization during the first Millennium BCE with a focus on central Italy. She has contributed to many excavations and published extensively on macro-economic, social and productive aspects such as transportation networks, political agency and community practices in smelting techniques. Her recent research focuses on breastfeeding/child-rearing practices and gender issues in first millennium BCE Italy and the Mediterranean.

Tamás Hajdu
Department of Biological Anthropology
Eötvös Loránd University
Budapest, Hungary
hajdut@caesar.elte.hu

Tamás Hajdu is a physical anthropologist. He is an assistant professor in the Department of Biological Anthropology at the Eötvös Loránd University and curator in the Department of Anthropology at the Hungarian Natural History Museum, Budapest. He specializes in the population history of the Carpathian Basin in the Bronze Age and Migration Period, as well as in the evolution of infectious diseases and palaeo-oncology.

Katarína Hladíková
Department of Archaeology
Faculty of Arts Comenius University in Bratislava
Bratislava, Slovak Republic
katarina.hladikova@uniba.sk

Katarína Hladíková is an archaeologist with a research focus on the social archaeology of later European prehistory, especially on modelling identities. After completing her PhD in 2013, she participated in many research projects, including 'Archaeological Chronometry in Slovakia'. In 2018 she became Assistant Professor at the Department of Archaeology of the Comenius University in Bratislava, Slovakia, where she teaches and participates in various research projects, such as 'Archaeology of Children in European Prehistory'. In 2020, she received a Post-Doctoral Scholarship at the University of Vienna with the project 'Protohistoric Identities'.

Beata Kaczmarek
Laboratory of the Bronze Age Mediterranean Archaeology
Adam Mickiewicz University in Poznan
Poznan, Poland
julkaka4@wp.pl

Beata Kaczmarek is an archaeologist specializing in the Bronze Age Mediterranean, with a particular interest in the Mycenaean culture and Linear B script. In 2014, she received a Master's degree in Archaeological Heritage and Oriental and Ancient Archaeology from Adam Mickiewicz University in Poznań, Poland. In 2015, she received a fellowship from the Greek Government for Scientific Research. Her doctoral project on Mycenaean childhood was funded by the National Science Centre in Poland. She is an active member of the European Association of Archaeologists.

Kathryn Kamp
Anthropology Department
Grinnell College
Grinnell, USA
kamp@grinnell.edu

Kathryn Kamp teaches Anthropology and Archaeology at Grinnell College in Iowa. Most of her fieldwork has been in the American Southwest, although she has also worked in Syria, Jordan, Cyprus, and Belize. Her main topical interests are children in the past, ethnoarchaeology, and experimental archaeology. She is the author of *Life in the Pueblo* and *Surviving Adversity*, and the editor of *Children in the Prehistoric Puebloan Southwest*.

Daniela Kern
Independent scholar
Vienna, Austria
daniela-eve.kern@gmx.at

Daniela Kern is an archaeologist with a research focus on the Central European Late Neolithic and Bronze Age. After completing her PhD in 1990, she has primarily worked as a freelance archaeologist at excavations and for exhibitions and projects at the University of Vienna, various museums and the Austrian Academy of Sciences. As independent scholar, she led privately or publicly funded projects such as the FWF project 'The Latest Neolithic in the Lower Traisen Valley'.

Viktória Kiss
Institute of Archaeology, Research Centre for the Humanities
Hungarian Academy of Sciences Centre of Excellence
Budapest, Hungary
kiss.viktoria@btk.mta.hu

Viktória Kiss is an archaeologist specialising in the Central European Bronze Age. After completing her PhD in 2003, she became a senior research fellow at the Institute of Archaeology, Research Centre for the Humanities of the Hungarian Academy of Sciences. She has written a book about Middle Bronze Age Encrusted Pottery in Western Hungary, and edited several volumes on Bronze Age archaeology of the region. As the PI of the Momentum Mobility Research Group granted by the Momentum Programme of the Hungarian Academy of Sciences, she has worked on pottery, metal production, bioarchaeology and mobility in recent years.

Kitti Köhler
Institute of Archaeology, Research Centre for the Humanities
Hungarian Academy of Sciences Centre of Excellence
Budapest, Hungary
kohler.kitti@btk.mta.hu

Kitti Köhler is a physical anthropologist. Since 2002, she has been working at the Institute of Archaeology, Research Centre for the Humanities (Hungarian Academy of Sciences Centre of Excellence) as a research fellow. She received her PhD in 2013 and has published several papers regarding population history and palaeopathology in different periods of prehistory.

Daria Ložnjak Dizdar
Institute of Archaeology
Zagreb, Croatia
dldizdar@iarh.hr

Daria Ložnjak Dizdar is senior research associate at the Institute of Archaeology in Zagreb, Croatia. Her research interests are prehistoric archaeology, especially Bronze Age and Early Iron Age communities and identities in the Carpathian Basin, mortuary practices and ceramics. She has participated in numerous archaeological investigations in continental Croatia and has been leader of several research projects. She teaches at the Department of Archaeology at the University of Zagreb. Her publications focus on topics of the Bronze Age and the beginning of the Early Iron Age in the southern Carpathian Basin.

Irene Mañas Romero
Departamento de Historia Antigua. Facultad de Geografía e Historia
Universidad Nacional de Educación a Distancia (UNED)
Madrid, Spain
i.manas@geo.uned.es

Irene Mañas Romero is an Assistant Professor at the Departamento de Historia Antigua (UNED). Prior to this position, she was a post-doctoral researcher at the CSIC (Consejo Superior de Investigaciones Científicas). Her research engages with the archaeological study and literary analysis of the visual culture in Roman times, and its role as a main agent of socialization in domestic spaces. She has participated in research programmes in Spain and Italy, and was principal investigator of the project 'Cultura material doméstica en Lusitania: Condiciones de vida y crecimiento' (CSIC-Ministerio de Ciencia e Innovación, Spain).

Eszter Melis
Institute of Archaeology, Research Centre for the Humanities
Hungarian Academy of Sciences Centre of Excellence
Budapest, Hungary
melis.eszter@btk.mta.hu

Eszter Melis is an archaeologist with a research focus on the Central European Bronze Age. After completing her MA in 2009, she started to work as a field archaeologist. Her ongoing PhD research at the Eötvös Loránd Universtity (Budapest) focusses on the territory of north-western Hungary during the Middle Bronze Age. She spent a semester at the University of Vienna in 2017 with an Ernst Mach PhD grant. She works as research assistant at the Momentum Mobility Research Group granted by the Momentum Programme of the Hungarian Academy of Sciences. She has published several papers on mortuary practices and social archaeology of Bronze Age communities.

Doris Pany-Kucera
Institute for Oriental and European Archaeology
Austrian Academy of Sciences
Vienna, Austria
Doris.Pany-Kucera@oeaw.ac.at

Doris Pany-Kucera studied biological anthropology at the University of Vienna, focusing on muscle marks and joint changes on skeletal remains to reconstruct occupational stress and labour patterns (PhD 2015). She has been working as scientific assistant in projects at the Natural History Museum, as freelance anthropologist for the Lower Austrian (MAMUZ) and the Upper Austrian Provincial Museum since 2002. She teaches at the Universities of Vienna and Pilsen. As a research associate in Katharina Rebay-Salisbury's ERC Starting Grant project 'The value of mothers to society: responses to motherhood and child rearing practices in prehistoric Europe', her work centred on pelvic features commonly associated with pregnancy and parturition.

Elisa Perego
Institute of Archaeology
University College London
London, United Kingdom
e.perego@ucl.ac.uk

Elisa Perego is an Honorary Research Associate at the Institute of Archaeology, UCL, where she completed her PhD in 2012. In 2017–2019, she was a Marie Skłodowska-Curie Fellow at the Institute for Oriental and European Archaeology, Austrian Academy of Sciences. In 2013–2014, Elisa held the Ralegh Radford Rome Fellowship at the British School at Rome. Her research interests include archaeological method and theory, European late prehistory, and Mediterranean archaeology. Elisa is also interested in combining methods drawn from bioarchaeology and medicine with disability and marginality research. She has published extensively on personhood, agency, inequality, human-environment interactions, and the Daunia and Veneto regions in Italy.

Nadia Pezzulla
Scienze archeologiche
Università degli Studi "La Sapienza" di Roma
Rome, Italy
nadiapronchi90@yahoo.it

Nadia Pezzulla received her PhD in the archaeology of the Ancient Near East in 2018 at the University of Rome 'La Sapienza' with a thesis entitled *Children in the Ancient Near East: an analysis starting from burials*. Her research focuses on children in the ancient Near East and follows two main fields: the study of childhood pathologies through the comparison of palaeo-pathological data and information from written sources, and the analysis of objects intended for specific use by children.

Petra Rajić Šikanjić
Institute for Anthropological Research
Zagreb, Croatia
petra@inantro.hr

Petra Rajić Šikanjić is a senior research associate at the Institute for Anthropological Research in Zagreb, Croatia. After a BA degree in Archaeology and MSc in Biological Anthropology, she obtained her PhD in Bioarchaeology from the University of Zagreb. Her research focuses on the bioarchaeological analyses of human skeletal material from archaeological sites dating from

prehistory to the Early Modern Age. She has multiple research interests, which all derive from human skeletal data. Currently, her publications focus on prehistoric cremated human remains.

Katharina Rebay-Salisbury
Institute for Oriental and European Archaeology
Austrian Academy of Sciences
Vienna, Austria
Katharina.Rebay-Salisbury@oeaw.ac.at

Katharina Rebay-Salisbury is an archaeologist with a research focus on the European Bronze and Iron Ages. After completing her PhD in 2005, she was a post-doctoral researcher at the Universities of Cambridge and Leicester in the UK, where she participated in research programmes on the human body and networks. In 2015, she was awarded the ERC Starting Grant for her project 'The value of mothers to society: responses to motherhood and child rearing practices in prehistoric Europe'. She directs the research group 'Prehistoric Identities' at the Institute for Oriental and European Archaeology of the Austrian Academy of Sciences and teaches at the University of Vienna.

José Nicolás Saiz López
Programa de Doctorado en Historia e Historia del Arte y Territorio
Universidad Nacional de Educación a Distancia (UNED)
Madrid, Spain
jnsaiz@santander.uned.es

José Nicolás Saiz López is a PhD candidate at the Ancient History Department of the National Distance Education University (UNED), Spain. His dissertation focuses on childhood in Roman Hispania, analysing literary, archaeological and epigraphic sources. His research interests include Daily Life in Ancient Rome, Roman Religion and Archaeology of Childhood. He is also a part-time lecturer at the UNED Associated Centre in Cantabria, teaching Archaeology and Ancient History.

Rafael Scopacasa
Department of History
The Federal University of Minas Gerais (UFMG)
Belo Horizonte, Brazil
R.Scopacasa@exeter.ac.uk

Rafael Scopacasa is Assistant Professor in Ancient History at the Federal University of Minas Gerais (UFMG). He is also an Honorary Research Fellow at the Department of Classics and Ancient History, University of Exeter, where he completed his PhD in 2010. He was the Ralegh Radford Rome Scholar at the British School at Rome in 2010–2011. Rafael's work has focused on bringing together written and archaeological evidence to investigate processes of cultural change and the rise of Roman hegemony in ancient Italy. He is also interested in human-environment interaction in late prehistoric Italy and the Mediterranean.

Anna Serra
Dipartimento di scienze del patrimonio culturale
Università di Salerno
Bologna, Italy
anna91serra@virgilio.it

Anna Serra is an archaeologist and her researches focus on the Etruscan Po Valley. She completed her studies in Etruscology and Italic Archaeology at the University of Bologna in 2017, when she finished a Postgraduate School in Archaeological Heritage. She has taken part in the research project on the Etruscan necropolis of Valle Trebba of Spina and in the excavations of the Etruscan city of Marzabotto. Since 2018, she has been conducting her PhD at the University of Salerno with a project focused on child funerary rituals in the Etruscan Po Valley.

Ekaterina Alexandrova Stamboliyska-Petrova
New Bulgarian University
Sofia, Bulgaria
estamboliyska@gmail.com

Ekaterina Stamboliyska-Petrova is a PhD student of archaeology at the New Bulgarian University, Sofia, Bulgaria. Ekaterina's research interests centre on Balkan Prehistory, in particular on the socio-economic development of the Chalcolithic communities in Bulgaria. Ekaterina has extensive archaeological experience acquired through active participation in various archaeological excavations and workshops in Bulgaria, Greece and Turkey. Through the course of her academic education, she has won competitive university fellowships. Her passion for archeology enabled her to participate in numerous scientific projects, conferences and courses in Sofia, Preston, Oxford and Liège.

Alexandra Syrogianni
Greek Archaeological Service
Ephorate of Antiquities of Piraeus and Islands
Athens, Greece
asyrogianni@gmail.com

Alexandra Syrogianni is a classical archaeologist and works in the Ephorate of Antiquities of Piraeus and Islands (Greek Archaeological Service). Her PhD (2015) was based on human skeletal remains she excavated at a Hellenistic cemetery of the wider area of Piraeus. In 2019, she conducted a post-doctoral research project at the University of Athens, studying the contribution of taphonomy and Forensic Anthropology to the interpretation of human skeletal remains from archaeological contexts. Her scientific interests focus on taphonomy, palaeopathology and archaeothanatology.

Veronica Tamorri
Independent Scholar
London, United Kingdom
veronicatamorri@gmail.com

Veronica Tamorri is an Italian archaeologist specialised in burial taphonomy, archaeothanatology, and the funerary archaeology of Predynastic Egypt and late prehistoric Europe. In 2017, she obtained her doctorate in Egyptian Archaeology from the Department of Archaeology, Durham University. She was awarded her MA in Egyptology at the UCL Institute of Archaeology. In 2018, Veronica was an Incoming Fellow at the Institute for Oriental and European Archaeology, at the Austrian Academy of Sciences in Vienna. Since 2015, she has been collaborating on international research projects, excavations and publications as an expert in funerary archaeology and archaeothanatology.

Lucie Vélová
Národní muzeum
Praha, Czech Republic
lucie_velova@nm.cz

Lucie Vélová is an archaeologist with a research focus on the Central European Neolithic, prehistoric funeral archaeology and the archaeology of childhood. She is currently completing her PhD at the Charles University in Prague. Since 2009, she has been working at the National Museum in Prague as a curator of the archaeological collection from the Neolithic at the Department of Prehistory and Classical Antiquity. She organises archaeology and anthropology conferences at the National Museum.

John Whittaker
Anthropology Department
Grinnell College
Grinnell, USA
whittake@grinnell.edu

John C. Whittaker has taught at Grinnell College since 1984. With Katharine Kamp he works in the American Southwest, the Mediterranean, and elsewhere. Experimental archaeology is an especially satisfying focus, engaging with ethnographic information to provide information essential to archaeological interpretations of early technologies. Flintknapping and lithic technology have been research foci, as have agricultural technologies and projectile weapons, especially spear-throwers. Experimental interests additionally connect archaeologists with students and non-academic communities, which are also issues of interest.

Childhood in the Past Monograph Series

Volume 1 Childhood and Violence in the Western Tradition
edited by Laurence Brockliss and Heather Montgomery

Volume 2 The Dark Side of Childhood in Late Antiquity and the Middle Ages
edited by Katariina Mustakallio and Christian Laes

Volume 3 Medieval Childhood: Archaeological Approaches
edited by D.M. Hadley and K.A. Hemer

Volume 4 Children, Spaces and Identity
edited by Margarita Sánchez Romero, Eva Alarcón García, and Gonzalo Aranda Jiménez

Volume 5 Children, Death and Burial: Archaeological Discourses
edited by Eileen Murphy and Mélie Le Roy

Volume 6 Nineteenth Century Childhoods in Interdisciplinary and International Perspectives
edited by Jane Eva Baxter and Meredith Ellis

Volume 7 Motherhood and Infancies in the Mediterranean in Antiquity
edited by Margarita Sánchez Romero and Rosa Cid López

Volume 8 Across the generations: the old and the young in past societies; proceedings from the 22nd Annual Meeting of the EAA in Vilnius, Lithuania, 31st August - 4th September 2016.
edited by Grete Lillehammer and Eileen Murphy.

The SSCIP Monograph Series was established to allow scholars from all disciplines a forum for presenting new, groundbreaking or challenging research into themed aspects of childhood in the past. The Society is happy to consider proposals for future monographs. Proposals should be submitted to the General Editor of the Monograph Series. Details for submission may be found on the Society's webpage at https://sscip.wordpress.com/.

Dr Lynne McKerr

General Editor, SSCiP Monograph Series
l.mckerr@qub.ac.uk

Chapter 1

Introduction. Children's developmental stages from biological, anthropological and archaeological perspectives

Katharina Rebay-Salisbury and Doris Pany-Kucera

'Ages and abilities: the stages of childhood and their social recognition in prehistoric Europe and beyond' is a collection of essays that aims to identify and describe the most important age thresholds during childhood and adolescence in the past. By combining bio-anthropological and archaeological data, often from graves, the chapters interpret how and when life was considered to begin in past societies, how developmental stages were recognised, and how childhood transitions were marked and celebrated. This volume grew from the 11th Annual International Conference of the Society for the Study of Childhood in the Past held at the Natural History Museum in Vienna from September 20–22, 2018. The conference theme 'Pregnancy, birth, early infancy and childhood: life's greatest transitions in the past' attracted scholars from the US, UK, Mediterranean and Central Europe.

The chapters present an extraordinary chronological and geographical coverage. For the first time, age and gender structures in late Neolithic to Classical societies in Central Europe are discussed in a way that allows comparison. The presentation of childhood stages includes both bio-archaeological recognition of age and the challenges of placing individuals in meaningful age classes, and cultural elaboration of developmental stages. Papers from outside the scope of later European prehistory expand the theoretical and methodological framework in a complementary manner. The chapters address their own themes and prioritise individual aspects of childhood, e.g. access to weaponry, toys, one particular transition, children's agency, rank and social status.

At the conference, discussions centred on the difficulties of cross-cultural comparison of developmental stages and important life transitions when using different conventions and terminologies with regard to naming age groups. In this volume, authors use the terminologies in the cultural context they study, but define them clearly.

Ages and abilities (Archaeopress 2020): 1–9

The process of maturing throughout childhood to adulthood necessitates definitions of individuals' ages. The concept of age, however, encompasses various dimensions and may refer to chronological age, i.e. days, months and years counted from birth, physiological age, which focuses on biological signs of maturation, and social age, which responds to the growing abilities and capabilities of the individual (Ginn and Arber 1995; Sofaer 2006, 119).

Contemporary societies most often anchor a person's beginning of life at the date of birth, but ethnographic examples clearly demonstrate that we should not impose our modern, Western conceptions of social life stages on past cultures. A classic example is Margaret Mead's argument that coming of age differs dramatically in different cultural contexts (Benedict 1934; Mead 1928); all children go through similar physical developments, but various cultures treat these changes differently (Prout and James 1990). In archaeological contexts, the physiological and social ages are commonly explored, compared and interpreted, as reliable information on chronological age is rare.

Reflections on childhood and social age from an anthropological (e.g. Lancy 2008; LeVine and New 2008; Montgomery 2008), bio-archaeological (e.g. Halcrow and Tayles 2008; Lewis 2007; Mays *et al.* 2017; Thompson *et al.* 2014) and archaeological (e.g. Crawford *et al.* 2018; Derricourt 2018; Finlay 2013; Romero and López 2018; Sofaer-Derevenski 2000) point of view have contributed a nuanced cross-cultural picture; this book, however, presents case studies from regions that often do not find their way into standard textbooks.

Bio-archaeological age assessment

Osteologists differentiate between physiologically immature skeletons (sub-adults) and fully mature skeletons (adults) using a range of different markers of biological development. These include primarily changes in dentition (AlQahtani *et al.* 2010) and body height inferred through the length of bones, as well as morphological changes such as the fusion of ossification centres and epiphyseal union (Cunningham *et al.* 2016). Dental age is generally less variable than skeletal age, as the latter is more susceptible to the body's response to environmental challenges, and is usually prioritised (Cardoso 2007). Tooth cementum annulation (Blondiaux *et al.* 2016; Roksandic *et al.* 2009; Wittwer-Backofen 2012) relies on combining the average age of dental eruption with counting light and dark bands of dental cementum, the formation of which is thought to correspond to chronological years. Nevertheless, it remains unclear in how far the use of modern reference populations is problematic for age estimations of individuals from prehistoric and ancient populations.

From a biological point of view, the development of primary dentition is an important developmental step that enables a dietary change from nursing to solid food intake. The deciduous dentition consists of 20 teeth and, in contrast to adult dentition, does not include premolars and the third molar. The milk teeth are already present in the jaws at birth, and the incisors may erupt first from the fourth month of life onwards. At that time, dental buds of the permanent dentition are already present in the jawbones, with the first permanent molars usually erupting at around the age of 6 years (AlQahtani *et al.* 2010; Ubelaker 1987). This event coincides with the beginning of the loss of primary dentition, entailing a period of mixed dentition with deciduous and permanent teeth. The occurrence of the second dentition is largely resistant against environmental influences and therefore a reliable feature in estimating age at death (Grupe *et al.* 2015). The second permanent molar erupts at the age of c. 11 years, usually

reaching the masticatory plane around the age of 14 years. Following paediatric definitions, this important event falls into the age of puberty, which girls usually reach between 10-13 years, and boys between 12-16 years (Cunningham, Scheuer, and Black 2016). The hormonally determined growth spurt in adolescence leads to skeletal maturity, which is reached earlier in girls compared to boys of the same age. Recently, techniques used in clinical contexts to assess the pubertal stage at the skeleton relating to hamate hook development, cervical vertebrae maturation (CVM), canine mineralization, iliac crest ossification, and radial fusion in radiographs have been adapted by osteologists for archaeological skeletal remains (Shapland and Lewis 2014). This adjusted method has implications for expanding our knowledge of adolescent maturation across different time-periods and regions. Reaching puberty is of wider significance, as from that age, individuals can biologically reproduce.

Individuals are biologically fully mature with adulthood. In a skeletally adult individual, long bone growth is finished and all epiphyses are fused. Growth cessation is determined hormonally and genetically, and is usually reached for females at the age of 18, and for males at the age of 19 or 20 years. The last epiphyses close at the age of 24-25 years, e.g. in the pelvis, generally later in male individuals (Cunningham *et al.* 2016; Martin, Harrod, and Pérez 2013).

How individuals are grouped into age classes varies according to academic traditions. Most papers in this collection that concern Central Europe follow the German anthropological convention that uses the age categories Fetus/Neonatus (neonate: up to three months old), Infans 1 (early childhood, 0-6 years), Infans 2 (late childhood, 8-14 years), Juvenis (adolescence, 15-20), Adultus (adult, 21-40 years), Maturus (41-60 years) and Senilis (over 60 years, Grupe *et al.* 2015: 267; Knussmann *et al.* 1993; Teschler-Nicola 1985, 205; for a discussion on age group terminology in English, see Cunningham *et al.* 2016, 473-474). Scholars with a focus on the Mediterranean follow alternative age categorisations. Whichever classification scheme is used, it is important to specify the age ranges to facilitate knowledge exchange between different cultures and research traditions.

The study of childhood is an interdisciplinary matter (Baxter *et al.* 2017). From an archaeological point of view, age classes provided by the osteological evaluation are both a useful tool and a hindrance of analysis (Rebay-Salisbury, in this volume). On one hand, using a set of pre-defined age classes can give first insights into associations of age with material objects, funerary and other practices; on the other hand, they make it more difficult to explore the social relevance of age classes that do not align with the modern definitions and identify important age thresholds of the past. This book contributes to improving our interpretations of the meaning of ages, as our authors find social categories that cross-cut these age classes and search to understand social emphasis and significance.

Social responses to ages and maturing

How exactly people in the past determined the right time to mark age transitions socially is an unresolved question, as we often do not understand how time was conceptualized and counted (Lucas 2005). If a calendric understanding of time was established, birthdays may have been counted. Alternatively, biological signs of maturation, such as dental eruption, may have been used as references, or alternatively, signs of mental maturity and the growth of abilities and capabilities.

Maturing occurs in stages, and whilst biological growth is comparable cross-culturally, social responses and categorisations of childhood stages vary across time and space. Definitions of adulthood range particularly widely, and may be very different for girls and boys (Baxter 2005; Crawford *et al.* 2018; Lillehammer 1989). The volume accounts for the variability of how a range of chronologically and geographically diverse communities understood childhood, and at the same time, discloses universal trends in child development in the (pre-)historic past.

Van Gennep's (1909) rites of passage, famous for their in-depth analysis of the phases of separation, liminality and incorporation that constitute the transition from one stage of life to the next, focussed primarily on the beginning of life, maturity, and the end of life. In this book, we are concerned with a more fine-grained appreciation of life course transitions during childhood.

Chapters address how age classes can be recognised archaeologically, which age classes were socially recognized for sub-adults, and identify approximated ages as cut-off-points. They investigate at what point individuals are understood as adults, and if this differs for women and men. Primary sources of information include burial practices and material culture associated with each group; inclusion or exclusion of young children in cemeteries, objects associated with child rearing such as feeding vessels and toys, and gradual or staged access to adult material culture are topics that cross-cut many chapters.

One problem in interpreting the association of grave goods in context with the age of the deceased is that the objects may refer to either the social position the child had achieved shortly before death, or alternatively, to the social position the girl and boy would have achieved if s/he had lived longer. In the latter case, funerary objects reference an age class older than the deceased individual in the grave.

The organisation of the book

Kathryn Kamp and John Whittaker's chapter 'Weaponry and children: technological and social trajectories' opens with an investigation into how children participate in weapon-based activities and learn how to hunt and participate in warfare. Playing with weapons occurs at an early age in many societies, but that does not necessarily mean that children are integrated in the communities of hunters and warriors – an important caveat for the archaeological interpretation of children's weapon graves. The authors scrutinize both ethnographic information and modern learning curves for target spear throwers and conclude that contrary to popular belief, early introduction to weapons does not contribute to an adult's hunting and warfare skills.

The following chapters drawing their data from prehistoric funerary contexts in Europe are organized broadly chronologically. Ekaterina Alexandrova Stamboliyska-Petrova's chapter 'How and when life is considered to have begun in past societies: child burials at the cemetery of Durankulak in northeast Bulgaria' investigates sub-adult burials in Balkan Chalcolithic communities (c. 4900-4200 BC). The cemeteries Varna and Durankulak are extraordinarily rich in metal. The author investigates the inclusion and exclusion of children in the cemeteries per chronological phase and discusses children's access to metal. The latter is seen as an indication of an individual's social status, which raises the question if status was hereditary. The identified variability suggests that status transmission was not automatic, but depended on community decision-making.

Daniela Kern also tackles the question of inherited rank in her chapter 'Own abilities and inherited rank: status and prestige of children in third millennium BC Austria'. However, she sees children as active members of societies, contributing their abilities and skills. This changes the way in which richly equipped child graves with tools and weapons are interpreted. In particular, Kern shows that different types of axes were used in different ways and challenges the prevailing view that they generically symbolize power and status. The author further draws attention to tools less often appreciated as such, for example flint flakes and bone awls; children older than eight seem to share the same tools as adults, suggesting that they participated in adult work. Noteworthy is Kern's presentation of a doll and whistle – rare evidence for childhood specific material culture at the dawn of the European Bronze Age.

The wealth of data brought together by Lucie Vélová, Katarína Hladíková and Klaudia Daňová for their chapter 'The little ones in the Early Bronze age: foetuses, newborns and infants in the Únětice culture in Bohemia, Moravia and Slovakia' is extraordinary. For the first time, the find contexts of Early Bronze Age (c. 2200-1600 BC) remains of foetuses, newborns and infants under one year are presented and discussed in detail. Although the 66 contexts are primarily from modern rescue excavations, their frequency demonstrates that evidence for children of such young age are more common in Early Bronze Age societies than previously thought. The paper highlights children's presence in settlement, single and multiple burial contexts, and describes funerary objects found with the remains.

Katharina Rebay-Salisbury's chapter on 'Children's ages and life stages at the Middle Bronze Age cemetery of Pitten, Lower Austria' takes one of the key sites in which the transition from inhumation to cremation can be directly observed as a case study to question using pre-set age categories for the analysis of childhood stages. New-borns and under one-year-olds were included in the cemetery in very low numbers, and burials of under three-year-olds are rarely placed in prominent positions or well equipped. From that age, however, children appear to gain a firm position within society – as children, evidenced by child-specific material culture and miniaturized objects – and as persons with growing access to status indicators.

'Children in the territory of western Hungary during the Early and Middle Bronze Age' are under study in the chapter by Eszter Melis, Kitti Köhler and Viktória Kiss. The cultural contexts compared include the Kisapostag, Gáta-Wieselburg, Encrusted Pottery and Nagyrév/Vatya culture groups and paint a rich portrait of the variability of treating children after death in the area. The authors use the age categories babies (under one year), toddlers (1-4 years) and young children (4-8 years), children during middle childhood (8-12 years) and adolescents (12-20 years) for a detailed evaluation. From young childhood onwards, funerary treatment suggests the social inclusion of children in all of the discussed social contexts, whereas gendered objects become more common from middle childhood. The heritability of rank and status is again a point of discussion in this chapter.

Dealing exclusively with cremation burials, Daria Ložnjak Dizdar and Petra Rajić Šikanjić use the age categories 0-5, 6-11 and 12-18 years at death in their chapter on 'Childhood in the Late Bronze and Early Iron Ages in the southern Carpathian Basin'. Between 1400 and 600 BC in today's Croatia and Bosnia, children were buried as full members of the community. Early graves were sometimes richly equipped, whilst later burials appear to have adjusted the size of the urns used to contain the cremated remains to the body size of the deceased.

The next set of chapters is in the fortunate position to draw on written records as well as archaeological evidence. Beata Kaczmarek combines information from Linear B tablets and iconography with archaeological data in her chapter on 'Mycenaean childhood'. Her research demonstrates children's routine participation in craftwork at palaces, and the importance of skill acquisition and training. Food rations described in Linear B differentiate several age classes, separately for girls and boys. The author concludes, however, that the position of children in Mycenaean society (c.1400-1200 BC) was defined based on hierarchy and origin more than on sex and age.

Nadia Pezzulla takes a similar methodological approach in her chapter 'Developmental Stages in Ancient Mesopotamia: Dumu.gaba, ṣiḫru e Guruš/sal.Tur.tur'. It is significant that a range of terms for foetuses, newborns and small children illustrate how children enter the social world in the second and first millennium BC. Ration texts and the iconography of sub-adults in reliefs and figurines help to identify the stages of childhood, and in some cases, the rites and rituals accompanying the transition from one stage to the next. The author describes five phases of childhood: the newborn to c. 2-year-old, early childhood, a phase of entering the work and school environments at c. 4-6 years, a fourth phase from c. 7 to 12 years, and adolescence leading to independence in adulthood.

The age transition at around three years is central to Francesca Fulminante's chapter 'Identifying social and cultural thresholds in Sub-Adult Burials of Central Italy during the 1st Millennium BC'. She considers ethnographic accounts and psychological studies in addition to archaeological data and literary sources to draw attention to this particular threshold, which was likely of great social significance. By investigating the archaeological burial record in detail, she finds that children below this age threshold generally lack gender and status role indicators in burials between the end of the Final Bronze Age and the end of the Orientalizing Age (c. 1050-509 BC), whilst older children's identity is indicated by inclusion of certain types of material culture.

Elisa Perego, Rafael Scopacasa and Veronica Tamorri, discuss in how far foetuses, newborns and children were understood as individuals with full membership in society in their chapter 'Child personhood in late prehistoric Italy: implications from bioarchaeology, archaeothanatology and archaeological theory'. Using the cemetery Padua Emo as a starting point, they investigate the representation of age and gender groups as well as abnormal mortuary treatment – in this case inhumation rather than the prevailing cremation rite – in the context of Iron Age Veneto (c. 900-450 BC).

Anna Serra's chapter 'The recognition of children and child-specific burial practices at the necropolis of Spina, Italy' follows with an analysis of grave goods and burial rites to identify age groups and markers of childhood transitions in an Etruscan city near the Po Delta (c. 600-200 BC). The necropolis of Valle Trebba of Spina, organized in family plots, gives ample evidence of the inclusion of children in funerary rituals, although the low numbers suggest a selection for burial in the family graveyard. The author discusses the significance of childhood-specific material culture such as bullae, choes and toys in the conceptualisation of developmental stages in the Etruscan world.

Choes, miniature wine jugs used during children's first religious festival in Classic Greece (c. 500-300 BC), play an important role in Hanna Ammar's chapter 'Greek children and their wheel carts on classical Greek vases'. The wine jugs are frequently decorated with depictions of

playing children. In some of the pictures, a small cart with wheels, manipulated by a stick, can be seen – a toy that symbolizes growth and learning during childhood. The author considers the significance of this object as a marker of age and gender, and its role in religious festivals marking and celebrating childhood age transitions.

Alexandra Syrogianni aims to explain the high rates of infant mortality in Ancient Greece by comparing ancient to modern medical practices in her chapter 'Teeny-tiny little coffins: from the embrace of the mother to the embrace of Hades in Ancient Greek Society'. Noteworthy is that the extremely slim body ideal for women fashionable at the time might have led to fatal complications during pregnancy and birth. The author further discusses the exposure of infants, care practices including breastfeeding, and childhood deaths in their social context.

Irene Mañas Romero and José Nicolás Saiz López detail the rites and rituals surrounding birth in the last chapter 'Pueri nascentes: rituals, birth and social recognition in Ancient Rome'. Their rich description of what exactly happened between birth and the name giving ritual is exemplary for ancient societies for which this information is usually lost. Regulated social practices include an examination of the newborn, the cutting of the umbilical cord, the first bath, stimulating massages, clothing and the first meal, all of which transform the baby into a social being in the first days of life.

Final comments

In this book, we collected papers on the rituals surrounding births and the question of whether the process of social recognition of newborns as members of the community is immediate (upon birth) or gradual. We see a period of dependence during the breast-feeding relationship with the mother, which ends with entering a new stage of childhood at around three years of age. Subsequently, children constantly learn and build their skills, and appear to be integrated into the routine work life from a young age in all of the societies studied in this book. This is reflected in burials, where children's graves include a range of tools that were used during their lifetimes. Grave goods, in the form of gender, status and other identity markers are gradually added with age. This raises the question if and how status was heritable, and how families built on biological relationships interacted with other institutions such as communities and states.

There is little to suggest in the studies presented in the book that adulthood coincided with full physical maturation; rather, it appears that participation rights and obligations to society were conferred during adolescence. This may be in sharp contrast to or own society, where child labour is outlawed, formal schooling required, and adulthood with full financial and organisational independence begins later and later, sometimes not before one's thirties.

The lesson to be learned for future archaeological studies is perhaps not to rely solely on the osteological distinction between sub-adults and adults; there is much more social nuance to be explored in the interdisciplinary study of the childhood-adulthood transition when biological, anthropological and archaeological perspectives are taken into consideration.

Acknowledgements

We thank the Society of the Study of Childhood in the Past for the opportunity to host the 2017 annual meeting in Vienna, and for considering the proceedings as a monograph in the society's

series. We much appreciate Lynne McKerr's editorial work as the society's series editor. The organization of the conference and editorial work was undertaken within the framework of the ERC project 'The value of mothers to society: responses to motherhood and child rearing practices in prehistoric Europe'. We thank Roderick B. Salisbury for proofreading the manuscript. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 676828).

References

AlQahtani, S. J., Hector, M. P., and Liversidge, H. M. 2010. Brief communication: The London atlas of human tooth development and eruption. *American Journal of Physical Anthropology* 142, (3), 481–490.

Baxter, J. E. 2005. *The Archaeology of Childhood. Children, Gender and Material Culture.* Oxford: Altamia Press.

Baxter, J. E., Vey, S., McGuire, E. H., Conway, S., and Blom, D. E. 2017. Reflections on Interdisciplinarity in the Study of Childhood in the Past. *Childhood in the Past* 10, (1) 1-15.

Benedict, R. 1934. *Patterns of Culture.* New York: Houghton Mifflin.

Blondiaux, J., Naji, S., Audureau, E., and Colard, T. 2016. Cementochronology and sex: A reappraisal of sex-associated differences in survival in past French societies. *International Journal of Paleopathology* 15, 152-163.

Cardoso, H. F. 2007. Environmental effects on skeletal versus dental development: Using a documented subadult skeletal sample to test a basic assumption in human osteological research. *American Journal of Physical Anthropology* 132, 2, 223-33.

Crawford, S., Hadley, D. M., and Shepherd, G. (eds) 2018. *The Oxford Handbook of the Archaeology of Childhood.* Oxford: Oxford University Press.

Cunningham, C., Scheuer, L., and Black, S. 2016. *Developmental Juvenile Osteology,* 2nd edition. London: Elsevier Academic.

Derricourt, R. 2018. *Unearthing Childhood. Young lives in prehistory.* Manchester: Manchester University Press.

Finlay, N. 2013. Archaeologies of the beginnings of life. *World Archaeology* 45, 2, 207-214.

Ginn, J., and Arber, S. 1995. "Only Connect": Gender Relations and Ageing, pp. 1-14 in S. Arber and J. Ginn (eds), *Connecting Gender and Ageing: A Sociological Approach.* Buckingham: Open University Press.

Grupe, G., Harbeck, M., and McGlynn, G. C. 2015. *Prähistorische Anthropologie*. Berlin, Heidelberg: Springer.

Halcrow, S. E., and Tayles, N. 2008. The Bioarchaeological Investigation of Childhood and Social Age: Problems and Prospects. *Journal of Archaeological Method and Theory 15, 190–215.*

Knussmann, R., Schwidetzky, I., Jürgens, H., and Ziegelmayer, G. 1993. *Anthropologie. Handbuch der vergleichenden Biologie des Menschen I/1: Band I: Wesen und Methoden der Anthropologie. 1. Teil: Wissenschaftstheorie, Geschichte, morphologische Methoden*. Stuttgart: Spektrum.

Lancy, D. F. 2008. *The Anthropology of Childhood. Cherubs, Chattel, Changelings. Cambridge: Cambridge University Press.*

LeVine, R. A., and New, R. S. (eds) 2008. *Anthropology and child development: a cross-cultural reader.* New York: Wiley Blackwell.

Lewis, M. E. 2007. *The Bioarchaeology of Children. Perspectives from Biological and Forensic Anthropology.* Cambridge: Cambridge University Press.

Lillehammer, G. 1989. A Child is Born. The Child's World in an Archaeological Perspective. *Norwegian Archaeological Review* 22, (2) 89–105.

Lucas, G. 2005. *The Archaeology of Time. Themes in archaeology.* London: Routledge.

Martin, D. L., Harrod, R. P., and Pérez, V. R. (eds) 2013. *Bioarchaeology. An Integrated Approach to Working with Human Remains. Manuals in Archaeological Method, Theory and Technique.* New York: Springer.

Mays, S., Gowland, R., Halcrow, S., and Murphy, E. 2017. Child Bioarchaeology: Perspectives on the Past 10 Years. *Childhood in the Past* 10, (1), 38-56.

Mead, M. 1928. *Coming of age in Samoa: a psychology study in primitive youth for western civilization.* New York: W. Morrow.

Montgomery, H. 2008. *An Introduction to Childhood: Anthropological Perspectives on Children's Lives.* Chichester: Wiley Blackwell.

Prout, A., and James, A. 1990. A new paradigm for the sociology of childhood? Provenance, promise and problems, pp.7-31 in A. James and A. Prout (eds), *Constructing and Reconstructing Childhood: contemporary issues in the sociological study of childhood.* London: Flamer Press.

Roksandic, M., Vlak, D., Schillaci, M. A., and Voicu, D. 2009. Technical note: Applicability of tooth cementum annulation to an archaeological population. *American Journal of Physical Anthropology* 140, (3), 583–588.

Romero, M. S., and López, R. C. (eds) 2018. Motherhood and Infancies in the Mediterranean in Antiquity. *Childhood in the Past Monograph Series* 7. Oxford: Oxbow.

Shapland, F., and Lewis, M. E. 2014. Brief communication: A proposed method for the assessment of pubertal stage in human skeletal remains using cervical vertebrae maturation. *American Journal of Physical Anthropology* 153, (1), 144-153.

Sofaer-Derevenski, J. R. (ed.) 2000. *Children and Material Culture.* London: Routledge.

Sofaer, J. R. 2006. *The Body as Material Culture. A Theoretical Osteoarchaeology.* Cambridge: Cambridge University Press.

Teschler-Nicola, M. 1985. Die Körper- und Brandbestattungen des mittelbronzezeitlichen Gräberfeldes von Pitten, Niederösterreich. Demographische und anthropologische Analyse, pp.127-272 in F. Hampl, H. Kerchler, and Z. Benkovsky-Pivovarová (eds), Das mittelbronzezeitliche Gräberfeld von Pitten in Niederösterreich. Ergebnisse der Ausgrabungen des Niederösterreichischen Landesmuseums in den Jahren 1967 bis 1973 mit Beiträgen über Funde aus anderen Perioden*, Band 2: Auswertung*, *Mitteilungen der prähistorischen Kommission* 21-22. Wien: Österreichische Akadamie der Wissenschaften.

Thompson, J. L., Alfonso-Durruty, M. P., and Crandall, J. J. (eds) 2014. *Tracing childhood. Bioarchaeological Investigations of Early Lives in Antiquity.* Florida: University Press of Florida.

Ubelaker, D. 1987. Estimating Age at Death from Immature Human Skeletons: An Overview. *Journal of Forensic Sciences* 32, (5), 1254–1263.

Van Gennep, A. 1909. *Les rites de passage.* Paris: Émile Nourry.

Wittwer-Backofen, U. 2012. Age Estimation Using Tooth Cementum Annulation, pp.129-143 in L.S. Bell (ed.), *Forensic Microscopy for Skeletal Tissues: Methods and Protocols.* Totowa, NJ: Humana Press.